

30 June 2018 Valuation Report



Department of Social Services

Final Report 2019



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Part I: Executive summary

Key findings

This 30 June 2018 actuarial valuation is part of the work undertaken by the Department of Social Services to implement the Australian Priority Investment Approach to Welfare with the aim of reducing welfare dependency and improving the lifetime wellbeing of people and families in Australia. The actuarial valuation provides a long term perspective of the financial commitments implicit in the current welfare system and provides information on:

- The future cost of the system (lifetime cost).
- How the different payment types (programs) contribute to this overall cost.
- The factors that drive the overall lifetime cost and annual expenditures.
- How the cost is changing over time, which provides information on the financial sustainability of the system.
- The impact of changes, both to the welfare system and to external drivers of the system experience.
- How different groups of people within the system contribute to the overall cost.
- The factors that explain why some groups of people have different levels of expected payment utilisation than others.

Headline results

The total lifetime cost is estimated to be \$5,662 billion as at 30 June 2018.

When considering the change in lifetime cost, we have first rebased the June 2017 result to allow for the updated discount rate of 5% used for the June 2018 valuation (a decrease from the discount rate of 6% used for the June 2017 valuation). The change in discount rate has no impact on future cashflows; however, it does impact the net present value of these cashflows and, therefore, the estimated lifetime cost. Rebasing increases the June 2017 result by \$1,617 billion, from \$4,681 billion to \$6,298 billion. This change supports comparability of the June 2018 and June 2017 results.

The June 2018 total lifetime cost has significantly decreased by approximately \$636 billion (10.1%), compared to this rebased June 2017 lifetime cost of \$6,298 billion.

- This is a very large decrease and, in particular, it reflects updated assumptions to allow for significant decreases in entries and decreases in persistency of payments seen over the last year. This update, together with the changes in the Age Pension forecast, contributed to an overall decrease of \$896 billion (-14.2%).
- Population growth and inflation over the year have acted to increase the total lifetime cost by almost \$261 billion (+4.1%), which partially offset the overall decrease described above.

Movements since the June 2017 valuation

Key observations regarding the overall movement in results and drivers of change include:

- The welfare population now represents 31.8% of the population (down from 32.6% at June 2017), with the proportion of the population in receipt of income support down from 23.3% to 22.1%.
 - While the Australian population has grown over the year, the total number of people in the welfare system has decreased.
 - Over the last year, entries to the welfare system have decreased and exits from the system have increased compared to recent years.
 - The numbers of people in most income support classes have reduced compared to the previous year. The main exception to this is the Carers class, which has continued to grow.
- Average lifetime costs have also decreased across most classes (compared to the rebased June 2017 averages), reflecting the assumption changes above.
- The main policy change expected to impact the lifetime cost relates to the introduction of the targeted compliance framework. As a result of this change, the estimated lifetime cost has reduced by \$4 billion (-0.1%).

New findings

This year we have added a number of new variables that have brought the following new insights:

- The inclusion of a region based measure of socio-economic advantage / disadvantage has allowed for greater differentiation in the model at a geographical level. Additionally, we have explored the historical geographical data during our analysis. This work has shown:
 - People living in areas with the highest level of socio-economic disadvantage are over three times more likely to be in receipt of income support than those living in areas with the lowest level of socio-economic disadvantage. The difference is greatest for recipients of Parenting and Carer payments; people in areas with the highest level of socio-economic disadvantage are almost ten times more likely to be in receipt of these payments than those living in areas with the lowest level of socio-economic disadvantage.
 - The level of welfare dependence tends to be higher in remote regions. Within major cities, welfare dependence tends to be higher further away from the city centre. This was evident when looking at welfare dependence across a variety of measures and cohorts including:
 - the proportion of 16 to 64 year olds currently in an income support class (excluding Pension Age);
 - the proportion of 11 to 17 year olds with a high level of intergenerational welfare dependency; and
 - the pre-retirement average lifetime cost for 11 to 17 year olds.
 - Higher pre-retirement average lifetime costs, as well as higher variability in average lifetime costs for individuals living in socio-economically disadvantaged areas.
- The inclusion of refugee-specific variables in the model has allowed for greater differentiation for this group, and has allowed for the detailed analysis of their experience through the welfare system. It has shown that:
 - Refugees tend to enter the welfare system through income support payments more often than non-refugees.
 - Refugees entering through the Studying class between the ages of 18 and 25 tend to stay on Studying payments for longer, and are more likely to transition onto Working Age payments in the short term. Over time, the experience for refugees has improved, however their dependence on welfare tends to stay higher than non-refugees. For example, historically we have seen that 10 years after their first entry into the system, 43% of refugees no longer receive any form of welfare, compared to 77% of non-refugees at the same point.
 - Refugees entering through the Working Age class between the ages of 20 and 40 tend to require more support in the short term than non-refugees. Though this has improved over time, the level of dependence for refugees tends to remain higher after 10 years (historically, we have seen that 23% of refugees remain in the Working Age class after 10 years compared to 14% of non-refugees after the same period of time).
- The inclusion of a variable indicating receipt of a payment at the end of the financial year has helped us further differentiate which people in each class are likely to have the highest cost over their future lifetimes. For example, when looking at the Working Age class, the analysis has shown that:
 - Of the 1,237,000 people in the Working Age class, 846,000 were in receipt of a payment at the end of the year and 722,000 of these related to the Newstart Allowance. This number aligns closely with the definitions used in 'point in time' counts of Newstart recipients.
 - The Investment Approach definition includes a further 316,000 people who had received Newstart Allowance earlier in the year, but have subsequently stopped receiving any income support due to gaining employment or other circumstance changes. The modelling shows that this group, while having a lower average lifetime cost, still have significant risk of cycling back onto income support compared to those who have remained off income support for more than a year.

Explanatory notes

We have set out below some brief explanatory notes and definitions. Further explanation can be found in section 1 of the report, as well as the glossary in Appendix A.

Model (Australian) population

The set of individual person records used in the model, representing the Australian resident population together with current overseas welfare recipients.

Lifetime cost

The net present value of all future welfare payments (to the in-scope population).

Income support payments

Income support payments provide for the basic living costs of adults, and are paid on a fortnightly basis. Income support payments are the primary form of financial assistance for individuals who are unable, or not expected, to fully support themselves. Examples include Age Pension, Newstart Allowance, Disability Support Pension, Carer Payment and Parenting Payment. Other supplementary payments are also available to assist people with other specific costs. For example, Family Tax Benefit Part A is provided for the direct costs of raising children and child care assistance is provided to assist with the costs of child care. For the purposes of this paper these payments are referred to as non income support payments.

Welfare class

Unique segments within the model which each person is assigned to. There are 12 classes: 6 for income support recipients, 3 for non income support recipients and 3 for the rest of population. Each person is assigned to the single most appropriate category for each financial year, and can move between classes in future years. Please refer to section 1.2 of the report for information on the payment types included in each class.

Welfare system interaction

The receipt of a welfare payment (including both income support and non income support payments) by an individual.

Duration on welfare

The number of financial years in which an individual has received a welfare payment. This includes income support payments, as well as non income support payments.

Work capacity assessment

An assessment of an individual's level of functional impairment and work capacity. This is expressed in the data as the number of hours in a week they are capable of working.

Welfare dependence

Welfare dependence is used to describe the historical and / or expected future level of welfare use for a group of people. A group with high welfare dependence would either have high historical welfare use or high expected future welfare use.

Parental welfare dependence

A measure of the level of welfare dependence of a person's parents / guardians during the course of that person's childhood (up to the age of 15). For the purposes of this parental welfare dependence we have only considered the use of income support payments (excluding the Age Pension) by a person's parents / guardians.

Mutual obligation requirements

A set of activities that must be completed by an individual in order to receive Newstart Allowance, Youth Allowance as a job seeker, Parenting Payment Single after the recipient's youngest child turns 6, and some types of Special Benefit. Welfare recipients may be granted either a permanent or a short-term exemption from these obligations in some situations, for example due to disability or a personal crisis.

SEIFA

Socio-economic Index for Areas. A product developed by the Australian Bureau of Statistics (ABS) that ranks areas in Australia according to relative socio-economic advantage and disadvantage.

Rebased June 2017 valuation results

The results from the June 2017 valuation, adjusted to allow for the updated discount rate of 5% used for the 2018 valuation. The change in discount rate is an external change that has no impact on the future cashflows. However, it does have a significant impact on the net present value of the cashflows, i.e. the lifetime cost. Rebasing the June 2017 valuation supports the comparability of the June 2017 and June 2018 results.

1. Introduction

Background to this report

This report documents the findings of the 30 June 2018 actuarial valuation of the Australian income support and social security system. This valuation is part of the work undertaken by the Department of Social Services (the Department) to implement the Australian Priority Investment Approach to Welfare with the aim of reducing welfare dependency and improving the lifetime wellbeing of people and families in Australia.

Developments in the valuation

The model used in this work projects individuals' trajectories through life and their interactions with the welfare system. As part of ongoing model development, this year we have:

- **Added a number of new variables** – which will allow the model to better differentiate lifetime costs between individuals. In particular, the model now takes into account differences in trajectories for people depending on the socio-economic advantage / disadvantage of their place of residence, and whether or not people entered Australia as a refugee or subsequently became a refugee while in Australia. Including these variables as predictive factors has flow on impacts throughout the whole model, but enables greater differentiation of lifetime trajectories and costs between groups within the population. We have also examined the timing of payments throughout the year, and used an indicator of whether an individual was in receipt of a payment at the valuation date as a predictor in the model.
- **Updated forecast of future Age Pension utilisation** – this forecast has been updated following a review of recent welfare experience, as well as consideration of relevant external factors such as workforce participation, levels of home ownership, and levels of superannuation and other savings.
- **Updated discount rate** – this has been changed this year following an update from Treasury on the long term discount rate set out in the Long Term Cost Report. While this change does not impact projected cashflows, it does lead to a significant increase in the lifetime cost.

Other significant developments in the valuation include model refinements to allow for changes in **policy settings**, and refinements and updates to account for the **additional year of experience** and information that is now available.

Changes to the welfare system

The actuarial valuation reflects the policy as legislated at the valuation date. It assumes that these policy settings will persist in perpetuity. In the valuation, we make explicit allowances for only the more material changes to legislated policy. The allowances reflect the estimated direct impact of the changes; no second order allowance has been made to account for any flow on impacts or behavioural responses to the changes, which will emerge over time in the experience and impact the valuation results as they occur.

The table below outlines the more material changes to policy that have occurred since the 2017 valuation, along with their expected influence on the welfare system.

Table 1: Summary of main material policy changes (legislated 1 July 2017 to 30 June 2018)

Policy change	Description of policy change	Expected influence on the welfare system
Creation of the Jobseeker Payment	Seven current working age payments will be consolidated into the new Jobseeker Payment, creating a single payment for those of working age with capacity to work now or in the future. From 20 March 2020, recipients of Newstart Allowance, Sickness Allowance, Wife Pension, Bereavement Allowance and Widow B Pension will be transitioned into Jobseeker Payment, Age Pension or Carer Payment depending on their circumstances. From 1 January 2022, recipients of Widow Allowance and Partner Allowance will transition to Age Pension.	The Jobseeker Payment is designed to simplify the income support system and treat people in similar circumstances consistently. The new consolidated payment fits well into the model class structure, and as such explicit model changes were not generally required.
Targeted compliance framework	From 1 July 2018, a two-phase compliance framework will be introduced which will apply strong penalties to job seekers who persistently and deliberately do not comply with their employment pathway plan (EPP) requirements.	Stronger penalties will be put in place for failure to comply with EPP requirements, including loss of income support payments.

The creation of the Jobseeker Payment is a material change from an operational point of view, however is not expected to be material in terms of lifetime cost, as it mainly represents a consolidation of payments. The introduction of the targeted compliance framework is expected to be more material from a lifetime cost perspective.

Over recent years, changes to the eligibility criteria for Disability Support Pension and a new Job Capacity Assessment that tests applicants' capacity to work, have seen fewer people qualifying for DSP.

Uses, limitations and reliances

The model can be used at a "system level" to consider the likely future welfare utilisation of the Australian population as it grows and as the demographic profile shifts, as well as at a detailed level to examine experience for sufficiently sized groups of interest within the population. The valuation also provides the ability to explore the sensitivity of the model results to changes in the model assumptions. This provides a platform through which different scenarios can be explored and their potential impact assessed over both the short and longer term.

The model captures the different risk characteristics that are important at a population level and for groups of people, but does not reflect all the factors that may result in different outcomes or different levels of payment for individual people. As such it is able to produce population and population group information rather than information for individuals.

This report has been prepared by PricewaterhouseCoopers (PwC) at the request of the Department to document the actuarial valuation of Australia's social security and income support system as at 30 June 2018. It is not intended, or necessarily suitable, for any other purpose. The report relies on the completeness and accuracy of information compiled and provided by the Department. There is also a limitation on the accuracy of the results contained in this report because of the inherent uncertainty of any estimation of such long term costs.

2. Allowance for recent experience

The valuation has been developed with reference to the latest welfare recipient experience as at 30 June 2018, and this experience has impacted the population at the valuation date, as well as the assumptions selected for use in the future projections.

For the June 2018 valuation the total model population is 25.0 million people which comprises the updated resident population of 24.9 million, as well as 0.1 million overseas payment recipients. This updated model population has increased by 0.3 million since June 2017, reflecting population growth over the year.

Since the previous valuation, we observed the following key trends with regards to the number of people accessing each payment type:

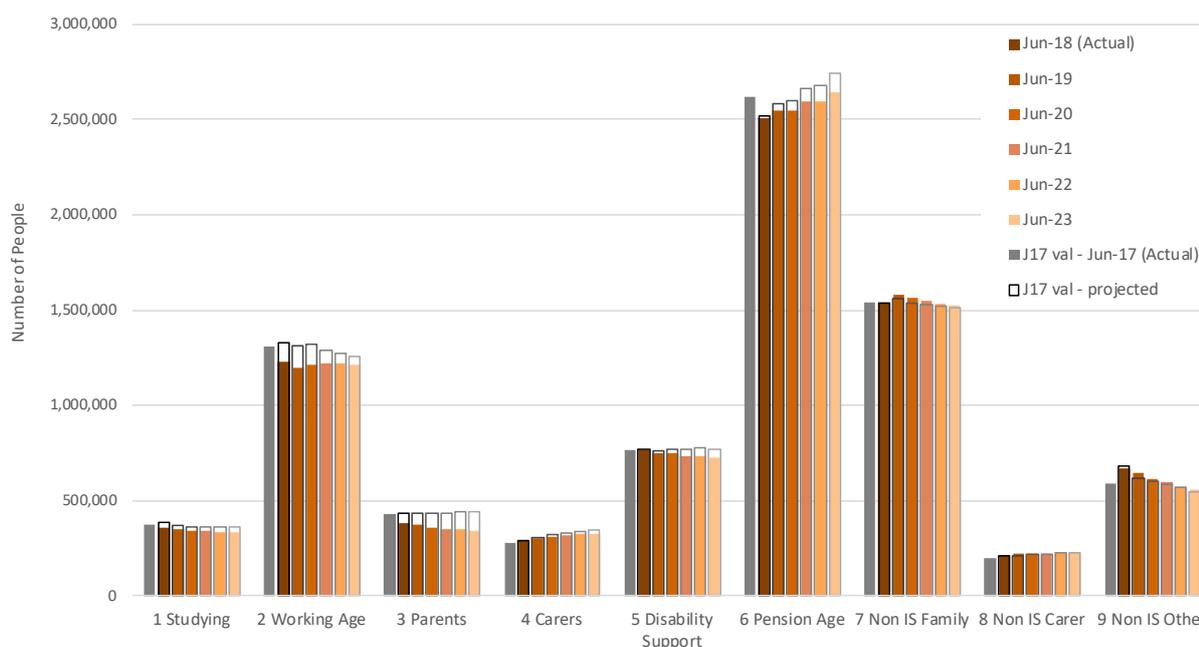
- Total entries into the welfare system have continued to decrease over the past year.
- The number of people exiting the welfare system has increased.

- The numbers of people in most income support classes have reduced compared to the previous year. The main exception to this is the Carers class, which has continued to grow.
- The number of entrants into DSP remained at much lower levels as a result of the tightening of eligibility criteria over recent years.
- The number of people entering the Age Pension has reduced, in part as a result of the changes in the pensions assets test. Movements into Age Pension also reduced as a result of the increase in the Age Pension age from 65 to 65.5 in the 2018 financial year.

These factors have resulted in an overall decrease in the welfare population over the last year despite growth in the total Australian population. The welfare population now represents 31.8% of the population (down from 32.6% at June 2017), with income support recipients now making up 22.1% of the total population (down from 23.3% at June 2017).

The chart below shows the projected number of people in each welfare class, and highlights some of the movements in the key projection assumptions in response to the experience noted above. The red and orange bars show the actual number of people in each class for the year ending 30 June 2018, as well as the expected numbers of people in each active class over the period June 2019 to June 2023. We have also included information from the previous June 2017 valuation for comparison: the grey bar shows the actual number of people in each class for the year ending 30 June 2017; while the black / grey outline bars show the projected numbers based on the June 2017 valuation.

Figure 1: Actual and projected numbers of people in each active welfare class



Key features:

- The total projected numbers of people from the June 2018 valuation (the red and orange bars), are generally significantly lower than the projections from the previous June 2017 valuation (the black / grey outline bars). This is reflective of the recent decrease in entries and increase in exits, which will act to reduce the total number of welfare recipients if this experience continues. The decrease is a continuation of the decreasing trend seen at the last valuation.
- In particular, decreases in the projection can be seen for the Working Age, Parents, Disability Support and Pension Age classes, relative to the June 2017 projection. This is reflective of the significant decrease in entries observed over the last year. While decreases appear more modest in the Carers and Disability Support classes, these still translate to large decreases in the lifetime cost due to the high expected duration on payments for people in these classes.

- Despite the decrease noted above, the number of **Age Pensioners** is still projected to increase, although at a lower rate than was expected based on the June 2017 valuation. This increase reflects the increasing population of people of age pension age as a result of improved longevity. This is being partially offset by the impact of the increase in the Age Pension age from 65 to 67, starting from 1 July 2017 – by itself this change in Age Pension age would act to decrease the number of people in this class.
- The number of people in the **Carers** class has been growing from year to year and we expect this to continue in the future. As the population ages and there are a higher number of older people needing care, there may be more demand for this payment. Note also that this class includes a group of people over pension age who may be caring for ageing partners.
- The number of people in the **Working Age** class is projected to remain fairly stable over this period, although at a lower level than was seen last year following a reduction in class numbers over 2017/18.
- The number of people in the **Studying** class is expected to reduce as there are fewer people in their late teens and early 20s today than was the case in the recent past.
- The number of people in the **Non IS Other** class increased in June 2018 following a large movement from the pension age class to the Non IS Other class as a result of the changes in eligibility relating to the pension assets test. The projection then shows decreasing numbers over the period. This is largely driven by the closure of carbon tax compensation to new recipients of concession cards from March 2017, which is expected to result in decreased numbers of people above retirement age in Non IS Other.

We have also updated projected payment size assumptions to allow for updated experience and we have noted the following features from our analysis:

- The **average FTB payments** have been gradually decreasing in recent years across a number of classes. This likely in part reflects a number of legislative changes introduced over recent years. There have also been some reductions in **Other Family payments** over the last three years. However we would expect this to increase again from 1 July 2018 following the introduction of the Child Care Subsidy.
- The **average rent assistance payments** have been increasing over the last few years. In part this is because there are less people in receipt of income support, and those who remain in these classes are now more likely to receive rent assistance.

Changes in other payments are discussed later, for each class in turn, as changes in average payments across the whole welfare system are influenced by the mix of people in different classes and the changes in this mix over time.

3. Results

Lifetime cost at 30 June 2018

The key result of the actuarial valuation is the total lifetime cost, which is defined at the valuation date as the net present value of future in-scope payments made to all people in the model population over the remainder of their natural lifetimes.

The total lifetime cost can be assessed for any group of people within the model population. In the discussion on the results we examine the total lifetime cost for the whole model population and for four groups of people in the starting population:

- **Current welfare recipients** - this includes any person who received a payment in the 2017/18 year.
- **Recent exits** – people who exited a welfare recipient class in the last three years. This is people who would be assigned to one of the welfare recipient classes (classes 1 to 9) at 30 June 2015, 30 June 2016, or 30 June 2017 but do not fall into one of these classes at 30 June 2018.
- **Older exits** – other people who are known to have previously received a payment.
- **Rest of the Australian Population** – the remainder of the model population.

Future migrants and unborn children are not included in the estimate of total lifetime cost, but will appear in future valuations once they migrate or are born, and at that time will contribute to an increase in the total lifetime cost.

For any group of people the lifetime cost can be considered in terms of the number of people in the group and the lifetime cost per person. Throughout this report we use the term **average lifetime cost** to refer to the per person future lifetime cost for a group of people.

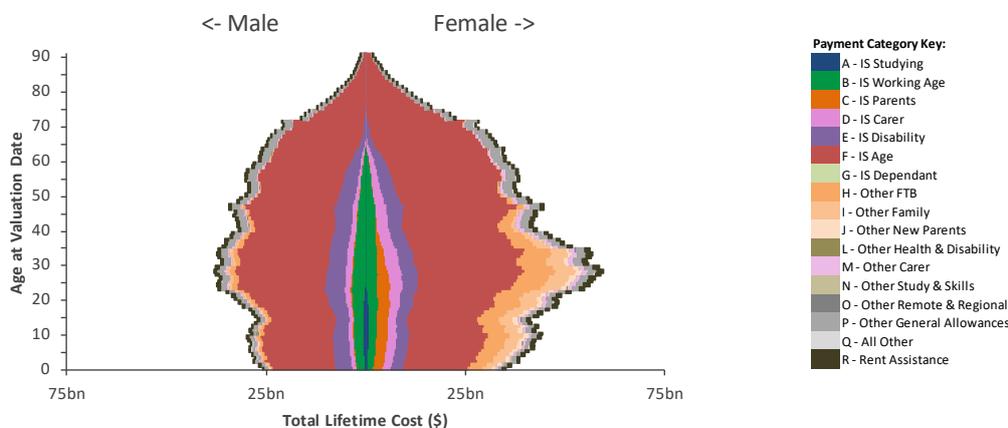
Note that while the model does simulate the lifetime trajectory of each individual, it is only intended that results ever be considered for a similar group of individuals – either in total or on average for that group.

Lifetime cost results by class

The total lifetime cost for the model population is estimated to be **\$5,662 billion** as at 30 June 2018, in respect of the **25.0 million** people included in the model population. This is a substantial and somewhat uncertain figure, but does lend itself to longer term thinking about the dynamics and cost of the welfare system; it can be considered a benchmark against which the potential impact on the total lifetime cost of policy changes can be assessed.

The figure below shows a breakdown of this total lifetime cost by current age and gender.

Figure 2: Total lifetime cost by age and gender



From the chart, we can see that the Age Pension is by far the largest component of the total lifetime cost. The total lifetime cost for women is also higher than that for men, owing to a higher usage of Parenting and Non IS Family (including FTB) payments. In addition, projected Age Pension payments are higher for females and this is likely due to higher expected longevity. The remainder of the total lifetime cost predominantly arises from income support payments – this is due to income support users being more likely to remain in the welfare system (and continue to use welfare), as well as these payments being larger in size compared to non income support.

The following table provides a further breakdown of the lifetime costs depicted in the figure above:

Table 2: Summary of key valuation results (30 June 2018 valuation)

Population segment	Number in starting population	Average age	Total Lifetime cost (\$bn)	Average payment in 2017/18 (a)	Average lifetime cost (\$'000) (b)	Change in average lifetime cost (%)	Ratio = (b) / (a)
Current welfare recipients							
- Studying payment recipients	358,986	24	94	7,500	263	-12.4%	35
- Working Age payment recipients	1,237,075	40	471	11,500	380	-4.7%	33
- Parenting payment recipients	380,947	33	220	33,000	577	-3.2%	17
- Carer payment recipients	294,008	51	155	27,400	529	-0.7%	19
- Disability support pensioners	761,985	50	417	22,400	547	-0.2%	24
- Age pensioners	2,508,270	76	577	17,600	230	+1.0%	13
- Family non IS clients	1,539,668	40	354	7,200	230	-11.8%	32
- Carer non IS clients	217,720	51	51	7,100	235	-10.1%	33
- Other non IS clients	652,322	50	98	2,900	151	-13.6%	52
<i>Total current welfare recipients</i>	<i>7,950,981</i>	<i>53</i>	<i>2,439</i>	<i>14,200</i>	<i>307</i>	<i>-5.0%</i>	<i>22</i>
Previous welfare recipients							
- Exited 1-3 years	1,597,238	41	337	n/a	211	-13.8%	n/a
- Exited 4+ years	3,219,117	47	563	n/a	175	-17.7%	n/a
<i>Total previous welfare recipients</i>	<i>4,816,355</i>	<i>45</i>	<i>900</i>	<i>n/a</i>	<i>187</i>	<i>-16.2%</i>	<i>n/a</i>
Rest of Australian resident population							
- Rest of Australian resident population	12,266,069	28	2,323	n/a	187	-15.7%	n/a
Australian resident population	25,033,405	39	5,662	n/a	226	-11.6%	n/a

Notes:

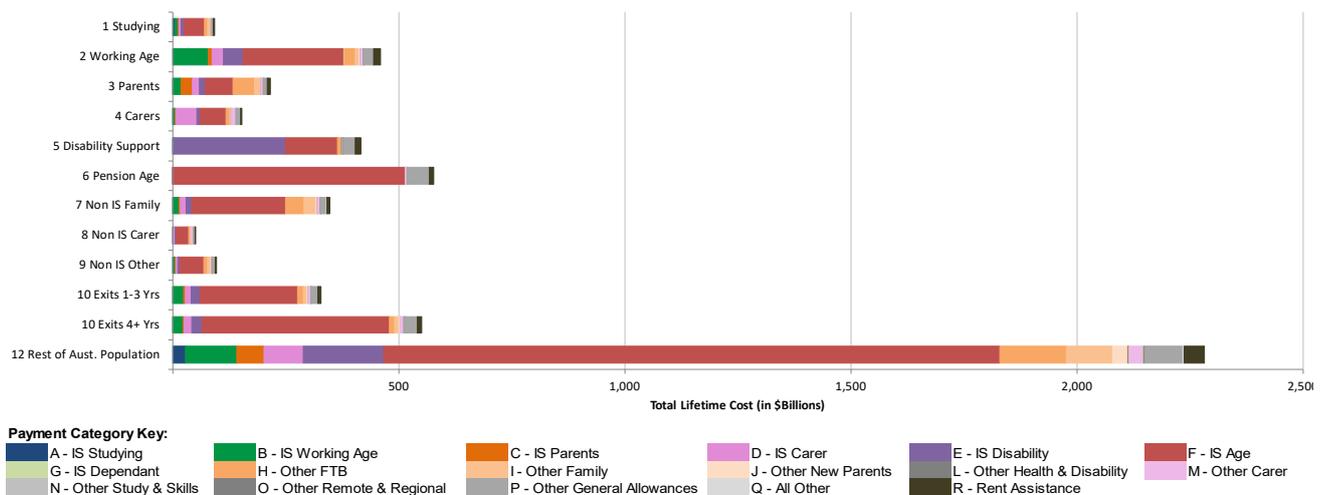
1. The average payment in 2017/18 is understated owing to the data maturity issues with FTB and other family payment data. This has a particular impact on the average payments for people in the family non IS and other non IS classes; we would expect these amounts to ultimately be larger than the figures shown.
2. Exited 4+ years refers to previous welfare recipients who have exited in the past 4 or more years.
3. Change in average lifetime cost is relative to the June 2017 (rebased) valuation.

The total lifetime cost represents a multiple of almost 50 times the total amount of 2017/18 in-scope payments, which totalled \$115.4 billion. Such a multiplier is not unexpected given that we have included the Age Pension in the valuation, which a significant proportion of the model population are expected to receive in the future for many years post retirement.

The table shows the contribution of each class and population group to the total lifetime cost, which reflects the number of people in that class and their average lifetime cost. The average lifetime cost for people in each class is driven by the probability of an average person in that starting population entering, remaining in or leaving the system in each future year; combined with the type and amount of payments they are likely to receive while they are active in the system.

Unsurprisingly, the current welfare recipient class with the largest total lifetime cost is Age Pension, owing to the number of people in this class and the fact that once in that class, most people remain there for the rest of their lives. Furthermore, the projected future cost of Age Pension and related payments for current welfare recipients is a significant component of the lifetime costs for all other classes. This is shown in the chart below, which further splits the lifetime costs by class shown in the above table, into the 17 payment categories that we have included in the model.

Figure 3: Composition of lifetime cost (\$bn) by welfare class and payment category



Note: Exited 4+ years refers to previous welfare recipients who have exited in the past 4 or more years

Below we show the number of years for which we expect people in each class to receive some income support payments, some other payments or no payments.

Note this duration measure captures information on welfare system use over future years of a person’s lifetime; it is not a measure of the length of time or number of fortnightly payment periods spent in receipt of payment.

Table 3: Summary of duration results (30 June 2018 valuation)

Population segment	Expected future lifetime (years)	Proportion of years receiving some income support payments	Proportion of years receiving some non income support payments only	Proportion of years receiving no welfare payments
Current welfare recipients				
- Studying payment recipients	67	35%	8%	58%
- Working Age payment recipients	49	59%	4%	37%
- Parenting payment recipients	57	59%	10%	32%
- Carer payment recipients	38	82%	3%	15%
- Disability support pensioners	34	93%	1%	6%
- Age pensioners	14	96%	<1%	4%
- Family non IS clients	51	32%	13%	55%
- Carer non IS clients	40	38%	22%	41%
- Other non IS clients	36	32%	22%	47%
Total current welfare recipients	36	56%	8%	36%
Previous welfare recipients				
- Exited 1-3 years	50	36%	5%	60%
- Exited 4+ years	43	34%	3%	63%
Total previous welfare recipients	46	34%	4%	62%
Rest of Australian resident population				
- Rest of Australian resident population	64	29%	6%	65%
Australian resident population	51	36%	6%	58%

Note: Exited 4+ years refers to previous welfare recipients who have exited in the past 4 or more years

As can be seen current income support recipients are expected to spend a far greater proportion of their future lifetimes receiving income support, and this is especially so for recipients of Carer payment, Disability Support pension and, unsurprisingly, the Age Pension.

The expected future durations on income support for students and people in the non income support classes are similar and lower than for other income support recipients, but somewhat higher than those for people who have not received any welfare payments over the time period for which we have data.

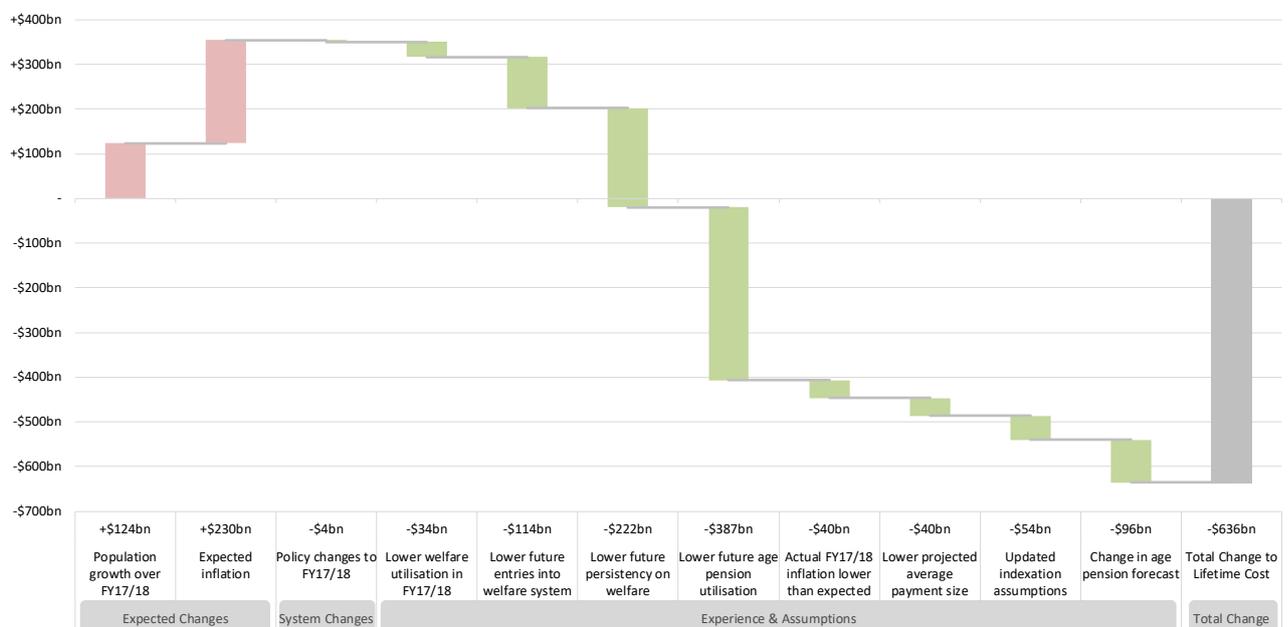
4. Changes in overall lifetime cost

When considering the change in lifetime cost, we have first rebased the June 2017 result to allow for the updated discount rate of 5% used for the June 2018 valuation (a decrease from the discount rate of 6% used for the June 2017 valuation). Rebasing increases the June 2017 lifetime cost by \$1,617 billion, from \$4,681 billion to \$6,298 billion. This rebasing supports comparability of the June 2018 and June 2017 results; noting that the change in discount rate for this valuation is an external change which, although it significantly increases the lifetime cost, it does not impact projected cashflows and so is not relevant to the actual projected welfare costs.

The total lifetime cost at 30 June 2018 is **\$5,662 billion**. This is a **significant decrease of approximately \$636 billion** compared to the rebased June 2017 results. This is a large decrease, and in particular, it reflects an update of assumptions which allow for significant decreases in entries and decreases in persistency of payments seen over the last year. This decrease also reflects the impact of growth in population, inflation, model refinements to account for policy changes, and changes to the forecast Age Pension utilisation following a review of experience and other relevant external factors such as changes in superannuation.

The following chart provides a detailed breakdown of the movement in the total lifetime cost. Each item of movement is discussed in turn below.

Figure 4: Explanation of change in lifetime cost (relative to June 2017-rebased)



Expected changes

Each year, we expect the total lifetime cost to grow in line with population growth and in line with inflation.

At the June 2018 valuation, the overall lifetime cost has **increased by \$124bn (+2.0%)** due to growth in the Australian population over the 2017/18 year. This includes the combined impact of births, deaths and net migration over the year. These population changes resulted in an extra 380,000 individuals in the Australian population.

The overall lifetime cost has further **increased by \$230bn (+3.6%)** due to expected inflation over the year. This includes:

- **Expected inflation over the 2017/18 year** – expected inflation of payments over the 2017/18 year based on information known at June 2017 was on average 2.0%.

- **Inflation of future payments** – this allows for the impact of the change in pattern in projected future inflation of payments from June 2018 (relative to the pattern from June 2017), in which we move closer to the expected long term inflation rate sooner into the projection. This increases the lifetime cost by 1.6%.

System changes

Changes to the welfare system may directly influence the entitlements of individuals and their welfare usage. The impact of such policy changes has been relatively minor over the last year, and resulted in a lifetime cost **reduction of \$4bn (-0.1%)**.

Experience and assumptions

The total lifetime cost will also change due to the impact of emerging experience observed over the year together with assumption changes which reflect this experience. This was the largest element of the change and this element resulted in a **\$986bn (-15.6%) decrease** in the overall lifetime cost, which reflects the impact of significant decreases in welfare utilisation experience over the year. While this decrease is the net impact of many complex changes and interactions within the model, it can be broadly attributed to the following:

- **Lower overall welfare utilisation (\$34bn decrease)** – in general the proportion of the population utilising welfare was lower this year than last year, and this has resulted in a decrease in the lifetime cost.
- **Lower future entries into the welfare system (\$114bn decrease)** – this in particular reflects recent experience of decreased entries into income support classes.
- **Lower future persistency on welfare (\$222bn decrease)** – in response to recent experience, overall projected welfare persistency is expected to fall. In particular, reduced future utilisation of DSP (\$66bn decrease), reduced future utilisation of other pre-retirement income support (\$97bn decrease), and reduced future use of non income support payments (\$55bn decrease).
- **Decreased use of Age Pension, including the flow on impacts from the above changes (\$387bn decrease)** – The use of income support and other payments leading up to retirement is an important predictor of the use of Age Pension, as people have a greater chance to build their superannuation if they are working rather than receiving income support payments. As such, the decreased future projected use of income support payments flows through to a decreased projected use of Age Pension and a further reduction in lifetime cost.
- **Actual inflation over the year was lower than expected (\$40bn decrease)** – the indexation of payments over the year was around 0.7% lower than expected which resulted in a decrease in liabilities.
- **Lower projected average payments than expected (\$40bn decrease)** – the main drivers of this decrease include reduced projected payments of Family Tax Benefit and other Family Payments (\$21bn decrease), and a marginal decrease in the adopted size assumption for the Age Pension to allow for the latest detailed experience.
- **Updated future indexation assumptions (\$54bn decrease)** – updates to the assumed indexation of future payments resulted in a \$54bn decrease in the estimated total lifetime cost. This reflects an adjustment to the projected indexation over time, with the long term inflation rate now being reached one year later. This indexation update has the biggest dollar impact on the Age Pension payment category (\$46bn) as this is the largest component of the lifetime cost.
- **Update of Age Pension forecast (\$96bn decrease)** – update of assumptions relating to the future utilisation of Age Pension following a review of welfare experience, as well as consideration of relevant external factors. See section 3.3 for more details.

5. New findings

This section considers the following new insights generated as a result of extensions to the work this year:

- Geographical insights
- Refugees
- Working Age recipients

Geographical insights

Regional variations in the level and type of welfare use within Australia are often of key interest from a policy and intervention development standpoint. While these differences in welfare usage can be partially explained by demographic factors that are available in the data (such as age, gender, educational attainment and earnings indicators amongst others), there are a number of other socio-economic factors outside of the welfare dataset that can influence the levels of welfare utilisation at a regional level.

Given the importance of differentiating welfare outcomes geographically, the 2018 model for the first time includes a variable that serves as a regional proxy for a number of socio-economic factors relating to place of residence; some of these factors are not available in the data. This factor is based on one of the ABS produced Socio-Economic Indices for Areas (SEIFA), and has been used to place individuals into one of ten deciles based on the collective socio-economic advantage / disadvantage of their region of residence. The types of variables considered in SEIFA include those relating to income, education, employment, occupation and housing.

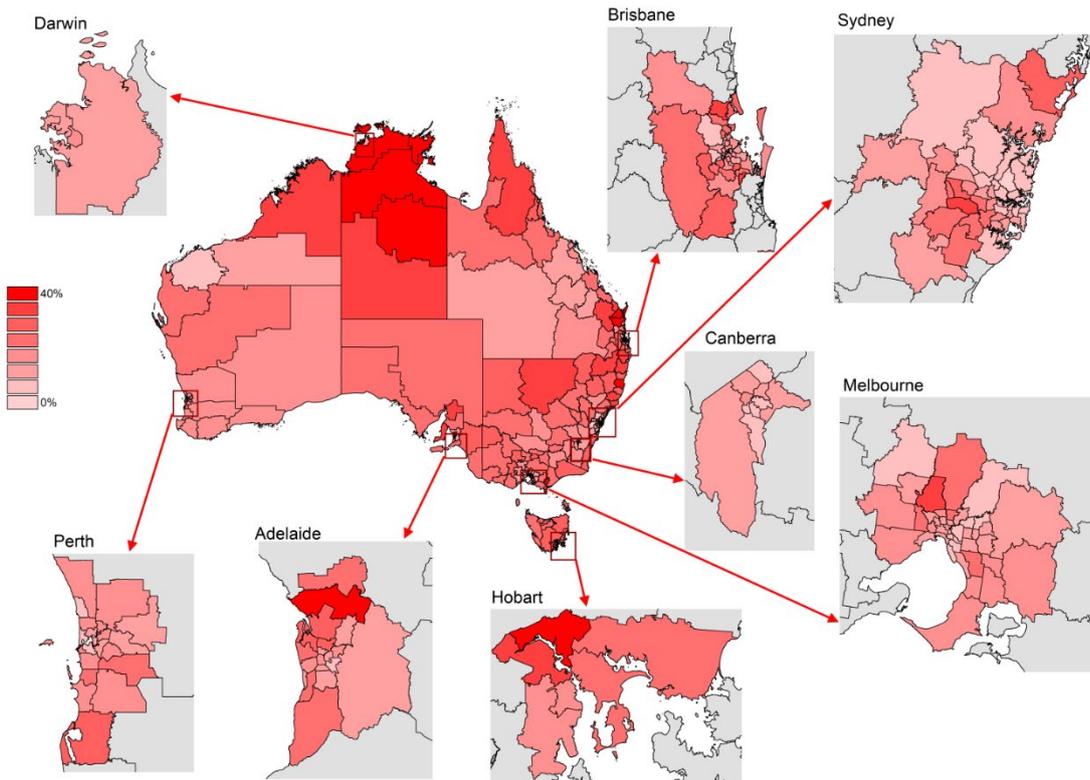
How does welfare use currently vary by region?

The map below shows the proportion of people aged between 16 and 64 who are in a pre-retirement income support class by region, and highlights the differences in the utilisation of working age¹ income support across Australia.

We can see that the per capita usage of pre-retirement income support varies considerably both across Australia and within each major population centre. There are areas of higher dependence in each region, and dependence tends to increase as the remoteness of a region increases. Even at a local level within major cities, income support dependency tends to increase in areas further from the city centre.

¹ The Working Age class relates to people who received a payment in the 'IS Working Age' payment category during the year, as well as a small number of people who received a payment in the 'IS Dependant' payment category during the year. The 'IS Working Age' payment category includes ABSTUDY – working, Austudy – working, Newstart Allowance, Sickness Allowance, Special Benefit and Youth Allowance (Other). The 'IS Dependant' payment category includes Partner Allowance and Widow Allowance.

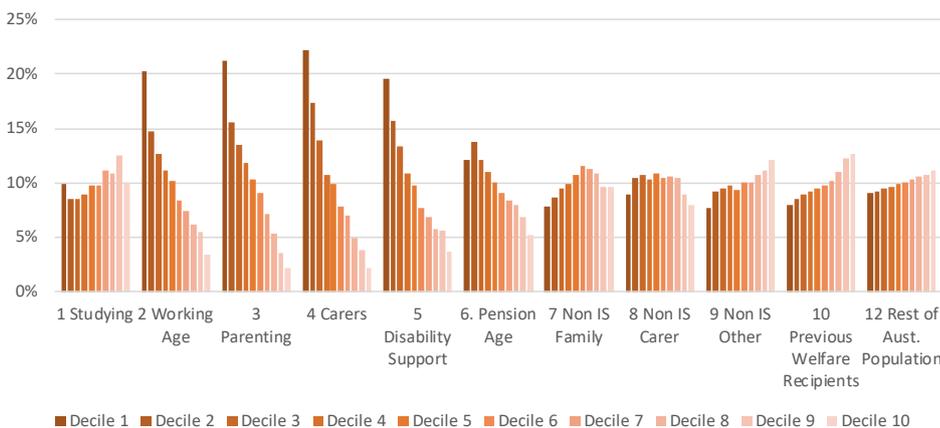
Figure 5 Proportion of 16 to 64 year olds in an income support class by region



We also noted that the areas with higher use of pre-retirement income support was well correlated with areas of higher socio-economic disadvantage.

The graph below looks at the mix of SEIFA deciles within each welfare class at June 2018. Of particular note is the distribution of SEIFA deciles within the Working Age, Parenting, Carers and Disability Support classes, where a heavy skew exists toward individuals residing in areas with high levels of socio-economic disadvantage (i.e. towards decile 1). There is a significant over representation given that only 10% of the Australian population as a whole live in each of the SEIFA Decile locations.

Figure 6 SEIFA decile distributions by class



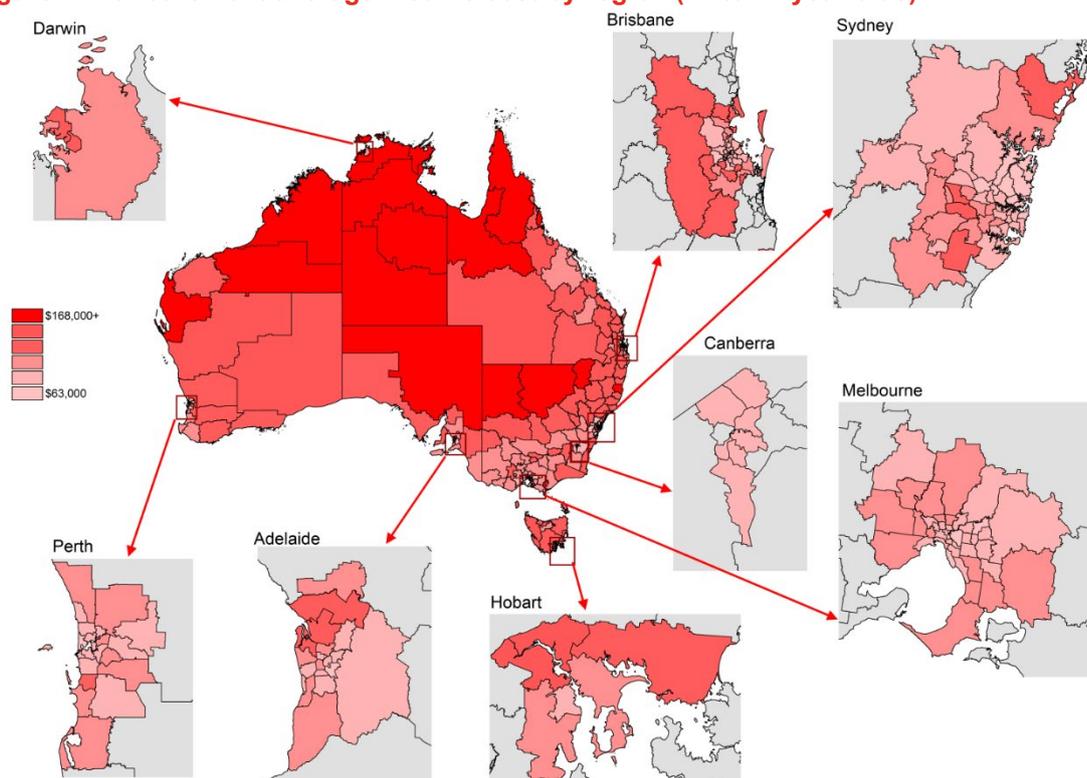
Overall, people living in areas with the highest level of socio-economic disadvantage are over three times more likely to be in receipt of income support than those living in areas with the lowest level of socio-economic disadvantage. The difference is greatest for Parenting and Carer payments; people in areas with the highest level of socio-economic disadvantage are almost ten times more likely to be in receipt of these payments than those living in areas with the lowest level of socio-economic disadvantage.

What does the model tell us about regional welfare use going forward?

The level of socio-economic advantage or disadvantage of a region is a strong predictor within the model. For those individuals that have never accessed welfare, the likelihood of entering the system for the first time through a Working Age payment increases significantly with the level of socio-economic disadvantage of their location of residence. A similar effect is observed for entries into the Parenting, Carers and Disability Support classes.

The flow on effect of socio-economic advantage or disadvantage of a region over a lifetime can be seen by comparing the average lifetime costs of individuals. The map below shows how the pre-retirement average lifetime cost varies by region for current 11 to 17 year olds. The average lifetime cost for this group is around \$115,000.

Figure 7 Pre-retirement average lifetime cost by region (11 to 17 year olds)



We can see that the pre-retirement average lifetime cost is significantly higher in remote regions when compared to the major cities. Within the major cities, we note that the average lifetime cost tends to be high in clusters of nearby regions, and that the cost tends to increase the further a region is from a major city centre.

Refugees

As part of the 2018 Valuation, an exercise was undertaken to better understand the welfare outcomes for refugees in the Australian population. For the purpose of the valuation, refugees were defined as any individuals who were granted a humanitarian visa up until June 2018.

Unlike other migrants, refugees are not selected on the basis of their potential contribution to Australia, but rather primarily for humanitarian reasons. Refugees can be at high risk of welfare dependency as they often face multiple disadvantages because of their pre-migration experiences, including mental health issues, torture and trauma, physical disabilities, low literacy and limited previous opportunities to gain skills and work experience.

There were a total of 243,000 refugees in the model population as at June 2018. This is just under 1% of the population. Of these refugees, almost 95% had either a Refugee Visa, a Special Humanitarian Visa or a Permanent Protection Visa. We note that differences will exist between the circumstances of people using different visa types, and this will likely impact how these people interact with the welfare system. For example

Permanent Protection Visas are for people who have already arrived legally in Australia on a valid visa, whereas Refugee Visas are for people outside Australia. We have not explored these differences in detail for the 2018 report.

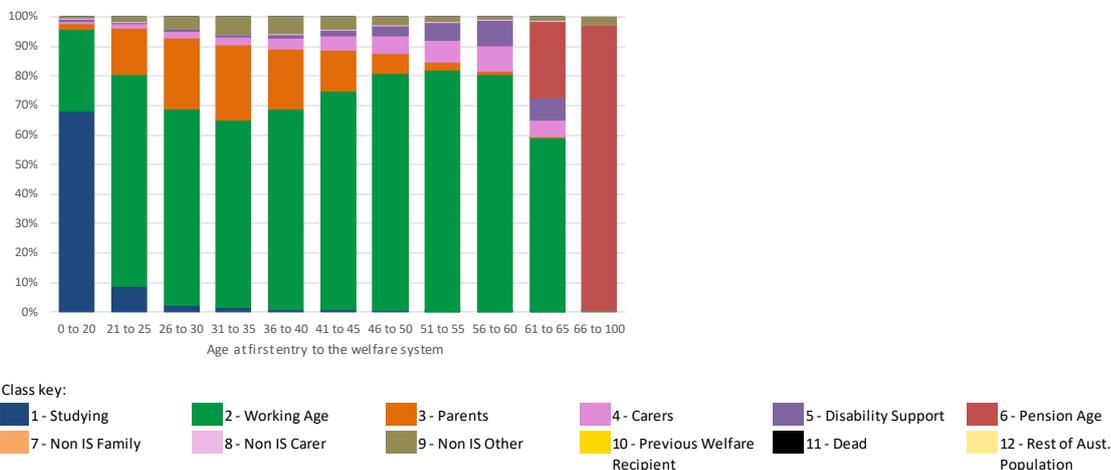
How do refugees first interact with the welfare system?

Due to the nature of the support provided to refugees to assist them upon entering the country (for example newly arrived resident’s waiting period and qualifying residence requirements are not applied in the case of refugees or humanitarian visa holders), most refugees enter the welfare system soon after their arrival: roughly 70% were observed to have entered the system within their first two years of being in the country, and this increases to approximately 90% after 10 years. Note that the increase seen over this period would in part reflect refugees who enter Australia as children, and then during this 10 year period become adults and enter the welfare system in their own right.

The chart below looks at the types of welfare that recent refugees utilised when they first entered the welfare system, and splits out this experience by their age of first entry into the welfare system.

We can see that across all ages, refugees have tended to enter the system through income support, and particularly through the Working Age and Parenting classes.

Figure 8 Proportion of refugees by class of first entry and age of first entry



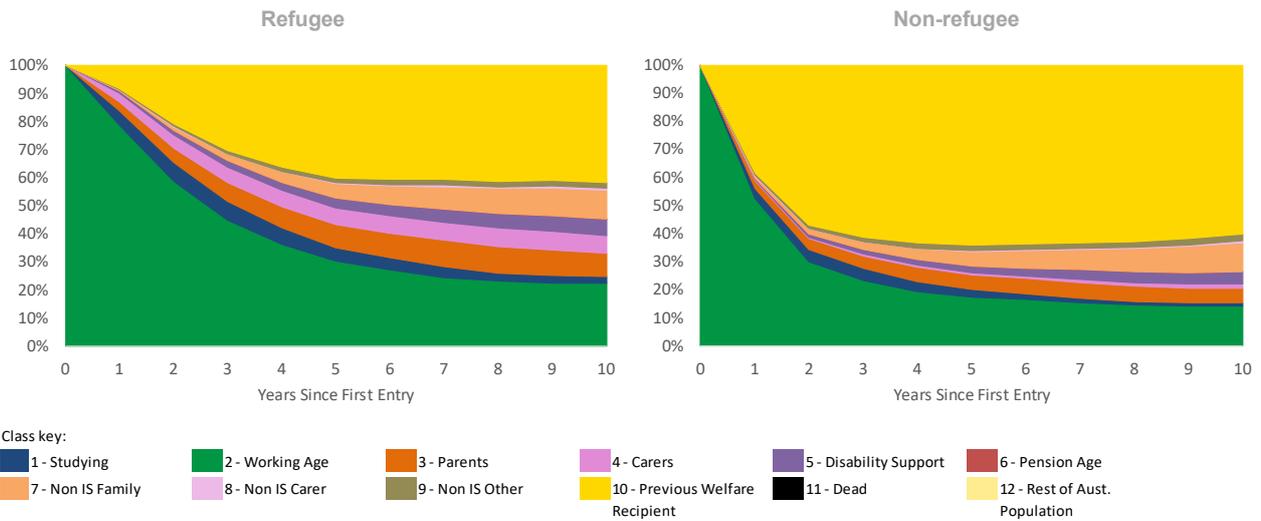
How long do refugees tend to stay in the welfare system?

Below we look at particular cohorts of refugees who entered the system, and their subsequent pathways through welfare.

The first chart below follows the experience of refugees aged 20 to 40 at first entry in the 10 years following their entry into the **Working Age** class. For comparison, the experience of non-refugee entrants into Working Age within the same age group is shown in the second chart below.

The analysis shows that these refugees have required more support than non-refugees in the first five years after they enter the system through the Working Age class. The experience for these refugees has improved over time, though their dependence on Working Age payments remains somewhat higher after 10 years. Similar experience can be seen for those moving into the Carers or Disability Support classes.

Figure 9 Proportion of people entering through Working Age by class and years since first entry



Working Age recipients

This year we have included a variable indicating receipt of a payment at the valuation date (as opposed to at any other point during the year). Information on this very recent welfare use has helped to further differentiate which people in each class are likely to have the highest future welfare use. For example, the analysis has shown that:

- Of the 1,237,000 people in the Working Age class, 846,000 were in receipt of a payment at the end of the year and 722,000 of these related to the Newstart Allowance. This number aligns closely with the definitions used in 'point in time' counts of Newstart recipients.
- The Investment Approach definition includes a further 316,000 people who had received Newstart Allowance earlier in the year but have subsequently stopped receiving any income support, due to gaining employment or other circumstance changes. The modelling shows that this group, while having a lower average lifetime cost, still have significant risk of cycling back onto income support compared to those who have remained off for more than a year.



Part II: Valuation results

1 Introduction

Key points

This report presents the 30 June 2018 valuation of the Australian income support and social security system.

- The 2018 valuation model has retained the same general structure used for previous valuations.
- The model has been extended to include information on people's location, through the inclusion of a measure of socio-economic advantage or disadvantage of their residential location; information on whether people entered the country as a refugee or who became a refugee while in Australia; and it considers whether recipients were in receipt of an income support payment at the valuation date (as opposed to at some other point during the last year).
- The model assumptions have been updated to reflect changes in policy settings since the last valuation and to reflect the experience over the last year, as well as an updated scenario for the projected trend in Age Pension use.

1.1 Background and Introduction

This report documents the findings of the 30 June 2018 actuarial valuation of the Australian income support and social security system. This valuation is part of the work undertaken by the Department of Social Services (the Department) to implement the Australian Priority Investment Approach to Welfare with the aim of reducing welfare dependency and improving the lifetime wellbeing of people and families in Australia.

The actuarial valuation provides a long term perspective of the financial commitments implicit in the current welfare system and provides information on:

- The future cost of the system (lifetime cost).
- How the different payment types (programs) contribute to this overall cost.
- The factors that drive the overall lifetime cost and annual expenditures.
- How the cost is changing over time, which provides information on the financial sustainability of the system.
- The impact of changes, both to the welfare system and to external drivers of the system experience.
- How different groups of people within the system contribute to the overall cost.
- The factors that explain why some groups of people have different levels of expected payment utilisation than others.

This is the fourth annual valuation and provides an updated assessment of the lifetime costs for the Australian population, together with information on the changes to the system since the 2017 valuation and other findings emerging from the analysis.

1.2 Summary of June 2018 valuation model

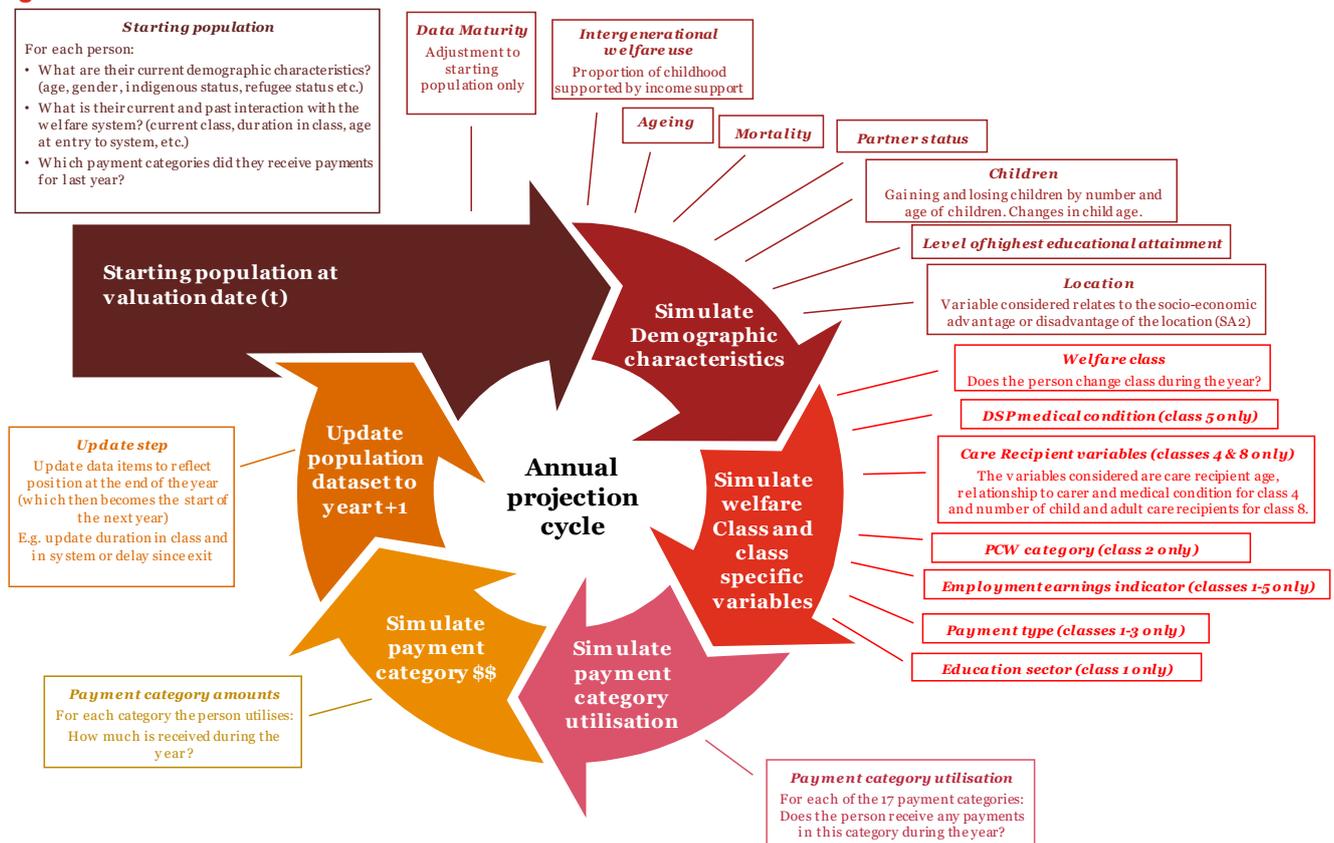
The June 2018 valuation model retains the same general structure as used for the previous valuations. It includes the following key components and steps:

- There is a population module which represents the population at the valuation date. This contains records for the whole Australian resident population and any overseas payment recipients. The records capture information on each individual's life situation and welfare history.
- The population is projected forward using a simulation approach to show the expected life outcomes for each cohort of people. Simulations are performed on an annual cycle, building iteratively to provide a view of peoples' entire future lifetimes.
- The simulation model draws on detailed assumptions which show how we expect peoples' characteristics, life situation and welfare use to evolve in each future year.
 - These assumptions are highly detailed and reflect how the different drivers of experience interact with each other.

- The assumptions are reflective of the welfare system in place at the valuation date, based on legislation in force at that point in time. More specifically, the assumptions have been updated to reflect any changes in legislation that took place over the year.
- The assumptions are also set to reflect the broader economic environment and economic forecasts.
- This year, the model has been extended to include information on people’s location, through the inclusion of a measure of socio-economic advantage or disadvantage of their residential location, at Statistical Areas Level 2 (SA2)²; and information on whether people entered the country as a refugee or who became one post-arrival. Additionally we have examined the timing of payments throughout the year, and used an indicator for whether an individual was in receipt of a payment at the valuation date as a predictor in the model.
- The key assumptions have also been updated to allow for the most recent experience. This update has included a more extensive investigation and update of the assumptions relating to the forecast of future utilisation of Age Pension.

The specific items considered in the annual simulation cycle are illustrated in the figure below. This also shows the order in which each variable is simulated.

Figure 10: Illustration of the simulation model structure



² Statistical Areas Level 2 (SA2) is an area type which falls under the Australian Bureau of Statistics (ABS) Structures hierarchy of areas. SA2 are medium-sized general-purpose areas which generally have a population range of 3,000 to 25,000 people. They are designed to reflect functional areas that represent a community that interacts together socially and economically. There are 2,310 SA2 regions covering Australia.

Welfare classes

The simulation model structure above refers to welfare classes which are defined based on the types of payments received over the last year. The classes are hierarchical, so that being in an income support class (classes 1 to 6) will take precedence over being in a non income support class (classes 7 to 9) where someone receives multiple payments during a year. The class definitions are described in the table below.

Table 4: Welfare classes

Active – income support (IS)	Active – non income support (Non IS)	Inactive classes
1 Studying People receiving Austudy, ABSTUDY or Youth Allowance (Student) as their most recent income support payment.	7 Non IS Family People not receiving any Carer payments but receiving one or more family supplement payments e.g. FTB, Child Care Benefit in the previous year.	10 Previous welfare recipient* People who were previously in one of classes 1 to 9 but are not for the latest year. <small>*These are people who were captured in classes 1 to 9 from 2001/02 onwards.</small>
2 Working Age People receiving Newstart Allowance or Youth Allowance (Other) as their most recent income support payment (a small number of other recipients are also included in this class – see section 6.2 for details).	8 Non IS Carer People receiving Carer Allowance.	11 Dead People who have died during the previous year or in prior years.
3 Parenting People receiving Parenting Payment (Partnered or Single) as their most recent income support payment.	9 Non IS Other People receiving payments but not in any other welfare recipient class.	12 Rest of Aust. population Rest of modelled population.
4 Carers People receiving Carer Payment as their most recent income support payment.		
5 Disability support People receiving Disability Support Pension as their most recent income support payment.		
6 Pension Age People receiving any Age Pension as their most recent income support payment (a small number of Widow B Pension and Wife Pension recipients are also included in this class).		

Payment categories

There are around 85 individual payment types included in the scope of the model. These have been grouped into 17 payment categories for modelling, seven of which relate to income support payments and ten relate to non income support payments.

Note that while each person is allocated to a single unique class in a year, the model simulates the possibility of payment utilisation for each possible payment category. As such the model allows for individuals to receive multiple payments in the same year.

1.3 Model uses

The actuarial valuation model is designed as a whole of population model with the purpose of providing a tool for understanding the welfare system and long term impact of decisions made today and in the future, at a fairly high “system” level, as well as for smaller groups of interest. The valuation model provides a flexible framework for exploring welfare system dynamics and the related lifetime cost outcomes.

The main results provide information on the current Australian population, which groups of people are utilising welfare now and how the types and amounts of welfare payments vary across different groups of the population. They also provide information on the lifetime cost for different groups and their expected future pathways through the welfare system. This information can be examined further for groups of people defined by age, gender, current payment or a range of other characteristics.

The model can be used at a “system level” to consider the likely future welfare utilisation of the Australian population as it grows and the demographic profile shifts over the coming years. We know that the population is expected to both grow and age; by considering which people within the population are more likely to draw on

supports from the welfare system we can see how the numbers of people seeking to access different payments may vary in future. The model can also be used for diving deeper into sufficiently sized groups of interest to explore their specific welfare interactions over time.

The valuation provides the ability to explore the sensitivity of the model results to changes in the model assumptions. This provides a platform through which different scenarios can be explored and their potential impact assessed over both the short and longer term. For example, the model could be used to explore the impact of different economic scenarios, changes in payment design (payment eligibility, amounts or indexation) or changes in fertility rates or the retirement age.

The model also has a potentially valuable role to play in measuring the effectiveness of evidence based interventions. The model can be used as a “scenario” tool to quantify the likely long term impacts of different policy changes or interventions; and the projections generated by the model can be used as a “baseline” against which to monitor and quantify the impact of interventions over time.

1.4 Model limitations

While the model captures the different risk characteristics that are important at a population or group level, it does not reflect all the factors that may result in different outcomes for individual people. Accordingly, it is able to produce population and population group information rather than information about individuals.

There is a limitation on the accuracy of the results contained in this report because of the inherent uncertainty of any estimation of such long term costs. The issue of uncertainty is expanded upon in the results section of this report.

1.5 Reliances

This report has been prepared by PricewaterhouseCoopers (PwC) at the request of the Department to document the actuarial valuation of Australia’s social security and income support system as at 30 June 2018. It is not intended, or necessarily suitable, for any other purpose.

The report relies on the completeness and accuracy of information compiled and provided by the Department. We have not verified that data is accurate or complete, but we have checked it for internal consistency and for consistency with other information summaries produced by the Department. We note that the Department also does not give any warranty as to the reliability or accuracy of the data provided to PwC for the valuation.

We accept no liability for loss or damage howsoever arising in the use of this report by the Department for other than the purpose stated above, nor for any use of this report, without full understanding of the reliances and limitations noted above, or for errors or omissions arising from the provision of inaccurate or incomplete information to us. We accept no liability for loss or damages howsoever arising in the use of this report by third parties.

1.6 Professional standards

The advice in this report is intended to satisfy the Code of Professional Conduct issued by the Actuaries Institute. No other Australian Professional Standards are relevant to this work.

The International Actuarial Association has published an International Standard of Actuarial Practice 2 (ISAP 2) “Financial Analysis of Social Security Programs”. It provides guidance to actuaries performing financial analyses of Social Security Programs (SSPs), or reviewing, advising on, or opining on such analyses. It is our view that the standard is not intended to cover the type of social benefit system in Australia and as such, we do not consider it directly relevant to this valuation. Nonetheless, we have considered the appropriate practices set out in the standard and consider that the approach adopted in this valuation aligns with the practices that are relevant to our work.

2 Developments and new insights

Key points

As part of ongoing model development, we have added a number of new variables that allow the model to take into account differences in trajectories for people depending on the socio-economic advantage / disadvantage of their region of residence and their refugee status. We have also examined the timing of payments throughout the year, and used an indicator for whether an individual was in receipt of a payment at the valuation date as a predictor in the model. This extension of the model has allowed us to bring the following new insights:

- The inclusion of this region based measure of socio-economic advantage / disadvantage has allowed for greater differentiation in the model at a geographical level. Additionally, we have explored the historical geographical data during our analysis. This work has shown:
 - People living in areas with the highest level of socio-economic disadvantage are over three times more likely to be in receipt of income support than those living in areas with the lowest level of socio-economic disadvantage. The difference is greatest for recipients of Parenting and Carer payments; people in areas with the highest level of socio-economic disadvantage are almost ten times more likely to be in receipt of these payments than those living in areas with the lowest level of socio-economic disadvantage.
 - The level of welfare dependence tends to be higher in remote regions. Within major cities, welfare dependence tends to be higher further away from the city centre. This was evident when looking at welfare dependence across a variety of measures and cohorts including:
 - the proportion of 16 to 64 year olds currently in an income support class (excluding Pension Age);
 - the proportion of 11 to 17 year olds with a high level of intergenerational welfare dependency; and
 - the pre-retirement average lifetime cost for 11 to 17 year olds.
 - Higher pre-retirement average lifetime costs, as well as higher variability in average lifetime costs, for individuals living in socio-economically disadvantaged areas.
- The inclusion of refugee-specific variables in the model has allowed for greater differentiation in the model for this group, and has allowed for the detailed analysis of their experience through the welfare system:
 - Refugees tend to enter the welfare system through income support payments more often than non-refugees.
 - Refugees entering through the Studying class between the ages of 18 and 25 tend to stay on Studying payments for longer, and are more likely to transition onto Working Age payments in the short term. Over time, the experience for refugees has improved, however their dependence on welfare tends to stay higher than non-refugees. For example, historically we have seen that 10 years after their first entry into the system, 43% of refugees no longer receive any form of welfare, compared to 77% of non-refugees at the same point.
 - Refugees entering through the Working Age class between the ages of 20 and 40 tend to require more support in the short term than non-refugees. Though this has improved over time, the level of dependence for refugees tends to remain higher after 10 years (historically, we have seen that 23% of refugees remain in the Working Age class after 10 years, compared to 14% of non-refugees after the same period of time).
- The inclusion of a variable indicating receipt of a payment at the end of the financial year has helped us further differentiate which people in each class are likely to have the highest cost over their future lifetimes. For example, when looking at the Working Age class, the analysis has shown that:
 - Of the 1,237,000 people in the Working Age class, 846,000 were in receipt of a payment at the end of the year and 722,000 of these related to the Newstart Allowance. This number aligns closely with the definitions used in 'point in time' counts of Newstart recipients.
 - The Investment Approach definition includes a further 316,000 people who had received Newstart Allowance earlier in the year but have subsequently stopped receiving any income support, due to gaining employment or other circumstance changes. The modelling shows that this group, while

having a lower average lifetime cost, still have significant risk of cycling back onto income support compared to those who have remained off for more than a year.

2.1 Overview of model developments for the 2018 valuation

Major developments

The model projects individuals' trajectories through life and their interactions with the welfare system. As part of ongoing model development we have made a number of extensions and developments to the model for the June 2018 valuation. The most significant of these developments are the addition of three new variables into the model:

- a variable that places individuals into deciles of socio-economic advantage / disadvantage based on their place of residence;
- refugee status; and
- a variable that captures whether or not an individual was in receipt of a payment at the end of a given year.

These variables have helped to improve the model's ability to differentiate between groups of people, facilitating further analysis which has provided helpful information and insights. The new variables and related insights are discussed in sections 2.2 to 2.4 below.

Updates and refinements

There have also been a number of other developments to the model and supporting assumptions to take account of updated information about the welfare system and model population. The table below provides a summary of these developments, together with the component of the modelling work they relate to.

Table 5: Summary of other model developments for 2018 valuation

Item	Details
Policy settings	The projected trajectories and payments in the model will vary if policy changes are made. A given set of policy settings must therefore be assumed in the model and adjustments made to reflect this. We have made adjustments for new policy changes (those occurring between 1 July 2017 and 30 June 2018). The adjustments made for policy changes occurring up to 30 June 2017 have also been reviewed and updated. See section 3.2 for further details.
Data	The model is supported by a longitudinal dataset covering welfare use in Australia, as well as the 2011 Census, 2016 Census and other supplementary population level data. This dataset has been extended to include a number of additional data variables to facilitate extensions to the model. At this valuation we have also used a later data extraction date of 30 September rather than 30 June. This does not have a direct impact on the results, however, it reduces the extent of maturity adjustments and provides more certainty in the recent experience. See section 3.3 for further details.
Population module	The 2018 population module has been extended to include information on regional levels of socio-economic advantage / disadvantage and a person's refugee status.
Assumptions for class characteristic data variables	The assumptions have all been updated to reflect recent experience and current policy settings. Further work has been undertaken for classes 1, 2 and 3 to refine the class characteristic assumption models to allow for the interaction of the new region based socio-economic advantage / disadvantage variable.
Class movement assumptions	These assumptions have all been updated to reflect recent experience and current policy settings. They have also been refined to consider the influence of the new region based socio-economic advantage / disadvantage variable, refugee variables and the variable indicating whether an individual was on payment as at the valuation date.
Payment utilisation and payment size assumptions	These assumptions have all been updated to reflect recent experience and current policy settings. They have also been refined to consider the influence of the new region based socio-economic advantage / disadvantage variable and refugee variables on payment utilisation and size.
Adjustments module	The economic adjustments have been updated to reflect more recent macro-economic forecasts. The adjustments module has also been recalibrated to reflect more recent experience and align with the updated class movement assumptions.
Age Pension model	As part of the 2018 valuation the assumptions relating to the forecast future utilisation of Age Pension have been updated. To support the revised assumptions, we further analysed the Age Pension experience and have undertaken a review of the external information available to support these assumptions. See section 3.3 for further details.

2.2 Geographical insights

Regional variations in the level and type of welfare use within Australia are often of key interest from a policy and intervention development standpoint. While these differences in welfare usage can be partially explained by demographic factors that are available in the data (such as age, gender, educational attainment and earnings indicators amongst others), there are a number of other socio-economic factors outside of the welfare dataset that can influence the levels of welfare utilisation at a regional level.

Given the importance of differentiating welfare outcomes geographically, the 2018 model for the first time includes a variable that serves as a proxy at the regional level for a number of socio-economic factors relating to place of residence; some of these factors are not available in the data. This factor is based on one of the ABS produced Socio-Economic Indices for Areas (SEIFA), and has been used to place individuals into one of ten deciles based on the collective socio-economic advantage / disadvantage of their region of residence. The types of variables considered in SEIFA include those relating to income, education, employment, occupation and housing. The ABS' Statistical Area 2 (SA2) boundaries have been used to define regions for this purpose (there are 2,310 SA2s across Australia). Additionally, we have considered the ABS' Statistical Area 3 (SA3) boundaries for the purposes of the maps used in this section. There are 358 SA3 regions, and these are made up of small groups of SA2 regions.

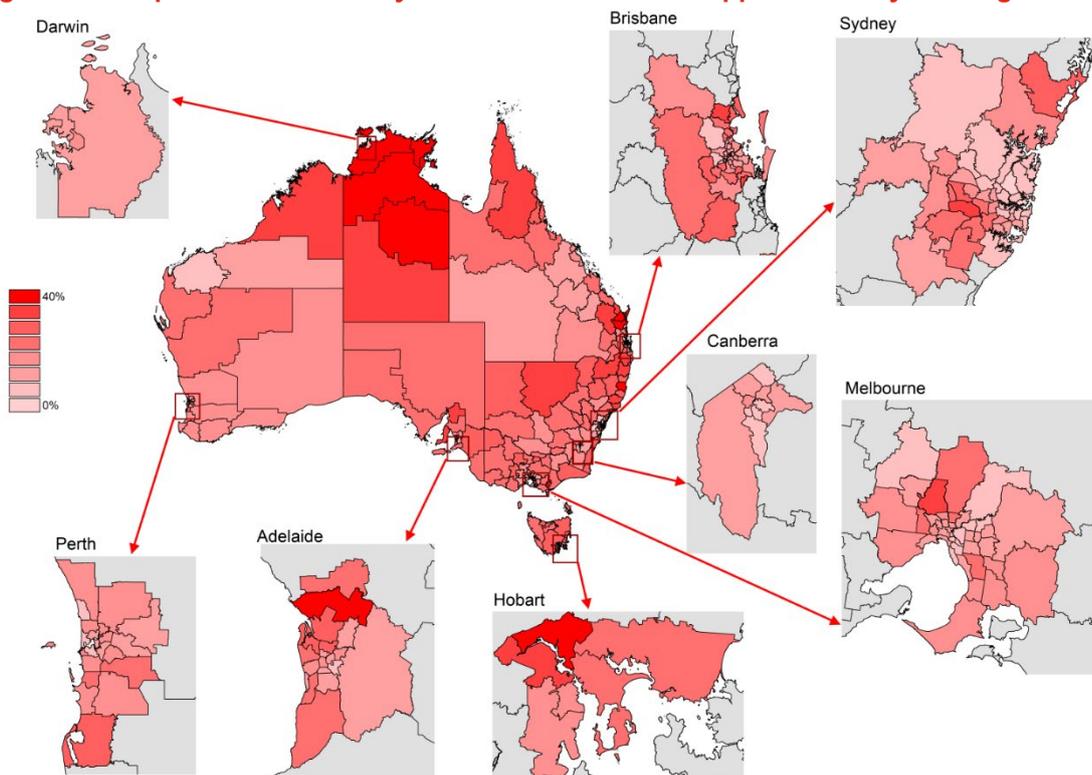
It is important to note that while SEIFA deciles have been assigned to individuals, the deciles do not represent the socio-economic advantage / disadvantage of that individual specifically. Rather, they represent the socio-economic advantage / disadvantage of the region in which that individual resides. Individuals living in socio-economically disadvantaged areas can still have high levels of socio-economic advantage / disadvantage themselves, and vice versa.

Nonetheless, the inclusion of SEIFA in the model this year is an important addition that allows for greater differentiation in projected welfare outcomes for cohorts of people at a geographical level, and highlights the complex interplay between these outcomes and regional levels of socio-economic advantage / disadvantage. We look to explore these relationships in detail below.

How does welfare use currently vary by region?

The map below shows the proportion of people aged between 16 and 64 who are in a pre-retirement income support class by region, and highlights the differences in the utilisation of income support across Australia.

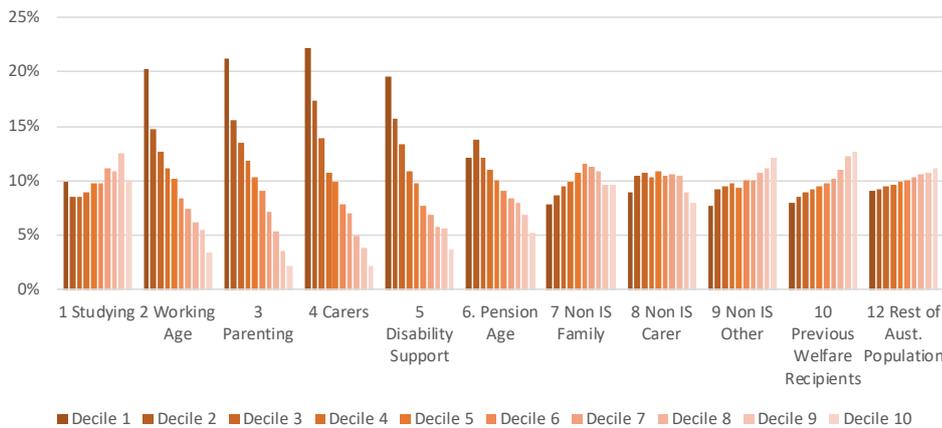
Figure 11: Proportion of 16 to 64 year olds in an income support class by SA3 region



We can see that the per capita usage of pre-retirement income support varies considerably both across Australia and within each major population centre. There are areas of higher dependence in each region, and dependence tends to increase as the remoteness of a region increases. Even at a local level within major cities, income support dependency tends to increase in areas further from the city centre. We also noted that the areas with higher use of pre-retirement income support was well correlated with areas of higher socio-economic disadvantage.

Approaching this from another viewpoint, we can also look at the regions utilising welfare through the lens of their relative level of socio-economic advantage or disadvantage. The graph below looks at the mix of SEIFA deciles within each welfare class at June 2018.

Figure 12: SEIFA decile distributions by class



Of particular note is the distribution of SEIFA deciles within the Working Age, Parenting, Carers and Disability Support classes where a heavy skew exists toward individuals residing in areas with high levels of socio-economic disadvantage. For instance, more than 20% of recipients in the Working Age class live in areas with the highest level of socio-economic disadvantage (SEIFA decile 1), whereas less than 4% of recipients in this class live in areas with the lowest level of socio-economic disadvantage (SEIFA decile 10). This is a significant over representation given that only 10% of the Australian population as a whole live in SEIFA Decile 1 areas. A similar trend, though less pronounced is also seen in the Pension Age class.

Of the income support classes, the Studying class is the only one with a skew towards individuals residing in socio-economically advantaged areas. This potentially reflects a number of factors, including the correlation between education, household income and socio-economic advantage / disadvantage, as well as the fact that students tend to move closer to educational institutions which may be in higher SEIFA areas.

Overall, people living in areas with the highest level of socio-economic disadvantage are over three times more likely to be in receipt of income support than those living in areas with the lowest level of socio-economic disadvantage. The difference is greatest for recipients of Parenting and Carer payments; people in areas with the highest level of socio-economic disadvantage are almost ten times more likely to be in receipt of these payments than those living in areas with the lowest level of socio-economic disadvantage.

In the non income support classes, the distribution of SEIFA tends to be more even. For the Non IS Family class, we see fewer individuals reside in low SEIFA areas, reflecting the fact that individuals residing in low SEIFA areas are more likely to receive an income support payment along with family supplements, and therefore, will be present in the income support classes rather than in the Non IS Family class. We also see fewer individuals living in areas with higher SEIFAs, reflecting the relatively higher incomes of these individuals combined with the effects of income testing for payments such as the Family Tax Benefit.

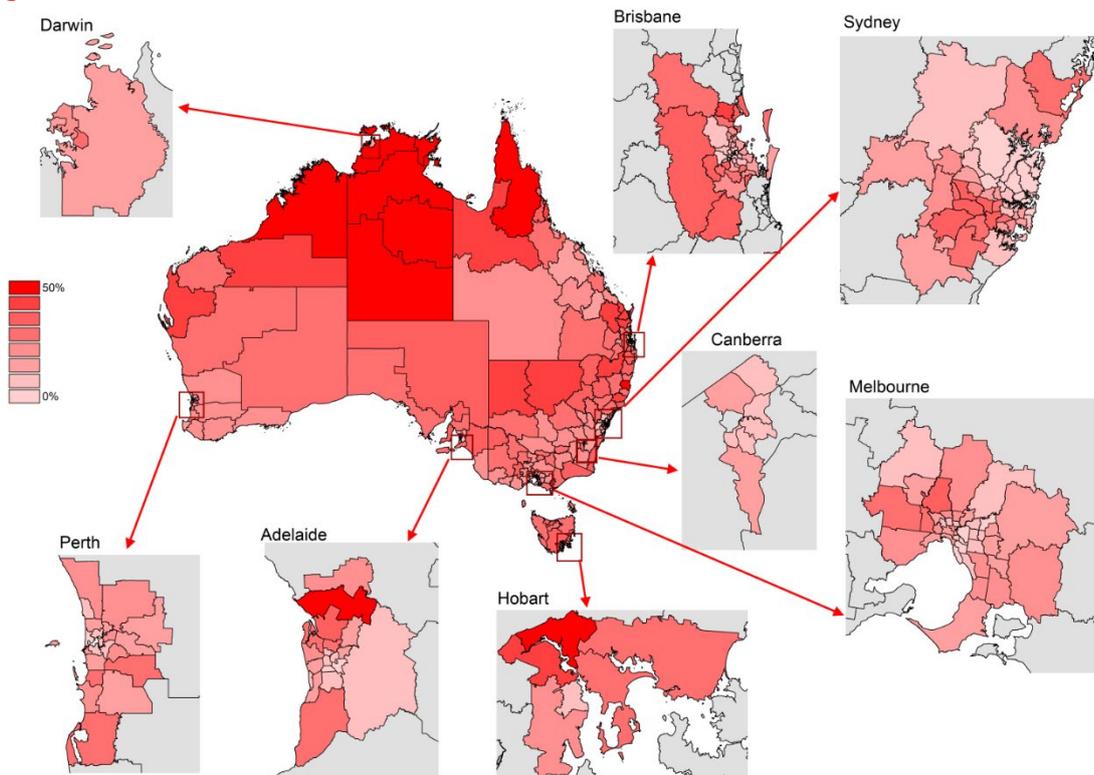
Outside of the welfare system, there tend to be higher proportions of people living in high SEIFA areas as expected. We can see that this skew is more prevalent for people in the Previous Welfare Recipients class than it is in the rest of the population, which is in part due to the difference in age mix between these classes. In

particular, older people tend to live in much more socio-economically advantaged areas than very young people— an effect due in part to their accumulation of assets over a longer period of time, as well as intergenerational differences in economic factors such as housing affordability. The Previous Welfare Recipients class has a much older age profile than the Rest of Australian Population class, leading to a larger proportion of people living in socio-economically advantaged areas within this class.

How does intergenerational welfare dependency vary by region?

In 2017, a measure of intergenerational welfare use was introduced in the model for the first time. The graph below looks at how the proportion of current 11 to 17 year olds with high intergenerational welfare dependency varies by region. In the figure below, a child is considered to have high intergenerational welfare dependency if their parents were dependent on pre-retirement income support for more than 35% of the life of the child up to age 15. This definition includes approximately 24% of children in the 11 to 17 year old age range.

Figure 13: Proportion of 11 to 17 year olds with high intergenerational welfare dependency by SA3 region



A similar pattern has emerged to the previous charts on income support use by region, and this time we can see that remote regions tend to have higher proportions of children with very high intergenerational welfare dependency. On a local level, clustering amongst regions of high intergenerational welfare dependency is evident, with outer suburban areas tending to have higher intergenerational welfare dependency than inner suburban areas within the same city.

What does the model tell us about regional welfare use going forward?

Effect on transitions through the welfare system

The level of socio-economic advantage or disadvantage of a region is a strong predictor within the model. For those individuals who have never accessed welfare, the likelihood of entering the system for the first time through a Working Age payment increases significantly with the level of socio-economic disadvantage of their region of residence. A similar effect is observed for entries into the Parenting, Carers and Disability Support classes. For example, this is reflected in the finding that, when looking at 20 to 25 year olds in the rest of the Australian population, those in the most disadvantaged socio-economic areas have 23% higher average lifetime costs than those in the least disadvantaged socio-economic areas. Specifically, the 20% of areas

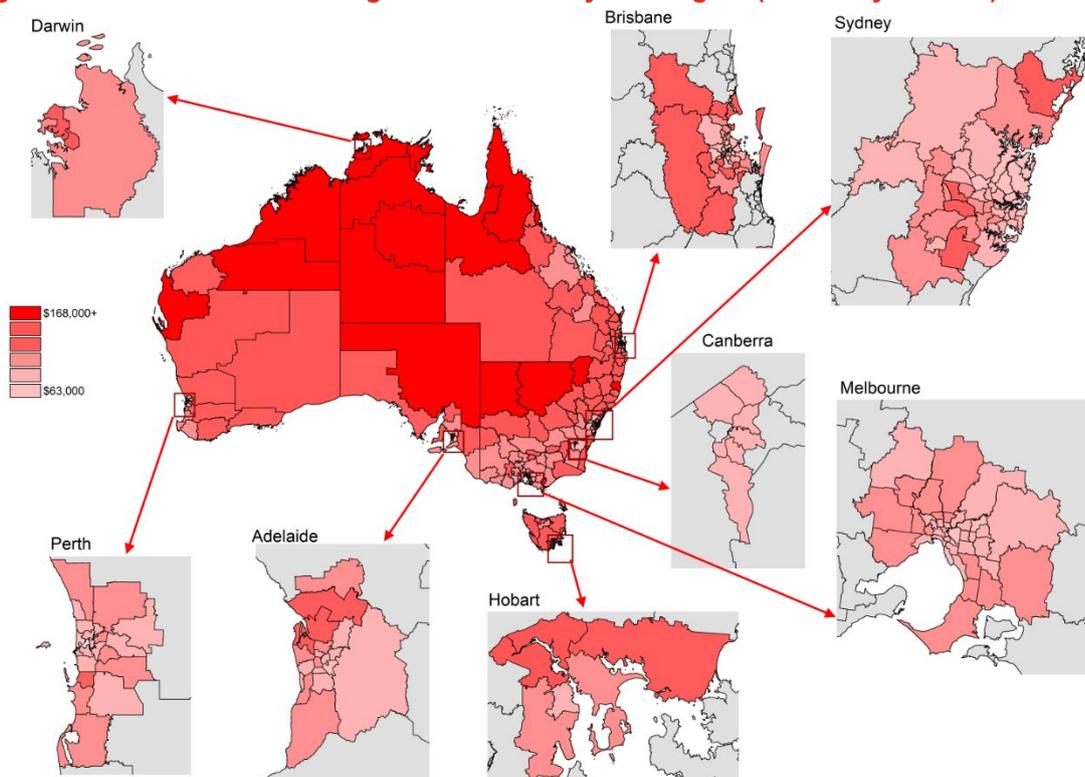
considered most disadvantaged have an average lifetime cost of \$221,000 and the 20% of least disadvantaged areas have an average lifetime cost of \$180,000 – see section 8.2.

For individuals already in the Working Age class, the likelihood of transitioning into the Parenting class significantly increases with the level of socio-economic disadvantage, while the likelihood of exiting the system or moving on to Studying payments decreases. Again, this is reflected in significant differences in lifetime costs within the Working Age class for people living different socio-economic areas. In this case, when looking at the group of 20 to 25 year old Working Age payment recipients, those in the most disadvantaged socio-economic areas have 39% higher average lifetime costs than those in the least disadvantaged socio-economic areas. Specifically, the 20% of areas considered most disadvantaged have an average lifetime cost of \$381,000 and the 20% of least disadvantaged areas have an average lifetime cost of \$274,000 – see section 6.2.

Average lifetime cost by region of residence

The map below shows how the pre-retirement average lifetime cost varies by region for current 11 to 17 year olds. It is important to note that these costs have been mapped using the region of residence for these individuals as at June 2018, as opposed to the region of residence at the point in which welfare payments are received during their lifetimes. The average lifetime cost for this group is around \$115,000.

Figure 14: Pre-retirement average lifetime cost by SA3 region (11 to 17 year olds)

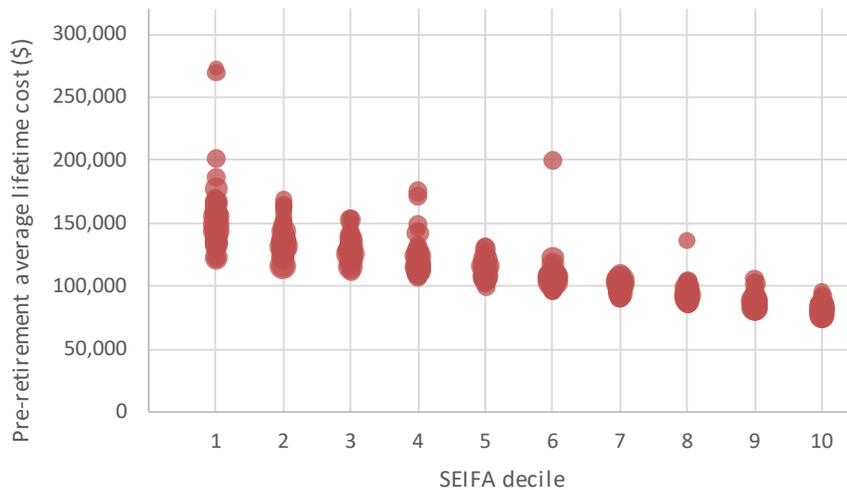


We can see that the pre-retirement average lifetime cost is significantly higher in remote regions when compared to the major cities. Within the major cities, we note that the average lifetime cost tends to be high in clusters of nearby regions, and that the cost tends to increase the further a region is from a major city centre.

The chart below illustrates the extent to which the regional variation in pre-retirement average lifetime cost is related to the level of socio-economic advantage or disadvantage in that area. Each bubble in the chart below represents a different region (as defined by the ABS' Statistical Area 2 boundaries, which make up 2,310

different regions³). The size of the bubble represents the number of people in that area, while darker regions represent clusters of regions with similar average lifetime costs.

Figure 15: Distribution of pre-retirement average lifetime cost for each SA2 location by SEIFA decile (11 to 17 year old)



We can see that the pre-retirement average lifetime cost is significantly higher in regions with the lowest SEIFA decile (highest level of disadvantage), and that this cost reduces gradually for regions categorised in higher SEIFA deciles.

We can also see that the variability of pre-retirement average lifetime cost tends to be significantly greater for more disadvantaged areas. For instance, in the lowest SEIFA decile, the pre-retirement average lifetime costs range from around \$120,000 to over \$250,000 per person. The higher points on the chart are likely to relate to locations where there are cumulative factors of disadvantage that increase the average lifetime costs in these locations.

In comparison, for areas in the highest SEIFA decile, the range of pre-retirement average lifetime costs varies between \$70,000 and \$100,000.

2.3 Refugees

As part of the 2018 Valuation, an exercise was undertaken to better understand the welfare outcomes for refugees in the Australian population. For the purpose of the valuation, refugees were defined as any individuals who were granted a humanitarian visa up until June 2018.

Unlike other migrants, refugees are not selected on the basis of their potential contribution to Australia, but rather primarily for humanitarian reasons. Refugees can be at high risk of welfare dependency as they often face multiple disadvantages because of their pre-migration experiences, including mental health issues, torture and trauma, physical disabilities, low literacy and limited previous opportunities to gain skills and work experience.

There were 243,000 refugees in the model population as at June 2018. This is just under 1% of the population. Of these refugees, almost 95% had either a Refugee Visa, a Special Humanitarian Visa or a Permanent Protection Visa. The remaining people mostly had a Women at Risk Visa, and there were also small numbers of people who entered the country with various historical visa subclasses (many of which have now been repealed). We note that differences will exist between the circumstances of people using different visa types, and this will likely impact how these people interact with the welfare system. For example Permanent Protection

³ Note that SA3 areas with less than 1,000 people aged 11 to 17 have been excluded from the chart.

Visas are for people who have already arrived legally in Australia on a valid visa, whereas Refugee Visas are for people outside Australia. We have not explored these differences in detail for the 2018 report.

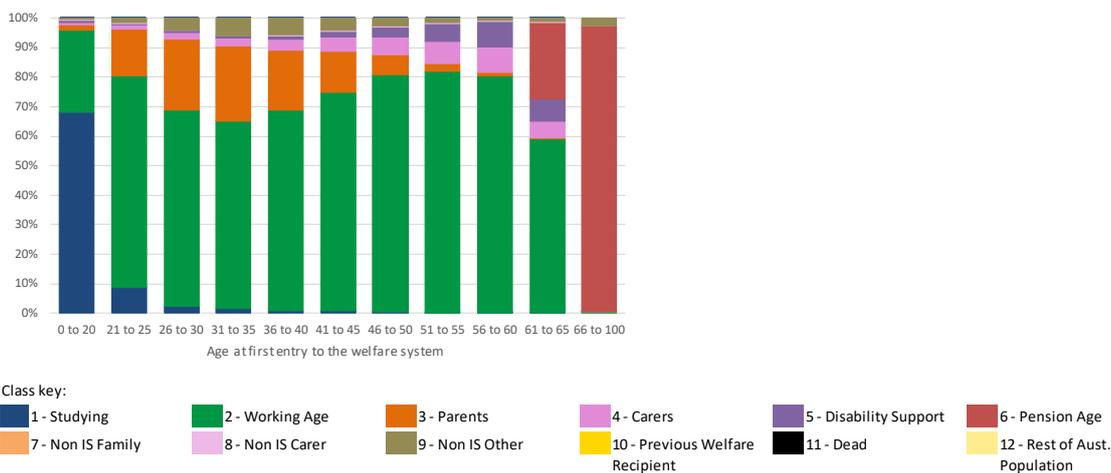
In the following sections, we look at the interactions of these refugees with the welfare system. Note that the analysis only includes refugees who have interacted with the welfare system at some point since 2003 given the limited availability of both refugee and welfare data prior to this point.

How do refugees first interact with the welfare system?

Due to the nature of the support provided to refugees to assist them upon entering the country (for example newly arrived resident's waiting period and qualifying residence requirements are not applied in the case of refugees or humanitarian visa holders), most refugees enter the welfare system soon after their arrival. In particular, for refugees with a known date of first residency, roughly 70% were observed to have entered the system within their first two years of being in the country, and this increases to approximately 90% after 10 years. Note that the increase seen over this period would in part reflect refugees who enter Australia as children, and then during this 10 year period become adults and enter the welfare system in their own right.

The following analysis focuses on the experience of refugees who entered the welfare system from the point they entered. The chart below looks at the types of welfare that recent refugees utilised when they first enter the welfare system, and splits out this experience by their age of first entry into the welfare system.

Figure 16: Proportion of refugees by class of first entry and age of first entry



Across all ages, refugees have tended to enter the system through income support, and particularly through the Working Age and Parenting classes

How long do refugees tend to stay in the welfare system?

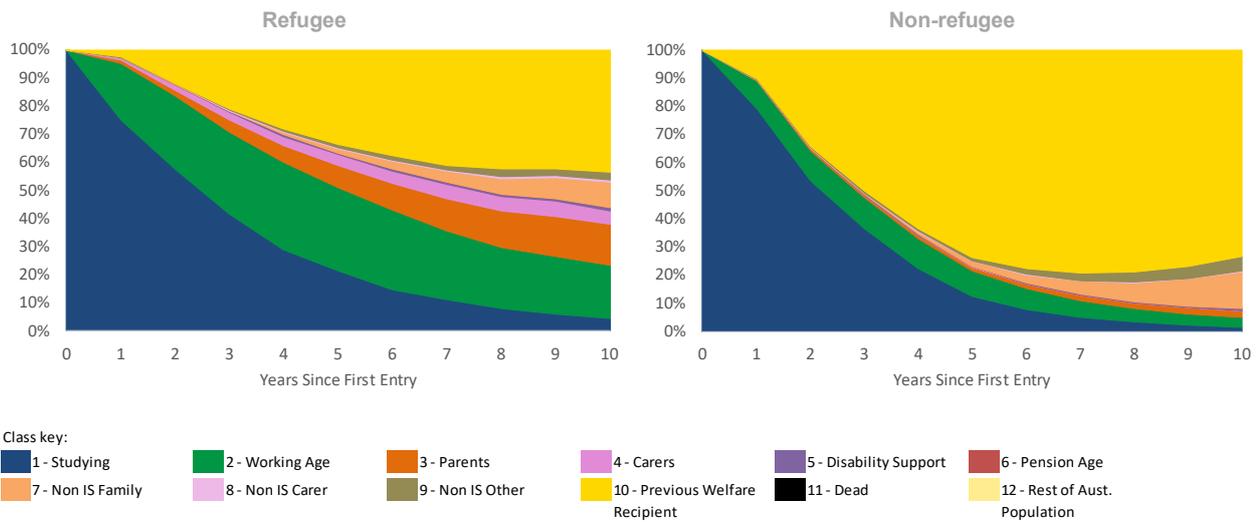
To analyse the pathways that refugees take through the welfare system, we have looked at particular cohorts of refugees and analysed their experience in the welfare system. The following sections focus on the two cohorts listed below:

- Refugees entering the welfare system through the Studying class (aged 15 to 25 at first entry)
- Refugees entering the welfare system through the Working Age class (aged 20 to 40 at first entry)

Trends for refugees entering into Studying

The first chart below follows the experience of refugees aged 18 to 25 at first entry in the 10 years following their entry into the Studying class. For comparison, the experience of non-refugee entrants in the same age cohort is shown in the second chart below.

Figure 17: Experience over first 10 years since entry for Studying recipients aged 18 to 25

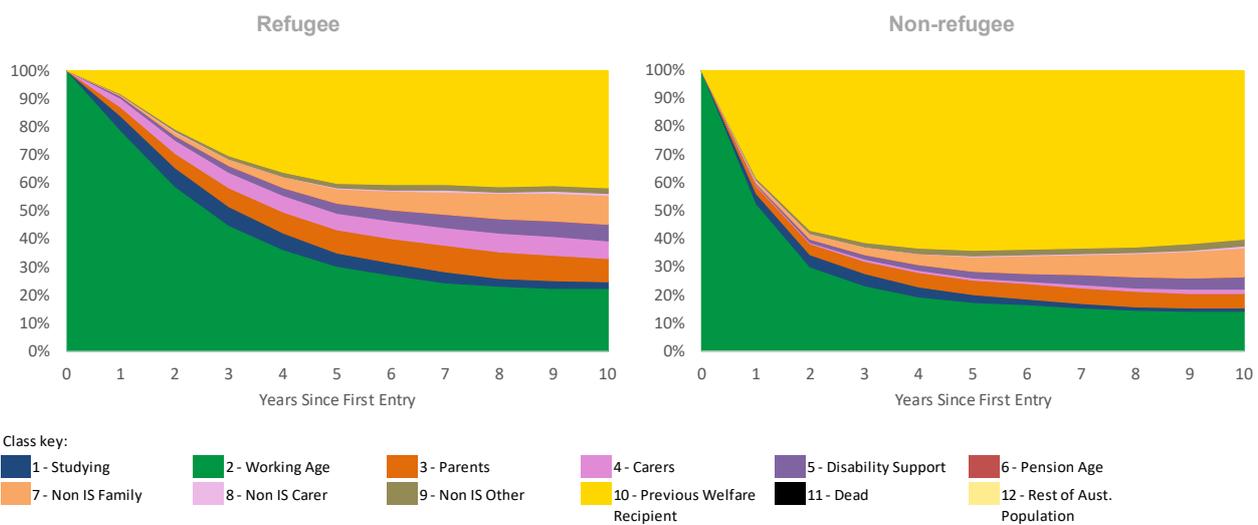


Note that the charts above are representative of studying payment recipients (i.e. Youth Allowance (student), Austudy and ABSTUDY recipients), rather than of all students. In particular, a parental income test applies for Youth Allowance where a person is considered as not independent, and this restricts access to Youth Allowance, only for those under the age of 22. This will impact on the group of people who are considered in the charts above. In the years initially following entry into the system, refugees tend to stay in the Studying class for longer, and are more likely to transition into the Working Age and Parenting classes than non-refugees. Over time, the experience for refugees has improved, however their dependence on welfare tends to stay higher than non-refugees. In particular, we can see that 10 years after their first entry into the system, 43% of refugees no longer receive any form of welfare, compared to 77% of non-refugees at the same point.

Trends for refugees entering into Working Age

The first chart below follows the experience of refugees aged 20 to 40 at first entry in the 10 years following their entry into the Working Age class. For comparison, the experience of non-refugee entrants into Working Age within the same age group is shown in the second chart below.

Figure 18: Experience over first 10 years since entry for Working Age recipients aged 20 to 40



The analysis shows that these refugees have required more support than non-refugees in the first five years after they enter the system through the Working Age class. The experience for these refugees has improved over time, though their dependence on Working Age payments remains somewhat higher after 10 years. In

particular, 23% of these refugees still require Working Age support after 10 years. This compares to 14% of non-refugees still in the Working Age class after a similar period of time.

The experience for this cohort of refugees also differs from non-refugees when looking at the proportion moving into the Carers and Disability Support classes. When compared to non-refugees, the charts above show a larger proportion of refugees in the Carers and Disability Support classes 15 years after entering the system.

2.4 Working Age recipients

The class definition in the valuation model looks at payments people have received during the last year. This allows the model to classify people into unique categories based on their use of welfare throughout the year, rather than at one point in time.

In practice, however, some welfare recipients will have episodes of payments throughout a year and the same people may come off payments and back on again. Others may stay on the same payment for extended periods of time. For Working Age recipients in particular, it is interesting to understand the breakdown of the class between long term recipients, recipients who cycle on and off payment, and recipients who have one episode of payment, exit and remain off payment. These people may have different needs, and different long term outcomes, and it is difficult with point in time reporting to understand the dynamics of these different groups.

Due to its longer term focus, the Investment Approach model allows us to bring some further insights on these groups. We have explored the different groups of people accessing Working Age payments over the year by examining the number of people in receipt of a payment at the valuation date. Using this as an additional predictor in the model, and looking at the count of people on payments at a single point of time (rather than during a year), has allowed us to reconcile the Investment Approach definition broadly with other welfare recipient reporting⁴.

This year, the valuation models have been updated to consider whether or not people in each of the pre-retirement income support classes were in receipt of a payment at the valuation date. We discuss some of the additional differentiation which can be seen from this in the Working Age class below, as well as in sections 6.1 to 6.5.

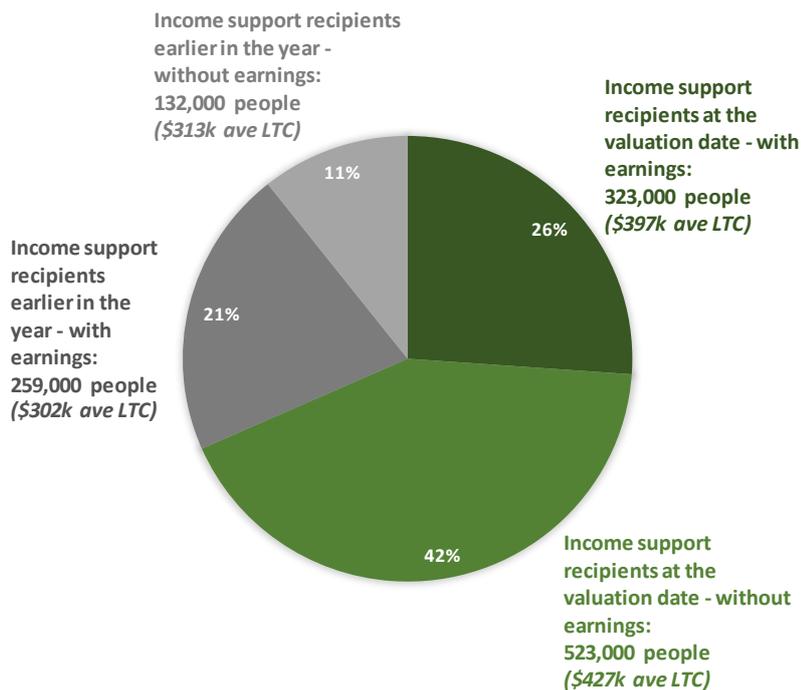
Working Age recipient insights

The chart below shows a breakdown of people in class 2 – Working Age⁵, by whether or not they were in receipt of a payment at the valuation date, and also by whether they received employment earnings while in receipt of income support payments. The chart also includes the number of people and the average lifetime cost ('ave LTC') associated with the different groups.

⁴ For example, the DSS Payment Demographic Data published on data.gov.au.

⁵ The Working Age class relates to people who received a payment in the 'IS Working Age' payment category during the year, as well as a small number of people who received a payment in the 'IS Dependant' payment category during the year. The 'IS Working Age' payment category includes ABSTUDY – working, Austudy – working, Newstart Allowance, Sickness Allowance, Special Benefit and Youth Allowance (Other). The 'IS Dependant' payment category includes Partner Allowance and Widow Allowance.

Figure 19: Breakdown of Working Age class for 2017/18



As expected, recipients who were in receipt of income support at the valuation date (the green segments) have a higher lifetime cost than those who only received income support earlier in the year and then exited (the grey segments). This would include long-term Jobseekers.

However, the average lifetime cost for the ‘income support recipients earlier in the year’ is still well in excess of the average for people who left the system more than a year ago (i.e. the previous welfare recipients class which has an average lifetime cost of \$187,000 – see section 8.1). This reflects the observation that many Working Age recipients have tended to come in and out of the welfare system quite frequently, and so this group have quite a high chance of re-entering.

Looking further within these groups, in each case people without employment earnings recorded while on welfare have a higher average lifetime cost than those with employment earnings recorded. This would also be expected.

Average lifetime cost for different payment types

The table below shows a breakdown of the number of people and average Lifetime Cost (Ave LTC) of class 2 – Working Age recipients. This shows how the lifetime cost varies depending on whether or not people were in receipt of payments at the valuation date, and also how it varies across the main individual payment types within the class.

Table 6: Breakdown of pre-retirement income support numbers and lifetime costs at June 2018

Payment	In receipt of payments at valuation date - people	In receipt of payments at valuation date – Ave LTC	Not in receipt of payments at valuation date – people	Not in receipt of payments at valuation date – Ave LTC	Total in class at June 2018 – people	Total in class at June 2018 – Ave LTC
Newstart Allowance	722,000	\$420k	316,000	\$308k	1,038,000	\$386k
Youth Allowance (other)	94,000	\$392k	61,000	\$298k	155,000	\$354k
Other Class 2 payments	30,000	\$368k	14,000	\$284k	44,000	\$341k
Total Class 2 - Working Age	846,000	\$415k	391,000	\$306k	1,237,000	\$380k

The table above does not consider supplements where being in receipt of a payment at the valuation date is not as easily defined – for example FTB payments relate to a tax year rather than a point in time. We have also not considered the Age Pension, for which the vast majority of the population would be on payment at the year end given the rate of exits from this class.

- Of the 1,237,000 people in this class, 846,000 were in receipt of a payment at the end of the year and 722,000 of these related to the Newstart Allowance. This number should align closely with the definitions used in 'point in time' counts of Newstart recipients. The DSS Payment Demographic Data, for example, showed 728,000 Newstart recipients at June 2018 compared to 722,000 in the table above, confirming the close alignment.
- The Investment Approach definition includes a further 316,000 people who had received Newstart Allowance earlier in the year but have subsequently stopped receiving any income support, due to gaining sufficient employment so as to exit payment or other circumstance changes. As discussed earlier, the modelling shows that this group, while having a lower average lifetime cost, still have significant risk of cycling back onto income support compared to those who have remained off for more than a year.
- The average lifetime cost is highest for Newstart Allowance recipients (at \$386,000). This is in part due to a higher expected persistency on income support for Newstart recipients, when compared to the average for this class. This also in part reflects the higher average age of the Newstart Allowance recipients, which means that there is less discounting for the projected Age Pension payments.

2.5 Drivers of lifetime cost

Lifetime cost is predicted to vary significantly for people, based on their circumstances or characteristics and the extent to which these are shown by the analysis to be important differentiators of welfare utilisation or payment size. Although the underlying model is complex and takes into account many interactions, it is useful to identify and understand in more simple terms the key drivers that differentiate the lifetime cost of an individual. These drivers vary for the different segments of the population.

The following charts present a summary of the key drivers of the lifetime cost for each pre-retirement income support class (classes 1 to 5). The bars represent the importance of each variable (in terms of predicting the lifetime cost), relative to the most significant variable for that class. Variables are shown below a dotted line if they do not feature in the top ten most predictive variables but are of specific interest.

We have also shown a table next to each chart, providing details of the specific characteristics within each variable that are associated with higher (or lower) lifetime costs.

Figure 20: Key drivers of lifetime cost by welfare class

■ Demographic attributes ■ Family situation ■ Welfare use and history ■ Education and Employment ■ Other

Class 1 Studying

Driver variable	Variable importance	Characteristics associated with higher (lower) lifetime costs
Gender		Females (Males)
Indigenous status		Indigenous Australian (Not Indigenous Australian)
Age		Teenagers and people near retirement age (Young adults)
SEIFA		Lower SEIFA decile (Higher SEIFA decile)
Parental welfare history		High parental welfare dependence (Low parental welfare dependence)
Education attainment		Lower level of education (Higher level of education)
Duration on income support		More years on income support (Fewer years on income support)
Education sector		School and VET (Higher education)
Number of children		At least 1 child (No children)
Partnering status and history		Single for several years (Partnered for several years)
Previous welfare class		Parenting (Rest of population)
Employment earnings indicator and history		Not employed for several years (Employed for several years)
Refugee status		Refugee (Non-refugee)

Class 2 Working Age

Driver variable	Variable importance	Characteristics associated with higher (lower) lifetime costs
Gender		Females (Males)
Age		Middle aged people (Young adults)
Capacity to work		Lower capacity to work (Higher capacity to work)
SEIFA		Lower SEIFA decile (Higher SEIFA decile)
Duration on income support		More years on income support (Less years on income support)
Previous welfare class		Parenting and Carers (Studying and Rest of population)
Indigenous status		Indigenous Australian (Not Indigenous Australian)
Partnering status and history		Single for several years (Partnered for several years)
Education attainment		Lower level of education (Higher level of education)
Employment earnings indicator and history		Not employed for several years (Employed for several years)
Age first entered welfare system		Younger entrants (Older entrants)
Age of youngest child		8 to 11 years old (Very young children)
Refugee status		Refugee (Non-refugee)

Class 3 Parents

Driver variable	Variable importance	Characteristics associated with higher (lower) lifetime costs
Age of youngest child		Younger children (Older children)
Partnering status and history		Single for several years (Partnered for several years)
Age		Teenagers (Middle aged)
Duration on income support		More years on income support (Less years on income support)
Number of children		More children (Fewer children)
SEIFA		Lower SEIFA decile (Higher SEIFA decile)
Gender		Females (Males)
Education attainment		Lower level of education (Higher level of education)
Employment earnings indicator and history		Not employed for several years (Employed for several years)
Parental welfare history		High parental welfare dependence (Low parental welfare dependence)
Indigenous status		Indigenous Australian (Not Indigenous Australian)
Refugee status		Refugee (Non-refugee)
Age first entered welfare system		Younger entrants (Older entrants)

■ Demographic attributes ■ Family situation ■ Welfare use and history ■ Education and Employment ■ Other

Class 4 Carers

Driver variable	Variable importance	Characteristics associated with higher (lower) lifetime costs
Age		Younger and middle aged people (Older people)
Gender		Females (Males)
Caree age		Younger carees (Older carees)
Previous welfare class		Parenting or Studying (Pension Age and Rest of Aust. population)
Partnering status and history		Single for several years (Partnered for several years)
Duration on income support		More years on income support (Fewer years on income support)
SEIFA		Lower SEIFA decile (Higher SEIFA decile)
Employment earnings indicator and history		Employed for several years (Employed for several years)
Education attainment		Lower level of education (Higher level of education)
Caree medical condition		Congenital anomalies, Intellectual (Cancer, Musculo-skeletal)
Indigenous status		Indigenous Australian (Not Indigenous Australian)
Carer and caree relationship		Carer is the parent or guardian of caree (Partner or Unrelated)
Refugee status		Refugee (Non-refugee)

Class 5 Disability Support

Driver variable	Variable importance	Characteristics associated with higher (lower) lifetime costs
Age		Younger people (Older people)
Disability medical condition		Intellectual disability (Cancer/tumour)
Partnering status and history		Single people (People partnered for longer)
Gender		Females (Males)
Indigenous status		Indigenous Australian (Not Indigenous Australian)
SEIFA		Lower SEIFA decile (Higher SEIFA decile)
Education attainment		Lower level of education (Higher level of education)
Duration in class		More years in class (Fewer years in class)
Duration on income support		More years on income support (Less years on income support)
Number of children		No children or a lot of children (Some children)
Employment earnings indicator and history		Employed for more years (Unemployed for longer)
Parental welfare history		High parental welfare dependence (No parental welfare dependence)

The drivers and their importance may be expected to change each year due to the addition of new variables, the refitting of parameters, the details of how variable importance is attributed between correlated variables, and other technical considerations.

We observe:

- Across all the classes, the attributes identified as significant are the factors that either:
 - reflect the structure of the benefit system and how long people are eligible to receive benefits (e.g. age, age of youngest child)
 - capture other information which is important in determining people’s expected persistency on payment (e.g. age first entered welfare system, duration on income support)
 - reflect the different levels of payments made to people in the class (e.g. gender, partnering status).

Some of the drivers are significant for more than one of these reasons. Further commentary for each class is provided below.

- For class 1:
 - Gender is the most significant variable and reflects the higher level of family payments that are generally expected to be made to women over their future lifetimes. This is relatively more important in the Studying class because although many men and women exit income support from this class, many more women than men then go on to receive family payments during their lives.
 - The drivers that have the next significance are Indigenous status, age and SEIFA. Indigenous status reflects eligibility of Indigenous Australians to receive ABSTUDY and the structure of this payment type whereby eligibility is at younger ages than for the other studying payment types. SEIFA is likely to be

reflective of financial circumstances of families, which feed into eligibility criteria. Age is important as it acts as a proxy for people's progress through their studies.

- While relatively less significant, the remaining variables shown in the chart are factors helpful in differentiating which people have a higher expected lifetime cost, all other things being equal. For instance, people with lower levels of educational attainment, on average, have higher lifetime costs.
- Refugee status has a lower variable importance, but is still quite an important factor.
- For class 2:
 - Gender and age are the most significant variables and the analysis shows they have a similar variable importance.
 - Gender is again significant because it reflects the higher level of family payments that are generally expected to be made to women over the future lifetimes. In relation to age, middle aged people tend to have higher average lifetime costs as they are closer to retirement, and so the possible receipt of the Age Pension in the relatively near future is significant.
 - Capacity to work is also a significant variable, as would be expected, as well as SEIFA.
- For class 3:
 - The age of a recipient's youngest child is the most important driver and this is reflective of the payment eligibility criteria which are linked to this information and recognise the expected duration of people's future caring responsibilities.
 - A person's partner status and partnering history ('partnering status and history') is also a key driver of lifetime cost for class 3. This is because single people have a longer eligibility for Parenting Payments, and also because single people receive a higher rate of payment. Payment type distinguishes whether a recipient is receiving Parenting Payment Single or Parenting Payment Partnered. As a result, this is picking up similar information to partnering status and history, and so is also coming through as an important driver.
- For class 4:
 - Age is the most important driver, reflecting the high persistency of most people in this class. This high persistency results in younger people generally having a higher lifetime cost as they have a longer expected future lifetime during which they can receive payment.
 - Gender and caree age are also important drivers. Gender is predictive of different levels of expected use of family payments, as discussed above. Caree age gives an indication of whether the carer is likely to be the parent of the person they are caring for. People caring for a child, on average, have a higher lifetime cost.
- For class 5:
 - Age is the most important driver, again reflecting the high persistency of most people in this class, with younger people in this class generally having a higher lifetime cost.
 - Disability medical condition is the next most important driver. This reflects the different expected outcomes for people with different conditions and the different ages at which types of conditions typically emerge. For example, people with congenital conditions typically enter the system at young ages and remain on benefit for some time, whereas cancers may trigger disability later in life and be shorter term conditions.

It should be noted that while parental welfare dependence does not appear to be as significant a driver of lifetime costs as some other variables, its impact is likely understated. This is because parental welfare information was only available for a subset of the population, and was only able to be used in the model to project future welfare dependency up to the age of 25.

3 Other key changes for this valuation

Key points

- The actuarial valuation reflects policy as legislated at the valuation date and the model has been updated to reflect new policy changes over the year.
- The main policy change expected to impact the lifetime cost is the introduction of a targeted compliance framework which will apply strong penalties to job seekers who persistently and deliberately do not comply with their employment pathway plan (EPP) requirements.
- The 2018 valuation allows for updated assumptions relating to the forecast future utilisation of Age Pension. This forecast was updated following a review of welfare experience, as well as consideration of relevant external factors such as workforce participation, levels of home ownership and levels of superannuation and other savings.
- The discount rate, which is used to discount projected payments to current dollar values, has been updated this year following an update from Treasury on the long term discount rate set out in the Long Term Cost Report. This change does not impact the projected cashflows but leads to a significant increase in the lifetime cost.

3.1 Introduction

The June 2018 valuation provides an updated assessment of the expected future use of the Australian welfare system. This assessment recognises a number of different sources of change since the previous valuation (June 2017):

- Change to the welfare system itself. This includes changes to the types of payments available, the eligibility criteria and payment levels. These are discussed below.
- Changes to how the population is utilising the system. For instance how the number of people accessing each payment type has been changing over time or how the level of payments received by each group of people is changing. We refer to this as changes in the experience. We discuss the second point in section 4
- Changes to external drivers of the valuation. This includes changes to the size and profile of the Australian population modelling approach or the economic environment. One particular change this year was a decrease in the discount rate, which is used to discount projected payments to current dollar values, in order to determine the lifetime cost. This change is discussed below.
- Methodology updates. This relates to refinements to existing modelling, and the main updates relate to the Age Pension model, as well as a refinement to the valuation data. We previously discussed in section 2 the development of new model insights.

3.2 Changes to the welfare system

The actuarial valuation reflects the policy as legislated at the valuation date. It assumes that these policy settings will persist in perpetuity.

This means future changes in payment design or eligibility have been allowed for in the valuation if the related legislation is in place, however changes still being debated are not included.

Each year, there are many new changes to policy settings which have resulted in some changes to previously expected impacts. We have captured these in Appendix B. In the valuation, we make explicit allowances for only the more material changes to policy. The allowances reflect the estimated direct impact of the changes; no second order allowance has been made to account for any flow-on impacts or behavioural responses to the changes. These will be reflected in the emerging experience as they take effect.

We outline below three significant policy changes that have occurred since the 2017 valuation, along with their expected influence on the welfare system.

Table 7: Summary of main material policy changes (legislated 1 July 2017 to 30 June 2018)

Policy change	Description of policy change	Expected influence on the welfare system
Creation of the Jobseeker Payment	Seven current working age payments will be consolidated into the new Jobseeker Payment, creating a single payment for those of working age with capacity to work now or in the future. From 20 March 2020, recipients of Newstart Allowance, Sickness Allowance, Wife Pension, Bereavement Allowance and Widow B Pension will be transitioned into Jobseeker Payment, Age Pension or Carer Payment depending on their circumstances. From 1 January 2022, recipients of Widow Allowance and Partner Allowance will transition to Age Pension.	The Jobseeker Payment is designed to simplify the income support system and treat people in similar circumstances consistently. The new consolidated payment fits well into the model class structure, and as such explicit model changes were not generally required.
Targeted compliance framework	From 1 July 2018, a two-phase compliance framework will be introduced which will apply strong penalties to job seekers who persistently and deliberately do not comply with their employment pathway plan (EPP) requirements.	Stronger penalties will be put in place for failure to comply with EPP requirements, including loss of income support payments.
Ordinary Waiting period	Creates a new ordinary waiting period for Parenting Payment, and for Youth Allowance for a person who is not undertaking full-time study and is not a new apprentice (referred to as Youth Allowance (Other)).	The ordinary waiting period is a period of one week that recipients are required to serve unless exempted. This may delay the commencement of some payments. This change is not expected to have a material impact on total payments, however it may slightly influence experience coming through from 1 July 2017.

The creation of the Jobseeker Payment is a material change from an operational point of view; however, it is not expected to be material in terms of lifetime cost, as it mainly represents a consolidation of payments. The introduction of the targeted compliance framework is expected to be more material from a lifetime cost perspective.

Over recent years, changes to the eligibility criteria for Disability Support Pension and a new Job Capacity Assessment that tests applicants' capacity to work, have seen fewer people qualifying for DSP.

3.3 Methodology updates

Age Pension

As part of the 2018 valuation, the assumptions relating to the forecast future utilisation of Age Pension have been updated. To support the revised assumptions, we further analysed the Age Pension experience and have undertaken a review of the external information available to support these assumptions.

The modelling of Age Pension is an inherently challenging part of the valuation. It is challenging because it reflects payments that for some people are many decades into the future and there are many factors which will influence the demand for Age Pension. This includes demographic trends, the economic environment and the returns on superannuation savings. It is also challenging because the data available to support our analysis does not include information on some key drivers such as levels of superannuation savings and home ownership.

Recap on previous modelling approach

The approach previously used for modelling the Age Pension was developed as part of the 2015 baseline valuation and retained for the 2016 and 2017 valuations. This referenced the recent experience to determine how likely different groups of people are to access the Age Pension; the age at which they would first receive the pension; and the level of pension they would receive.

Two key trends were adjusted for:

- At age pension qualifying age (APQA): the expected future trend in reducing eligibility to Age Pension as people reach retirement age with greater levels of superannuation.

Other key changes for this valuation

- Post APQA: an allowance for an individual's assets eroding, or otherwise, as they progress through their retirement and the resulting trend in Age Pension payment levels.

The at APQA trend was modelled as an explicit scenario of a reduction in Age Pension entries over the period from 2015 to 2030. This adjustment was based, in part, on external research; however, it was acknowledged that there is a high level of uncertainty in the adjustment and that it simply represents a scenario that makes a plausible allowance for the potential impact of the expected trend. The post retirement trend was modelled by reference to the past experience.

Age Pension experience and drivers

We reviewed the DSS data, as well as publicly available data published by ABS and the Department of Veterans' Affairs (DVA), to better understand the recent trends in pension utilisation. We analysed the trends in the proportions of people accessing all types of pensions (including service pensions administered by DVA) as they achieved retirement age and beyond. We considered the variations in trends by gender and differential experience of different birth cohorts. We also considered how this experience has been impacted by the January 2017 change in assets test and the recent increase in APQA to 65.5.

This analysis identified that there has been a recent reduction in the proportion of people who access any Age Pension in the first few years after reaching APQA. In particular, there has been a significant reduction in the proportion of full pensioners within these cohorts. Conversely, the proportion of part pensioners has been quite stable.

We also reviewed the external data and research available on trends in other drivers of future Age Pension utilisation, including trends in workforce participation, levels of home ownership and levels of superannuation and other savings. This supported our understanding that levels of superannuation savings are increasing over time (both from the maturing of the superannuation system and increasing workforce participation of women). However, there has also been a material reduction in levels of home ownership, especially for younger generations.

Finally, we refreshed our theoretical model of superannuation savings accumulation. This indicated that the maturing of the superannuation system will be largely complete by 2035. By this time, workers reaching retirement will have been accumulating superannuation for their whole working lives. Beyond this time, we expect there will be a smaller increasing trend in superannuation savings accumulation, reflecting past increases in the Superannuation Guarantee rate.

Revised modelling approach

For this valuation we developed a revised Age Pension modelling approach and scenario to better reflect these trends. This approach continues to reference the recent experience to determine how likely different groups of people are to access the Age Pension; the age at which they would first receive the pension; and the level of pension they would receive.

The at-retirement trend has been refined to allow for a greater reduction in the proportion of people accessing any Age Pension at APQA and in their early years post APQA. This adjustment has been extended to now occur over the period to 2035. We have added a supplementary adjustment to allow for some of these non-pensioners to start accessing the Age Pension as they progress through their retirement years and their assets erode.

Post retirement, we have continued to incorporate an allowance for an individual's assets eroding, or otherwise, as they progress through their retirement, and have retained our previous modelling approach for this trend.

We have calibrated these models to maintain a broadly constant level of part pensioners, consistent with the experience we have observed. Hence, where there are changes in the proportions of a birth cohort not accessing any pension, there will generally be an offsetting trend in the proportion of full pensioners.

The impacts of this revised scenario are discussed in the overall results and age pensioner results sections of this report.

Refinement of valuation data

For this valuation there were two small updates to the data.

The first update was to the extraction date. For previous valuations, the data was extracted at the valuation date of 30 June. Information revived after this date relating to historical entitlements is not incorporated and this

particularly impacts the most recent year. The issue of not all information being known at the valuation date is known as a data maturity issue.

For this valuation, the data was instead extracted 3 months after the valuation date, at 30 September. This does not have a direct impact on the results; however, it reduces the extent of maturity adjustments and provides more certainty in the recent experience.

The second update relates to the number of people included in the classes. In particular, there has been a change in the treatment of a group of people who received a particular payment who were then subsequently confirmed as no longer being entitled to receive any amount under that payment type (the 'zero entitlement' group). In the previous 2017 valuation, these people remained in their allocated model class within the welfare system and were allocated a zero payment amount. For this valuation, we have now excluded this zero entitlement group from the classes within the welfare system, and instead they are included in the rest of the population. This is a small modelling refinement, which does not impact the overall lifetime costs being modelled; however, it does result in a small decrease in the number of people in the class, offset by a small increase in average payment size.

The most material impact is on Class 3 – Parents, for which it results in a reduction of the number of people in the class of around 30,000 people (or 7%), along with an offsetting increase in average sizes. For the other income support classes the impact is less than 1%.

3.4 Changes to the discount rate

The discount rate is one of the external drivers that impact the valuation results. Discounting is applied to the forecast future payments to calculate their net present value. We refer to this as the lifetime cost. This provides an important reference point for applying and understanding the results of the investment approach. Discounting takes into account the time value of money, ensuring policy interventions can be identified and prioritised. It also allows discounted costs to be compared at different points in time to assess progress.

In the 2015 baseline valuation, a discount rate of 6% was adopted. While a number of factors were considered in making this choice, the adopted discount rate of 6% is consistent with that used by The Treasury in assessing other long term Commonwealth Government liabilities, in particular Commonwealth superannuation liabilities. This rate was a long term selection which then held fixed for the 2016 and 2017 valuations and has supported the comparability of the results over time.

In the 2018-19 Budget and through related discussions, The Treasury advised that the long term discount rate set out in the Long Term Cost Report and used for assessing superannuation liabilities has been reduced to 5%. We understand that this change is to reflect the current estimated costs of long term debt noting there have been persistent low interest rates and there is uncertainty whether the higher averages observed in the past will return.

Following this change, the discount rate used for this valuation has also been reduced to 5%. The change in discount rate has no impact on future cashflows; however, it does impact the net present value of these cashflows i.e. the lifetime cost.

To enable the comparability of results over time, we have reproduced the results from the 2017 valuation with a 5% discount rate (referred to as June 2017 rebased) and used this as a point of comparison in presenting the overall and class results.

4 Summary of recent experience

Key points

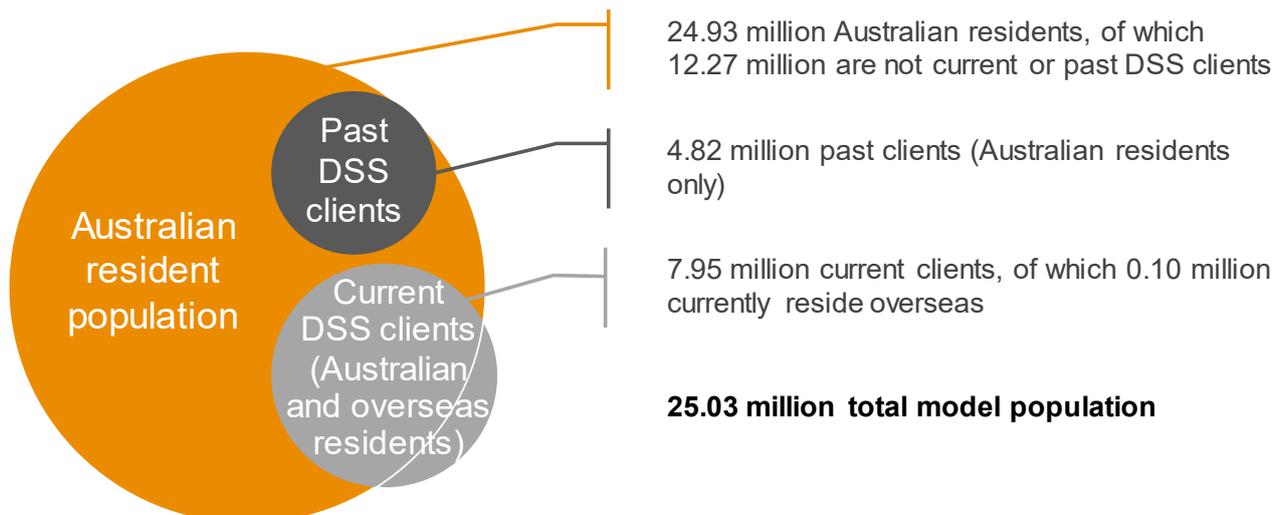
- The total model population of 25.0 million people comprises the 24.9 million resident population of Australia, as well as 0.1 million current welfare recipients residing overseas (mostly age pensioners). This has increased by 0.3 million since June 2017 which reflects population growth over the year.
- The number of entries into the welfare system has been decreasing over recent years, while the number of people exiting the welfare system has been increasing. These factors have driven a decrease in the total number of welfare recipients from 8.04 million in 2017 to 7.95 million in 2018.
- This decrease in the welfare population over the last year is despite growth in the number of Australian residents. Welfare recipients now make up 31.8% of the population, down from 32.6% at June 2017. Income support recipients now make up 22.1% of the population, down from 23.3% at June 2017.
- The numbers of people in most income support classes have reduced compared to last year. The main exception to this is the Carers class, which has continued to grow.
- The number of entrants into DSP remained at much lower levels as a result of the tightening of eligibility criteria over recent years.
- The number of people entering the Age Pension has reduced, in part as a result of the changes in the pensions assets test. Movements into Age Pension also reduced as a result of the increase in the Age Pension age from 65 to 65.5 in 2018.

4.1 Summary of model population

The scope of the population for the 2018 valuation includes all Australian residents at 30 June 2018 and overseas welfare recipients who received a payment in the 2017/18 year. Future migrants and unborn children are not included in the model, but will appear in future valuations once they migrate or are born.

The Australian estimated resident population (ERP) at 30 June 2018 is 24.9 million people.⁶ The model population is 25.0 million people; this is slightly larger than the resident population owing to the inclusion of overseas residents who currently receive welfare payments as represented below.

Figure 21: Population at 30 June 2018



⁶ Source: ABS – 2017 estimated resident population projected to 2018 by PwC

The total model population of 25.03 million is 0.38 million higher than at June 2017. Despite this population growth the number of current welfare recipients has decreased from 8.04 million at June 2017 to 7.95 million at June 2018.

The remainder of the section provides more details on the population and changes since our previous valuation.

4.2 Summary of experience over the last year

The way in which the population utilises the welfare system changes over time. This may include behavioural responses to changes in policy settings, or more general changes in societal trends over time. We discuss this below in terms of the numbers of people accessing payments, and the average payment sizes.

Number of people accessing payments

Since the previous valuation, we observed the following key trends with regards to the number of people accessing each payment type:

- Total entries into the welfare system have continued to decrease over the past year;
- The number of people exiting the welfare system has increased;
- The number of people entering into the Working Age class has decreased;
- The number of entrants into the Disability Support Pension class has continued to reduce significantly, following the tightening of DSP eligibility criteria; and
- The number of people entering the Age Pension has reduced, in part as a result of the changes in the pensions assets test. The experience for entries into Age Pension was also lower this year as the Age Pension age increased from 65 to 65.5 in 2018.

Average payment sizes

We have also noted the following main feature of the experience in relation to the average payment amounts made to welfare recipients:

- Average Family Tax Benefit (FTB) and Other Family payments have continued to gradually reduce, likely in part a result of a number of policy changes in recent years; and
- Average rent assistance payments have been increasing over the last few years.

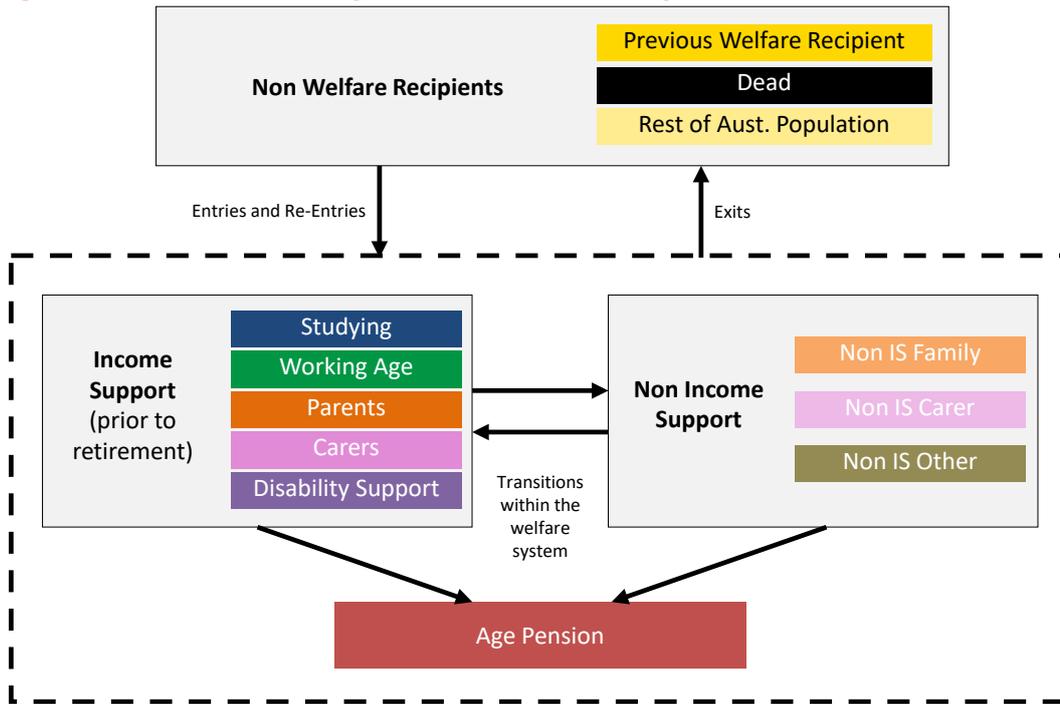
We discuss these in more detail in the following sections.

4.3 Numbers of people accessing payments

At a broad level, the dynamics of the welfare system primarily involve the movements of people (a) in and out of the welfare system, and (b) in between the broad categories of income support (prior to retirement), non income support, and the Age Pension.

These broad dynamics are illustrated in the diagram below.

Figure 22: Overview of the dynamics of the welfare system



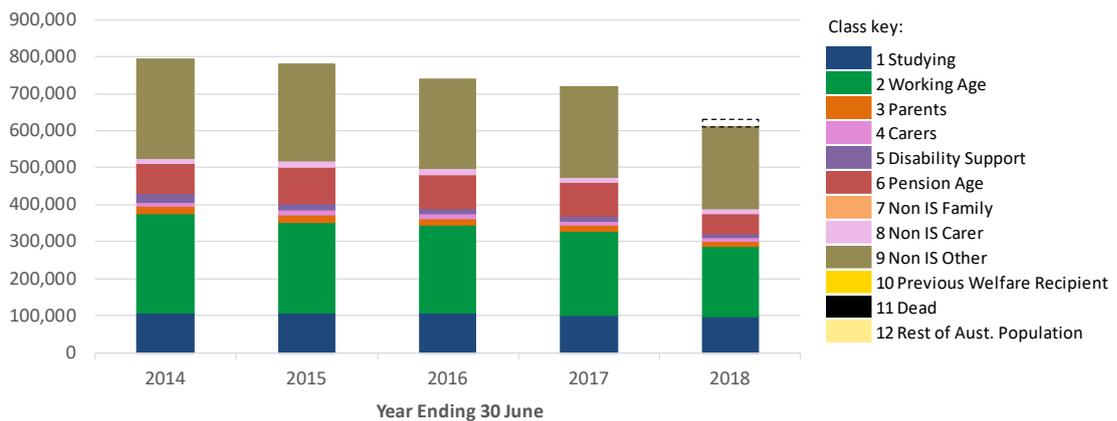
We discuss the key features and trends in the system and class level experience below.

Entries and exits into the welfare system

Entries into the welfare system

The chart below shows the total number of entries and re-entries into the welfare system.

Figure 23: Recent entries and re-entries into the welfare system (by destination class)



* The dotted section represents the total adjustment made for data maturity in the latest year. This adjustment is significantly lower than for the June 2017 valuation as we have September data in the analysis this year, compared to June data last year. As such the data used this year is more mature.

A decreasing trend can be seen over the last few years and in particular there has been a reduction in entrants to Working Age payments. Between 2017 and 2018, there was a particularly large decrease in Working Age entrants of around 35,000 people; this compared to decreases of 10,000 people over each of the two prior years.

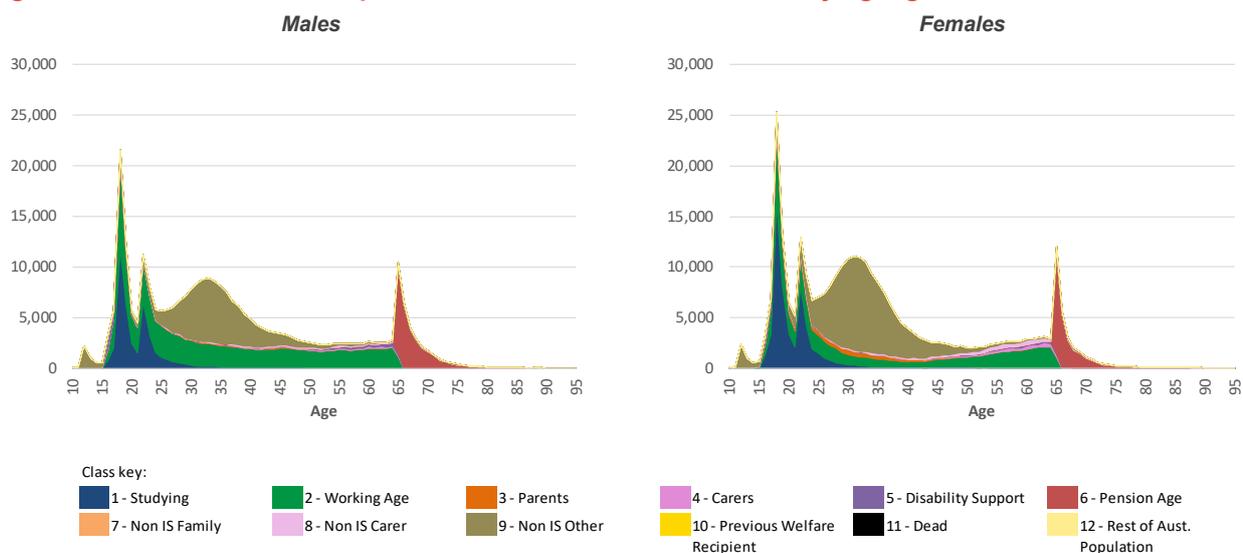
The experience for entries during 2017/18 is not complete as the actual number of entrants for this year will not be known until sometime after the valuation date due to delays in processing applications and reporting. We refer to this as “data maturity” and estimate the impact using past experience (shown by the dotted line). Even with the adjustment, the chart above reveals that entries into the welfare system have continued to trend down, with the number of people entering the welfare system reducing from 717,000 in 2016/17 to an estimated 631,000 in 2017/18.

There is a large decrease in entries to Age Pension in 2018. This relates to the increase in the Age Pension age from age 65 to age 65.5, which reduces the number of people newly eligible for Age Pension in the latest year.

Entrants into the non income support classes can also be seen to have been decreasing over this period.

We now consider the profile of entrants and re-entrants in 2017/18, which can be seen in the charts below.

Figure 24: 2017/18 combined profile of entrants and re-entrants, by age, gender and class entered



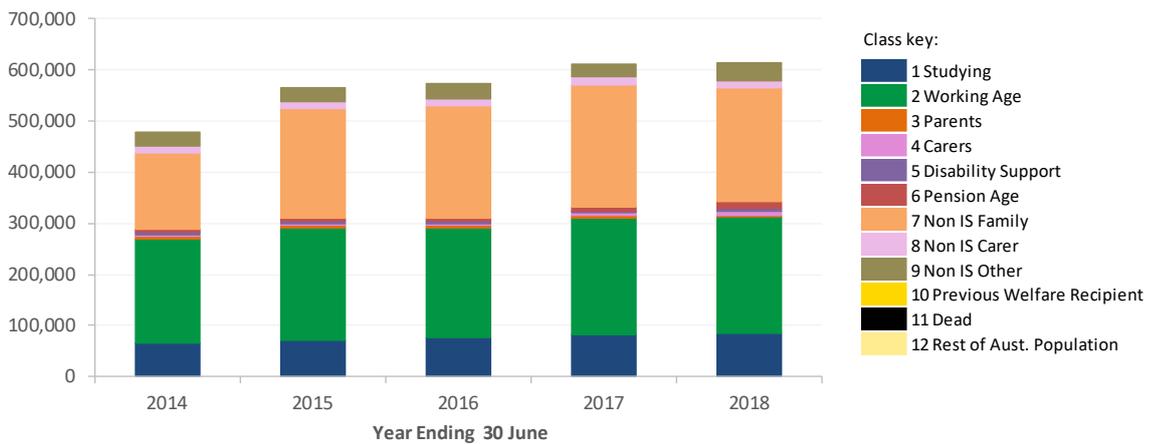
We can see that the profile of entrants and re-entrants varies significantly by age and gender, reflecting the way in which men and women access different classes at different stages of life:

- Below age 25, there are a large number of entrants into Studying and Working Age benefits; in particular, there are two spikes which align with eligibility changes for Youth Allowance at ages 18 (from which point full-time students can access Youth Allowance while living at home) and 22 (from which point young people are considered independent and so parental income tests no longer apply).
- Above age 25 but prior to retirement age, the entries are dominated by the Working Age and Non IS Other classes. Some women also enter into the Parents class.
 - We note that entries into Non IS Other largely relate to people using FTB for the first time. These people will transition into the Non IS Family if they continue to utilise FTB in the following year. The reason these people enter into the Non IS Other class rather than Non IS Family is because of the one year timing lag on the definition of people in class 7, as explained in section 7.1.
- From retirement age onwards, entries are primarily into the Pension Age class.

Exits from the welfare system

The chart below shows the total exits from the welfare system over the last five years, split by class prior to exit. The number of people exiting the welfare system has remained fairly stable, with 611,000 in 2016/17 and 614,000 in 2017/18. Slightly higher exits were observed across most income support welfare classes, and slightly fewer exits from non income support classes.

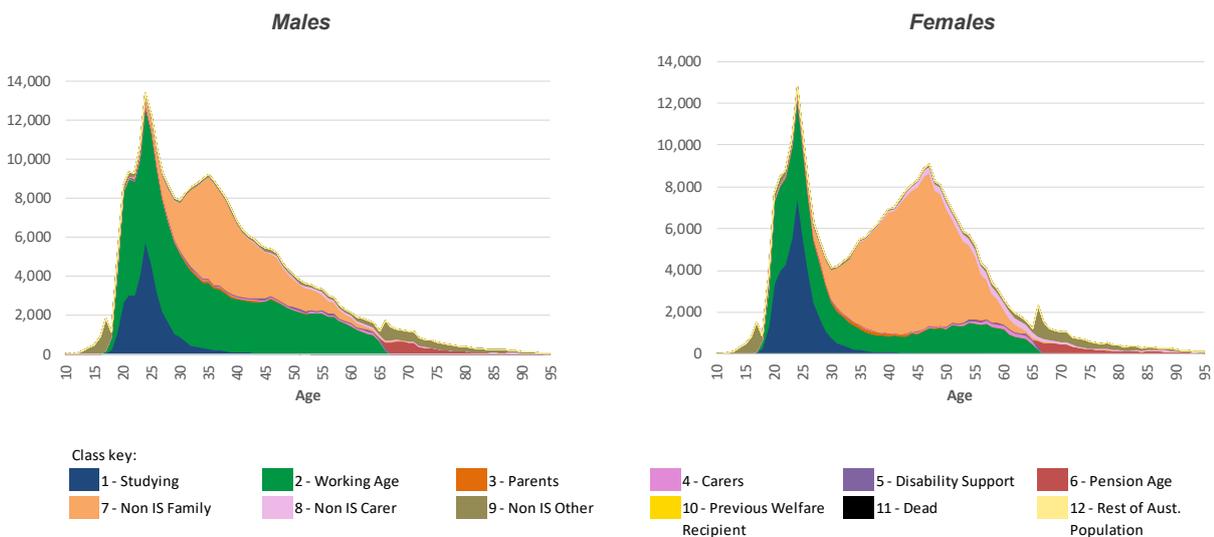
Figure 25: Total exits from the welfare system (by previous class) over the last five years



When combined with the lower observed entrants into the system, this results in a general reduction in welfare usage across the population. This may in part be driven by unemployment rates which have been decreasing over this period.

The figure below presents the age and gender profile of exits observed over the last year. To help focus on the areas of greater interest we have removed deaths from the charts as these would otherwise dominate the numbers at the higher ages.

Figure 26: Summary of exits between June 2017 and June 2018



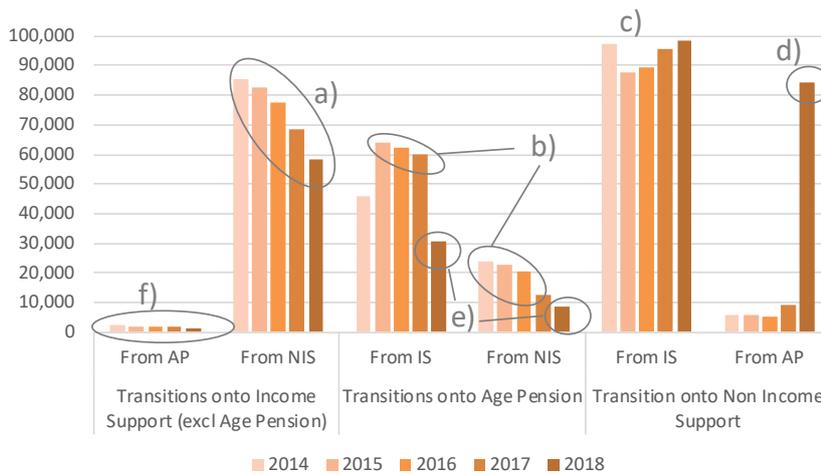
We can see that the main classes from which people exit the system are Studying, Working Age and Non IS Family (noting that most people who are on Parenting payments will transition to Family Tax Benefit only, i.e. the Non IS Family class, before exiting the system).

These charts also illustrate that very few people exit from the Disability Support Pension, Age Pension or Carer classes directly, other than by death. The exits that can be seen from Age Pension in this latest year are increased due to the changes in the Age Pension eligibility criteria relating to the pension assets test.

Transitions within the welfare system

Apart from overall entrants and exits, the movements of people between the various parts of the welfare system are a key driver of changes in lifetime cost. The following chart shows the number of transitions between three broad categories of payment: income support excluding the Age Pension (IS), non income support (NIS), and the Age Pension (AP) and how this has changed over recent years.

Figure 27: Movements of people within the welfare system



We observe the following key aspects of the transition experience:

- a) The number of people moving from non income support to income support has been reducing in recent years;
- b) Transitions onto the Age Pension from within the welfare system have been reducing in recent years, especially for people in the non income support classes;
- c) There has been an increase in people moving from income support to non income support;
- d) High transitions were seen from Age Pension to non income support in 2018, which is a result of people no longer being eligible for Age Pension following the changes in the pension assets test;
- e) Transitions to Age Pension have approximately halved in 2018. This is due to the increase in Age Pension age from 65 to 65.5; and
- f) Very few people transition out of the Age Pension and into other payment types each year.

The first three trends a) to c) all show a reducing reliance on income support payments.

Class-level transition experience

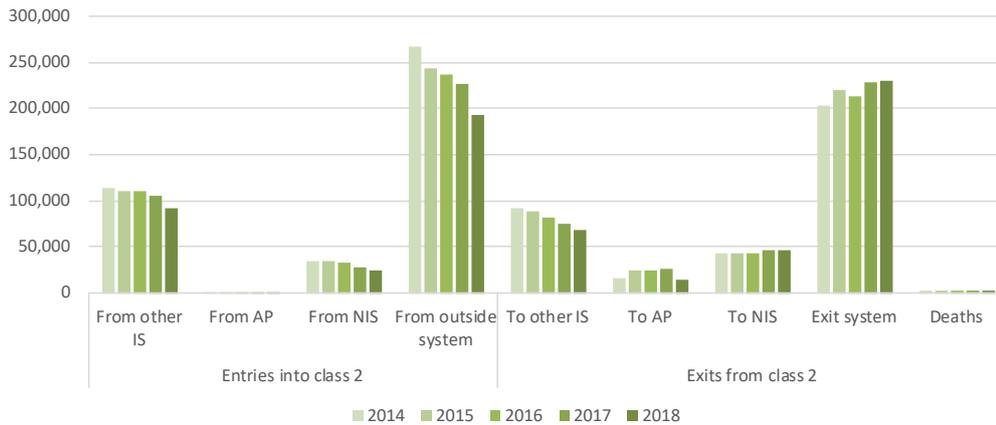
We discuss below selected features of the class-level transition experience which are of interest. The features discussed for Working Age relate to entries and re-entries only. The features discussed for Disability Support Pension and Age Pension encompass a combination of entries into the welfare system, as well as transitions within the welfare system.

Lower entries and transitions onto Working Age Payments, as well as increased exits

We previously noted that entries and re-entries into the system had decreased and that, in particular, there was a decreasing trend in the number of entries and re-entries into Working Age.

The chart below shows more details of the various transitions in and out of the Working Age class.

Figure 28: Entries and exits for class 2 – Working Age

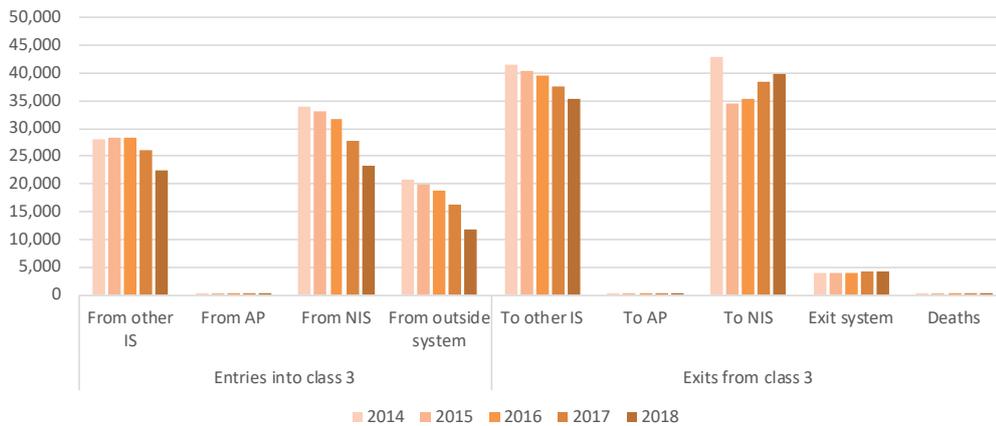


Entries into Working Age have been decreasing, both in relation to entries / re-entries from outside the system (as previously noted), and also in terms of transitions from income support and non income support classes. Additionally, exits from this class have been more likely to exit the system entirely, in the most recent years.

Lower entries and transitions onto Parenting Payments

The chart below shows entries and exits for the Parents class.

Figure 29: Entries and exits for class 3 Parents



It is evident that entries and transitions have been decreasing over recent periods.

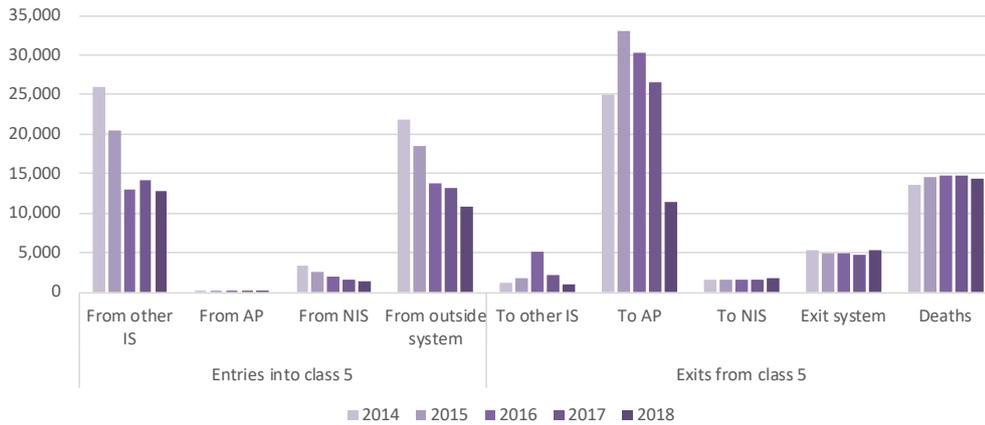
The total number of people in this class decreased by 52,000 between June 2017 and June 2018. Around 22,000 of this decrease was as a result of higher exits than entries over the last year. The remaining 30,000 decrease relates to a small technical data change, whereby people who have been processed to receive a payment but then it was subsequently confirmed that they were not entitled to any amount, are now excluded from the class. This is discussed in section 3.3.

Lower entries and transitions onto the Disability Support Pension

There have been a number of changes in policy settings in relation to the Disability Support Pension over the last few years, including a tightening of eligibility criteria which has driven a reduction in the number of entries onto the DSP. Following this we have noted decreases in both entries from outside the welfare system and in movements from other payments into DSP.

The chart below shows the entries and transitions onto DSP by previous welfare class.

Figure 30: Entries and exits for class 5 Disability Support Pension

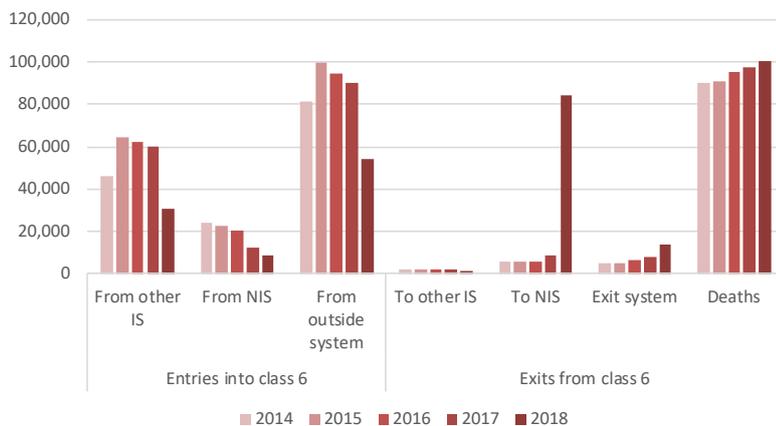


Recent experience shows a decreasing trend of both direct entries into DSP from outside the welfare system, and also of entries from inside the welfare system. It can also be seen that DSP recipients have been less likely to transition from DSP to Age Pension (AP); they are instead more likely to continue receiving DSP. Note that the final large decrease in exits to Age Pension, relates to the increase in the Age Pension age from 65 to 65.5.

Lower entries and transitions onto the Age Pension

The chart below shows entries and exits from Age Pension, which is impacted by both general experience and also recent policy changes relating to the Age Pension age and the pension assets test.

Figure 31: Entrants onto the Age Pension (by previous class) over the last five years



The lower level of entries in the 2018 year is due to an increase in the Age Pension age from 65 to 65.5 and, as a result, fewer people have become eligible for the Age Pension. A reducing trend can also be seen in entries into Age Pension for earlier years, from all parts of the system. For transitions from current welfare recipients, this is in part a flow on effect of reducing numbers of welfare recipients over recent years.

The main exits from Age Pension are due to deaths. A high number of exits can also be seen in 2018 into non income support and also system exits. This is due to approximately 100,000 people no longer being eligible for Age Pension following the pension assets test change; many of these people were still eligible for other supplements and so transitioned into a non income support class.

We also note that deaths have been gradually increasing. This is a result of an increasing number of people in the Age Pension class, resulting in an increasing expected number of deaths.

Other experience relating to number of people accessing payments

Additionally, we noted from our review of recent experience that there have been declining entries and transitions, as well as increased exits for class 4 – Carer (see section 6.4).

4.4 Average payment sizes

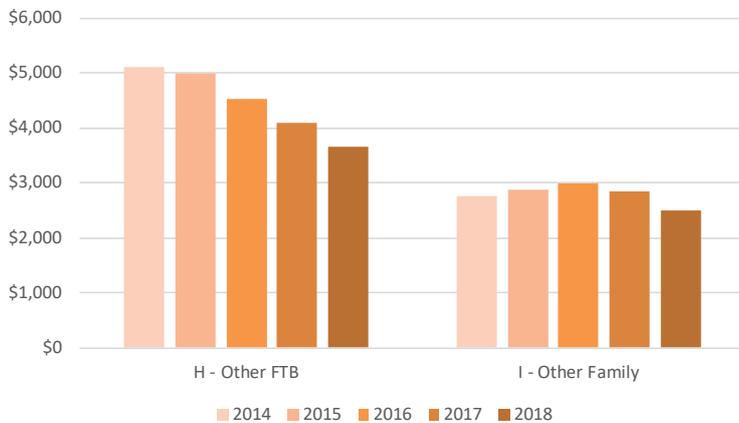
We discuss below the main change noted in average payment sizes during the year, which relates to Family Tax Benefit and Other Family payments.

Reduction in Family Tax Benefit (FTB) and Other Family payments

The average FTB payments have been gradually decreasing in recent years across a number of classes. This likely in part reflects a number of legislative changes introduced over recent years. There have also been some reductions in Other Family payments over the last three years. However, we would expect this to increase again from 1 July 2018 following the introduction of the Child Care Subsidy.

These trends can be seen in the chart below, which shows average FTB payments and Other Family payments made for people in the Non IS Family class (although note that the latest year of payments is understated due to the impact of the data maturity as Family Tax Benefit and child care payment information for the valuation year is not fully known at 30 September, when the valuation data is extracted).

Figure 32: Average selected payments per person in class 7 – Non IS Family (restated to 2017/18 \$ values)

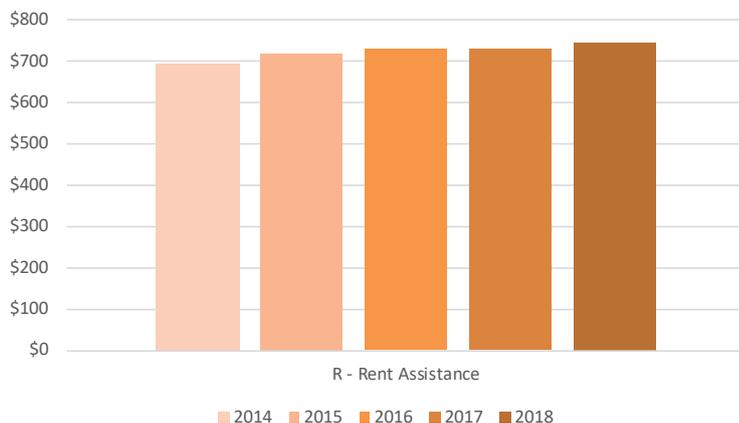


* Note that the latest year is impacted by data maturity issues with non income support family payments.

Increasing Rent Assistance payments

Average rent assistance payments have been increasing over the last few years. In part this is because there are less people in receipt of income support, and those who remain in these classes are now more likely to receive rent assistance. The chart below shows average rent assistance payments for people in the Working Age class, as an example.

Figure 33: Average Rent Assistance payments per person in class 2 – Working Age (restated to 2017/18 \$ values)



4.5 Changes in model population

In this section we review how the population of welfare recipients has changed over the past year in light of the experience discussed above. The table below provides a summary of the numbers of people in each class at 30 June 2017 and the subsequent change over the year to 30 June 2018.

Table 8: Summary of changes in model population

Class	June 2017 Population ('000s)	% of total June 2017 Australian population	June 2018 Population ('000s)	% of total June 2018 Australian population	Difference ('000s)
1 – Studying payment recipients	371	1.5%	359	1.4%	-12
2 – Working Age payment recipients	1,301	5.3%	1,237	4.9%	-64
3 – Parenting payment recipients	433	1.8%	381	1.5%	-52
4 – Carer payment recipients	277	1.1%	294	1.2%	17
5 – Disability Support Pension recipients	760	3.1%	762	3.0%	2
6 – Age Pension recipients	2,595	10.5%	2,508	10.0%	-87
Income support recipient subtotal	5,738	23.3%	5,541	22.1%	-197
7 – Family Non IS payment recipients	1,544	6.3%	1,540	6.2%	-4
8 – Carer Non IS payment recipients	203	0.8%	218	0.9%	15
9 – Other Non IS payment recipients	557	2.3%	652	2.6%	95
Non Income support recipient subtotal	2,304	9.3%	2,410	9.6%	106
Total welfare recipient population	8,041	32.6%	7,951	31.8%	-90
10 - Previous clients, exited 1-3 years	1,538	6.2%	1,597	6.4%	59
10 - Previous clients, exited 4+ years	2,951	12.0%	3,219	12.9%	268
Total previous client population	4,490	18.2%	4,816	19.2%	327
12 - Rest of Australian resident population	12,122	49.2%	12,266	49.0%	144
Total Australian model population	24,654	100.0%	25,033	100.0%	380

These changes in class population reflect the combined effect of changes in legislation, changes to the underlying population size and demographics, as well as to the welfare system utilisation. The main drivers of the changing numbers for the income support classes are as follows:

- **Studying payment recipients:** the number of people in this class reduced over the last year by 12,000 people. The majority of transitions out of this class were to the previous clients and Working Age classes.
- **Working Age payment recipients:** the number of people in this class reduced by 64,000 people over the last year and now represents 4.9% of the total population (down from 5.3% at June 2017). This is reflective of the decreasing entries into the class noted earlier in this section.

It is also worth noting that people in this class are quite mobile, with around a quarter of people in the class expected to exit each year and a similarly substantial number of new entrants. The effect of small changes to the entrant and exit experience can have a significant effect on class numbers and we would expect this to be the main driver of the numbers of people in this class (rather than movements to and from other active classes). This is also likely to be one of the elements of the experience that changes most from year to year as a result of external environmental factors.

- **Parenting payment recipients:** the number of Parenting payment recipients has reduced by 52,000 people since last year. This is a result of lower entries than exits over the last year, as well as the removal from the data of a group of people with a Parenting payment type recorded in the data but zero payment entitlements (this technical data change is discussed in section 3.3).
- **Carer payment recipients:** while this remains one of the smaller classes, the number of Carer payment recipients has continued to grow and there are 17,000 more people in this class than at June 2017.
- **Disability Support Pension recipients:** the number of people in this class has increased marginally by 2,000 since June 2017. Exits from this class are mainly due to movements into the Pension Age class and due to death, and have been relatively stable over time and reflective of the age profile of the class. As noted

previously, the new entrant numbers into this class have decreased over recent years. The number is also impacted by the increase in retirement age, with fewer people moving into the Age Pension class this year.

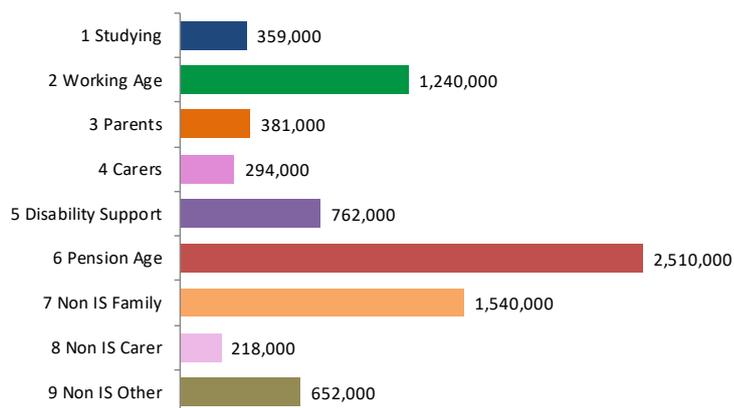
- **Age Pension recipients:** the number of age pensioners has decreased by 87,000. The key reason for this is the increase in Age Pension age seen over the year from 65 to 65.5. This has outweighed the experience of an increasing population of people at older ages in Australia, as a result of general population growth and the long term trend of increasing longevity. Additionally the change in the pension assets test has resulted in exits from the Age Pension class over the year.
- **Non income support recipients:** overall the number of non income support recipients is a little higher than last year, with the main increase seen in the Other Non IS class as a result of transitions from Age Pension into this class following the pension assets test change.
- **Non welfare recipients:** the previous welfare recipients and rest of Australian population classes have increased by 470,000 people in total and now make up 68.2% of the population (compared to 67.4% at June 2017). This increase in the numbers of non welfare recipients is reflective of the overall growth in the resident population of Australia. This is driven by year on year population growth as births and inwards migration exceed deaths and outwards migration.

Overall, the 5,541,000 people who received an income support payment over the year to 30 June 2018 represented 22.1% of the population. This was a reduction from 23.3% at 30 June 2017.

4.6 Profile of model population

The current welfare recipient population split by class is as follows.

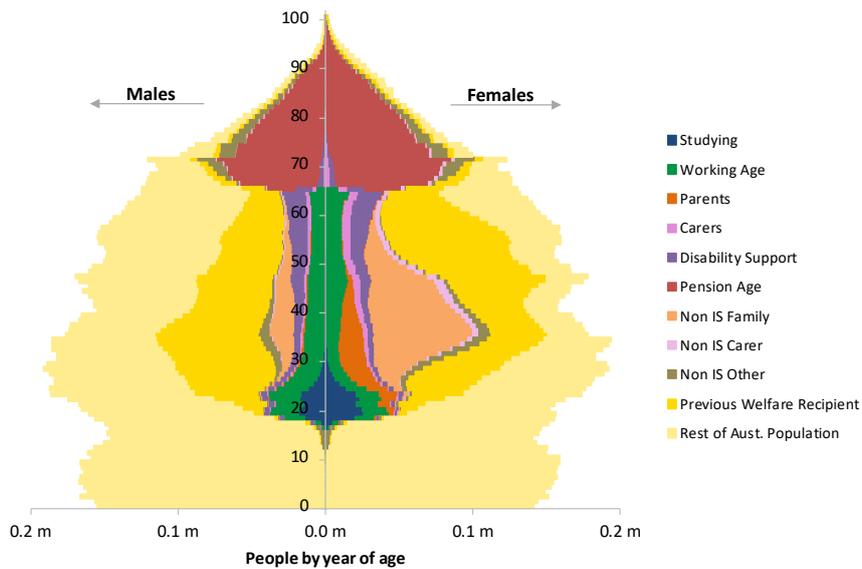
Figure 34: Current welfare recipient population by welfare class



The current welfare recipient population is 7.95 million. Previous clients and the rest of the Australian population make up a further 4.82 million and 12.27 million people respectively.

It is interesting to consider how the current welfare recipients relate to the whole population i.e. which groups of the population are people in receipt of Commonwealth welfare payments. We have used a population pyramid which shows the composition of the population by age and gender to illustrate which people fall into each class and to show the proportion of each group who are current welfare recipients.

Figure 35: Model population with class utilisation (June 2018)



We can see that:

- a large proportion of over 65's are people in receipt of Commonwealth welfare payments (as would be expected);
- people only generally access the welfare system directly from their late teens onwards;
- there is a significant group of women and a smaller group of men receiving Parenting payments or 'Non IS Family' payments (which is primarily FTB and / or child care payments);
- there is a slight increase in welfare utilisation in the years leading up to retirement age; and
- there are other differences in payment system utilisation between genders – which relates to the method of allocation FTB and other family payments to one member of couple households, variations in roles performed by each gender, differences in longevity and differences in lifetime incomes.

5 Overall results

Key results

- The total lifetime cost as at June 2018 is **\$5,662bn**.
- When considering the change in lifetime cost, we have first rebased the June 2017 result to allow for the updated discount rate of 5% used for the June 2018 valuation (a decrease from the discount rate of 6% used for the June 2017 valuation). This supports comparability of the June 2018 and June 2017 results. The June 2018 total lifetime cost has **decreased by approximately \$636bn (10.1%)** compared to this rebased June 2017 lifetime cost of \$6,298bn.
- This is a large decrease, and in particular, it reflects an update of assumptions that allow for significant decreases in entries and decreases in persistency of payments seen over the last year. This update, together with the changes in the Age Pension forecast and other assumption updates, contributed to an overall decrease of \$896bn (-14.2%).
- Population growth and inflation increased the total lifetime cost by almost \$261bn (+4.1%), partially offsetting this large decrease.
- The impact of adjustments for policy changes contributed to a decrease of \$4bn. This related to the introduction of a targeted compliance framework which will apply strong penalties to Jobseekers who do not consistently comply with their employment pathway plan (EPP) requirements.

5.1 Total lifetime cost

The estimated total lifetime cost for the whole Australian population as at 30 June 2016 is **\$5,662 billion**. This figure is the net present value of the future in-scope payments expected to be made over the remaining natural lifetimes of the full model population. In calculating the net present value, the projected payments are discounted to current dollar values.

This is a substantial figure; by way of comparison, the in-scope payments made in the 2017/18 year totalled \$115.4 billion. Hence, the total lifetime cost is almost 50 times the size of recent annual payments. Such a multiplier is perhaps not unreasonable given that we have included the Age Pension in the valuation, which a significant proportion of the model population are expected to receive in the future for many years post retirement.

Table 9: Summary of key valuation results

Population segment	Number in starting population	Average age	Total Lifetime cost (\$bn)	Average payment in 2017/18 (a)	Average lifetime cost (\$'000) (b)	Ratio = (b) / (a)	Expected proportion of future lifetime in IS classes
Current welfare recipients							
- Studying payment recipients	358,986	24	94	7,500	263	35	34%
- Working Age payment recipients	1,237,075	40	471	11,500	380	33	58%
- Parenting payment recipients	380,947	33	220	33,000	577	17	58%
- Carer payment recipients	294,008	51	155	27,400	529	19	81%
- Disability support pensioners	761,985	50	417	22,400	547	24	93%
- Age pensioners	2,508,270	76	577	17,600	230	13	96%
- Family non IS clients	1,539,668	40	354	7,200	230	32	32%
- Carer non IS clients	217,720	51	51	7,100	235	33	37%
- Other non IS clients	652,322	50	98	2,900	151	52	32%
<i>Total current welfare recipients</i>	<i>7,950,981</i>	<i>53</i>	<i>2,439</i>	<i>14,200</i>	<i>307</i>	<i>22</i>	<i>55%</i>
Previous welfare recipients							
- Exited 1-3 years	1,597,238	41	337	n/a	211	n/a	35%
- Exited 4+ years	3,219,117	47	563	n/a	175	n/a	33%
<i>Total previous welfare recipients</i>	<i>4,816,355</i>	<i>45</i>	<i>900</i>	<i>n/a</i>	<i>187</i>	<i>n/a</i>	<i>34%</i>
Rest of Australian resident population							
- Rest of Australian resident population	12,266,069	28	2,323	n/a	187	n/a	29%
Australian resident population	25,033,405	39	5,662	n/a	226	n/a	36%

Notes:

1. The average payment in 2017/18 is understated owing to the data maturity issues with FTB and other family payment data. This has a particular impact on the average payments for people in the family non IS and other non IS classes; we would expect these amounts to ultimately be larger than the figures shown.
2. Exited 4+ years refers to previous welfare recipients who have exited in the past 4 or more years

The above table shows the contribution of each class and population group to the total lifetime cost, which reflects the number of people in that class as well as their average lifetime cost. The average lifetime cost for people in each class is driven by the probability of an average person in that starting population entering, remaining in or leaving the welfare system in each future year; combined with the type and amount of payments they are likely to receive. A few comparative indicators have been included in the table to help explain the results:

- The **average age** of the starting population is shown – younger people have a longer period over which they may receive benefits, but also have a greater potential to move out of the system at some stage compared to older people. In addition to this, the Age Pension costs for younger people are further into the future and so are lower as they are discounted more. In general, the lower the average age of the population group, the lower the average lifetime cost.
- The **average payment received in 2017/18** by people in each class is shown – this is quite different by class, reflecting the nature and mix of the payments received by people in each class. The differences in payments received in the 2017/18 year broadly reflect the differences in the average lifetime cost by class. For example, the average payment in 2017/18 for those currently in the Parenting class is one of the highest compared to other classes, and this class is also estimated to have one of the highest average lifetime costs.
- The **ratio of the average lifetime cost to the annual payment** is shown for current welfare recipients, this ratio reflects:
 - the average number of years on benefit projected for people in that class; and
 - the extent to which future payment levels will change based on people transitioning into different classes or changing their circumstances.

For example, the Pension Age class ratio of 13 would mainly reflect the number of years that the current population of age pensioners are likely to remain in receipt of payments, along with some variation in payment as people age and their circumstances change.

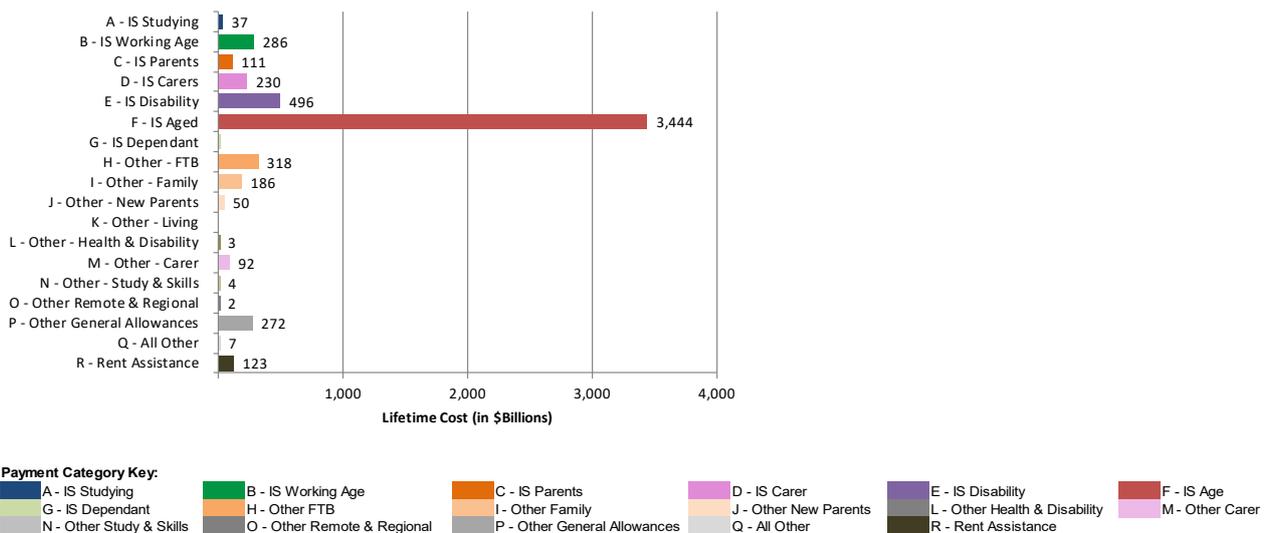
The ratio of 35 for studying payment recipients would reflect the fact that while many in this class will exit the system within a couple of years, this is swamped by the long term cost of those people who transition to other classes after studying, or those who return to the system at a later stage of their lives, in particular those who retire and go onto the Age Pension.

- The expected **proportion of future years in an income support class** is provided as an indicator of the extent to which people in each class are expected to be self-sufficient over the remainder of their lives. We can see that age pensioners and Disability Support Pensioners are expected to receive income support for most of their remaining lifetimes and that the proportions are lower for those in other classes, especially those not currently receiving welfare payments. In general, the higher this proportion, the higher the average lifetime cost.

Contribution of payment categories to total lifetime cost

The total lifetime cost is calculated as the net present value of future in-scope payments made to all people in the model population over the remainder of their natural lifetimes. Given that a large portion of the model population is likely to receive the Age Pension in the future, the total lifetime cost is dominated by the Age Pension. The chart below illustrates how each payment category contributes to total lifetime cost.

Figure 36: Composition of lifetime cost (\$bn) by payment category

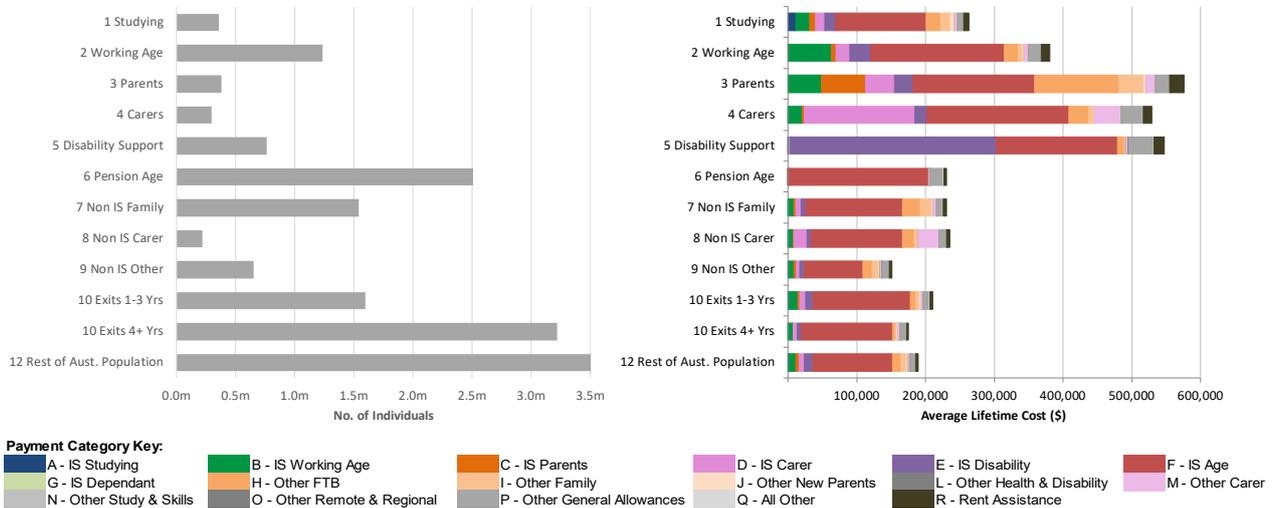


The largest contribution is from the Age Pension which represents 61% of the total lifetime cost. The next largest income support contributions are from the Disability Support Pension (9%) and Working Age (5%) payment categories.

Contribution of each welfare class to total lifetime cost

The relative contributions of each class to the total lifetime cost are impacted by both the numbers of people in each class as well as the average cost for each person.

Figure 37: Drivers of welfare class lifetime costs



Notes:

1. The rest of the Australian population class contains 12.27m people and is not shown in full in this chart.
2. Exited 4+ years refers to previous welfare recipients who have exited in the past or more years

For current welfare recipients:

- The largest contribution is from people in the Pension Age class (\$577bn). This is primarily driven by the large number of people in this class, as the average lifetime cost per person is actually less than many other classes.
- The other classes of current welfare recipients with particularly large contributions to the lifetime cost include:
 - *Working Age payment recipients (\$471bn)* – this is driven by a combination of high numbers of people in the class, and a relatively high average lifetime cost per person.
 - *Disability Support Pension recipients (\$417bn)* – this is mainly driven by a high average lifetime cost per person and to a lesser extent the numbers of people in the class.
 - *Non IS Family payment recipients (\$354bn)* – this is mainly driven by high numbers of people in the class
- It can also be seen that, along with Disability Support Pension, the Parents and Carers classes also have a high average lifetime cost per person. This reflects a mix of drivers including long durations in an income support class, higher maximum rates of payment, a reduced likelihood to work and the people in these classes accessing a broad range of payments.

Despite having one of the lowest average lifetime costs per person, class **12 Rest of Australian Population** accounts for **41% of the total lifetime cost** for the model population. This is driven by the fact that this class makes up half of the model population and reflects the expectation that many Australians who are currently not relying on welfare will need to do so at some point in the future.

5.2 Change since the previous valuation

Introduction

Over the time from one valuation to the next we do not expect the total lifetime cost to stay the same. Changes will occur for a number of reasons including:

- changes to the size and composition of the population;
- inflationary increases in the rates of payment (for instance, the basic fortnightly rate of the Age Pension for single people was \$808.30 at 1 July 2017 and increased to \$826.20 by 1 July 2018 – an increase of 2.2%);
- changes to the welfare payments arising from policy changes;
- changes to both the current and expected future utilisation of each part of the welfare system; and
- external changes, such as the change in the discount rate.

Approach

In order to understand the overall change in the lifetime cost result, we have considered each potential element of change in turn, exploring the change in results as the population information and each set of assumptions are updated to reflect the June 2018 valuation data, policy settings and model refinements.

Note that as all the valuation assumptions interact with each other this analysis is sensitive to the order in which the changes are made. For instance, the impact of updating the class movement assumptions for a class will be influenced by the numbers of people in that class and so will differ depending on the order in which the population information and class assumptions are updated.

This sensitivity to ordering is greater for the areas of change which interact strongly with each other (notably the demographic assumptions, class movement assumptions and economic module) and for the areas where the changes have the greatest impact. Changes that are specific to individual payment categories are typically less sensitive to the ordering of change as lifetime cost results are explicitly assessed for each payment category and the effects are more easily isolated.

In selecting an ordering we have recognised the discount rate change first, then changes to the composition of the starting population, and then updated the assumptions about the future experience in the general order of the modelling sequence.

Change in discount rate

The discount rate for the valuation was held fixed for the first three valuations, which has supported in comparability of the results over time. However, for the June 2018 valuation, the discount rate has been decreased from 6% to 5%, as discussed in section 3.4.

In order to support comparability of this June 2018 update with the June 2017 results, the approach we have taken is to first rebase the June 2017 results using this new discount rate. We have then compared 2018 result with this rebased 2017 result.

The table below shows the impact of this rebasing of the June 2017 results.

Table 10: Rebasing of June 2017 valuation results

Population segment	Jun-17 Lifetime Cost (\$bn)	Jun-17 Lifetime Cost (\$bn) – rebased	Change in lifetime cost – Total (\$bn)	Change in lifetime cost – Age Pension (\$bn)	Change in lifetime cost – Other (\$bn)	Average age
Current welfare recipients						
- 1 Studying	79	112	+33 (+42%)	+23 (+70%)	+10 (+22%)	24
- 2 Working Age	411	521	+110 (+27%)	+74 (+41%)	+36 (+16%)	40
- 3 Parenting	210	259	+49 (+23%)	+29 (+55%)	+21 (+13%)	33
- 4 Carers	125	148	+23 (+18%)	+14 (+32%)	+9 (+11%)	51
- 5 Disability Support	351	417	+66 (+19%)	+33 (+30%)	+33 (+13%)	50
- 6 Pension Age	542	591	+50 (+9%)	+45 (+9%)	+5 (+8%)	76
- 7 Non IS Family	303	403	+100 (+33%)	+80 (+47%)	+20 (+15%)	40
- 8 Non IS Carer	42	53	+11 (+25%)	+8 (+37%)	+3 (+14%)	51
- 9 Non IS Other	72	96	+24 (+33%)	+17 (+46%)	+7 (+19%)	50
<i>Total current welfare recipients</i>	<i>2,134</i>	<i>2,599</i>	<i>+465 (+22%)</i>	<i>+322 (+28%)</i>	<i>+143 (+14%)</i>	<i>53</i>
Non welfare recipients						
- 10 Previous welfare recipients	735	990	+256 (+35%)	+204 (+41%)	+51 (+22%)	45
- 12 Rest of Australian Population	1,812	2,708	+896 (+49%)	+636 (+64%)	+260 (+32%)	28
<i>Total non-welfare recipients</i>	<i>2,547</i>	<i>3,699</i>	<i>+1,152 (+45%)</i>	<i>+841 (+56%)</i>	<i>+311 (+30%)</i>	<i>33</i>
Australian resident population	4,681	6,298	+1,617 (+35%)	+1,163 (+44%)	+454 (+22%)	39

This rebasing restates the total lifetime cost at the June 2017 valuation to be \$6,298 billion. This is consistent with the impact shown in the June 2017 report as part of the sensitivity testing of model assumptions.

As can be seen the impact is greater on the lifetime cost assessed for future Age Pension payments, with a 44% increase seen on the Age Pension component of the lifetime cost compared to a 22% increase on the other components. Additionally the impact is greater for the younger population segments; for example, the impact for the rest of the population (average age 28) is 49%. This is because in both of these cases the payments are, on average, further into the future and thus impacted more by the change in discount rate.

Looking by class, the impact of this rebasing is larger for the non income support and non welfare classes (+28% to +49%), reflecting the composition of their lifetime cost. The impact is also quite high for the Studying class, as much of the lifetime cost is for Age Pension which will be received many years in the future.

It should be noted that the discount rate is an external change which has no impact on future cashflows, However, it does have a significant impact on the net present value of these cashflows i.e. the lifetime cost.

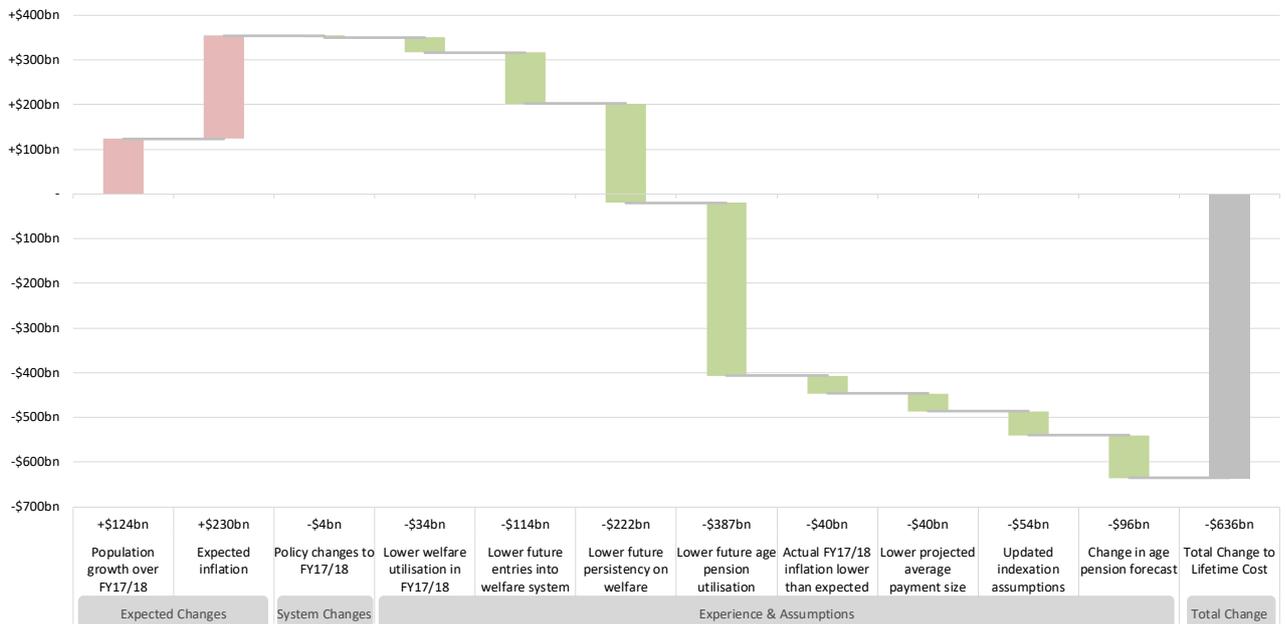
Change in overall lifetime cost

Relative to the June 2017 rebased lifetime cost of \$6,298bn, the total lifetime cost at this valuation has **decreased by approximately \$636bn (10.1%)**. The largest contributors to this decrease are the lower projected utilisation of welfare, in response to the update for recent experience, as well as an update of the

Overall results

projected use of Age Pension. These have been partially offset by increases due to population growth and inflation over the year. The factors contributing to this change are shown below.

Figure 38: Explanation of change in lifetime cost (relative to June 2017 – rebased)



Changes in lifetime cost above are shown relative to the rebased June 2017 lifetime cost, which allows for an updated discount rate of 5% p.a.

Expected Changes

Each year, we expect the total lifetime cost to grow in line with the growth in the population and in line with inflation.

At the June 2018 valuation, the overall lifetime cost has **increased by \$124bn (+2.0%)** due to growth in the Australian Population over the 2017/18 year. This includes the combined impact of births, deaths and net migration over the year – these population changes resulted in an extra 380,000 individuals.

The overall lifetime cost has further **increased by \$230bn (3.6%)** due to expected inflation over the year. This includes:

- **Expected inflation over the 2017/18 year** – expected inflation of payments over the 2017/18 year based on information known at June 2017 was on average 2.0%.
- **Inflation of future payments** – this allows for the impact of the change in pattern in projected future inflation of payments from June 2018 (relative to the pattern from June 2017), in which we move closer to the expected long term inflation rate sooner into the projection. This increases the lifetime cost by 1.6%.

System changes

Changes to the welfare system may directly influence the entitlements of individuals and their welfare usage. The impact of such policy changes has been relatively minor over the last year. The main policy change expected to impact the lifetime cost relate to the introduction of the targeted compliance framework. As a result of this, the estimated lifetime cost has **reduced by \$4bn (-0.1%)**.

A brief description of this change and the impact is shown in the tables below:

Table 11: Impact of new policy changes

New Policy Change	Description of policy change	Estimated impact on the total lifetime cost
Targeted compliance framework	From 1 July 2018, a two-phase compliance framework will be introduced which will apply strong penalties to job seekers who persistently and deliberately do not comply with their employment pathway plan (EPP) requirements	Decrease of \$3.6bn
All new policy changes		Decrease of \$3.6bn

Note that the estimate shown in the table above makes use of external estimates of the impact on annual expenditure as a result of introducing this policy.

Experience and assumptions

The total lifetime cost will also change due to the impact of emerging experience observed over the year together with assumption changes which reflect this experience. This was the largest element of the change and this element resulted in a **\$986bn (-15.6%) decrease** in the overall lifetime cost, which reflects the impact of significant decreases in welfare utilisation experience over the year.

We note that the impact of changes in demographics and class movement assumptions are closely inter-related owing to the iterative nature of the model; where changes in person characteristics influence class movements, which in turn further influence class movements in the following year. The long term nature of the model also means that the impacts are highly geared, where quite subtle changes in single year assumptions can build up to material impacts when compounded over peoples' full future lifetimes.

At this valuation, new welfare recipient characteristic variables were introduced with the intention of introducing greater differentiation of costs between groups within the valuation.

While this decrease is the net impact of a number of changes and interactions, the key drivers of the overall change are:

- **Lower overall welfare utilisation (\$34bn decrease)** – in general the proportion of the population utilising welfare was lower this year than last year, and this has resulted in a decrease in the lifetime cost.
- **Lower future entries into the welfare system (\$114bn decrease)** – this in particular reflects recent experience of decreased entries into income support classes.
- **Lower future persistency on welfare (\$222bn decrease)** – the main drivers of this decrease include:
 - **Reduced future movements to class 5 Disability Support (\$66bn decrease)** – in recent years, the tightening of DSP eligibility criteria has resulted in falling entries into the DSP welfare class. The falling trend was again observed over the last year, and the valuation model assumptions were updated to allow for this. The effect of the assumption change is to reduce transitions into DSP and instead leave welfare recipients in their previous classes for longer.
 - **Reduced future utilisation of other pre-retirement Income Support classes (\$97bn decrease)** – in particular, recent transitions into Working Age, Parents and Carer classes have been lower than previous levels. Additionally we have seen increased transitions out of these classes, and particularly for the Working Age class. We have adjusted our assumptions to reflect this recent experience, and this change in assumptions flowed through to reduced projected future numbers in these classes. The impact by class of this experience is Working Age (\$43bn decrease); Parents (19bn decrease); and Carers (\$35bn decrease).
 - **Reduced future use of non income support payments (\$55bn decrease)** – This includes reduced use of FTB, other Family payments, Other Carer payments and Other General allowances. This is in part reflective of the reduced future use of income support payments, leading to a lower use of supplements. Additionally this is reflective of the experience seen of higher recent exits from the Non IS Family class, and an update in the assumptions in light of this experience.
 - **The remaining impact (\$4bn decrease)** – is the combined impact of smaller adjustments to the other valuation model assumptions in response to emerging experience, as well as the introduction of new model variables.
- **Decreased use of Age Pension, including the flow on impacts from the above changes (\$387bn decrease)** – The use of income support and other payments leading up to retirement is an important

predictor of the use of Age Pension, as people have a greater chance to build their superannuation if they are working rather than receiving income support payments. Accordingly, the decreased future projected use of income support payments flows through to a decreased projected use of Age Pension and a further reduction in lifetime cost.

- **Actual inflation over the year was lower than expected (\$40bn decrease)** – the indexation of payments over the year was around 0.7% lower than expected which resulted in a decrease in liabilities.
- **Lower projected average payments than expected (\$40bn decrease)** – the main drivers of this decrease include:
 - *Reduced projected payments of Family Tax Benefit and other Family payments (\$21bn decrease)* – utilisation of these payments has been slightly lower than expected and our valuation model assumptions have been updated in response to this.
 - *Other size impacts (\$19bn decrease)* – this includes a marginal decrease in the adopted size assumption for Age Pension, during the refitting of the size models in order to allow for the latest detailed experience. Although the decrease was very small (less than 1%), this has an impact on the liabilities due to the materiality of this payment type.
- **Updated future indexation assumptions (\$54bn decrease)** – updates to the assumed indexation of future payments resulted in a \$54bn decrease in the estimated total lifetime cost. This reflects an adjustment to the projected indexation over time, with the long term inflation rate now being reached one year later. This indexation update has the biggest dollar impact on the Age Pension payment category (\$46bn) as this is the largest component of the lifetime cost.
- **Update of Age Pension forecast (\$96bn decrease)** – update of assumptions relating to the future utilisation of Age Pension following a review of welfare experience, as well as consideration of relevant external factors. See section 3.3 for details.

5.3 Summary of change in lifetime cost by welfare class

The changes to the total lifetime cost described above will not impact people in each welfare class in the same way. For instance, certain assumption changes will only affect particular classes, population growth may differ by class, and the observed trends in welfare utilisation and behaviour will also differ by class.

Furthermore, when new predictive variables are introduced to the model, the impact is typically fairly neutral for the full population. However, these new variables will result in more differentiation between those who are expected to have higher persistency in the welfare system, and those who are expected to have lower persistency in the welfare system.

At this valuation, three new variables were introduced to the model: information on people's location, through the inclusion of a measure of socio-economic advantage or disadvantage of the location; information on whether people who entered the country as a refugee or who became a refugee while in Australia; and information on whether income support recipients were in receipt of payments at the valuation date.

The table below shows a class level summary of the changes in population and average lifetime cost. These contribute to the total change discussed above.

Table 12: Summary of changes in lifetime cost by class

Population segment	Jun-17 Lifetime Cost (\$bn)	Jun-17 Lifetime Cost (\$bn) – rebased	Jun-18 Lifetime Cost (\$bn)	Change in lifetime cost (\$bn)	Change in lifetime cost (%)	Change in lifetime cost – population change component (%)	Change in lifetime cost – ave lifetime cost change component (%)	Change in lifetime cost – ave lifetime cost change component (\$'000)
Current welfare recipients								
- 1 Studying	79	112	94	-18	-15.8%	-3.4%	-12.4%	-39
- 2 Working Age	411	521	471	-50	-9.6%	-4.9%	-4.7%	-20
- 3 Parenting	210	259	220	-39	-15.1%	-12.0%	-3.2%	-22
- 4 Carers	125	148	155	+8	+5.4%	+6.0%	-0.7%	-3
- 5 Disability Support	351	417	417	+0	+0.1%	+0.2%	-0.2%	-1
- 6 Pension Age	542	591	577	-14	-2.4%	-3.3%	+1.0%	+2
- 7 Non IS Family	303	403	354	-49	-12.1%	-0.3%	-11.8%	-31
- 8 Non IS Carer	42	53	51	-1	-2.6%	+7.5%	-10.1%	-24
- 9 Non IS Other	72	96	98	+3	+3.0%	+16.6%	-13.6%	-20
<i>Total current welfare recipients</i>	<i>2,134</i>	<i>2,599</i>	<i>2,439</i>	<i>-160</i>	<i>-6.2%</i>	<i>-1.1%</i>	<i>-5.0%</i>	<i>-16</i>
Non welfare recipients								
- 10 Previous welfare recipients	735	990	900	-90	-9.1%	+7.1%	-16.2%	-33
- 12 Rest of Australian Population	1,812	2,708	2,323	-385	-14.2%	+1.0%	-15.3%	-34
<i>Total non-welfare recipients</i>	<i>2,547</i>	<i>3,699</i>	<i>3,223</i>	<i>-475</i>	<i>-12.9%</i>	<i>+2.8%</i>	<i>-15.7%</i>	<i>-34</i>
Australian resident population	4,681	6,298	5,662	-636	-10.1%	+1.5%	-11.6%	-29

All changes shown in the table above are relative to the rebased June 2017 results, which allows for external change of reducing the discount rate from 6% to 5%.

We can see that the majority of the \$636bn decrease in total lifetime cost comes from **non-welfare recipients** (classes 10 and 12), with a **\$475bn decrease** in their estimated total lifetime cost. The costs for these groups are typically further into the future (reflecting their younger average age) and more uncertain. This means they are more sensitive to changes in the assumptions, as these are updated to reflect the emerging experience.

This change in average lifetime cost is further broken down below into the changes relating to inflation, policy changes, and other changes.

Table 13: Breakdown in average lifetime cost changes by class

Population segment	Change in lifetime cost – ave lifetime cost change component (\$'000)	Impact of change in inflation on ave lifetime cost (\$'000)	Impact of Age Pension forecast change on ave lifetime cost (\$'000)	Impact of other changes on ave lifetime cost (\$'000)
Current welfare recipients				
- 1 Studying	-39	+7	-5	-40
- 2 Working Age	-20	+8	-5	-23
- 3 Parenting	-22	+14	-5	-31
- 4 Carers	-3	+11	-3	-12
- 5 Disability Support	-1	+10	-3	-8
- 6 Pension Age	+2	+5	+1	-3
- 7 Non IS Family	-31	+6	-7	-30
- 8 Non IS Carer	-24	+5	-5	-25
- 9 Non IS Other	-20	+4	-3	-21
<i>Total current welfare recipients</i>	-16	+7	-3	-20
Non welfare recipients				
- 10 Previous welfare recipients	-33	+5	-5	-33
- 12 Rest of Australian Population	-34	+5	-4	-35
<i>Total non-welfare recipients</i>	-34	+5	-4	-35
Australian resident population	-29	+5	-4	-31

All changes shown in the table above are relative to the rebased June 2017 results, which allows for external change of reducing the discount rate from 6% to 5%.

The decrease was driven by a 15.7% decrease in the estimated average lifetime cost per person, partially offset by a 2.8% increase in the population in these classes.

At this valuation, the estimated total lifetime cost for **current welfare recipients** (classes 1 to 9) **decreased by \$160bn**. This increase was made up of a 1.1% reduction in the population in these classes and a 5.0% decrease in the estimated average lifetime cost per person.

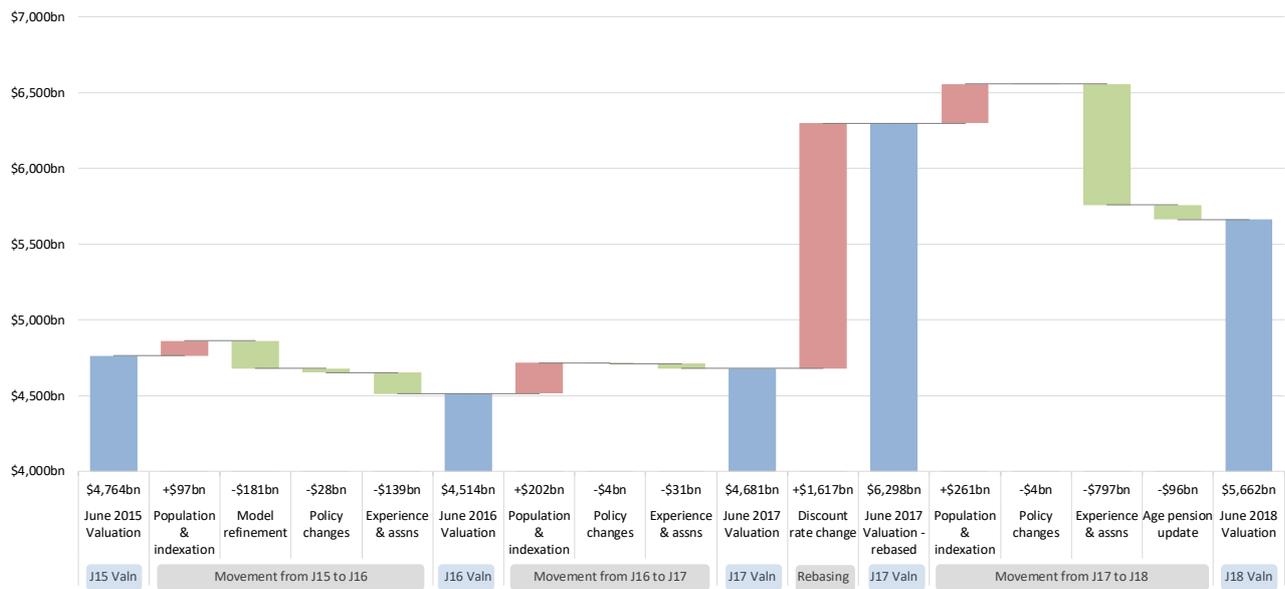
The decreases in the estimated average lifetime cost per person can largely be attributed to lower projected utilisation of welfare, in response to the update for recent experience.

5.4 Changes since the baseline valuation

This is the third valuation since the baseline valuation. The figure below shows the cumulative movement in the estimated lifetime cost since the baseline valuation.

Typically, we would expect the estimated lifetime cost to increase from year to year due to general population growth and inflation. However, the changes in the lifetime cost may also vary each year due to model changes, policy changes, and changes in welfare utilisation and experience. These are discussed in detail in the following section.

Figure 39: Changes since the baseline valuation



Notes:

The movements for prior years are drawn from the previous valuations, however the presentation of this change has been modified to better align with this year's description of the change in results.

For the June 2017 valuation total, we have included both the original total result (\$4,681bn) in order to reconcile with previous years' results, and also the rebased total allowing for the updated 5% discount rate (\$6,298bn) in order to reconcile with the June 2018 result. All else being equal, movements between June 2017 and 2018 are larger than previous movements, since they allow for the lower discount rate which makes all items larger.

Population growth and indexation

From year to year, we would expect the Australian population to grow through births, deaths, and net migration, with a corresponding increase in the estimated total lifetime cost. Historically, the Australian population has grown between 1 to 2% each year. Since the baseline valuation, the impact of the change in the Australian population has increased the total lifetime cost by **\$59bn** at the June 2016 valuation, by **\$67bn** at the June 2017 valuation, and by **\$124bn** at the June 2018 valuation. This increase in June 2018 is larger than in previous years due to the lower discount rate, which makes all items larger.

From year to year, welfare payments are expected to increase based on increases in relevant inflation indices and / or wages measures such as Consumer Price Index (CPI) or Male Total Average Weekly Earnings (MTAWE). As a result, we would also expect a corresponding increase in the total lifetime cost at each valuation. The long term inflation rate is expected to be approximately 2% to 4%. The future outlook for inflation is revised at each valuation based on Australian Government forecasts. Since the baseline valuation, the impact of payment indexation has resulted in an overall **\$38bn increase** at the June 2016 valuation, a **\$135bn increase** at the June 2017 valuation, and a **\$137bn increase** at the June 2018 valuation. Inflation over the 2015/16 year was much lower than expected, resulting in a smaller indexation impact compared to that observed at the June 2017 and June 2018 valuations.

Model refinements / Age Pension update

Over the last three valuations, refinements were made to the model with the aim to introduce greater differentiation of costs between groups; for example, to differentiate better between those who are expected to have high persistency in the welfare system, and those who are expected to have lower persistency.

At the June 2016 valuation, significant model refinements were made, with the introduction of new welfare recipient characteristic variables, as well as the economic module. Overall, these refinements resulted in an **\$181bn decrease** in the total lifetime cost, of which the majority related to the introduction of the economic module, and the associated change in the long term unemployment rate assumption.

At the June 2017 valuation, three new variables were introduced to the model; **parental welfare dependence**, a student's current **education sector**, and a variable describing **barriers to work** for Working Age recipients. These three variables will primarily affect non-welfare recipients, and those in the Studying and Working Age classes respectively, but will also have flow on impacts to the other classes. While these variables will enable better differentiation between welfare recipients, these have minimal impact on the valuation result overall.

At the June 2018 valuation, the model has been extended to include information on people's **locational advantage / disadvantage**, through the inclusion of a measure of socio-economic advantage or disadvantage of the location; and also to include information on whether people who entered the country as a **refugee**.

Additionally, at June 2018 we updated the Age Pension utilisation forecast, which resulted in a **\$96bn decrease** in the lifetime cost.

Policy Changes

Over the last three valuations, a number of policy changes have been legislated which influence the payment design and eligibility of welfare benefits. As these policy changes affect the behaviour and utilisation of the welfare system, where possible we have made explicit allowances for the impact of these policy changes.

Since the baseline valuation, the impact of material individual policy changes has resulted in a **\$28bn decrease** at the June 2016 valuation, a **\$4bn decrease** at the June 2017 valuation, and a further **\$4bn decrease** at the June 2018 valuation.

At the June 2016 valuation, a number of policy changes were legislated, including the reduction in the income limit for FTB Part B, the removal of FTB Part B for couple families with a youngest child aged 13 and over, cessation of the Large Family Supplement, changes affecting Family Day Care services, and replacing the Student Start-up Scholarship with the Student Start-up Loan. Each of these resulted in a decrease in the lifetime cost.

At the June 2017 valuation, a substantial increase due to the introduction of the Child Care Subsidy was more than offset by the introduction of the \$80,000 income limit for claiming the Family Tax Benefit Part A supplement and the two year freeze on FTB rates.

At the June 2018 valuation, the main change related to the introduction of a targeted compliance framework which will apply strong penalties to job seekers who persistently and deliberately do not comply with their employment pathway plan (EPP) requirements.

There are also many other policy changes which are made each year. While they are not expected to have a material impact on the valuation when considered individually, their impact will be reflected in the observed experience over time.

Experience and Assumptions

The general welfare system utilisation of the population will also change over time. In general, the proportion of people utilising welfare over the period since the baseline valuation has been lower than previous levels. This has resulted in a reduction in the total lifetime cost of **\$8bn** at the June 2016 valuation, a reduction of **\$28bn** at the June 2017 valuation, and a reduction of **\$34bn** at the June 2018 valuation.

Additionally, at each valuation, where relevant, assumptions relating to characteristics, class movements, payment utilisation and average sizes are updated to reflect recent experience.

At the June 2016 valuation, updates for experience resulted in a **\$131bn decrease** in the total lifetime cost. This was primarily driven by a falling trend in the proportion of women with children (affecting the Parenting and Family classes), reduced entries into the Working Age class, other changes to class movements, and partially offset by an increase in the average size of Working Age payments (over and above indexation).

At the June 2017 valuation, updates for experience resulted in a **\$3bn decrease**. This has primarily been driven by reduced entries and movements into some Income Support classes offset by increases to the Age Pension average size in response to higher recent payment experience for new age pensioners.

At the June 2018 valuation, updates for other experience resulted in a **\$763bn decrease**. This primarily relates to lower future utilisation of welfare in response to low entry experience and high exit experience over the year. Additionally there were decreases in the average payment sizes.

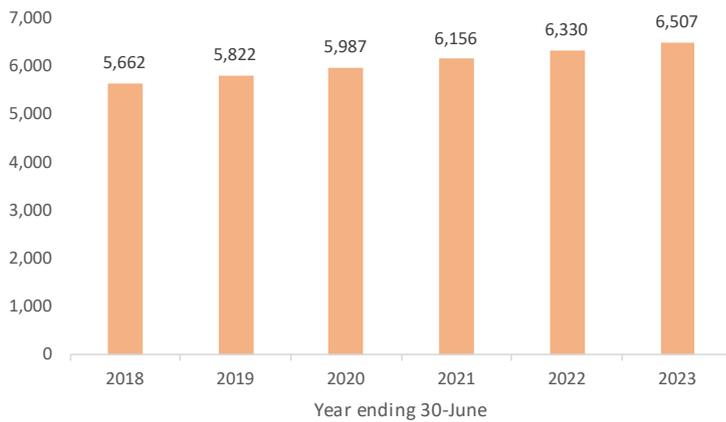
5.5 Forecasts

Lifetime cost

Lifetime cost forecasts are expectations of lifetime cost at future valuation dates. They provide useful benchmarks for future years' valuations. As each subsequent valuation is performed, the differences to the benchmark can be examined to understand how the lifetime cost results differ from expectations.

Based on the current valuation we have developed a partial forecast of lifetime cost at the next five years for the people in the 30 June 2018 population. At 30 June 2019, it will be possible to reassess the lifetime cost and explain the movements in the lifetime cost assessment. It will also be possible to show the additional components of lifetime cost being added for new members of the population, including new births and migrants.

Figure 40: Projected Lifetime cost (\$bn)



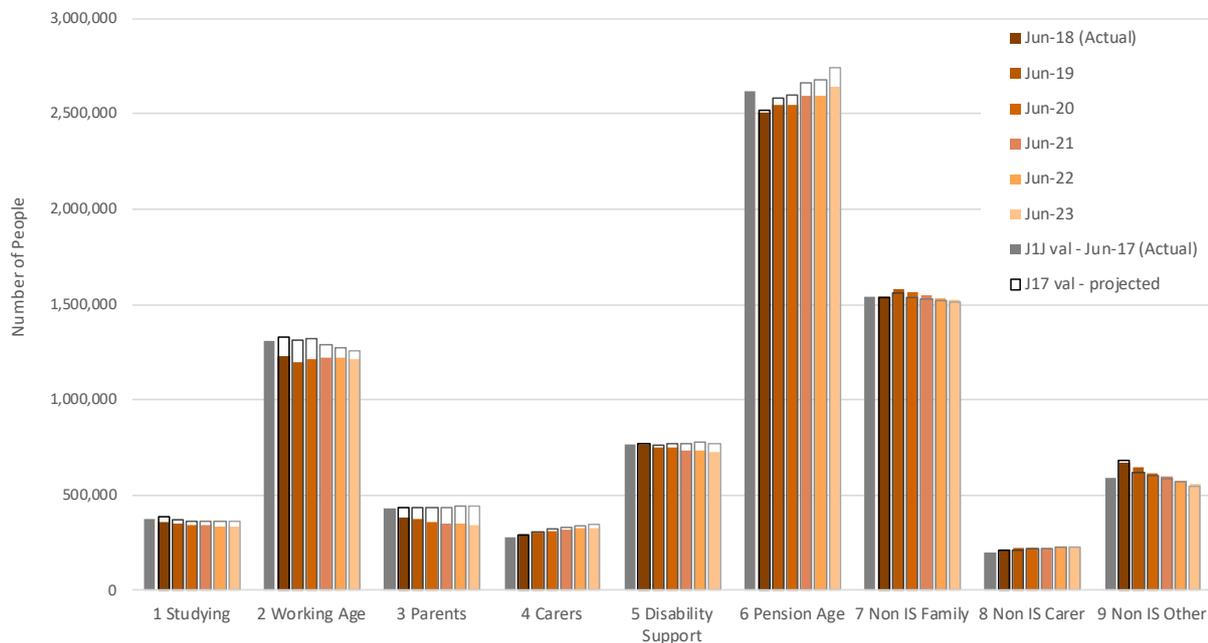
People in each class

The chart below looks at the actual and projected numbers of people in each welfare class. The red and orange bars show the actual number of people in each class for the year ending 30 June 2018, as well as the expected numbers of people in each active class over the period June 2019 to June 2023. We have also included information from the previous June 2017 valuation for comparison: the grey bar shows the actual number of

Overall results

people in each class for the year ending 30 June 2017; while the black / grey outline bars show the projected numbers based on the June 2017 valuation.

Figure 41: Actual and Projected numbers of people in each active welfare class



Notes:

- The actual numbers will be slightly higher than this as the population is expected to grow through migration and births. Over this five year timeframe migration will have the bigger impact as most people only enter the payment system in their own right in their teenage years and therefore births over this period will not impact the upcoming short-term welfare use.
- Consequently the Department should use this information with care and consider making adjustments for the undercount before using them for purposes such as planning or budgeting.
- We have adjusted the actual population in the chart above to allow for the main impact of the data maturity issue described in section 3.3. We have also excluded projected deaths during the year from the projections. These adjustments are to allow a more consistent comparison between the actual and projected numbers.

Key features:

- The total projected numbers of people from the June 2018 valuation (the red and orange bars) are generally significantly lower than the projections from the previous June 2017 valuation (the black / grey outline bars). This is reflective of the recent decrease in entries and increase in exits, which will act to reduce the total number of welfare recipients if this experience continues. The decrease is a continuation of the decreasing trend seen at the last valuation.
- In particular, decreases in the projection can be seen for the Working Age, Parents, Disability Support and Pension Age classes, relative to the June 2017 projection. This is reflective of the significant decrease in entries observed over the last year. While decreases appear more modest in the Carers and Disability Support classes, these still translate to large decreases in the lifetime cost due to the high expected duration on payments for people in these classes.
- Despite the decrease noted above, the number of age pensioners is still projected to increase, although at a lower rate than was expected based on the June 2017 valuation. This increase reflects the increasing population of people above age retirement age as a result of improved longevity. This is being partially offset by the impact of the increase in the Age Pension age from 65 to 67, starting from 1 July 2017 – by itself this change in Age Pension age would act to decrease the number of people in this class.
- The number of people in the Carers class has been growing from year to year and we expect this to continue in the future. As the population ages and there are a higher number of older people needing care,

there may be more demand for this payment. Note also that this class includes a group of people over pension age who may be caring for ageing partners.

- The number of people in the Working Age class is projected to remain fairly stable over this period, although at a lower level than was seen last year following a reduction in class numbers over 2017/18.
- The number of people in the Studying class is expected to reduce as there are fewer people in their late teens and early 20s today than was the case in the recent past.
- The number of people in the Non IS Other class increased in June 2018 following a large movement from the pension age class to the Non IS Other class as a result of the changes in eligibility relating to the pension assets test. The projection then shows decreasing numbers over the period. This is largely driven by the closure of carbon tax compensation to new recipients of concession cards from March 2017, which is expected to result in decreased numbers of people above retirement age in Non IS Other.

5.6 Areas of sensitivity and uncertainty

Limitations of the valuation

The valuation explores the cost of future welfare payments over the remaining natural lifetimes of the model population on the basis that the currently legislated policy persists over that timeframe. While this exercise is intended to provide useful information, it is important to understand its limitations.

The payment system changes frequently. Hence, the scenario contemplated in the valuation of current policy continuing will be unlikely to eventuate in practice. As time progresses further into the future, the potential for different policies to be put in place is greater and so differences between actual and projected payments are likely to be larger.

The valuation explores the use of the welfare system allowing for expected demographic changes and considering the broader economic environment. Other external factors may influence the demands on the system. These factors extend as far as changing patterns of life and work; changes in the composition of households; changes in the mix of industries and work opportunities; impacts of trends in population health and healthcare driving changes in demand for supports and behavioural changes from individuals and in terms of the informal supports provided between members of different generations. The extremely long term nature of the projected payments within the model means that all these factors, and others that we have not yet contemplated, are likely to influence the use of the welfare system in future years and hence impact the liabilities. We have not considered such trends explicitly.

Uncertainty

For each person, their actual life outcomes and the welfare payments received are uncertain. This is reflected in the assumption sets adopted in the valuation model which are probabilities of different events occurring throughout people's lives and the likely costs of the resultant life trajectories. For each group of people, and the population as a whole, the valuation results presented above represent the mean of the lifetime costs derived from the range of modelled future outcomes.

Many of the assumptions underlying the actuarial valuation are developed by considering patterns of past use of the welfare system. In some cases, the past experience has been volatile and in others the experience has varied from year to year, most likely as a result of policy changes. Some policy changes are recent and not fully reflected in the observed experience; people may also behave differently in the future than they have in the past. These considerations mean that the assumptions are inherently uncertain and the actual future experience may differ from that modelled.

The long term nature of the lifetime cost results means they are highly sensitive to some of the assumptions. In particular:

- The assumed mortality rates and mortality improvements have a systemic impact on the whole population. Small changes to future mortality rates mean that, on average, people receive the age pension for a different length of time and this can impact the lifetime costs materially.
- The inflation and discounting assumptions also have an extremely large impact on the lifetime cost results. Many of the payments are not received until many years into the future and for some of the population are concentrated in the latter part of people's lives. This means small changes in the indexation and discount rates can have a large impact on the lifetime cost.

The impact is greatest for changes to the discount rate as this impacts all future payments over all timeframes. It is greater for changes to MTAWE than changes in the CPI as the payments that occur later in people's lives benefit from MTAWE benchmarking and have a longer average duration.

An important part of the analysis has been to use risk based assumptions to achieve a differentiation in the lifetime cost results for different groups of the population, with these being more reflective of their underlying risk profile, to the extent that this is captured within the variables modelled.

While the use of risk characteristic variables improves the explanatory power of the modelling, the analysis demonstrates that not all of the variation in welfare utilisation for different people can be explained by the risk characteristics included. Although there may be opportunities to continue to include some further variables in future valuations there will be a limit to the extent to which variation between groups and individuals can be explained.

A number of the risk based characteristics are dynamic in nature. Examples in the valuation include educational attainment, partial capacity to work, partnering status, number and age profile of children, and SEIFA. Quite small variation in adopted parameters can have a significant compounding effect over the long periods of time projected. An important validation step has been to check the reasonableness of the distributions of these parameters across the projected population into future years. What represents reasonable is ultimately a subjective judgement. Where possible, we have attempted to validate with other external reference points. Changes in profile may also impact on the predictive strength of the characteristic over time. For example, obtaining a university degree may not be as powerful an influence on lifetime earnings and employment as it was for earlier generations, due to a greater proportion of the population obtaining a degree and the changing composition of the economy.

Similarly, the class and payment utilisation variables used to project future welfare utilisation are themselves dynamic and the lifetime cost is sensitive to variations in these assumptions. In addition, there is uncertainty as to how well the adopted assumptions reflect the likely future experience of the population under the current policy settings.

By its nature, the lifetime cost assessment for the rest of the Australian population group may be even more uncertain than the lifetime cost for people currently and recently in receipt of Commonwealth payments. This comprises those segments of the population who have either never been in receipt of Commonwealth payments or who have not been in the last three years. As a result, less is known about the current situation and characteristics of people in these segments. Furthermore their projected future consumption of welfare is generally further into the future than for current and recent welfare recipients. The further out into the future the costs are projected, the more uncertain they become for the range of reasons discussed above.

We have illustrated the sensitivity to the key valuation model assumptions in the section below.

Sensitivity

The lifetime cost results are sensitive to the underlying assumptions. To illustrate these sensitivities we have tested a range of alternate assumptions and the results are presented below.

Table 14: Sensitivity of current liabilities to changes in assumptions

Assumption set	Sensitivity test	Change in lifetime cost, non-Age Pension component	Change in lifetime cost, Age Pension component	Total change in lifetime cost (\$)	Total change in lifetime cost (%)
Mortality	Removal of mortality adjustments for specific population groups	+\$61bn	+\$48bn	+\$109bn	+1.9%
Mortality	Increase future mortality improvements by 25%	+\$20bn	+\$154bn	+\$174bn	+3.1%
Mortality	Remove future mortality improvements	-\$132bn	-\$845bn	-\$977bn	-17.3%
Economic	Discount rate increases 1% to +6%	-\$386bn	-\$1,044bn	-\$1,430bn	-25.3%
Economic	Discount rate reduces 1% to +4%	+\$547bn	+\$1,772bn	+\$2,319bn	+40.9%
Economic	Long term CPI assumption increases by 1% (from 2.5% to 3.5%, starting from 2025/26)	+\$210bn	-	+\$210bn	+3.7%
Economic	Long term CPI assumption reduces by 1% (from 2.5% to 1.5%, starting from 2025/26)	-\$156bn	-	-\$156bn	-2.7%

Overall results

Assumption set	Sensitivity test	Change in lifetime cost, non-Age Pension component	Change in lifetime cost, Age Pension component	Total change in lifetime cost (\$)	Total change in lifetime cost (%)
Economic	Long term MTAWA assumption increases by 1% (from 4% to 5%, starting from 2025/26)	+\$176bn	+\$1,465bn	+\$1,641bn	+29.0%
Economic	Long term MTAWA assumption reduces by 1% (from 4% to 3%, starting from 2025/26)	-\$126bn	-\$913bn	-\$1,040bn	-18.4%
Age Pension	Adjustment to reflect a scenario of future changes in Age Pension utilisation removed	+\$8bn	+\$122bn	+\$129bn	+2.3%
Entry and exit rates	Rates of movement from the rest of the population to the active classes increase by 10% for ages up to retirement age	+\$87bn	+\$34bn	+\$120bn	+2.1%
Entry and exit rates	Rates of movement from the rest of the population to the active classes increase by 10% for retirement age and above	+\$7bn	+\$115bn	+\$121bn	+2.1%
Entry and exit rates	Rates of movement from the active classes to the rest of the population increase by 10%	-\$44bn	-\$29bn	-\$74bn	-1.3%
Economic module	Long term unemployment rate of 4% (1% decrease from base assumption)	-\$110bn	-\$74bn	-\$184bn	-3.2%
Economic module	Long term unemployment rate of 6% (1% increase from base assumption)	+\$126bn	+\$73bn	+\$200bn	+3.5%
Economic module	Long term unemployment rate of 7% (2% increase from base assumption)	+\$282bn	+\$161bn	+\$442bn	+7.8%

Age Pension sensitivities

Age Pension costs may vary in future as a result of changes in various external factors such as workforce participation, levels of home ownership and levels of superannuation and other savings. Our forecast scenario of Age Pension utilisation has been set following consideration of these factors, along with recent experience.

To illustrate the sensitivity to this assumption we have assessed the change in lifetime costs that would occur if we had not made the adjustment. Removing the adjustment would increase the liabilities by 2.3% (that is, applying this adjustment has reduced the lifetime cost by 2.3%).

Simulation run differences

The valuation is based on a simulation method which generates a possible future scenario for each individual, based on random numbers.

The overall and class level results presented in this report are based on a simulation run of one simulation per person. We considered this number of simulations sufficient owing to the substantial numbers of people within each of these population groups. Where results are presented for smaller groups of people, such as the average lifetime cost of cohorts with different characteristics, the model has been run with a minimum of 100,000 simulations in total (for instance, this is equivalent to 100 simulations per person for a group of 1,000 people or lower numbers per person for larger groups).

If the model is re-run using an alternative set of random numbers then the simulated future scenario for each individual will change.

Testing has previously been carried out in order to validate the choice of using one simulation per person when developing the overall and class level results. In particular, this testing confirmed that the uncertainty arising from the simulation process itself are small and likely much less than the uncertainty associated with the model assumptions (as illustrated in the sensitivities table).

6 Results for income support recipients

In this section and the next two sections, for each welfare class, we present information on the profile of the people in that class and a breakdown of the payments received during 2017/18. We then discuss the experience and assumptions relating to the main class movements and payment amounts. Finally, we present results based on the application of the assumptions to the people currently in the class using the valuation model.

This section covers the income support classes.

6.1 Studying Payment recipients

Key points

There were 359,000 people in the Studying class in 2018, who were mostly aged 18 to 30. The majority of people in this class enter the Studying class as their first welfare class, and go on to either leave the system or move to the Working Age class after finishing their studies.

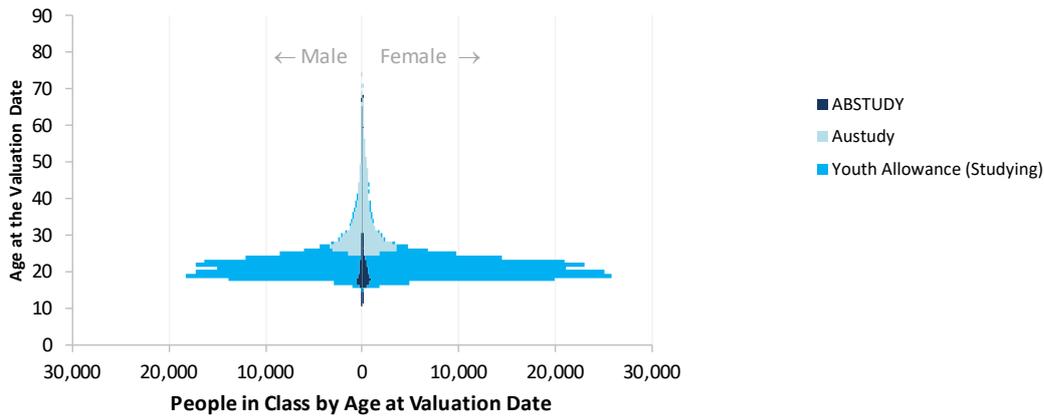
- Over the last five years an increasing proportion of individuals have exited the system rather than transitioning to the Working Age class after finishing their studies.
- The replacement of the Student Start-up Scholarship with the Student Start-up Loan has led to lower average payment sizes since 2015/16.
- Looking at the new variables this year, we see that people who live in areas with the highest levels of socio-economic disadvantage have higher lifetime costs than others on average. We can also see that being in receipt of payments at the valuation is associated with higher lifetime costs. These features are as expected and the inclusion of these variables has helped make the model outputs more realistic. We generally see these same features to varying degrees across the other classes.
- Students undertaking higher education have typically spent longer in the Studying class but have had a higher chance of exiting the welfare system completely upon leaving the class, when compared to secondary school students or vocational education and training students.
- Students whose parents have a more intensive history of welfare use tend to spend longer in the Studying class and have a higher chance of transitioning to another form of income support when leaving the Studying class.
- The lifetime cost for this class is \$94bn, which is \$18bn below the rebased 2017 lifetime cost. The reduction is driven by a decrease in the number of people in the class, as well as decreased assumptions for future payment utilisation in light of recent decreases in persistency in income support use.

Recent and projected trends for people receiving Studying payments

There were 359,000 people (4.5% of current welfare recipients) in the Studying class in the 2018 model population. This represents 1.4% of the population of Australia which is a decrease from 1.5% at the previous valuation.

The following chart shows a breakdown of the number of people in the Studying class by age, gender and payment type.

Figure 42: 2018 profile of people in class 1 – Studying (age / gender / payment type)



From the chart, we can see that there are a mix of both men and women, albeit with more women at younger ages. The people in the class are mostly in the age range 15 to 30, although there are some people receiving these payments at most ages through to retirement age.

The vast majority of people in the Studying class are on Youth Allowance (if aged up to 24) or Austudy (if over 24 years old). There are a small number of Indigenous Australians on ABSTUDY across all ages.

Movements into and out of this class

Over the last three years, an average of 135,500 people (around 36% of the people in this class) per annum enter this class from another welfare class or from outside the welfare system. Over this same period, an average of 147,800 people (around 39% of people in this class) per annum have transitioned out of the Studying class.

The following chart shows the breakdown of these transitions by previous / destination class and year of transition. This is shown for both the last five years, and also the first five years of the projection.

Figure 43: Number of people entering class 1 – Studying (by class entered from)

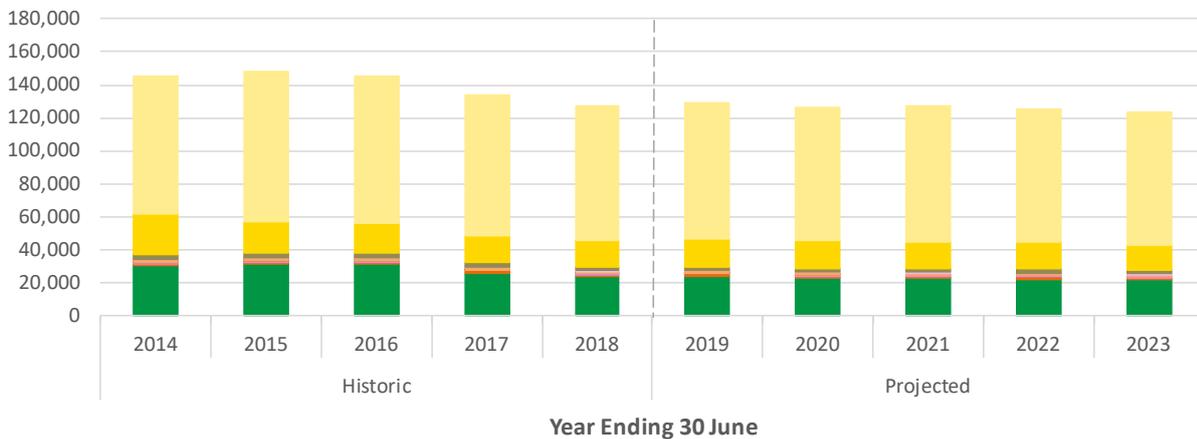
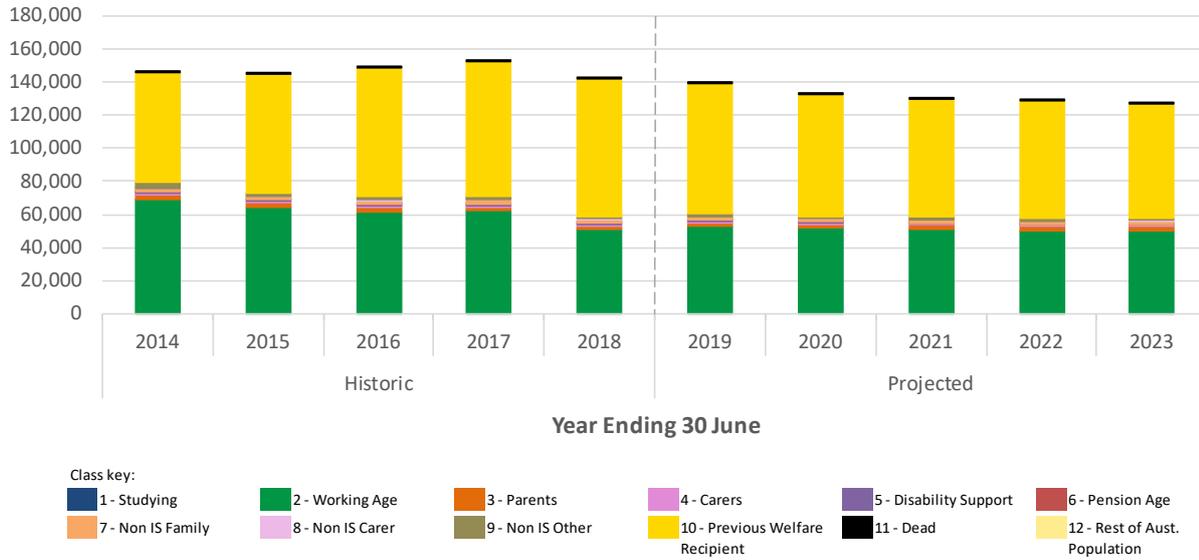


Figure 44: Number of people exiting class 1 – Studying (by class exited to)



We can see that most people enter this class directly from outside the welfare system, many of whom have never received welfare payments before. This is not unexpected, given the age profile and nature of benefits in this class. Of the people who enter this class from within the welfare system, most people come from the Working Age class.

People in this class also show a high level of mobility; as can be seen by the high numbers of entries and exits relative to the total number of people in the class. Of those exiting the class, most people generally transition to the Working Age class or transition out of the welfare system.

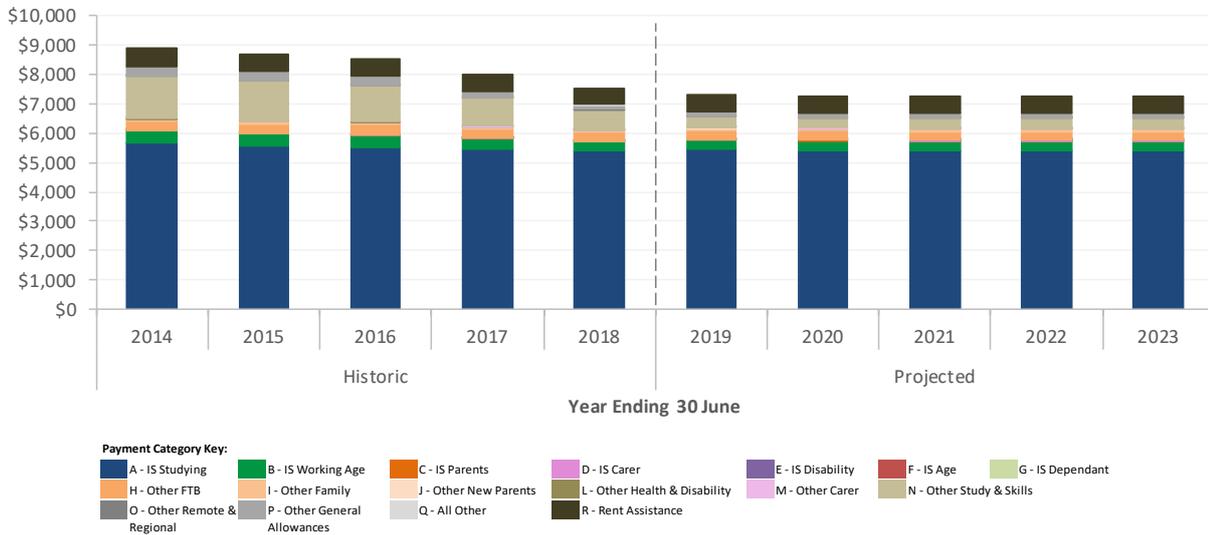
Over the last few years, entries into the Studying class have been lower than exits, resulting in a decrease in the number of people in the class. Entry rates into the Studying class have reduced since 2017 due to lower numbers of people entering from the Working Age and Rest of Population classes.

The level of entries is projected to remain similar for the next few years, and the level of exits is projected to reduce towards a similar level to the entries.

Payments received

During 2017/18, people in this class received a total of \$2.7 billion. This is 2.3% of the total payments made in 2017/18. The chart below shows the average amount paid in a year to each person in this class, shown for both recent years and the first five years of the projection.

Figure 45: Average payments per person in class 1 – Studying (restated to 2017/18 \$ values)



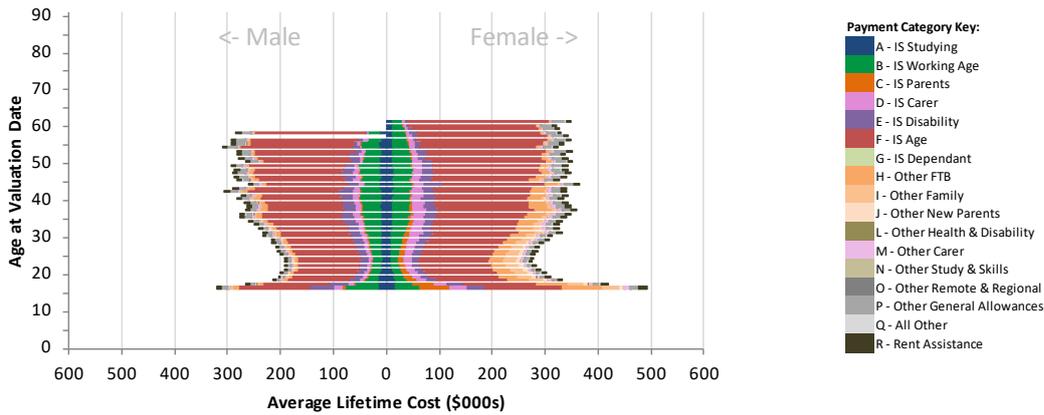
During 2017/18, the average payment made was \$7,500 (compared to \$8,000 last year) with slightly higher average payments being made to women as a result of them being more likely to also be claiming FTB and other family payments alongside the main study payment and study supplements. This reduction has been largely driven by lower Other Study & Skills payments, which reduced from \$900 to \$700 over the last year. In particular, fewer people in the Studying class have utilised Other Study & Skills payments since the Student Start-up Scholarship (SSS) was replaced with the Student Start-up Loan (SSL) in January 2016. The projection shows a further decrease in the use of Other Study & Skill. This is in part because the projection allows for the inclusion of a bad debt allowance for the SSL, to allow for a proportion of recipients not repaying this loan in full.

What does the model show for people in the Studying class?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **\$94bn** (or 1.7% of the total lifetime cost). The average lifetime cost for people in this class is **\$263,000**. The variation by age and gender is illustrated in the figure below.

Figure 46: Average lifetime cost by age and gender (class 1)



This is the lowest average lifetime cost of the pre-retirement income support classes, despite the people in this class generally being younger and thus having a longer future lifetime.

We can see that the most substantial part of this cost is for the Age Pension. This component of the average lifetime cost is lower for younger people as their time of retirement is further away and because younger people are more likely to exit and may later draw a lower level of Age Pension.

The next most apparent feature is the difference between the average lifetime costs for men and women. Women have higher costs through most of the age range as they are more likely to receive FTB or other family payments. For both men and women there are additional cost components for all the main income support payment types reflecting the probability of people moving from the current Studying class onto these payments. There are some differences between the genders, in particular reflecting the different probabilities of moving onto Parenting payments versus Working Age payments.

To further explore differences in the average lifetime costs for people within class 1, we have prepared the table below, which shows the average lifetime cost for 18 to 25 year olds currently receiving studying payments, split by key characteristics. We have selected a set age group to reduce the effect of age on the future lifetime cost. It is important to note that some characteristics serve as proxies for more fundamental socio-economic factors, and as such, they may not necessarily be the underlying cause of any differences observed in the average lifetime costs of individuals. Further, the variations and relativities to the average lifetime cost that have been shown may differ for other age bands.

Table 15: Average lifetime cost for 18 to 25 year old studying payment recipients split by key characteristics

	Number of people	Number of people as % of cohort	Average lifetime cost (\$)	Average lifetime cost relative to cohort
Total	279,000	100%	254,000	100%
Education sector				
- Higher education	235,000	85%	246,000	97%
- School	8,000	3%	332,000	131%
- VET	33,000	12%	291,000	115%
Highest educational attainment recorded				
- Year 10 or less	7,000	3%	334,000	131%
- Year 11	10,000	3%	306,000	120%
- Year 12	225,000	81%	247,000	97%
- Certificate	16,000	6%	304,000	119%
- Diploma	13,000	5%	250,000	98%
- Bachelors / Postgraduate	7,000	2%	229,000	90%
Earnings				
- No earnings	119,000	43%	261,000	102%
- Has earnings	159,000	57%	250,000	98%
Payment type				
- Austudy	3,000	1%	253,000	100%
- ABSTUDY	7,000	2%	428,000	168%
- Youth Allowance (Student)	269,000	97%	250,000	98%
Level of parental welfare dependence				
- None (0%)	128,000	46%	237,000	93%
- Some (1%-35%)	73,000	26%	256,000	101%
- High (36%-80%)	47,000	17%	275,000	108%
- Very high (81%+)	31,000	11%	291,000	114%
Indigenous status				
- Indigenous	9,000	3%	429,000	169%
- Non-Indigenous	269,000	97%	248,000	98%
Geography – socio-economic area grouping				
- Lowest 20% (most disadvantaged)	51,000	18%	291,000	114%
- 20% to 40%	48,000	17%	272,000	107%
- 40% to 60%	54,000	19%	256,000	101%
- 60% to 80%	62,000	22%	241,000	95%
- Highest 20% (least disadvantaged)	63,000	23%	224,000	88%
Payments at valuation date				
- In receipt of payments at valuation date	182,000	65%	263,000	103%
- Not in receipt of payments at valuation date	96,000	35%	238,000	94%

From the table, we can see that for the current cohort of 18 to 25 year old studying payment recipients:

- As would be expected, people currently living in areas with the lowest 20% socio-economic area grouping (which have the highest level of socio-economic disadvantage), have higher lifetime costs on average.
- We can also see that being in receipt of payments at the valuation is associated with higher lifetime costs, again as would be expected.
- Those receiving ABSTUDY payments have noticeably higher average lifetime costs than the other people in their cohort. This reflects that this group of Indigenous Australians are more likely to stay within the welfare system in the future.
- Those in the school or VET education sectors tend to have greater welfare dependency going forward than those currently in higher education which is reflected by their higher average lifetime costs.

- Those with higher levels of parental welfare dependence tend to have higher levels of welfare dependence in their own right.

Change in lifetime costs since the 2017 valuation

The lifetime cost for the people in this class is \$94bn and has reduced by \$18bn compared to the rebased June 2017 valuation. This was driven by a reduction in both the number of people in this class and in the average payment size:

- The number of people in this class has reduced due to higher exits than entries over the past year; these people exiting the Studying class generally moved to the Working Age class or out of the welfare system.
- The average cost has decreased by \$39,000 (12.4%) since the (rebased) previous valuation. The following table provides a breakdown of the change in average lifetime cost by grouped payment category.

Table 16: Breakdown of change in average lifetime cost for class 1 by payment category

	Total	IS			Non IS ¹	
		Studying	Other (excl. Age Pension)	Age Pension	Family Supplements	Other Supplements
Jun-17 Total Lifetime Cost	\$79bn					
Jun-17 Total Lifetime Cost – rebased ²	\$112bn					
Jun-18 Total Lifetime Cost	\$94bn					
Change in Total Lifetime Cost ²	-\$18bn (-15.8%)					
Change due to People in Class	-3.4%					
Change due to Average Lifetime Cost ²	-\$39k (-12.4%)	<\$1k	-\$14k	-\$19k	-\$3k	-\$3k
- Impact of change in inflation	+\$7k	<\$1k	+\$2k	+\$3k	+\$1k	<\$1k
- Impact of Age Pension forecast	-\$5k	<\$1k	<\$1k	-\$5k	<\$1k	<\$1k
- Impact of other changes	-\$40k	<\$1k	-\$15k	-\$17k	-\$4k	-\$3k

Notes:

1. Note that payment categories H, I and J have been included in family supplements and the remaining non income support payment categories in other supplements.
2. The June 2017 rebased Lifetime Cost represents a recalculation of the June 2017 lifetime cost, but using a discount rate of 5% p.a. for consistency with the June 2018 results. All changes are shown relative to this rebased lifetime cost.

The decrease in average lifetime cost has been primarily driven by:

- a decrease in the likelihood of transitioning to the Working Age class, which reduces the contribution of Working Age payments to the average lifetime cost for people in the Studying class;
- a flow on decrease to the likelihood of subsequently transitioning to both the other pre-retirement income support classes and to Age Pension;
- a further decrease in projected Age Pension use as a result of the change to the Age Pension forecast; and
- a decrease in the expected amount of supplements received, primarily as a consequence of the reduced projected use of income support payments.

These decreases have been partially offset by an increase in the cost of future payments as a result of inflation.

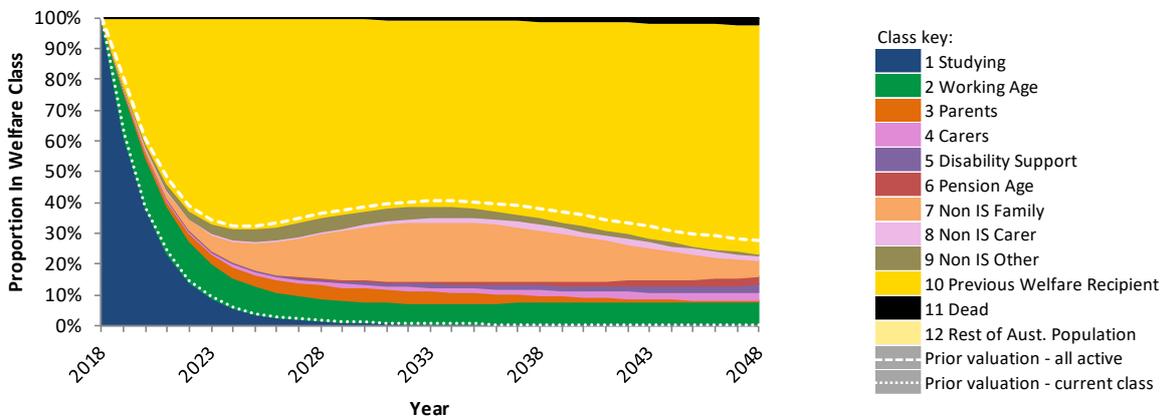
Note that the part of the cost arising directly from student payments has not changed materially since the June 2017 Valuation.

Future outcomes

In developing the valuation results the projection model also produces information on the expected transitions for people out of each class, as shown below. We have also included equivalent projections from the previous

valuation and these are shown for both the current class and the total active classes with the two white dashed lines.

Figure 47: Expected future trajectory for people in class 1



Some observations we can make based on our analysis are that:

- Similar to last year about 90% of people are projected to exit the class over the next five years. Over half of those present today are expected to leave the payment system completely over this timeframe. Of the rest:
 - many are expected to move onto Working Age payments and some onto Parenting payments
 - small proportions are expected to transition to the Carer payment and Disability Support Pension
- Of the group who are projected to exit over the next five years, a proportion are projected to later return primarily to class '7 Non IS Family' over the following 10 years.
- A slightly larger portion of the group are projected to exit the system over the next five years when compared to the June 2017 valuation (which is shown with the lower dashed line). This is driven partly by fewer students transitioning to Working Age and other income support classes.
- Only a small proportion (around 2%) of people currently in this class are projected to be in this class in 10 years' time.
- For each future year, around 15% or more of this group are projected to receive income support. After 30 years, this proportion increases as more people progress to the Age Pension.

Duration

The average future life expectancy for people in the Studying class is **67** years. This reflects the relatively young age profile of people in this class.

The table below provides a summary of the expected welfare system use of people currently in this class over this time. This has been developed by considering which classes people move into as they move through the welfare system over their lives.

Table 17: Average expected durations in welfare system for people currently in class 1

	Expected Years	Proportion of Future Lifetime
Years with some income support payments:		
- Not Age Pension (classes 1-5)	9	13%
- Age Pension (class 6)	15	22%
Years with non income support payments only	5	8%
Years not receiving any welfare payments	39	57%
Total	67	100%

6.2 Working Age Payment recipients

Key points

There were 1,237,000 people in the Working Age class in 2018, who were mostly aged 18 to 65. This is 4.9% fewer than at the June 2017 valuation. The Working Age class is reasonably mobile with high numbers of people seen to transition to and from Studying, Parenting, Non IS Family and the non-welfare recipient classes.

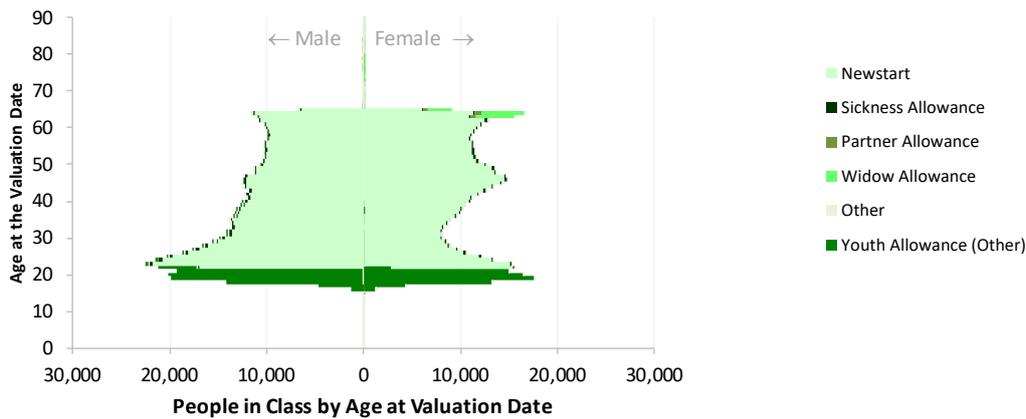
- Over the last five years a reducing number of people have entered the Working Age class. Additionally over the last few years more exits from this class have been exits from the welfare system rather than transitions into other classes.
- The longer a person remains on Working Age benefits, the less likely they have been to leave the Working Age class before retirement. Similarly, those who enter the Working Age class directly from another welfare class have generally been less likely to exit the system.
- As with the Studying class, we see that being in receipt of payments at the valuation is associated with higher lifetime costs. The impact of this is larger for the Working Age class compared to the Studying class. This is reflective of the greater persistency on payments for people in receipt of Working Age payments, which makes being in receipt of payments at the valuation date a more significant feature for the Working Age class.
- People with employment earnings while in the Working Age class are around 1.5 times more likely to leave the Working Age class and around two times more likely to exit the system than those without any employment earnings.
- People with lower capacity to work are less likely to leave, and more likely to transition to other income support classes when leaving the Working Age class. There are a growing number of individuals in this class with less capacity to work. This is likely to be a flow on effect of more people remaining in this class rather than transitioning into Disability Support following the tightening of Disability Support Pension eligibility criteria. This changing profile is one of the drivers of the observed increase in the expected average lifetime cost for this class.
- The lifetime cost for this class is \$471bn, which is \$50bn below the rebased 2017 lifetime cost. The reduction is driven by a decrease in the number of people in the class, as well as decreased assumptions for future payment utilisation in light of recent decreases in persistency in income support use. This is similar to the drivers to the decrease in lifetime cost for class 1.

Recent and projected trends for Working Age people

There were 1,237,000 people (15.6% of current welfare recipients) in the Working Age class in the 2018 model population. This represents 4.9% of the population of Australia which is a decrease from 5.3% at the previous valuation.

The following chart shows a breakdown of the number of people in the Working Age class by age, gender and payment type.

Figure 48: 2018 profile of people in class 2 – Working Age (age / gender / payment type)



From the chart, we can see that there are a mix of both men and women, albeit with more men than women at younger ages which may be because more women are receiving Parenting or Studying payments. The numbers in the class peak for people in their twenties and then gradually reduce up to pension age. This pattern is particularly evident for men; for women the shape is different as many women transition to receiving Parenting payments.

The vast majority of people in the Working Age class are on Youth Allowance (if aged up to 21) or Newstart Allowance (if over 21 years old). The remaining people are mostly on Sickness Allowance; there are also a small number of people (mostly women) at the older ages still accessing Partner Allowance and Widow Allowance. These benefits will be consolidated as part of the transition to the new Jobseeker Payment in 2020.

Movements into and out of this class

Over the last three years, an average of 349,900 people (around 27% of the people in this class) per annum enter this class from another welfare class or from outside the welfare system. Over this same period, an average of 368,800 people (around 29% of people in this class) per annum have transitioned out of the Working Age class.

The following chart shows the breakdown of these transitions by previous / destination class and year of transition. This is shown for both the last five years, and also the first five years of the projection.

Figure 49: Number of people entering class 2 – Working Age (by class entered from)

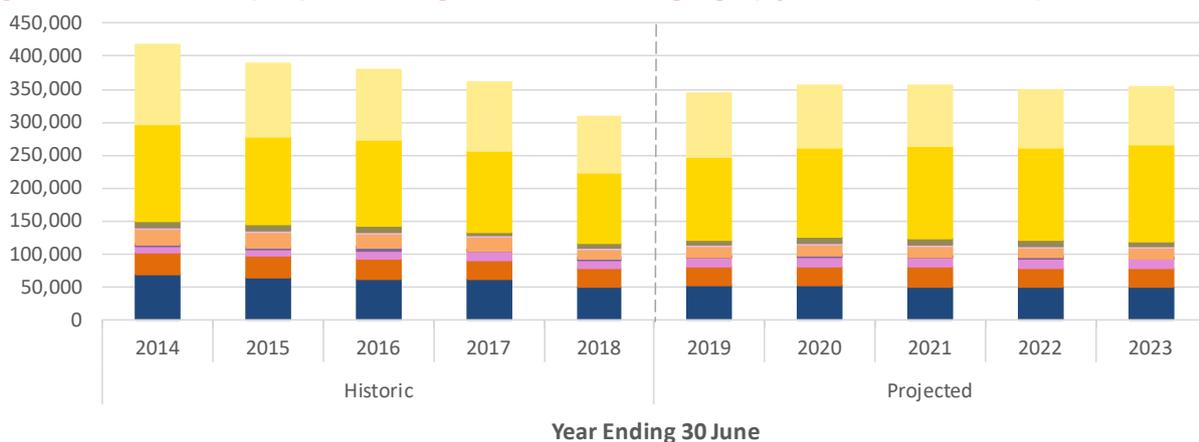
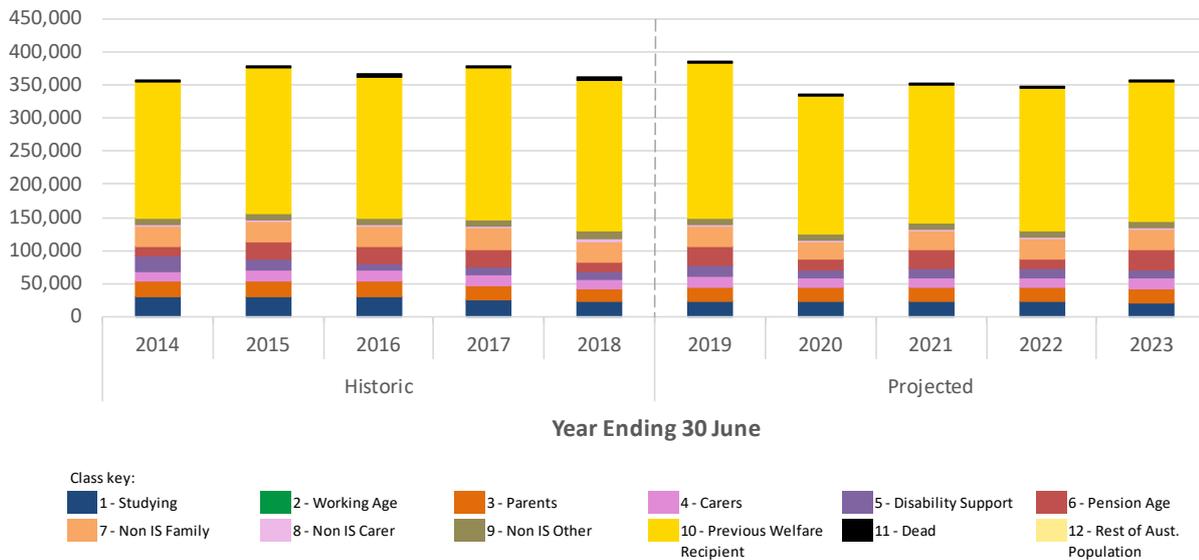


Figure 50: Number of people exiting class 2 – Working Age (by class exited to)



We can see that people generally enter this class from outside the welfare system, many of whom had previously accessed welfare payments. People in this class show some mobility, with a mixture of exits from the system and movements to a range of other classes. Most people who leave this class but remain in the system tend to transition to class ‘1 Studying’ (at the younger ages), class ‘6 Pension Age’ (at retirement) and, for women, classes ‘3 Parenting’ and ‘7 Non IS Family’.

Historically, entries into class 2 have been a little higher than exits from class 2 and this has led to increases in the number of people in the class each year. However, this has reversed in recent years resulting in decreases in the number of people in the class.

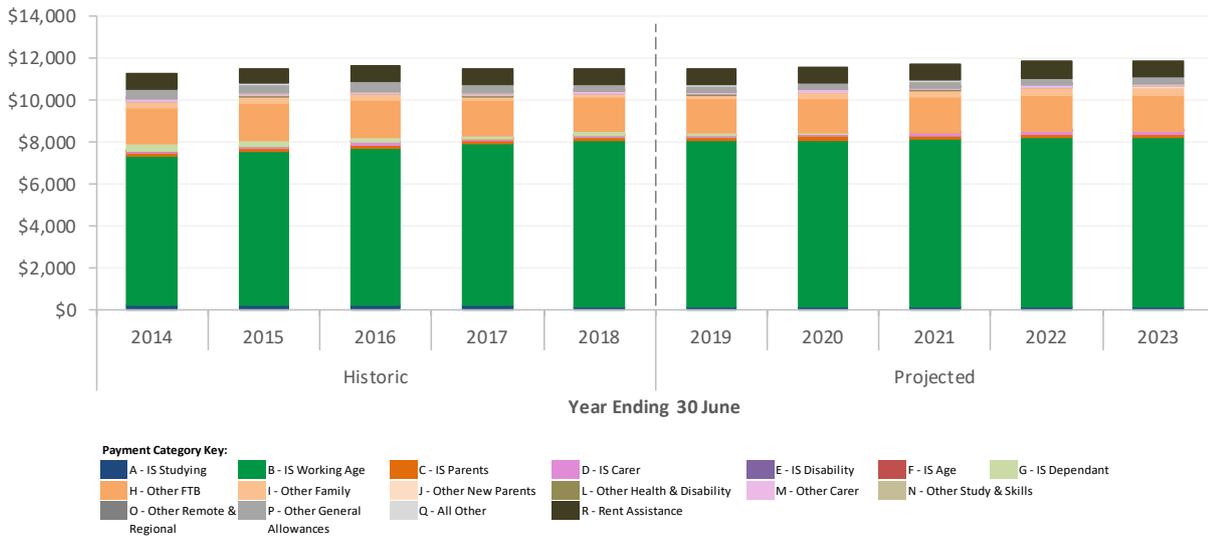
The projected entries in 2019 are above the level seen in 2018. This is because, at this stage, we do not believe there is enough experience to assume that the entries will continue at the low level seen in 2018 (noting for example that the level of entries seen in 2018 was lower than what might have been expected based on the decrease seen in the unemployment rate alone, suggesting that there were other contributing factors to the low level seen in 2018). Instead, a slightly higher level of entries is projected forward, which gives some credit to the higher levels seen in previous years.

Over the last few years, more exits from this class have been exits from the welfare system, rather than transitions into other classes. The actual and projected exits into the Pension Age class are lower for 2018, 2020 and 2022. This is the result of fewer people reaching Age Pension age during these years, as the Age Pension age transitions from age 65 to 67.

Payments received

During 2017/18, people in this class received a total of \$14.3 billion. This is 12.4% of the total payments made in 2017/18. The chart below shows the average amount paid in a year to each person in this class, shown for both recent years and the first five years of the projection.

Figure 51: Average payments per person in class 2 – Working Age (restated to 2017/18 \$ values)



During 2017/18, the average payment made was \$11,500 with considerably higher average payments being made to women (\$13,600) than men (\$9,600). This is because of their greater propensity to receive FTB and other family payments alongside the main Working Age payment.

The Working Age class also contains a small group of dependents, being people receiving either Partner Allowance or Widow Allowance. The eligibility criteria for these payments are such that this group are all age 60 or above at the valuation date and almost all women. The contribution of the payments made to this group can be seen in the payment category G amounts in the chart above.

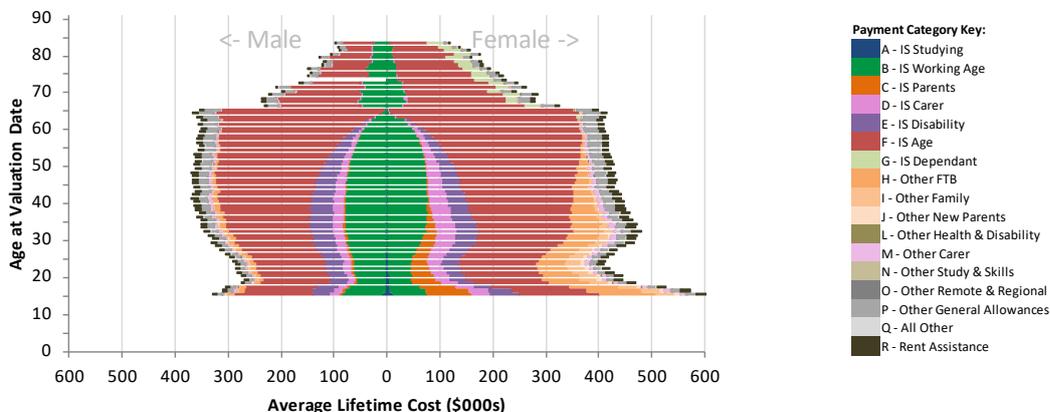
Overall there is a small increasing trend in average payments, after adjusting to remove the impact of inflation. This increase reflects a changing mix of people in the class, with an increasing proportion of people in the class who have a longer history of working age payments.

What does the model show for the current Working Age group?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **\$471bn** (or **8.3%** of the total lifetime cost). The average lifetime cost for people in this class is **\$380,000**. The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 52: Average lifetime cost by age and gender (class 2)



The vast majority of people in this class are in the age range 15 to 65. People outside of this age range are generally receiving some of the smaller payment types such as Special Benefit and Widow Allowance.

The largest part of the lifetime cost is from the Age Pension (note that we expect to see this across most of the classes). As a proportion of the total lifetime cost, the Age Pension component increases with age up to age 65, as most people under retirement age are expected to enter the Age Pension on retirement.

The other main components of the lifetime cost are for Working Age payments, Disability Support Pension, and Carer payments. Parenting, FTB and other family payments are also significant for women up to around age 50.

To further explore differences in the average lifetime costs for people within class 2, we have prepared the table below, which shows the average lifetime cost for 20 to 25 year olds currently receiving Working Age payments, split by key characteristics. We have selected a set age group to reduce the effect of age on the future lifetime cost. It is important to note that some characteristics serve as proxies for more fundamental socio-economic factors, and as such, they may not necessarily be the underlying cause of any differences observed in the average lifetime costs of individuals. Further, the variations and relativities to the average lifetime cost that have been shown may differ for other age bands.

Table 18: Average lifetime cost for 20 to 25 year old Working Age payment recipients split by key characteristics

	Number of people	Number of people as % of cohort	Average lifetime cost	Average lifetime cost relative to cohort
Total	213,000	100%	343,000	100%
Exemption at year end				
- <i>No exemption at year end</i>	201,000	94%	338,000	98%
- <i>With exemption at year end</i>	12,000	6%	430,000	125%
Earnings				
- <i>No earnings</i>	99,000	46%	373,000	109%
- <i>Has earnings</i>	114,000	54%	318,000	92%
Payment type				
- <i>Youth Allowance (Other)</i>	78,000	37%	341,000	99%
- <i>Newstart Allowance</i>	132,000	62%	345,000	101%
- <i>Sickness Allowance</i>	2,000	1%	279,000	81%
Highest educational attainment recorded				
- <i>Year 10 or less</i>	26,000	12%	408,000	119%
- <i>Year 11</i>	17,000	8%	388,000	113%
- <i>Year 12</i>	64,000	30%	305,000	89%
- <i>Certificate</i>	75,000	35%	374,000	109%
- <i>Diploma</i>	13,000	6%	308,000	90%
- <i>Bachelors</i>	15,000	7%	233,000	68%
- <i>Postgraduate</i>	1,000	1%	228,000	67%
Level of parental welfare dependence				
- <i>None (0%)</i>	55,000	26%	294,000	86%
- <i>Some (1%-35%)</i>	48,000	22%	326,000	95%
- <i>High (36%-80%)</i>	53,000	25%	361,000	105%
- <i>Very high (81%+)</i>	57,000	27%	389,000	113%
Number of children				
- <i>No children</i>	198,000	93%	333,000	97%
- <i>1 child</i>	9,000	4%	480,000	140%
- <i>2 children</i>	3,000	2%	472,000	137%
- <i>3+ children</i>	2,000	1%	524,000	153%
Years in pay class				
- <i>1 Year</i>	62,000	29%	306,000	89%
- <i>2-3 Years</i>	81,000	38%	330,000	96%
- <i>4-5 Years</i>	40,000	19%	378,000	110%
- <i>6+ Years</i>	31,000	14%	411,000	120%
Indigenous status				
- <i>Indigenous</i>	29,000	14%	488,000	142%
- <i>Non-Indigenous</i>	184,000	86%	321,000	93%
Geography – socio-economic area grouping				
- <i>Lowest 20% (most disadvantaged)</i>	74,000	35%	381,000	111%
- <i>20% to 40%</i>	50,000	24%	352,000	103%
- <i>40% to 60%</i>	40,000	19%	326,000	95%
- <i>60% to 80%</i>	30,000	14%	301,000	88%
- <i>Highest 20% (least disadvantaged)</i>	19,000	9%	274,000	80%
Payments at valuation date				
- <i>In receipt of payments at valuation date</i>	123,000	58%	385,000	112%
- <i>Not in receipt of payments at valuation date</i>	90,000	42%	287,000	83%

From the table, we can see that for the current cohort of 20 to 25 year old Working Age payment recipients:

- As with the Studying class, we see that being in receipt of payments at the valuation is associated with higher lifetime costs. The impact of this is larger for the Working Age class compared to the Studying class. This is reflective of the greater persistency on payments for people in receipt of Working Age payments, which makes being in receipt of payments at the valuation date a more significant feature for the Working Age class.
- Those with an active exemption from mutual obligations from undertaking job searching activities at the end of the year have significantly higher lifetime costs than those without such an exemption.
- Those on Sickness Allowance have a significantly lower cost than the overall average in this class (which is predominantly people on Newstart), possibly reflecting the temporary nature of this payment type. Youth Allowance recipients are also seen to have a lower average cost compared to Newstart recipients. This could be partially related to the average age for Youth Allowance recipients being lower.
- Those with more children, no earnings in the year or lower levels of educational attainment tend to have higher average lifetime costs.
- Those with higher levels of parental welfare dependence tend to have higher levels of welfare dependence in their own right.

Change in lifetime costs since the 2017 valuation

The lifetime cost for the people in this class is \$471bn, a decrease of \$50bn compared to the rebased June 2017 valuation. This was driven by reductions in both the number of people in this class and in the average payment size:

- The average cost has decreased by \$20,000 (4.7%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by grouped payment category.

Table 19: Breakdown of change in average lifetime cost for class 2 by payment category

	Total	IS			Non IS ¹	
		Working Age	Other (excl. Age Pension)	Age Pension	Family Supplements	Other Supplements
Jun-17 Total Lifetime Cost	\$411bn					
Jun-17 Total Lifetime Cost – rebased ²	\$521bn					
Jun-18 Total Lifetime Cost	\$471bn					
Change in Total Lifetime Cost ²	-\$50bn (-9.6%)					
Change due to People in Class	-4.9%					
Change due to Average Lifetime Cost ²	-\$20k (-4.7%)	-\$4k	-\$12k	-\$2k	<\$1k	<\$1k
- Impact of change in inflation	+\$8k	+\$1k	+\$2k	+\$4k	<\$1k	<\$1k
- Impact of Age Pension forecast	-\$5k	<\$1k	<\$1k	-\$5k	<\$1k	<\$1k
- Impact of other changes	-\$23k	-\$5k	-\$15k	<\$1k	-\$1k	<\$1k

Notes:

1. Note that payment categories H, I and J have been included in family supplements and the remaining non income support payment categories in other supplements.
2. The June 2017 rebased Lifetime Cost represents a recalculation of the June 2017 lifetime cost, but using a discount rate of 5% p.a. for consistency with the June 2018 results. All changes are shown relative to this rebased lifetime cost.

The decrease in average cost has been primarily driven by:

- a decrease in the assumption for future persistency of Working Age recipients;
- a decrease in the assumption for the future use of Working Age payment as a result of the introduction of the targeted compliance framework;
- lower projected transitions into other pre-retirement income support classes, and particularly into DSP; and
- a further decrease in projected Age Pension use as a result of the change to the Age Pension forecast.

These decreases have been partially offset by:

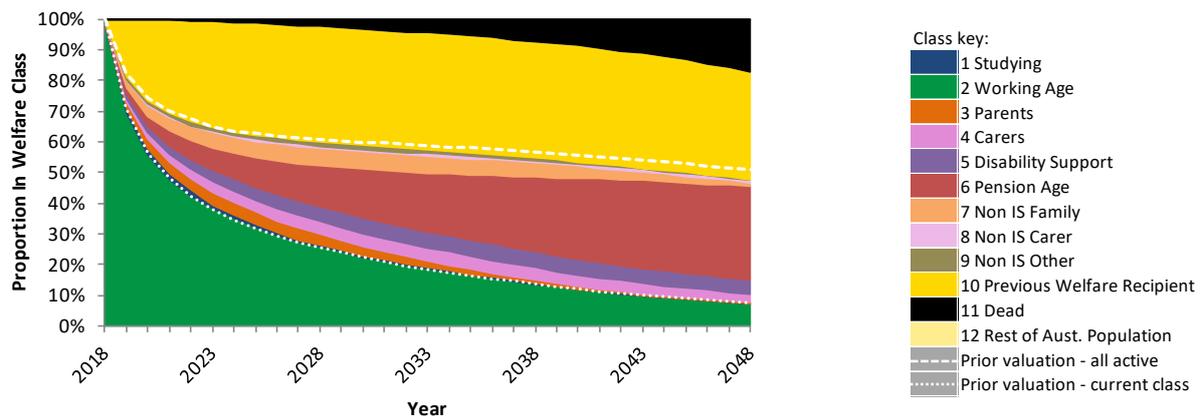
- an increase in the cost of future payments as a result of inflation; and

- changes in the profile of current Working Age recipients (relative to the previous year's recipients) resulting in increased likelihood of future use of income support payments. In particular, on average, the current Working Age recipients have been in the Working Age class for longer and are more likely to have barriers to work (such as an exemption from mutual obligation requirements), when compared to the previous year's Working Age recipient population. This offset some of the decreases in income support use (including Age Pension) that we might expect to see given the reducing recent experience of Working Age payment use.

Future outcomes

In developing the valuation results the projection model also produces information on the expected transitions for people out of each class, as shown below.

Figure 53: Expected future trajectory for people in class 2



Some observations we can make based on our analysis are that:

- About 40% of the people currently in the Working Age class are projected to stop receiving any income support over the next five years. Most of these people will stop receiving any payments; the rest will keep receiving one or more of the family payment categories.
- Over the same timeframe, of the people who are projected to stay on income support payments, around 65% remain on the Working Age class. The remainder either retire or move onto Parenting, Carer or Disability payments.
- 38% of the people currently in this class are projected to be in this class in five years' time (either by remaining in this class throughout this time, or by exiting and returning). This figure reduces to 26% by 10 years' time.
- The projected proportion of this group who remain in the Working Age class in the future is similar to that projected from the June 2017 valuation (which is shown with the lower dashed line).
- After 30 years, around 45% of the original group are projected to be on some form of income support payment.

Duration

The average future life expectancy for the Working Age class is **49** years. This reflects that the age profile of this class is well distributed across the working ages. The table below provides a summary of the expected welfare system use of people currently in this class over this time. This has been developed by considering which classes people move into as they move through the welfare system over their lives.

Table 20: Average expected durations in welfare system for people currently in class 2

	Expected Years	Proportion of Future Lifetime
Years with some income support payments:		
- Not Age Pension (classes 1-5)	12	25%
- Age Pension (class 6)	17	34%
Years with non income support payments only	2	4%
Years not receiving any welfare payments	18	37%
Total	49	100%

6.3 Parenting Payment recipients

Key points

There were 381,000 people in the Parenting class in 2018, who were mostly female and aged 15 to 50.

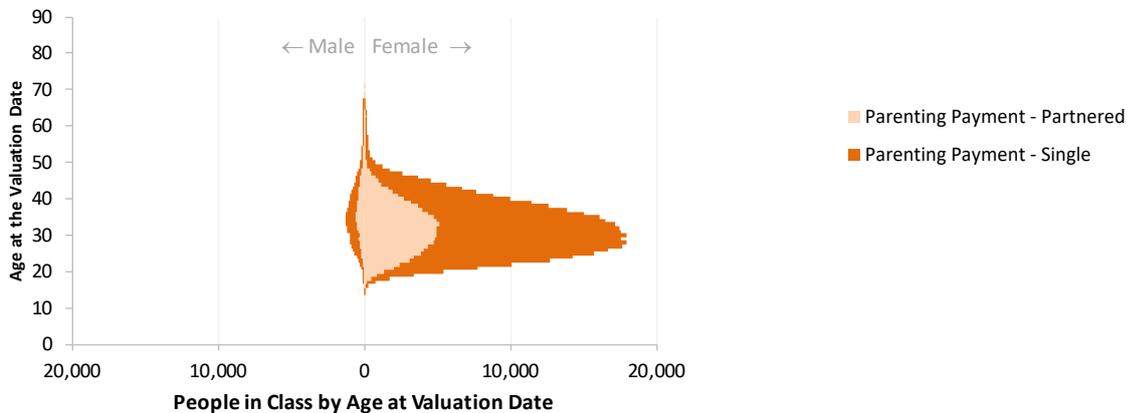
- Entries into the Parenting class have reduced over the last few years which has resulted in a decrease in the number of people in this class.
- Women in this class have a much higher expected lifetime cost than men as they spend longer on the Parenting payment and are more likely to receive supplementary family payments such as FTB.
- The length of time an individual remains in class is closely related to the age of their youngest child and partnering status. This is because these characteristics are considered in the eligibility criteria for receiving the Parenting payment.
- The lifetime cost for this class is \$220bn, which is \$39bn below the rebased 2017 lifetime cost. The reduction is mainly driven by a decrease in the number of people in the class.

Recent and projected trends for Parenting Payment recipients

There were 381,000 people (4.8% of current welfare recipients) in the Parenting class in the 2018 model population. This represents 1.5% of the population of Australia which is a decrease from 1.8% at the previous valuation.

The following chart shows a breakdown of the number of people in the Parenting class by age, gender and payment type.

Figure 54: 2018 profile of people in class 3 – Parents (age / gender / payment type)



The people in this class are predominantly women and in the age range 15 to 50. The majority (73%) of the people in this class are single.

Movements into and out of this class

Over the last three years, an average of 69,000 people (around 17% of the people in this class) per annum enter this class from another welfare class or from outside the welfare system. Over this same period, an average of 79,800 people (around 20% of people in this class) per annum have transitioned out of the Parenting class.

The following chart shows the breakdown of these transitions by previous / destination class and year of transition. This is shown for both the last five years, and also the first five years of the projection.

Figure 55: Number of people entering class 3 – Parents (by class entered from)

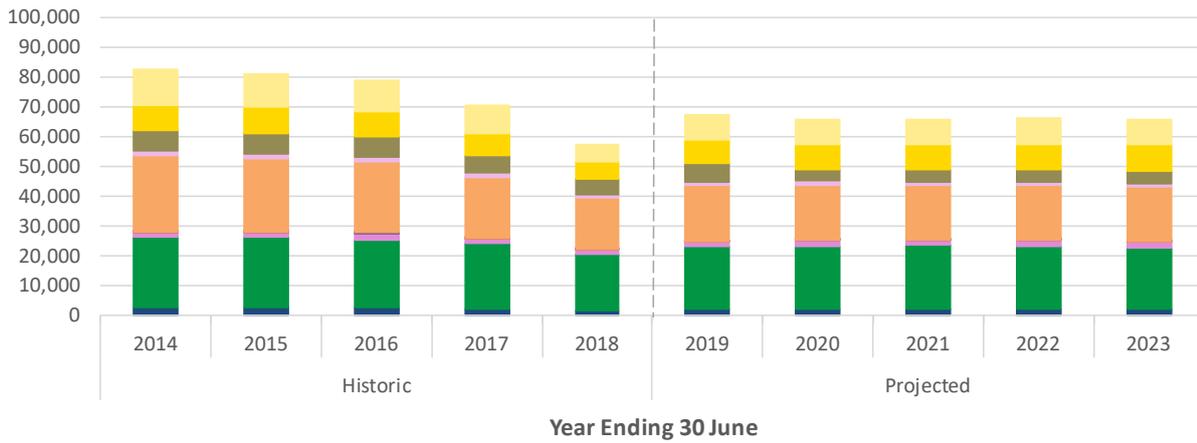
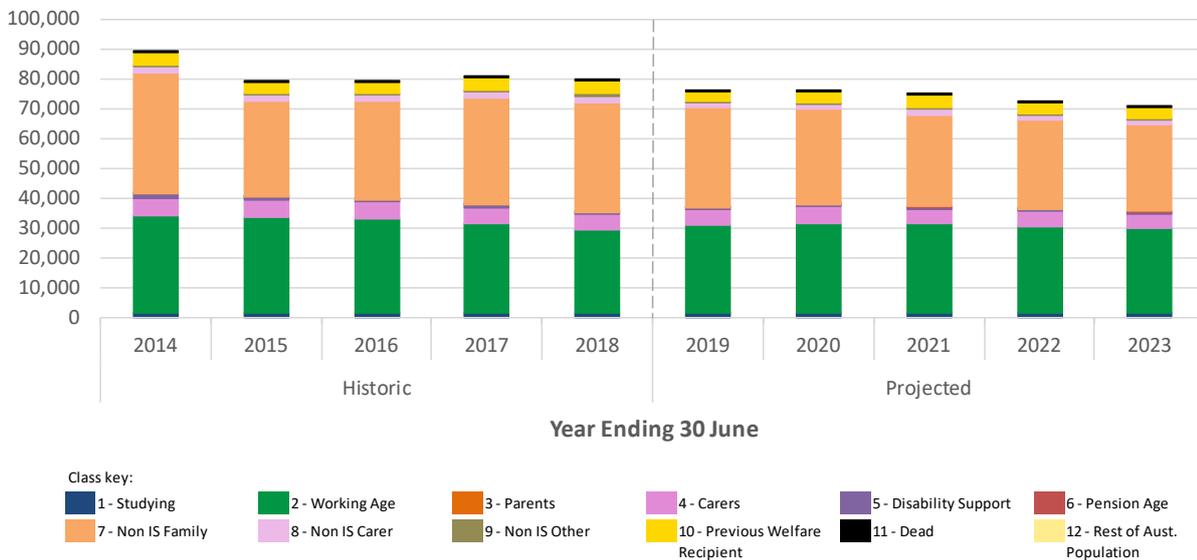


Figure 56: Number of people exiting class 3 – Parents (by class exited to)



We can see that people in this class primarily came from the Working Age and Non IS Family classes. There are also material numbers coming directly from outside the welfare system.

The projected entries in 2019 are above the level seen in 2018. This is because, at this stage, we do not believe there is enough experience to assume that the entries will continue at the low level seen in 2018. Instead, a slightly higher level of entries is projected forward, which gives some credit to the higher levels seen in previous years.

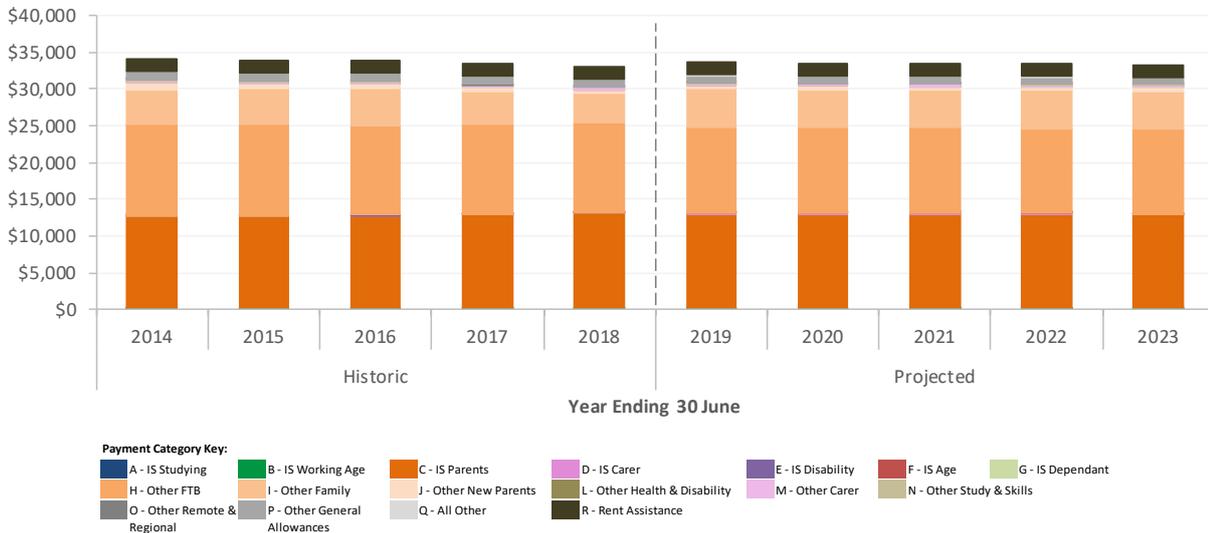
People in this class show considerable mobility. However note that many people exit to other active classes upon ceasing to meet the eligibility criteria for Parenting payment, which is linked to the age of the person’s youngest qualifying child. A large number of exits can be seen into both income support and non income support payments. The most common income support destination is to Working Age and the most common non income support destination is to Non IS Family classes. Only a small proportion of people exit the system directly from this class as most of this group would continue to use other payments, including non income support payments such as FTB.

Transitions into the Parents class have been decreasing, especially over the last 2 years, whereas transitions out of the class have remained more stable and at a higher level. This has resulted in decreasing class numbers and these decreases are projected to continue for the next few years.

Payments received

During 2017/18, people in this class received a total of \$12.6 billion. This is 10.9% of the total payments made in 2017/18. The chart below shows the average amount paid in a year to each person in this class, shown for both recent years and the first five years of the projection.

Figure 57: Average payments per person in class 3 – Parents (restated to 2017/18 \$ values)



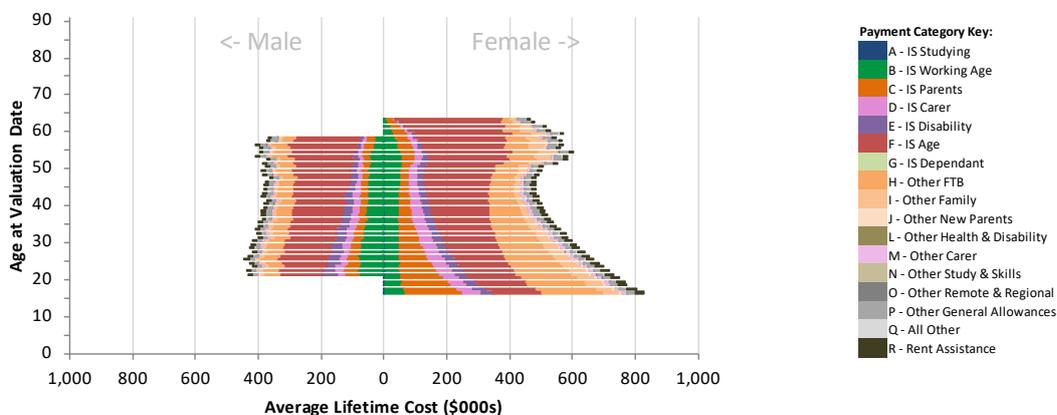
People in this class receive some of the highest average annual payments. The average payment made in 2017/18 was \$33,000 with considerably higher average payments being made to women (\$33,700) than men (\$23,900). The average payment is significantly higher for women than men as a result of them being more likely to receive FTB and family (child care) payments in addition to the main payment. The rate of the Parenting payment itself is also higher on average for women as a higher proportion of women are receiving the single rather than the partnered rate.

What does the model show for current Parenting payment recipients?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **\$220bn** (or **3.9%** of the total lifetime cost). The average lifetime cost for people in this class is **\$577,000**, a significantly higher amount than for the Studying or Working Age class. The variation by age and gender illustrated in the figure below.

Figure 58: Average lifetime cost by age and gender (class 3)



There is significant variation by age and gender.

The average lifetime cost for men is much lower than for women (\$399,000 for men compared to \$591,000 for women). This reflects the previous observation, that women typically receive higher annual payments as a result of receiving more FTB and other family payments.

The average lifetime costs are higher for the younger people in the class, especially the younger women. This is because they are more likely to stay on Parenting and FTB payments for longer and also may be more likely to transition to other types of income support.

The average lifetime costs also have small but clear contributions from both Disability Support and Carer payments. These reflect the likelihood of people in the Parenting class to move into these classes in future years.

To further explore differences in the average lifetime costs for people within class 3, we have prepared the table below, which shows the average lifetime cost for 30 to 39 year olds currently receiving Parenting payments, split by key characteristics. We have selected a set age group to reduce the effect of age on the future lifetime cost. It is important to note that some characteristics serve as proxies for more fundamental socio-economic factors, and as such, they may not necessarily be the underlying cause of any differences observed in the average lifetime costs of individuals. Further, the variations and relativities to the average lifetime cost that have been shown may differ for other age bands.

Table 21: Average lifetime cost for 30 to 39 year old Parenting payment recipients split by key characteristics

	Number of people	Number of people as % of cohort	Average lifetime cost	Average lifetime cost relative to cohort
Total	167,000	100%	541,000	100%
Marital status				
- <i>Single</i>	113,000	68%	593,000	110%
- <i>Partnered</i>	54,000	32%	432,000	80%
Number of children				
- <i>1 child</i>	36,000	22%	481,000	89%
- <i>2 children</i>	54,000	32%	491,000	91%
- <i>3+ children</i>	77,000	46%	604,000	112%
Age of youngest child				
- <i>New born</i>	19,000	12%	619,000	114%
- <i>1-6 Years old</i>	132,000	79%	540,000	100%
- <i>7-8 Years old</i>	15,000	9%	459,000	85%
Earnings				
- <i>No earnings</i>	103,000	61%	576,000	106%
- <i>Has earnings</i>	65,000	39%	486,000	90%
Received 'Other Carer' payment				
- <i>No</i>	156,000	93%	538,000	99%
- <i>Yes</i>	11,000	7%	588,000	109%
Geography – socio-economic area grouping				
- <i>Lowest 20% (most disadvantaged)</i>	58,000	34%	591,000	109%
- <i>20% to 40%</i>	42,000	25%	550,000	102%
- <i>40% to 60%</i>	34,000	20%	517,000	96%
- <i>60% to 80%</i>	23,000	14%	482,000	89%
- <i>Highest 20% (least disadvantaged)</i>	11,000	6%	439,000	81%
Payments at valuation date				
- <i>In receipt of payments at valuation date</i>	142,000	85%	569,000	105%
- <i>Not in receipt of payments at valuation date</i>	25,000	15%	383,000	71%

From the table, we can see that for the current cohort of 30 to 39 year old Parenting payment recipients:

- Single parents have a higher average lifetime cost than partnered parents.
- Those with more children, or younger children tend to have higher average lifetime costs.

- Those without earnings in the year have higher average lifetime costs.

Change in lifetime costs since the 2017 valuation

The lifetime cost for the people in this class is \$220bn, a decrease of \$39bn (15.1%) compared to the rebased June 2017 valuation. This was driven by reductions in both the number of people in this class and in the average payment size:

- The number of people in this class has reduced significantly since the previous valuation as a result of lower entries into the class over the year; as well as a technical data change whereby a group of people with a Parenting payment recorded in the data but who subsequently had zero payment entitlements, were removed from the class for the June 2018 valuation (see also section 3.3).
- The average cost has decreased by \$22,000 (3.2%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 22: Breakdown of change in average lifetime cost for class 3 by payment category

	Total	IS			Non IS ¹	
		Parenting	Other (excl. Age Pension)	Age Pension	Family Supplements	Other Supplements
Jun-17 Total Lifetime Cost	\$210bn					
Jun-17 Total Lifetime Cost – rebased ²	\$259bn					
Jun-18 Total Lifetime Cost	\$220bn					
Change in Total Lifetime Cost ²	-\$39bn (-15.1%)					
Change due to People in Class	-12.0%					
Change due to Average Lifetime Cost ²	-\$22k (-3.2%)	<\$1k	-\$15k	-\$10k	+\$5k	-\$1k
- Impact of change in inflation	+\$14k	+\$1k	+\$3k	+\$4k	+\$5k	+\$1k
- Impact of Age Pension forecast	-\$5k	<\$1k	<\$1k	-\$6k	<\$1k	<\$1k
- Impact of other changes	-\$31k	-\$2k	-\$19k	-\$8k	<\$1k	-\$2k

Notes:

1. Note that payment categories H, I and J have been included in family supplements and the remaining non income support payment categories in other supplements.
2. The June 2017 rebased Lifetime Cost represents a recalculation of the June 2017 lifetime cost, but using a discount rate of 5% p.a. for consistency with the June 2018 results. All changes are shown relative to this rebased lifetime cost.

The decrease in average cost has been primarily driven by:

- a decrease in the assumption for future persistency of Parenting recipients;
- a decrease in projected use of other pre-retirement income support, which reflects lower general experience of transitioning into other income support classes;
- a flow on decrease to the likelihood of subsequently transitioning to Age Pension; and
- a further decrease in projected Age Pension use as a result of the change to the Age Pension forecast.

These decreases have been partially offset by an increase in the cost of future payments as a result of inflation.

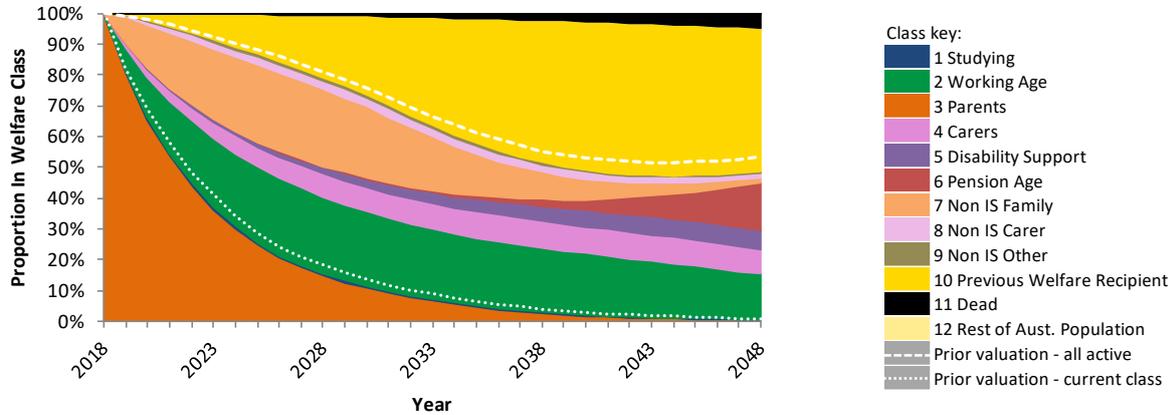
Additionally there was a small increasing impact on the average payment size for Parenting payments which came through as a result of the technical data change whereby a group of people with a Parenting payment recorded in the data but who subsequently had zero payment entitlements, were removed from the data.

Although this had a small increasing impact, the overall impact of the other changes for Parenting payments is still negative due to the significant decreases in future persistency of Parenting recipients.

Future outcomes

In developing the valuation results the projection model also produces information on the expected transitions for people out of each class, as shown below.

Figure 59: Expected future trajectory for people in class 3



We can see the expectations are that:

- There is a steady reduction in the numbers of current Parenting payment recipients who are projected to remain on Parenting payments. Most of the reduction takes place over the next 10 years as people’s children age and they are no longer eligible for the Parenting payment.
- As people exit this class, a significant proportion move first to the Non IS Family class (i.e. they receive only FTB or child care payments). The most common income support destination is Working Age, followed by Carer or DSP.
- For each future year at least 40% of this group receive income support. After 30 years, around 45% of the original group are projected to be on some form of income support payment.

Duration

The average future life expectancy for the Parents class is **57** years. This reflects that the age profile of this class is well distributed across the ages 20 to 50.

The table below provides a summary of the expected welfare system use of people currently in this class over this time. This has been developed by considering which classes people move into as they move through the welfare system over their lives.

Table 23: Average expected durations in welfare system for people currently in class 3

	Expected Years	Proportion of Future Lifetime
Years with some income support payments:		
- Not Age Pension (classes 1-5)	17	30%
- Age Pension (class 6)	17	29%
Years with non income support payments only	5	9%
Years not receiving any welfare payments	18	31%
Total	57	100%

6.4 Carers (Income Support)

This class includes people receiving the Carer Payment in 2017/18 as their last income support payment. People receiving Carer Allowance only, an income supplement, are in the non income support Carers class, class 8.

Key points

There were 294,000 people in the Carer class in 2018 with significantly more women than men.

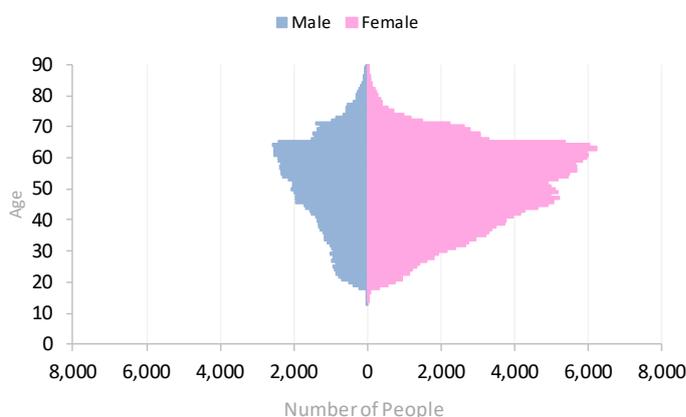
- Over the last five years the number of entrants has been marginally decreasing, but is still higher than the number of exits, leading to a growing number of individuals in the class, and an increasing number of exits each year.
- The length of time a person receives Carer payment is strongly linked to the mortality of the caree. Those receiving a bereavement payment or those caring for older people or people with cancer are much more likely to leave the Carer class.
- The lifetime cost for this class is \$155bn, which is \$8bn above the rebased 2017 lifetime cost. The increase is driven by a continued increase in the number of people in the class as entrants continue to outnumber exits.

Recent and projected trends for Carers

There were 294,000 people (3.7% of current welfare recipients) in the Carers class in the 2018 model population. This represents 1.2% of the population of Australia which is similar to the previous valuation.

The following chart shows a breakdown of the number of people in the Carers class by age and gender.

Figure 60: 2018 profile of people in class 4 – Carers (age / gender)



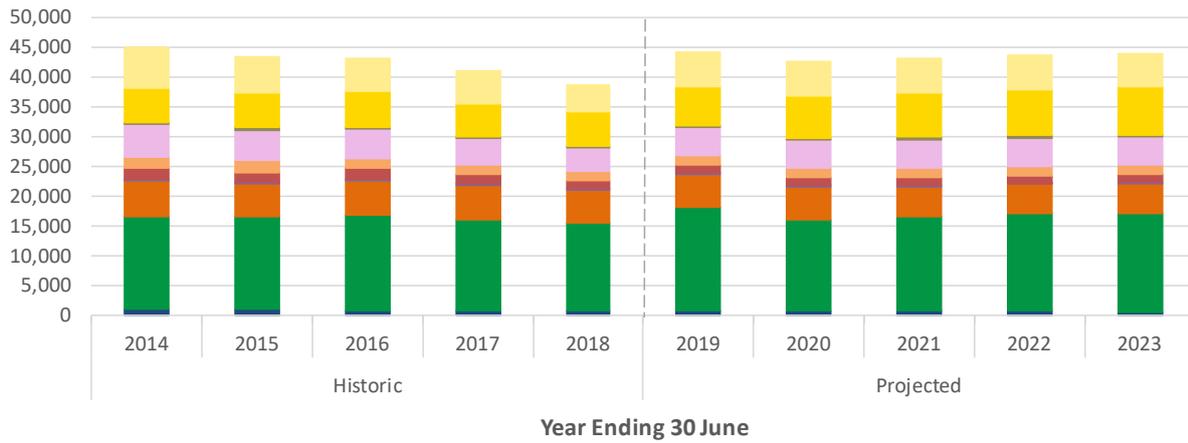
This class included significantly more women than men. The numbers in the class increase by age up to pension age and then reduce as most retire; however there are material numbers of people in the Carers class who are above retirement age.

Movements into and out of this class

Over the last three years, an average of 41,000 people (around 14% of the people in this class) per annum enter this class from another welfare class or from outside the welfare system. Over this same period, an average of 32,900 people (around 11% of people in this class) per annum have transitioned out of the Carers class.

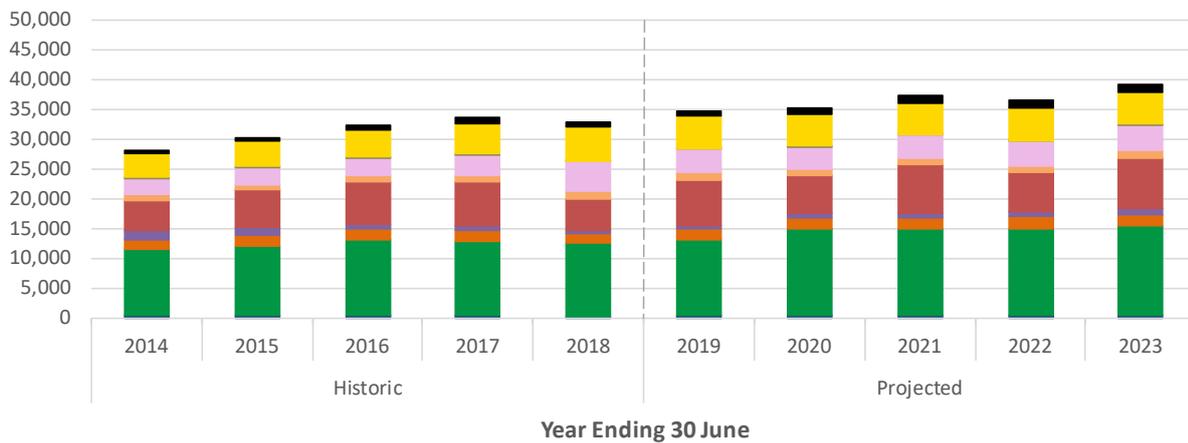
The following chart shows the breakdown of these transitions by previous / destination class and year of transition.

Figure 61: Number of people entering class 4 – Carers (by class entered from)



Notes the entries into class 4 in 2017/18 are impacted by data maturity and are likely understated. An adjustment has been carried out in order to increase the entries in the 2018/19 year of the projection, in order to make an allowance for this.

Figure 62: Number of people exiting class 4 – Carers (by class exited to)



Class key:
 1 - Studying 2 - Working Age 3 - Parents 4 - Carers 5 - Disability Support 6 - Pension Age
 7 - Non IS Family 8 - Non IS Carer 9 - Non IS Other 10 - Previous Welfare Recipient 11 - Dead 12 - Rest of Aust. Population

We can see that people in this class primarily came from another income support class, in particular from Working Age or Parents. A significant proportion also enter this class from the non income support Carers class.

The number of exits in recent years has been consistently less than the number of entrants, which has caused year on year growth in the class. This is projected to continue, although not as rapidly as in the past since entrant numbers are trending down.

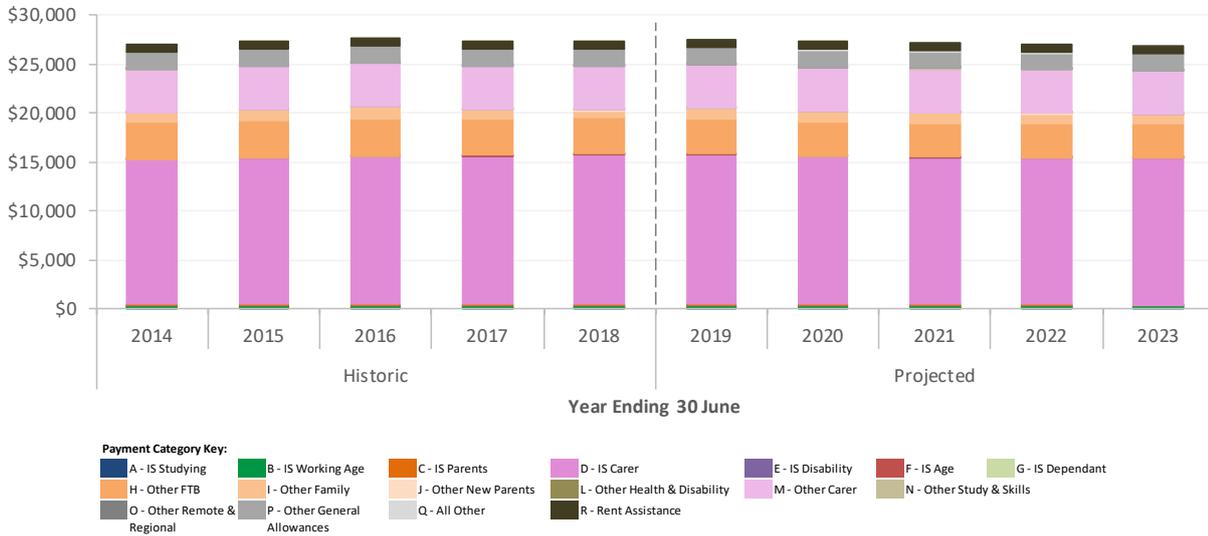
The projected entries in 2019 are above the level seen in 2018. This is because, at this stage, we do not believe there is enough experience to assume that the entries will continue at the low level seen in 2018. Instead, a slightly higher level of entries is projected forward, which gives some credit to the higher levels seen in previous years. Additionally the 2018 year is impacted by data maturity and likely understated, and an adjustment has been carried out in to increase entries in the 2019 projection in order to compensate; these factors act to increase the difference seen between the 2018 historic level and the 2019 projected level.

People in this class show more limited mobility compared to some of the other classes. The main exits from the class are through retirement or movement to the Working Age class; a lower proportion of people from the class directly exit the welfare system. Some also exit to the Parenting or non income support Carers classes.

Payments received

During 2017/18, people in this class received a total of \$8.1 billion. This is 7.0% of the total payments made in 2017/18. The charts below show the average amount paid in a year to each person in this class.

Figure 63: Average payments per person in class 4 – Carers (restated to 2017/18 \$ values)



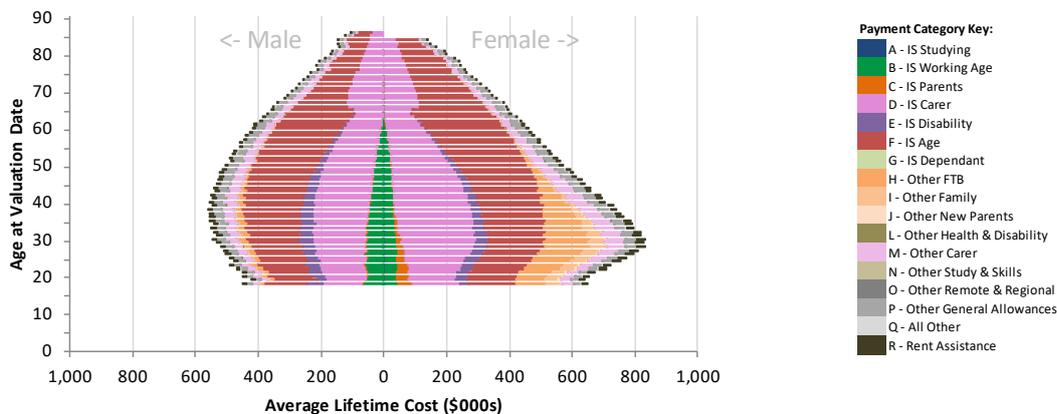
People in this class receive some of the highest average annual payments. The average payment made in 2017/18 was \$27,400 with considerably higher average payments being made to women (\$29,100) than men (\$23,400), as a result of women being more likely to also be claiming FTB and other family payments.

What does the model show for Carers?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **\$155bn** (or **2.7%** of the total lifetime cost). The average lifetime cost for people in this class is **\$529,000**. The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 64: Average lifetime cost by age and gender (class 4)



The average lifetime costs include significant amounts of the Carer payment and Age Pension and contributions from a range of supplementary payment categories, for both males and females. The costs are noticeably higher for women than men and especially so for those at young to mid ages. This arises from higher additional costs of FTB and other family payments and from more women transitioning to Parenting payments.

The average lifetime cost pyramid shows a small discontinuity at around age 65 for the IS Carer payments but then continues through the full age range reflecting the composition of people in the class. The discontinuity arises as many people move to the Age Pension class once they are over this age. For the small proportion of people who continue in this class once they are above their pension age, the average lifetime cost is mainly comprised of a mix of Carer payments and the Age Pension.

To further explore differences in the average lifetime costs for people within class 4, we have prepared the table below, which shows the average lifetime cost for 45 to 54 year olds currently receiving Carer payments, split by key characteristics. We have selected a set age group to reduce the effect of age on the future lifetime cost. It is important to note that some characteristics serve as proxies for more fundamental socio-economic factors, and as such, they may not necessarily be the underlying cause of any differences observed in the average lifetime costs of individuals. Further, the variations and relativities to the average lifetime cost that have been shown may differ for other age bands.

Table 24: Average lifetime cost for 45 to 54 year old Carer Payment recipients split by key characteristics

	Number of people	Number of people as % of cohort	Average lifetime cost (\$)	Average lifetime cost relative to cohort
Total	71,000	100%	560,000	100%
Carer caree relationship				
- <i>Child</i>	18,000	25%	523,000	93%
- <i>Other relation</i>	7,000	10%	537,000	96%
- <i>Parent</i>	21,000	29%	621,000	111%
- <i>Unrelated</i>	5,000	6%	552,000	98%
- <i>Partner / spouse</i>	21,000	30%	542,000	97%
Caree medical condition				
- <i>Cancer / tumour</i>	3,000	4%	442,000	79%
- <i>Circulatory & respiratory system</i>	10,000	14%	533,000	95%
- <i>Congenital anomalies & inherited disorders</i>	1,000	2%	601,000	107%
- <i>Intellectual/learning</i>	7,000	9%	622,000	111%
- <i>Musculo-skeletal & connective tissue</i>	15,000	21%	554,000	99%
- <i>Nervous system</i>	7,000	9%	531,000	95%
- <i>Psychological / psychiatric</i>	20,000	29%	590,000	105%
- <i>Other</i>	8,000	12%	578,000	97%
Number of children				
- <i>No children</i>	34,000	48%	545,000	97%
- <i>1 child</i>	16,000	23%	573,000	102%
- <i>2 children</i>	12,000	16%	574,000	102%
- <i>3+ children</i>	9,000	13%	579,000	103%
Marital status				
- <i>Single</i>	37,000	52%	589,000	105%
- <i>Partnered</i>	34,000	48%	529,000	94%
Geography – socio-economic area grouping				
- <i>Lowest 20% (most disadvantaged)</i>	28,000	40%	577,000	103%
- <i>20% to 40%</i>	17,000	24%	566,000	101%
- <i>40% to 60%</i>	13,000	18%	551,000	98%
- <i>60% to 80%</i>	8,000	12%	533,000	95%
- <i>Highest 20% (least disadvantaged)</i>	4,000	6%	510,000	91%
Payments at valuation date				
- <i>In receipt of payments at valuation date</i>	67,000	94%	573,000	102%
- <i>Not in receipt of payments at valuation date</i>	4,000	6%	359,000	64%

From the table, we can see that for the current cohort of 45 to 54 year old Carer Payment recipients:

- Those carers who are the parent of their caree tend to have higher average lifetime costs.

Results for income support recipients

- Those caring for someone with a congenital anomaly or learning disability tend to have higher average lifetime costs.
- Single carers, or those with more children tend to have higher average lifetime costs.

Change in lifetime costs since the 2017 valuation

The lifetime cost for the people in this class is \$155bn, an increase of \$8bn compared to the rebased June 2017 valuation. This was due to an increase in the number of people in this class partially offset by a small decrease in the average cost

- The number of people in this class has increased in line with our previous expectation for this class where numbers were expected to grow if the recent class entry experience continued.
- The average cost has decreased by \$3,000 (0.7%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 25: Breakdown of change in average lifetime cost for class 4 by payment category

	Total	IS			Non IS ¹	
		Carer	Other (excl. Age Pension)	Age Pension	Family Supplements	Other Supplements
Jun-17 Total Lifetime Cost	\$125bn					
Jun-17 Total Lifetime Cost – rebased ²	\$148bn					
Jun-18 Total Lifetime Cost	\$155bn					
Change in Total Lifetime Cost ²	+\$8bn (+5.4%)					
Change due to People in Class	+6.0%					
Change due to Average Lifetime Cost ²	-\$3k (-0.7%)	+\$2k	-\$9k	-\$1k	+\$3k	+\$1k
- Impact of change in inflation	+\$11k	+\$3k	+\$1k	+\$4k	<\$1k	+\$2k
- Impact of Age Pension forecast	-\$3k	<\$1k	<\$1k	-\$3k	<\$1k	<\$1k
- Impact of other changes	-\$12k	<\$1k	-\$10k	-\$2k	+\$2k	<\$1k

Notes:

1. Note that payment categories H, I and J have been included in family supplements and the remaining non income support payment categories in other supplements.
2. The June 2017 rebased Lifetime Cost represents a recalculation of the June 2017 lifetime cost, but using a discount rate of 5% p.a. for consistency with the June 2018 results. All changes are shown relative to this rebased lifetime cost.

The decrease in average cost has been primarily driven by:

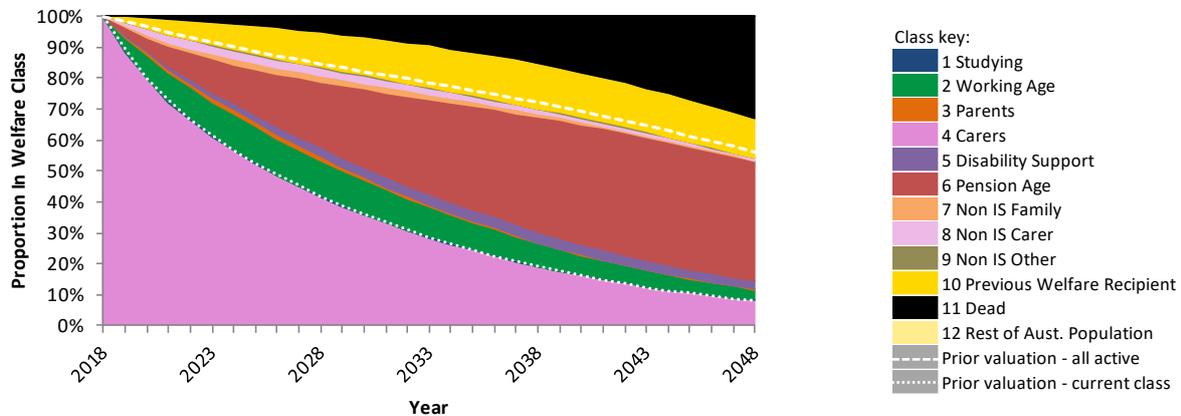
- A small decrease in the likelihood of transitioning to the Working Age or DSP classes; and
- a flow on decrease to the likelihood of subsequently transitioning to both the other pre-retirement income support classes and to Age Pension.

These decreases have been partially offset by an increase in the cost of future payments as a result of inflation.

Future outcomes

In developing the valuation results the projection model also produces information on the expected transitions for people out of each class, as shown below.

Figure 65: Expected future trajectory for people in class 4



The model projections indicate that:

- More than 60% of the people in this class are projected to remain there for the next five years (or exit and subsequently return) and over 40% are projected to still be receiving the Carer Payment in 10 years' time.
- For those who are projected to exit over the next 10 years:
 - Around two thirds of these move onto another income support payment. The biggest destination is Age Pension, although a significant proportion of people move onto Working Age payments.
 - Most of the remainder are either projected to exit the system or die, although a small proportion transition to the non income support Carer class.
- After 30 years, the majority of the original group are projected to either be on some form of income support payment (53%) or dead (33%).

Duration

The average future life expectancy for the income support Carer class is **38** years. This reflects that a significant proportion of this class is approaching retirement age. The table below provides a summary of the expected welfare system use of people currently in this class over this time. This has been developed by considering which classes people move into as they move through the welfare system over their lives.

Table 26: Average expected durations in welfare system for people currently in class 4

	Expected Years	Proportion of Future Lifetime
Years with some income support payments:		
- Not Age Pension (classes 1-5)	15	40%
- Age Pension (class 6)	16	42%
Years with non income support payments only	1	3%
Years not receiving any welfare payments	6	15%
Total	38	100%

6.5 Disability Support Pensioners

Key points

There were 762,000 people in the Disability Support Pension class in 2018.

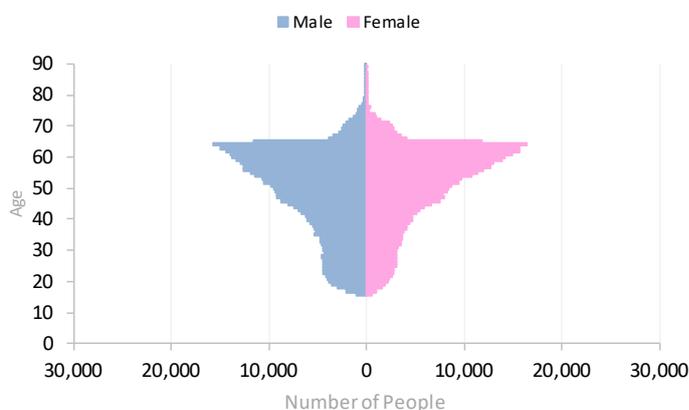
- Eligibility criteria for the Disability Support Pension has been tightening over the last five years. This has been reflected in reducing numbers of entrants each year.
- Over the last few years, and particularly in 2016, medical reviews have increased the number of exits to the Working Age class. This higher exit rate to class 2 is not expected to continue after the current program of medical reviews ceases.
- People in the Disability Support Pension class tend to remain on the Disability Support Pension and only a small proportion of people leave the class other than through retirement or death.
- The lifetime cost for this class is \$417bn, which is the same as the rebased 2017 lifetime cost. The low level of this change reflects the continued high persistency on payments for people in this class.
- The average lifetime costs are very similar for people who live in areas with different levels of socio-economic disadvantage. This is because persistency in this class is high across most people, and so little variation is seen. However it can be seen that 37% of this group live in the 20% of locations with the most disadvantage.

Recent and projected trends for Disability Support Pensioners

There were 762,000 people (9.6% of current welfare recipients) in the Disability Support Pension class in the 2018 model population. This represents 3.0% of the population of Australia which is a decrease from 3.1% at the previous valuation.

The following chart shows a breakdown of the number of people in the Disability Support Pension class by age, gender and payment type.

Figure 66: 2018 profile of people in class 5 – Disability Support (age / gender)

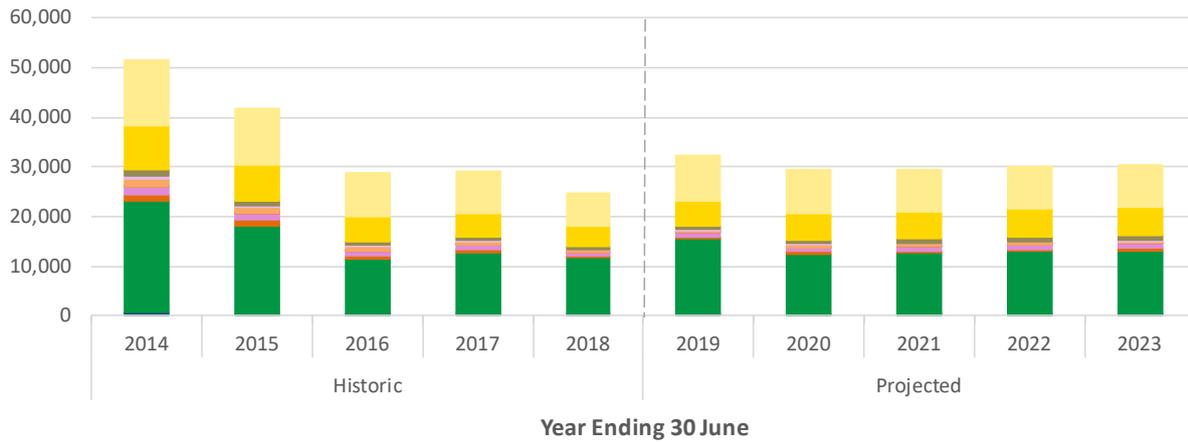


There are slightly more men than women in this class. The numbers in the class increase by age up to pension age and then reduce as most retire.

Movements into and out of this class

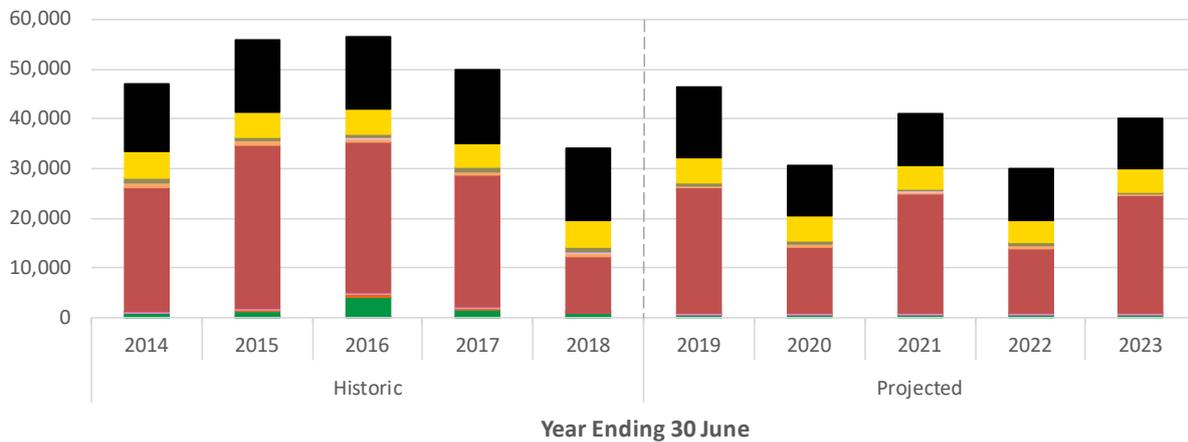
Over the last three years, the number of people entering and exiting this class has fluctuated due to a number of policy changes. Over this period there were an average of 27,600 people (around 3.5% of the people in this class) entering this class from another welfare class or from outside the welfare system. Over this same period, an average of 46,800 people (around 5.9% of people in this class) transitioned out of the Disability Support Pension class. The following chart shows the breakdown of these transitions by previous / destination class and year of transition.

Figure 67: Number of people entering class 5 – Disability Support (by class entered from)



Notes the entries into class 5 in 2017/18 are impacted by data maturity and are likely understated. An adjustment has been carried out in order to increase the entries in the 2018/19 year of the projection, in order to make an allowance for this.

Figure 68: Number of people exiting class 5 – Disability Support (by class exited to)



Class key:
 1 - Studying 2 - Working Age 3 - Parents 4 - Carers 5 - Disability Support 6 - Pension Age
 7 - Non IS Family 8 - Non IS Carer 9 - Non IS Other 10 - Previous Welfare Recipient 11 - Dead 12 - Rest of Aust. Population

We can see that people in this class primarily came from the Working Age class, with the remainder mostly coming from outside the welfare system. The number of entries into DSP increases with age, up until retirement age.

The projected entries in 2019 are above the level seen in 2018. This is because, at this stage, we do not believe there is enough experience to assume that the entries will continue at the low level seen in 2018. Instead, a slightly higher level of entries is projected forward, which gives some credit to the higher levels seen in previous years. Additionally the 2018 year is impacted by data maturity and likely understated, and an adjustment has been carried out in to increase entries in the 2019 projection in order to compensate; these factors act to increase the difference seen between the 2018 historic level and the 2019 projected level.

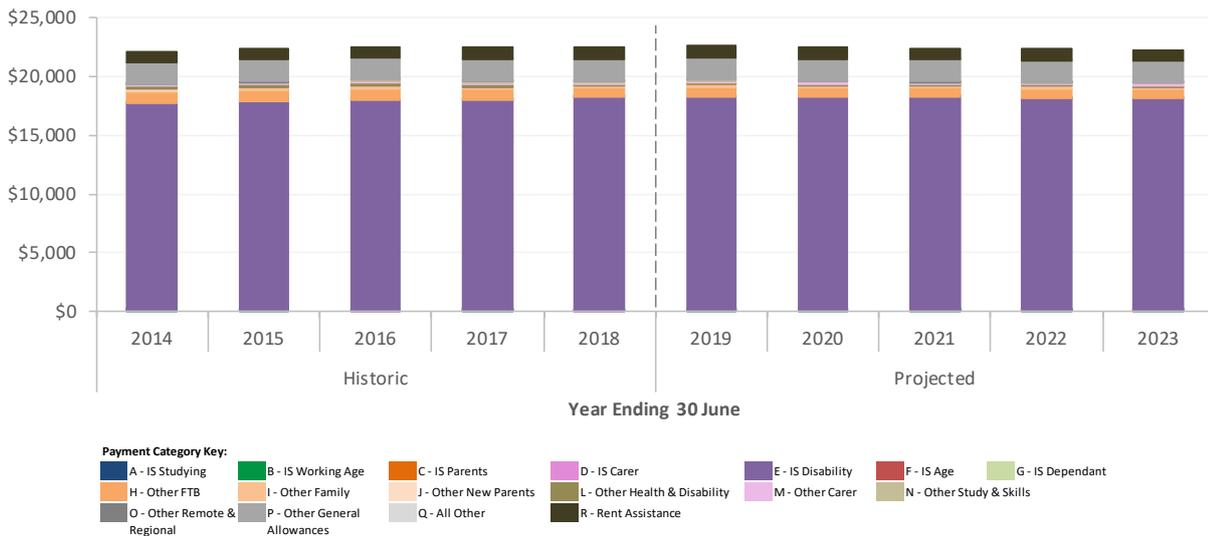
People in this class show very limited mobility. The main exits from the class are through retirement or death. Notwithstanding this, we have observed that a material number of people aged under 40 exit the class, mainly into the other income support classes, particularly in the 2015/16 year. This is understood to be driven by medical reviews conducted by the Department of Human Services (DHS), which were expected to result in a higher exit rate (relative to historical levels) in the short term. The medical reviews and tightened eligibility criteria have reduced the number of people receiving DSP but increased the proportion of individuals with a severe medical condition.

The actual and projected exits into the Pension Age class are lower for 2018, 2020 and 2022, as shown in the figure above. This is the result of fewer people reaching Age Pension age during these years, as the Age Pension age transitions from age 65 to 67.

Payments received

During 2017/18, people in this class received a total of \$17.4 billion. This is 15.1% of the total payments made in 2017/18. The charts below show the average amount paid in a year to each person in this class.

Figure 69: Average payments per person in class 5 – Disability Support (restated to 2017/18 \$ values)



The average payment made in 2017/18 was \$22,400 with slightly higher average payments being made to women than men, as a result of them being more likely to also be claiming FTB. This is expected to remain stable going forward.

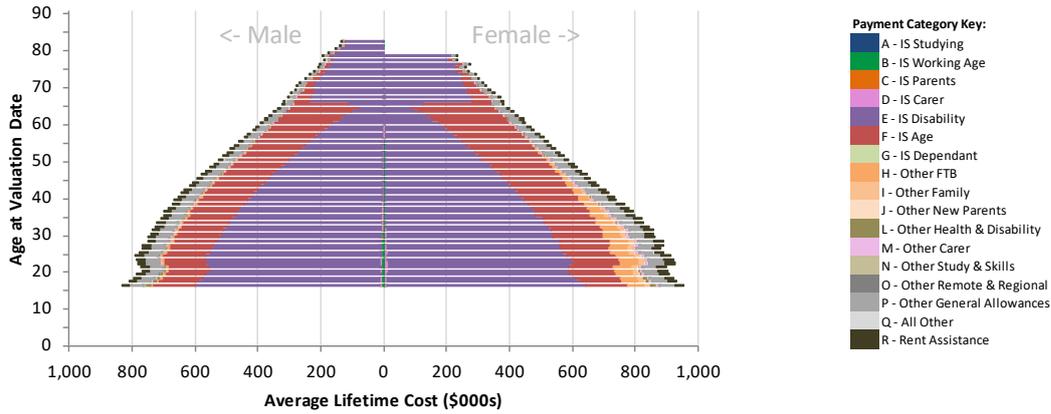
What does the model show for current Disability Support Pensioners?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **\$417bn** (or **7.4%** of the total lifetime cost). The average lifetime cost for people in this class is **\$547,000**. It is interesting to note that this class represents around 10% of current welfare recipients but a significantly greater proportion (20%) of total lifetime costs for current welfare recipients. This is because these welfare recipients are less likely than average to exit the system.

The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 70: Average lifetime cost by age and gender (class 5)



We can see that the most substantial part of this average lifetime cost is for the Disability Support Pension itself, with the Age Pension also being a key component of the average lifetime cost for people below pension age. Supplements paid along with the pension also contribute to the cost.

The average lifetime cost is higher for younger people with a steady reduction as people age. This is a reflection of the extremely high persistency in the payment system for people in this class – as people are not expected to exit the system, the main determinant of the lifetime cost is then the expected duration of the person’s future lifetime.

The average lifetime cost pyramid shows a change at around age 65 as most people would leave this class and instead be in the Age Pension class once they are over this age. For the small proportion of people who continue in this class once they are above their pension age, the lifetime cost is comprised primarily of the Disability Support Pension. This simply reflects the reduced likelihood of them transitioning to the Age Pension at some later stage.

To further explore differences in the average lifetime costs for people within class 5, we have prepared the table below, which shows the average lifetime cost for 45 to 54 year olds currently receiving Disability Support Pension payments, split by key characteristics. We have selected a set age group to reduce the effect of age on the future lifetime cost. It is important to note that some characteristics serve as proxies for more fundamental socio-economic factors, and as such, they may not necessarily be the underlying cause of any differences observed in the average lifetime costs of individuals. Further, the variations and relativities to the average lifetime cost that have been shown may differ for other age bands.

Table 27: Average lifetime cost for 45 to 54 year old Disability Support Pension recipients split by key characteristics

	Number of people	Number of people as % of cohort	Average lifetime cost	Average lifetime cost relative to cohort
Total	182,000	100%	558,000	100%
DSP medical condition				
- <i>Acquired brain impairment</i>	6,000	3%	546,000	98%
- <i>Cancer / tumour</i>	4,000	2%	171,000	31%
- <i>Circulatory & respiratory system</i>	7,000	4%	540,000	97%
- <i>Congenital anomalies & inherited disorders</i>	3,000	1%	582,000	104%
- <i>Intellectual/learning</i>	18,000	10%	585,000	105%
- <i>Musculo-skeletal & connective tissue</i>	36,000	20%	547,000	98%
- <i>Nervous system</i>	10,000	5%	563,000	101%
- <i>Poorly defined cause / chronic pain</i>	7,000	4%	563,000	101%
- <i>Psychological / psychiatric</i>	73,000	40%	577,000	103%
- <i>Other</i>	18,000	10%	556,000	100%
Earnings				
- <i>No earnings</i>	163,000	89%	561,000	100%
- <i>Has earnings</i>	19,000	11%	535,000	96%
Number of children				
- <i>No children</i>	138,000	76%	564,000	101%
- <i>1 child</i>	24,000	13%	551,000	99%
- <i>2 children</i>	12,000	7%	533,000	96%
- <i>3+ children</i>	8,000	4%	512,000	92%
Class before entering '5 Disability Support'				
- <i>Income support</i>	91,000	50%	564,000	101%
- <i>Non income support</i>	9,000	5%	526,000	94%
- <i>Previous client / non client</i>	81,000	45%	555,000	99%
Geography – socio-economic area grouping				
- <i>Lowest 20% (most disadvantaged)</i>	67,000	37%	556,000	100%
- <i>20% to 40%</i>	44,000	24%	558,000	100%
- <i>40% to 60%</i>	31,000	17%	557,000	100%
- <i>60% to 80%</i>	22,000	12%	561,000	101%
- <i>Highest 20% (least disadvantaged)</i>	17,000	9%	566,000	101%
Payments at valuation date				
- <i>In receipt of payments at valuation date</i>	179,000	98%	560,000	100%
- <i>Not in receipt of payments at valuation date</i>	3,000	2%	420,000	75%

From the table, we can see that for the current cohort of 45 to 54 year old Disability Support Pensions recipients:

- Those with congenital anomalies or learning disabilities tend to have higher average lifetime costs.
- Those with more children tend to have lower lifetime costs. This trend is the opposite to the trends observed in other classes and is likely related to the fact that those Disability Support Pensioners with more children are less likely to have severe medical conditions.
- 98% of this group were in receipt of payments at the valuation date. The other 2% have a lower average lifetime cost.
- The average lifetime costs are very similar for people who live in areas with different levels of socio-economic disadvantage. This is because persistency in this class is high across most people, and so little variation is seen. However it can be seen that 37% of this group live in the 20% of locations with the most disadvantage.

Change in lifetime costs since the 2017 valuation

The lifetime cost for the people in this class is **\$417bn**, which is the same as the rebased June 2017 valuation. This was the result both a similar number of people in this class and a similar average cost:

- The average cost remained around the same at an overall level. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 28: Breakdown of change in average lifetime cost for class 5 by payment category

	Total	IS			Non IS ¹	
		Disability Support	Other (excl. Age Pension)	Age Pension	Family Supplements	Other Supplements
Jun-17 Total Lifetime Cost	\$351bn					
Jun-17 Total Lifetime Cost – rebased ²	\$417bn					
Jun-18 Total Lifetime Cost	\$417bn					
Change in Total Lifetime Cost ²	+\$0bn (+0.1%)					
Change due to People in Class	+0.2%					
Change due to Average Lifetime Cost ²	<\$1k	+\$12k	<\$1k	-\$12k	<\$1k	<\$1k
- Impact of change in inflation	+\$10k	+\$5k	<\$1k	+\$4k	<\$1k	+\$1k
- Impact of Age Pension forecast	-\$3k	<\$1k	<\$1k	-\$2k	<\$1k	<\$1k
- Impact of other changes	-\$8k	+\$7k	<\$1k	-\$14k	<\$1k	<\$1k

Notes:

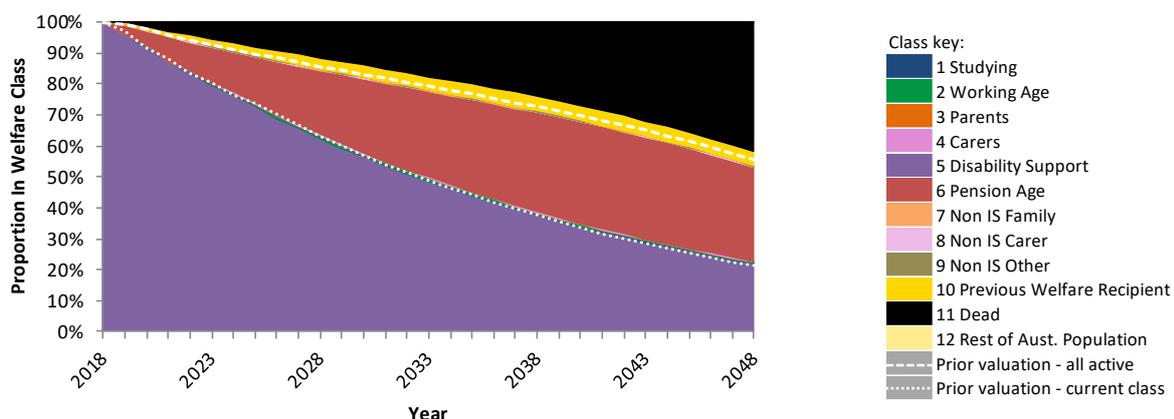
- Note that payment categories H, I and J have been included in family supplements and the remaining non income support payment categories in other supplements.
- The June 2017 rebased Lifetime Cost represents a recalculation of the June 2017 lifetime cost, but using a discount rate of 5% p.a. for consistency with the June 2018 results. All changes are shown relative to this rebased lifetime cost.

The change in average cost has been primarily driven by an increase in the cost of future payments as a result of inflation; offset by a small decrease in the overall projected use of income support payments, combined with a rebalancing such that the continuation of DSP payment beyond retirement is more likely under the updated assumptions (instead of transitioning to Age Pension).

Future outcomes

In developing the valuation results, the projection model also produces information on the expected transitions for people out of each class, as shown below.

Figure 71: Expected future trajectory for people in class 5



This reinforces the observation that most people are only expected to exit this class through death or retirement.

- More than 60% of the people in this class are projected to remain there for the next 10 years (or exit and subsequently return) and 38% are expected still to be receiving Disability Support Pension in 20 years' time.

Results for income support recipients

- 52% of the people currently in the class are expected to be receiving either DSP or Age Pension in 30 years' time (and are most likely to also do so for all the intervening years).

Duration

The average future life expectancy for the Disability Support class is **34** years. This reflects that a significant proportion of this class is approaching retirement age.

The table below provides a summary of the expected welfare system use of people currently in this class over this time. This has been developed by considering which classes people move into as they move through the welfare system over their lives.

Table 29: Average expected durations in welfare system for people currently in class 5

	Expected Years	Proportion of Future Lifetime
Years with some income support payments:		
- Not Age Pension (classes 1-5)	19	55%
- Age Pension (class 6)	13	39%
Years with non income support payments only	0	0%
Years not receiving any welfare payments	2	6%
Total	34	100%

6.6 Age Pensioners

Key points

There were 2,508,000 people in the Age Pension class in 2018, who were mostly aged 65 and over. The Age Pensioner class is very immobile with very few people transitioning off payment before the end of their life. Age Pension payments in 2017/18 were \$45.8 billion representing 40% of the total welfare payments covered by this valuation.

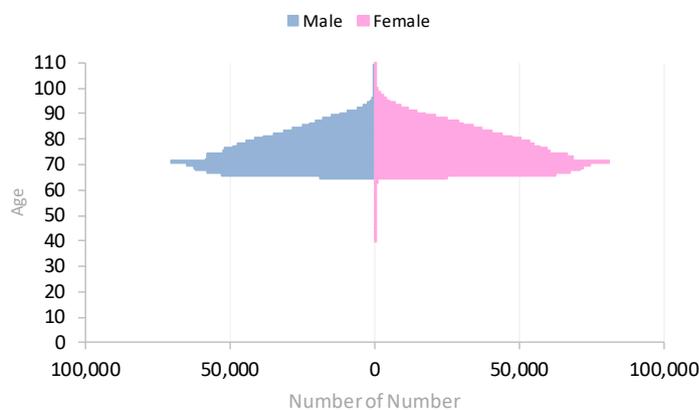
- This year the entries into Age Pension were low as a result of the increase in the Age Pension age from 65 to 65.5. Additionally exits from Age Pension were higher as a result of the changes in the pension assets test. These two factors resulted in a decrease in the Age Pension class size in 2018.
- However more generally over recent years, there have been more people entering the Age Pension class than those exiting, resulting in a growing population of age pensioners for most years. We would expect the general trend of a growing population of age pensioners to continue well into the future.
- The pension age will increase by half a year every two years for each of the next six years, until it reaches 67 by 1 July 2023.
- The lifetime cost for this class is \$577bn, which is \$14bn below the rebased 2017 lifetime cost. The decrease is driven by a decrease in the number of people in the class, which is largely as a result of the factors above influencing entries and exits during the year.

Recent and projected trends for Age Pensioners

There were 2,508,000 people in the Age Pension class in the 2018 model population. This represents 10.0% of the population of Australia which is a decrease from 10.5% at the previous valuation, and 31.5% of current welfare recipients; it is the biggest income support class by a considerable margin.

The following chart shows a breakdown of the number of people in the Age Pension class by age and gender.

Figure 72: 2018 profile of people in class 6 – Pension Age (age / gender)



From the chart, we can see that while there are a mix of both men and women, there are more women at every age. This is most likely a result of greater female longevity. The vast majority of people in the class are past pension age, however a small number of younger people have been included through their receipt of the Wife Pension.

Movements into and out of this class

Over the last three years, an average of 144,600 people (around 5.4% of the people in this class) per annum entered this class from another welfare class or from outside the welfare system. Over this same period an average of 141,900 people (around 5.3% of people in this class) per annum have transitioned out of the Age Pension class.

The following chart shows the breakdown of these transitions by previous / destination class and year of transition.

Figure 73: Number of people entering class 6 – Pension Age (by class entered from)

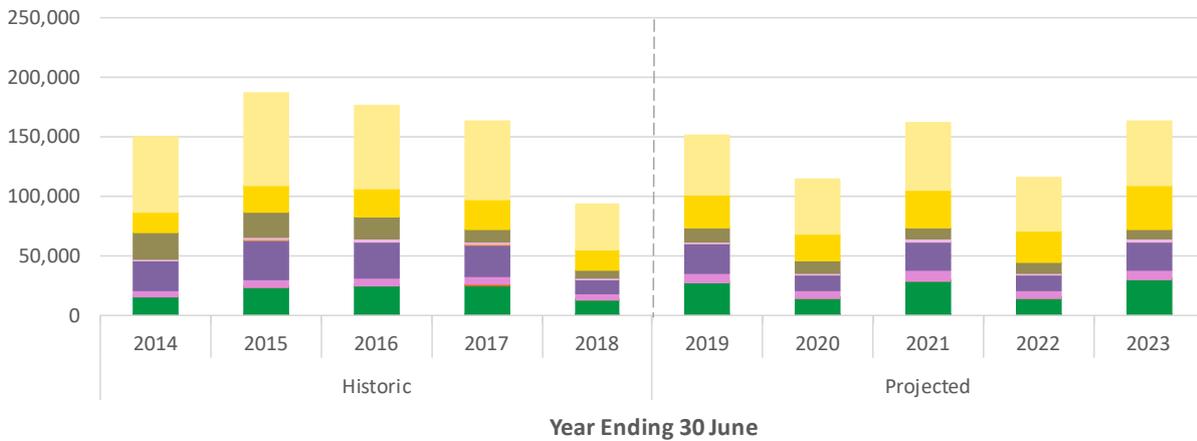
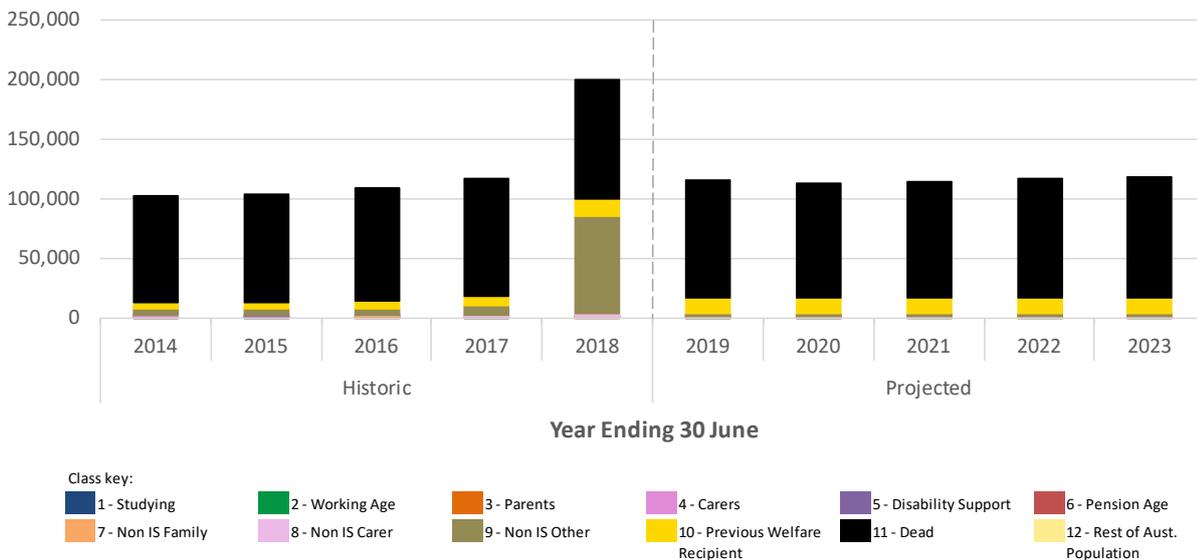


Figure 74: Number of people exiting class 6 – Pension Age (by class exited to)



We can see that people typically enter the Age Pension class either from outside the welfare system, or through the Working Age, Disability Support Pension, or Non IS Other classes. The majority of people enter the class upon reaching their age pension qualifying age (pension age).

Over the last five years, there have generally been fewer people leaving the Age Pension class than entering. Aside from those at the end of their life, only a very small number of people leave the class presumably as a result of changes in their personal circumstances which affects their eligibility. It is possible that these changes in circumstances are temporary and they will re-enter the Age Pension class later in life.

On 1 January 2017 the assets test changes were implemented, increasing the assets threshold and increasing the taper rate. This led to the cancellation of benefits for approximately 100,000 age pensioners, as well as the re-calculation of pensions for many other pensioners with some payments increasing and other decreasing. These cancellations can be seen in the increased 2017/18 exits. An additional impact is the lower expected entries into Age Pension following the tightening of this criteria. This will have acted to reduce the number of people entering into Age Pension after 1 January 2017.

For 2018, the Age Pension age increased from 65 to 65.5 and as such the number of people reaching Age Pension age in that year was about half of the normal number. It follows that we would expect the normal number of transitions into Age Pension at Age Pension age to reduce by about half. However in practice we

noted (when looking at more detailed age breakdowns of the information above) that the drop off in numbers entering at Age Pension age was actually more than half. This would appear to be a kind of ‘honeymoon effect’, whereby the impact of a change was a little different to what might be expected, and this would likely be to do with behavioural or administrative factors which acted to further reduce entries. These factors are likely short-term considerations, and we might expect a catch up in entries in future which would counter this honeymoon effect.

The charts above consider Age Pension entries across all ages. Entries into Age Pension at higher ages continued at a more typical level in 2018, and as such the overall drop off was not as marked across this full group – however there was still around a 40% drop off in 2018.

Similar drops in projected entries into the Pension Age class are also seen in 2020 and 2022, as the Age Pension age continues to transition from age 65 to 67.

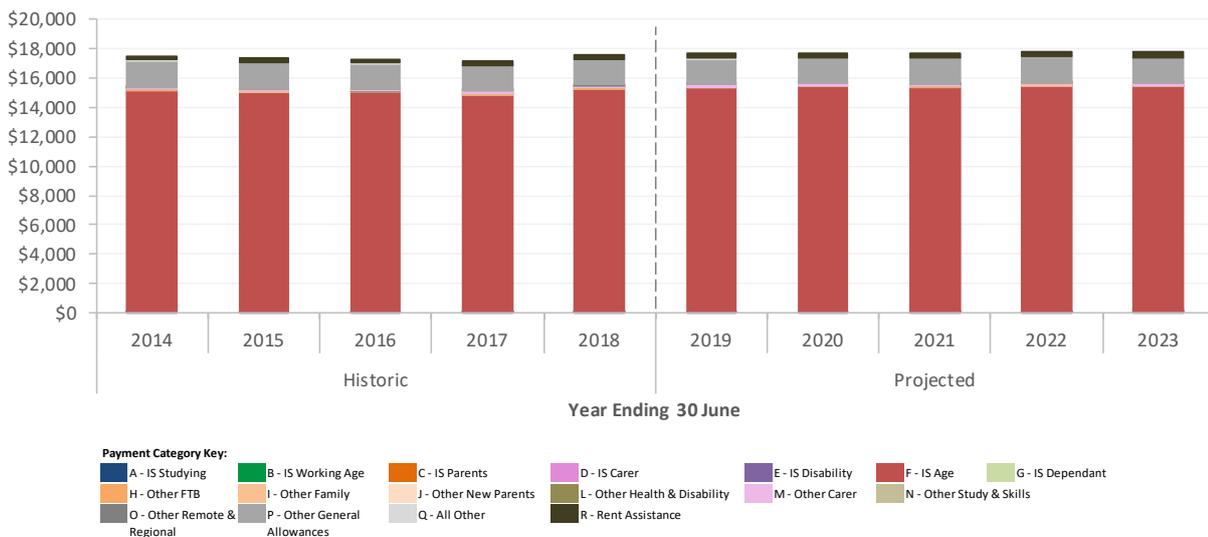
It can also be seen that entries into Age Pension in 2014 were lower than in other recent years. This is due to the Age Pension age for females which increased from 64.5 to 65 for females turning 65 after 31 December 2013. The Age Pension age for males was 65 during this earlier period.

The projection shows we expect this class to grow again next year and in generally over subsequent years.

Payments received

During 2017/18, people in this class received a total of \$45.8 billion. This is 39.7% of the total payments made in 2017/18. The charts below show the average amount paid in a year to each person in this class, split by the categories of payments received.

Figure 75: Average payments per person in class 6 – Pension Age (restated to 2017/18 \$ values)



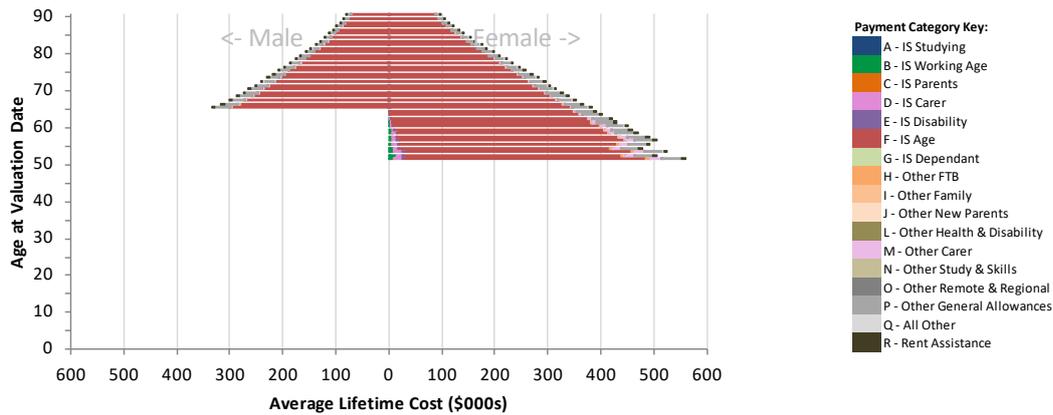
The average payment made in 2017/18 was \$17,600. The average payments are slightly higher for women than men, in part as a result of more of them receiving the single rate.

What does the model show for current Age Pensioners?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **\$577bn** (or **10.2%** of the total lifetime cost). The average lifetime cost for people in this class is **\$230,000**. The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 76: Average lifetime cost by age and gender (class 6)



The pyramid or ‘inverse funnel’ shape illustrates the reductions in average lifetime cost as age increases. This is simply a function of the expected future lifetimes for people who have currently reached the ages shown. The average lifetime costs range from around **\$383,000** for women aged 65 to around **\$79,000** for men aged 90. As can be seen, almost all of the cost is from the Age Pension; the remainder is the cost of the Pension Supplement and Energy Supplement that are paid as a component of the pension rate.

There are very small numbers of people in this class below retirement age (approx. 6,000 people or around 0.3% of the class). Typically these are people receiving the Wife Pension. The existence of this group extends the pyramid to younger ages and the average lifetime costs are larger again as a result of the combined effect of the longer future lifetime and the expectation of this group being highly likely to remain in the class for the remainder of their lives.

To further explore differences in the average lifetime costs for people within class 6, we have prepared the table below, which shows the average lifetime cost for 65 to 69 year olds currently receiving Age Pension, split by key characteristics. We have selected a set age group to reduce the effect of age on the future lifetime cost. It is important to note that some characteristics serve as proxies for more fundamental socio-economic factors, and as such, they may not necessarily be the underlying cause of any differences observed in the average lifetime costs of individuals. Further, the variations and relativities to the average lifetime cost that have been shown may differ for other age bands.

Table 30: Average lifetime cost for 65 to 69 year old Age Pension recipients split by key characteristics

	Number of people	Number of people as % of cohort	Average lifetime cost	Average lifetime cost relative to cohort
Total	552,000	100%	326,000	100%
Marital status				
- <i>Single</i>	221,000	40%	378,000	116%
- <i>Partnered</i>	331,000	60%	291,000	89%
Received 'Other Carer' payment				
- <i>No</i>	525,000	95%	325,000	100%
- <i>Yes</i>	27,000	5%	339,000	104%
Payment rate (over latest year)				
- <i>Partial rate / partial year</i>	283,000	51%	294,000	90%
- <i>Max partnered rate, full year</i>	110,000	20%	319,000	98%
- <i>Partial single rate / partial year</i>	42,000	8%	372,000	114%
- <i>Max single rate, full year</i>	117,000	21%	393,000	121%
Geography – socio-economic area grouping				
- <i>Lowest 20% (most disadvantaged)</i>	153,000	28%	337,000	103%
- <i>20% to 40%</i>	135,000	25%	330,000	101%
- <i>40% to 60%</i>	110,000	20%	325,000	100%
- <i>60% to 80%</i>	85,000	16%	321,000	99%
- <i>Highest 20% (least disadvantaged)</i>	54,000	10%	323,000	99%

The payment rates over the last year are split into the following bands:

1. *Partial rate / partial year*: People who have received a partial (single or partnered) rate and / or received payments for a partial year, such that the total received over the year is less than the maximum partnered rate for a year.
2. *Max partnered rate, full year*: People who have received a full year of payments at the maximum partnered rate (which equates to a basic rate of around \$16,200 over a year, based on the rate applicable at 1 July 2018).
3. *Partial single rate / partial year*: People who have received a partial single rate and / or received payments for a partial year, such that the total received over the year is between the maximum partnered rate for a full year and the maximum single rate for a full year.
4. *Max single rate, full year*: People who have received a full year of payments at the maximum single rate (which equates to a basic rate of around \$21,500 over a year, based on the rate applicable at 1 July 2018).

From the table, we can see that for the current cohort of Age Pension recipients aged 65 to 69:

- Single pensioners have higher average lifetime costs compared to partnered pensioners.
- Those pensioners providing some form of care for another person tend to have higher average lifetime costs.

Change in lifetime costs since the 2017 valuation

The lifetime cost for the people in this class is \$577bn, a decrease of \$14bn (2.4%) compared to the rebased 2017 valuation. This is due to a decrease in the number of people in this class, partially offset by an increase in lifetime cost:

- The number of age pensioners has decreased by 3.3%; this is due to a combination of low entries over the year as the Age Pension age increased, combined with the higher number of exits as a result of the pension assets test change.
- The average cost of age pensioners has increased by \$2,000 (1.0%) since the previous valuation largely due to the increase in the cost of future payments as a result of inflation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 31: Breakdown of change in average lifetime cost for class 6 by payment category

	Total	IS		Non IS ¹	
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-17 Total Lifetime Cost	\$542bn				
Jun-17 Total Lifetime Cost – rebased ²	\$591bn				
Jun-18 Total Lifetime Cost	\$577bn				
Change in Total Lifetime Cost ²	-\$14bn (-2.4%)				
Change due to People in Class	-3.3%				
Change due to Average Lifetime Cost ²	+\$2k (+1.0%)	<\$1k	+\$1k	<\$1k	<\$1k
- Impact of change in inflation	+\$5k	<\$1k	+\$4k	<\$1k	<\$1k
- Impact of policy changes	<\$1k	<\$1k	<\$1k	<\$1k	<\$1k
- Impact of other changes	-\$3k	<\$1k	-\$3k	<\$1k	<\$1k

Notes:

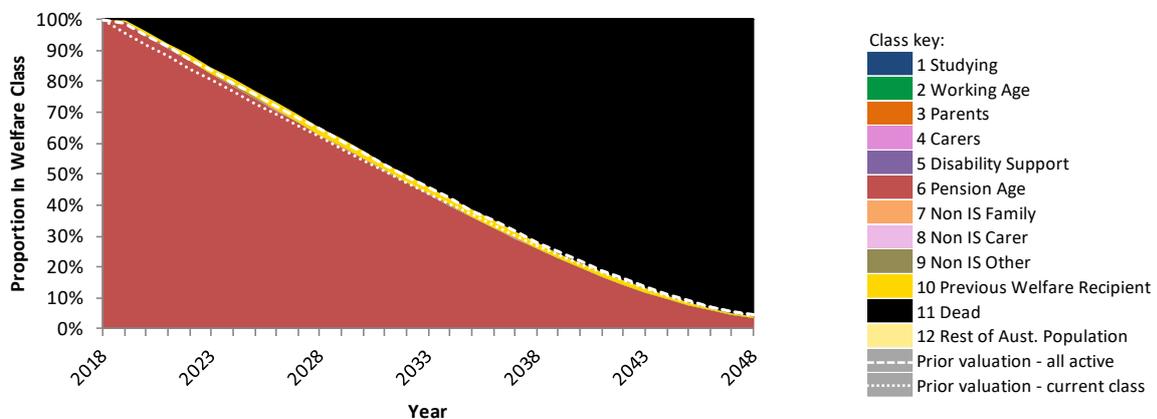
- Note that payment categories H, I and J have been included in family supplements and the remaining non income support payment categories in other supplements.
- The June 2017 rebased Lifetime Cost represents a recalculation of the June 2017 lifetime cost, but using a discount rate of 5% p.a. for consistency with the June 2018 results. All changes are shown relative to this rebased lifetime cost.

There has been an increase in the average lifetime cost of Age Pension payments as a result of increases due to indexation over the year, partially offset by decreases due to slightly reduced average payment sizes for Age Pension (reflecting a slight shift in the mix of part and full pension payments).

Future outcomes

In developing the valuation results the projection model also produces information on the expected transitions for people out of each class, as shown below.

Figure 77: Expected future trajectory for people in class 6



We can see that a very small proportion of this class exit and, as would be expected for age pensioners, the rest stay on the payment for their remainder of their natural lives.

Duration

The average future life expectancy for the Age Pension class is **14** years. This reflects the older age profile of this class. The table below provides a summary of the expected welfare system use of people currently in this class over this time. This has been developed by considering which classes people move into as they move through the welfare system over their lives.

Table 32: Average expected durations in welfare system for people currently in class 6

	Expected Years	Proportion of Future Lifetime
Years with some income support payments:		
- Not Age Pension (classes 1-5)	<1	0%
- Age Pension (class 6)	14	96%
Years with non income support payments only	<1	0%
Years not receiving any welfare payments	1	4%
Total	14	100%

7 Results for non income support recipients

In this section, we continue to discuss the profile of the classes and the key considerations for setting the assumptions, and the class-level lifetime cost results. This section covers the non income support classes.

We have also set out key points at the top of each subsection.

7.1 Non income support – Family

People are in this class if they have not received any income support payment in the financial year but received a FTB, family or new parent payment in the previous financial year.

The precise definition of this class includes a one year timing lag so that family payments are considered from the previous year rather than the current year when allocating people to this class. This definition has been used as data maturity has a particularly big impact on FTB payments since these are often claimed well after the year end through tax returns. This means that new recipients of family payments who are not receiving income support payments typically enter into class 9, and then transition to class 7 for the remainder of the period during which they receive any of the family payment categories.

Key points

There were 1,540,000 people in the Non IS Family class in 2018. 80% of this class are women and they are predominately aged in their mid-twenties to late-forties.

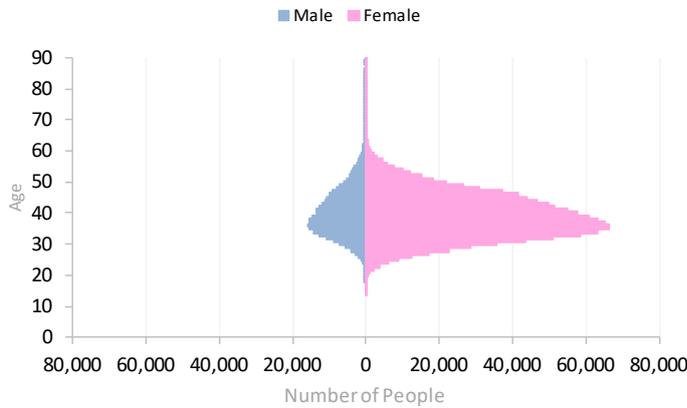
- Over the recent history there have been multiple changes to policies affecting family payments. There has been several changes which have tightened the criteria to receive Family Tax Benefits, and some benefits have been repealed. This has contributed to decreasing average payments. There has also been a significant change to child care payments which took effect from July 2018. While the effect of this change cannot be seen yet in the data, we have allowed for the expected impact in the valuation.
- The number of people leaving the class has stabilised over the last few years at a level comparable to entries to the class. In general, single people are less likely than partnered people to stay in this class, and are far more likely to transition onto the Parenting payment.
- The lifetime cost for this class is \$354bn, which is \$49bn below the rebased 2017 lifetime cost. The reduction is driven by decreased assumed future payment utilisation in light of recent decreases in both entries into income support and persistency on payments once in receipt of income support. The decrease in lifetime cost is particularly large for this class, as we are now modelling geographical factors which show that people in this class are more likely than average to live in higher SEIFA (more advantaged) locations. This in turn acts to reduce the likelihood of future income support use.

Recent and projected trends for the Non IS Family class

There were 1,540,000 people in the Non IS Family class in the 2018 model population. This represents 6.2% of the population of Australia which is a decrease from 6.3% at the previous valuation, and 19.4% of current welfare recipients.

The following chart shows a breakdown of the number of people in the Non IS Family class by age and gender.

Figure 78: 2018 profile of people in class 7 – Non IS Family (age / gender)



From the chart, we can see that there are a mix of both men and women, albeit with substantially more women at all ages. The people in this class are predominately aged 20 to 60, with class numbers peaking at around the mid-thirties.

Movements into and out of this class

Over the last three years, an average of 317,300 people (around 20.6% of the people in this class) per annum entered this class from another welfare class (note that owing to the lagged definition, it is not possible to transition directly into this class from outside the welfare system). Over this same period an average of 322,600 people (around 20.9% of people in this class) per annum have transitioned out of the Non IS Family class.

The following chart shows the breakdown of these transitions by previous / destination class and year of transition.

Figure 79: Number of people entering class 7 – Non IS Family (by class entered from)

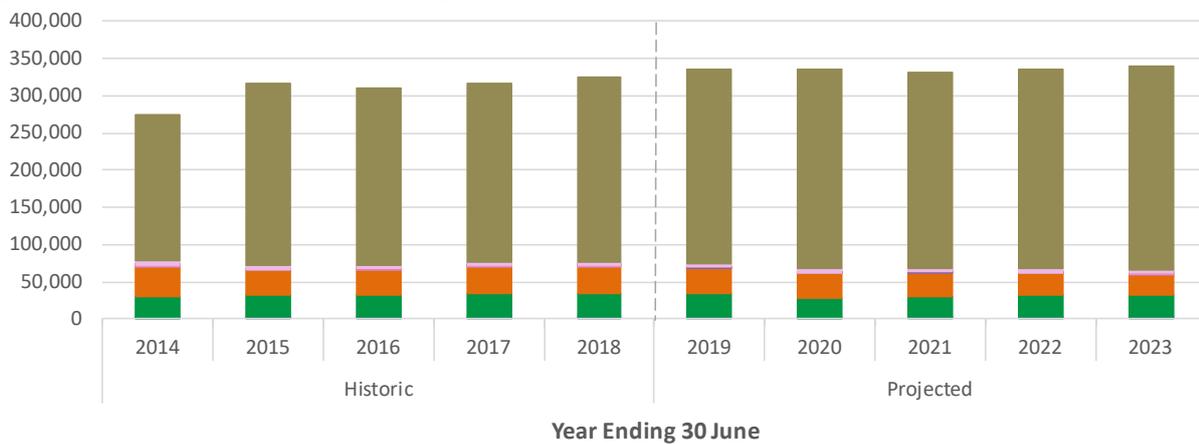
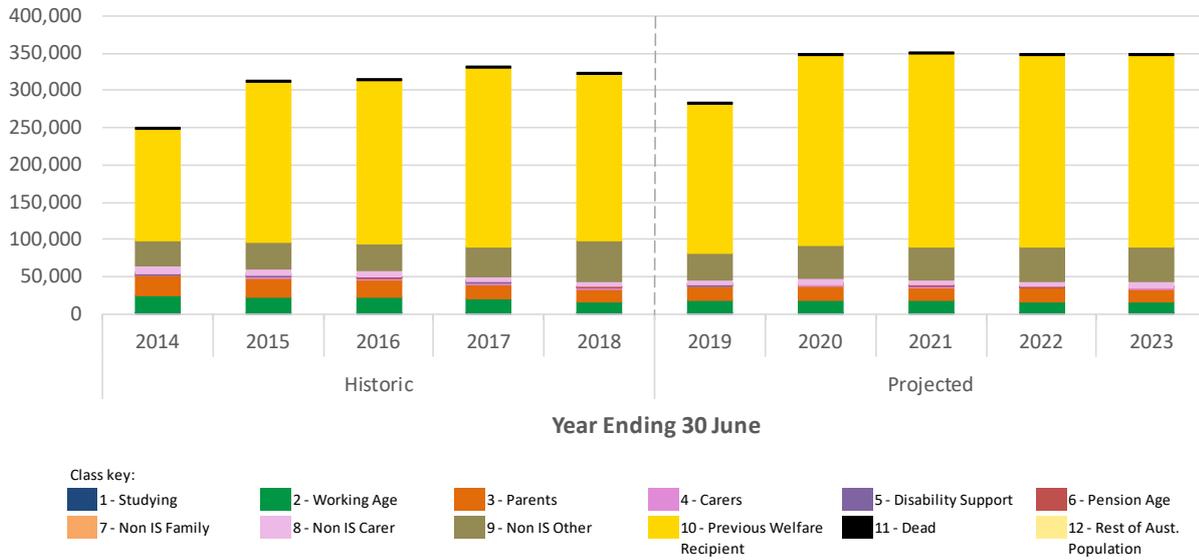


Figure 80: Number of people exiting class 7 – Non IS Family (by class exited to)



We can see that people predominately enter this class from class ‘9 Non IS Other’ and some enter from class ‘3 Parents’ or ‘2 Working Age’. We can also see that the majority of people who leave this class also leave the welfare system. Men who don’t leave the system tend to transition into class ‘2 Working Age’ or ‘9 Non IS Other’, while women who don’t leave tend to transition to ‘3 Parents’ (under age 40), ‘2 Working Age’ (over age 40), ‘9 Non IS Other’ (across ages 30 to 45). Some women also transition into ‘4 Carers’.

Both exits and entries from and to class ‘7 Non IS Family’ have stabilised since 2015 at a higher level than the preceding years. This partly reflects the age profile of the population and that the numbers of people in the income support classes has been reducing, so many of those people receiving family payments will be in this class.

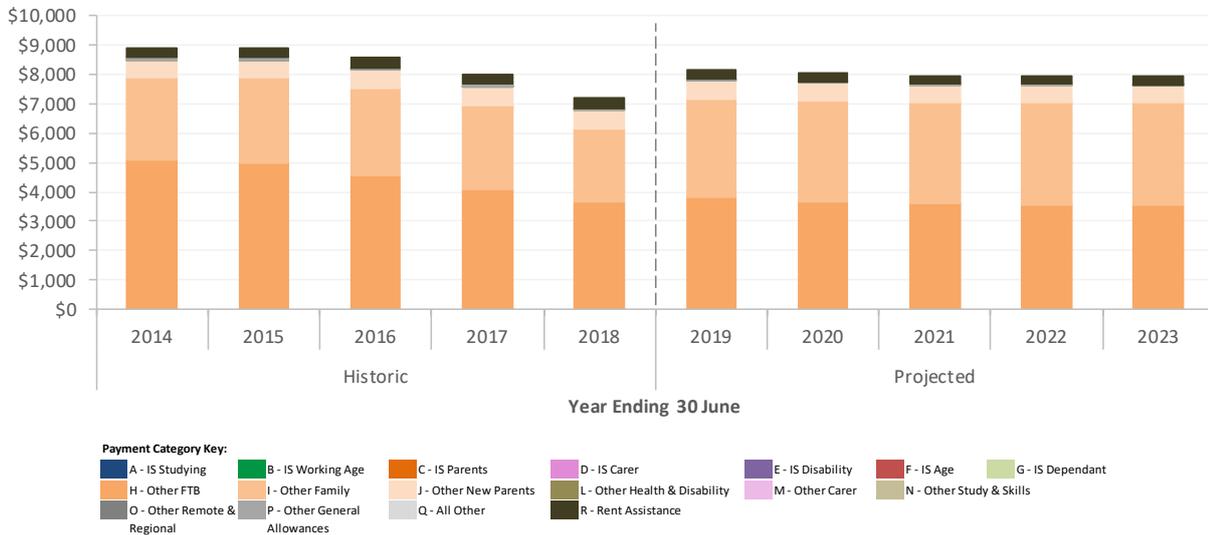
There have been a number of policy changes to Family Tax Benefit over recent years, that have reduced both the coverage of Family Tax Benefit and the level of assistance available

Projected exits are low for 2019, and this is reflective of unusually high utilisation of family payments seen in the class 7 actual experience in 2018. This in turn is predictive of low exits.

Payments received

During 2017/18, people in this class received a total of \$11.1 billion. This is 9.6% of the total payments made in 2017/18. The charts below show the average amount paid in a year to each person in this class, split by the categories of payments received.

Figure 81: Average payments per person in class 7 – Non IS Family (restated to 2017/18 \$ values)



As shown in the chart above, the average amount per person for 2017/18 is lower than prior years. This is due to the impact of the data maturity issue where Family Tax Benefit and child care payment information for the latest year is not fully known at 30 September 2018, when the data was extracted. Additional information collected after 30 September (predominately through income tax assessments) updates the data retrospectively and 'corrects' the understatement previously observed in past years.

Average payment sizes have been decreasing in recent years, particularly for FTB and Other Family payments.

The average payment made in 2016/17 (noting the understating of 2017/18) was \$8,000 (after inflating to 2017/18 values). Higher average payments being made to women (\$8,500) than men (\$5,900) as a result of women claiming higher amounts of child care payments and New Parents allowances. This average amount per person is much lower than that for people in the income support classes.

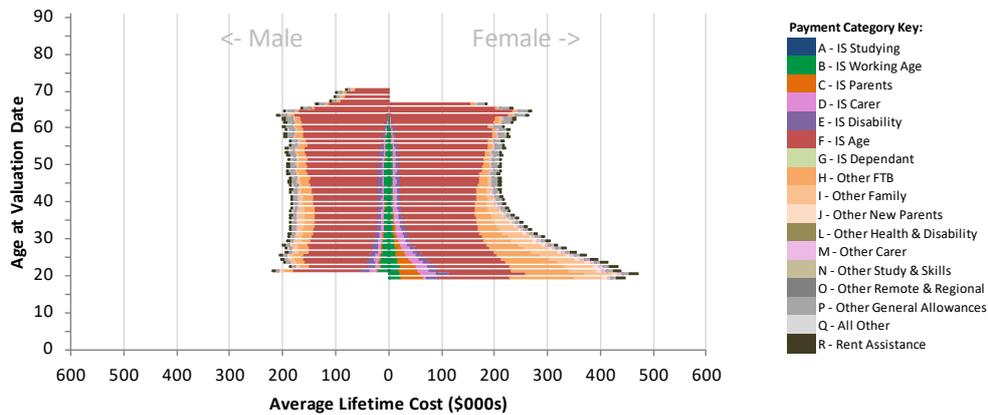
Over time we have seen a gradual reduction in the average size of FTB payments. We expect this to stabilise going forwards. Conversely we project the other family payments, which are predominantly child care payments, to increase as a result of the new child care arrangements.

What does the model show for people currently in the Non IS family class?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **\$354bn** (or **6.3%** of the total lifetime cost). The average lifetime cost for people in this class is **\$230,000**, with the lifetime cost being higher for women (**\$241,000**) than for men (**\$188,000**). The variation by age and gender illustrated in the figure below.

Figure 82: Average lifetime cost by age and gender (class 7)



The most substantial part of this average lifetime cost for both genders is for the Age Pension as there is a high chance of the people moving onto the Age Pension as they reach pension age. Above the age of 40 the average lifetime cost of men and women is similar. The driver of the higher average lifetime cost for women under the age of 40 is the significant contributions from FTB and other family payments, combined with Parenting payments. This difference is substantially higher for younger women, and the reduction in future cost by age reflects the lower expected future time in receipt of family related payments for older people.

The average lifetime cost pyramid shows a significant change at around age 65 with much lower costs for older people. To be above age 65.5 and still be in this class means that they cannot be receiving the Age Pension at present. This means they are far less likely to receive the Age Pension in future than a typical person in the population and hence have a lower average lifetime cost.

The table below outlines the average lifetime cost for 30 to 39 year olds currently receiving Non IS Family payments, split by key characteristics. We have selected a set age group to reduce the effect of age on the future lifetime cost. It is important to note that some characteristics serve as proxies for more fundamental socio-economic factors, and as such, they may not necessarily be the underlying cause of any differences observed in the average lifetime costs of individuals. Further, the variations and relativities to the average lifetime cost that have been shown may differ for other age bands.

Table 33: Average lifetime cost for 30 to 39 year old Non IS Family recipients split by key characteristics

	Number of people	Number of people as % of cohort	Average lifetime cost (\$)	Average lifetime cost relative to cohort
Total	710,000	100%	237,000	100%
Number of children				
- No children	15,000	2%	199,000	84%
- 1 child	228,000	32%	230,000	97%
- 2 children	314,000	44%	226,000	95%
- 3+ children	153,000	21%	273,000	115%
Age of youngest child				
- No children	15,000	2%	199,000	84%
- New born	51,000	7%	280,000	118%
- 1-6 Years old	532,000	75%	234,000	99%
- 7-8 Years old	51,000	7%	228,000	96%
- 9-15 Years old	57,000	8%	245,000	103%
- 16-18 Years old	4,000	1%	247,000	104%
Marital status				
- Single	61,000	9%	303,000	128%
- Partnered	649,000	91%	231,000	97%
Class before entering '7 Non IS Family'				
- Income support	125,000	18%	300,000	127%
- Non income support	584,000	82%	223,000	94%
Geography – socio-economic area grouping				
- Lowest 20% (most disadvantaged)	111,000	16%	287,000	121%
- 20% to 40%	137,000	19%	261,000	110%
- 40% to 60%	164,000	23%	239,000	101%
- 60% to 80%	162,000	23%	217,000	91%
- Highest 20% (least disadvantaged)	135,000	19%	194,000	82%

Note: The class definition means that people can remain in this class for a year after they stop receiving family payments.

From the table above we can see that for current Non IS Family recipients:

- Those with more children have a higher average lifetime cost compared to those who have fewer children.
- Those with newborn children have a higher average lifetime cost.
- Single welfare recipients have a higher average lifetime cost compared to partnered welfare recipients.
- Those who were previously receiving income support welfare payments have a higher average lifetime cost compared to those who were previously receiving non income support payments.

Change in lifetime costs since the 2017 valuation

The lifetime cost for the people in this class is \$354bn, a decrease of \$49bn compared to the rebased 2017 valuation. This was driven by a decrease in the average cost (as opposed to a change in population in this class):

- The average cost has decreased by \$31,000 (11.8%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 34: Breakdown of change in average lifetime cost for class 7 by payment category

	Total	Income Support		Non Income Support ¹	
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-17 Total Lifetime Cost	\$303bn				
Jun-17 Total Lifetime Cost – rebased ²	\$403bn				
Jun-18 Total Lifetime Cost	\$354bn				
Change in Total Lifetime Cost ²	-\$49bn (-12.1%)				
Change due to People in Class	-0.3%				
Change due to Average Lifetime Cost ²	-\$31k (-11.8%)	-\$7k	-\$21k	<\$1k	-\$3k
- Impact of change in inflation	+\$6k	<\$1k	+\$3k	+\$1k	<\$1k
- Impact of Age Pension forecast	-\$7k	<\$1k	-\$6k	<\$1k	<\$1k
- Impact of other changes	-\$30k	-\$8k	-\$19k	<\$1k	-\$3k

Notes:

- Note that payment categories H, I and J have been included in family supplements and the remaining non income support payment categories in other supplements.
- The June 2017 rebased Lifetime Cost represents a recalculation of the June 2017 lifetime cost, but using a discount rate of 5% p.a. for consistency with the June 2018 results. All changes are shown relative to this rebased lifetime cost.

The decrease in average cost is driven by:

- a decrease of the projected use of pre-retirement income support;
- a flow on decrease to the likelihood of subsequently transitioning to Age Pension, combined with lower assumptions for direct entry into Age Pension;
- a further decrease in projected Age Pension use as a result of the change to the Age Pension forecast; and
- a decrease in the expected amount of supplements received, primarily as a consequence of the reduced projected use of income support payments.

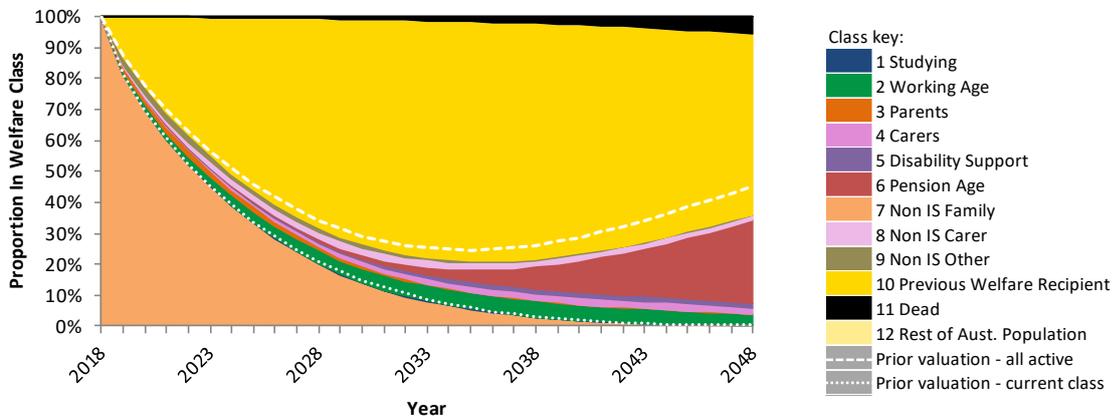
These decreases have been partially offset by an increase in the cost of future payments as a result of inflation.

The decrease in lifetime cost is particularly large for this class, as we are now modelling geographical factors which show that people in this class are more likely than average to live in higher SEIFA (more advantaged) locations – section 2.2 (and this is in contrast to most of the other active classes). This in turn acts to reduce the likelihood of future income support use.

Future outcomes

In developing the valuation results, the projection model produces information on the expected transitions for people out of each class, as shown below.

Figure 83: Expected future trajectory for people in class 7



We can see that:

- In five years, 45% of the current class 7 group are projected to be in class 7 (having either remained for the full period, or having exited the class and returned by this point). In 10 years 20% are projected to be in class 7. This pattern of behaviour is likely to be determined by the eligibility criteria for Family Tax Benefit (linked to child ages) and Child Care Benefits as these are the main payment types which cause people to be in this class.
- The majority of the people who are projected to exit this class exit the payment system completely.
- A small proportion of people are projected to move onto a different payment at the point they exit this class, with the most common destinations first being Working Age payments, then the two carer classes, and then later being the Age Pension.
- The model refinements and assumption updates made at this valuation have lowered our expectations of the proportion of people in this class who will receive income support in future.

Duration

The average future life expectancy for the Non IS Family class is **51** years. This reflects that the age profile of this class is well distributed across the ages 25 to 55.

The table below provides a summary of the average expected welfare system use of people currently in this class over this time. This has been developed by considering which classes people move into as they move through the welfare system over their lives.

Table 35: Average expected durations in welfare system for people currently in class 7

	Expected Years	Proportion of Future Lifetime
Years with some income support payments:		
- Not Age Pension (classes 1-5)	3	6%
- Age Pension (class 6)	14	27%
Years with non income support payments only	7	13%
Years not receiving any welfare payments	28	55%
Total	51	100%

7.2 Non income support – Carer

As noted previously, this class includes those people receiving Carer Allowance, who do not also receive any Carer Payment or any other income support payment. People receiving the Carer Payment are in class 4 and have been discussed in section 6.4.

Key points

There were 218,000 people in the Non IS Carer class in 2018. Over 80% of this class are women who are mostly aged from their early-thirties upwards.

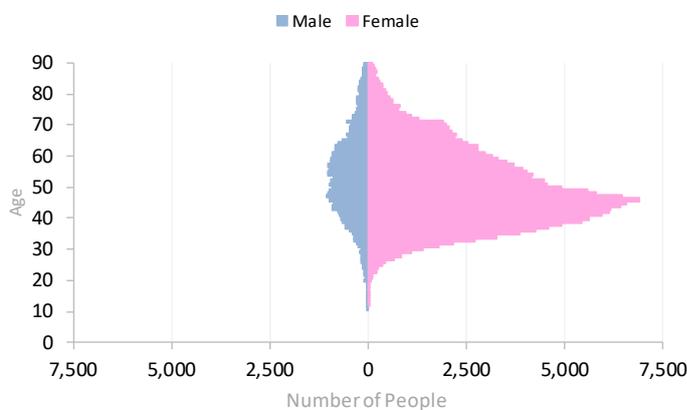
- Younger carers leaving the class are most likely to transition back to the last class they were in prior to entering class 8, suggesting they were temporary carers who returned to their previous situation.
- The average rate of Carer Allowance and Carer Supplement to people in this class has been stable, while Family Tax Benefits have decreased.
- The lifetime cost for this class is \$51bn, which is \$1bn below the rebased 2017 lifetime cost. The reduction is driven by decreased assumed future payment utilisation in light of recent decreases in both entries into income support and persistency on payments once in receipt of income support. This is partially offset by an increase in the number of people in the class.

Recent and projected trends for the Non IS Carer class

There were 218,000 people in the Non IS Carer class in the 2018 model population. This represents 0.9% of the population of Australia which is unchanged from the previous valuation, and 2.7% of current welfare recipients; it is the smallest of all the classes.

The following chart shows a breakdown of the number of people in the Non IS Carer class by age and gender.

Figure 84: 2018 profile of people in class 8 – Non IS Carer (age / gender)



From the chart, we can see that there are a mix of both men and women, albeit with substantially more women at all ages. The people in this class are mostly aged 30 to 65, with class numbers peaking in the mid-forties. A material number of people stay in the class after retirement age and the numbers above retirement age have been increasing.

Movements into and out of this class

Over the last three years, an average of 33,500 people (around 15.8% of the people in this class) per annum entered this class from another welfare class or from outside the welfare system. Over the last three years, an average of 29,500 people (around 13.9% of people in this class) per annum have transitioned out of the Non IS Carer class.

The following chart shows the breakdown of these transitions by previous / destination class and year of transition.

Figure 85: Number of people entering class 8 – Non IS Carer (by class entered from)

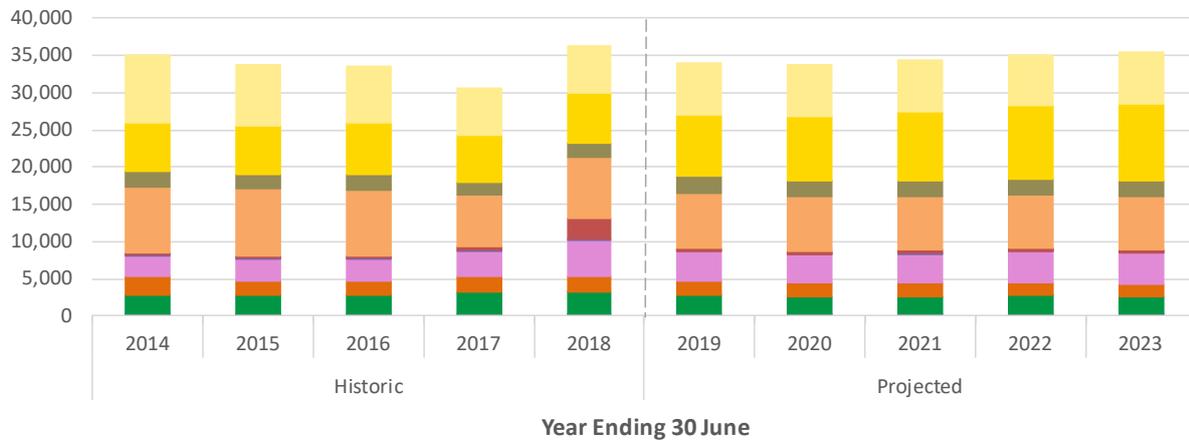
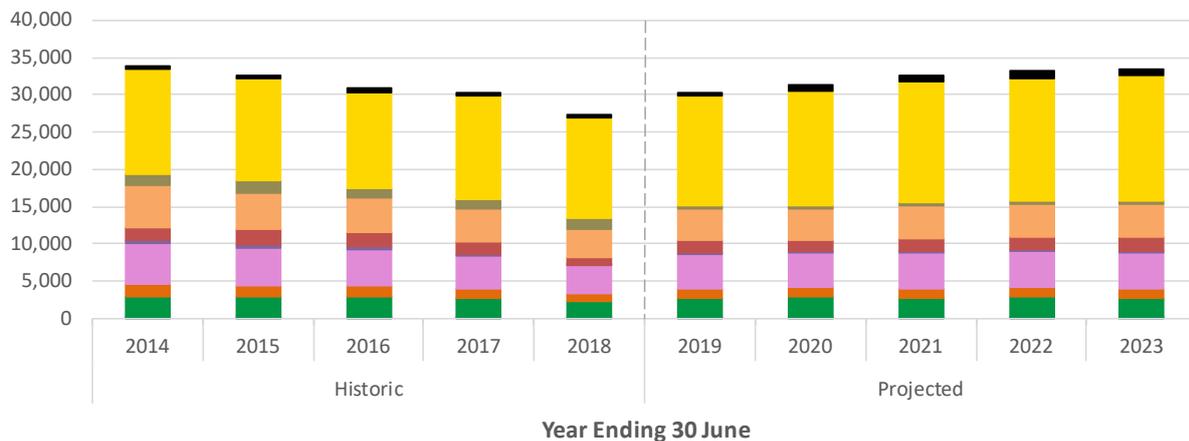


Figure 86: Number of people exiting class 8 – Non IS Carer (by class exited to)



Class key:

1 - Studying	2 - Working Age	3 - Parents	4 - Carers	5 - Disability Support	6 - Pension Age
7 - Non IS Family	8 - Non IS Carer	9 - Non IS Other	10 - Previous Welfare Recipient	11 - Dead	12 - Rest of Aust. Population

We can see that people enter this class from a variety of classes. People predominantly enter from non income support classes or from outside of the welfare system. Of those who entered from an income support class, their previous class was generally Working Age, Parents or Carers.

Women entering this class under age 50 have primarily come from class '7 Non IS Family', but with material numbers also coming from Working Age, Parents and Carers (income support) as well. Women entering aged 50 to retirement age have primarily come from outside the system, and those aged above retirement age have come from class '9 Non IS Other'. Men entering this class aged 35 and above are increasingly more likely to have entered from outside the welfare system as they get older.

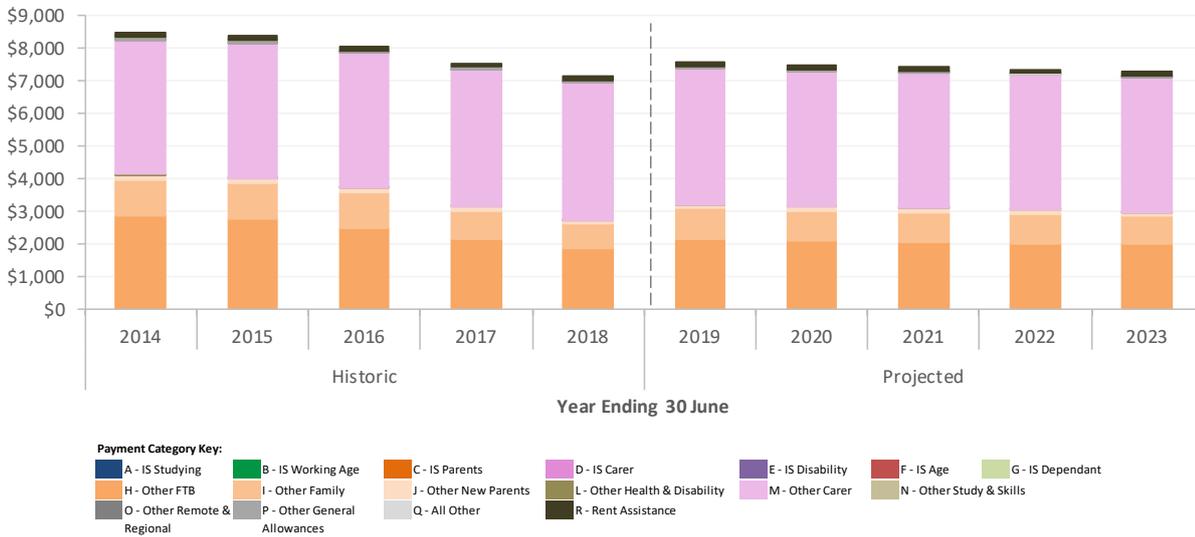
Around half of the people leaving this class also leave the welfare system, while the others generally transition to the Working Age, Carer (Income Support) or Non IS Family classes. However, this varies significantly by age – those exiting the welfare system are generally those aged above 40, while those younger than 40 tend to remain within the system on exiting this class.

In 2017 there were significantly higher numbers of new entrants, with particular increases in those entering from Age Pension and Carers. This is the result of the change in the assets test which tightened eligibility for these payments. There were also fewer exits in 2018, in part because of the change in the retirement age to 65.5 which meant fewer people moving into the Age Pension.

Payments received

During 2017/18, people in this class received a total of \$1.6 billion. This is 1.3% of the total payments made in 2017/18. The charts below show the average amount paid in a year to each person in this class, split by the categories of payments received.

Figure 87: Average payments per person in class 8 – Non IS Carer (restated to 2017/18 \$ values)



It is worth noting that the average payment for 2017/18 is somewhat understated as a result of the impact of the data maturity issue discussed earlier.

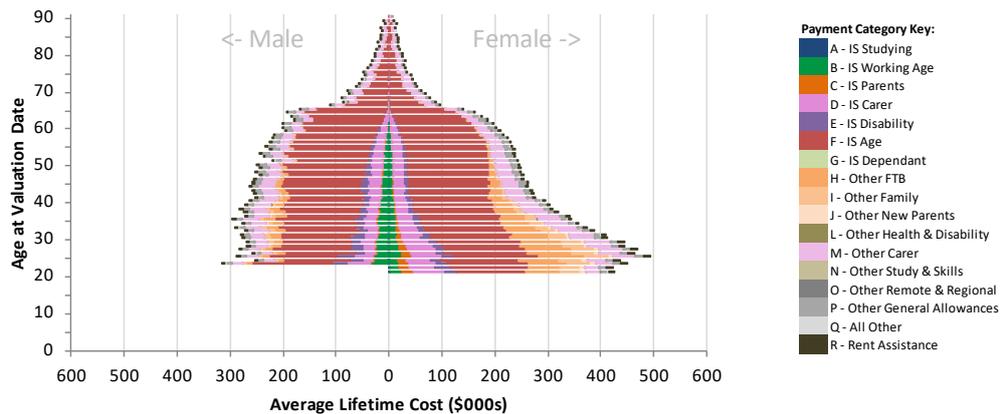
The average payment made in 2016/17 (noting the understating of 2017/18) was \$7,500 with higher average payments being made to women (\$8,100) than men (\$5,000) as a result of them being more likely to also be claiming FTB and other family payments. This average amount per person is much lower than that for people in the income support classes.

What does the model show for current Non IS Carer?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **\$51bn** (or **0.9%** of the total lifetime cost). The average lifetime cost for people in this class is **\$235,000**. The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 88: Average lifetime cost by age and gender (class 8)



The costs differ between genders with around \$199,000 for men and \$243,000 for women. We can see that a major part of the difference is for women under the age of 40 and arises from their increased propensity to receive FTB and other family payments.

The general shape of this pyramid is similar to that for the previous class (Non IS Family) for those below retirement age. Above retirement age there are significant reductions in average lifetime costs once people pass pension age, reflecting that these people are not currently in receipt of Age Pension.

At the younger ages there are a myriad of contributions to the assessed average lifetime cost from Working Age, Disability Support, Carer and Parenting income support payments. This may indicate that some people in this class are quite close to becoming income support recipients and have material likelihoods of transitioning to these classes in future.

The table below outlines the average lifetime cost for 40 to 49 year olds currently receiving Non IS Carer payments, split by key characteristics. We have selected a set age group to reduce the effect of age on the future lifetime cost. It is important to note that some characteristics serve as proxies for more fundamental socio-economic factors, and as such, they may not necessarily be the underlying cause of any differences observed in the average lifetime costs of individuals. Further, the variations and relativities to the average lifetime cost that have been shown may differ for other age bands.

Table 36: Average lifetime cost for 40 to 49 year old Non IS Carer recipients split by key characteristics

	Number of people	Number of people as % of cohort	Average lifetime cost (\$)	Average lifetime cost relative to cohort
Total	71,000	100%	265,000	100%
Number of adult / child carees				
- 1 adult caree only	41,000	58%	252,000	95%
- 1 child caree only	20,000	29%	282,000	107%
- 2+ adult carees only	5,000	7%	274,000	104%
- 2+ child carees only	1,000	2%	303,000	115%
- Other	3,000	4%	294,000	111%
Age of youngest child				
- No children	9,000	12%	296,000	112%
- 0-1 Years old	1,000	2%	307,000	116%
- 2-6 Years old	12,000	18%	275,000	104%
- 7-8 Years old	10,000	15%	259,000	98%
- 9-15 Years old	33,000	50%	252,000	95%
- 16-18 Years old	6,000	9%	270,000	102%
Marital status				
- Single	13,000	18%	334,000	126%
- Partnered	58,000	82%	250,000	94%
Class before entering '8 Non IS Carer'				
- Income support	16,000	23%	307,000	116%
- Non income support	36,000	51%	251,000	95%
- Previous client / non client	18,000	26%	256,000	97%
Geography – socio-economic area grouping				
- Lowest 20% (most disadvantaged)	12,000	17%	319,000	120%
- 20% to 40%	14,000	20%	291,000	110%
- 40% to 60%	16,000	22%	268,000	101%
- 60% to 80%	16,000	23%	241,000	91%
- Highest 20% (least disadvantaged)	13,000	18%	214,000	81%

From the table above we can see that for current Non IS Carer recipients:

- Those with adult carees have a higher average lifetime cost compared to carers with child carees.
- In general, those with younger children have a higher average lifetime cost.
- Single welfare recipients have a higher average lifetime cost compared to partnered welfare recipients.
- Those who were previously receiving income support payments have a higher average lifetime cost compared to those were receiving non income support welfare payments, or were not receiving welfare payments.

Change in lifetime costs since the 2017 valuation

The lifetime cost for the people in this class is \$51bn, a decrease of \$1bn compared to the rebased 2017 valuation. This was driven by a decrease in the average cost, partially offset by an increase in the number of people in this class:

- The number of people in this class has increased (7.5% higher) since the previous valuation.
- The average cost has decreased by \$24,000 (10.1%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 37: Breakdown of change in average lifetime cost for class 8 by payment category

	Total	Income Support		Non Income Support ¹	
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-17 Total Lifetime Cost	\$42bn				
Jun-17 Total Lifetime Cost – rebased ²	\$53bn				
Jun-18 Total Lifetime Cost	\$51bn				
Change in Total Lifetime Cost ²	-\$1bn (-2.6%)				
Change due to People in Class	+7.5%				
Change due to Average Lifetime Cost ²	-\$24k (-10.1%)	-\$9k	-\$13k	<\$1k	-\$2k
- Impact of change in inflation	+\$5k	+\$1k	+\$3k	<\$1k	<\$1k
- Impact of policy changes	-\$5k	<\$1k	-\$5k	<\$1k	<\$1k
- Impact of other changes	-\$25k	-\$10k	-\$11k	-\$2k	-\$2k

Notes:

- Note that payment categories H, I and J have been included in family supplements and the remaining non income support payment categories in other supplements.
- The June 2017 rebased Lifetime Cost represents a recalculation of the June 2017 lifetime cost, but using a discount rate of 5% p.a. for consistency with the June 2018 results. All changes are shown relative to this rebased lifetime cost.

The decrease in average cost is driven by:

- a decrease of the projected use of pre-retirement income support with the updated assumptions now reflecting the SEIFA profile and lower recent experience;
- a flow on decrease to the likelihood of subsequently transitioning to Age Pension;
- a further decrease in projected Age Pension use as a result of the change to the Age Pension forecast;
- a decrease in the projected utilisation of family supplements; and
- a decrease in the expected amount of other supplements received, primarily as a consequence of the reduced projected use of income support payments.

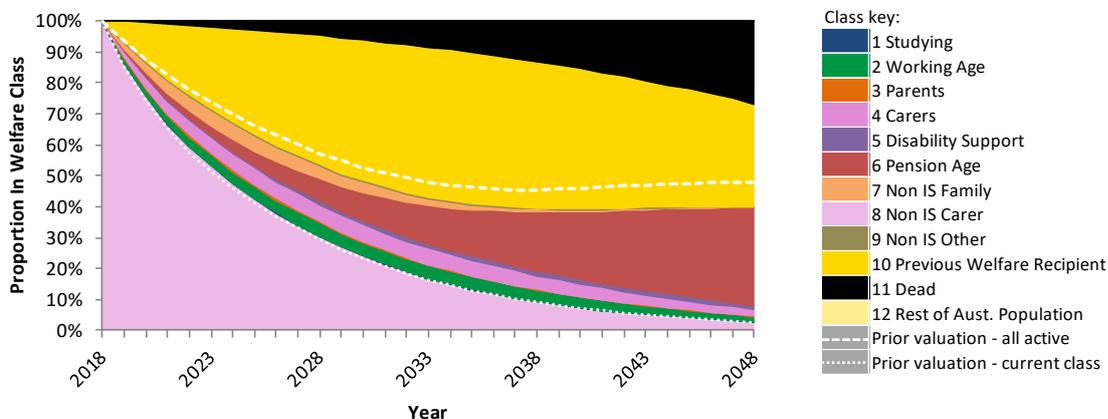
These decreases have been slightly offset by an increase in the cost of future payments as a result of inflation.

While we expect this class to be growing, there has been an unusually large increase in 2018 as a result of the combined impact of the pension assets test and change in retirement age to 65.5.

Future outcomes

In developing the valuation results the projection model produces information on the expected transitions for people out of each class, as shown below.

Figure 89: Expected future trajectory for people in class 8



We can see that:

- Around 70% of people are projected to exit the class over the next 10 years:
 - Around 46% of the starting population are projected to either exit the payment system or die over this 10 year period
 - Around 11% of the starting population are projected to move into a pre-retirement income support class over this 10 year period, with Working Age and Carer being the most common.
 - A similar proportion are projected to move into the Age Pension, non IS family or non IS Other classes

The proportion of people expected to transition into income support payments has reduced since our previous assessment. This reflects both the changing experience and model refinements, which allow us to better differentiate the expected future experience of people in this class.

Duration

The average future life expectancy for the Non IS Carer class is **39** years. This reflects that the age profile of this class is well distributed across most pre-retirement ages.

The table below provides a summary of the expected welfare system use of people currently in this class over this time. This has been developed by considering which classes people move into as they move through the welfare system over their lives.

Table 38: Average expected durations in welfare system for people currently in class 8

	Expected Years	Proportion of Future Lifetime
Years with some income support payments:		
- Not Age Pension (classes 1-5)	3	8%
- Age Pension (class 6)	12	30%
Years with non income support payments only	9	22%
Years not receiving any welfare payments	16	41%
Total	39	100%

7.3 Non income support – Other

Key points

There were 652,000 people in the Non IS Other class in 2018. This is a significant increase compared to the June 2017 valuation. There are three distinct groups in this class being; young people receiving school related payments, parents in their first year of family payments, and post age pension age people receiving supplements.

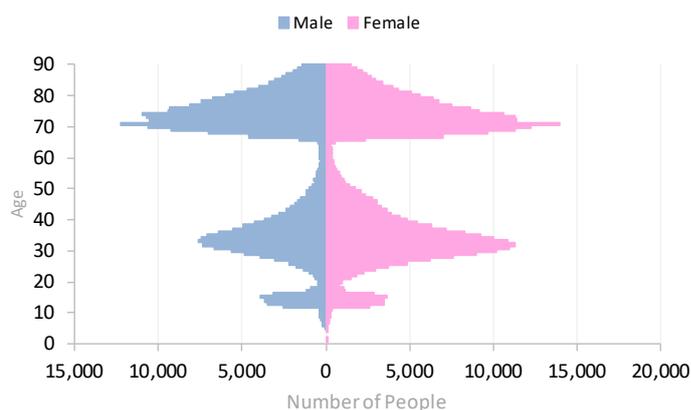
- The increase in the number of people in this class is a result of a one-off increase in entrants, following the introduction of the pension assets test. This is because some previous age pensioners are no longer eligible for the pension but continue to receive some supplements, and hence have transitioned to this class.
- The recent policy changes which affect family payments have also impacted this class as people receiving family supplements for the first time generally enter the system through the Non IS – Other class. This has contributed toward reduced entries into this class seen over the last four years.
- With the closure of Carbon Tax compensation (the Energy Supplement) to new recipients of the Seniors Health Card, the main historical source of entrants into this class above retirement age will disappear going forward. This is expected to substantially change the profile of new entrants to this class, and over time, change the profile of the class.
- The lifetime cost for this class is \$98bn, which is \$3bn above the rebased 2017 lifetime cost. The changes here are largely driven by a large change in the population following the one-off increase in entrants above. Reductions in average lifetime cost relating to income support can also be seen, as for the other classes.

Recent and projected trends for this class

There were 652,000 people in the Non IS Other class in the 2018 model population. This represents 2.6% of the population of Australia which is an increase from 2.3% at the previous valuation, and 8.2% of current welfare recipients.

The following chart shows a breakdown of the number of people in the Non IS Other class by age and gender.

Figure 90: 2018 profile of people in class 9 – Non IS Other (age / gender)



From the graph, we can see there are three distinct groups within the class:

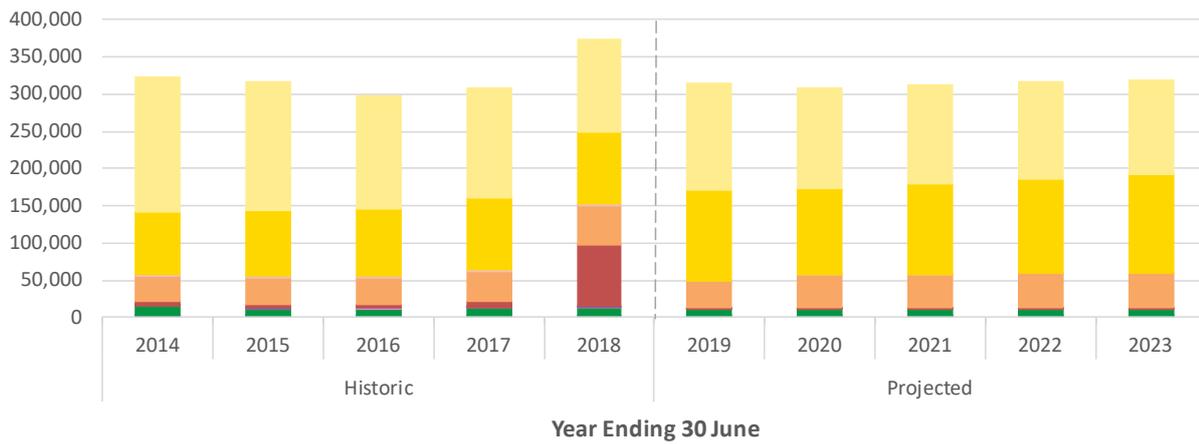
- a group receiving payments such as school fees allowance or assistance for isolated children payments during their youth;
- a group of Parenting age people who are receiving FTB, family or new parent payments for their first year (and who subsequently move on to class 7); and
- a group of people above age pension age who are typically receiving Energy Supplements.

Movements into and out of this class

Over the two years to 2017, an average of 302,600⁷ people (around 50.6% of the people in this class) per annum entered this class from another welfare class or from outside the welfare system. Over the last three years, an average of 309,300 people (around 50.0% of people in this class) per annum have transitioned out of the Non IS Other class.

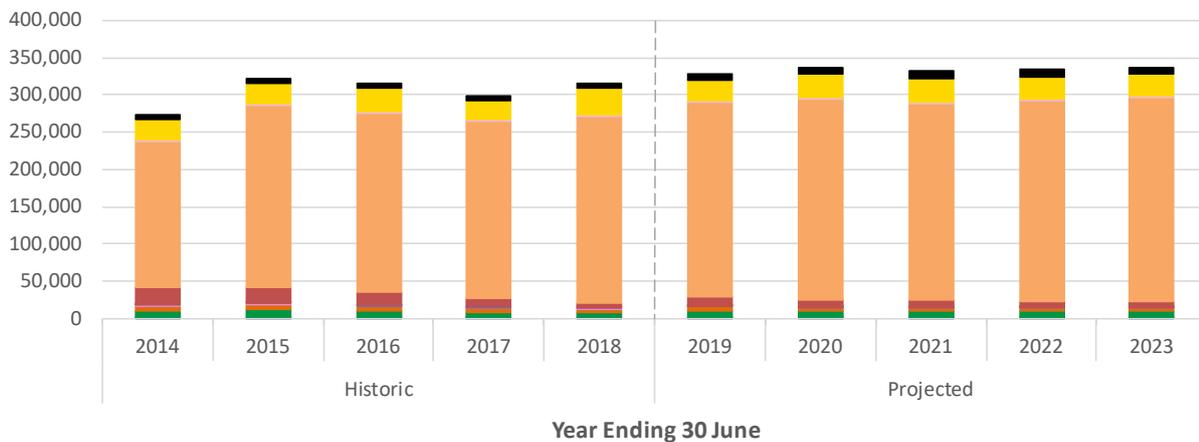
The following chart shows the breakdown of these transitions by previous / destination class and year of transition.

Figure 91: Number of people entering class 9 – Non IS Other (by class entered from)



Notes the entries into class 9 in 2017/18 are impacted by data maturity and are likely understated. An adjustment has been carried out in order to increase the entries in the 2018/19 year of the projection, in order to make an allowance for this. Entries into class 9 in 2017/18 are also impacted by the pension assets test changes.

Figure 92: Number of people exiting class 9 – Non IS Other (by class exited to)



- Class key:
- 1 - Studying
 - 2 - Working Age
 - 3 - Parents
 - 4 - Carers
 - 5 - Disability Support
 - 6 - Pension Age
 - 7 - Non IS Family
 - 8 - Non IS Carer
 - 9 - Non IS Other
 - 10 - Previous Welfare Recipient
 - 11 - Dead
 - 12 - Rest of Aust. Population

We can see that people predominately enter this class directly from outside the welfare system, and around half of entrants to this class have not received a welfare payment in the 16 years of data available (and therefore enter from the rest of population class). People above pension age have predominately entered due to an entitlement to the Energy Supplement through their Seniors Health Card. The people who enter this class

⁷ This figure excludes the experience of the 2018 year which is significantly impacted by data maturity and the pension assets test.

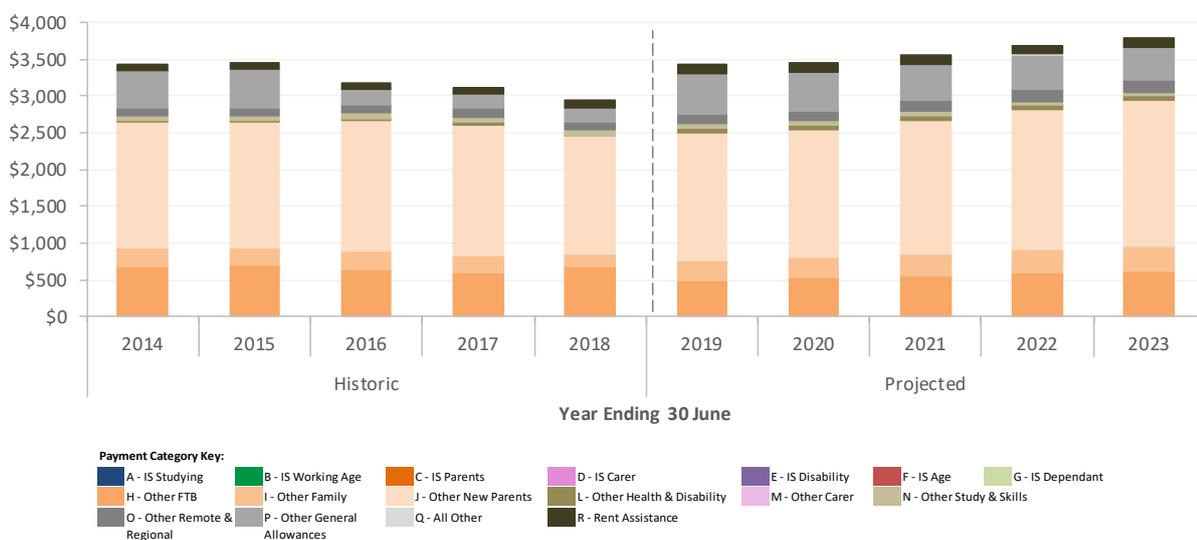
from other active classes typically do so from the Non IS Family class. There are a large number of transitions from Age Pension into this class in 2017/18 as a consequence of the changes to the pension assets test, which meant that around 100,000 were no longer eligible for the Age Pension.

The entries and exits above mainly relate to the group below retirement age. Most people who leave this class transition into class '7 Non IS Family'. This is due to the one year timing lag (explained in section 7.1), which leads this class to be a gateway into class 7 for people aged 20 to 60. Above retirement age, most people leaving this class transition into class '6 Age Pension'.

Payments received

During 2017/18, people in this class received a total of \$1.9 billion. This is 1.7% of the total payments made in 2017/18. The charts below show the average amount paid in a year to each person in this class, split by the categories of payments received.

Figure 93: Average payments per person in class 9 – Non IS Other (restated to 2017/18 \$ values)



It is worth noting that the average payment for 2017/18 is somewhat understated. This is due to the impact of the data maturity issue discussed earlier.

The average payment made in 2016/17 (noting the understating of 2017/18) was \$3,100 with a notable contribution from new parents payments, as people typically enter this class when they first have children. There are higher average payments being made to women (\$4,500) than men (\$1,500) as a result of women claiming more new parents, FTB and other family payments.

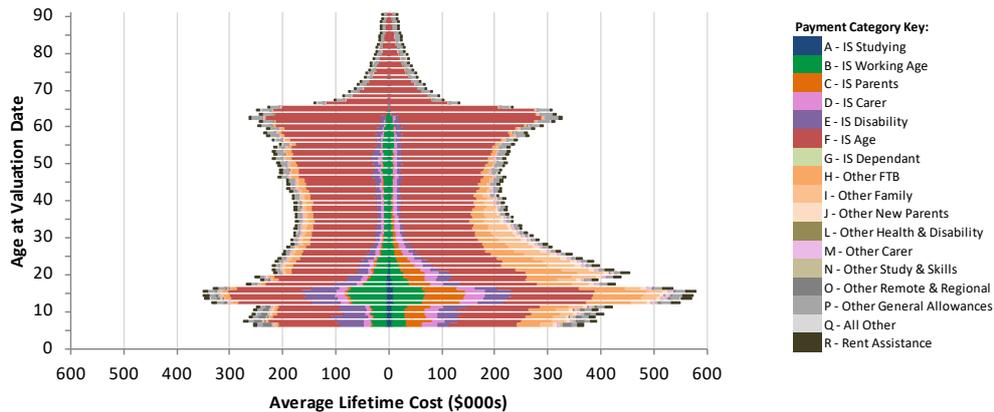
Changes in the average payment profile can be seen over the first few years of the projection. The increased use of supplements largely reflects the changing profile of this class due to the circa 100,000 people entered this class from Age Pension following the pension assets test change; as well as a changing profile of older recipients due to the closing of the carbon tax compensation from 2017.

What does the model show for current people in the Non IS other class?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **\$98bn** (or 1.7% of the total lifetime cost). The average lifetime cost for people in this class is **\$151,000**. This is the lowest of all the active classes. The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 94: Average lifetime cost by age and gender (class 9)



The above chart illustrates the distinct average lifetime cost for the three distinct groups which make up this class (those above pension age, those aged under 20, and those in between).

- The older group have relatively low average lifetime costs and these typically reflect their low chance of moving onto the Age Pension payment at some point in the future.
- For the people in the 20 to 65 age bracket the average lifetime cost is dominated by the FTB, family and Age Pension payments and is similar to that seen for the non IS family class. In this age range these two non IS classes contain people with a very similar mix of characteristics and so the cost similarity is unsurprising.
- For the group below age 20 the family payment categories make a lower contribution to the cost but there are larger elements from the income support payment types. This group have a greater chance of moving into these payments as they grow older than the other people in the class (who, by definition, are not currently getting any income support payments).

The table below outlines the average lifetime cost for 30 to 39 year olds currently receiving Non IS Other payments, split by key characteristics. We have selected a set age group to reduce the effect of age on the future lifetime cost. It is important to note that some characteristics serve as proxies for more fundamental socio-economic factors, and as such, they may not necessarily be the underlying cause of any differences observed in the average lifetime costs of individuals. Further, the variations and relativities to the average lifetime cost that have been shown may differ for other age bands.

Table 39: Average lifetime cost for 30 to 39 year old Non IS Other recipients split by key characteristics

	Number of people	Number of people as % of cohort	Average lifetime cost (\$)	Average lifetime cost relative to cohort
Total	150,000	100%	216,000	100%
Number of children				
- No children	26,000	18%	202,000	94%
- 1 child	75,000	50%	223,000	104%
- 2 children	34,000	23%	203,000	94%
- 3+ children	15,000	10%	231,000	107%
Age of youngest child				
- No children	26,000	18%	202,000	94%
- New born	65,000	44%	221,000	103%
- 1-6 Years old	48,000	32%	214,000	99%
- 7-18 Years old	11,000	7%	222,000	103%
Marital status				
- Single	9,000	6%	297,000	138%
- Partnered	141,000	94%	210,000	98%
Class before entering '9 Non IS Other'				
- Income support	4,000	2%	274,000	127%
- Non income support	25,000	17%	215,000	100%
- Previous client / non client	121,000	81%	214,000	99%
Geography – socio-economic area grouping				
- Lowest 20% (most disadvantaged)	20,000	14%	254,000	118%
- 20% to 40%	27,000	18%	234,000	109%
- 40% to 60%	34,000	23%	219,000	101%
- 60% to 80%	36,000	24%	203,000	94%
- Highest 20% (least disadvantaged)	34,000	22%	188,000	87%

From the table above we can see that for current Non IS Other recipients in this age range:

- Those with children have a higher average lifetime cost compared to those who don't.
- Those with newborn children have a higher average lifetime cost.
- Single welfare recipients have a higher average lifetime cost compared to partnered welfare recipients.
- Whilst the majority of those currently receiving Non IS Other welfare payments weren't receiving welfare payments previously, the small proportion that were previously receiving income support payments have a higher average lifetime cost.

Change in lifetime costs since the 2017 valuation

The lifetime cost for the people in this class is \$98bn, an increase of \$3bn (3.0%) compared to the rebased 2017 valuation. This was driven by a significant increase in the number of people in the class, partially offset by a decrease in the average cost:

- The number of people in this class has increased by 16.6% since the previous valuation. This is mainly driven by an increase in people entering class 9 above pension age as a result of movements into this class from Age Pension, following changes in Age Pension eligibility.
- The average cost has decreased by \$20,000 (-13.6%) since the previous valuation. A significant part of this reduction is from including the group of new entrants from the Age Pension class who are above retirement age and have a much lower average lifetime cost than younger groups. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 40: Breakdown of change in average lifetime cost for class 9 by payment category

	Total	Income Support		Non Income Support ¹	
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-17 Total Lifetime Cost	\$72bn				
Jun-17 Total Lifetime Cost – rebased ²	\$96bn				
Jun-18 Total Lifetime Cost	\$98bn				
Change in Total Lifetime Cost ²	+\$3bn (+3.0%)				
Change due to People in Class	+16.6%				
Change due to Average Lifetime Cost ²	-\$20k (-13.6%)	-\$8k	-\$11k	-\$3k	+\$1k
- Impact of change in inflation	+\$4k	<\$1k	+\$2k	<\$1k	<\$1k
- Impact of Age Pension forecast	-\$3k	<\$1k	-\$2k	<\$1k	<\$1k
- Impact of other changes	-\$21k	-\$8k	-\$11k	-\$3k	+\$1k

Notes:

- Note that payment categories H, I and J have been included in family supplements and the remaining non income support payment categories in other supplements.
- The June 2017 rebased Lifetime Cost represents a recalculation of the June 2017 lifetime cost, but using a discount rate of 5% p.a. for consistency with the June 2018 results. All changes are shown relative to this rebased lifetime cost.

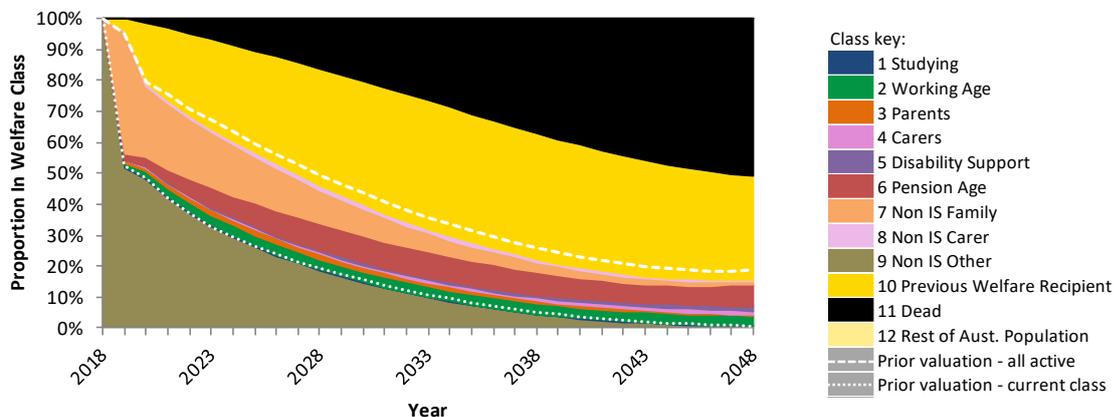
The decrease in average cost is driven by a decrease of the projected use of pre-retirement income support, a flow on decrease to the likelihood of subsequently transitioning to Age Pension, a further decrease in projected Age Pension use as a result of the change to the Age Pension forecast, and a decrease in the projected utilisation of family supplements. All of these will be driven by the change in profile mix of the class.

These decreases have been mostly offset by an increase in the cost of future payments as a result of inflation.

Future outcomes

In developing the valuation results the projection model also produces information on the expected transitions for people out of each class, as shown below.

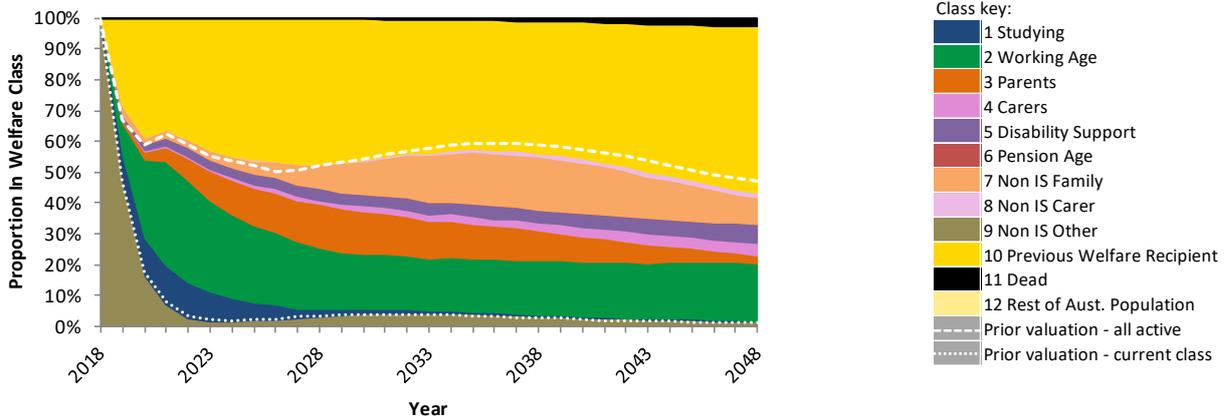
Figure 95: Expected future trajectory for people in class 9



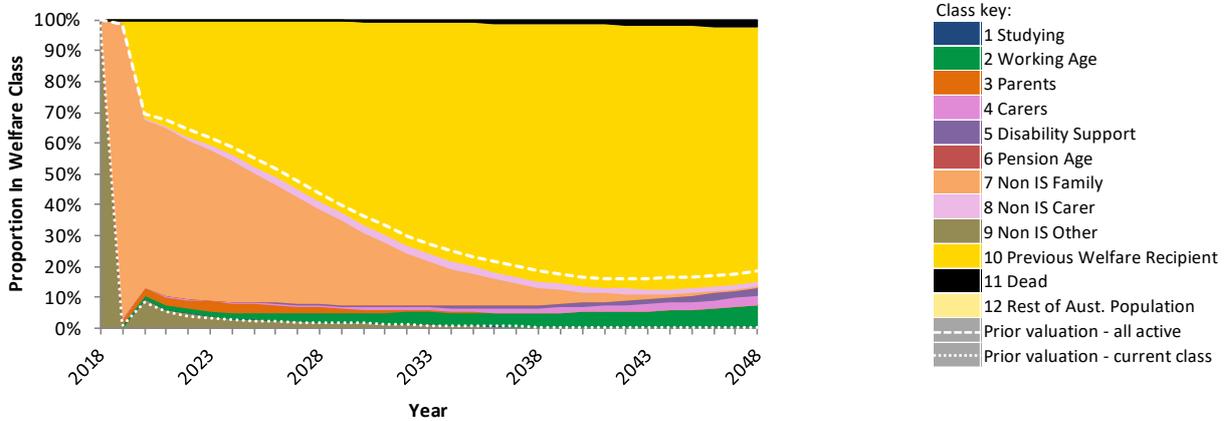
These results aggregate the expected trajectories of the distinct sub groups within this class each of whom would be expected to have very different future life trajectories. We have illustrated this below by showing the trajectories for people within different selected age bands.

Figure 96: Expected future trajectory for people in class 9 – by age band

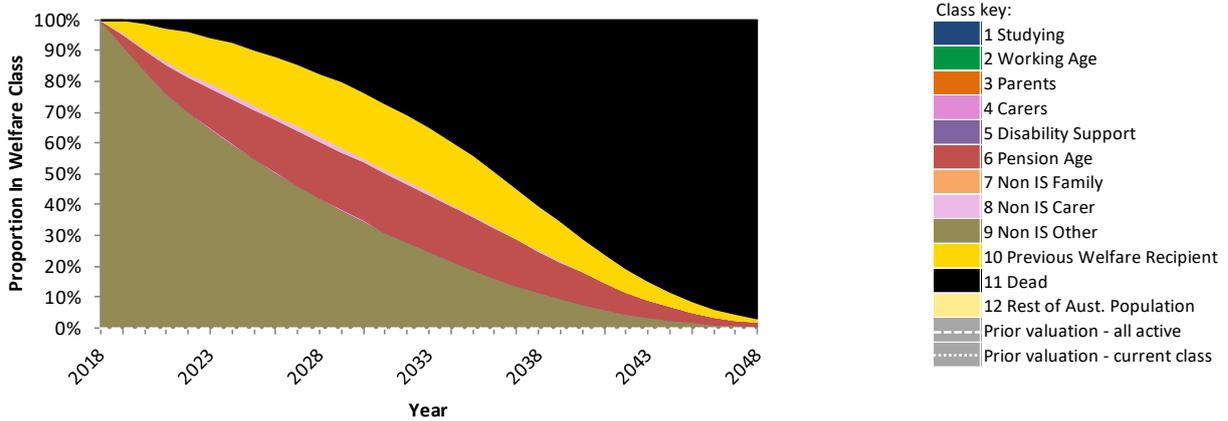
Age 15 to 19



Age 30 to 34



Age 70 to 74



The trajectory results support the previous observations, showing that:

- For people aged 15 to 19, in five years, only around 2% of people are projected to be in this class, while approximately 52% are projected to be in receipt of an income support payment, and 43% are projected to be out of the welfare system. In 10 years over 40% are projected to be in receipt of an income support payment. This recognises that this is a relatively disadvantaged group.
- For people aged 30 to 34, nearly everyone transitions into class 7 in the first projection year as expected from the class definitions. In the second year approximately 30% are projected to be out of the welfare system reflecting a population who does not continue to receive family related payments. The trajectory

after these first couple of years closely resembles that of current class 7 recipients although the expected duration on family payments is longer reflecting the younger age profile of this group. In five years, around 5% of people are projected to be in receipt of an income support payment, while approximately 50% are projected to be in class 7.

- For people aged 70 to 74, relatively few of the surviving people are projected to leave the welfare system reflecting the grandfathering of energy supplement payments for the majority of this group. In five years, around 65% of the current class are projected to be in this class (having persisted for the entire period or exited and returned), while approximately around 13% are projected to be in receipt of the Age Pension, and around 22% are projected to be out of the welfare system (including deaths).

Duration

The average future life expectancy for the Non IS Other class is **36** years. The table below provides a summary of the expected welfare system use of people currently in this class over this time. This has been developed by considering which classes people move into as they move through the welfare system over their lives.

Table 41: Average expected durations in welfare system for people currently in class 9

	Expected Years	Proportion of Future Lifetime
Years with some income support payments:		
- Not Age Pension (classes 1-5)	3	8%
- Age Pension (class 6)	9	24%
Years with non income support payments only	8	21%
Years not receiving any welfare payments	17	47%
Total	36	100%

8 Results for non-welfare recipients

In this section, we continue to discuss the profile of the classes and the key considerations for setting the assumptions, and the class-level lifetime cost results. This section covers the non welfare recipient classes.

There are 17.1 million people in the model who are non-welfare recipients representing 68.2% of the total model population and capturing 56.9% of the lifetime cost. Despite currently not being in receipt of welfare, every person in the population has some chance of accessing welfare over the course of their life and therefore all Australians have a non-zero average lifetime cost. In this section we discuss the lifetime costs for people who are not current welfare recipients (i.e. those in classes 10 and 12).

8.1 Previous welfare recipients

Key points

There were 4,816,000 people (or 19% of the Australian population) in the previous welfare recipients class at 30 June 2018 i.e. they have received welfare since the data started in July 2001, but are not currently receiving welfare. A third of the people in this class recently left the welfare system (within the last one to three years).

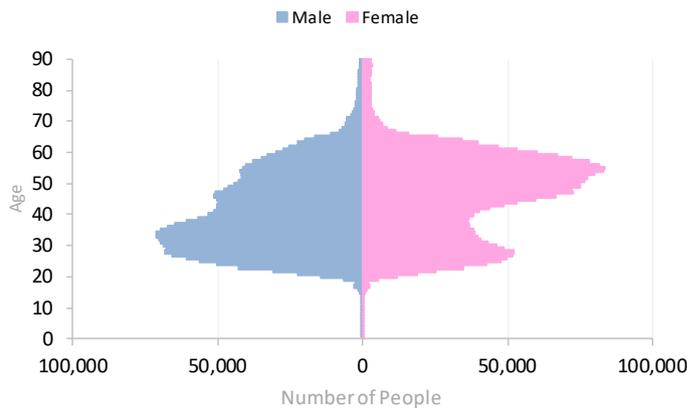
- Most of the previous welfare recipients were using Working Age or non income support family payments prior to exiting. The number of people leaving the system has been increasing over the last three years.
- The number of people re-entering the welfare system each year has been relatively stable (approximately 300,000 people per year) with most people re-entering onto Working Age or family payments. A slight decrease in this level was seen in the most recent year. This is despite the growth of this class.
- People whose parents have a more intensive history of welfare use tend to be more likely to re-enter the welfare system again after exiting.
- The lifetime cost for this class is \$900bn, which is \$90bn below the rebased 2017 lifetime cost. The reduction is driven by decreased assumed for future payment utilisation in light of recent decreases in both entries into income support and persistency on payments once in receipt of income support. This is partially offset by an increase in the number of people in the class.

Recent and projected trends for previous welfare recipients

There were 4,816,000 people in the previous welfare recipients class in the 2018 model population. This represents 19.2% of the population of Australia which is an increase from 18.2% at the previous valuation. Part of this increase is expected, reflecting the increasing length of time captured within the welfare dataset.

The following chart shows a breakdown of the number of people in the previous welfare recipients class by age and gender.

Figure 97: 2018 profile of people in class 10 – previous welfare recipients (age / gender)



From the chart, we can see that there are more men in this class at younger ages (20 to 40) and more women at older ages (40 to 60). This is most likely due to the higher use of family payments by women (as family payments are more often claimed by mothers rather than fathers) at younger ages resulting in a lower number of them being outside the system while young, and a higher number being previous recipients when they are then older.

Some of the people have been in the previous welfare recipients class for only a short period; others have been there for longer, up to the maximum of the 16 years available from the data provided. As successive years of data are added to the modelling dataset over time this class will continue to grow and the maximum time in class will increase. This increasing length of captured previous welfare use is likely to increase the number of people in the class at older ages, gradually changing the demographic mix of the class.

Movements into and out of this class

Over the last three years, an average of 599,700 people (around 13.1% of the people in this class) per annum exited their current welfare classes into this class. Over this same period an average of 288,500 people (around 6.3% of people in this class) per annum re-entered the welfare system by transitioning out of this previous welfare recipients class.

The following chart shows the breakdown of these transitions by previous / destination class and year of transition.

Figure 98: Number of people exiting the welfare system into class 10 – Previous Welfare Recipient (by class exited from)

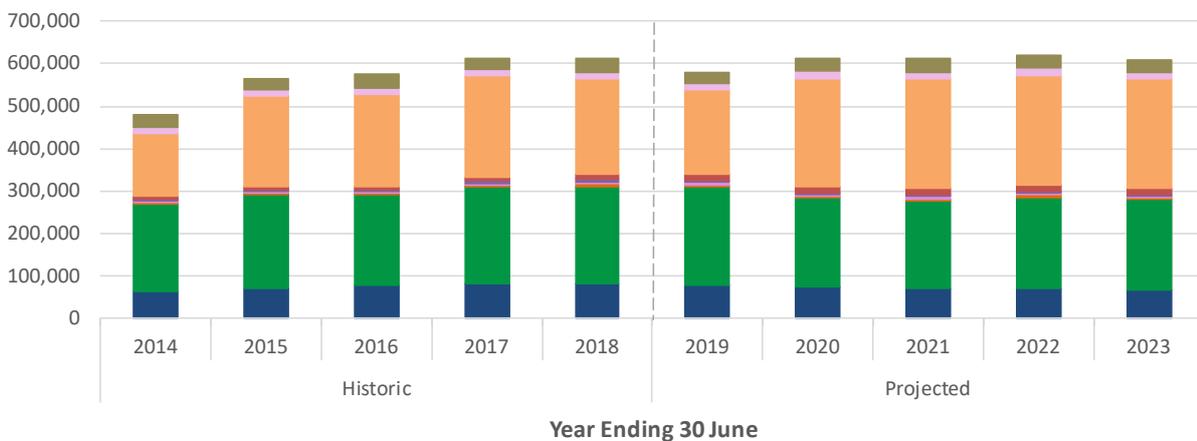
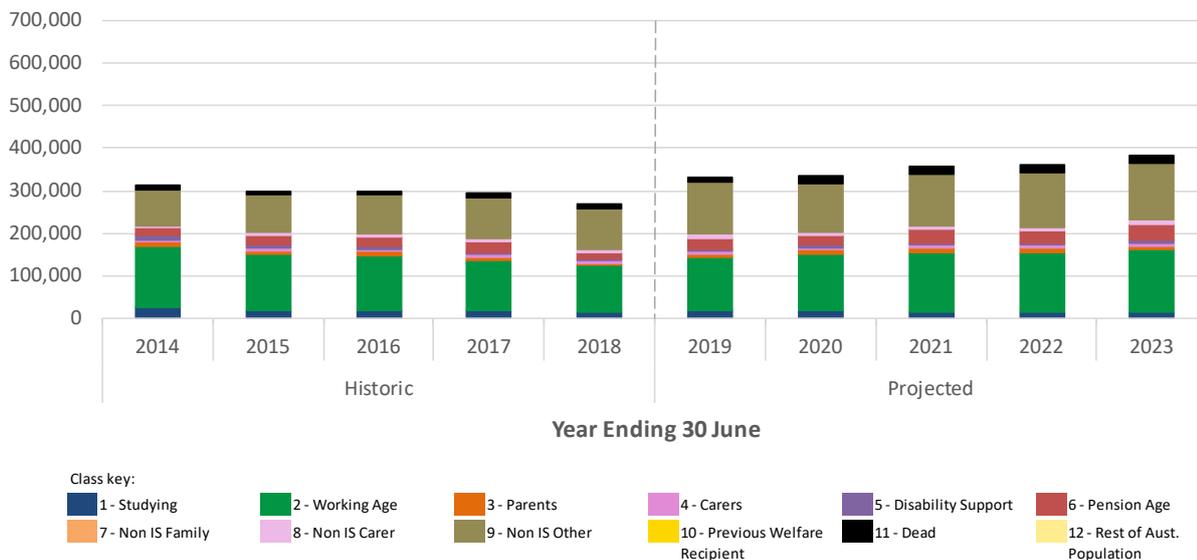


Figure 99: Number of people re-entering the welfare system from class 10 – Previous Welfare Recipient (by class entered into)



We can see that most people exiting the welfare system (in the upper chart) are leaving from ‘1 Studying’, class ‘2 Working Age’ and class ‘7 Non IS Family’. People in other classes are more likely to either not exit the welfare system (other than through death), or to transition to another class prior to exiting.

The main re-entries from this class (in the lower chart) are through movements into class ‘2 Working Age’ and ‘9 Non IS Other’ (most of those re-entering into class 9 subsequently transition to class ‘7 Non IS Family’).

Payments received

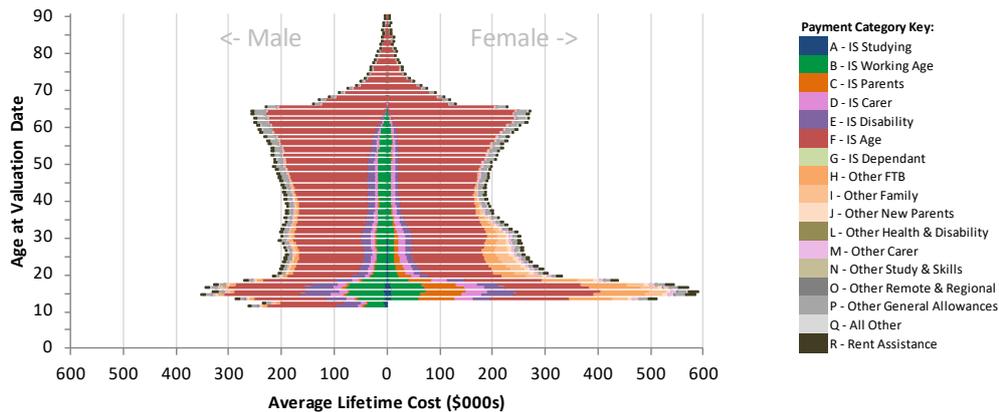
No payments are received while people are in this class. Payments may be received by this group upon re-entry into an active welfare recipients and these are covered in sections 6 and 7.

What does the model show for people currently in this class?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **\$900bn** (or **15.9%** of the total lifetime cost). The average lifetime cost for people in this class is **\$187,000**, with the lifetime cost being higher for people who have been out of the welfare system for 1 to 3 years (**\$211,000**) than those people who have been out for longer (**\$175,000**). The variation in average lifetime cost by age and gender is illustrated in the figure below, which is based on exits in the last 3 years only.

Figure 100: Average lifetime cost by age and gender (class 10) – based on exits in last 3 years



The most substantial part of this average lifetime cost for both genders is for the Age Pension although there are contributions from all payment categories.

For women up to around age 40 there are significant contributions from FTB and other family payments. For people in their early forties and above, the differences between the costs for men and women are small (women have a slightly higher lifetime cost due to higher expected longevity).

The average lifetime cost pyramid shows a significant change at around age 65 with much lower costs for older people:

- For people below age 65.5 - the Age Pension component of the average lifetime cost is significant as there is a high chance of the people moving onto the Age Pension as they reach pension age.
- For people above age 65.5 - to be above age 65.5 and be in this class they cannot be receiving Age Pension at present. This means they are far less likely to receive the Age Pension in future than a typical person in the population and hence have a lower average lifetime cost.

For people significantly above age 65.5 the average lifetime costs reduce year on year as the future lifetime is shorter and the chances of moving into the Age Pension class at a future point in time are even lower.

There is also a significant increase in lifetime cost for those below age 20. This is a small group of people who have received benefits during their childhood and, on average, are highly disadvantaged and have a high likelihood of needing greater support in future.

The table below outlines the average lifetime cost for 20 to 25 year olds who are previous welfare recipients, split by key characteristics. We have selected a set age group to reduce the effect of age on the future lifetime cost. It is important to note that some characteristics serve as proxies for more fundamental socio-economic factors, and as such, they may not necessarily be the underlying cause of any differences observed in the average lifetime costs of individuals. Further, the variations and relativities to the average lifetime cost that have been shown may differ for other age bands.

Table 42: Average lifetime cost for 20 to 25 year old previous welfare recipients split by key characteristics

	Number of people	Number of people as % of cohort	Average lifetime cost (\$)	Average lifetime cost relative to cohort
Total	399,000	100%	227,000	100%
Marital status				
- <i>Single</i>	331,000	83%	229,000	101%
- <i>Partnered</i>	68,000	17%	216,000	95%
Highest educational attainment recorded				
- <i>Year 10 or less</i>	28,000	7%	245,000	108%
- <i>Year 11</i>	18,000	5%	245,000	108%
- <i>Year 12</i>	175,000	44%	225,000	99%
- <i>Certificate</i>	84,000	21%	248,000	110%
- <i>Diploma</i>	28,000	7%	219,000	97%
- <i>Bachelors</i>	57,000	14%	196,000	86%
- <i>Postgraduate</i>	8,000	2%	191,000	84%
Number of children				
- <i>No children</i>	374,000	94%	226,000	100%
- <i>1 child</i>	16,000	4%	240,000	106%
- <i>2 children</i>	7,000	2%	242,000	107%
- <i>3+ children</i>	2,000	1%	258,000	114%
Level of parental welfare dependence				
- <i>None (0%)</i>	150,000	38%	216,000	95%
- <i>Some (1%-35%)</i>	98,000	25%	227,000	100%
- <i>High (36%-80%)</i>	81,000	20%	234,000	103%
- <i>Very high (81%+)</i>	70,000	18%	241,000	106%
Years in pay class				
- <i>1 Year</i>	122,000	31%	237,000	104%
- <i>2-3 Years</i>	156,000	39%	234,000	103%
- <i>4-5 Years</i>	73,000	18%	210,000	92%
- <i>6+ Years</i>	48,000	12%	202,000	89%
Geography – socio-economic area grouping				
- <i>Lowest 20% (most disadvantaged)</i>	79,000	20%	264,000	117%
- <i>20% to 40%</i>	73,000	18%	246,000	109%
- <i>40% to 60%</i>	76,000	19%	228,000	101%
- <i>60% to 80%</i>	81,000	20%	210,000	92%
- <i>Highest 20% (least disadvantaged)</i>	91,000	23%	193,000	85%

From the table above we can see that for previous welfare recipients:

- Single individuals have a higher average lifetime cost compared to partnered individuals.
- In general, those with a lower level of educational attainment have a higher average lifetime cost.
- Noting that the majority of previous welfare recipients do not currently have children, for the small proportion of individuals that do currently have children, in general they have a higher average lifetime cost.
- Those with a higher level of parental welfare dependence have a higher average lifetime cost.
- Those who have been out of the welfare system for a shorter period of time have a higher average lifetime cost.

Change in lifetime costs since the 2017 valuation

The lifetime cost for the people in this class is \$900bn, a decrease of \$90bn compared to the rebased June 2017 valuation. This was driven by a decrease in the average cost, partially offset by an increase in the number of people in this class:

- The number of people in this class has increased by 7.1% (from 4.5m to 4.8m) since the previous valuation. This increase is largely a result of having one year of extra history in our data which means there is likely a larger group of people we have been able to identify as being previous welfare recipients. This effect will continue at future valuations.
- The average cost has decreased by \$33,000 (16.2%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 43: Breakdown of change in average lifetime cost for class 10 by payment category

	Total	Income Support		Non Income Support ¹	
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-17 Total Lifetime Cost	\$735bn				
Jun-17 Total Lifetime Cost – rebased ²	\$990bn				
Jun-18 Total Lifetime Cost	\$900bn				
Change in Total Lifetime Cost ²	-\$90bn (-9.1%)				
Change due to People in Class	+7.1%				
Change due to Average Lifetime Cost ²	-\$33k (-16.2%)	-\$8k	-\$21k	-\$1k	-\$3k
- Impact of change in inflation	+\$5k	<\$1k	+\$3k	<\$1k	<\$1k
- Impact of policy changes	-\$5k	<\$1k	-\$5k	<\$1k	<\$1k
- Impact of other changes	-\$33k	-\$9k	-\$20k	-\$2k	-\$3k

The decrease in average cost is driven by:

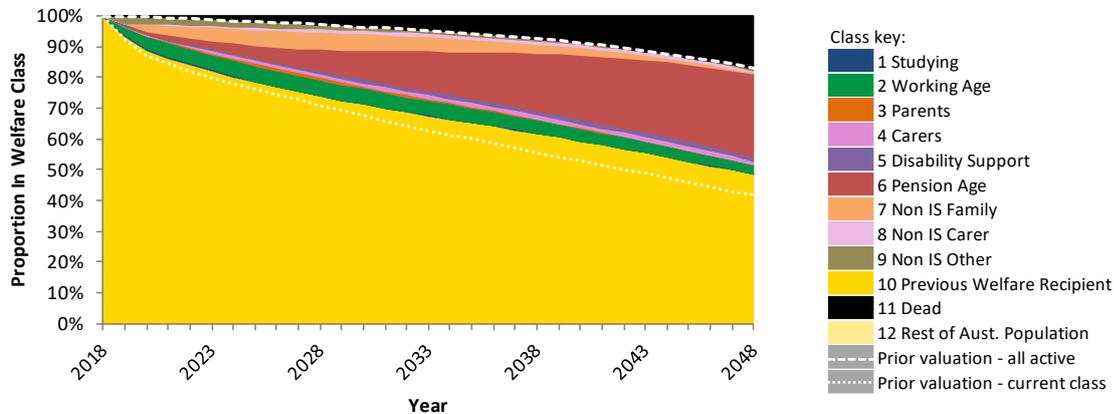
- a decrease of the projected use of pre-retirement income support, reflecting the recent experience where re-entrant numbers have been stable despite the class growing;
- a flow on decrease to the likelihood of subsequently transitioning to Age Pension;
- a further decrease in projected Age Pension use as a result of the change to the Age Pension forecast; and
- a decrease in the projected utilisation of both family supplements and other supplements, in part as a result of a decrease in projected entries.

These decreases have been mostly offset by an increase in the cost of future payments as a result of inflation.

Future outcomes

In developing the valuation results the projection model also produces information on the expected transitions for people out of each class, as shown below.

Figure 101: Expected future trajectory for people in class 10



Some observations we can make based on our analysis are that:

- The pattern for this trajectory chart is different to most of the active classes seen in sections 6 and 7. In particular a relatively high proportion are expected to still be in the current class in each future year.
- In 10 years around 26% of the people currently in class 10 are projected to be in an active class. Those who left the system recently (in the 1 to 3 years prior to 30 June 2018) are expected to re-enter the active welfare system at a higher rate (29%) compared with those who exited longer ago (24%). The highest entries are expected to be into '2 Working Age', '6 Age Pension' and '7 Non IS Family'.
- For most of this group, if they receive an income support payment in future it is most likely to be the Age Pension.

The forecast likelihood of re-entering the welfare system has reduced at this valuation. This reflects the recent experience and model refinements which improve our understanding of the profile of people in this class.

Duration

The average future life expectancy for the Previous Welfare Recipient class is **46** years. This reflects that the age profile of this class is well distributed across most pre-retirement ages.

The table below provides a summary of the expected welfare system use of people currently in this class over this time. This has been developed by considering which classes people move into as they move through the welfare system over their lives.

Table 44: Average expected durations in welfare system for people currently in class 10

	Expected Years	Proportion of Future Lifetime
Years with some income support payments:		
- Not Age Pension (classes 1-5)	3	6%
- Age Pension (class 6)	13	28%
Years with non income support payments only	2	4%
Years not receiving any welfare payments	28	62%
Total	46	100%

8.2 Rest of the Australian population

Key points

There were 12,266,000 people (or 49% of the Australian population) in the rest of the Australian population class at 30 June 2018. This includes all people who have never used welfare (or not used welfare since July 2001, when the data started).

- When entering the system for the first time, most people initially receive student, Working Age or family payments if they enter before retirement age; or Age Pension payments if they enter after retirement age.
- People whose parents have a more intensive history of welfare use tend to be more likely to enter the welfare system earlier.
- The lifetime cost for this class is \$2,323bn, which is \$385bn below the rebased 2017 lifetime cost. As with the previous welfare recipient class, the reduction is driven by decreased assumptions for future payment utilisation in light of recent decreases in both entries into income support and persistency on payments once in receipt of income support. This is partially offset by an increase in the number of people in the class.

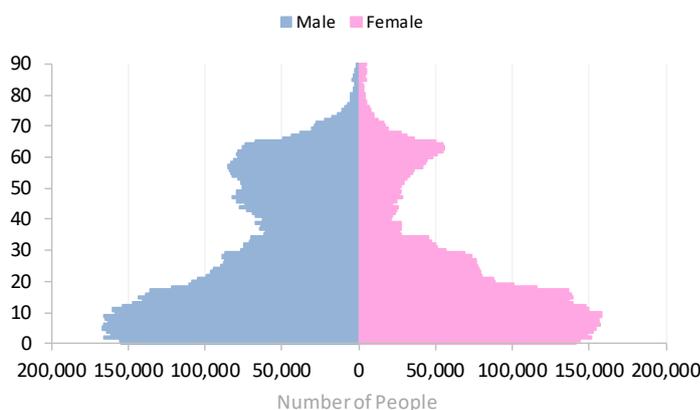
This group (class 12) is the remainder of the population, being the group of people who have not received any payments during the period covered by the data analysed – broadly the last 17 years. This group will include some people who were welfare recipients prior to that time alongside others who have never received a payment.

Recent and projected trends for the rest of the Australian population class

There were 12,266,000 people in the rest of the Australian population class in the 2018 model population. This represents 49.0% of the population of Australia which is a decrease from 49.2% at the previous valuation.

The following chart shows a breakdown of the number of people in the rest of the Australian population class by age and gender.

Figure 102: 2018 profile of people in class 12 – rest of the Australian population (age / gender)



Across all but the youngest ages there are more men in this class than women. This is likely because women are more likely to have received FTB or family payments and have been in the large Non IS Family class. If these people subsequently exit, they move into class 10 (previous welfare recipients) rather than return to class 12 (rest of the Australian population).

This feature of class 12 (that people cannot return to it once they have interacted with the welfare system) means that as successive years of welfare use data are added to the modelling dataset at future valuations the number of people in this class may shrink if the number of new-borns and migrants do not keep up with new welfare use.

Movements into and out of this class

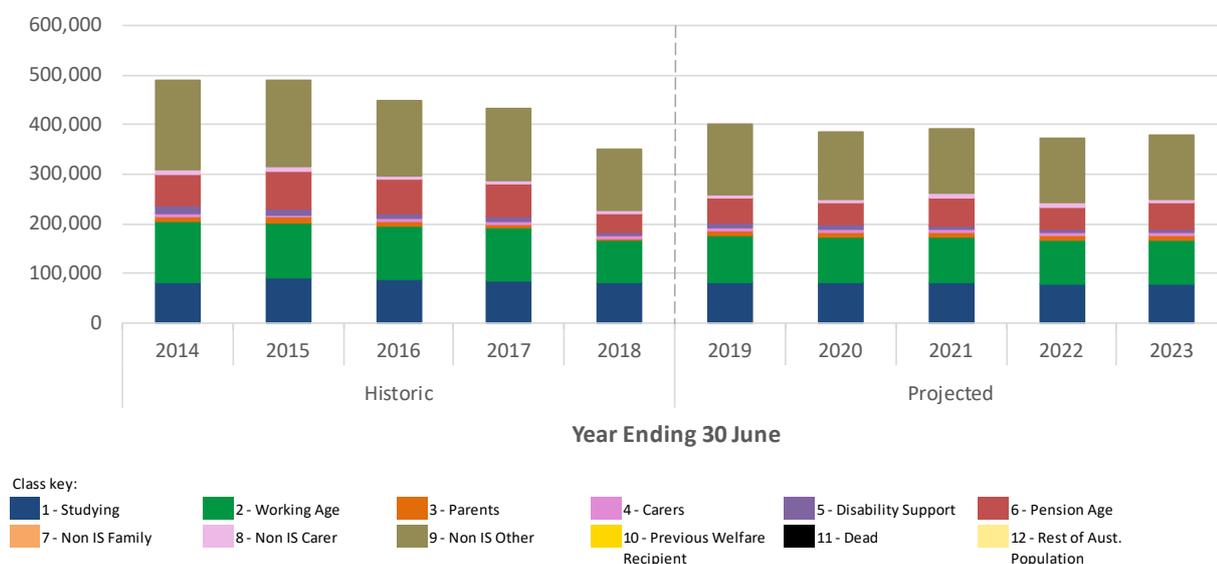
By definition there are no transitions into this class. However, from valuation to valuation the model population changes to reflect the profile of the Australian resident population after considering those people assigned to other classes (section 7) and this impacts on the number of people in this class.

As previously noted the model population includes all Australian residents at the valuation date and overseas welfare recipients who received a payment in the previous year. Between 30 June 2017 and 30 June 2018 we have estimated that the combined effect of births, deaths and net migration resulted in an increase in the population of around 380,000 people.

Over the last three years, an average of 410,400 people (around 3.4% of the people in this class) per annum have entered the welfare system by transitioning out of the rest of Australian population class.

The following charts show the breakdown of these transitions by destination class and year of transition.

Figure 103: Number of people entering the welfare system from class 12 – Rest of the Australian Population (by class entered into)



The main entries into the welfare system from this class are into class '1 Studying', '2 Working Age', '6 Pension Age' and '9 Non IS Other' (most of those entering into class 9 subsequently transition to class '7 Non IS Family'). A decreasing trend can be seen in entries over the last few years and in particular there has been a reduction in entries into Working Age and Pension Age payments in 2018. Part of this change is from the change in retirement age to 65.5 which has reduced the number of people attaining retirement age during the year. Notwithstanding this change, the number of entrants from class 12 has been lower in 2018 than previous years. Part of this may be because the data is not yet fully mature; this will particularly impact entrants to class 9.

The projected exits into the Pension Age class are lower for 2020 and 2022. This is the result of fewer people reaching Age Pension age during these years, as the Age Pension age transitions from age 65 to 67.

Payments received

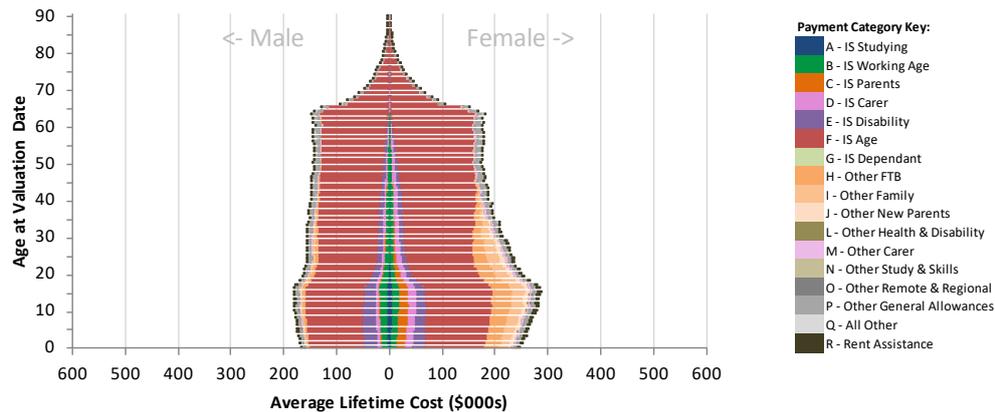
No payments are received while people are in this class. Payments may be received by this group upon entry into an active welfare recipient class and these are covered in sections 6 and 7.

What does the model show for people currently in this class?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **\$2,323bn** (or **41.0%** of the total lifetime cost). The average lifetime cost for people in this class is **\$189,000**. The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 104: Average lifetime cost by age and gender (class 12)



The most substantial part of this average lifetime cost for both genders is for the Age Pension although there are contributions from all payment categories.

For women up to around age 40 there are significant contributions from FTB and Parenting payments. For people in their early forties and above, the differences between the costs for men and women are small (women have a slightly higher lifetime cost due to higher expected longevity).

The average lifetime cost pyramid shows a significant change at around age 65 with much lower costs for older people:

- For people below age 65.5 - the Age Pension component of the average lifetime cost is significant as there is a high chance of the people moving onto the Age Pension as they reach pension age.
- For people above age 65.5 - to be above age 65.5 and still be in this class they cannot be receiving Age Pension at present. This means they are far less likely to receive the Age Pension in future than a typical person in the population and hence have a lower average lifetime cost.

For people significantly above age 65.5 the average lifetime costs reduce year on year as the future lifetime is shorter and the chances of moving into the Age Pension class at a future point in time are even lower.

The table below outlines the average lifetime cost for 20 to 25 year olds in the rest of the Australian population, split by key characteristics. We have selected a set age group to reduce the effect of age on the future lifetime cost. It is important to note that some characteristics serve as proxies for more fundamental socio-economic factors, and as such, they may not necessarily be the underlying cause of any differences observed in the average lifetime costs of individuals. Further, the variations and relativities to the average lifetime cost that have been shown may differ for other age bands.

Table 45: Average lifetime cost for 20 to 25 year olds in the rest of the Australian population split by key characteristics

	Number of people	Number of people as % of cohort	Average lifetime cost (\$)	Average lifetime cost relative to cohort
Total	1,086,000	100%	196,000	100%
Marital status				
- <i>Single</i>	797,000	73%	193,000	98%
- <i>Partnered</i>	289,000	27%	205,000	104%
Highest educational attainment recorded				
- <i>Year 10 or less</i>	97,000	9%	210,000	107%
- <i>Year 11</i>	53,000	5%	203,000	103%
- <i>Year 12</i>	362,000	33%	199,000	101%
- <i>Certificate</i>	243,000	22%	193,000	99%
- <i>Diploma</i>	99,000	9%	193,000	98%
- <i>Bachelors</i>	206,000	19%	189,000	96%
- <i>Postgraduate</i>	25,000	2%	190,000	97%
Number of children				
- <i>No children</i>	1,011,000	93%	194,000	99%
- <i>1 child</i>	49,000	5%	229,000	117%
- <i>2 children</i>	21,000	2%	227,000	116%
- <i>3+ children</i>	6,000	1%	244,000	125%
Geography – socio-economic area grouping				
- <i>Lowest 20% (most disadvantaged)</i>	157,000	14%	221,000	113%
- <i>20% to 40%</i>	179,000	17%	209,000	106%
- <i>40% to 60%</i>	211,000	19%	199,000	101%
- <i>60% to 80%</i>	252,000	23%	188,000	96%
- <i>Highest 20% (least disadvantaged)</i>	286,000	26%	180,000	92%

From the table above we can see that for the rest of the Australian population:

- Partnered individuals have a higher average lifetime cost compared to single individuals.
- In general, those with a lower level of educational attainment have a higher average lifetime cost.

Note that the majority of previous welfare recipients do not currently have children. For the relatively small proportion of this class that do currently have children, in general they have a higher average lifetime cost.

It is likely that there are circumstances (such as levels of income) which explain why there are people in this class who have children but have not used any welfare. This could be thought of as a kind of 'selection effect'. As such the profile of the people with children and the people without children may be quite different. These profile differences may affect the average costs shown in the table above for people with and without children.

Change in lifetime costs since the 2017 valuation

The lifetime cost for the people in this class is \$2,323bn, a decrease of \$385bn compared to the rebased 2017 valuation. This was due to a decrease in the average cost, partially offset by a small increase in the number of people in this class:

- The number of people in this class has increased by 1.0% since the previous valuation. This is the net impact of births, migration, deaths, and entries into the welfare system over the past year.

Although the overall population is growing we would not necessarily expect an increase in the numbers in this class as the longer time period covered by the data means we are now able to identify a greater proportion of previous welfare recipients and assign these people to class 10.

- The average cost has decreased by \$34,000 (15.3%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 46: Breakdown of change in average lifetime cost for class 12 by payment category

	Total	Income	Support	Non Income	Support ¹
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-17 Total Lifetime Cost	\$1,812bn				
Jun-17 Total Lifetime Cost – rebased ²	\$2,708bn				
Jun-18 Total Lifetime Cost	\$2,323bn				
Change in Total Lifetime Cost ²	-\$385bn (-14.2%)				
Change due to People in Class	+1.0%				
Change due to Average Lifetime Cost ²	-\$34k (-15.3%)	-\$9k	-\$19k	-\$3k	-\$3k
- Impact of change in inflation	+\$5k	+\$1k	+\$3k	<\$1k	<\$1k
- Impact of Age Pension forecast	-\$4k	<\$1k	-\$4k	<\$1k	<\$1k
- Impact of other changes	-\$35k	-\$11k	-\$18k	-\$3k	-\$3k

Notes:

- Note that payment categories H, I and J have been included in family supplements and the remaining non income support payment categories in other supplements.
- The June 2017 rebased Lifetime Cost represents a recalculation of the June 2017 lifetime cost, but using a discount rate of 5% p.a. for consistency with the June 2018 results. All changes are shown relative to this rebased lifetime cost.

The decrease in average cost is driven by:

- a decrease of the projected use of pre-retirement income support;
- a flow on decrease to the likelihood of subsequently transitioning to Age Pension;
- a further decrease in projected Age Pension use as a result of the change to the Age Pension forecast; and
- a decrease in the projected utilisation of both family supplements and other supplements, in part as a result of a decrease in projected entries.

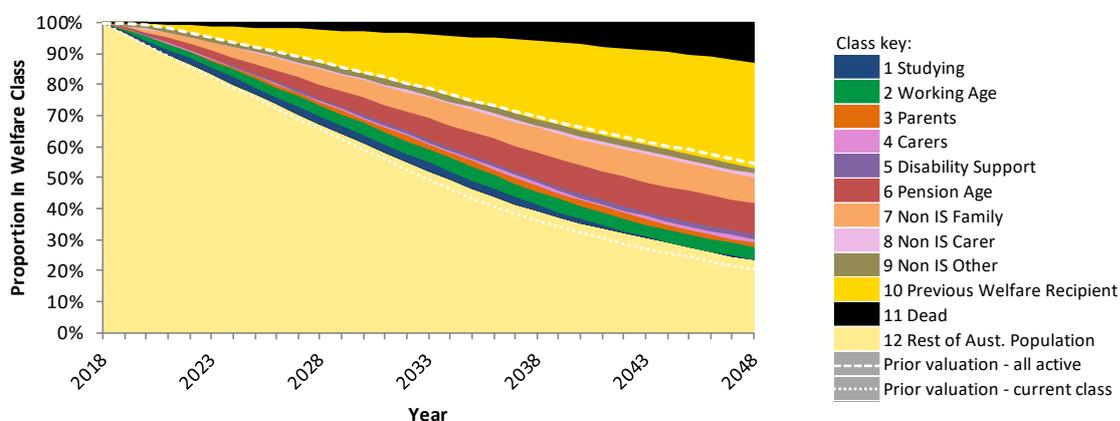
These decreases have been mostly offset by an increase in the cost of future payments as a result of inflation.

While the changes in assumptions underpinning these forecasts are relatively small, their effect compounds over time and has a significant impact for this group who are relatively young on average. This drives the change in average lifetime cost which, together with the lower number of people in this group, then leads to the substantial change in total lifetime cost.

Future outcomes

In developing the valuation results the projection model also produces information on the expected transitions for people out of each class, as shown below.

Figure 105: Expected future trajectory for people in class 12



Some observations we can make based on our analysis are that:

- The main difference between the trajectories for this group compared to that shown for the previous welfare recipients is likely driven by the difference in the age profiles. In particular class 12 contains a higher number of younger people and so the use of each different welfare classes is typically further into the projection.
- In five years, around 12% of the people currently in class 12 are projected to be in an active class. These people are expected to predominately be in classes '1 Studying', '2 Working Age', '6 Age Pension', and '7 Non IS Family'. Around 4% of people are projected to have entered an active class and then exited into class 10 by this point.
- In 20 years around 19% of this group are projected to be receiving an income support payment, with the majority projected to be in class '6 Pension Age'.

Duration

The average future life expectancy for the Rest of Australian Population class is **63** years. This reflects that there are a large proportion of young people in this class.

The table below provides a summary of the expected welfare system use of people currently in this class over this time. This has been developed by considering which classes people move into as they move through the welfare system over their lives.

Table 47: Average expected durations in welfare system for people currently in class 12

	Expected Years	Proportion of Future Lifetime
Years with some income support payments:		
- Not Age Pension (classes 1-5)	5	8%
- Age Pension (class 6)	13	21%
Years with non income support payments only	4	6%
Years not receiving any welfare payments	41	65%
Total	63	100%



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Appendix A Glossary

Actuarial valuation

Estimation of the lifetime cost to the Australian government of future social security payments using generally accepted actuarial principles.

Allowances

Allowances provide income support and access to a range of concessions for eligible Australians. The term Allowance is used by the Department to refer to income support payments that are generally at lower payment levels than Pensions.

Assumptions

Assumptions are the parameters that guide the model - these include 'macro' assumptions such as economic forecasts and demographic assumptions; and 'micro' assumptions such as probabilities of individuals moving into and through the welfare system based on various risk factors.

Group

In this report we have used the term group to refer to a group of people defined by a set of common characteristics in the model - for example, a group could be "females aged 20 to 24 who were in welfare class 'Studying' in 2014/15" or could be "male carers". Generally, groups will be defined by the model structure and individual's characteristics.

Data

Data refers to sets of information that are being used to inform the project.

Datasets

A set of values of qualitative (characters) or quantitative (numbers) variables that is data coded in a form suitable for using in analysis.

Data maturity

The model data is built by attributing payment information into the year in which a welfare recipient was entitled to a payment (which may differ in some cases from the year when the payment was actually received). The data includes all information known and recorded up to 3 months after the valuation date at 30 September, which is also the 'as known at' date for the data. In some cases further information about a previous entitlement year will only be known at a later date, and the currently known data is said to be immature in these cases. The main maturity issues noted in the valuation relate to the latest entitlement year and a key example is FTB which is received through the tax system and is often only claimed after the end of the year of entitlement. The model makes various adjustments to allow for the impact of data maturity.

Discounting

The process of determining the present value of a payment or a stream of payments that is to be received in the future. Given the time value of money, a dollar is worth more today than it would be worth tomorrow given its capacity to earn interest.

Duration on welfare

The number of financial years in which an individual has received a welfare payment. This includes income support payments as well as non income support payments.

Dynamic

A term we are using to describe information or data variables that change with the progression of time (e.g. a person's partner status).

Flow assumptions

This comprises the set of assumptions used to ascertain how each person's individual demographic and risk characteristics change as time progresses.

Income support payments

Income support payments provide for the basic living costs of adults, and are paid on a fortnightly basis. Income support payments are the primary form of financial assistance for individuals who are unable, or not expected, to fully support themselves. Examples include Age Pension, Newstart Allowance, Disability Support Pension, Carer Payment and Parenting Payment. Other supplementary payments are also available to assist people with other specific costs. For example, Family Tax Benefit Part A is provided for the direct costs of raising children and child care assistance is provided to assist with the costs of child care. For the purposes of this paper these payments are referred to as non income support payments.

Indexation

Indexation is a technique to adjust payments by means of an index, in order to maintain an equivalence in values across years. For example, indexing in line with price inflation, will maintain an equivalence of payments after indexation relative to purchasing power; while indexing in line with wage inflation, will maintain an equivalence of payments after indexation relative to community living standards.

Liability

In finance, the term liability is used to refer to general obligations to make future payments. The specific meaning varies depending on the person using the term and context of its use. Actuaries may also use this term to describe the net present value of the cash flows arising from future obligations.

Lifetime cost

For the investment model, the lifetime cost will be the net present value of all future welfare payments (to the in-scope population).

Average lifetime Cost (future)

The net present value of the payments that we expect to be made to an individual over their future lifetime. Note that these will be assessed for groups of similar individuals, not for specific people.

Method

The method refers to the description or specification of the process for selecting modelling techniques, taking the data, analysing it, developing or incorporating assumptions about the future, and projecting forward and summarising the expected welfare payments for each individual within the model population.

Model

The model refers to the set of computer programs, spreadsheets, formulae, techniques and tools that are being built to apply the method. In a sense, the model is intended to represent, in a mathematical way, what happens to people as they move in, through and out of the social support system based on various assumptions. The model is a collection of modules and sub-components that fit together in applying the method.

Model population

The model population is the set of individual person records used in the model. The model design allows the model to be run for either a sample of the population or the whole population. Where the model is run for the entire model population, and not a sample, we refer to this as the full population.

Mutual obligation requirements

A set of activities that must be completed by an individual in order to receive Newstart Allowance, Youth Allowance as a job seeker, Parenting Payment Single after the recipient's youngest child turns 6, and some types of Special Benefit. Welfare recipients may be granted either a permanent or a short-term exemption from these obligations in some situations, for example due to disability or a personal crisis.

Net Present Value

The sum of the present values of incoming and outgoing cash flows over a period of time.

Parental welfare dependence

A measure of the level of welfare dependence of a person's parents / guardians during the course of that person's childhood (up to the age of 15). For the purposes of this parental welfare dependence we have only considered the use of income support payments (excluding the Age Pension) by a person's parents / guardians.

Payment

A generic term used to describe all the different types of benefits which an individual can be paid. Includes Pensions, Allowances, Entitlements etc.

Payment assumptions

The assumptions which describe the payments which individuals receive given that they use a specific Payment category.

Payment categories

The groupings of individual payment types used for modelling purposes.

Payment types

A term used to describe the labels which have been assigned to all the underlying payments so they can be considered for modelling purposes. The assignment has been through a mapping process with around 2,000 underlying payments being identified by codes and these mapped to around 100 payment types.

Payment utilisation assumptions

The assumptions which describe the probabilities with which individuals use different Payment categories.

Pensions

Pensions provide income support and access to a range of concessions for eligible Australians. The term Pension is used by the Department to refer to income support payments that are generally at higher payment levels than Allowances.

Present Value

The present value is the value of an expected income stream determined as of the date of valuation. The present value is always less than or equal to the future value because money has interest-earning potential, a characteristic referred to as the time value of money.

Probability

Probability is the measure of the likelihood that an event will occur. Probability is quantified as a number between 0 and 1 (where 0 indicates impossibility and 1 indicates certainty). The higher the probability of an event, the more certain we are that the event will occur.

Projection

The use of the model to forecast the future payment experience of the population based on current statistics and trends.

Rebased June 2017 valuation results

The results from the June 2017 valuation, but adjusted to allow for the updated discount rate of 5% being used for the 2018 valuation. The change in discount rate is an external change which has no impact on the future cashflows. However it does have a significant impact on the net present value of the cashflows i.e. the lifetime cost. Rebasing the June 2017 valuation supports the comparability of the June 2017 and June 2018 results.

Risk characteristics

Measurable or observable factors or characteristics that are used to assign each individual to one of the risk classes of a risk classification system. Examples of risk characteristics in the context of the actuarial valuation model include age, gender, family situation and education status.

Risk classes

A set of risks grouped together under a risk classification system.

Risk classification system

The process of systematically arranging risks into groups or categories according to similar risk characteristics.

Risk factors

See risk characteristics.

SEIFA

Socio-economic Index for Areas. A product developed by the ABS that ranks areas in Australia according to relative socio-economic advantage and disadvantage.

Simulation

Simulation is the imitation of the operation of a real-world process or system over time. In the context of the actuarial valuation model, we will simulate how the payment system operates. Where the system is stochastic, multiple simulations may be used to show the range of possible outcomes.

Static

A term we are using to describe information or data variables that do not change over time. (e.g. a person's date of birth or country of birth).

Statistics

The study of the collection, analysis, interpretation, presentation, and organisation of data.

Stochastic

The term stochastic describes events or systems that are unpredictable due to the influence of random variables. A stochastic model will not produce the same output from a given starting condition or initial state even if run in the same way.

Valuation

see Actuarial valuation

Valuation Date

The reference date for the actuarial valuation. The valuation will consider the lifetime cost as at the valuation date for all payments after the valuation date.

Valuation Results

The summarised outputs from the model, which will be tailored to meet the needs of different users – for example, as well as the total reported lifetime cost, results may include average lifetime cost estimates for particular groups, projected payments for each of the next five years, projected numbers of “new entrants” to the social support system from different population segments.

Welfare class

The assignation of people into unique segments used within the model. There are 12 classes: 6 for income support recipients (Studying, Carers, etc.), 3 for people receiving payments but no income support and 3 for the rest of the population. Each person is assigned to the single most appropriate category for each financial year.

Welfare class assumptions

The assumptions which describe the probabilities with which individuals move between welfare classes.

Welfare dependence

Welfare dependence is used to describe the historical and / or expected future level of welfare use for a group of people. A group with high welfare dependence would either have high historical welfare use or high expected future welfare use.

Welfare system interaction

The receipt of a welfare payment (including both income support and non income support payments) by an individual.

Welfare utilisation assumptions

A term covering both the Welfare class and Payment utilisation assumptions.

Work capacity assessment

An assessment of an individual's level of functional impairment and work capacity. This is expressed in the data as the number of hours in a week they are capable of working.

Appendix B Policy changes

The following tables summarise the list of policy changes provided to us by the Department. The first table summarises policy changes which took effect prior to the previous valuation, while the second table summarises policies which are to take effect after the current valuation date.

Table 48: Policy changes which were legislated between 2011 and 2018 and took effect on or prior to 30 June 2018

Amendment	Year Effective	Description
Parenting Payment transitional arrangement Social Security Amendment (Parenting Payment Transitional Arrangement) Act 2011	2011	Changed ability to access transitional arrangements.
Work rule for Disability Support Pension Social Security and Other Legislation Amendment (Disability Support Pension Participation Reforms) Act 2012	2012	From 1 July 2012, all Disability Support Pension recipients can work up to 30 hours a week without having their payment suspended or cancelled.
Changes to the eligibility criteria for Youth Allowance (Other) and Newstart Allowance Social Security and Other Legislation Amendment (Income Support and Other Measures) Act 2012	2012	The maximum age for Youth Allowance for non-students and the minimum qualification age for Newstart Allowance increased from 21 to 22 years. The income free area value was increased from \$62 a fortnight to \$143 a fortnight and the working credit limit value was increased from \$1000 to \$3500 for all Youth Allowance (Other) recipients.
Clean Energy Advance (CEA)	2012	The Clean Energy Advance (CEA) was introduced in May 2012.
Clean Energy Supplement and other measures Clean Energy (Household Assistance Amendments) Act 2011	2012-2013	From 1 July 2013, the normal payment indexing arrangements and the Clean Energy Supplement (CES) began to deliver assistance related to carbon pricing. In addition, amendments were introduced for the Low Income Supplement, Essential Medical Equipment Payment, Single Income Family Supplement and aged care.
Family Tax Benefit and Youth Allowance Family Assistance and Other Legislation Amendment Act 2011	2012	The maximum age limit for a young person to qualify as a dependent child for Family Tax Benefit Part A (FTB-A) changed from aged under 25 to aged 21. This change aligns with the age of independence recognised in Youth Allowance. As at 1 January 2012, a young person is considered independent for Youth Allowance purposes once they turn 22.
Supporting Families with Teenagers	2012	From 1 January 2012, Family Tax Benefit Part A increased for eligible families with dependent 16-19 year olds who are undertaking full-time secondary study. The maximum rate increased by up to \$161.42 per child per fortnight, to \$214.06.
Removal of the grandfathering provisions and other measures Social Security Legislation Amendment (Fair Incentives to Work) Act 2012	2013	Grandfathering provisions for some Parenting Payment recipients were removed. For certain Newstart recipients there were changes to the eligibility for certain supplements and allowances, and to income taper rates.
New Income Support Bonus Social Security and Other Legislation Amendment (Income Support Bonus) Act 2013	2013	The Act creates a new Income Support Bonus to be paid to recipients of Newstart Allowance, Youth Allowance, Parenting Payment, Sickness Allowance, Austudy Payment, Special Benefit, ABSTUDY Living Allowance, Exceptional Circumstances Relief Payment, Transitional Farm Family Payment.
Austudy	2013	The maximum length of temporary absence was reduced.
Age / study rules for children for family assistance payments Social Security and Other Legislation Amendment (2012 Budget and Other Measures) Act 2012	2013	The maximum age of eligibility for FTB Part A is further reduced to 17 for children who have completed secondary education or a vocational equivalent. Children still in secondary study can continue to access FTB Part A until the end of the calendar year they turn 19.
Austudy	2015	The residence requirements changed for Austudy in Jan 2015 and temporary absence is no longer included.

Appendix B Policy changes

Amendment	Year Effective	Description
Child Care Rebate	2013	<p>The government changed the eligibility criteria for Jobs, Education and Training Child Care Fee Assistance (JETCCFA) program.</p> <p>From 1 July 2013 parents who were studying an enabling course (commonly referred to as bridging or foundation courses) may be eligible for Jobs, Education and Training Child Care Fee Assistance.</p> <p>Changes to the amount of JETCCFA subsidy could impact the amount of CCR that a child is entitled to. There were changes to JETCCFA eligibility and subsidy rules in 2013, 2014 and 2015.</p>
Disability Support Pension	Various 2014	<p>The tightening of eligibility criteria including, but not limited to, the 'Program of Support' rule in September 2011 and the revised Impairment Tables in January 2012.</p> <p>From 1 July 2014, DSP recipients under age 35 years, granted between 1 January 2008 and 31 December 2011, are subject to review of their impairment (using the revised Impairment Tables) and capacity to work. People with a severe or manifest disability will not be reassessed.</p> <p>People who have some capacity to work now or in the future will be helped to do this through programmes, services and activities.</p> <p>Under this reform, recipients under 35 will have a participation plan which includes activities that will genuinely assist in labour market participation. These activities could include Work for the Dole, job search, work experience, education and training, and connection with Disability Employment Services.</p>
Seniors Supplement Cessation Social Services and Other Legislation Amendment (Seniors Supplement Cessation) Act 2014	2014	<p>The Budget 2014 – 15 measure on the cessation of the Seniors Supplement – Commonwealth Seniors Health Card holders commenced on 20 June 2015.</p> <p>The Seniors Supplement for Commonwealth Seniors Health Card (CSHC) holders will no longer be paid beyond the June 2014 quarterly payment. From this date CSHC holders will continue to receive only the Energy Supplement each quarter.</p>
Child Care Rebate (indexation)	2014	<p>In the 2010-11 Budget, the Child Care Rebate annual cap was reduced to \$7500 and indexation was paused for four years. This arrangement was due to cease on 30 June 2014. Under this measure, the pause in indexation will continue for the 2014-15, 2015-16 and 2016-17 financial years.</p> <p>For the income years 2014-15, 2015-16, 2016-17, CCR entitlement is calculated as 50% of out-of-pocket child care expenses up to a limit of \$7,500 (capped) per child per year for approved child care. The annual indexation is paused for a further 3 income years. The first indexation of the \$7,500 maximum limit is to occur on 1 July 2017.</p>
Energy Supplement (ES) Social Services and Other Legislation Amendment (2014 Budget Measures No. 6) Act 2014	2014	<p>In September 2014, the Energy Supplement (ES) replaced the CES and indexing was removed.</p>
Other Measures Social Security Amendment (Supporting More Australians into Work) Act 2013	2014	<p>From 20 March 2014, the income free area that applied for certain payments was increased.</p> <p>From 1 January 2014, eligibility for the Pensioner Education Supplement (PES) was extended.</p>
Family Tax Benefit Part B - primary earner income limit reduced from \$150,000 to \$100,000 per year Social Services And Other Legislation Amendment (2014 Budget Measures No. 6) Act 2014	2016	<p>The FTB B higher income earner test changed to \$100,000 from 1 July 2015. Families with one parent earning over \$100,000 are not eligible for FTB B.</p>
Family Tax Benefit Part A - higher income free area per-child add-on abolished Social Services And Other Legislation Amendment (2014 Budget Measures No. 6) Act 2014	2016	<p>Remove the FTB Part A per-child add-on to the higher income free area for each additional child after the first.</p>
Changes to the treatment of defined benefit income streams (Age Pension) Social Services Legislation Amendment (Defined Benefit Income Streams) Act 2015	2016	<p>This introduces a 10% cap on the amount of a superannuant's defined benefit income that is excluded when applying the social security income test.</p>

Appendix B Policy changes

Amendment	Year Effective	Description
Student Start-up Loan (SSL) replaced the Student Start-up Scholarship (SSS) Labor 2013-14 Budget Savings (Measures No. 2) Act 2015	2016	For new recipients of Youth Allowance, Austudy and ABSTUDY who are in higher education full-time, the Student Start-up Loan (SSL) replaced the Student Start-Up Scholarship (SSS). SSL is a \$1,025 voluntary income contingent loan that can be paid twice per year at the beginning of each semester. SSS will be grandfathered for pre 1 January 2016 recipients and they will continue to receive it until they leave the student payment.
Portability of Family Tax Benefit Social Services Legislation Amendment (Family Measures) Act 2016	2016	Reduce to six weeks the period during which FTB Part A, and additional payments that rely on FTB eligibility, will be paid to recipients who are outside Australia.
No Job, No Pay Social Services Legislation Amendment (No Job, No Pay) Act 2015	2016	Immunisation requirements apply to children aged from 12 months up to 20 years for the FTB Part A Supplement, and for children aged under 20 years for Child Care Benefit and Child Care Rebate.
Cessation of the Large Family Supplement Social Services Legislation Amendment (Family Measures) Act 2016	2016	Cease the Large Family Supplement, which is a component of FTB Part A currently paid for the fourth and each subsequent FTB child in the family.
Remove Family Tax Benefit Part B to couple families with a youngest child aged 13 and over Social Services Legislation Amendment (Family Payments Structural Reform and Participation Measures) Act 2015	2016	Couple families with a youngest child 13 or over (excluding grandparents and great-grandparents) lose FTB Part B. Single parents, grandparents and great-grandparents with a youngest child between 13 and 18 will continue to receive FTB Part B.
Changes to Family Assistance Law affecting Child Care Benefit (CCB) approved Family Day Care (FDC) services. Aimed at ending 'child swapping' Child Care Benefit (Children in respect of whom no-one is eligible) Determination 2015	2016	FDC educators and their partners are no longer entitled to receive child care fee assistance for their own child's session of FDC if, on that same day, the FDC educator provides FDC for an approved FDC service, unless specified circumstances apply.
Changes to the parental means test (Impacting on Studying class, a small section of Working Age class and the non IS family class) Social Services Legislation Amendment (More Generous Means Testing For Youth Payments) Act 2015	2016	Family Actual Means Test (FAMT) and Family Assets Test (FAT) removed from Youth Allowance Parental Means Test arrangements.
Repeal of the income support bonus and the schoolkids bonus Minerals Resource Rent Tax Repeal and Other Measures Act 2014	2016	The final instalment of the Schoolkids Bonus will be paid in July 2016. The Income Support Bonus will continue until December 2016 with the last instalment paid in September 2016.
Changes to assets test Social Services Legislation Amendment (Fair and Sustainable Pensions) Act 2015	2017	From 1 January 2017, the pension assets test will be rebalanced. The assets test free areas will be increased to: <ul style="list-style-type: none"> • \$250,000 for a single homeowner (an increase of \$48,000) • \$375,000 for a homeowner couple (an increase of \$88,500) • \$450,000 for a single non-homeowner (an increase of \$101,500) • \$575,000 for a non-homeowner couple (an increase of \$142,000). The assets test "taper" (or withdrawal) rate for assets above the new free areas will be increased to 3.00 per fortnight for each extra \$1,000 in assessable assets (from the current rate of \$1.50, reversing the 2007 change). When announced in the 2015-16 Budget, the measure was to save \$2.4 billion across the forward estimates, the majority of which would be related to the Age Pension.
Cessation of Low Income Supplement Social Services Legislation Amendment (Low Income Supplement) Act 2015	2017	The low income supplement will cease on 30 June 2017.

Appendix B Policy changes

Amendment	Year Effective	Description
Changes to the parental means test Social Services Legislation Amendment (More Generous Means Testing For Youth Payments) Act 2015	2017	Treatment of Child Support maintenance income will be further reformed by applying a separate Maintenance Income Test, reducing payments for around 850 young people aged under 18. This test is similar to the one currently applying to Family Tax Benefit Part A.
Closing Carbon Tax Compensation Budget Savings (Omnibus) Act 2016	2017	New recipients of FTB or Seniors Health Cards will no longer be paid the Energy Supplement from 20 March 2017. Those people already receiving the Energy Supplement prior to 20 September 2016 will continue to receive it. Those people receiving the Energy Supplement after 20 September will stop receiving it from 20 March 2017 onwards.
Backdating provisions for Carer Allowance Budget Savings (Omnibus) Act 2016	2017	Changes the rules for backdating Carer Allowance to be in line with the rules for Carer Payment and other social security payments and concessions. Prior to this amendment Carer Allowance start date could be backdated earlier than the start date for Carer Payment.
Newly Arrived Residents - removal of exemptions Budget Savings (Omnibus) Act 2016	2017	Removes the exemption from the 104 week waiting period for new migrants who are family members of Australian citizens or long-term permanent residents. This change aligns the social security waiting period for working age payment for all newly arrived migrants (except for refugees, former refugees and their family members).
Parental Leave Pay - Consistent treatment for income support assessment Budget Savings (Omnibus) Act 2016	2017	Commonwealth Parental Leave Payments and Dad and Partner Pay payments under the Paid Parental Leave Act 2010 are now treated in the same way as employer-provided parental leave payments when determining eligibility for income support payments.
New treatments of Fringe Benefits for Family Assistance and Youth Payments purposes Budget Savings (Omnibus) Act 2016	2017	This changes the way fringe benefits are treated under the income tests for family assistance and youth income support payments and for other related purposes. "Adjusted fringe benefits total" is now defined to be gross rather than adjusted net value of reportable fringe benefits. There are a few exceptions to this for people working in particular industries.
Age Pension - aligning means testing Budget Savings (Omnibus) Act 2016	2017	From 1 Jan 2017 net rental income earned on the former principal residence of new entrants into residential aged care, is treated the same way under the pension income test as it is under the aged care means test, regardless of how the resident chooses to pay their accommodation costs.
Extend existing freezes on family payments Budget Savings (Omnibus) Act 2016	2017	Higher income free area (HIFA) for Family Tax Benefit (FTB) Part A and the primary earner income limit for FTB Part B are maintained for a further three years. Prevents indexation of income limits for FTB Part A, FTB Part B and Paid Parental Leave for the next three years (2017, 2018 and 2019). It is anticipated that there will be around 100,000 affected recipients.
General interest charge to debts Budget Savings (Omnibus) Act 2016	2017	Introduces a new interest charge scheme to former recipients of social welfare payments who have outstanding debts and have failed to enter into, or have not complied with, an acceptable repayment arrangement. The interest charge will apply to social security, family assistance (including child care), paid parental leave and student assistance debts.
Enhanced Welfare Integrity Budget Savings (Omnibus) Act 2016	2017	Debt recovery - allows departure prohibition orders to prevent targeted debtors from leaving the country. Also removes the six-year limitation on recovery of welfare debts, in line with arrangements applied by other government agencies.
One-off Energy Assistance Payment Social Services Legislation Amendment (Energy Assistance Payment & Pensioner Concession Card) Act 2017	2017	A one-off energy assistance payment made to approximately 3.8 million people.
Fee Cap for Grandparent Child Care Benefit (GCCB) or Special Child Care Benefit (SCCB) Child Care Benefit (Session of Care) Amendment Determination 2017	2017	Child care provided by an approved Family Day Care service is no longer a 'session of care' for Grandparent Child Care Benefit (GCCB) or Special Child Care Benefit (SCCB) purposes where reported fees involve amounts for which no individual has incurred a genuine liability, or the reported fees exceed a maximum amount of \$12.67 per hour (indexed to \$12.84 on 1 July 2017).
Age Limit for Child Care Benefit Child Care Benefit (Children in respect of whom no-one is eligible) Amendment Determination 2017	2017	Introduces restriction so that no one is eligible for child care fee assistance for Family Day Care provided to either an individual who has turned 18; or a child aged 14 years or older, or who attends secondary school, unless specific circumstances apply.

Appendix B Policy changes

Amendment	Year Effective	Description
Parental Income Test and family pool arrangements for Youth Allowance and ABSTUDY Social Services Legislation Amendment (More Generous Means Testing For Youth Payments) Act 2015	2017	Parental Income Test and family pool arrangements for Youth Allowance and ABSTUDY will take into account all dependent siblings in the family aged 0-19, who meet the definition of a Family Tax Benefit child. Around 13,700 families with dependent children in both the Family Tax Benefit Part A and youth systems will be eligible for an average increase in payment of \$43 per fortnight (\$1,118 per annum). Around 5,800 families, who currently miss out on payments due to the higher taper rates, will be eligible for an average payment of around \$50 per fortnight (\$1,300 per annum).
Qualifying age for the Age Pension Social Security and Other Legislation Amendment (Pension Reform and Other 2009 Budget Measures)	2018	The Age Pension age will be increased from age 65 to age 67, at a rate of six months every two years, beginning in 2017.
Income Limit for FTB Part A Supplement Budget Savings (Omnibus) Act 2016	2018	Introduces an income limit of \$80,000 on payment of the Family Tax Benefit (FTB) Part A supplement, commencing from the 2016-17 income year. If an individual's adjusted taxable income (which includes the adjusted taxable income of their partner if any) is more than \$80,000 for the relevant income year, then the individual's FTB Part A supplement in relation to that year will be nil.
Closing Carbon Tax Compensation Budget Savings (Omnibus) Act 2016	2018	From 1 July 2017, the single income family supplement will not be paid to new recipients from 1 July 2017. Existing recipients may continue to receive the supplement if they remain eligible.
Remove grandfathering for Student Start-Up Scholarships Budget Savings (Omnibus) Act 2016	2018	This bill closes the Student Start-up Scholarship for all existing recipients of the scholarship. Current recipients of the Student Start-up Scholarship payment may be qualified for a Student Start-up Loan or ABSTUDY Start-up Loan after the commencement of this change.
Indexation maintain at level for three years the income free areas for working age Social Services Legislation Amendment Act 2017	2018	Maintain at level for three years, the income free areas for all working age allowances (other than student payments) and for Parenting Payment Single.
Indexation maintain at level for three years the income free areas for student payments Social Services Legislation Amendment Act 2017	2018	Maintain at level for three years, the income free areas and other means test thresholds for student payments, including the student income bank limits.
Ordinary Waiting period - Working Age Payments (excluding Widows Allowance) Social Services Legislation Amendment Act 2017	2018	Creates a new ordinary waiting period for Parenting Payment, and for Youth Allowance for a person who is not undertaking full-time study and is not a new apprentice (referred to as Youth Allowance (Other)).
Family Tax Benefit - Maintain child rates for 2 years Social Services Legislation Amendment Act 2017	2018	Maintain the current Family Tax Benefit (FTB) rates for two years, from 1 July 2017. This change applies to the maximum standard, base rate and approved care organisation rate of FTB Part A and the maximum rate of FTB Part B.
Reduce the qualification period for Youth Allowance / Independent test for Youth Allowance and scholarship payments for students Social Services Legislation Amendment (Simplifying Student Payments) Act 2017	2018	Students who qualify under this provision will be eligible for Youth Allowance as independent after 14 months, rather than the current 18 month period, provided they have earned at least a minimum rate of pay.
Align means test with other payments / Means testing for social security benefits Social Services Legislation Amendment (Simplifying Student Payments) Act 2017	2018	Simplification of means testing for student payments.
Automatically updating geographical classifications / Remoteness structure Social Services Legislation Amendment (Simplifying Student Payments) Act 2017	2018	This measure was part of the 2016-17 Budget and simplifies the process for updating the Australian Statistical Geography Standard (ASGS) remoteness structure published by the Australian Statistician which is used to assess eligibility for student payments under the Social Security Act. This will ensure that an assessment of qualification for Youth Allowance and qualification for, and rate of, Relocation Scholarship payments is based on up-to-date geographical classification information.

Appendix B Policy changes

Amendment	Year Effective	Description
Amendments to Disability Services Act Disability Services Amendment (Linking Upper Age Limits for Disability Employment Services to Pension Age) Act 2017	2018	Allows technical amendment to correct a mismatch between Disability Employment Services eligibility and the age of qualification for the Age Pension that would otherwise arise from 1 July 2017. This will remove the reference to '65 years' and replace it with the term 'pension age'
Seasonal horticultural work income exemption Social Services Legislation Amendment (Seasonal Worker Incentives for Jobseekers) Act 2017	2018	This measure provides a social security income test incentive aimed at increasing the number of job seekers who undertake specified seasonal horticultural work, such as fruit picking. This change will be trialled for 2 years, commencing 1 July 2017.
Reinstate Pensioner Concession Cards to former recipients Social Services Legislation Amendment (Energy Assistance Payment & Pensioner Concession Card) Act 2017	2018	This provides a pensioner concession card to various social security pensioners and veterans' payments recipients where the recipient's payment or pension was cancelled on 1 January 2017 due to the rebalancing of the assets test parameters by the Social Services Legislation Amendment (Fair and Sustainable Pensions) Act 2017.
Queensland Commission Income Management Regime - Cape York Social Services Legislation Amendment (Queensland Commission Income Management Regime) Act 2017	2018	This enables a two year continuation of the Income Management element of Cape York Welfare Reform in the communities of Aurukun, Coen, Hope Vale, and Mossman Gorge. The continuation of Income Management until 30 June 2019 is a key element of the reforms and will continue to assist in stabilising people's circumstances and fostering behavioural change, particularly in the areas of school attendance, parental responsibility and increasing individual responsibility.
Cessation of Widow Allowance Social Services Legislation Amendment (Welfare Reform) Act 2017	2018	Widow allowance will close to new entrants from 12 April 2018 and will cease entirely from 1 January 2022.
Start day for some participation payments Social Services Legislation Amendment (Welfare Reform) Act 2017	2018	Changes to the date at which payments commence for people transferring to Newstart Allowance and Youth Allowance recipients.
Changes to reasonable excuses Social Services Legislation Amendment (Welfare Reform) Act 2017	2018	This amends the Social Security Administration Act to provide a new power to make a legislative instrument setting out matters that must not be taken into account when deciding whether a person has a reasonable excuse for committing a no show no pay failure, a connection failure, a reconnection failure, a serious failure, or a non-attendance failure.
Better Alignment of Student Payments Student Assistance (Education Institutions and Courses) Amendment Determination 2017	2018	From 1 January 2018, approval of tertiary courses for student payments has changed. Approved courses have been restricted to VET courses (at diploma level and above) and education providers approved for VET Student Loans and higher education courses offered by providers approved for the Higher Education Loan Program. These changes affect Youth Allowance (student), Austudy, ABSTUDY and the Pensioner Education Supplement. Existing student payment recipients will be grandfathered for the duration of their current course.

The following table contains the legislated future policy changes of which we are aware. These will take effect after the valuation date.

Table 49: Policy changes which will take effect after the valuation date

Amendment	Valuation Year	Description
Introduction of Child Care Subsidy (CCS) and Additional Child Care Subsidy (ACCS), and cessation of Child Care Benefit (CCB) and Child Care Rebate (CCR). Family Assistance Legislation Amendment (Jobs for Families Child Care Package) Act 2017	2019	The CCS will replace the current child care payments (including CCB and CCR). ACCS will provide improved and targeted support to those families who require it most, such as: families with children at risk of serious abuse or neglect; families experiencing temporary financial hardship; families on income support transitioning to work; and grandparent carers on income support
Remove the exemptions for Parents in Employment Nil Rate Periods Budget Savings (Omnibus) Act 2016	2019	From 1 July 2018, people will no longer be exempt from income testing arrangements and their actual income will be taken into account for the purpose of calculating family and student payments.

Appendix B Policy changes

Amendment	Valuation Year	Description
Targeted compliance framework	2019	From 1 July 2018, a two-phase compliance framework will be introduced which will apply strong penalties to job seekers who persistently and deliberately do not comply with their employment pathway plan (EPP) requirements.
Introduction of a family income test for Carer Allowance	2019	Introduction of a non-indexed family income test for Carer Allowance with a threshold of \$250,000. Savings realised will be invested in a support package for carers which will be introduced progressively from October 2018.
Changes to activity tests for persons aged 55 to 59 Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Newstart and certain Special Benefits recipients aged 55-59 will no longer be able to satisfy the activity test by engaging in voluntary work for at least 30 hours per fortnights. Recipients will be taken to satisfy the work test if they are engaged for at least 30 hours per fortnight in a combination of approved unpaid voluntary work and suitable paid work, at least 15 hours of which must be in suitable paid work.
Removal of intent to claim provisions Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Previously claim entitlement was backdated to the date a claimant initially contacted the Department of Human Services and indicated their intention to claim. It will now be the date the claim was made.
Removal of exemptions for drug or alcohol dependence Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Exemptions from the activity test and participation requirements will no longer be available in relation to circumstances directly attributable to drug or alcohol misuse (including abuse of drugs or alcohol) for certain social security recipients.
Streamlining tax file number collection Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Allows for a request to provide a tax file number and/or a relevant third party's tax file number as part of a claim for a social security payment, seniors health card or income-tested health care card. Payments or the provision of the cards can be prevented until the request is satisfied.
Information management Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Information or documents obtained about a person under the coercive information gathering provisions in the course of an administrative action by the Department of Human Services can now be used in subsequent investigation and prosecution of criminal offences.
Cashless debit card extensions Social Services Legislation Amendment (Cashless Debit Card) Bill 2017	2019	Amendments to support the extension of cashless debit card arrangements in current sites, and enable the expansion of the cashless debit card to further sites.
Automatically issue Health Care Cards / Health care cards Social Services Legislation Amendment (Simplifying Student Payments) Act 2017	2020	All students receiving income support will be automatically issued a health care card (HCC).
Creation of the Jobseeker Payment Social Services Legislation Amendment (Welfare Reform) Act 2017	2020	Seven current working age payments will be consolidated into the new Jobseeker Payment, creating a single payment for those of working age with capacity to work now or in the future. From 20 March 2020, recipients of Newstart Allowance, Sickness Allowance, Wife Pension, Bereavement Allowance and Widow B Pension will be transitioned into Jobseeker Payment, Age Pension or Carer Payment depending on their circumstances. From 1 January 2022, recipients of Widow Allowance and Partner Allowance will transition to Age Pension.

Operational developments

Over the last few years there have also been operational developments relating to the medical assessment for the Disability Support Pension.

- These assessments were first introduced as part of the process for new DSP claims from 1 January 2015.
- A process of reviewing DSP medical assessments for current recipients under the age of 35 also commenced from 1 July 2014.
- Further to this, from 1 July 2016 additional medical reviews are being undertaken for DSP recipients.

These developments have resulted in changes to the welfare population over recent years. In particular, as most of the people impacted started receiving Newstart in place of Disability Support Pension there was a reduction in the number of Disability Support Pension recipients and an equivalent increase in Working Age payment recipients. While the assessments resulted in reduced numbers of DSP recipients, they did not directly impact the average payment levels for Disability Support benefits.

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