30 June 2017
Valuation Report

Department of Social Services

Final Report 2018

Contents

Part I: Executive summary

Key Findings

This 30 June 2017 actuarial valuation is part of the work undertaken by the Department of Social Services to implement the Australian Priority Investment Approach to social 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 which 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 which 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 $4,681 billion as at 30 June 2017, up 3.7% ($167 billion) from $4,514 billion last year. This change is the combined effect of:

- Population growth and inflation which increased the total lifetime cost by $210bn (+4.7%).
- Other changes including a reduction in the number of people accessing welfare payments which have contributed a decrease of $43bn (-1.0%).

Movements since the June 2016 valuation

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

- The welfare population now represents 32.6% of the population (down from 33.3% at June 2016), with the proportion of the population in receipt of income support down from 23.8% to 23.3%.
  - Whilst the population has grown over the year the total number of people in the welfare system is very close to that last year.
  - Over the latest 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, including the Studying, Working Age, Parenting and Disability Support Pensioners classes, have reduced compared to last year. The exceptions to this are the Carers class and Age Pension class, both of which have continued to grow, but to a lesser extent than previously expected.
- The average lifetime cost has remained fairly stable after allowing for inflation, both across the whole population and for most of the main classes.
  - A slightly bigger change has been seen for the Working Age class, where reducing numbers and changes to other payments have shifted the profile of people in the class and resulted in an increased average size.
  - Conversely, the average size for the Non Income Support Other class has reduced, as we expect fewer people who are above retirement age in this class to move on to the age pension in the future.
- The net impact of adjustments for policy changes has contributed to a 0.1% decrease ($4 billion) in the total lifetime cost. A substantial increase due to the introduction of the Child Care Subsidy and associated changes is 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.

New findings

While there has been little movement in the overall lifetime cost results, the valuation model has been enhanced since last year to provide more insights into parental welfare dependence; the impact of barriers to

work on jobseeker pathways and lifetime costs; and the outcomes for people being supported to study in different education sectors. Some insights from this new analysis include:

- Parental welfare dependence is highly correlated with welfare usage. People with higher parental welfare dependence tend to enter into the welfare system earlier, utilise more income support, and have a higher average lifetime cost. There are large differences in outcomes between those with the highest parental welfare dependence and those with none. Examples of these differences are:
  - Younger people whose parents or guardians had a very high level of welfare dependency are 5.8 times more likely to be on income support payments today compared to those with no parental welfare dependency.
  - Around 26% of 16 to 20 year olds who had a very high level of parental welfare dependency up to age 15 are currently receiving Working Age payments, compared to just 2% for those individuals with no parental welfare dependency.
  - By the age of 25, around 90% of children with very high parental welfare dependence will have interacted with the welfare system, compared to around 45% for those with no such dependence.
- People who have reported barriers to work have higher welfare dependency and higher lifetime costs:
  - People with an exemption from mutual obligations in the past year, a reported psychological/psychiatric condition, or reduced capacity to work have greater future dependence on welfare. They are less likely to leave the Working Age class, and when they do they are much more likely to transition to another form of income support (in particular the Disability Support Pension). We expect they will spend around 4 to 6 years longer on pre-retirement income support than other people in the Working Age class.
  - Whether or not a Working Age recipient has had a work capacity assessment is more indicative of higher future lifetime cost than the level of assessment.
  - People with a recent exemption from mutual obligations in the past year (but without a current active exemption) are expected to spend a similar number of future years in the Working Age class to those with an active exemption. This suggests that while these people no longer qualify for an exemption, the circumstances of their exemption have longer lasting effects which increase the difficulty of them finding employment.
- There has been a reduction in the average capacity to work and an increase in the number of exemptions and reported psychological or psychiatric conditions for people in the Working Age class over the last five years. This has occurred over the same period as the tightening of DSP eligibility and introduction of DSP medical reviews.
- Including information on the education sector of students shows that:
  - Due to eligibility criteria, young studying recipients (under age 18) are mostly either Indigenous, independent or needing to live away from home. In this age range, VET students are projected to have lower future dependency than secondary school students and are expected to spend two and a half years less on income support payments.
  - For people 18 and above who rely on student income support, VET students have higher future welfare dependency than higher education students.

Explanatory notes

We have set out below some brief explanatory notes and definitions. Further explanation can be found in section 1 of the report 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

A regular payment designed to assist with day to day living costs. Examples include Age Pension, Newstart

Allowance, Disability Support Pension, Carer Payment and Parenting Payment. Other supplementary payments such as Family Tax Benefit and child care 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 Aged 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.

1. Introduction

Background to this report

This report documents the findings of the 30 June 2017 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 social 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 allow the model to better differentiate lifetime costs between different individuals. In particular, the model now takes into account differences in trajectories for people depending on their parental welfare dependence, the education sector they are studying in if they are a student, and some of their barriers to work if they are on a Working Age payment. These variables change over time for individuals, and including them 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. Other significant developments in the valuation have included 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 2016 valuation, along with their expected influence on the welfare system.

Table 1: Summary of main material policy changes (legislated 1 July 2016 to 30 June 2017)

Policy change	Description of policy change	Expected influence on the welfare system
Child Care Subsidy	Introduction of the Child Care Subsidy, and cessation of the Child Care Benefit and Child Care Rebate from July 2018.	Those parents currently receiving Child Care Benefit and Rebate payments will receive a different rate of payment based on their individual circumstances. On average, it is expected that child care payments will increase.
Income Limit of $80,000 for FTB Part A supplement	Introduction of an income limit of $80,000 on the payment of the Family Tax Benefit Part A Supplement, from July 2017.	Those people who earn more than $80,000 will not be entitled to the FTB Part A Supplement. On average this will reduce the amount of FTB paid per person.
Freeze of current Family Tax Benefit rates	Freeze of the current Family Tax Benefit (Part A and B) rates for two years, from 1 July 2017.	Future payment rates for FTB will be lower as a result of two years without indexation.
Student Start-Up Scholarship	Removal of the grandfathering for the Student Start-Up Scholarship from July 2017.	Those students who have not yet finished their studies will no longer be entitled to Student Start-Up Scholarship. Some of these students may elect to receive the Student Start-Up Loan.
Closure of Carbon Tax Compensation	Closure of Carbon Tax compensation (the Energy Supplement) to new recipients of Family Tax Benefit and concession cards (including the Seniors Health Card) from March 2017.	New recipients of FTB and new holders of the Seniors Health Card will not receive the Energy Supplement, as they have done historically.
Freeze of FTB higher income free area and primary earner income limit	Freeze of the higher income free area for Family Tax Benefit Part A, and the primary earner income limit for Family Tax Benefit Part B at their current levels until 30 June 2020.	People whose income grows beyond the current limits will lose their entitlement. This will reduce the amount of FTB payments.
Energy Assistance Payment	Payment of one-off Energy Assistance Payment in June 2017.	A new payment made in the 2016 financial year which is not expected to continue.

Over the last few years there have also been operational developments relating to the medical assessment for the Disability Support Pension, and these have acted to tighten the eligibility. We have previously noted decreasing entries into the Disability Support Pension as a result of this, and a continuation of this experience has been observed this year.

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 2017. 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 to 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 2017, 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 2017 valuation the total model population is 24.7 million people which comprises the updated resident population of 24.6 million, as well as 0.1 million overseas payment recipients. This updated model population has increased by 0.5 million since June 2016 which reflects population growth over the year of around 350,000, as well as allowance for updated information drawn from the 2016 Census (which showed the population was around 150,000 higher than from previous estimates).

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 entrants into DSP 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.

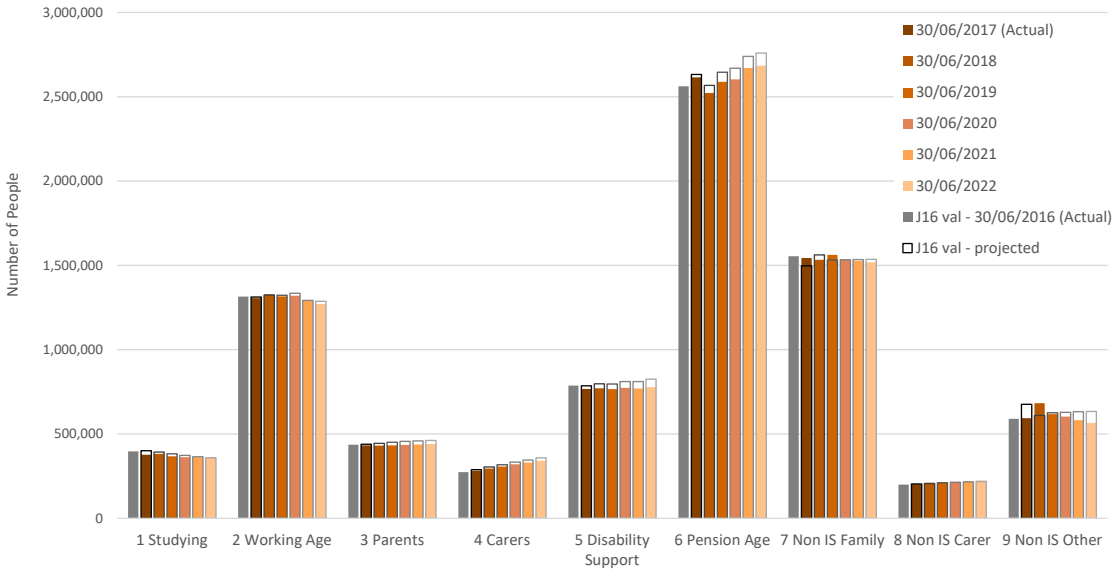
These factors have resulted in a very small decrease in the number of people in receipt of payments over the last year, despite the increase in the total population of Australia. In particular, the numbers of people in most income support classes have reduced compared to last year. The exceptions to this are the Carers class and Age Pension class, both of which have continued to grow, but to a lesser extent than previously expected.

The welfare population now represents 32.6% of the population (down from 33.3% at June 2016), with the proportion of the population in receipt of income support down from 23.8% to 23.3%.

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 2017, as well as the expected numbers of people in each active class over the period June 2018 to June 2022. We have also included information from the previous June 2016 valuation for comparison: the grey bar shows the actual number of

people in each class for the year ending 30 June 2016; whilst the black/grey outline bars show the projected numbers based on the June 2016 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 2017 valuation (the red and orange bars), are generally lower than the projections from the previous June 2016 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.
- In particular, decreases in the projection can be seen for the Pension Age and Disability Support classes, relative to the June 2016 projection. This is reflective of the decreasing entries into these classes observed over the last year.
- 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 2016 valuation. This increase reflects the increasing population of people above age 65, associated with demographic factors and improved longevity. A decrease in the number of people in the Pension Age class can be observed in the June 2018 projection due to the impact of the pensions assets test changes. In addition the Age Pension age increases to 65.5 from 1 July 2017 which also reduces the projected entries into age pension in 2017/18.
- 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 be fairly stable over this period.

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

- There has been a reduction in non income support studying payments, driven by the replacement of the Student Start-up Scholarship (SSS) with the Student Start-up Loan (SSL); and
- Average Family Tax Benefit (FTB) payments have continued to gradually reduce, likely a result of a number of policy changes in recent years which have generally tightened FTB payments.

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 2017

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 2016/17 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 2014, 30 June 2015, or 30 June 2016 but do not fall into one of these classes at 30 June 2017.
- 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.

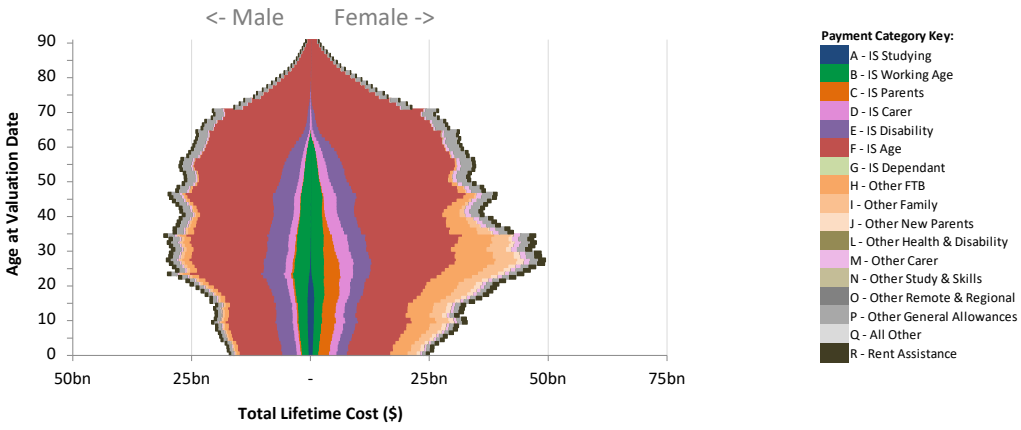
Note that while the model does simulate the lifetime trajectory of each individual, it is only intended that results ever be considered for a similar group of individuals – either in total or on average for that group.

Lifetime cost results by class

The total lifetime cost for the model population is estimated to be **$4,681 billion** as at 30 June 2017, in respect of the **24.7 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 income support 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 2017 valuation)

Population segment	Number in starting population	Average age	Total Lifetime cost ($bn)	Average payment in 2016/17 (a)	Average lifetime cost ($'000) (b)	Change in average lifetime cost (%)	Ratio = (b) / (a)
Current welfare recipients							
- Studying payment recipients	371,462	24	79	8,100	212	+1.1%	26
- Working age payment recipients	1,301,346	40	411	11,200	316	+3.7%	28
- Parenting payment recipients	432,641	33	210	29,100	485	+2.2%	17
- Carer payment recipients	277,220	51	125	26,700	449	+2.6%	17
- Disability support pensioners	760,148	50	351	22,000	462	+2.6%	21
- Age pensioners	2,594,978	76	542	16,900	209	+2.8%	12
- Family non IS clients	1,543,972	40	303	5,400	197	+1.4%	36
- Carer non IS clients	202,505	51	42	6,700	207	+0.5%	31
- Other non IS clients	557,092	54	72	2,800	129	-5.6%	46
Total current welfare recipients	*8,041,364*	*53*	*2,134*	*13,606*	*265*	+1.9%	*20*
Previous welfare recipients							
- Exited 1-3 years	1,538,442	41	274	n/a	178	+4.5%	n/a
- Exited 4+ years	2,951,378	47	461	n/a	156	+5.2%	n/a
Total previous welfare recipients	*4,489,820*	*45*	*735*	*n/a*	*164*	+5.3%	*n/a*
Rest of Australian resident population							
- Rest of Australian resident population	*12,122,461*	*28*	*1,812*	*n/a*	*150*	+1.0%	*n/a*
Australian resident population	**24,653,645**	**39**	**4,681**	**4,438**	**190**	**+1.6%**	**43**

Notes:

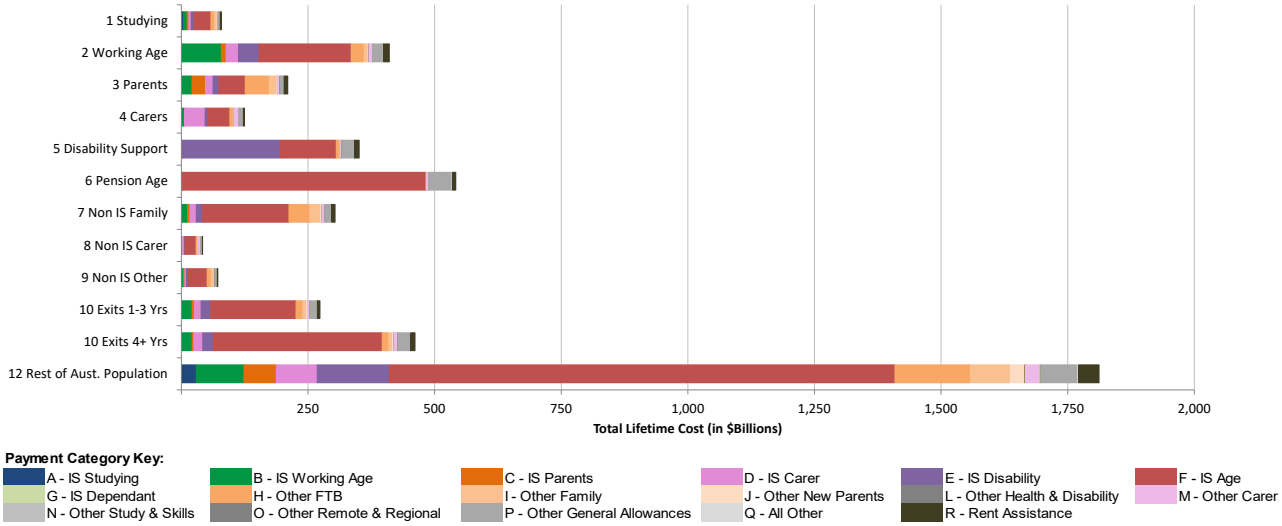
1. The average payment in 2016/17 is understated owing to the data maturity issues with FTB and family payment data. This has a particular impact on the average payments for people in the family non IS and other non IS classes; we would expect these amounts to ultimately be larger than the figures shown.
2. Exited 4+ years refers to previous welfare recipients who have exited in the past 4-16 years

The total lifetime cost represents a multiple of over 40 times the total amount of 2016/17 in-scope payments, which was $111.4 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 whilst 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 ($billion) by welfare class and payment category



Note: Exited 4+ years refers to previous welfare recipients who have exited in the past 4-16 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 2017 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	40%	8%	51%
- Working age payment recipients	49	62%	5%	33%
- Parenting payment recipients	57	64%	9%	27%
- Carer payment recipients	37	84%	4%	12%
- Disability support pensioners	34	94%	1%	4%
- Age pensioners	14	94%	3%	3%
- Family non IS clients	51	38%	14%	48%
- Carer non IS clients	40	43%	23%	34%
- Other non IS clients	37	37%	23%	41%
Total current welfare recipients	36	59%	9%	31%
Previous welfare recipients				
- Exited 1-3 years	50	41%	6%	53%
- Exited 4+ years	44	40%	4%	55%
Total previous welfare recipients	46	41%	5%	55%
Rest of Australian resident population				
- *Rest of Australian resident population*	63	34%	7%	59%
Australian resident population	51	41%	7%	52%

Note: Exited 4+ years refers to previous welfare recipients who have exited in the past 4-16 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

The assessment of the total lifetime cost has increased from **$4,514 billion** at 30 June 2016 to **$4,681 billion** at 30 June 2017. This is an **increase of $167 billion** reflecting the impact of growth in population, inflation, and our updated assumptions and model refinements to account for policy changes and observed changes in experience over the latest year.

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

Expected changes

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

At the June 2017 valuation, the overall lifetime cost has **increased by $67bn (+1.5%)** due to growth in the Australian Population over the 2016/17 year. The estimated population as at 30 June 2017 reflects the allowance for births and net migration over the year, as well as the use of the latest Australian Census (2016). The latest census includes an additional 150,000 individuals compared to the initial population forecasts based on the 2011 Australian Census.

The overall lifetime cost has further increased by **$143bn (+3.2%)** due to inflation. This includes inflation of payments over the 2016/17 year of 1.3% on average, allowance for updated published inflation indices and their impact on future payment rates, as well as the impact of inflation on future payments as we move closer to the expected long term inflation rates.

System changes

Changes to the welfare system may directly influence the entitlements of individuals and their welfare usage. Over recent years a number of policy changes have been legislated which have had an impact on the total lifetime cost. At the June 2017 valuation, the overall lifetime cost was **reduced by $4bn (-0.1%)** to reflect the net impact of these policy changes:

- **Increases in lifetime cost** – The introduction of the Child Care Subsidy from July 2018 has an estimated impact of a **$27bn increase** in the total lifetime cost;

- **Decreases in total lifetime cost** – the combination of a number of policy changes to the Family Tax Benefit, closure of the Carbon Tax Compensation, and updates to the impact of the pensions assets test have contributed to an estimated **decrease of $31bn** in the total lifetime cost.

Experience and Assumptions

Further changes in the projected total lifetime cost result from the impact of emerging experience in the welfare system observed over the latest year, together with assumption changes which reflect this experience. In total, these contributed to a further **decrease of $39bn (-0.9%)** in the overall lifetime cost. 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 ($28bn decrease)** – in general the proportion of people utilising welfare was lower this year than last year, and this has resulted in a decrease in the lifetime cost.
- **Lower assumed future utilisation of welfare ($49bn decrease)** – in response to the experience, assumed future entry rates into welfare have been reduced, in particular into the DSP, Working Age and Age Pension; and more people have been assumed to exit from the welfare system, mainly as a result of tightening of the eligibility criteria for the Family Tax Benefit.
- **Higher average payments ($46bn increase)** – although welfare utilisation has decreased, this has been offset by higher recent payment experience for new age pensioners which has now been reflected in the payment assumptions. There has also been some reduction in payments as a result of reduced utilisation of FTB payments.
- **Updated future indexation assumptions ($8bn decrease)** – at this valuation, the future payment indexation assumptions were updated to reflect the Australian Government forecasts outlined in the 2017/18 Commonwealth Budget. In particular, reductions to the short term MTAWE and CPI rates were made. The indexation update had the biggest dollar impact on the Age Pension ($5bn decrease) as this is the largest component of the overall lifetime cost.

5. New findings

The following variables were added this year:

- Intergenerational variable (measure of parental welfare dependence)
- Education sector (for those on student income support)
- Barriers to work (for those on Working Age income support)
- Family composition (included in the model population but not the forward simulation)

These variables have helped to improve the model's ability to differentiate between groups of people as well as facilitating further analysis to provide helpful information and insights.

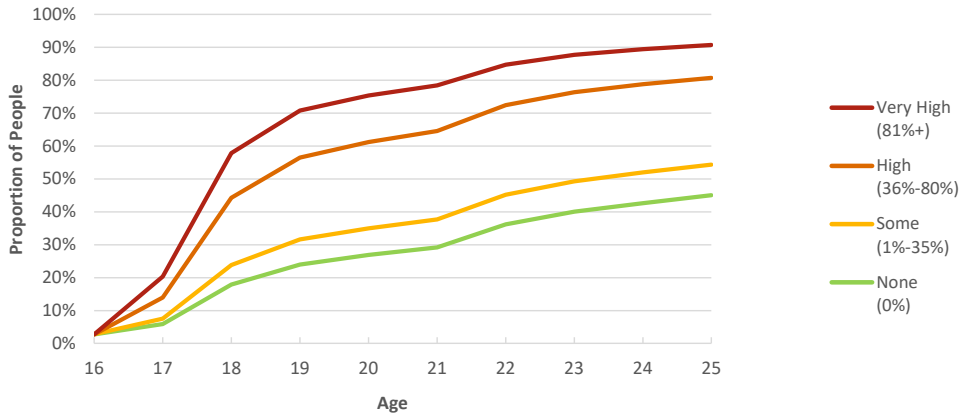
Intergenerational variable

The intergenerational variable measures the proportion of an individual's childhood (up to the age of 15) during which their parents or guardians were reliant on income support payments, other than the age pension.

Parental welfare dependence is highly correlated with welfare usage (though it is important to note that this does not imply a causal relationship between the two). People with higher parental welfare dependence tend to enter into the welfare system earlier, utilise more income support, and have a higher average lifetime cost. There are generally large differences in outcomes between those with the highest parental welfare dependence and those with none. Two examples of these differences are:

- Around 26% of 16 to 20 year olds with a very high level of parental welfare dependency are currently receiving Working Age payments, compared to just 2% for those individuals with no parental welfare dependency.
- By the age of 25, around 90% of children with very high parental welfare dependence will have interacted with the welfare system, compared to around 45% for those with no such dependence – this is shown in the chart below.

Figure 5: Proportion of people who are projected to have entered the welfare system by or before the age shown, by parental welfare dependency level (based on projection of current 15 year olds)



As a result of their higher welfare utilisation, in particular of income support, the lifetime cost is significantly higher for those with high parental welfare dependence. Individuals with very high levels of parental welfare dependency account for more than 19% of the total lifetime cost for 0 to 20 year olds, despite making up only 11% of the group.

We note that the parental means test applies for some Youth Allowance and ABSTUDY recipients. As such, the insights here both a direct intergenerational link whereby some younger welfare recipients are by definition children of people with low income (and therefore highly likely to be welfare recipients), as well as an indirect effect of children being more likely to utilise welfare if their parents or guardians were also welfare dependent.

Education sector

The new education sector variable represents a student's current level of study: secondary school, higher education or VET. It is strongly related to a person's age and past educational achievements.

- Due to eligibility criteria, young studying recipients (under age 18) are mostly either Indigenous, independent or needing to live away from home. In this age range, VET students are projected to have lower future dependency than secondary school students and are expected to spend two and a half years less on income support payments.
- For people 18 and above who rely on student income support, Higher education students are expected to stay longer in the studying class than VET students. However the impact of this on future welfare dependency is more than offset by them having a higher probability of exiting the system after finishing study when compared to VET students.

Note that these differences may be related to the characteristics and levels of disadvantage of the groups studying in the sectors, rather than the nature of the study itself. However, the finding warrants some further investigation to better understand these differences and inform policy development.

Barriers to work

The barriers to work variable provides information about an individual's ability to work based upon the status of their exemption from mutual obligation requirements, reported psychological/psychiatric condition, and assessed work capacity. It shows:

- People with an exemption from mutual obligation requirements in the past year, a reported psychological/psychiatric condition, or reduced capacity to work have greater future dependence on welfare. They are less likely to leave the Working Age class, and when they do they are much more likely to transition to another form of income support (in particular the Disability Support Pension).
- Whether or not a Working Age recipient has had a work capacity assessment is more indicative of higher future lifetime cost than the level of assessment.

- People with a recent exemption from mutual obligations in the past year (but without a current active exemption) are expected to spend a similar number of future years in the Working Age class to those with an active exemption. This suggests that while these people no longer qualify for an exemption, the circumstances of their exemption have longer lasting effects which increase the difficulty of them finding employment.

There has been a reduction in the average capacity to work and an increase in the number of exemptions and reported psychological or psychiatric conditions for people in the Working Age class over the last five years. This has occurred over the same period as the tightening of DSP eligibility and introduction of DSP medical reviews.

Family composition

The considerably complex and dynamic nature of family units, further complicated by a number of gaps and inconsistencies in the information collated across the various data sources, has limited the extent to which we are able to analyse and provide insights on family units. Notwithstanding this, we have found that:

- Single person family units with children have the highest level of welfare dependency – the majority of adults in these family units receive income support.
- Partnered adults tend to have similar levels of income support dependence regardless of whether or not they have children. However, those people with children tend to have a much higher utilisation of non income support payments compared to those without children.

Part II: Valuation results

1 Introduction

Key points

This report presents the 30 June 2017 valuation of the Australian income support and social security system.

- The 2017 valuation model has retained the same general structure used for previous valuations
- The model has been extended to include consideration of: intergenerational welfare use; the outcomes for students in different education sectors; and the impact of barriers to work for Working Age payment recipients
- The population data has also been extended to include information on people's family composition
- The model assumptions have been updated to reflect changes in policy settings since the last valuation and to reflect the experience over the latest year.

1.1 Background and Introduction

This report documents the findings of the 30 June 2017 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 social 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 which 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 which explain why some groups of people have different levels of expected payment utilisation than others.

This is the third 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 2016 valuation and other findings emerging from the analysis.

1.2 Summary of June 2017 valuation model

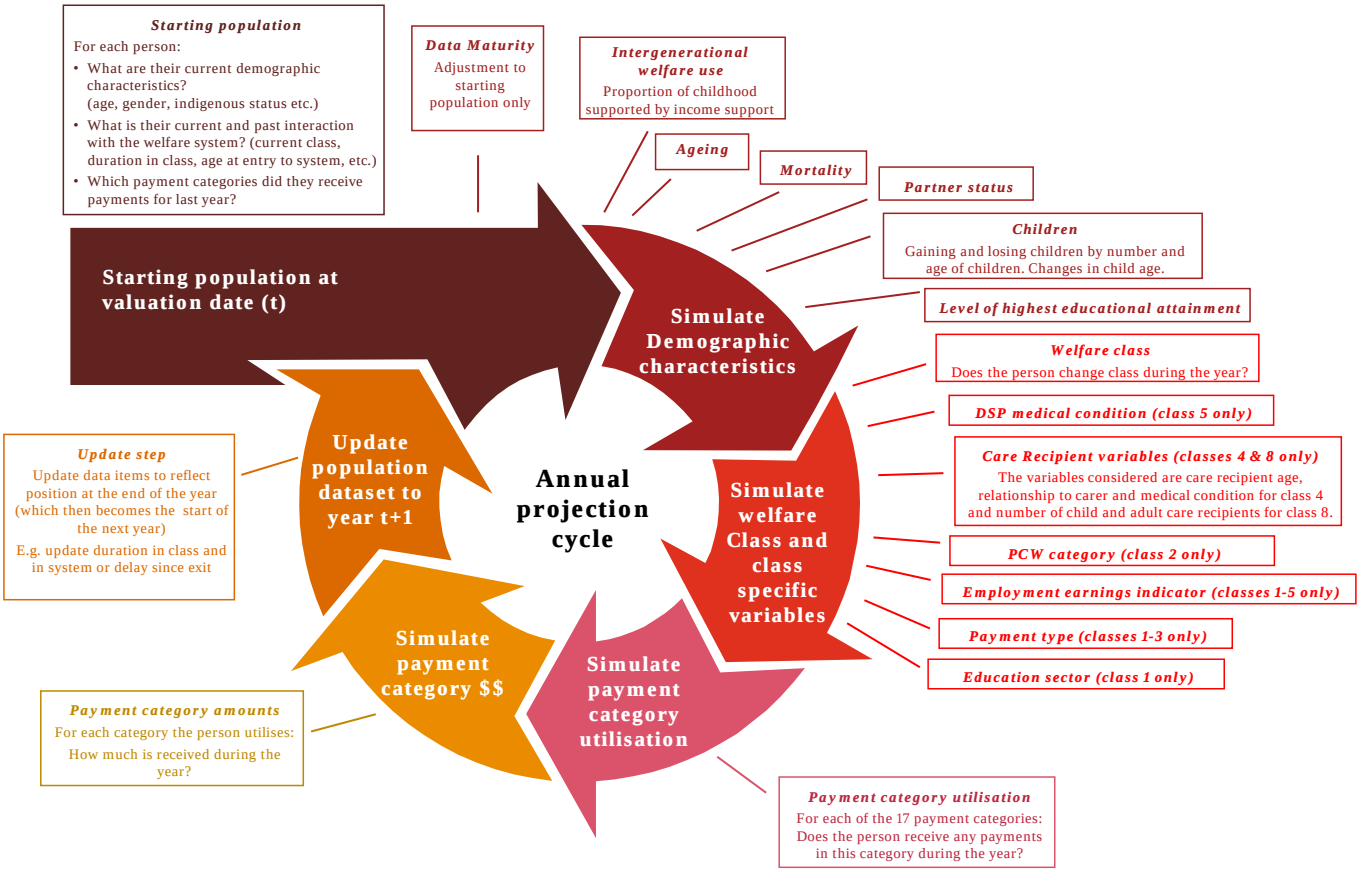
The June 2017 valuation model retains the same general structure as used for the previous valuations. It includes the following key components and steps:

- 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 of the broader economic environment and economic forecasts.

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 6: Illustration of the simulation model structure



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 such 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. **These are people who were captured in classes 1 to 9 from 2001/02 onwards.*
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 or Carer Supplement	**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 which are 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 which relate to non income support payments.

Note that whilst 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 being to provide 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, and 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 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 the 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.

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. As such it is able to produce population and population group information rather than information for individuals.

There is a limitation to the accuracy of the results contained in this report because of the inherent uncertainty of any estimation of such long term costs.

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 2017. 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.

There is a limitation to 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.

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 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, this year we have added a number of new variables which allow the model to take into account differences in trajectories for people depending on their parental welfare dependence, the education sector students are studying in, and some of their barriers to work if they are on a Working Age payment. These variables change over time for individuals, and including them 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 added information on the family composition of members of the model population at the valuation date, but without projecting this forward.

This extension of the model has allowed us to bring the following new insights:

- The intergenerational variable measures the proportion of an individual's childhood (up to the age of 15) during which their parents or guardians were reliant on pre-retirement income support payments. It shows:
  - People with higher parental welfare dependence tend to enter into the welfare system earlier, utilise more income support, and have a higher average lifetime cost.
  - There are generally large differences in outcomes between those with the highest parental welfare dependence and those with none. For example:
    - Younger people whose parents or guardians had a very high level of welfare dependency are 5.8 times more likely to be on income support payments today compared to those with no parental welfare dependency.
    - Around 26% of 16 to 20 year olds with a very high level of parental welfare dependency are currently receiving Working Age payments, compared to just 2% for those individuals with no such dependency.
    - By the age of 25, around 90% of children with very high parental welfare dependence will have interacted with the welfare system, compared to around 45% for those with no such dependence.
- The new education sector variable captures a person's current level of study: secondary school, higher education or VET. It is strongly related to a person's age and past educational achievements. It shows:
  - Due to eligibility criteria, young studying recipients (under age 18) are mostly either Indigenous, independent or needing to live away from home. In this age range, VET students are projected to have lower future welfare dependency than secondary school students and are expected to spend two and a half years less on income support payments.
  - For older students (age 18 and above) on student payments, Higher education students are expected to stay longer in the studying class than VET students. However the impact of this on future welfare dependency is more than offset by them having a higher probability of exiting the system after finishing study when compared to VET students.
- The barriers to work variable provides information about an individual's ability to work based upon the status of their exemption from mutual obligation requirements, reported psychological/psychiatric condition, and assessed work capacity. It shows:
  - People with an active exemption over the past year, a reported psychological/psychiatric condition, or reduced capacity to work have greater future dependence on welfare. They are less likely to leave the Working Age class, and when they do they are much more likely to transition to another form of income support (in particular the Disability Support Pension). As a result, we expect they will spend around four to six years longer on pre-retirement income support than other people in the Working Age class.
  - Whether or not a Working Age recipient has had a work capacity assessment is more indicative of higher future lifetime cost than the level of assessment.
  - People who recently (in the past year) had an active exemption but do not have a current active exemption, are expected to spend a similar amount of future years in the Working Age class to those with a current active exemption. This suggests that while these people no longer qualify for an exemption, the circumstances of their exemption have longer lasting effects which increase the difficulty of them finding employment.

- There has been a reduction in the average capacity to work and an increase in the number of exemptions and reported psychological or psychiatric conditions for people in the Working Age class over the last five years. This has occurred over the same period as the tightening of DSP eligibility and introduction of DSP medical reviews.

2.1 Overview of model developments for the 2017 valuation

Major developments

The model used in this work 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 2017 valuation. The most significant of these developments are:

- model refinements to allow for changes in policy settings (discussed in section 3), and
- the addition of four new variables into the model:
  - an intergenerational variable to capture information on parental welfare dependency;
  - education sector;
  - a variable to capture reported barriers to work; and
  - family composition (included in the model population but not the forward simulation).

These variables added have helped to improve the model's ability to differentiate between groups of people as well as facilitating further analysis which have provided helpful information and insights. The new variables and related insights are discussed 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 which they relate to.

Table 5: Summary of other model developments for 2017 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. Whilst the adjustments for new policy changes (those occurring between 1 July 2016 and 30 June 2017) are a major development to the model, the adjustments made for policy changes occurring up to 30 June 2016 have also been reviewed and updated.
Data	The model is supported by a longitudinal dataset covering welfare use in Australia, as well as the 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.
Population module	The 2017 population module has been calibrated based on new information on the Australian resident population available from the 2016 census. It has also been extended to include information on parental welfare dependence and people's family composition.
Demographic (flow) assumptions	Further work has been undertaken to refine the assumptions for educational attainment and consider the interactions with the new education sector variable (see below).
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 class 1 to refine the class characteristic assumption models to allow for the interaction of the new education sector variable with the existing suite of modelling variables Further work has been undertaken for class 2 to refine the class characteristic assumption models to allow for the interaction of the new barriers to work variable with the existing suite of modelling variables
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 intergenerational variable and the two new class characteristic variables on class movements
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 intergenerational variable and the two new class characteristic variables on payment utilisation and size.

Item	Details
Adjustments module	The economic adjustments has 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.

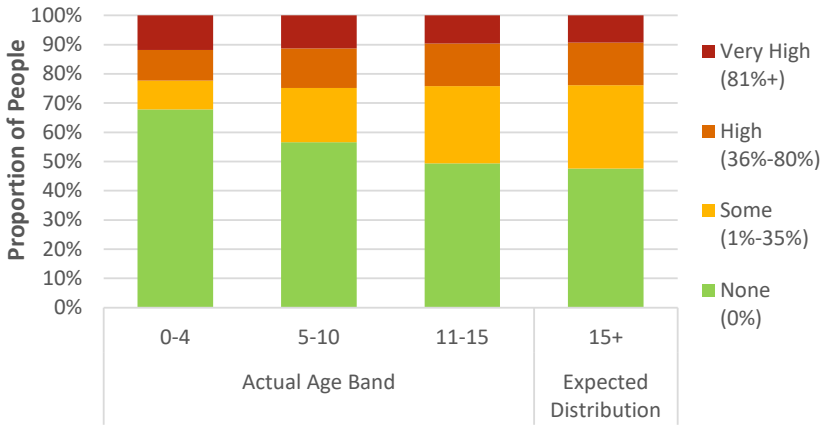
2.2 Intergenerational welfare dependence

Persistent dependence on the welfare system not only impacts the welfare recipient, but also has the potential to influence the outcomes of children in their care. In order to understand the intergenerational effects of welfare, we have worked with the Department to capture information on the welfare use of parents or guardians through a person's childhood. This information has been incorporated into the valuation model as a variable that measures the proportion of an individual's childhood (up to the age of 15) during which their parents or guardians were reliant on income support payments, other than the age pension. The results presented below have banded this proportion into None (parents or guardians reliant on income support for 0% of childhood), Some (1% to 35%), High (36% to 80%) and Very High (81% and above).

It should be noted that owing to the limited history of data available, parental welfare dependence information is not complete for people of all ages and, in particular, is not available at all for those currently aged above 30. As a result of these data limitations we have focussed on exploring the variables impact for those cohorts of people aged 25 and under. Over time, the time span covered by the supporting dataset will gradually increase and allow for the exploration of this information for cohorts as they age.

The figure below shows the extent of this parental welfare dependence in the full model population by age group, and highlights how this dependency is expected to change by the time children reach the age of 15.

Figure 7: Parental welfare dependency by age band (colour bandings represent different levels of parental welfare dependence)



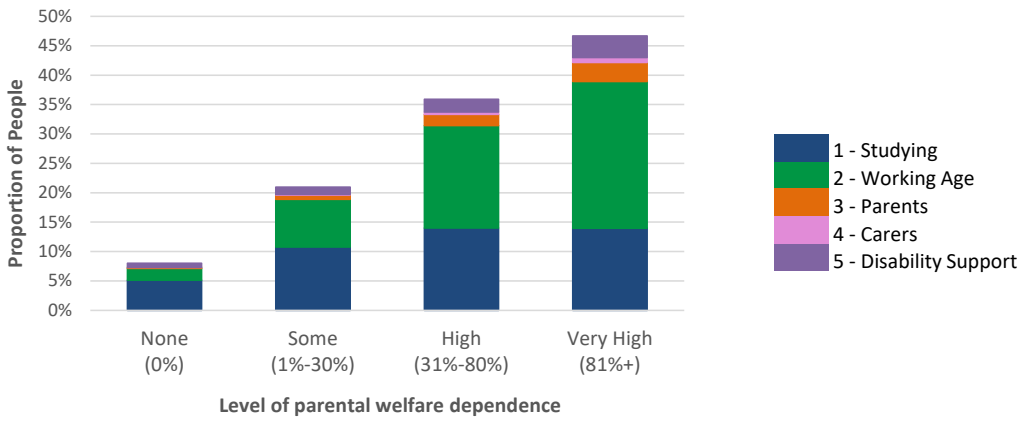
Note: The percentage represents the proportion of a person's childhood (up to the age of 15) during which a parent or guardian received income support (excluding Age Pension payments).

As can be seen above, there is less variation in the level of parental welfare dependence for younger children, with the majority having no dependence. As children grow older and the circumstances of their parents or guardians change, we find that more children tend to fall into the middle categories of parental welfare dependence ('Some' or 'High'). By the age of 15, the range of parental welfare dependence is such that around half the children have no parental welfare dependency, whilst just under a quarter of children had parents with high or very high income support dependency.

What effect has this already had on the welfare use of young people?

We have investigated the nature of the relationship between parental welfare dependence and the use of welfare by young people as at 2017. The chart below shows how this influences welfare use for current 16 to 20 year olds.

Figure 8: Actual utilisation of the pre-retirement income support classes in 2017 for 16 to 20 year olds, by level of parental welfare dependence

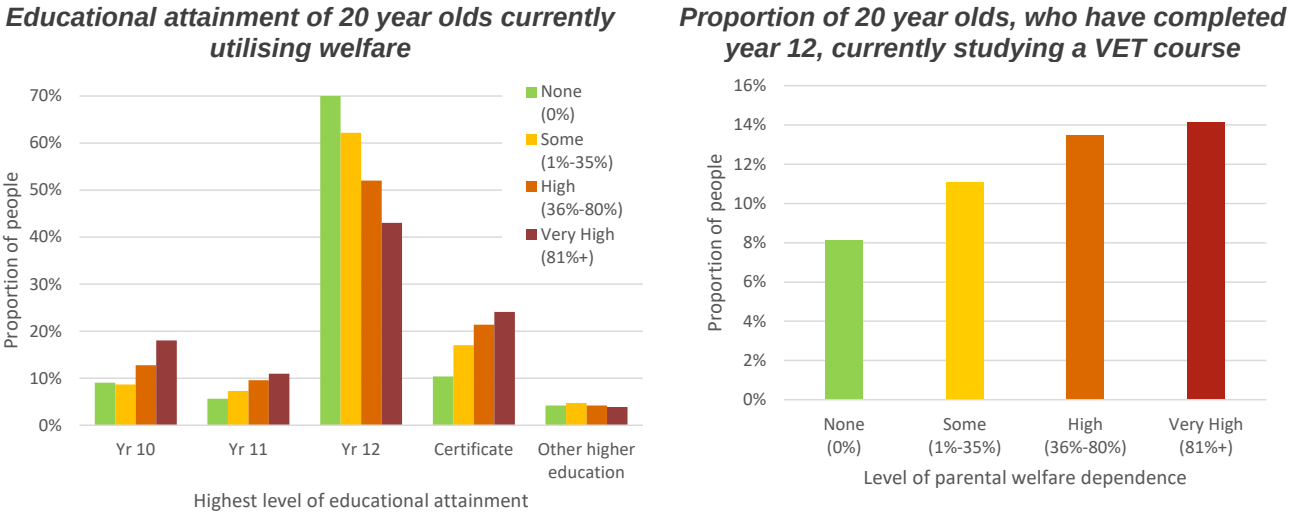


We can see that younger people whose parents or guardians had a very high level of welfare dependency are 5.8 times more likely to be on income support payments today compared to those with no parental welfare dependency. Furthermore, 26% of 16 to 20 year olds with a very high level of parental welfare dependency are currently receiving Working Age payments, compared to just 2% for those individuals with no parental welfare dependency.

We also note that the parental means test applies for some Youth Allowance and ABSTUDY recipients. As such, the insights in this chapter reflect both a direct intergenerational link whereby some younger welfare recipients are by definition children of people with low income (and therefore highly likely to be welfare recipients), as well as an indirect effect of children being more likely to utilise welfare if their parents or guardians were also welfare dependent.

We have also explored the relationship between parental welfare dependency and educational attainment for young people currently accessing welfare. This is shown in the chart below which looks at the educational attainment of 20 year olds currently in the welfare system by the welfare dependency level of their parents or guardians.

Figure 9: Actual education profile of 20 year olds currently utilising welfare, by level of parental welfare dependence



The figure on the left shows that 20 year old welfare recipients who have higher levels of parental welfare dependency are:

- more likely to have left school before completing year 12; and
- more likely to have attained a Certificate level of training.

The results for people in other higher education are less relevant as you would only expect a small proportion of 20 year olds to have attained other higher education.

Of particular note is the fact that around 29% of 20 year olds with a very high level of parental welfare dependence have not yet reached an educational attainment of at least year 12. This compares to just 15% for 20 year olds who have no parental welfare dependency.

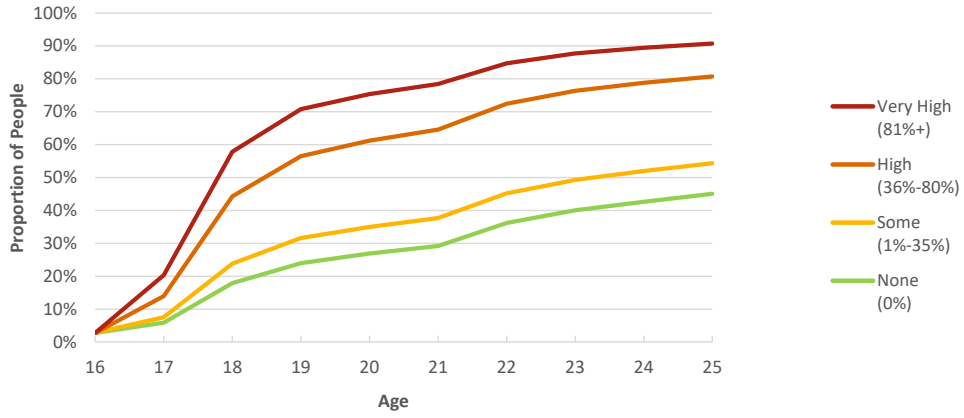
Furthermore, the figure on the right shows that 20 year old welfare recipients with a highest educational attainment of year 12 are more likely to be studying a VET course if they have a higher level of parental welfare dependence.

How does parental welfare dependence impact the entry of children into the welfare system?

In addition to explaining how young people have already utilised the welfare system (both income support and non income support), the model has also provided insights into the expected interaction between a child's parental welfare information and their welfare utilisation going forward. The following sections explore these insights in greater detail. Note that for simplicity, we have focussed the remaining analysis on the cohort of people aged 15 in 2017 and in class '12 Rest of Australian Population' (noting that 97% of 15 year olds are in this class). Similar results can be expected for individuals of other young ages.

The figure below shows the proportion of children who have interacted with the welfare system up to a certain age, and how this differs depending on the welfare dependence of their parents or guardians.

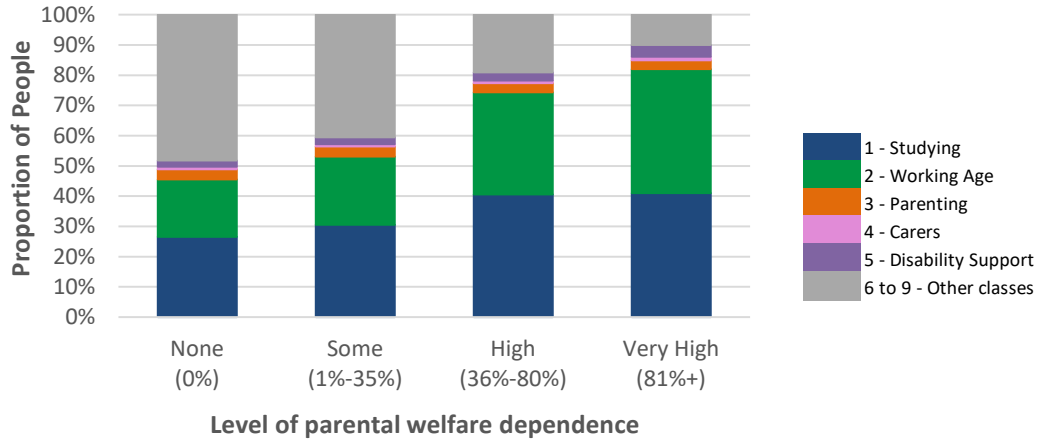
Figure 10: Proportion of people who are projected to have entered the welfare system by or before the age shown, by level of parental welfare dependence (based on projection of current 15 year olds)



The model indicates that almost 60% of children with a very high level of parental welfare dependence will have interacted with the welfare system by the age of 18. This compares to 18% for children with no parental welfare dependence at the same age. By the age of 25, around 90% of children with very high parental welfare dependence will have interacted with the welfare system, compared to around 45% for those with no such dependence. It should be noted that up until the age of 21, there is a parental income test that applies to younger people looking to receive certain welfare payments. This means that children of parents who have not accessed welfare are less likely to be eligible for payments themselves. As such, some of the differences in welfare system utilisation seen in the figure above may be driven by this effect.

There are also differences in the nature of welfare assistance provided when these children do enter the welfare system. This is explored in the chart below which looks at the likelihood of a child entering the welfare system through a pre-retirement income support class.

Figure 11: Projected class at first entry to the welfare system by level of intergenerational dependence (current 15 year olds)

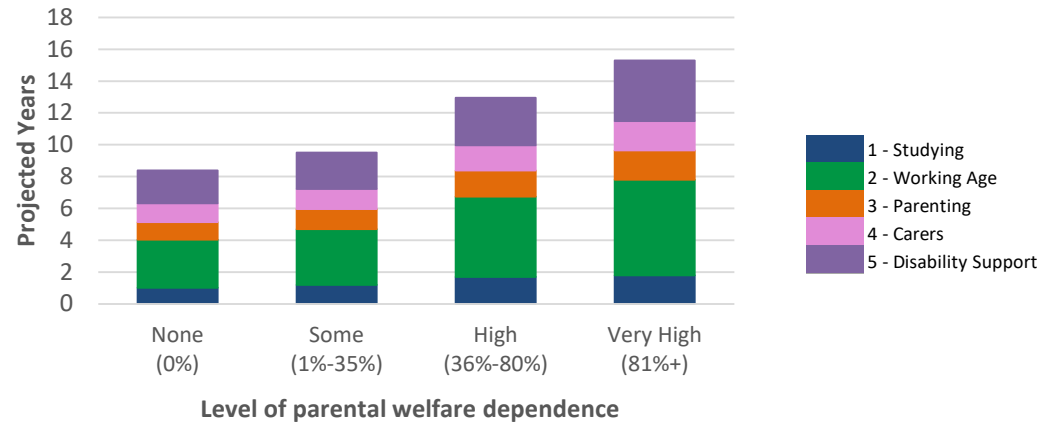


It reveals that when children with very high level of parental welfare dependence do enter the system, 90% enter directly onto pre-retirement income support payments, including 40% that enter directly onto Working Age payments. These figures are almost double of those for children with no parental welfare dependence who are instead much more likely to enter the welfare system onto a non income support payment or the age pension when they retire.

How does this affect the duration of a child's interaction with the welfare system?

The figure below shows the expected number of years that these children will stay in the pre-retirement income support system, and how this differs based on their level of parental welfare dependence.

Figure 12: Projected future years in pre-retirement income support classes by level of parental welfare dependence (current 15 year olds)

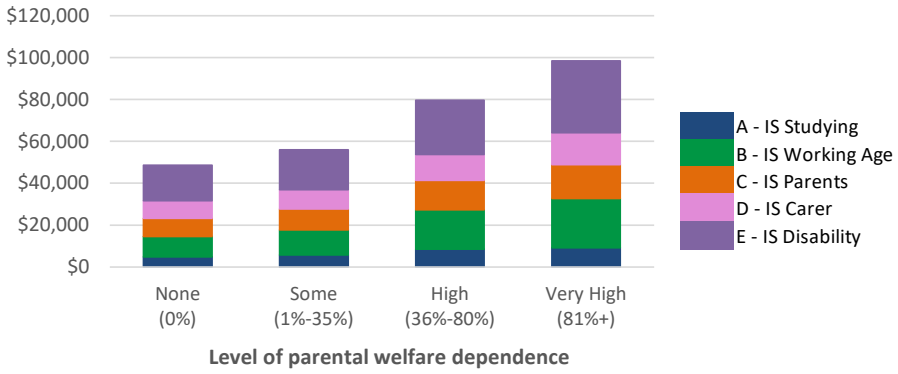


As can be seen above, children with very high welfare dependence are expected to be reliant on income support payments (excluding the age pension) for more than 15 years of their lives. For six of these years, this group will be receiving Working Age related payments. Children with no parental welfare dependence who enter the welfare system are expected to spend only half of this time (three years) receiving Working Age payments, and a total of eight years receiving income support payments (excluding the age pension).

What is the cost of this cycle of welfare dependence?

The chart below shows the average lifetime cost of income support payments (excluding the age pension) for children aged 15 in 2017 by their level of parental welfare dependence.

Figure 13: Projected average lifetime cost of pre-retirement income support payments by level of intergenerational welfare dependency (current 15 year olds in class 12)



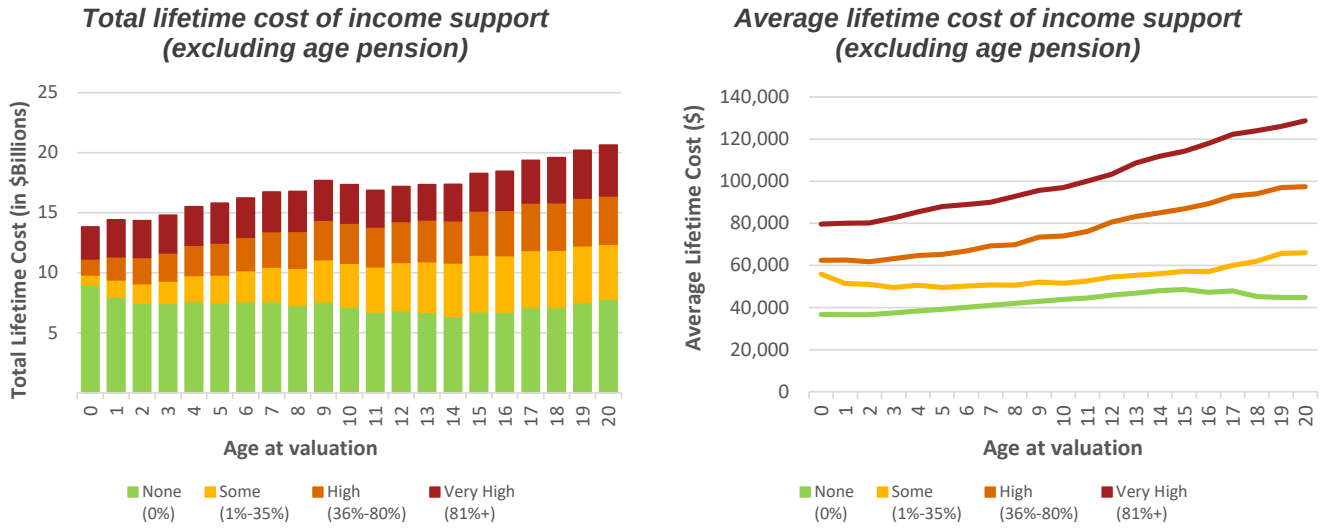
For a 15 year old with a very high level of parental welfare dependence, the model indicates an average lifetime cost of $240,000 per child, including the amounts shown above as well as all other in-scope payments. This is $69,000 more than children with no parental welfare dependence. The majority (around $50,000) of the difference in the costs for these children relates to the receipt of pre-retirement income support payments; this is primarily driven by higher Working Age, Parenting and DSP payments.

Lifetime cost results by level of parental welfare dependence and age

While the analysis above focuses on the lifetime cost results for the cohort of children aged 15 in 2017 who are in class '12 Rest of Australian Population', below we have considered the lifetime cost results for all individuals currently aged up to 20.

The figure on the left shows the breakdown of the total lifetime cost of income support payments (excluding the age pension) for children aged 0 to 20 at the valuation date. For comparison, the figure on the right shows the average lifetime cost per person by age and level of intergenerational welfare dependency for this same group of people.

Figure 14: Projected lifetime cost for income support payment categories (excluding pension) by level of parental welfare dependency (all classes)



We observe that:

- Individuals with higher levels of parental welfare dependency tend to have more than double the average lifetime cost (for income support payments excluding the age pension) across younger ages.
- The importance of parental welfare use is evident when we consider that individuals with very high levels of parental welfare dependency account for more than 19% of the total pre-retirement income support cost for 0 to 20 year olds, despite making up only 11% of the group.

- The total and average lifetime cost generally increases with age (within this age range) due to discounting – future welfare payments for older people are expected to be paid sooner.

2.3 Education sector

Previously, the only education variable used in the model was the highest level of educational attainment. This variable has some limitations in that (a) by definition it is only updated when people have completed their current studies, and (b) the completion of studies often coincides with a transition into another part of the welfare system or out of the welfare system entirely, and therefore there may no longer be an obligation for the individual to report their attained education.

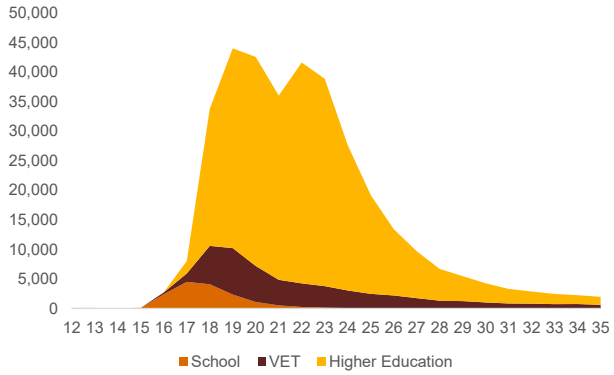
This year, for people in the Studying class, we have also included the education sector in which they are currently studying. This helps to supplement the existing educational attainment variable by providing more up to date information about the education pathways being undertaken by current students. This has assisted modelling of their future educational and/or career pathway which influences welfare usage. Education sector is a new class characteristic variable, modelled only while individuals are in the Studying class.

The education sector variable represents a person's current level of study. A person can either be completing secondary school, vocational education and training (VET), or higher education while studying.

What does the data tell us about peoples' education sector?

Whether a person is completing secondary school, VET, or higher education is strongly linked to their age and educational attainment. The chart below shows the number of those in the studying class in each education sector by age.

Figure 15: Profile of students (age/education sector)

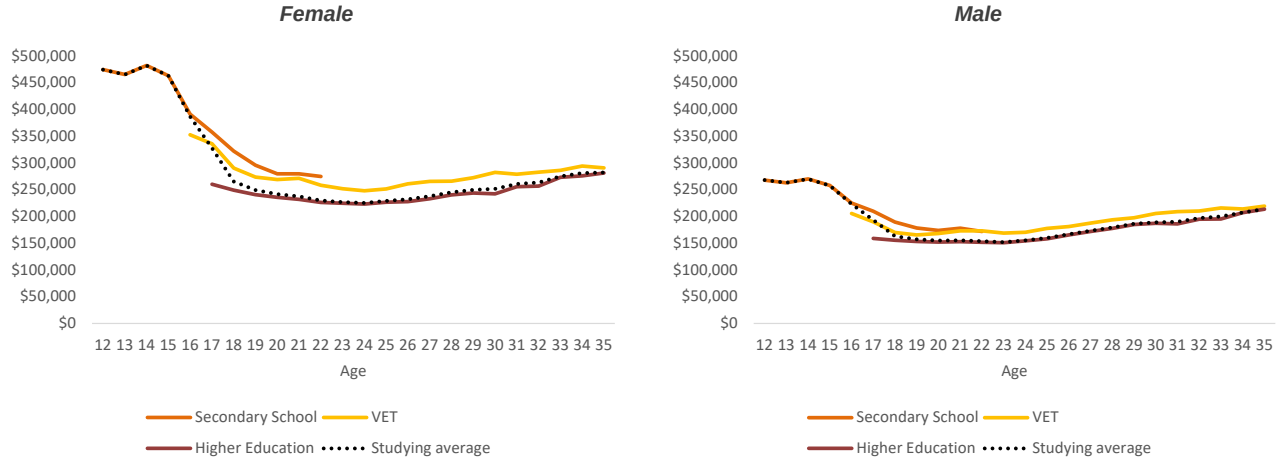


We can see at the younger ages, people mostly attend secondary school, while at the older ages people attend VET or higher education. The timing of the major shift from secondary school to VET or higher education likely reflects the age mix within school grades, the different states' ages for graduating from secondary school, and people who may graduate slightly quicker or slower.

Lifetime costs

We estimated the average lifetime cost for higher education students to be **$203,000**. This compares to the **$241,000** average lifetime cost for VET students and **$273,000** average lifetime cost for secondary school students. Note however that these differences are somewhat exaggerated due to the different profile of students at different ages within each education sector – this is explored in the charts below, which show the variation in average lifetime cost by education sector for students of different ages.

Figure 16: Average life time cost for individuals split by education sector[1]



We observe the following:

- The lifetime costs for school students are close to the class average at younger ages and similarly for higher education students at the older ages reflecting in each case that they form the majority of the class.
- There is higher future welfare use for younger users which may reflect the tighter eligibility criteria for studying income support payments at these younger ages, potentially targeting a relatively more disadvantaged group. In particular, there is a large difference before/after age 18, the age at which full time students are eligible for Youth Allowance.
- For both men and women the expected average lifetime cost is highest for those in secondary school followed by those in VET and then those in Higher Education, and this difference is generally consistent across all ages.
- Almost all of the individuals in the Studying class aged 15 or under are Indigenous Australians receiving ABSTUDY payments. The higher lifetime cost for this cohort indicates that this group of Indigenous Australians are more likely to stay within the welfare system in the future. Furthermore, females in this cohort have a significantly higher lifetime cost than males as a result of their greater expected utilisation of parenting and family payments in the future.

Future outcomes

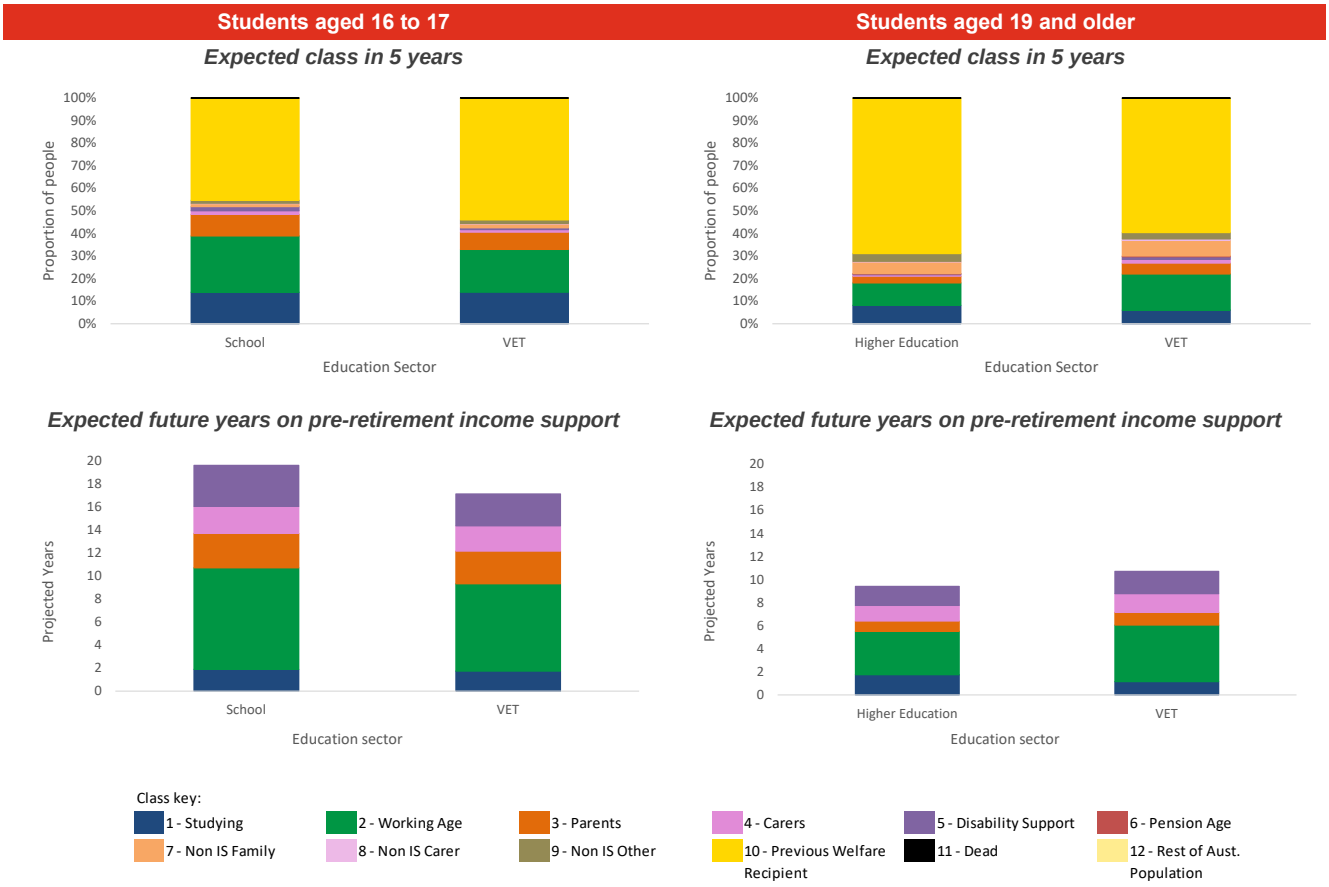
The impact of education sector on future outcomes is explored further for two separate cohorts representing two important life stages:

- Students aged 16 to 17, who are generally close to finishing school or in VET – note that due to the eligibility criteria for Studying payments, this cohort mainly consists of Indigenous Australians (supported by ABSTUDY) or non-Indigenous Australians (supported by Youth Allowance) who are either independent or needing to live away from home. In particular, this cohort excludes most full time students in secondary school who are living at home with their parents or guardians.
- Students aged over 18, who have generally finished school and are therefore in VET or Higher Education.

[1] Lifetime cost information for those in secondary school older than age 22 has not been shown due to the very small numbers of people

The following charts show the variation by education sector for each of these cohorts of: (a) the proportion of people expected in each welfare class in five years' time, and (b) the expected future years on income support (excluding the age pension).

Figure 17: Expected future outcomes for Studying recipients



For the younger cohort of students aged 16 to 17 who are mostly either Indigenous, independent or needing to live away from home, we observe that:

- VET students are expected to have lower welfare dependency than secondary school students. VET students are expected to have a future lifetime cost of **$287,000** compared to secondary school students with **$307,000**.
- VET students are expected to spend 2.5 less years on income support over their future lifetime compared to secondary school students.

For the cohort of students aged 19 and over, we observe that:

- VET students who are supported by student payments are expected to have higher welfare dependency than higher education students. VET students are expected to have a future lifetime cost of **$238,000** compared to higher education students with **$202,000**.
- Higher education students are expected to spend longer in the Studying class but are more likely to exit the system when they do so compared to VET students. VET students are expected to spend about 9.5 years on other forms of income support (excluding pension age payments) compared to 7.5 years for higher education students.

2.4 Barriers to work

The barriers to work variable is a new modelling variable added to the 2017 valuation for people receiving Working Age payments. The variable separates the people in the Working Age class based on whether they: have an exemption from mutual obligation requirements; whether they have had a partial capacity to work assessment and its outcome; and whether their primary medical condition reports a psychological or psychiatric condition. Barriers to work is a class characteristic variable, and it captures information which is only available for people while they are in the Working Age class.

The barriers to work variable was added to the model this year owing to its strong relationship with the likelihood of remaining on income support. The inclusion of this variable allows exploration of how these factors influence the outcomes of Working Age payment recipients. Together with the class characteristic variables which were introduced last year (payment type, employment earning flag), this variable allows us to undertake much more detailed analysis of the factors influencing outcomes for people receiving Working Age payments.

In 2017, around 45% of individuals in the Working Age class either received an exemption, were assessed with little capacity to work, or had a reported psychological or psychiatric condition. People with an exemption status tend to have temporary circumstances which reduce their ability to work, while those with a reported psychological/psychiatric condition or reduced work capacity have longer term conditions which reduce their ability to work.

Exemption at year end

Exemptions from mutual obligation requirements may be provided to people who have circumstances which reduce their ability to find employment for a period of time. This could include crises like the death of an immediate family member, homelessness, a flood at home, or short term duties of care to a parent or child. The table below shows the breakdown of Working Age class recipients by their exemption status at the end of June 2017.

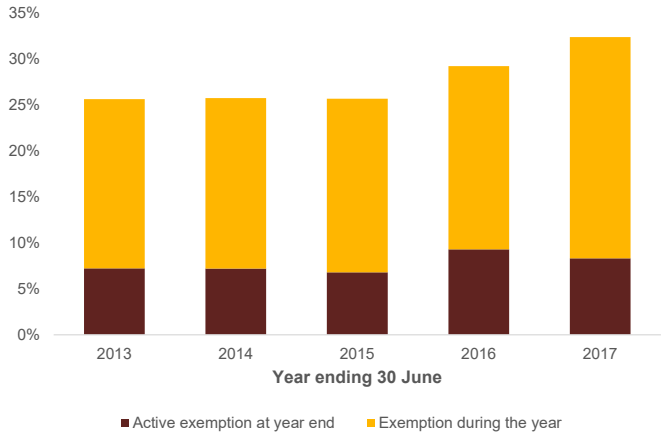
Table 6: Breakdown of 2017 Working Age class by exemption status

Exemption Status	Number of People	Proportion of Working Age Class
Active exemption at year end	108,373	8%
Past exemption in most recent year	312,483	24%
No exemption over year	880,490	68%
Total	**1,301,346**	**100%**

A similar proportion of men and women have obtained an exemption at some point during the year, however women are about 1.3 times more likely to have an active exemption at the end of the year, indicating they may remain exempt for longer than males.

In the last few years, the proportion of Working Age recipients who have an exemption at some stage during the year has grown from 26% to 32%, as shown in the chart below.

Figure 18: Proportion of people in the Working Age class with an exemption during the year



We note that this increase in the proportion of people with exemptions has coincided with the tightening of eligibility criteria and introduction of medical reviews for the Disability Support Pension.

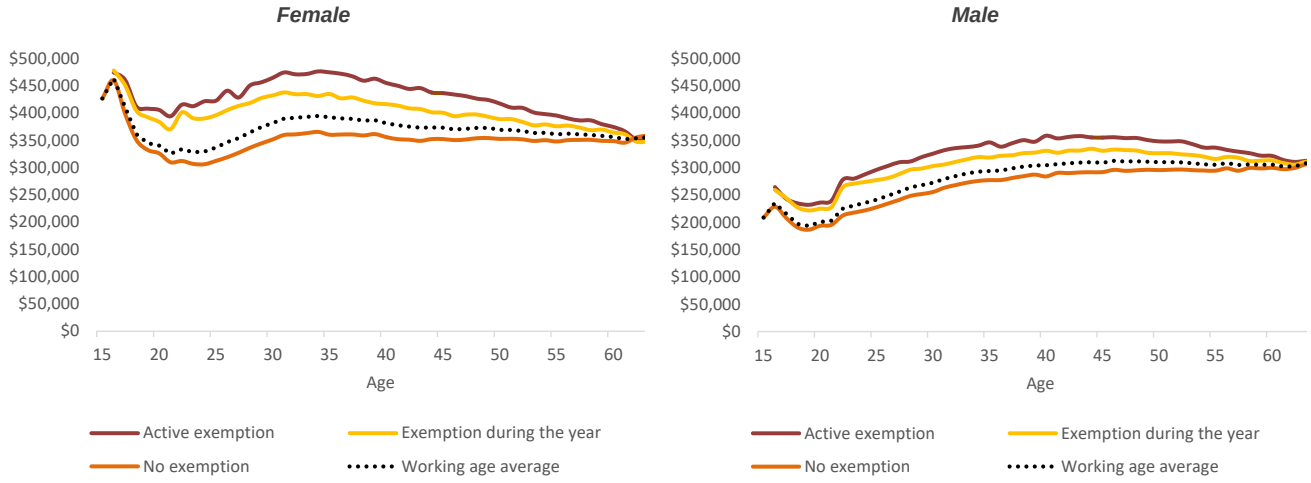
Our analysis has shown that individuals are more likely to obtain an exemption in the future if they:

- have a large number of children (four or more);
- have a low level of highest attained education (year 10 or less);
- are older; or
- have previously received the Disability Support Pension.

Lifetime costs

We estimated the average lifetime cost for the people with an active exemption from mutual obligations to be **$376,000**. This compares to the average lifetime cost for people in the Working Age class of **$315,000**. The variation in average lifetime cost by exemption status, age and gender is illustrated in the figure below.

Figure 19: Average life time cost for individuals split by exemption



Those with an active exemption at year end have a higher lifetime cost and longer expected duration in the Working Age class than those who do not across nearly all ages. This difference is largest for Working Age recipients aged 25 to 40 and is greater for women than for men.

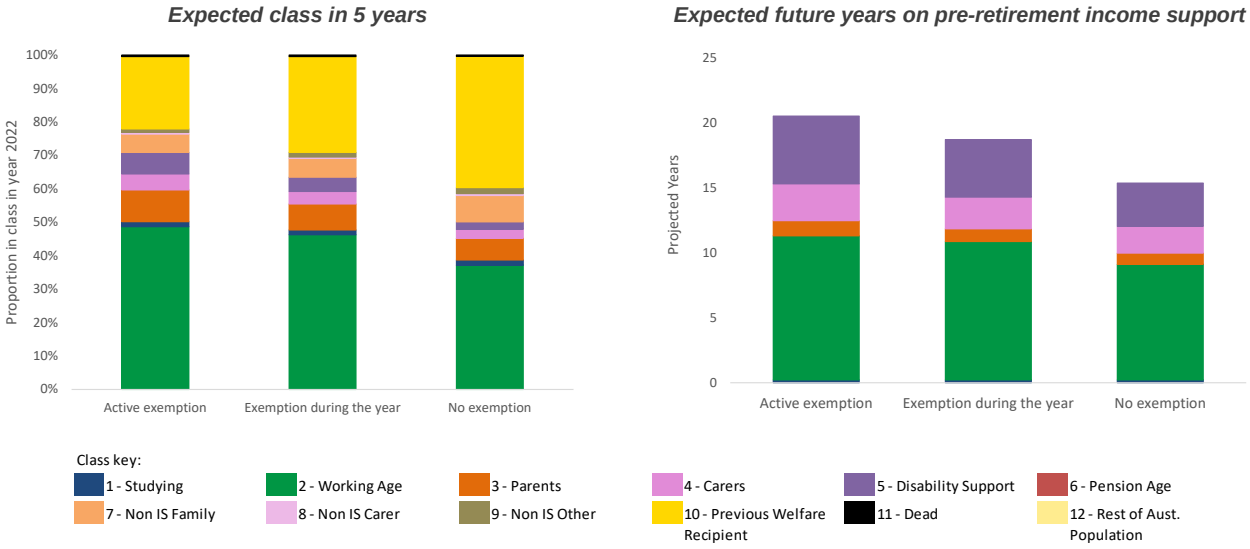
People that have had an exemption over the last year (but do not have an active exemption at year end) still have substantially higher average lifetime costs and a longer expected duration in the Working Age class compared to people without an exemption across most ages. This suggests that despite exemptions generally being granted for short term crises, the people in these situations are still likely to face longer term barriers to employment.

Future outcomes

The difference in lifetime cost is driven by future pathways through the welfare system. Individuals with an active exemption from mutual obligations take longer to transition out of the Working Age class and are more likely to transition to an income support class when they do, compared to those without an active exemption.

The following charts show the variation by current exemption status for the cohort of Working Age payment recipients currently aged 30 to 34 of (a) the proportion of people expected in each welfare class in five years' time, and (b) the expected future years on income support (excluding the age pension).

Figure 20: Future outcomes for Working Age recipients aged 30 to 34 by exemption category



We observe the following:

- Only about 30% of people aged 30 to 34 with an active exemption from mutual obligations and currently in the Working Age class are expected to be independent of income support over the next five years. This compares to around 50% for people with no exemption and currently in the Working Age class.
- A Working Age payment recipient aged 30 to 34 with an exemption is expected to spend 21 more years on pre-retirement income support (including 11 years on Working Age payments and five years on the Disability Support Pension). This is six years more than those without an exemption.
- People that have had an exemption in the past year but do not currently have an exemption have life trajectories closer to those with an active exemption. They are expected to spend a similar amount of time on Working Age payments and slightly less time on the other income support classes compared to those with an active exemption. This suggests that while these people no longer qualify for an exemption, the circumstances of their exemption have longer lasting effects which increase the difficulty of them finding employment.

Reported psychological condition and work capacity assessment

People may report a medical condition or reduced work capacity when sick or injured, which may in turn reduce their mutual obligations while in the Working Age class. Those assessed with less than 15 hours work capacity a week have different obligations to those assessed with at least 15 hours work capacity a week. We expect these people to be more likely to remain on income support given their lower work capacity, while anecdotal evidence suggested that individuals with psychological or psychiatric medical conditions are also more likely to remain on welfare.

To separate out the impact of those with temporary circumstances from those with longer term conditions reducing their ability to work, the analysis conducted in this section focuses only on those without an active exemption from mutual obligations at 30 June 2017.

The table below shows the breakdown of Working Age class recipients by their work capacity assessment and reported psychological/psychiatric assessment at the end of June 2017.

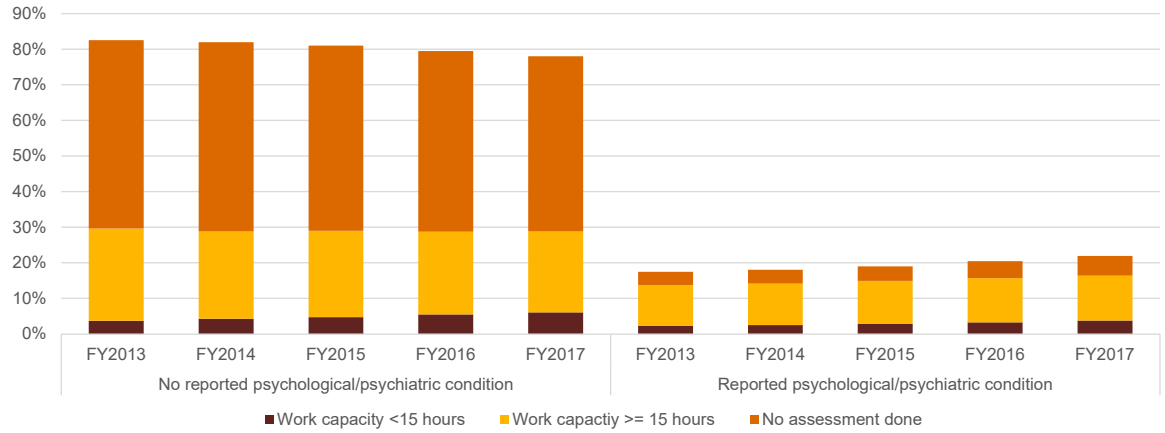
Table 7: Breakdown of 2017 Working Age class by medical condition and assessed work capacity

Exemption Status	Reported Medical Condition	Assessed Work Capacity	Number of People	Proportion of Working Age Class
Exemption at year end	All	All	108,373	8%
No exemption at year end	Psychological or psychiatric	Less than 15 hours	41,144	3%
		At least 15 hours	143,477	11%
		No assessment	59,678	5%
	Other or none	Less than 15 hours	65,327	5%
		At least 15 hours	269,473	21%
		No assessment	613,874	47%
Total			**1,301,346**	**100%**

Most people (around 75%) with a psychological or psychiatric condition have had a work capacity assessment. For those without a psychological or psychiatric condition, there is a larger proportion of people without a work capacity assessment – these are predominantly those without any reported medical condition. Of the people who have a work capacity assessment, approximately 20% are assessed as having less than 15 hours of work capacity – this is similar for people irrespective of whether they have a psychological or psychiatric condition.

The chart below shows the proportion of people in the Working Age class over the last five years based on whether they have had a reported psychological/psychiatric condition and/or a work capacity assessment.

Figure 21: Historic proportion of people with a reported psychological/psychiatric condition or work capacity assessment



The number of people with reported psychological/psychiatric conditions has grown steadily over the last five years. This is potentially due to increased awareness of mental health over the past decade and may also reflect the recent tightening of the DSP eligibility criteria, with more people with these conditions staying in the Working Age class rather than transitioning into DSP. The split between men and women with a reported psychological or psychiatric condition is similar.

We can also see that the number of individuals assessed with less than 15 hours of work capacity a week has increased over the last five years and that this is across both the medical condition groupings. This may also reflect people who would have previously entered DSP.

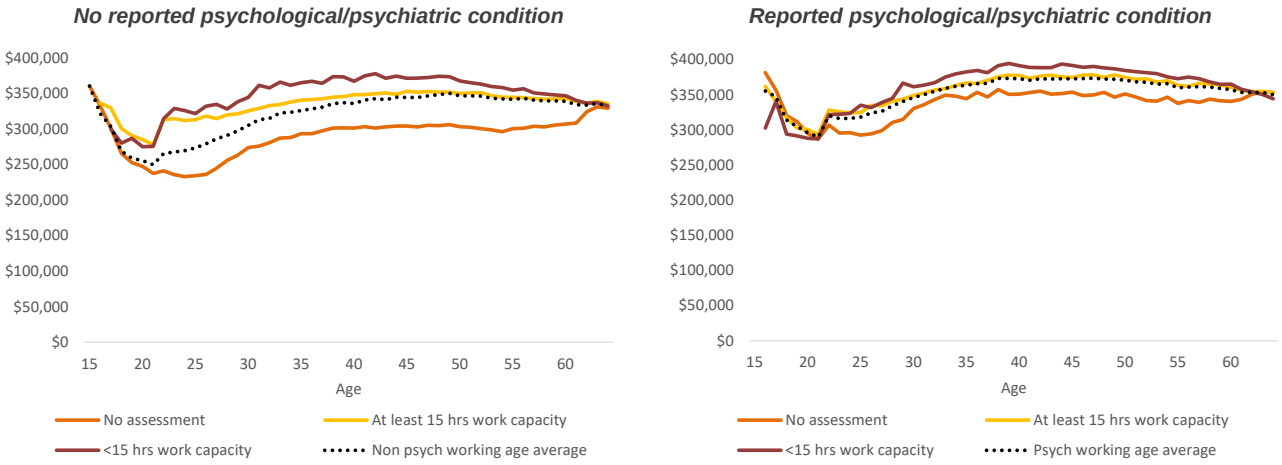
Interestingly although the proportion of men and women assessed with less than 15 hours of work capacity is similar, a slightly greater proportion of men (39% compared to 31% for women; not shown in chart) who have applied for a work capacity assessment have been assessed with 15 or more hours work capacity.

Lifetime costs

We estimated the average lifetime cost for the people with either a recorded psychological/psychiatric condition or work capacity of less than 15 hours a week to be to be close to **$350,000**. Those who have not had a work capacity assessment and do not have a recorded psychiatric/psychological condition have an average lifetime cost of **$277,000**. These compare to the average lifetime cost for people in the Working Age class of **$315,000**.

The variation in average lifetime cost by age, reported psychological condition and assessed work capacity is illustrated in the figure below.

Figure 22: Average lifetime cost for individuals split by recorded psychological condition and assessed work capacity.



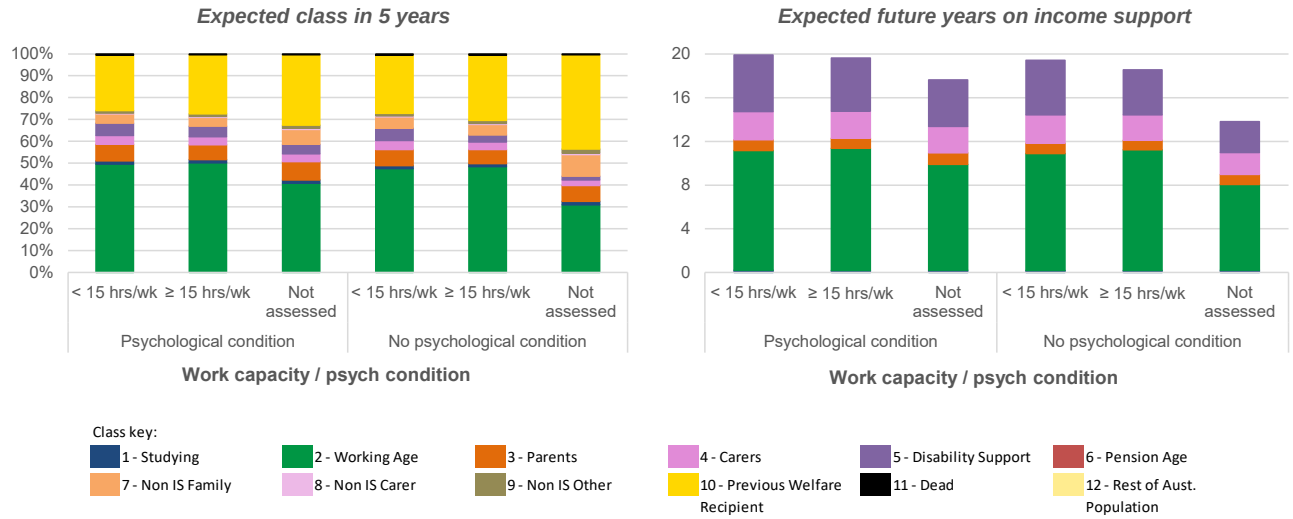
There is moderate variation in average lifetime costs by age, work capacity and recorded psychological or psychiatric condition:

- The following observations are consistent across most ages:
  - people with less work capacity have a higher expected future lifetime cost; and
  - people with a recorded psychological/psychiatric condition have a higher expected future lifetime cost.
- There is a greater difference between those that have had no assessment and those with an assessment, irrespective of the outcomes of the assessment. This is especially the case for people with no reported psychological or psychiatric condition.
- The impact of a work capacity assessment on expected lifetime cost is influenced by age. We can see that for those less than 30, having a work capacity assessment is indicative of much higher average lifetime costs regardless of whether they have been assessed as having less than 15 hours of capacity or not.
- As individuals approach retirement, the differences in average lifetime cost diminish as lifetime pathways become more fixed.

Future outcomes

The difference in lifetime cost is driven by future pathways through the welfare system. The following chart shows the expected proportion of Working Age recipients currently aged 30 to 34 in each welfare class in five years' time for different assessed work capacities and reported medical conditions.

Figure 23: Future outcomes for Working Age recipients aged 30 to 34 by work capacity/psychological condition



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

- Again, there is only a small difference in future outcomes between those assessed as having 15 or more hours work capacity from those assessed with less than 15 hours work capacity, with the larger difference being between those that have applied for a work capacity assessment and those who have not. People with a work capacity assessment are expected to spend around three to five years longer on income support, and are approximately 30 to 40% more likely to be on Working Age payments in five years' time.
- People assessed with work capacity of less than 15 hours per week are more likely to enter the Disability Support class compared to those with higher work capacity.
- Those with a reported psychological/psychiatric condition are expected to spend slightly more time (around one to two years longer) on income support.
- The expected future duration on either studying, Income Support Carer or Parenting payments is relatively unaffected by a persons reported psychological/psychiatric condition and work capacity assessment.

2.5 Family units

As welfare eligibility and the quantum of many benefits are typically tied not only to the individual's circumstances but also to the family situation, it was considered that a better understanding of household structures would be of value in supporting policy development.

The 2016 model captured information about family circumstances by projecting a person's partner status and their associated children. For the 2017 valuation, as a step towards understanding how family units as a whole interact and evolve over time, we have used the historic welfare payments data to analyse the composition of family units that currently exist and combined this with information available from the census for the rest of the model population. The analysis has revealed the considerably complex and dynamic nature of family units, which is further complicated by a number of gaps and inconsistencies in the information collated across the various data sources. While the work done is a valuable first step, better data would be needed to undertake a more comprehensive analysis of households and family units.

Based on exploration of this data as well as considering the information available for both the welfare recipient population and the wider population, we have adopted a relatively simple definition which was used to assign[2] all individuals in the population to one of four different types of family units:

- Single person, with no children under the age of 15
- Couple, with no children under the age of 15
- Single person, with at least one child under the age of 15
- Couple, with at least one child under the age of 15

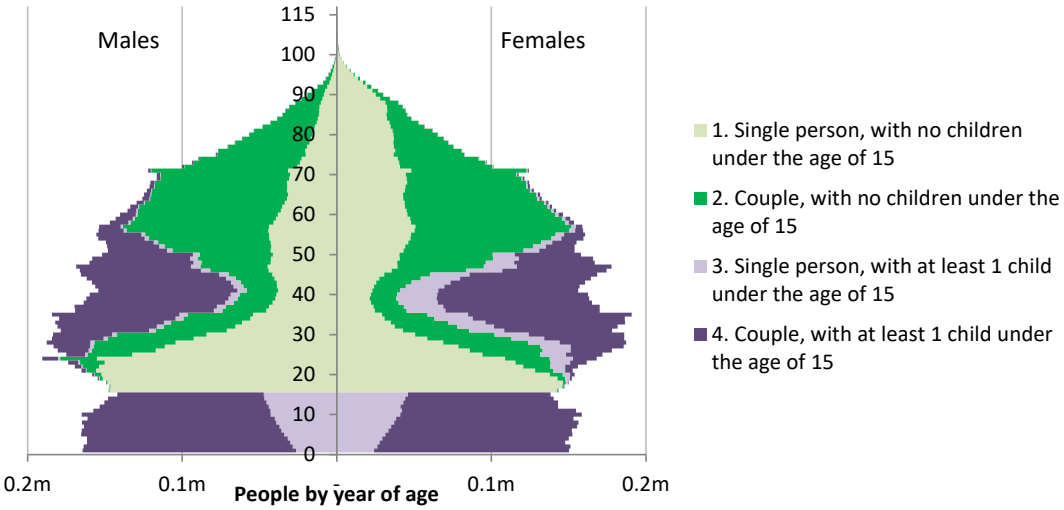
The real world is more complex than this – for example, people can be both a child in one family unit and a parent in another; most 15 to 18 year olds will still be part of their parents' household. After considering the value of different definitions, we have adopted the convention that people under the age of 15 are considered to be children and are therefore part of either a couple or single family with children. Conversely, those aged 15 and over are defined as adults in their own right, capable of being their own family unit and mostly starting as single people without children. As they age, form partnerships and have children their family composition type changes. This was necessary as the data does not allow us to reliably identify which teenagers or young adults may be living with parents. This definition also aligned to family compositions used in ABS Census outputs which were used to infer the family compositions for people where welfare data was unavailable or outdated.

This variable has been developed for reporting purposes only, that is, information in the family composition variable is not directly taken into account when projecting each person's future pathway or welfare utilisation.

Family compositions in the population

The population pyramid below shows how family compositions in the model population vary by age and gender.

Figure 24: Model population by family unit composition



We observe the following:

- Children living in single parent family units account for 24% of all children under the age of 15.
- 7% of individuals between the ages of 18 and 45 are in single person with children family units under the age of 15, and 34% are part of couple with children family units.

[2] We note that this process of assigning a family unit is not straightforward. Limitations in the data meant that a child could be initially identified as part of multiple family units due to their association (i.e. parent or guardian relationship) with these adults. It was therefore necessary to devise a set of business rules to allocate children to an individual family unit – this was done by allocating the child to the family unit of the person who is seen to be their primary caregiver in the administrative data.

- As expected, the “single person with children” family unit is much more prevalent for females than males, with 82% of single parent families having a female parent and 18% having a male parent.
- There is a step change at age 15 due to the family unit definition considering those aged 15 and over to be persons in their own right, as discussed previously.

Family composition and welfare utilisation

Our analysis has highlighted the difference in welfare utilisation between different family units. The results of this for people aged 18 and over are shown in the table below:

Table 8: Family unit composition welfare utilisation (population aged 18+)

Family unit composition	Number of adults	% of adults on income support	% of adults on non income support	% Not welfare dependent
Single person with no children aged <15	**7,147,000**	**41%**	**3%**	**56%**
- Aged 18-35	*3,236,000*	*27%*	*0%*	*73%*
- Aged 36-64	*2,345,000*	*38%*	*5%*	*57%*
- Aged 65+	*1,566,000*	*76%*	*5%*	*19%*
Couple, with no children aged <15 [3]	**7,026,000**	**26%**	**6%**	**68%**
- Both adults aged 18-35	*1,170,000*	*3%*	*2%*	*94%*
- At least one adult aged 36-64 (but none older)	*3,774,000*	*13%*	*5%*	*83%*
- At least one adult aged 65+	*2,082,000*	*64%*	*10%*	*26%*
Single person with children aged <15	**867,000**	**63%**	**21%**	**16%**
- Adult aged 18-35	*337,000*	*72%*	*10%*	*18%*
- Adult aged 36-64	*519,000*	*57%*	*28%*	*15%*
- Adult aged 65+	*11,000*	*79%*	*5%*	*17%*
Couple with children aged <15	**4,095,000**	**9%**	**36%**	**55%**
- Both adults aged 18-35	*1,159,000*	*11%*	*37%*	*53%*
- At least one adult aged 36-64 (but none older)	*2,918,000*	*9%*	*35%*	*56%*
- At least one adult aged 65+	*18,000*	*49%*	*5%*	*46%*
Total	**19,134,000**	**30%**	**12%**	**58%**

Key takeaways from this analysis are:

- The majority of adults (more than 14 million people) are in family units that do not have any children younger than 15.
- Single person with children family units have the highest level of welfare dependency. In particular, 63% of adults in these family units currently receive income support, and a further 21% receive non income support.
- Of the 18 to 35 year olds in single person with children family units, 72% receive income support payments, compared to just 27% of 18 to 35 year old single people without children.
- Young couples aged 18 to 35 with no children have the lowest rate of welfare dependency amongst the groups shown in the table, with only 6% of adults in these family units are currently receiving benefits. In contrast, 47% of partnered 18 to 35 year old adults with children are currently receiving benefits. The majority of these individuals are receiving non income support payments.

[3] The two specific adults that form a couple family unit were only able to be linked (and therefore their ages determined) if welfare data was available for both adults. For the family units where this data was not available (around 41% of couple family units), we have assumed that the two adults have the same age for the purposes of this table.

- Couples with no children and at least one adult aged 36 to 64 (but none older) have a higher level of income support dependence compared to younger couples with no children.
- As would be expected, income support dependence is considerably higher for individuals aged 65 or over due to the high proportion of people receiving the age pension.

Common patterns of welfare utilisation amongst couples

The table below shows the proportions of men and women that are partnered in each of the income support classes.

Table 9: Proportion of people partnered by gender and class

	% of females partnered	% of males partnered	Total % partnered
1 Studying	7%	7%	7%
2 Working Age	21%	21%	21%
3 Parents	33%	53%	35%
4 Carers	56%	54%	55%
5 Disability Support	25%	23%	24%
6 Pension Age	45%	67%	55%

We note that:

- Singles tend to make up the majority of both the Studying and Working Age classes. Only 7% of people in the Studying class and 21% of people in the Working Age class are partnered.
- The majority of females in the Parenting class are single (67%). In contrast, only 47% of males in the Parenting class are single.
- Slightly more than half of people in the Carers class are partnered, and this proportion is reasonably similar for males and females.
- More than 75% of all DSP recipients are single, and this proportion is reasonable similar for males and females.
- 67% of male age pensioners are partnered. In contrast, less than half of the women in the Age Pension class have a partner. This is likely due to differences in longevity between men and women.

We have performed analysis to explore patterns of welfare utilisation by couples, where at least one partner is in receipt of an income support payment. The first table below looks at men in a couple and shows the welfare class of their partner, while the second table shows similar information for women. Both tables are restricted to look at income support recipients only for the first person in the couple being considered.

Table 10: Partner class proportions for men receiving income support, with rows showing the individual's class and columns showing their partner's class

Partnered men (by their welfare class)	Count	1 Studying	2 Working Age	3 Parents	4 Carers	5 Disability Support	6 Pension Age	Non IS classes	Non-welfare recipients
1 Studying	12,000	24%	12%	27%	2%	2%	0%	9%	25%
2 Working Age	146,000	2%	34%	27%	7%	5%	3%	9%	15%
3 Parents	19,000	4%	12%	9%	6%	4%	0%	33%	32%
4 Carers	46,000	0%	9%	7%	6%	52%	18%	3%	5%
5 Disability Support	92,000	0%	11%	4%	39%	18%	12%	6%	10%
6 Pension Age	717,000	0%	3%	0%	5%	3%	79%	1%	10%

Table 11: Partner class proportions for women receiving income support, with rows showing the individual's class and columns showing their partner's class

Partnered women (by their welfare class)	Count	1 Studying	2 Working Age	3 Parents	4 Carers	5 Disability Support	6 Pension Age	Non IS classes	Non-welfare recipients
1 Studying	14,000	21%	18%	5%	1%	2%	2%	5%	46%
2 Working Age	122,000	1%	40%	2%	3%	8%	19%	3%	24%
3 Parents	131,000	2%	30%	1%	3%	3%	0%	13%	47%
4 Carers	106,000	0%	10%	1%	3%	34%	32%	2%	18%
5 Disability Support	88,000	0%	8%	1%	27%	18%	24%	4%	17%
6 Pension Age	602,000	0%	1%	0%	1%	2%	94%	0%	2%

The following insights can be drawn from this analysis:

- Partnered men in the Studying class tend to have partners in the Studying or Parenting classes, while partnered women in the Studying class tend to have partners in the Studying or Working Age classes.
- A significant portion (30 to 40%) of partnered people in the Working Age class tend to have partners who are also receiving Working Age payments. This suggests partners of Working Age recipients are seven times more likely to be in the Working Age class themselves. There is also a large proportion of men (27%) who have partners in the Parenting class.
- Of the partnered women in the Parenting class, 30% of their partners receive Working Age payments.
- Of the partnered female carers, 34% of their partners receive DSP, whilst 32% of their partners receive the Age Pension. Of the partnered male carers 52% of their partners receive DSP.
- Of the partnered Disability Support Pensioners, more than 18% of their partners also receive DSP. Furthermore, for partnered female Disability Support Pensioners, more than 24% of their partners receive the Age Pension. This suggests partners of DSP recipients are six times more likely to be in the Disability Support class themselves.

2.6 Drivers of lifetime cost

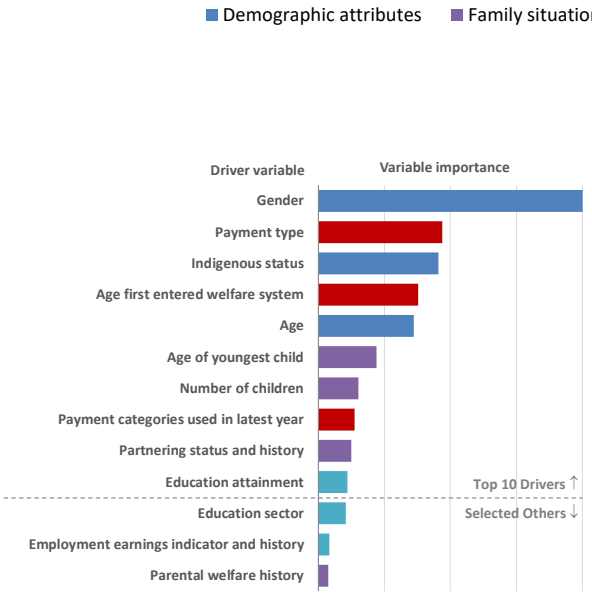
Lifetime cost is predicted to vary significantly for people, based on their circumstances or characteristics and the extent to which these are shown to by the analysis to be important differentiators of welfare utilisation or payment size. Although the underlying model is complex and takes into account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

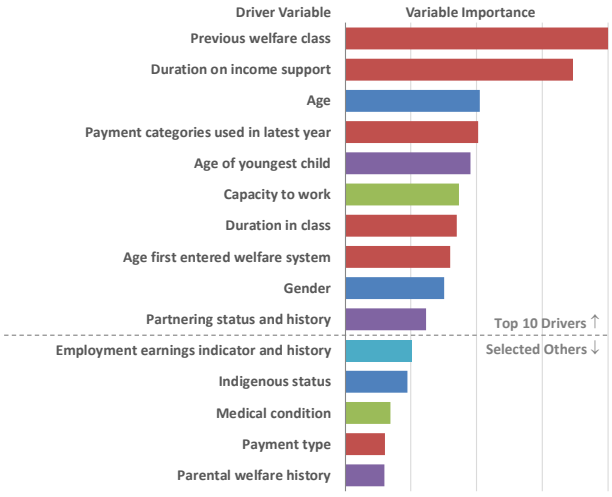
For example, for the Studying class, the most significant driver of lifetime cost is gender (with the lifetime cost for females being significantly higher than males). The second most important factor is payment type, and this has just below half the predictive power in determining the lifetime cost.

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

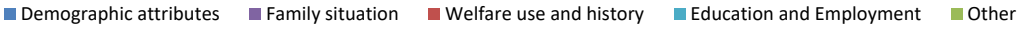
Figure 25: Key drivers of lifetime cost by welfare class



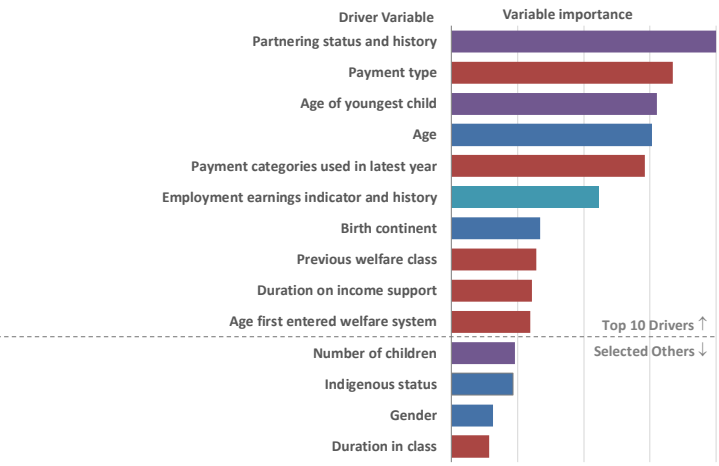
Driver variable	Characteristics associated with higher (lower) lifetime costs
Gender	Females (Males)
Payment type	ABSTUDY, Austudy (Youth Allowance Student)
Indigenous status	Indigenous Australian (Not Indigenous Australian)
Age first entered welfare system	Teenagers and people near retirement age (Young adults)
Age	Teenagers and people near retirement age (Young adults)
Age of youngest child	8-11 year olds (Very young children)
Number of children	At least 1 child (No children)
Payment categories used in latest year	Working Age and FTB (Supplementary payments excl. FTB)
Partnering status and history	Single for several years (Married for several years)
Education attainment	Lower level of education (Higher level of education)
Education sector	School and VET (Higher 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)



Driver Variable	Characteristics associated with higher (lower) lifetime costs
Previous welfare class	Parenting and Carers (Studying and Rest. of population)
Duration on income support	More years on income support (Less years on income support)
Age	Mid to late 40s (Young adult)
Payment categories used in latest year	Parenting payments and FTB (Studying and Rent Assistance)
Age of youngest child	8 to 11 years old (Very young children)
Capacity to work	Lower capacity to work (Higher capacity to work)
Duration in class	More years in class (Less years in class)
Age first entered welfare system	Younger entrants (Older entrants)
Gender	Females (Males)
Partnering status and history	Single for several years (Married for several years)
Employment earnings indicator and history	Unemployed for several years (Employed several years)
Indigenous status	Indigenous Australian (Not Indigenous Australian)
Medical condition	Psychological, Respiratory (Intellectual, Congenital anomalies)
Payment type	Widow Allowance, Abstudy (Partner allowance)
Parental welfare history	High parental welfare dependence (Low parental welfare dependence)

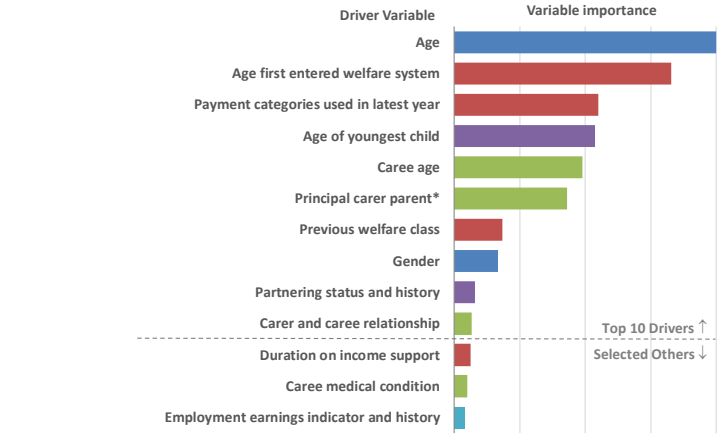


Class 3 Parents



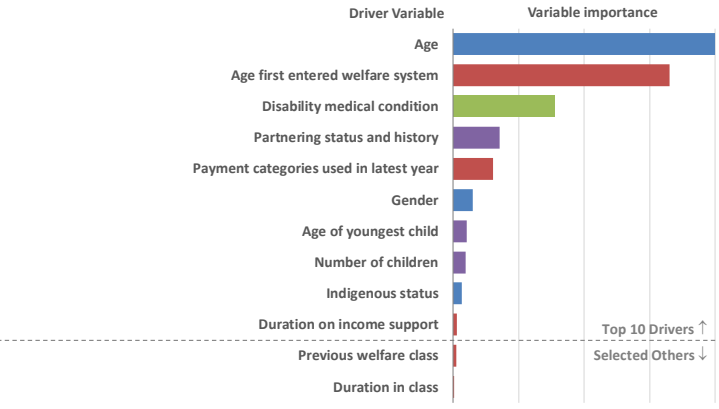
Driver Variable	Characteristics associated with higher (lower) lifetime costs
Partnering status and history	Single for several years (Married for several years)
Payment type	Parenting Payment Single (Parenting Payment Partnered)
Age of youngest child	Younger children (Older children)
Age	Teenagers (Middle aged)
Payment categories used in latest year	FTB (Working Age)
Employment earnings indicator and history	Unemployed for several years (Employed for several years)
Birth continent	Africa, Australia (Asia, Europe)
Previous welfare class	Carers and Working Age (Non Income Support Family)
Duration on income support	More years on income support (Less years on income support)
Age first entered welfare system	Younger children (Older children)
Number of children	Fewer children (More children)
Indigenous status	Indigenous Australian (Not Indigenous Australian)
Gender	Females (Males)
Duration in class	More years in class (Less years in class)

Class 4 Carers



Driver Variable	Characteristics associated with higher (lower) lifetime costs
Age	Younger people (Older people)
Age first entered welfare system	Younger entrants (Older entrants)
Payment categories used in latest year	Parenting and FTB (Aged Pension)
Age of youngest child	Younger children (Older children)
Caree age	Younger carees (Older carees)
Principal carer parent*	Principal carer parent (Not a principal carer parent)
Previous welfare class	Parenting or Studying (Pension Age and Rest of Aust. population)
Gender	Females (Males)
Partnering status and history	Single for several years (Married for several years)
Carer and caree relationship	Carer is the parent or guardian of caree (Partner or Unrelated)
Duration on income support	More years on income support (Less years on income support)
Caree medical condition	Congenital anomalies, Intellectual (Cancer, Musculo-skeletal)
Employment earnings indicator and history	Umployed for several years (Employed for several years)

Class 5 Disability Support



Driver Variable	Characteristics associated with higher (lower) lifetime costs
Age	Younger people (Older people)
Age first entered welfare system	Younger entrants (Older entrants)
Disability medical condition	Intellectual disability (Cancer/tumour, muscular)
Partnering status and history	Single people (People married for longer)
Payment categories used in latest year	Health and Disability supplement (No Health and Disability supp.)
Gender	Females (Males)
Age of youngest child	Younger children (Older children)
Number of children	No children or a lot of children (Some children)
Indigenous status	Not Indigenous Australian (Indigenous Australian)
Duration on income support	More years on income support (Less years on income support)
Previous welfare class	Studying and Parenting class (Pension Age, Non Income Support Carer)
Duration in class	More years in class (Less years in class)

Note: Principal carer payment is denoted with a (*) as this has not been modelled directly and has likely featured due to its correlation with directly modelled variables. As such, caution should be exercised when drawing conclusions based on this variable.

We observe:

- Across all the classes, the attributes which have been identified as significant are the factors which 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 this 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 which have the next significance are payment type, indigenous status and age first entered the welfare system. These all reflect 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.
  - Age is important as it acts as a proxy for people's progress through their studies.
  - Whilst relatively less significant, the remaining variables shown in the chart are factors which are 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 have higher lifetime costs.
- For class 2:
  - Previous welfare class and duration on income support are the most significant variables and reflect the observation that people who have been on income support for longer, are also more likely to continue using income support.
  - The age of a recipient's youngest child is a highly ranked driver for class 2 and this is reflective of the expected duration of people's future caring responsibilities, which impacts their chance of becoming independent of working age payments.
- For class 3
  - A person's partner status and partnering history ('partnering status and history') is the most important 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 such this is picking up similar information to partnering status and history, and so is also coming through as an important driver.
  - The age of a recipient's youngest child is a highly ranked driver 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.
- 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.
  - Age of youngest child as well as the payment categories used in the latest year are also important drivers. Both of these variables incorporate information about whether the recipient has children and therefore is likely to receive family payments.

- 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.
  - Age first entered system and disability medical condition are the next most important drivers. Both these variables reflect 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.

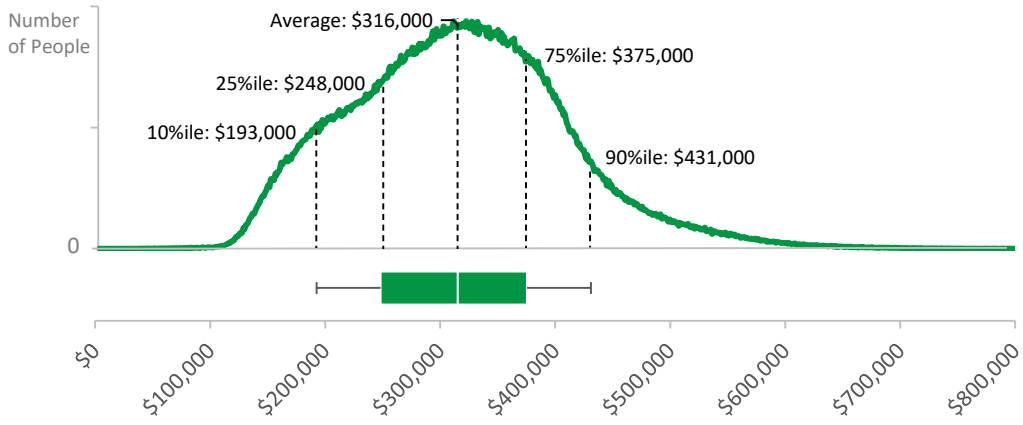
It should be noted that while parental welfare dependence does not appear be to be as significant a driver of lifetime costs as some other variables, its impact is likely understated. This is because parental welfare information was only available for a subset of the population, and as such it was only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

2.7 Distribution of average lifetime cost

The valuation model is designed to differentiate between people based on their individual characteristics. In the previous section we discussed the characteristics or drivers which have the highest impact on determining which people have higher and lower lifetime costs within each of the pre-retirement income support classes. This section takes this analysis a step further and discusses the extent of the variation in lifetime costs for individuals within each welfare class.

The first chart below provides an example of the distribution of the lifetime costs for the 1,301,000 people in the Working Age class. Almost all of the lifetime costs for these individuals are between $100,000 and $600,000, with an average of $316,000.

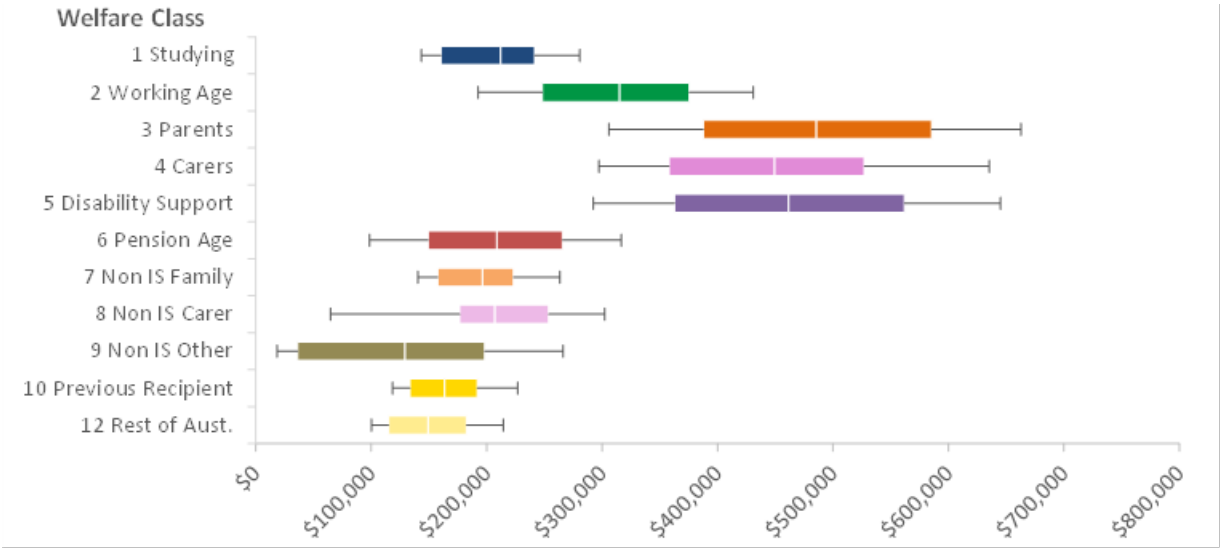
Figure 26: Distribution of lifetime cost for individuals in the working age class



In this chart the black dotted lines represent the average and percentiles which are also expressed as a "box-and-whisker" where the coloured box represents the interquartile range (i.e. the range from the 25th percentile to the 75th percentile), the black ends (dashes) represent the 10th and 90th percentiles, and the white line represents the average lifetime cost.

The next chart summarises the percentiles of the lifetime cost distribution for all classes, showing the equivalent "box-and-whisker" for each class.

Figure 27: Distribution of lifetime cost for individuals in each welfare class



We observe the following:

- There is a wide range of variability around the average lifetime cost for each class. This shows that outcomes can vary significantly depending on the characteristics of individuals which influence their future pathway – these drivers of lifetime cost were explored previously in section 2.6.
- Classes 3 to 5 (Parents, Carers and DSP), which have the highest average lifetime costs, also have higher dollar variation in lifetime costs for individuals in the class. However, despite the higher variation, the 10th percentile for these classes remain higher than the 75th percentile of most other classes. This suggests that even the people less dependent on welfare within these classes are still likely to require considerable support from the welfare system.
- Although not shown in the chart, lifetime costs for individuals also differ by age and gender (this is shown in the sections for each class later in the report):
  - A significant proportion of the variation within the lifetime cost for individuals in classes 4 to 6 (Carers, DSP and Pension Age) is driven by age, and this is consistent with the analysis shown in the previous drivers of lifetime cost section. Other variables which capture class specific characteristics were seen to be amongst the other key drivers for classes 4 and 5 (e.g. caree age for class 4 and disability medical condition for class 5).
  - After allowing for the effect of age and gender on people's lifetime costs, there still remains a significant variation in lifetime costs for individuals in Classes 2 and 3 (Working Age and Parents) owing to other characteristics which influence their future pathway. The analysis in the previous drivers of lifetime cost section showed that family characteristics and welfare history were amongst the other key drivers for these classes.
- There is a large spread of lifetime costs for people in class 9 ('Non IS Other'). This is owing to this class containing three distinct groups of people at rather different life stages (see section 7.3 for further detail).

3 Changes to the welfare system

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 most substantial policy changes were the introduction of the Child Care Subsidy from July 2018, replacing the current Child Care Benefit and Child Care Rebate; the introduction of an income limit of $80,000 on the payment of the Family Tax Benefit Part A Supplement from July 2017; and the two year freeze of current Family Tax Benefit rates for two years from July 2017.

3.1 Introduction

The June 2017 valuation provides an updated assessment of the expected future use of the Australian welfare system. This assessment recognises a number of different sources of changes since the previous valuation (June 2016):

- Change to the welfare system itself. This includes changes to the types of payments available, the eligibility criteria and payment levels
- 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.
- Changes to external drivers of the experience. This includes changes to the size and profile of the Australian population or the economic environment.

The first of these points on changes to the welfare system itself is discussed below. We go on to discuss changes to how the population is utilising the system, as well as changes in the size and profile of the population in section 4.

Note that the valuation can also be impacted to some extent by changes in the valuation process itself and these model developments and refinements were discussed in section 2.

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 that future changes in payment design or eligibility have been allowed for in the valuation if the related legislation is in place; however changes that are still being debated are not included. By way of example, we have allowed for the increase in retirement age from 65 to 67 which will occur over the period from 1 July 2017 to 30 June 2023. However we have not allowed for the further increase in the Age Pension qualification age to 70 as this measure is subject to the passage of legislation.

Each year there are many new changes to policy settings which have varied 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.

Since the 2016 valuation, there have been seven new changes to policy which we have made allowances for in the 2017 valuation. These are outlined in the table below along with their expected influence on the welfare system.

Table 12: Summary of main material policy changes (legislated 1 July 2016 to 30 June 2017)

Policy change	Description of policy change	Expected influence on the welfare system
Child Care Subsidy	Introduction of the Child Care Subsidy, and cessation of the Child Care Benefit and Child Care Rebate from July 2018.	Those parents currently receiving Child Care Benefit and Rebate payments will receive a different rate of payment based on their individual circumstances. On average, it is expected that child care payments will increase.
Income Limit of $80,000 for FTB Part A supplement	Introduction of an income limit of $80,000 on the payment of the Family Tax Benefit Part A Supplement, from July 2017.	Those people who earn more than $80,000 will not be entitled to the FTB Part A Supplement. On average this will reduce the amount of FTB paid per person.
Freeze of current Family Tax Benefit rates	Freeze of the current Family Tax Benefit (Part A and B) rates for two years, from 1 July 2017.	Future payment rates for FTB will be lower as a result of two years without indexation.
Student Start-Up Scholarship	Removal of the grandfathering for the Student Start-Up Scholarship from July 2017.	Those students who have not yet finished their studies will no longer be entitled to Student Start-Up Scholarship. Some of these students may elect to receive the Student Start-Up Loan.
Closure of Carbon Tax Compensation	Closure of Carbon Tax compensation (the Energy Supplement) to new recipients of Family Tax Benefit and concession cards (including the Seniors Health Card) from March 2017.	New recipients of FTB and new holders of the Seniors Health Card will not receive the Energy Supplement, as they have done historically.
Freeze of FTB higher income free area and primary earner income limit	Freeze of the higher income free area for Family Tax Benefit Part A, and the primary earner income limit for Family Tax Benefit Part B at their current levels until 30 June 2020.	People whose income grows beyond the current limits will lose their entitlement. This will reduce the amount of FTB payments.
Energy Assistance Payment	Payment of one-off Energy Assistance Payment in June 2017.	A new payment made in the 2016 financial year which is not expected to continue.

Based on budgeted information the most substantial policy changes which have been reflected in the policy settings for the first time at this valuation were the introduction of the Child Care Subsidy, replacing the current Child Care Benefit and Child Care Rebate from July 2018; the introduction of an income limit of $80,000 on the payment of the Family Tax Benefit Part A Supplement from July 2017; and the two year freeze of current Family Tax Benefit rates for two years from July 2017.

It is worth noting that all the above changes relate to supplementary payments; there have been few changes to the design of income support payments.

The 2017 valuation also includes a minor revision to the allowance for the January 2017 Age Pension assets test changes. This reflects information on the actual impact of the change in the two months after it took effect; the allowance was previously based on expected impacts from Departmental modelling.

Over the last few years there have also been operational developments relating to the medical assessment for the Disability Support Pension, and these have acted to tighten the eligibility. We have previously noted decreasing entries into the Disability Support Pension as a result of this, and a continuation of this experience has been observed this year.

4 Summary of recent experience

Key points

- The total model population of 24.7 million people comprises the 24.6 million resident population of Australia, as well as 0.1 million current welfare recipients residing overseas (mostly age pensioners).
- The model population has increased by 0.5 million since June 2016 which reflects 0.35 million population growth over the year, as well as a 0.15 million increase to reflect the higher than expected rate of population growth in the period between the 2011 Census and 2016 Census.
- Whilst the population has grown over the year, the total number of people in the welfare system is very close to that last year. There has been a very small decrease from 8.05 million welfare recipients seen during 2015/16 to 8.04 million during 2016/17.
- The number of entries into the welfare system has been decreasing over recent years whilst the number of people exiting the welfare system has been increasing. These factors have driven this small decrease in the total number of welfare recipients since last year.
- The numbers of people in most income support classes have reduced compared to last year. The exceptions to this are the Carers class and Age Pension class, both of which have continued to grow, but to a lesser extent than previously expected.
- The number of entrants into DSP has continued to reduce significantly as a result of tightened eligibility criteria and this has resulted in a significant reduction in the number of DSP recipients.
- This decrease in the welfare population over the last year is despite growth in the number of Australian residents. Welfare recipients now make up 32.6% of the population, down from 33.3% at June 2016. Income support recipients now make up 23.3% of the population, down from 23.8% at June 2016.

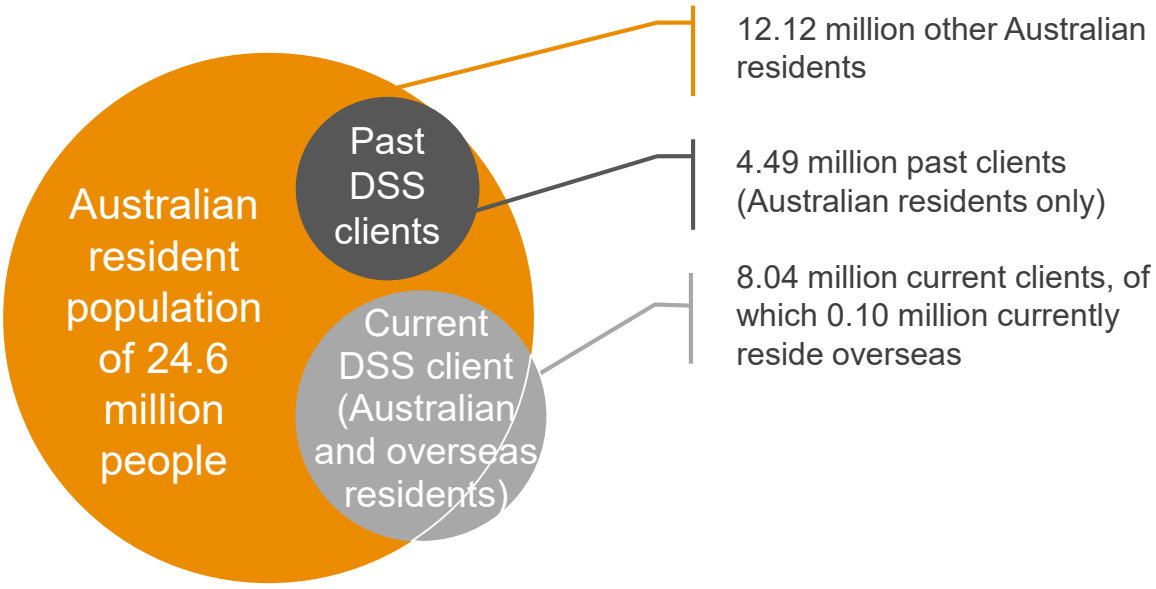
4.1 Summary of model population

The scope of the population for the 2017 valuation includes all Australian residents at 30 June 2017 and overseas welfare recipients who received a payment in the 2016/17 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 (ERP) population at 30 June 2017 is 24.6 million people.[4] The model population is 24.7 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.

[4] Source: ABS – 2016 estimated resident population projected to 2017 by PwC

Figure 28: Population at 30 June 2017



The total model population of 24.7 million is 0.5 million higher than at June 2016. This reflects population growth over the year of around 350,000, as well as allowance for updated information drawn from the 2016 Census (which showed the population was around 150,000 higher than from previous estimates). Despite this growth the number of current welfare recipients is very close to the 8.05 million seen at June 2016.

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.

Numbers 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 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.

Average payment sizes

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

- A gradual increase has been seen over recent years in the level of Age Pension payments for new pensioners;
- There has been a reduction in non income support studying payments, driven by the replacement of the Student Start-up Scholarship (SSS) with the Student Start-up Loan (SSL);
- Average Family Tax Benefit (FTB) payments have continued to gradually reduce, likely a result of a number of policy changes in recent years which have generally tightened FTB payments.

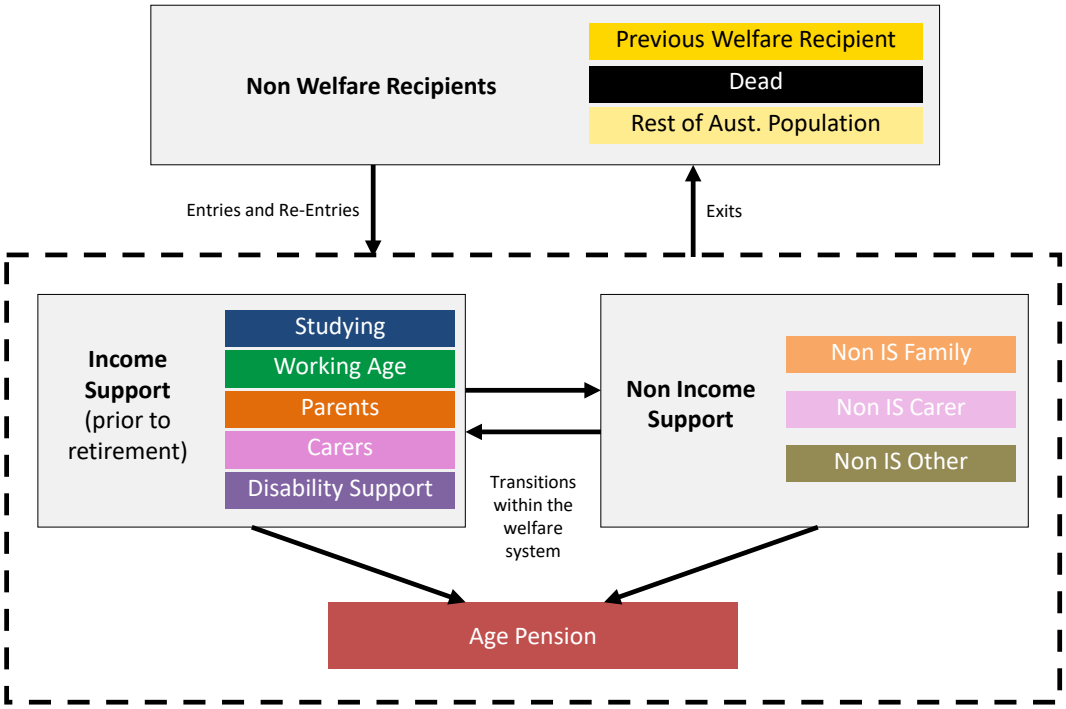
We discuss these in more detail in the following sections.

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 29: Overview of the dynamics of the welfare system



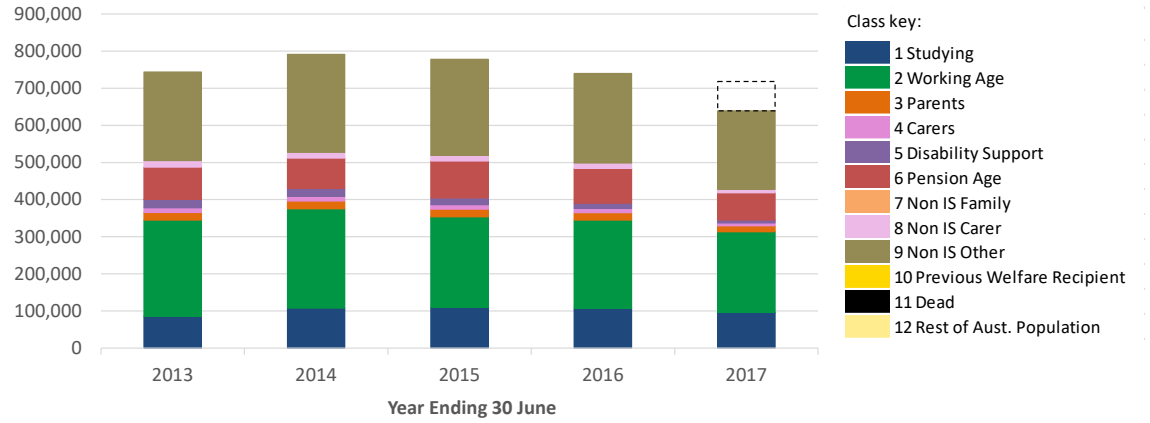
We discuss the key features and trends in the system and class level experience below.

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 30: Total entries and re-entries into the welfare system (by destination class) over the last five years



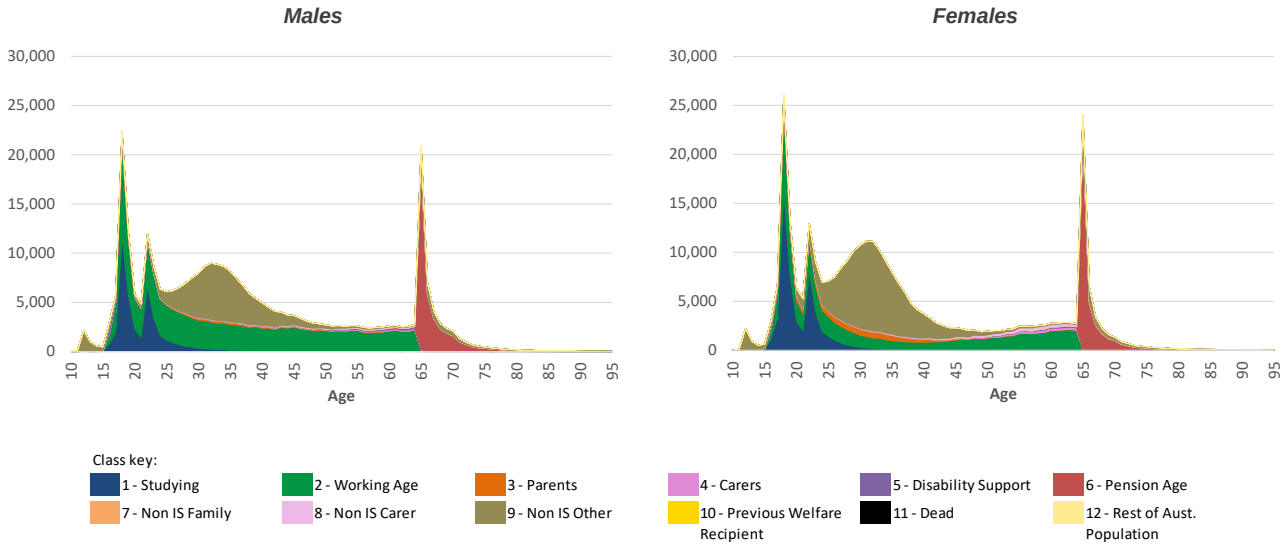
* The dotted section represents the total adjustment made for data maturity in the latest year.

A decreasing trend can be seen over the last few years and in particular there has been a reduction in entrants to Working Age and Pension Age payments.

The experience for entries during 2016/17 is not complete as the actual number of entrants for this year will not be known until some time after the valuation date. We refer to this as “data maturity” above. After adjusting for data maturity (the adjustment is shown in the dotted section on the chart), the chart below shows that this trend has continued in the 2016/17 year, with the number of people entering the welfare system reducing slightly from 740,000 in 2015/16 to an estimated 718,000 in 2016/17.

We now consider the profile of entrants and re-entrants in 2016/17, which can be seen in the charts below.

Figure 31: 2016/17 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 supports at different stages of life:

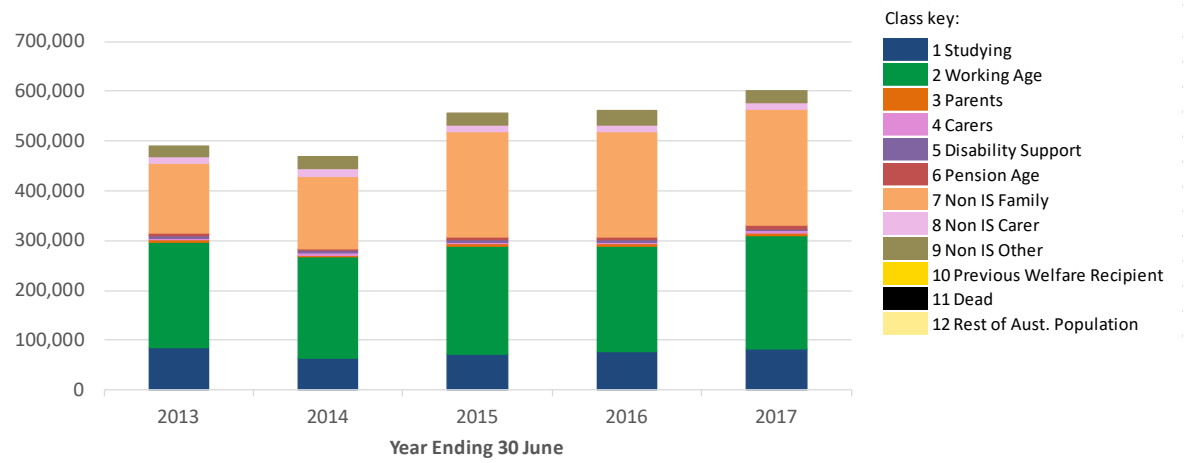
- Below age 25, there are a large number of entrants into Studying and Working Age benefits; in particular, there are two spikes which align with the age at which people typically start tertiary education.

- 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. As can be seen, the number of people exiting the welfare system has increased from 563,000 in 2015/16 to 601,000 in 2016/17. The higher exits were observed across most welfare classes.

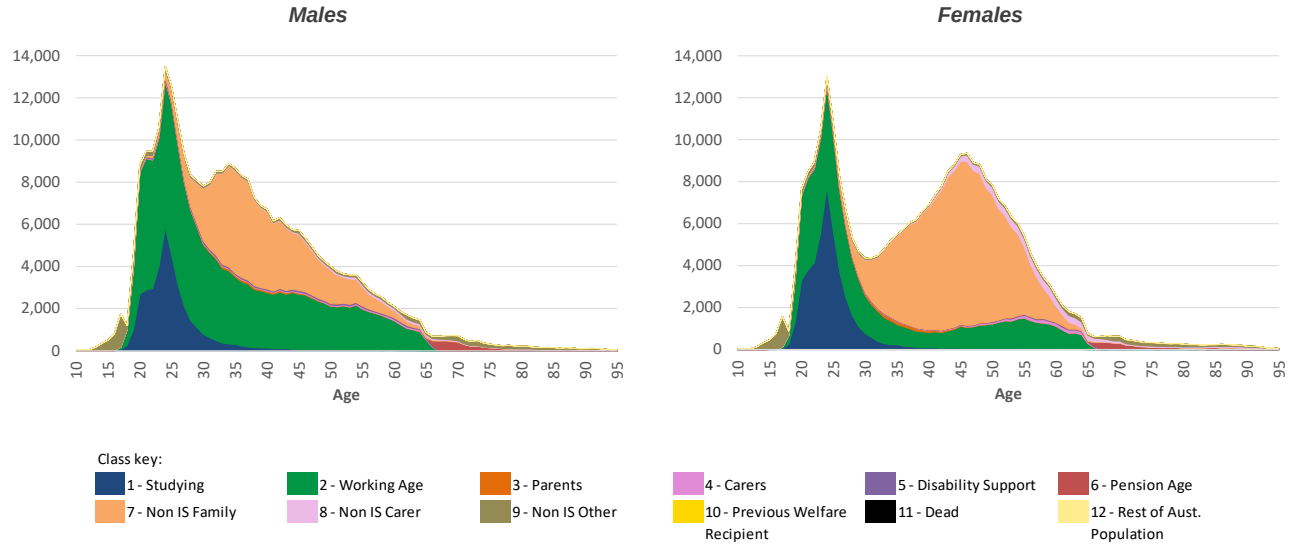
Figure 32: Total exits from the welfare system (by previous class) over the last five years



When combined with the lower observed entrants into the system, this results 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 33: Summary of exits between June 2016 and June 2017



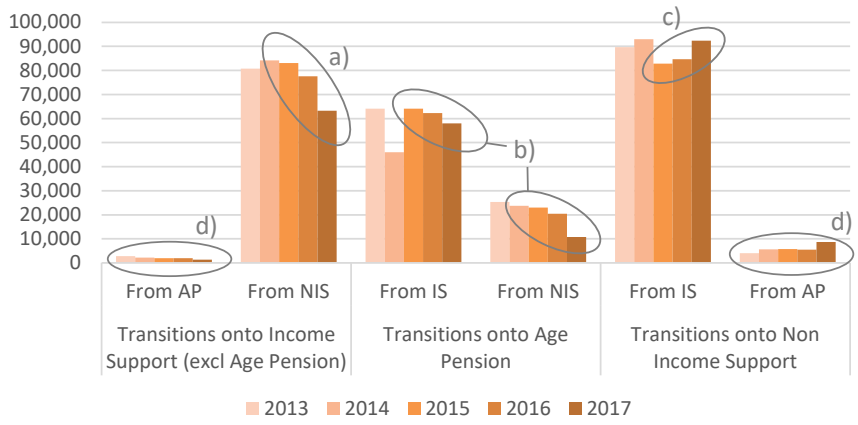
We can see that the main classes from which people exit the system are Studying, Working Age and Non IS Family (noting that most people who are on Parenting payments will often transition to Family Tax Benefit only, i.e. the Non IS Family class, before exiting the system).

These charts also illustrate that very few people exit from the Disability Support Pension, Age Pension or Carer classes directly, other than by death.

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 the three broad categories of 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 34: Movements of people within the welfare system



We note that the 2017 year is impacted by data maturity and therefore the number of movements between the categories is somewhat understated in this year. Notwithstanding this, 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 have been reducing and are low in 2017, likely in part due to the changes in the pensions assets test;

c) There has been an increase in people moving from income support to non income support; and

d) very few people transition out of the Age Pension each year.

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

Class-level transition experience

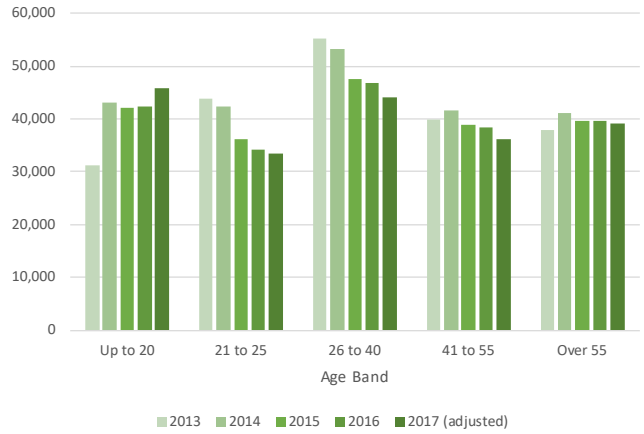
We have discussed below selected features of the class-level transition experience which are of interest. The features discussed for Working Age relate to entries and re-entries only. The features discussed for Disability Support Pension and Pension Age encompasses a combination of entries into the welfare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

Entries and re-entries entering the system into Working Age, by age band

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 looks at a more detailed breakdown of people who enter or re-enter the welfare system directly onto Working Age payments, shown by age band. As shown in the chart below, younger entrants (up to age 20) onto Working Age payments have increased, while for people aged 21 to 55 the reducing trend has continued in the 2017 year. Those over age 55 have had stable experience.

Figure 35: Entrants onto Working Age payments by age band – adjusted for data maturity

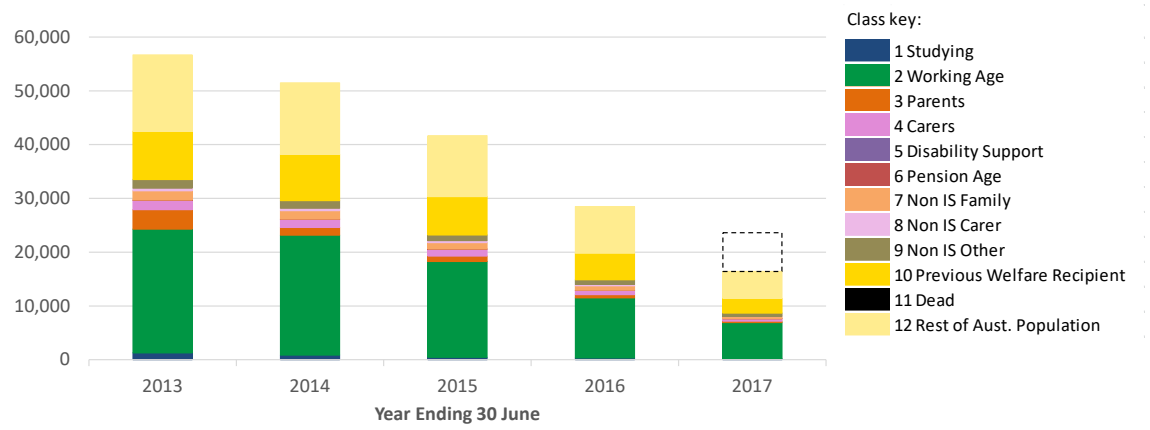


Lower entries and transitions onto the Disability Support Pension

There have been a number of recent changes in policy settings in relation to the Disability Support Pension, 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. Over the last three to four years the number of people entering DSP has reduced from around 54,000 p.a. historically to 28,000 in the 2015/16 year. These reductions have been sustained in the 2016/17 year, with an estimated 24,000 entries and transitions onto the DSP after adjusting for data maturity.

Figure 36: Entries and transitions onto the Disability Support Pension (by welfare class) over the last 5 years



* The dotted section represents the total adjustment made for data maturity in the latest year.

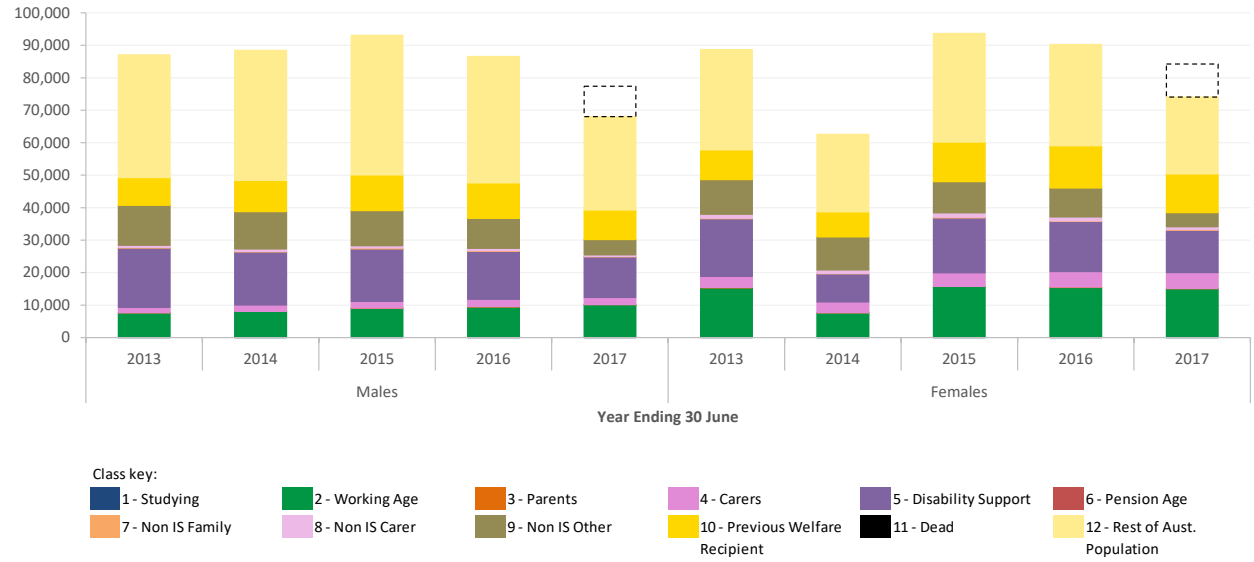
It can be seen that most DSP entrants transitioned either from outside the system or from Working Age payments, although a small number do enter from most other classes. The reductions can be seen across most previous classes.

Lower entries and transitions onto the Age Pension

The number of people entering the Age Pension has reduced from 177,000 in 2015/16 to an estimated 162,000 in 2016/17 after adjusting for data maturity, as shown in the chart below.

This is likely to be related to the changes in the pensions assets test which took effect on 1 January 2017, and in general, tightened the eligibility criteria.

Figure 37: Entrants onto the Age Pension (by previous class) over the last five years



* The dotted line represents the total adjustment made for data maturity in the latest year.

It can also be seen that female entries into age pension in 2013/14 were lower than in other recent years. This is due to the past changes in the age pension qualifying 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 full period.

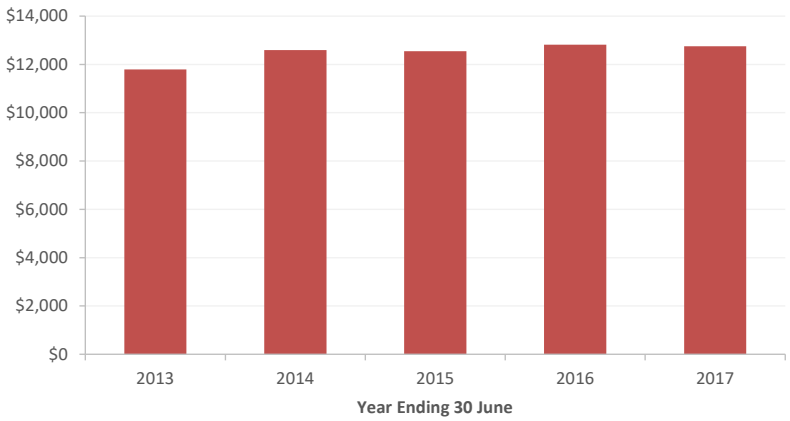
4.4 Average payment sizes

We discuss below the main changes noted in average payment sizes during the year.

Increasing average payment sizes for new age pensioners

The chart below looks at movements in average payments for new pensioners. This has been gradually increasing over recent years. It is also worth noting that the 2017 year is impacted by the assets test changes which applied from 1 January 2017, as such the 2017 figure will be impacted by this change which took effect half way through the year and may not be reflective of the trend.

Figure 38: Average Age Pension payments per person in class 6 – Pension Age during first full year of retirement (restated to 2016/17 $ values, for retirement between ages 65 and 74)

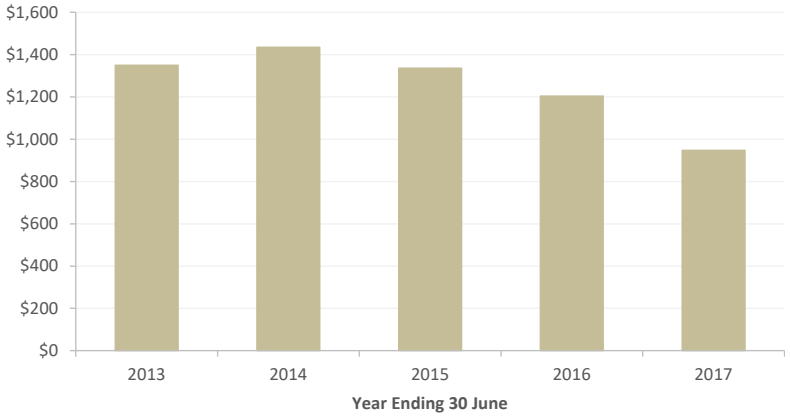


As people age after retirement a trend is generally noted of increasing reliance on age pension as individual's assets erode. The key determinants for the overall age pension are the age pension amount at retirement, and then the impact of this trend during retirement. For this reason the trend noted above on the age pension at retirement is important for the lifetime cost.

Reduction in non income support studying payments

The average payments made to people in the Studying class has reduced from around $8,500 to $8,100 over the last year. The reduction was consistent across both men and women. This reduction has been largely driven by lower Other Study & Skills payments, which are shown in the chart below, reducing from $1,200 to $900 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.

Figure 39: Average Other Study & Skills payments per person in class 1 – Studying (restated to 2016/17 $ values)

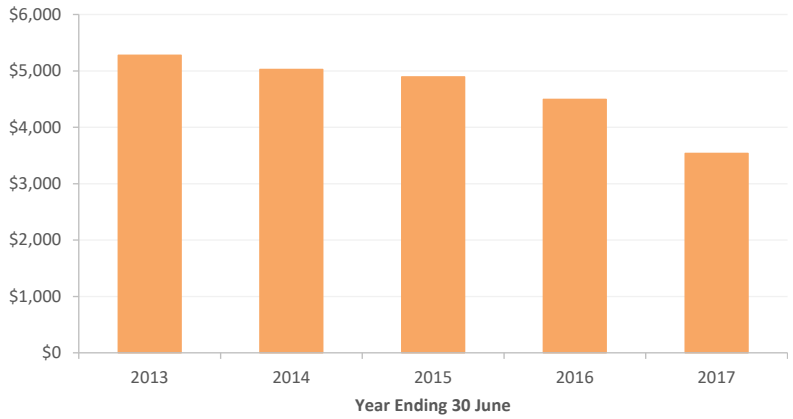


Reduction in Family Tax Benefit (FTB) payment

The average FTB payments have been gradually decreasing in recent years across a number of classes. This reflects a number of legislative changes which have been made over recent years.

This trend can be seen in the chart below, which shows average FTB 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 June).

Figure 40: Average FTB payments per person in class 7 – Non IS Family (restated to 2016/17 $ values)



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

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 2016 and the subsequent change over the year to 30 June 2017.

Table 13: Summary of changes in model population

Class	June 2016 Population (000s)	% of total June 2016 Australian population	June 2017 Population (000s)	% of total June 2017 Australian population	Difference ('000s)
1 – Studying payment recipients	390	1.6%	371	1.5%	-19
2 – Working age payment recipients	1,318	5.5%	1,301	5.3%	-16
3 – Parenting payment recipients	437	1.8%	433	1.8%	-4
4 – Carer payment recipients	272	1.1%	277	1.1%	6
5 – Disability Support Pension recipients	782	3.2%	760	3.1%	-22
6 – Age Pension recipients	2,551	10.6%	2,595	10.5%	44
Income support recipient subtotal	5,749	23.8%	5,738	23.3%	-11
7 – Family Non IS payment recipients	1,554	6.4%	1,544	6.3%	-10
8 – Carer Non IS payment recipients	201	0.8%	203	0.8%	2
9 – Other Non IS payment recipients	543	2.2%	557	2.3%	14
Non Income support recipient subtotal	2,298	9.5%	2,304	9.3%	6
Total welfare recipient population	8,047	33.3%	8,041	32.6%	-5
10 - Previous clients, exited 1-3 years	1,419	5.9%	1,538	6.2%	120
10 - Previous clients, exited 4+ years	2,768	11.5%	2,951	12.0%	184
Total previous client population	4,187	17.3%	4,490	18.2%	303
12 - Rest of Australian resident population	11,929	49.4%	12,122	49.2%	193
Total Australian model population	24,163	100.0%	24,654	100.0%	491

These changes in class population reflect changes to both 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 19,000 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 16,000 people over the last year and now represents 5.3% of the total population (down from 5.5% at June 2016). This is reflective of the decreasing entries into the class noted earlier in this section.

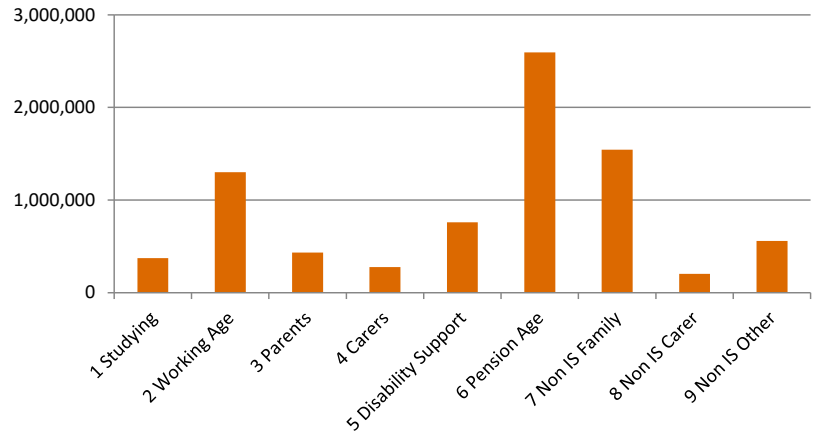
  It is also worth noting that people in this class are quite mobile with around a quarter of people in the class being expected to exit each year and a similarly substantial number of new entrants. The effect of small changes to the entrant and exit experience can have a significant effect on class numbers 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 marginally by 4,000 people since last year.
- Carer payment recipients: whilst this remains one of the smaller classes, the number of Carer payment recipients has continued to grow and there are 6,000 more people in this class than at June 2016.
- Disability Support Pension recipients: the number of people in this class has reduced by 22,000 since June 2016, with the numbers of people exiting exceeding the new entrants. 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 been decreasing and this is likely to be in part due to the tightened eligibility assessment process.
- Age Pension recipients: the number of age pensioners has continued to increase, with a key driver of this being the increasing population of people above age 65 as a result of general population growth and the long term trend of increasing longevity. This factor outweighed the decrease in entries into age pension discussed previously, in terms of the impact on the number of recipients. However we note that the Age Pension class as a proportion of the population has decreased slightly from 10.6% to 10.5%, and as a proportion of those aged 65 and over, dropped from 67.1% to 66.7%.
- Non Income Support recipients: overall the number of non income support recipients is similar this year to last year. An increase has been seen in the number of people in the family non income support class and an increase in the other non income support class.
- Non Welfare recipients: the previous welfare recipients and rest of Australian population classes have increased by 497,000 people in total and now make up 67.4% of the population (compared to 66.7% at June 2016). 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. In addition, this year the population reflects the results from the 2016 census which showed slightly higher than expected population growth when compared to the 2011 census.

Overall, the 5,738,000 people who received an income support payment over the year to 30 June 2017 represented 23.3% of the population. This was a slight reduction from 23.8% at 30 June 2016, and has been driven by a reduction in the number of people receiving income support payments combined with a larger total population.

4.6 Profile of model population

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

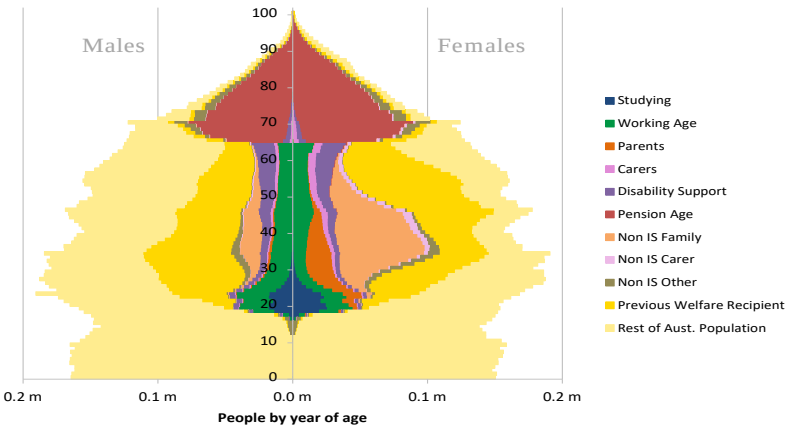
Figure 41: Current welfare recipient population by welfare class



The current welfare recipient population is 8.0 million. Previous clients and the rest of the Australian population make up a further 4.5 million and 12.1 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 42: Model population with class utilisation (June 2017)



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 may relate to the variation 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 2017 is **$4,681bn.**
- This represents a **$167bn (3.7%) increase** from the lifetime cost of $4,514bn at the previous valuation.
- Population growth and inflation increased the total lifetime cost by $210bn (+4.7%) whilst other changes including a reduction in the number of people accessing welfare payments contributed to an overall decrease of $43bn (-1.0%).
- The net impact of adjustments for policy changes contributed to a decrease of 0.1%. A substantial increase due to the introduction of the Child Care Subsidy and associated changes, is 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.

5.1 Total lifetime cost

The estimated total lifetime cost for the whole Australian population as at 30 June 2017 is **$4,681 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 2016/17 year totalled $111.4 billion. Hence the total lifetime cost is over 40 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 14: Summary of key valuation results

Population segment	Number in starting population	Average age	Total Lifetime cost ($bn)	Average payment in 2016/17 (a)	Average lifetime cost ($'000) (b)	Ratio = (b) / (a)	Expected proportion of future lifetime in IS classes
Current welfare recipients							
- Studying payment recipients	371,462	24	79	8,100	212	26	40%
- Working age payment recipients	1,301,346	40	411	11,200	316	28	62%
- Parenting payment recipients	432,641	33	210	29,100	485	17	64%
- Carer payment recipients	277,220	51	125	26,700	449	17	84%
- Disability support pensioners	760,148	50	351	22,000	462	21	94%
- Age pensioners	2,594,978	76	542	16,900	209	12	94%
- Family non IS clients	1,543,972	40	303	5,400	197	36	38%
- Carer non IS clients	202,505	51	42	6,700	207	31	43%
- Other non IS clients	557,092	54	72	2,800	129	46	37%
Total current welfare recipients	*8,041,364*	*53*	*2,134*	*13,606*	*265*	*20*	*59%*
Previous welfare recipients							
- Exited 1-3 years	1,538,442	41	274	n/a	178	n/a	41%
- Exited 4+ years	2,951,378	47	461	n/a	156	n/a	40%
Total previous welfare recipients	*4,489,820*	*45*	*735*	*n/a*	*164*	*n/a*	*41%*
Rest of Australian resident population							
- Rest of Australian resident population	*12,122,461*	*28*	*1,812*	*n/a*	*150*	*n/a*	*34%*
Australian resident population	**24,653,645**	**39**	**4,681**	**4,438**	**190**	**43**	**41%**

Notes:

1. The average payment in 2016/17 is understated owing to the data maturity issues with FTB and 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 to 16 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 and become self-reliant 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 2016/17** 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 2016/17 year broadly reflect the differences in the average lifetime cost by class. For example, the average payment in 2016/17 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 Age Pension class ratio of 12 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.

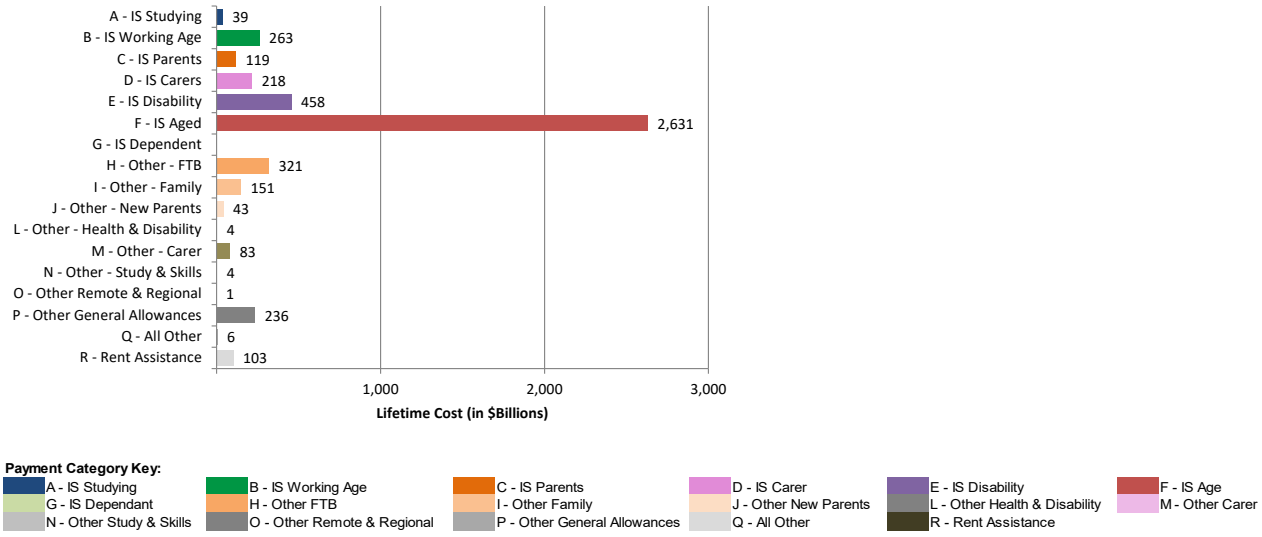
The ratio of 26 for studying payment recipients would reflect the fact that while many in this class will exit the system within a couple of years, this is swamped by the long term cost of those people who transition to other classes after studying, or those who return to the system at a later stage 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 43: Composition of lifetime cost ($billion) by payment category

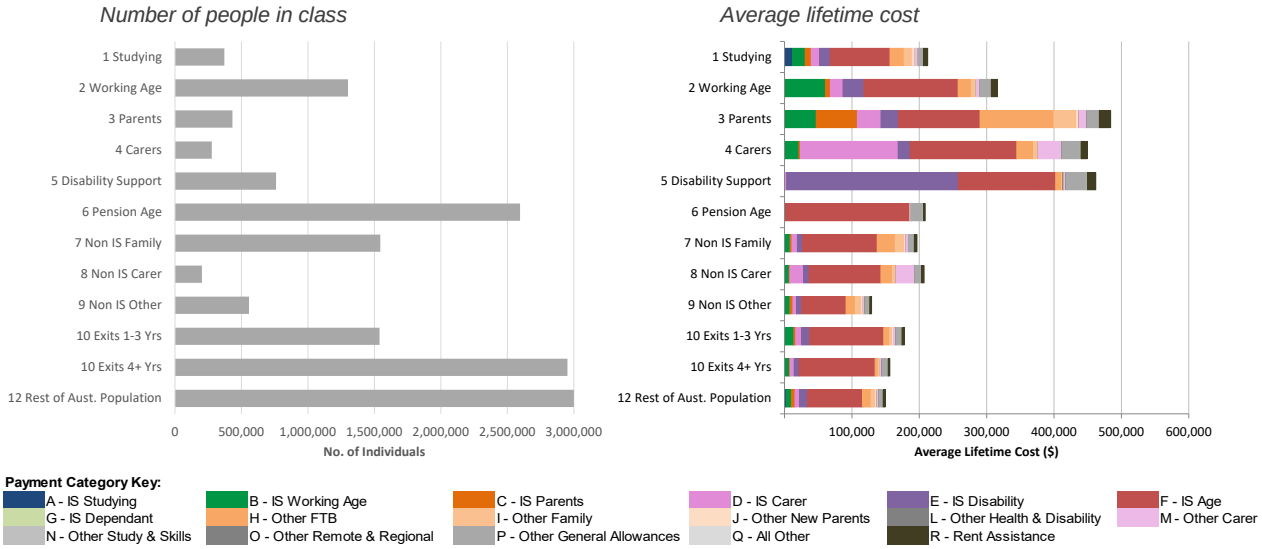


The largest contribution is from the Age Pension which represents 56% of the total lifetime cost. The next largest income support contributions are from the Disability Support Pension (10%) and working age (6%) payment categories.

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 44: Drivers of welfare class lifetime costs



Notes:

1. The rest of the Australian population class contains 12.12m 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 4 to 16 years

For **current welfare recipients**:

- The largest contribution is from people in the Age Pension class ($542bn). 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 ($411bn)* – 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 ($351bn)* – 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 ($303bn)* – 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 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 **39% 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 $794.80 at 1 July 2016 and increased to $808.30 by 1 July 2017 – an increase of 1.7%);
- changes to the welfare payments arising from policy changes; and
- changes to both the current and expected future utilisation of each part of the welfare system.

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 2017 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.

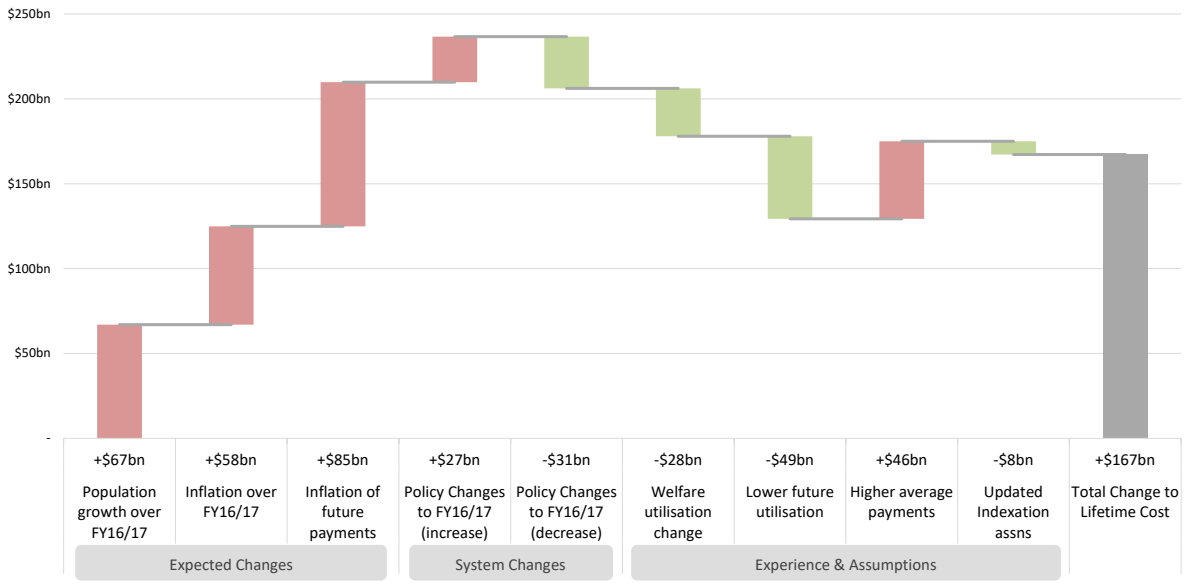
This sensitivity to ordering is greater for the areas of change which interact strongly with each other (notably the demographic assumptions, class movement assumptions and economic module) and for the areas where the changes have the greatest impact. Changes that are specific to individual payment categories 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 changes to the composition of the starting population first and then updated the assumptions about the future experience in the general order of the modelling sequence.

Change in overall lifetime cost

At this valuation, the total lifetime cost has **increased by $167bn (3.7%).** The figure below shows a detailed breakdown of this movement in the total lifetime cost from the June 2016 to the June 2017 valuation. Population growth and inflation contributed an **increase of 4.7%**, whilst other changes including a reduction in the number of people accessing welfare payments contributed an overall **decrease of 1.0%**.

Figure 45: Explanation of change in lifetime cost



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 2017 valuation, the overall lifetime cost has **increased by $67bn (+1.5%)** due to growth in the Australian Population over the 2016/17 year. This includes

- *The combined impact of births, deaths and net migration over the 2016/17 year* – an estimated 315,000 newborns, 162,000 deaths and 188,000 net migrants were allowed for in the estimation of the Australian Population. The combined effect of these population changes resulted in an extra 340,000 individuals.
- *Updated Australian Census* – at this valuation the latest Australian Census (2016) was used in the estimation of the Australian Population. The latest census included an additional 150,000 individuals compared to the initial population forecasts based on the 2011 Australian Census. Note, this change has not impacted the total lifetime cost but results in updated estimates to our understanding of the welfare system utilisation and the average lifetime cost for people who are not current welfare recipients.

The overall lifetime cost has further **increased by $143bn (3.2%)** due to inflation. This includes:

- **Inflation over the 2016/17 year** – actual inflation of payments over the 2016/17 year was on average 1.3%;
- **Inflation of future payments** – this allows for the impact of the change in pattern in projected future inflation from June 2017 (relative to the pattern from June 2016), in which we move closer to the expected long term inflation rate sooner into the projection. This increases the lifetime cost by 1.9%.

System changes

Changes to the welfare system may directly influence the entitlements of individuals and their welfare usage. Over recent years a number of policy changes have been legislated which have had an impact on total lifetime cost. At the June 2017 valuation, the estimated lifetime cost was **reduced by $4bn (-0.1%)** to reflect the net effect of these policy changes.

The estimated impact of each individual policy change is shown in the tables below:

- **New policy changes** – for policy changes that were introduced over the 2016/17 year, the estimates represent the expected total impact of these policies on the overall lifetime cost.
- **Prior policy changes** – for policy changes that were introduced prior to the 2016/17 year, the estimates below represent updates to the initial estimate of the policy impact to reflect emerging experience observed in the latest year.

Table 15: Impact of new policy changes

New Policy Change	Description of policy change	Estimated impact on the total lifetime cost
Child Care Subsidy	Introduction of the Child Care Subsidy, and cessation of the Child Care Benefit and Child Care Rebate from July 2018.	Increase of $26.9bn
Income Limit of $80,000 for FTB Part A supplement	Introduction of an income limit of $80,000 on the payment of the Family Tax Benefit Part A Supplement, from July 2017.	Decrease of $11.1bn
Freeze of current Family Tax Benefit rates	Freeze of the current Family Tax Benefit (Part A and B) rates for two years, from 1 July 2017.	Decrease of $11.6bn
Freeze of FTB higher income free area and primary earner income limit	Freeze of the higher income free area for Family Tax Benefit Part A, and the primary earner income limit for Family Tax Benefit Part B at their current levels until 30 June 2020.	Decrease of $1.8bn
Closure of Carbon Tax Compensation	Closure of Carbon Tax compensation (the Energy Supplement) to new recipients of Family Tax Benefit and concession cards (including the Seniors Health Card) from March 2017.	Decrease of $3.1bn
All new policy changes		*Decrease of $0.7bn*

Note: Grandfathering for the Student Start-Up Scholarship was removed from July 2017. The lifetime cost impact of this grandfathering was expected to be relatively small in the context of this model (<$1bn) and so the grandfathering was not explicitly modelled for the June 2016 valuation, when the removal of the Student Start-Up Scholarship was first recognised. As such we have also not modelled the impact of the removal of this grandfathering and so we have not shown an impact above.

Table 16: Impact of updates to the estimates of existing policy changes

Existing Policy Change	Description of policy change	Estimated impact on the total lifetime cost
Changes to the Pension Asset test	From January 2017, the asset test free areas were increased, along with increases to the asset test taper rate. At this valuation, the estimated impact of this was refined to reflect experience observed in the latest year.	Decrease of $2.9bn
All updates		*Decrease of $2.9bn*

These policy changes can be grouped into those changes that have resulted in an increase in the liability (+$27bn) and those that have resulted in a decrease in the liability (-$31bn).

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. In total, this contributed to a further **$39bn (-0.9%) decrease** in the overall lifetime cost.

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 having minimal impact on the total lifetime cost.

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 ($28bn decrease)** – in general the proportion of people utilising welfare was lower this year than last year, and this has resulted in a decrease in the lifetime cost.
- **Lower assumed future utilisation of welfare ($49bn decrease)** – the main drivers of this decrease include:
  - *Reduced future entries and movements to class 5 Disability Support ($13bn 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 latest 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 entries and movements into other Income Support classes ($25bn decrease)* – in particular, recent entries into Working Age and Age Pension have been lower and we have updated our valuation assumptions in response to this.
  - *Higher future exits from class 7 Non IS Family ($6bn decrease)* – in recent years, the tightening of FTB eligibility criteria has resulted in higher exits from the Non IS Family class out of the welfare system. This trend was again observed in the latest year, and the valuation model assumptions were updated in response to this.
  - The remaining impact ($5bn 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.
- **Higher average payments ($46bn increase)** – the main drivers of this increase include:
  - *Increased average payment size for the Age Pension ($61bn increase)* – we have increased the adopted average size assumptions for Age Pension in response to higher recent payment experience observed for new age pensioners. The increase in average size has a relatively small impact (2%) on the total liability for Age Pension payments.
  - Offset by *reduced utilisation of Family Tax Benefit ($14bn decrease)* – utilisation of FTB payments has been lower and our valuation model assumptions have been updated in response to this.
- **Updated future indexation assumptions ($8bn decrease)** –updates to the assumed indexation of future payments resulted in an $8bn decrease in the estimated total lifetime cost. This reflects reductions in the short term MTAWE and CPI indexation assumptions in line with the Australian Government forecasts outlined in the 2017/18 Commonwealth Budget as well as the fact that the long term inflation rate is now one year later.

  This indexation update has the biggest dollar impact on the Age Pension payment category ($5bn) as this is the largest component of the lifetime cost.

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 policy 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; parental welfare dependence, a student's current education sector (School, Vocational Education and Training, and Higher Education), and a variable describing barriers to work for Working Age recipients. These three new variables will primarily impact the non-welfare recipient, Studying and Working Age classes, but will also have flow on impacts to other classes.

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 17: Summary of changes in lifetime cost by class

Population segment	Jun-16 Lifetime Cost ($bn)	Jun-17 Lifetime Cost ($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	82	79	-3	-3.7%	-4.8%	+1.1%	+2
- 2 Working age	401	411	+10	+2.5%	-1.2%	+3.7%	+11
- 3 Parenting	207	210	+3	+1.3%	-0.9%	+2.2%	+11
- 4 Carers	119	125	+6	+4.7%	+2.1%	+2.6%	+11
- 5 Disability Support	352	351	-1	-0.2%	-2.8%	+2.6%	+12
- 6 Pension Age	518	542	+24	+4.6%	+1.7%	+2.8%	+6
- 7 Non IS Family	301	303	+2	+0.8%	-0.6%	+1.4%	+3
- 8 Non IS Carer	41	42	+1	+1.4%	+0.9%	+0.5%	+1
- 9 Non IS Other	74	72	-2	-3.1%	+2.5%	-5.6%	-7
Total current welfare recipients	2,095	2,134	+39	+1.9%	-0.1%	+1.9%	+5
Non welfare recipients							
- 10 Previous welfare recipients	653	735	+82	+12.6%	+7.3%	+5.3%	+8
- 12 Rest of Australian Population	1,766	1,812	+46	+2.6%	+1.6%	+1.0%	+1
Total non-welfare recipients	2,418	2,547	+128	+5.3%	+3.1%	+2.2%	+3
Australian resident population	**4,514**	**4,681**	**+167**	**+3.7%**	**+2.0%**	**+1.7%**	**+3**

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

Table 18: 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 policy changes on ave lifetime cost ($'000)	Impact of other changes on ave lifetime cost ($'000)
Current welfare recipients				
- 1 Studying	+2	+9	<1	-7
- 2 Working age	+11	+9	<1	+3
- 3 Parenting	+11	+12	-3	+1
- 4 Carers	+11	+15	<1	-3
- 5 Disability Support	+12	+16	<1	-3
- 6 Pension Age	+6	+7	<1	<1
- 7 Non IS Family	+3	+4	<1	-2
- 8 Non IS Carer	+1	+2	<1	<1
- 9 Non IS Other	-7	+3	<1	-11
Total current welfare recipients	+5	+8	<1	-2
Non welfare recipients				
- 10 Previous welfare recipients	+8	+5	<1	+3
- 12 Rest of Australian Population	+1	+4	<1	-3
Total non-welfare recipients	+3	+4	<1	-1
Australian resident population	**+3**	**+5**	<1	**-2**

From the tables above we can see that at this valuation, the majority of the $167bn increase in total lifetime cost comes from **non-welfare recipients** (classes 10 and 12), with a **$128bn increase** in their estimated total lifetime cost. This increase was driven by a 3.1% increase in the population in these classes, as well as a 2.2% increase in the estimated average lifetime cost per person.

At this valuation, the estimated total lifetime cost for **current welfare recipients** (classes 1 to 9) **increased by $39bn.** This increase was made up of 0.4% reduction in the population in these classes and a 2.3% increase in the estimated average lifetime cost per person.

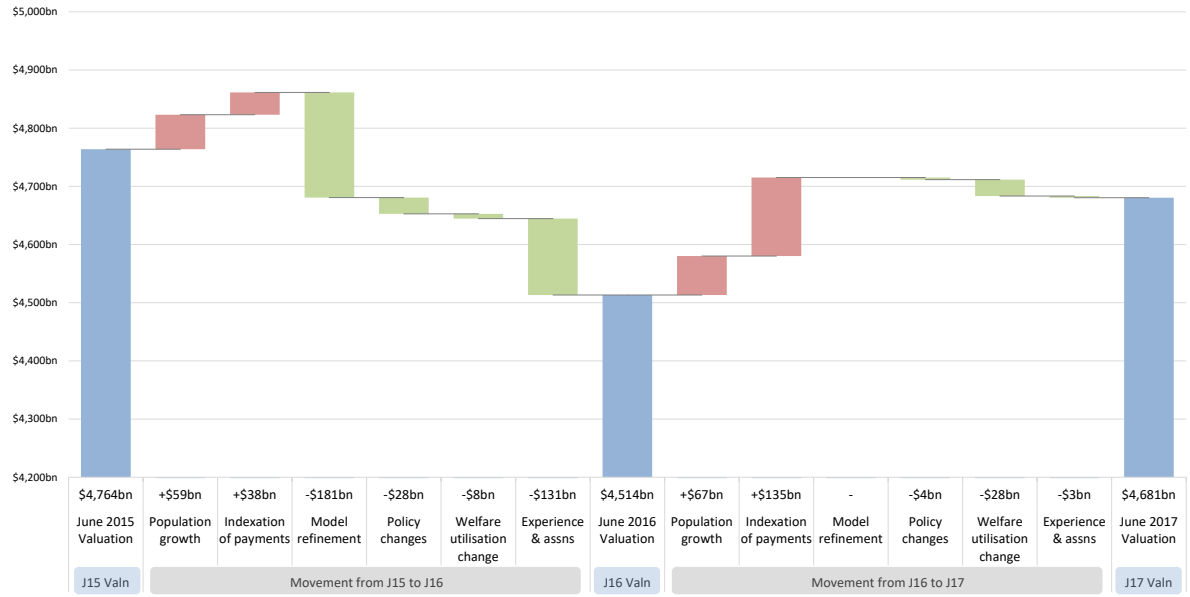
The increases in the estimated average lifetime cost per person can largely be attributed to inflation of future payments, an increase in the average size of the Age Pension, and partially offset by reduced entries into class 5 Disability Support and class 6 Age Pensions.

5.4 Changes since the baseline valuation

This is the second 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 46: Changes since the baseline valuation



Notes:

The movements from June 2015 to June 2016 are drawn from the previous valuation however the presentation of this change has been modified to better align with this year's description of the change in results.

Population growth

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, and by **$67bn** at the June 2017 valuation.

Indexation of payments

From year to year, welfare payments are expected to increase based on relevant inflation indices, such as Male Total Average Weekly Earnings (MTAWE) and Consumer Price Index (CPI). 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, and a **$135bn increase** at the June 2017 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 valuation.

Model refinements

Over the last two 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. Whilst these variables will enable better differentiation between welfare recipients, these have minimal impact on the valuation result overall.

Policy Changes

Over the last two 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 policy changes has resulted in a **$28bn decrease** at the June 2016 valuation, and a further **$4bn decrease** at the June 2017 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.

Welfare Utilisation Change

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 and a reduction of $28bn at the June 2017 valuation.

Experience and Assumptions

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.

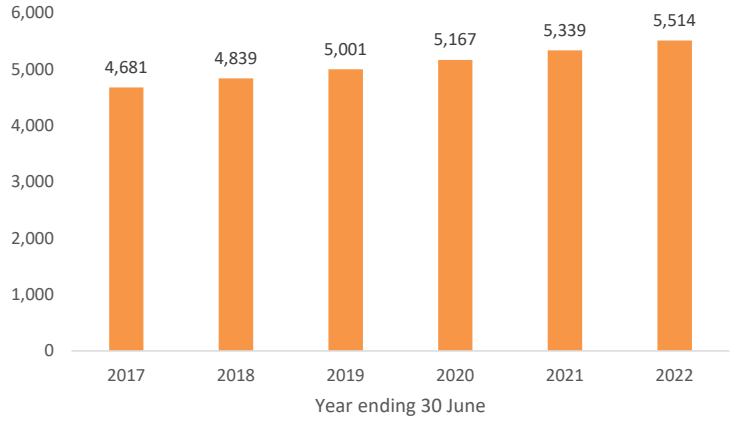
5.5 Forecasts

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 2017 population. At 30 June 2018 we will be able to reassess the lifetime cost and explain the movements in the lifetime cost assessment. We will also be able to show the additional components of lifetime cost being added for new members of the population, including new birth and migrants.

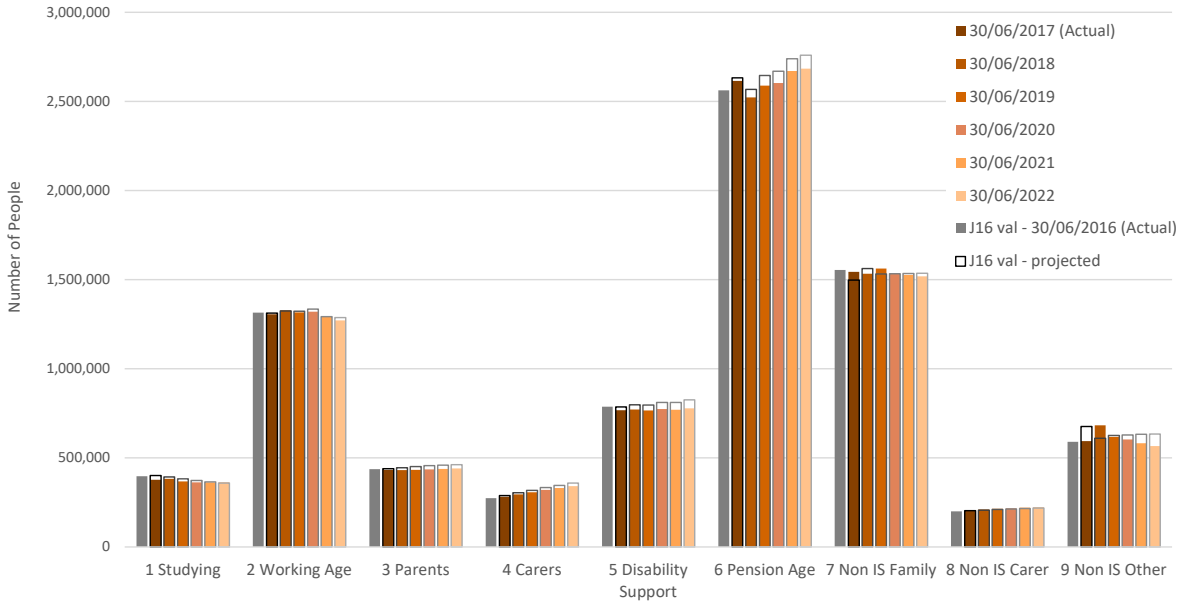
Figure 47: Projected Lifetime cost ($billion)



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 2017, as well as the expected numbers of people in each active class over the period June 2018 to June 2022. We've also included information from the previous June 2016 valuation for comparison: the grey bar shows the actual number of people in each class for the year ending 30 June 2016; whilst the black/grey outline bars show the projected numbers based on the June 2016 valuation.

Figure 48: 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 4.3. 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 2017 valuation (the red and orange bars), are generally lower than the projections from the previous June 2016 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.
- In particular decreases in the projection can be seen for the Pension Age and Disability Support classes, relative to the June 2016 projection. This is reflective of the decreasing entries into these classes observed over the last year.
- 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 2016 valuation. This increase reflects the increasing population of people above age 65 as a result of improved longevity. A decrease in the number of people in the pension age class can be observed in the June 2018 projection due to the impact of the pensions assets test changes. In addition the Age Pension age increases to 65.5 from 1 July 2017 which acts to reduce the projected entries into age pension in 2017/18.
- 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 be fairly stable over time.
- The numbers of people studying are expected to reduce as there are fewer people in their late teens and early 20s today than was the case in the recent past.
- A few interesting features can be seen in the projection of the Non IS Other class when compared to the June 2016 projection. For the projections for both valuations, an increase in numbers can be seen over the first projection year (i.e. an increase is seen in the June 2017 projection for the previous valuation, and an increase is seen in the June 2018 projection for the current valuation). This is likely due to an additional maturity issue in the data, whereby there are a number of people with new children who had not claimed FTB at the time of the data extract, but who are modelled as having a high chance of receiving FTB very soon due to their family circumstances. We also note that the overall projection of numbers in this class has decreased compared to the June 2016 valuation projection. 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. Whilst 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 are indexed by MTAWE and hence 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.

Whilst 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 details of care recipients. 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 which are used to project future welfare utilisation are themselves dynamic and the lifetime cost is sensitive to variations in these assumptions and 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 19: 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	+$53bn	+$34bn	+86bn	+1.8%
Mortality	Increase future mortality improvements by 25%	+$18bn	+$106bn	+$124bn	+2.7%
Mortality	Remove future mortality improvements	-$97bn	-$541bn	-$638bn	-13.6%
Economic	Discount rate increases 1% to +7%	-$330bn	-$714bn	-$1,044bn	-22.3%
Economic	Discount rate reduces 1% to +5%	+$454bn	+$1,162bn	+$1,616bn	+34.5%
Economic	Long term CPI assumption increases by 1% (from 2.5% to 3.5%, starting from 2024/25)	+$164bn	-	+$164bn	+3.5%
Economic	Long term CPI assumption reduces by 1% (from 2.5% to 1.5%, starting from 2024/25)	-$125bn	-	-$125bn	-2.7%
Economic	Long term MTAWE assumption increases by 1% (from 4% to 5%, starting from 2024/25)	+$151bn	+$954bn	+$1,105bn	+23.6%
Economic	Long term MTAWE assumption reduces by 1% (from 4% to 3%, starting from 2024/25)	-$111bn	-$615bn	-$726bn	-15.5%
Age pension	Adjustment to reflect an expected increase in future numbers of part pensioners is removed	+$3bn	+$30bn	+$33bn	+0.7%
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	+$82bn	+$21bn	+$103bn	+2.2%
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	+$8bn	+$77bn	+$84bn	+1.8%
Entry and exit rates	Rates of movement from the active classes to the rest of the population increase by 10%	-$37bn	-$10bn	-$47bn	-1.0%
Economic module	Long term unemployment rate of 4% (1% decrease from base assumption)	-$85bn	-$44bn	-$129bn	-2.7%
Economic module	Long term unemployment rate of 6% (1% increase from base assumption)	+$99bn	+$43bn	+$141bn	+3.0%
Economic module	Long term unemployment rate of 7% (2% increase from base assumption)	+$218bn	+$85bn	+$303bn	+6.5%

Age pension sensitivities

Age pension costs may vary in future as a result of the expected future trend of an increased number of part pensioners over time as people reach retirement with more superannuation assets.

We have allowed for this trend in the valuation results through making an explicit adjustment to increase the proportion of part pensioners entering the Age Pension class in future years. 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 0.7% (that is, applying this adjustment has reduced the lifetime cost by 0.7%).

Simulation run differences

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

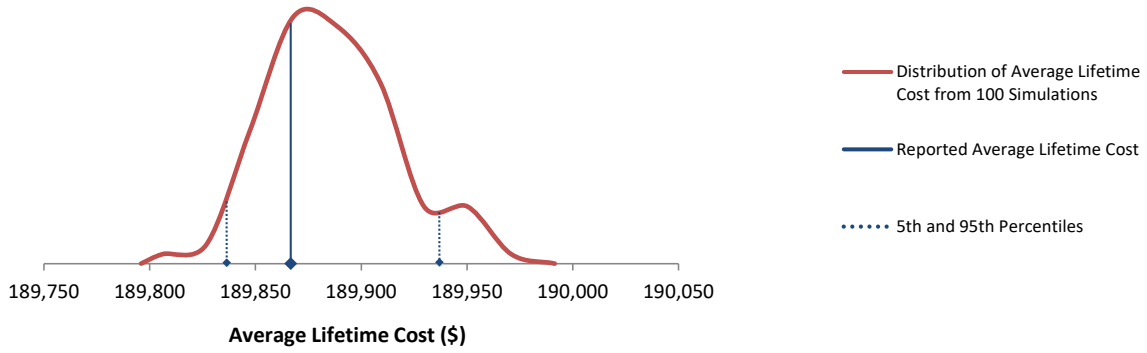
The overall and class level results presented in this report are based on a simulation run of one simulation per person. We considered this number of simulations sufficient owing to the substantial numbers of people within

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. However, as discussed above, we would expect that the overall results and class level results would only change by a small proportion. Hence, simulation run differences are expected to be a much less significant source of uncertainty in the overall results than the uncertainty associated with the model assumptions (as illustrated in the sensitivities table).

In order to test this we have run the model one hundred times using different sets of random numbers. The average lifetime cost for the entire population produced from these 100 runs is depicted in the frequency chart below.

Figure 49: Distribution of average lifetime cost across 100 simulations



The average lifetime cost presented in the results is illustrated by a solid blue line and the dotted lines show the 5th percentile and the 95th percentile of the distribution. The difference between the 95th and 5th percentile is used as a measure which provides information on the variability arising from the randomness within the simulations.

This difference measure is $0.1k when looking at the average lifetime cost of the full population; this is less than 0.1% of the average lifetime cost of $190,000. This is equivalent to a difference of $2bn when considered for the total lifetime cost of $4,681 billion rather than for the average lifetime cost of $190,000.

Similar analysis at a class level was also conducted and the results are tabulated below. In all cases, the variation between the 5th and 95th percentiles was $1.1k or less.

Table 20: Average lifetime cost distribution statistics from 100 simulations compared to reported results

Class	Reported Total Lifetime Cost	Reported Average Lifetime Cost	Average Lifetime Cost - 5th Percentile of 100 Simulations	Average Lifetime Cost - 95th Percentile of 100 Simulations	Simulation Variability Measure (95th less 5th Percentile)
1	$79bn	$212.3k	$211.9k	$212.8k	$0.9k
2	$411bn	$315.5k	$315.1k	$315.5k	$0.4k
3	$210bn	$485.3k	$485.4k	$486.5k	$1.1k
4	$125bn	$449.2k	$448.9k	$449.9k	$1.0k
5	$351bn	$461.8k	$461.2k	$461.9k	$0.7k
6	$542bn	$208.8k	$208.7k	$208.9k	$0.2k
7	$303bn	$196.5k	$196.2k	$196.6k	$0.4k
8	$42bn	$207.1k	$206.9k	$207.9k	$1.0k
9	$72bn	$129.2k	$129.0k	$129.6k	$0.6k
10	$735bn	$163.7k	$163.6k	$163.8k	$0.2k
12	$1,812bn	$149.5k	$149.4k	$149.5k	$0.1k
All	**4,681bn**	**$189.9k**	**$189.8k**	**$189.9k**	**$0.1k**

Note that the average lifetime costs are shown to the nearest $100 so that the small differences due to simulation randomness can be seen. We have rounded the results to the nearest $1,000 for the remainder of the report in light of the uncertainty highlighted here.

This analysis validates the choice of using one simulation per person when developing the overall and class level results. In particular, these results confirm that the uncertainty arising from the simulation process itself are small and likely much less than the uncertainty associated with the model assumptions.

Economic module sensitivities

The selection of a long term unemployment rate of 5% is a key area of judgement and has a significant impact on the lifetime cost. The scenarios above show impacts on the total lifetime cost ranging from a reduction of $129bn based on the lowest unemployment rate scenario, to an increase of $303bn based on the highest unemployment rate scenario.

6 Results for income support recipients

In this section and the next two sections, for each welfare class, we present information regarding the profile of the people in that class and a breakdown of the payments received during 2016/17. We then discuss the key considerations for the setting of the main class movement and payment type assumptions that influence the future outcomes for the class. 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 371,000 people in the Studying class in 2017, 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.

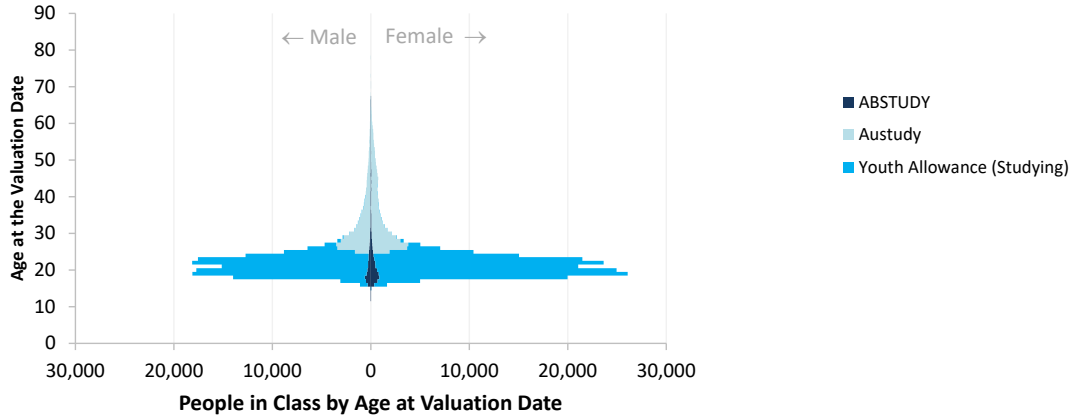
- Over the last five years an increasing proportion of individuals have exited the system rather than transitioning to the Working Age class after finishing their studies.
- The replacement of the Student Start-up Scholarship with the Student Start-up Loan has led to lower average payment sizes in 2015/16 and 2016/17.
- Students completing 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.

What does the data tell us about people receiving Studying payments?

There were 371,000 people (4.6% of current welfare recipients) in the Studying class in the 2017 model population. This represents 1.5% of the population of Australia which is a decrease from 1.6% 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 50: 2017 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.

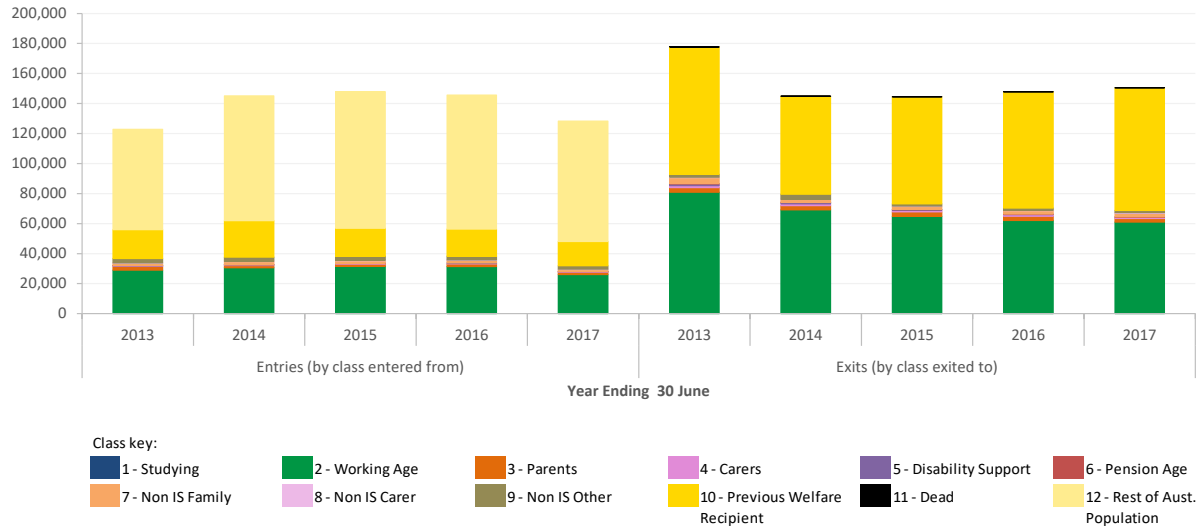
The vast majority of people in the Studying class are on Youth Allowance (if aged up to 24) or Austudy (if over 24 years old). There are a small number of Indigenous Australians on ABSTUDY across all ages.

Movements into and out of this class

Over the last three years, an average of 140,600 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 147,700 people (around 38% 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.

Figure 51: Number of people entering and exiting class 1 – Studying



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.

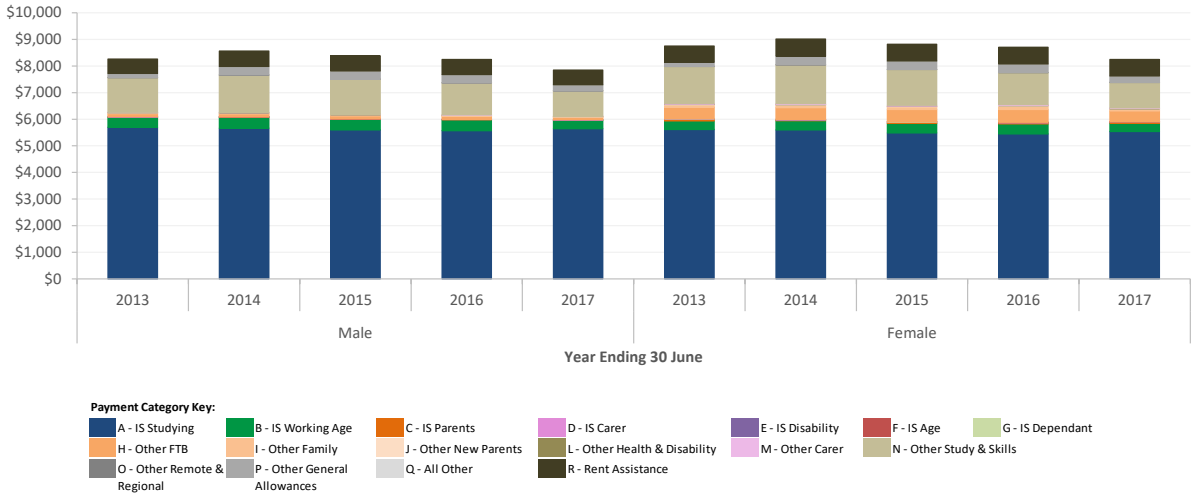
Since 2014, entries into the Studying class have increased while exits have reduced. Prior to 2014, families were able to claim Family Tax Benefit (FTB) A for their children up to age 21 provided they were not receiving Youth Allowance. In most circumstances families were able to receive higher payments through FTB payments rather than Youth Allowance payments. Since 2014, families were only able to claim FTB A for children up to age 17 who had completed year 12 equivalent and age 19 for children still in secondary study, which has likely caused a higher utilisation of Studying benefits.

Entry rates into the Studying class have reduced in 2017 due to lower numbers of people entering from the Working Age and Rest of Population classes, although it should be noted that the latest year's data in the chart above will be affected by maturity issues and may be understated.

Payments received

During 2016/17, people in this class received a total of $3.0 billion. This is 2.7% of the total payments made in 2016/17. The charts below show the average amount paid in a year to each person in this class.

Figure 52: Average payments per person in class 1 – Studying (restated to 2016/17 $ values)



During 2016/17, the average payment made was $8,100 (compared to $8,500 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 $1,200 to $900 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.

Changes in model fitting this valuation

This year we have enhanced the Studying model assumptions to allow for the intergenerational and education sector variables. Use of welfare by a person's parents during childhood was seen to be correlated with higher continuance on income support payments, and higher likelihood of remaining on income support after finishing study.

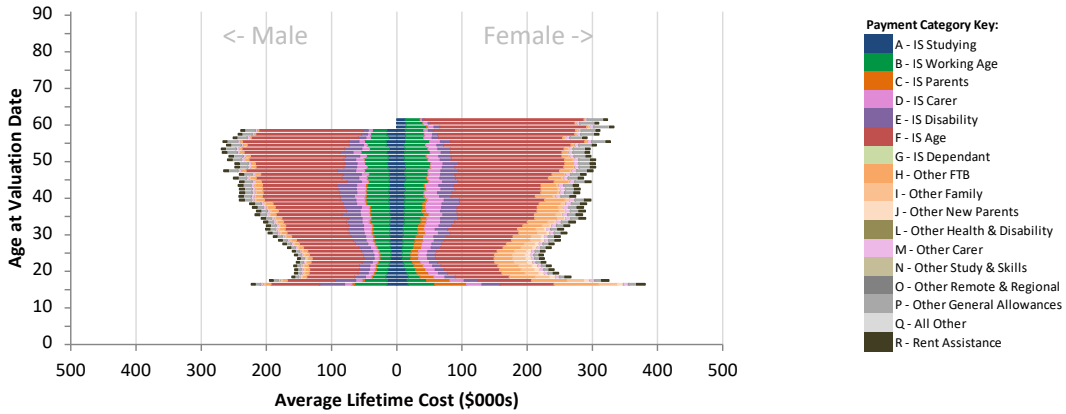
Those with an education sector indicating that they were currently undertaking higher education were also seen to be correlated with higher continuance on income support payments. Those currently undertaking vocational education training or secondary education were seen to be correlated with a higher proportion moving into class '2 Working Age' when leaving class '1 Studying'.

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 **$79bn** (or **1.7%** of the total lifetime cost). The average lifetime cost for people in this class is **$212,000**. The variation by age and gender is illustrated in the figure below.

Figure 53: 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 differential chances 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 21: 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	**285,000**	**100%**	**204,000**	**100%**
Education sector				
- Higher education	237,000	84%	198,000	97%
- School	9,000	3%	245,000	120%
- VET	38,000	13%	229,000	112%
Education hierarchy				
- Year 10 or less	8,000	3%	243,000	119%
- Year 11	10,000	4%	233,000	114%
- Year 12	225,000	79%	198,000	97%
- Certificate	19,000	7%	247,000	122%
- Diploma	14,000	5%	203,000	100%
- Bachelors/Postgraduate	9,000	3%	185,000	91%
Earnings				
- No earnings	127,000	45%	205,000	101%
- Has earnings	158,000	55%	202,000	99%
Payment type				
- Austudy	3,000	1%	207,000	102%
- ABSTUDY	7,000	2%	340,000	167%
- Youth Allowance (Student)	275,000	97%	200,000	98%
Level of parental welfare dependence				
- None (0%)	134,000	47%	193,000	95%
- Some (1%-35%)	69,000	24%	205,000	101%
- High (36%-80%)	47,000	17%	215,000	106%
- Very high (81%+)	34,000	12%	227,000	112%
Indigenous status				
- Indigenous	9,000	3%	340,000	167%
- Non-Indigenous	276,000	97%	199,000	98%

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

- 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 2016 valuation

The lifetime cost for the people in this class is $79bn and has reduced by $3bn compared to the June 2016 valuation. This has been driven by a reduction in the number of people in this class and offset by an increase to the average payment size:

- The number of people in this class has reduced due to higher exits than expected over the past year; these people exiting the Studying class generally moved to Working Age or out of the welfare system.
- The average cost has increased by $2,000 (1.1%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by grouped payment category.

Table 22: Breakdown of change in average lifetime cost for class 1 by payment category

	Total	IS			Non IS	
		Studying	Other (excl. Age Pension)	Age Pension	Family Supplements	Other Supplements
Jun-16 Total Lifetime Cost	$82bn					
Jun-17 Total Lifetime Cost	$79bn					
Change in Total Lifetime Cost	-$3bn (-3.7%)					
Change due to People in Class	-4.8%					
Change due to Average Lifetime Cost	+$2k (+1.1%)	-$1k	-$3k	+$6k	+$2k	<$1k
- Impact of change in inflation	+$9k	<$1k	+$3k	+$3k	+$2k	<$1k
- Impact of policy changes	<$1k	<$1k	<$1k	<$1k	<$1k	<$1k
- Impact of other changes	-$7k	-$1k	-$6k	+$2k	<$1k	-$2k

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 increase in average lifetime cost has been primarily driven by:

- an increase in the cost of future payments as a result of inflation; and
- an increase in the expected amount of Age Pension payments - the average Age Pension size has been adjusted in response to the observed increase in average payments to new pensioners.

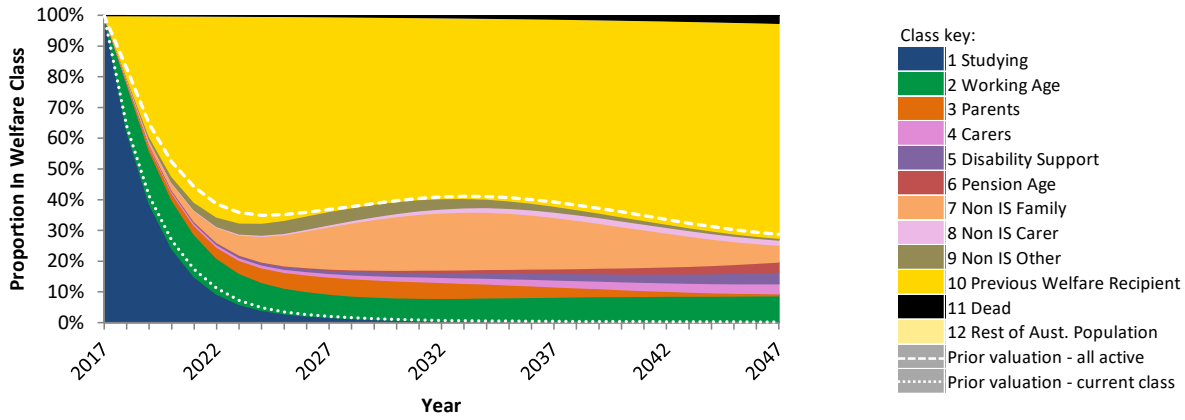
These increases have been partially offset by:

- 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; and
- a small decrease in the expected amount of Other Study & Skills supplements received, reflecting the lower expected uptake of the Student Start-up Loan (impact on average lifetime cost <$1k), along with other small changes relating to the Other Supplements which together resulting in a small average lifetime cost decrease of $2k.

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've 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 54: 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 however, only around 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 2016 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. Those students that do transition to Working Age however are expected to remain in the Working Age class for longer and are less likely to go on to transition into Disability Support.
- 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 at least 20% 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 23: 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)**	10	15%
- **Age pension (class 6)**	17	25%
Years with non income support payments only	6	8%
Years not receiving any welfare payments	34	51%
Total	67	100%

6.2 Working Age Payment recipients

Key points

There were 1,301,000 people in the Working Age class in 2017, who were mostly aged 18 to 65. 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.

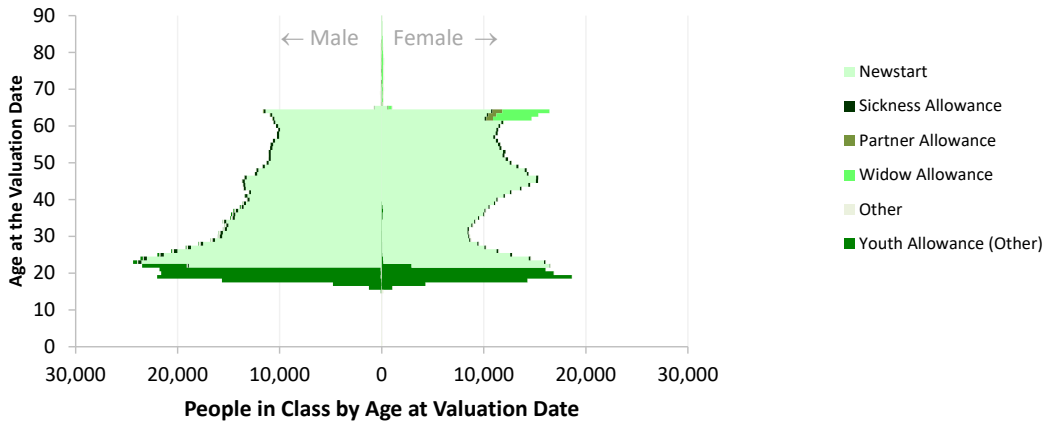
- Over the last five years a reducing number of people have entered the Working Age class while exits have remained stable.
- The longer a person remains on Working Age benefits, the less likely they have been to leave the Working Age class before retirement. Similarly, those who enter the Working Age class directly from another welfare class have generally been less likely to exit the system.
- 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.

What does the data tell us about Working Age people?

There were 1,301,000 people (16.2% of current welfare recipients) in the Working Age class in the 2017 model population. This represents 5.3% of the population of Australia which is a decrease from 5.5% 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 55: 2017 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.

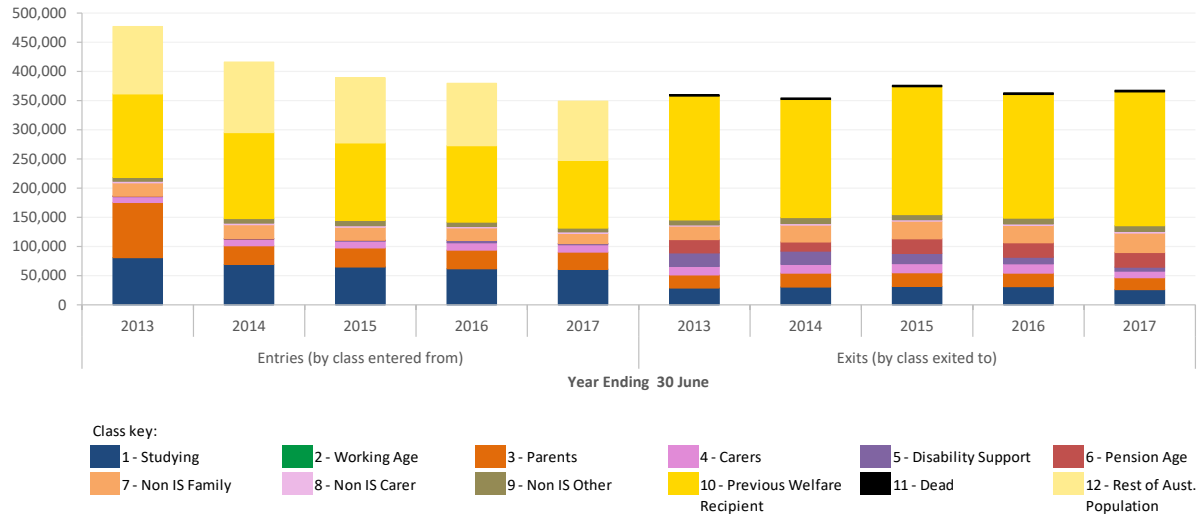
The vast majority of people in the Working Age class are on Youth Allowance (if aged up to 21) or Newstart Allowance (if over 21 years old). The remaining people are mostly on Sickness Allowance; there are also a small number of people (mostly women) at the older ages still accessing Partner Allowance and Widow Allowance although these will decrease over time as these benefits are gradually phased out.

Movements into and out of this class

Over the last three years, an average of 372,500 people (around 28% 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 369,100 people (around 28% 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.

Figure 56: Number of people entering and exiting class 2 – Working Age



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'.

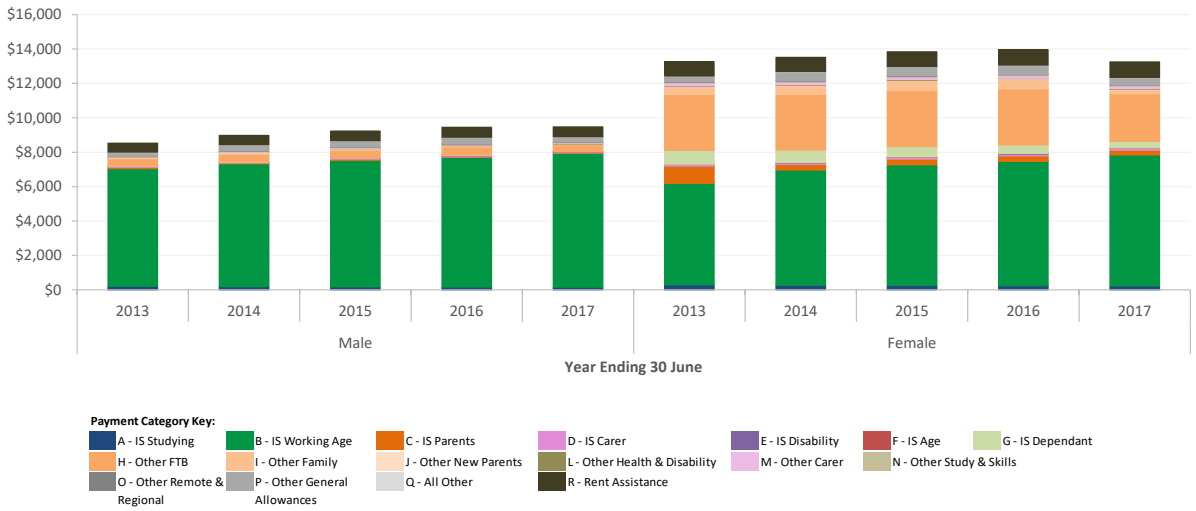
Transitions from Parenting payment in 2013 were particularly high due to a transitional arrangement ending, which reduced the Parenting payment eligibility criteria for the age of the youngest child from 16 to either 6 (for partnered parents) or 8 (for single parents). This resulted in a large number of exits from the Parenting class during that year and many of these people transitioned into the Working Age class.

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, the gap between entries and exits has been decreasing over the period, and in the most recent year the number of exits from class 2 was slightly higher than the number of entrants. It should be noted that the latest year's data in the chart above will be affected by maturity issues and may be understated.

Payments received

During 2016/17, people in this class received a total of $14.6 billion. This is 13.1% of the total payments made in 2016/17. The charts below show the average amount paid in a year to each person in this class.

Figure 57: Average payments per person in class 2 – Working Age (restated to 2016/17 $ values)



During 2016/17, the average payment made was $11,200 with considerably higher average payments being made to women ($13,300) than men ($9,500). As can be seen from the chart above, this is because of their greater propensity to receive FTB and family payments alongside the main Working Age payment.

The Working Age class also contains a small group of dependants, 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 female section of the chart above.

Changes in model fitting this valuation

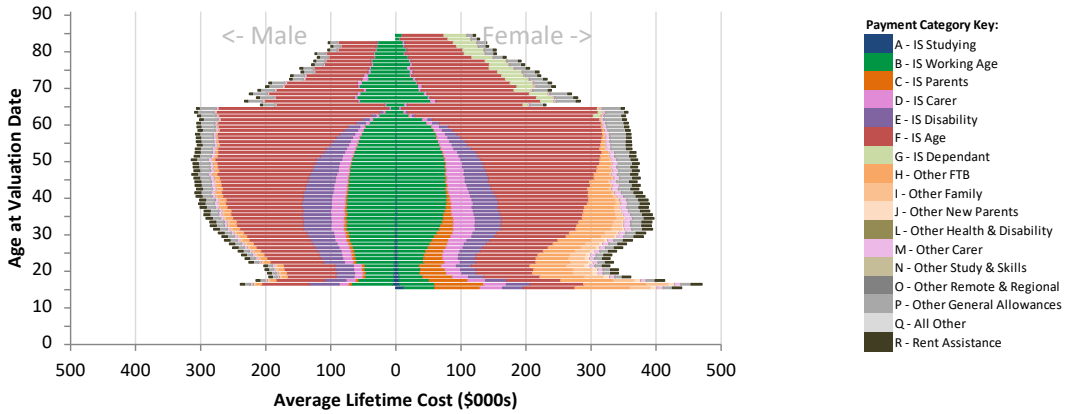
This year we have enhanced the Working Age model assumptions to allow for the intergenerational and partial capacity to work (PCW) variables. Use of welfare by a person's parents during childhood was seen to be correlated with higher continuance on income support payments. People with lower work capacity, in particular those with an exemption from mutual obligation requirements, were also seen to be correlated with higher continuance on income support 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 **$411bn** (or **8.8%** of the total lifetime cost). The average lifetime cost for people in this class is **$315,000**. The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 58: 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 Sickness 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 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 24: 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	**230,000**	**100%**	**268,000**	**100%**
Exemption at year end				
- No exemption at year end	220,000	96%	264,000	99%
- With exemption at year end	10,000	4%	341,000	127%
Earnings				
- No earnings	107,000	47%	290,000	108%
- Has earnings	123,000	53%	249,000	93%
Payment type				
- Youth Allowance (Other)	85,000	37%	254,000	95%
- Newstart Allowance	143,000	62%	276,000	103%
- Sickness Allowance	2,000	1%	220,000	82%
Education hierarchy				
- Year 10 or less	27,000	12%	316,000	118%
- Year 11	16,000	7%	299,000	112%
- Year 12	66,000	29%	232,000	86%
- Certificate	88,000	38%	297,000	111%
- Diploma	14,000	6%	237,000	89%
- Bachelors	17,000	7%	182,000	68%
- Postgraduate	2,000	1%	182,000	68%
Level of parental welfare dependence				
- None (0%)	65,000	28%	232,000	87%
- Some (1%-35%)	49,000	21%	256,000	96%
- High (36%-80%)	55,000	24%	281,000	105%
- Very high (81%+)	62,000	27%	303,000	113%
Number of children				
- No children	213,000	93%	258,000	96%
- 1 child	11,000	5%	393,000	147%
- 2 children	4,000	2%	382,000	143%
- 3+ children	2,000	1%	430,000	161%
Years in pay class				
- 1 Year	72,000	31%	239,000	89%
- 2-3 Years	83,000	36%	255,000	95%
- 4-5 Years	43,000	19%	292,000	109%
- 6+ Years	32,000	14%	334,000	125%
Indigenous status				
- Indigenous	29,000	13%	387.000	145%
- Non-Indigenous	201,000	87%	250,000	93%

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

- 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 2016 valuation

The lifetime cost for the people in this class is $411bn, an increase of $10bn compared to the June 2016 valuation. This was driven by an increase in the average cost:

- The average cost has increased by $11,000 (3.7%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by grouped payment category.

Table 25: Breakdown of change in average lifetime cost for class 2 by payment category

	Total	IS			Non IS	
		Working Age	Other (excl. Age Pension)	Age Pension	Family Supplements	Other Supplements
Jun-16 Total Lifetime Cost	$401bn					
Jun-17 Total Lifetime Cost	$411bn					
Change in Total Lifetime Cost	+$10bn (+2.5%)					
Change due to People in Class	-1.2%					
Change due to Average Lifetime Cost	+$11k (+3.7%)	+$5k	-$7k	+$11k	<$1k	<$1k
- Impact of change in inflation	+$9k	<$1k	+$2k	+$4k	<$1k	<$1k
- Impact of policy changes	<$1k	<$1k	<$1k	<$1k	<$1k	<$1k
- Impact of other changes	+$3k	+$4k	-$9k	+$7k	<$1k	<$1k

Note figures above may not sum to the totals owing to the impact of the '<$1k' items and the impact of other rounding.

The increase in average cost has been primarily driven by:

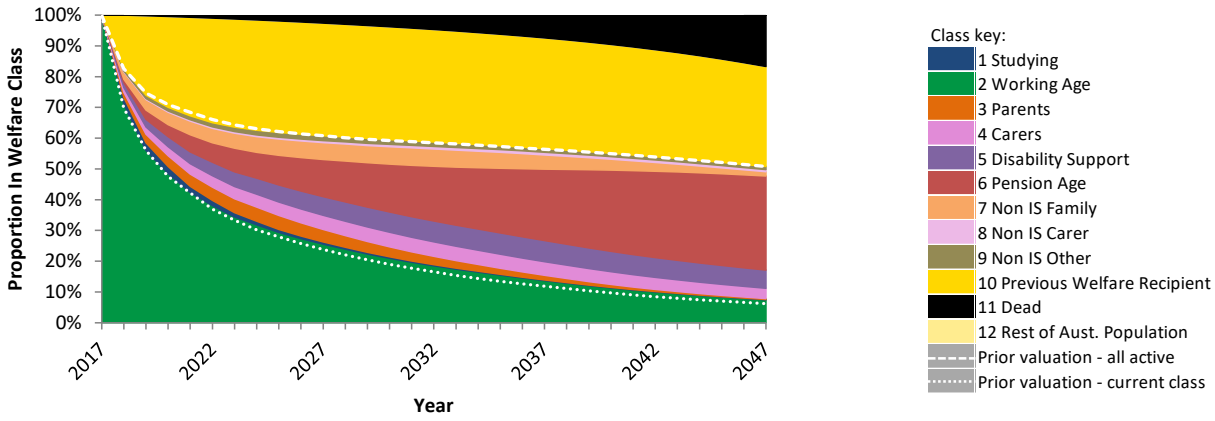
- an increase in the cost of future payments as a result of inflation;
- an increase in the persistency of Working Age recipients; this relates to the tightening of the eligibility for Disability Support Pension which has been seen to have decreased the transitions from Working Age into Disability Pension;
- an increase in the expected transitions into the Age Pension class; this may be partly due to the increased persistency on Working Age payments increasing the likelihood of this group later transitioning into the Age Pension class; and
- an increase in the expected amount of Age Pension payments - the average Age Pension size has been adjusted in response to the observed increase in average payments to new pensioners.

These increases are partly offset by lower expected transitions into DSP, and therefore a lower contribution of DSP to the average lifetime cost, due to the tightening of the eligibility criteria for DSP.

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 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 60% remain on the Working Age payment. 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.
- There has been a slight increase in the projected proportion of this group who remain in the Working Age class in the future, when compared to the June 2016 valuation (which is shown with the lower dashed line).
- After 30 years, around 48% 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 26: 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)**	13	27%
- **Age pension (class 6)**	17	35%
Years with non income support payments only	2	5%
Years not receiving any welfare payments	16	33%
Total	49	100%

6.3 Parenting Payment recipients

Key points

There were 433,000 people in the Parenting class in 2017, who were mostly female and aged 15 to 50.

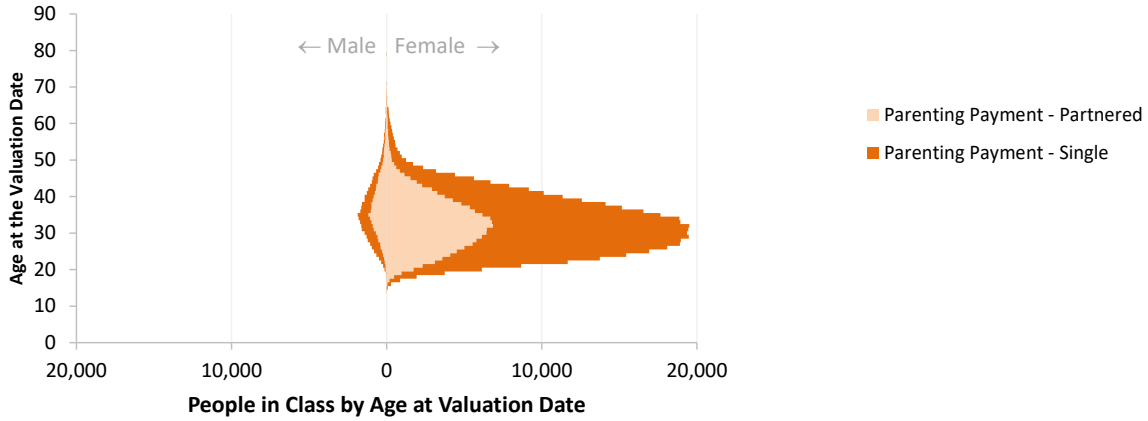
- Since the last major Parenting payment policy change which removed the grandfathering of the previous eligibility criteria, both the number of entrants and exits into the Parenting class have remained stable.
- Women in this class have a much higher expected lifetime cost than men as they spend longer 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.
- Outcomes upon leaving the Parenting class are influenced by employment earnings and historic use of other payments. People transitioning out of the class have generally been most likely to return to a class they were previously in. This effect is particularly strong for those who were previously in Non Income Support Carer and Non Income Support Family related classes. Parenting payment recipients with employment earnings are more likely to transition to a non IS class than another IS class.

What does the data tell us about Parenting Payment recipients?

There were 433,000 people (5.4% of current welfare recipients) in the Parenting class in the 2017 model population. This represents 1.8% 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 Parenting class by age, gender and payment type.

Figure 60: 2017 profile of people in class 3 – Parents (age/gender/payment type)



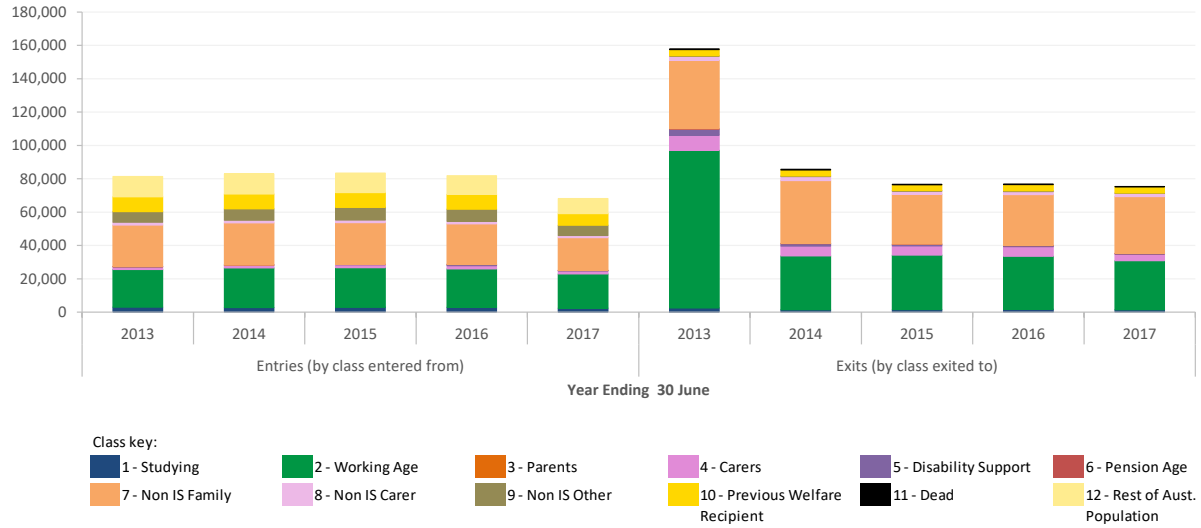
The people in this class are predominantly women and in the age range 15 to 50. The majority (67%) of the people in this class are single.

Movements into and out of this class

Over the last three years, an average of 77,800 people (around 18% 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 76,300 people (around 18% 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.

Figure 61: Number of people entering and exiting class 3 – Parents



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.

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.

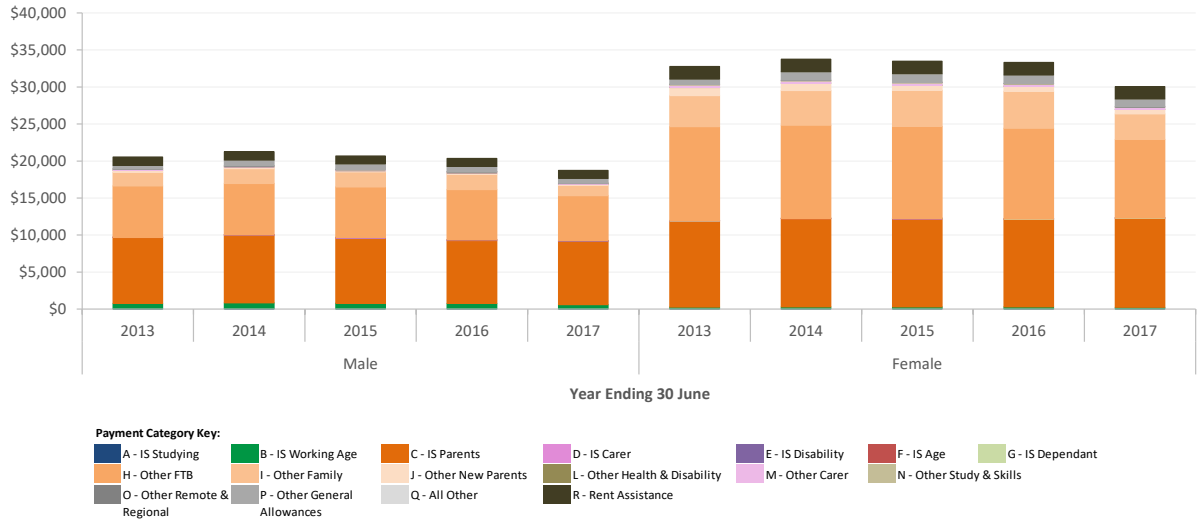
Transitions to Working Age in 2013 were particularly high due to a transitional arrangement ending, which reduced the Parenting payment eligibility criteria for the age of the youngest child from 16 to either six (for partnered parents) or eight (for single parents). This resulted in a large number of exits from Parenting during that year and many of these people transitioned into the Working Age class.

Since then, transitions in and out of the Parents class have been relatively stable. It should be noted that the latest year's data in the chart above will be affected by maturity issues and may be understated.

Payments received

During 2016/17, people in this class received a total of $12.6 billion. This is 11.3% of the total payments made in 2016/17. The charts below show the average amount paid in a year to each person in this class.

Figure 62: Average payments per person in class 3 – Parents (restated to 2016/17 $ values)



As shown in the chart above, the average amount per person for 2016/17 is around 10% lower than prior years. This is likely due to the payments in the 2016/17 year being understated, as it will not fully reflect all FTB and family payments which can be received as part of an income tax assessment post 30 June.

People in this class receive some of the highest average annual payments. The average payment made in 2015/16 (noting the potential understating of 2016/17) was $32,300 with considerably higher average payments being made to women ($33,300) than men ($20,400). 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.

Changes in model fitting this valuation

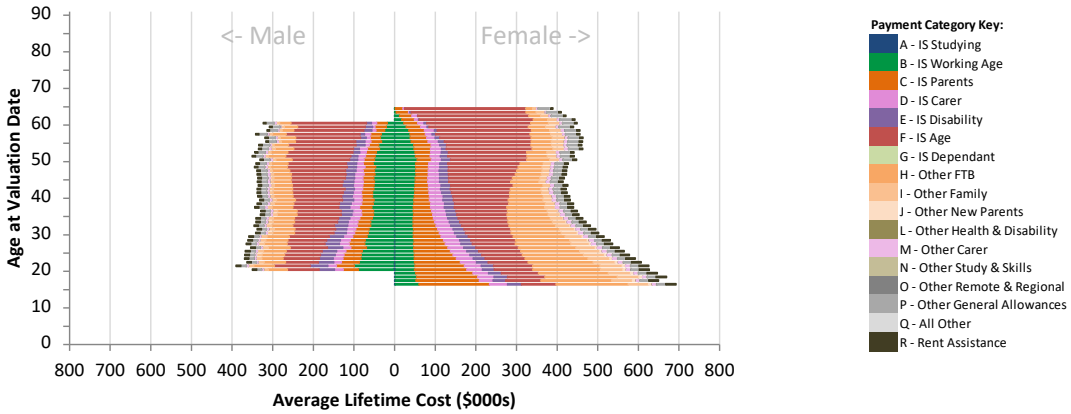
This year we have enhanced the Parenting model assumptions to allow for the intergenerational variable. Use of welfare by a person's parents during childhood was seen to be correlated with higher continuance on income support payments

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 **$210bn** (or **4.5%** of the total lifetime cost). The average lifetime cost for people in this class is **$485,000**, a significantly higher amount than for the Studying or Working Age class. The variation by age and gender illustrated in the figure below.

Figure 63: Average lifetime cost by age and gender (class 3)



There is significant variation by age and gender illustrated in the figure above.

The average lifetime cost for men is much lower than for women ($342,000 for men compared to $497,000 for women). This reflects the previous observation, that women typically receive higher annual payments as a result of receiving more FTB and 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 27: 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	**189,000**	**100%**	**456,000**	**100%**
Marital status				
- Single	116,000	62%	516,000	113%
- Partnered	72,000	38%	359,000	79%
Number of children				
- 1 child	43,000	23%	403,000	88%
- 2 children	62,000	33%	415,000	91%
- 3+ children	84,000	44%	514,000	113%
Age of youngest child				
- New born	23,000	12%	516,000	113%
- 1-6 Years old	147,000	78%	454,000	100%
- 7-8 Years old	17,000	9%	400,000	88%
Earnings				
- No earnings	114,000	61%	486,000	107%
- Has earnings	74,000	39%	409,000	90%
Received 'Other Carer' payment				
- No	176,000	93%	452,000	99%
- Yes	12,000	7%	505,000	111%

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 2016 valuation

The lifetime cost for the people in this class is $210bn, an increase of $3bn (1.3%) compared to the June 2016 valuation. This was driven by an increase in the average cost and slightly offset by a reduction in the number of people in this class:

- The number of people in this class has reduced slightly since the previous valuation as a result of lower than expected entries into the class over the year.
- The average cost has increased by $11,000 (2.2%) since the previous valuation. 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 3 by payment category

	Total	IS			Non IS	
		Parenting	Other (excl. Age Pension)	Age Pension	Family Supplements	Other Supplements
Jun-16 Total Lifetime Cost	$207bn					
Jun-17 Total Lifetime Cost	$210bn					
Change in Total Lifetime Cost	+$3bn (+1.3%)					
Change due to People in Class	-0.9%					
Change due to Average Lifetime Cost	+$11k (+2.2%)	+$2k	-$3k	+$9k	+$3k	<$1k
- Impact of change in inflation	+$12k	+$2k	+$3k	+$4k	+$3k	<$1k
- Impact of policy changes	-$3k	<$1k	<$1k	<$1k	-$3k	<$1k
- Impact of other changes	+$1k	<$1k	-$7k	+$5k	+$2k	<$1k

The increase in average cost has been primarily driven by:

- an increase in the cost of future payments as a result of inflation;
- an increase in the assumed probability of people remaining in the Parenting class in response to recent experience, which leads to a longer duration on income support and Family Supplements; and
- an increase in the expected amount of Age Pension payments - the average Age Pension size has been adjusted in response to the observed increase in average payments to new pensioners.

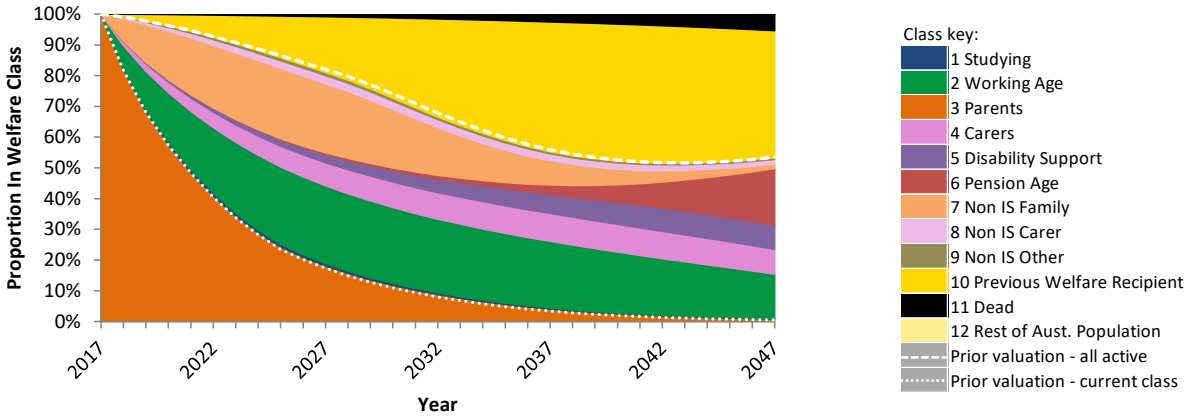
These increases have been partially offset by:

- a decrease in the likelihood of transitioning to the Disability Support class which reduces the contribution of DSP payments to the average lifetime cost for people in the Parenting class. The reduced transition rates to DSP are in part due to the tightening of the eligibility criteria for DSP; and
- a net decrease due to policy changes affecting family payments, involving a reduction in expected FTB payments partly offset by an expected increase as a result of the implementation of the Child Care Subsidy starting on 1 July 2018.

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 64: 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 45% of this group receive income support. After 30 years, around 50% 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 29: 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)**	19	33%
- **Age pension (class 6)**	18	31%
Years with non income support payments only	5	9%
Years not receiving any welfare payments	15	27%
Total	57	100%

6.4 Carers (Income Support)

This class includes people receiving the Carer Payment in 2016/17 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 277,000 people in the Carer class in 2017 with significantly more women than men.

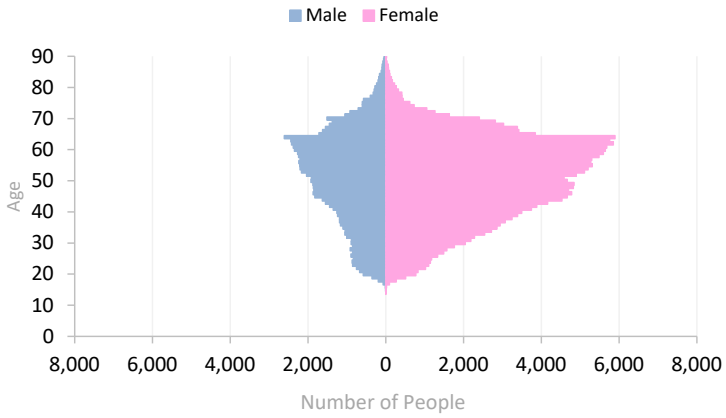
- Over the last five years the number of entrants has been stable but higher than the number of exits, leading to a growing number of individuals and an increasing number of exits each year.
- The length of time a person receives Carer payment is strongly linked to the mortality of the caree. Those receiving a bereavement payment or those caring for older people or people with cancer are much more likely to leave the Carer class.

What does the data tell us about Carers?

There were 277,000 people (3.4% of current welfare recipients) in the Carers class in the 2017 model population. This represents 1.1% 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 65: 2017 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.

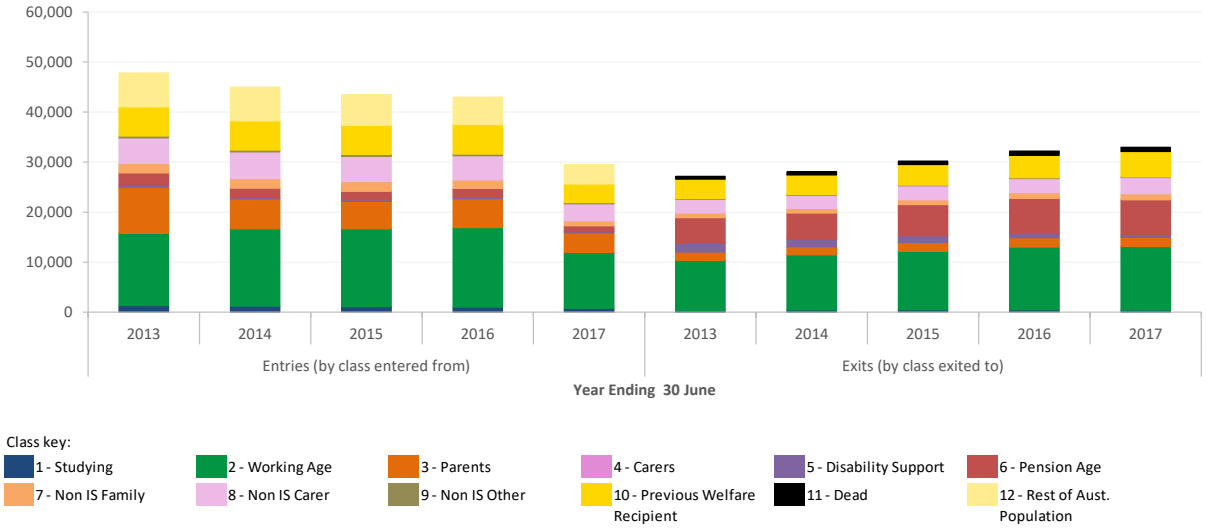
Movements into and out of this class

Over the two years to 2016, an average of 43,200[5] people (around 16% of the people in this class) per annum enter this class from another welfare class or from outside the welfare system. Over the last three years, an average of 31,800 people (around 12% 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.

[5] This figure excludes the experience of the 2017 year which is significantly impacted by data maturity.

Figure 66: Number of people entering and exiting class 4 – Carers



Entries into class '4 Carers' are noticeably lower for the most recent year, however these are likely understated due to maturity issues. This is because there can be considerable delays in applying for Carer Payment and receiving Carer Payment.

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

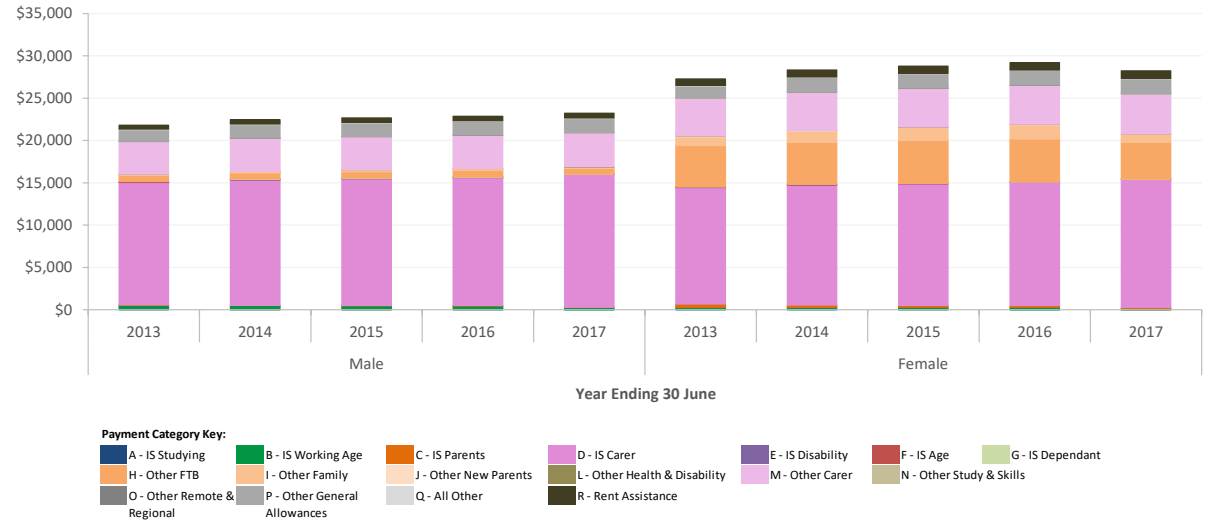
The number of exits in recent years has been consistently less than the number of entrants, which has caused year on year growth in the class.

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; only a small 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 2016/17, people in this class received a total of $7.4 billion. This is 6.7% of the total payments made in 2016/17. The charts below show the average amount paid in a year to each person in this class.

Figure 67: Average payments per person in class 4 – Carers (restated to 2016/17 $ values)



People in this class receive some of the highest average annual payments. The average payment made in 2016/17 was $26,700 with considerably higher average payments being made to women ($28,200) than men ($23,200), as a result of women being more likely to also be claiming FTB and other family payments.

Changes in model fitting this valuation

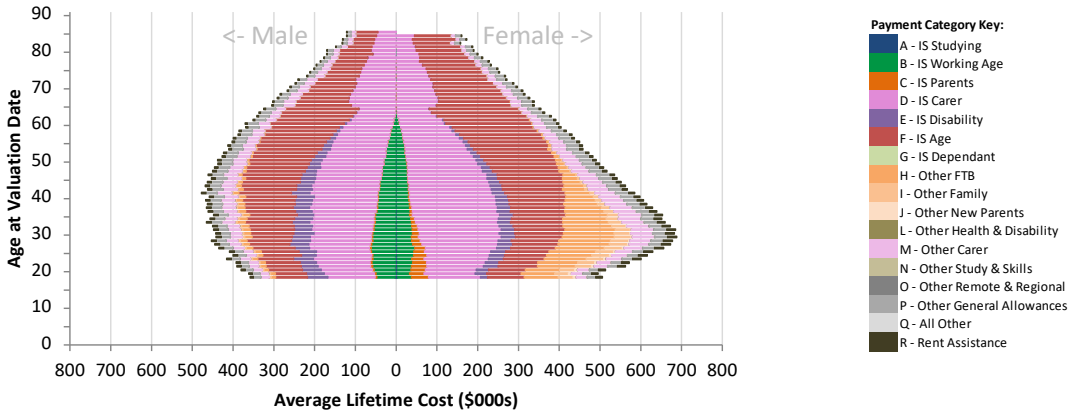
This year we have enhanced the Carers model assumptions to allow for the intergenerational variable. Use of welfare by a person's parents during childhood was seen to be correlated with higher continuance on income support payments.

What does the model show for Carers?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **$125bn** (or **2.7%** of the total lifetime cost). The average lifetime cost for people in this class is **$449,000**. The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 68: 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 family payments and from more women transitioning to Parenting payments.

The average lifetime cost pyramid shows a small discontinuity at 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 30: Average lifetime cost for 45 to 54 year old Carers 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	**68,000**	**100%**	**479,000**	**100%**
Carer caree relationship				
- Child	17,000	25%	456,000	95%
- Other relation	6,000	10%	458,000	96%
- Parent	19,000	28%	527,000	110%
- Unrelated	4,000	6%	472,000	99%
- Partner/spouse	21,000	31%	462,000	96%
Caree medical condition				
- Cancer/tumour	3,000	4%	394,000	82%
- Circulatory & respiratory system	9,000	14%	461,000	96%
- Congenital anomalies & inherited disorders	1,000	2%	507,000	106%
- Intellectual/learning	6,000	9%	527,000	110%
- Musculo-skeletal & connective tissue	15,000	23%	474,000	99%
- Nervous system	7,000	10%	456,000	95%
- Psychological/psychiatric	18,000	27%	503,000	105%
- Other	8,000	12%	483,000	97%
Number of children				
- No children	33,000	49%	468,000	98%
- 1 child	15,000	23%	488,000	102%
- 2 children	11,000	16%	490,000	102%
- 3+ children	8,000	12%	493,000	103%
Marital status				
- Single	35,000	51%	508,000	106%
- Partnered	33,000	49%	449,000	94%

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

- Those carers who are the parent of their caree tend to have higher average lifetime costs.
- 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 2016 valuation

The lifetime cost for the people in this class is $125bn, an increase of $6bn compared to the June 2016 valuation. This was due to both an increase in the average cost and an increase in the number of people in this class.

- 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 increased by $11,000 (2.6%) since the previous valuation. 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 4 by payment category

	Total	IS			Non IS	
		Carer	Other (excl. Age Pension)	Age Pension	Family Supplements	Other Supplements
Jun-16 Total Lifetime Cost	$119bn					
Jun-17 Total Lifetime Cost	$125bn					
Change in Total Lifetime Cost	+$6bn (+4.7%)					
Change due to People in Class	+2.1%					
Change due to Average Lifetime Cost	+$11k (+2.6%)	+$2k	-$1k	+$8k	<$1k	+$1k
- Impact of change in inflation	+$15k	+$5k	+$2k	+$6k	<$1k	+$2k
- Impact of policy changes	<$1k	<$1k	<$1k	<$1k	<$1k	<$1k
- Impact of other changes	-$3k	-$3k	-$3k	+$3k	<$1k	<$1k

The increase in average cost has been primarily driven by:

- an increase in the cost of future payments as a result of inflation; and
- an increase in the expected amount of Age Pension payments - the average Age Pension size has been adjusted in response to the observed increase in average payments to new pensioners.

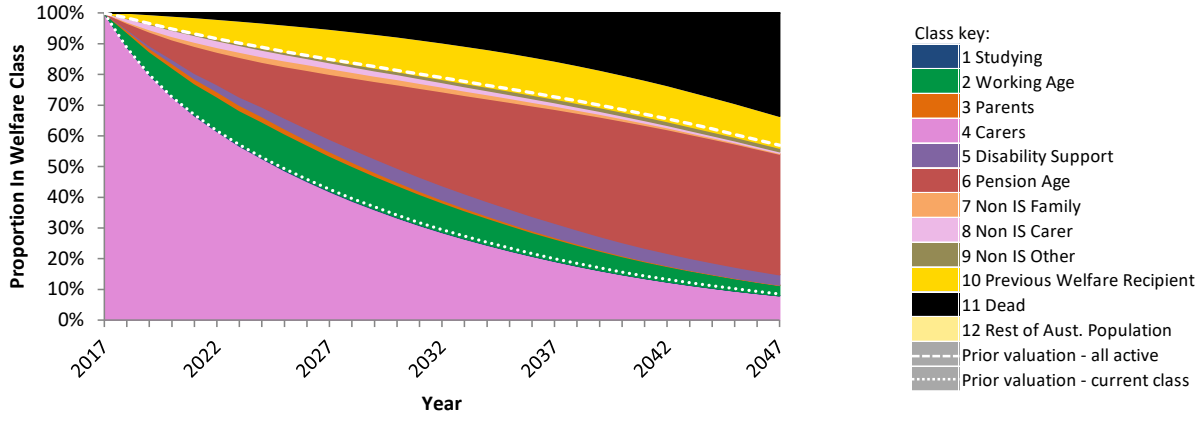
These increases have been partially offset by:

- the continued impact of the tightening DSP eligibility criteria leading to lower expected transitions into DSP and therefore a lower contribution of DSP to the average lifetime cost; and
- lower re-entry rates onto Carer Payments, leading to a lower contribution of Carer Payments to the average 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 69: 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 Carers payment pension 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 material 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 (54%) or dead (34%).

Duration

The average future life expectancy for the income support Carer class is **37** 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 32: 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	41%
- **Age pension (class 6)**	16	43%
Years with non income support payments only	1	4%
Years not receiving any welfare payments	5	12%
Total	37	100%

6.5 Disability Support Pensioners

Key points

There were 760,000 people in the Disability Support Pension class in 2017.

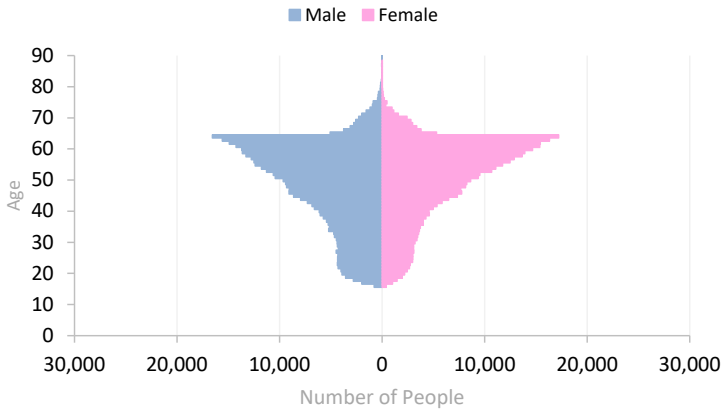
- Eligibility criteria for the Disability Support Pension has been tightening over the last five years. This has been reflected in reducing numbers of entrants each year.
- In 2016 and 2017, medical reviews have increased the number of exits to the Working Age class. This higher exit rate to class 2 is not expected to continue after the current program of medical reviews ceases.
- The tightening of eligibility criteria for the Disability Support Pension has led to a reduction in the number of people with less severe medical conditions in the class. Consequently, there has been an increase in the proportion of people with more severe medical conditions. In particular, the proportion of recipients with cancer has doubled from 10% to 20% over the last five years.
- People in the Disability Support Pension class tend to remain on the Disability Support Pension and rarely leave the class before retirement age or death.

What does the data tell us about Disability Support Pensioners?

There were 760,000 people (9.5% of current welfare recipients) in the Disability Support Pension class in the 2017 model population. This represents 3.1% of the population of Australia which is a decrease from 3.2% 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 70: 2017 profile of people in class 5 – Disability Support (age/gender)

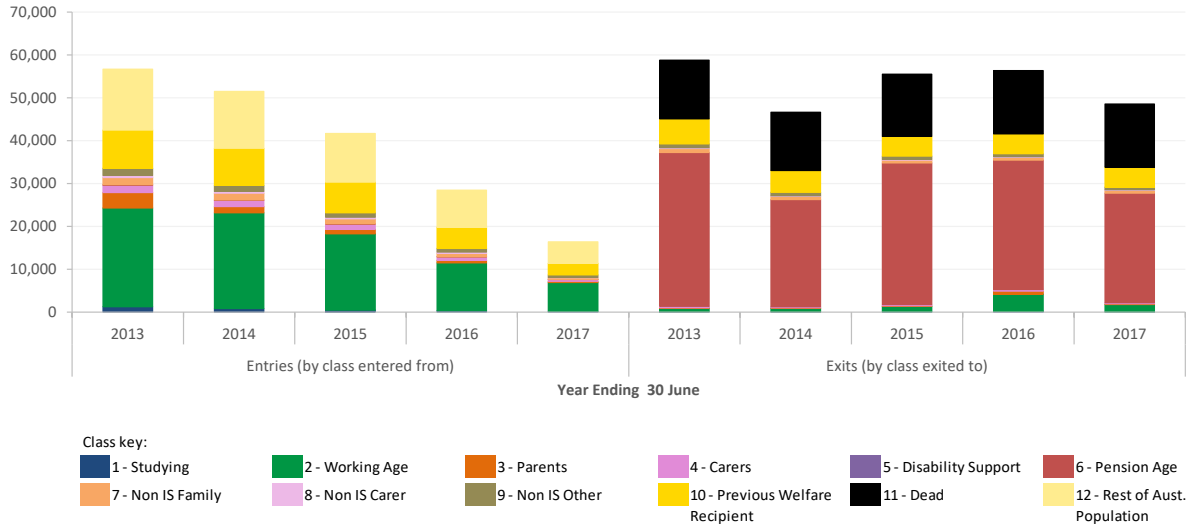


There are slightly more men than women in this class. The numbers in the class increase by age up to pension age and then reduce as most retire.

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 as well as data maturity affecting the most recent year. In 2015/16 there were 28,500 people (around 3.5% of the people in this class) entering this class from another welfare class or from outside the welfare system. In the same year, 56,300 people (around 7.0% 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. Note that the number of entries for 2016/17 are materially impacted by data maturity and is likely to be understated.

Figure 71: Number of people entering and exiting class 5 – Disability Support



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.

We have observed a strong decreasing trend in the number of people entering this class over the last five years. The following table shows the number of entrants into this class over the last five years.

Table 33: Number of people entering class 5 – Disability Support in the last 5 years

Financial Year	Total	% Reduction vs Previous Year
2012/13	56,664	
2013/14	51,478	-9%
2014/15	41,654	-19%
2015/16	28,478	-32%
2016/17	16,419	-42%

Note the figure for 2016/17 is likely to be materially impacted by data maturity and hence the reduction for this year will be less when the data is fully mature.

We have discussed this with the Department and understand this experience is likely to be a reflection of a series of policy changes that have been made over recent years, all tightening the eligibility criteria for the Disability Support Pension.

We can see that people in this class show very limited mobility. The main exits from the class are through retirement or death. Notwithstanding this, in the 2015/16 year, we have observed that a material number of people aged under 40 exit the class, mainly into the other income support classes. 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 have continued in 2016/17 however, the impact seen in 2016/17 is less. This experience can be seen in the table below, which shows the historic number of people leaving the Disability Support Pension class prior to retirement age.

Table 34: Number of people leaving class 5 – Disability Support prior to retirement in the last five years

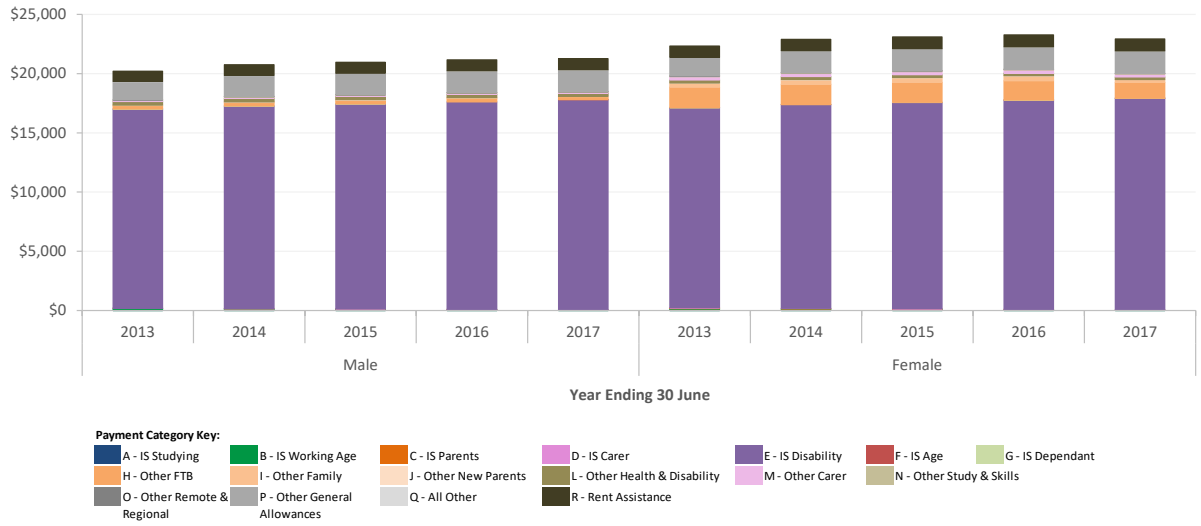
Financial Year	Remaining in class 5	Leaving class 5 to an income support class	Leaving class 5 and no longer on income support	Total
2012/13	752,190	1,310	18,750	772,250
2013/14	758,885	1,244	17,596	777,725
2014/15	749,429	1,754	17,591	768,774
2015/16	728,954	5,232	17,416	751,602
2016/17	701,643	2,165	17,135	720,943

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 proportion of DSP recipients entering the class with cancer as their primary medical condition has doubled over the last five years from 10% to 20%.

Payments received

During 2016/17, people in this class received a total of $17.1 billion. This is 15.3% of the total payments made in 2016/17. The charts below show the average amount paid in a year to each person in this class.

Figure 72: Average payments per person in class 5 – Disability Support (restated to 2016/17 $ values)



The average payment made in 2016/17 was $22,000 with slightly higher average payments being made to women than men, as a result of them being more likely to also be claiming FTB.

Changes in model fitting this valuation

There were no significant changes to the Disability Support Pension model assumptions this valuation. The new intergenerational variable was considered but was not found to have a strong relationship with the dynamics of people in class '5 Disability Support Pension' as it was for other income support classes.

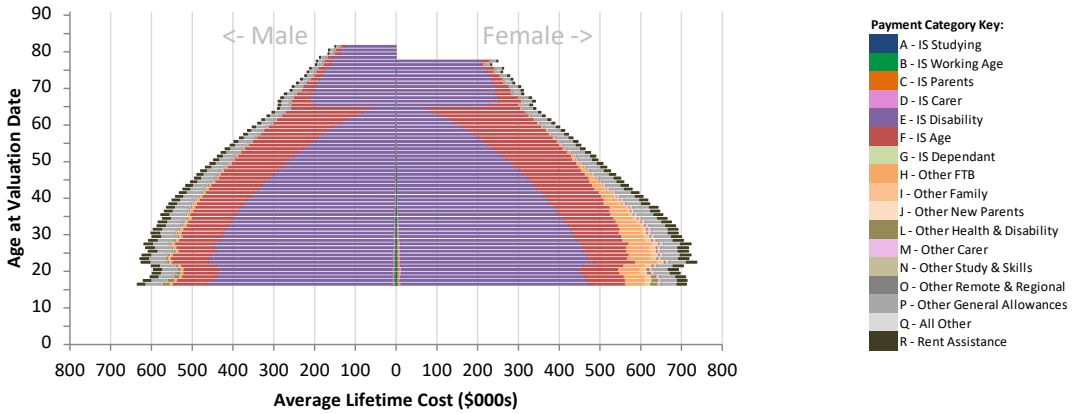
What does the model show for current Disability Support Pensioners?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **$351bn** (or **7.5%** of the total lifetime cost). The average lifetime cost for people in this class is **$462,000**. It is interesting to note that this class represents around 9% of current welfare recipients but a significantly greater proportion (16%) 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 73: 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 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 35: 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	**188,000**	**100%**	**472,000**	**100%**
DSP medical condition				
- Acquired brain impairment	6,000	3%	465,000	98%
- Cancer/tumour	4,000	2%	153,000	32%
- Circulatory & respiratory system	8,000	4%	457,000	97%
- Congenital anomalies & inherited disorders	3,000	1%	494,000	105%
- Intellectual/learning	18,000	10%	496,000	105%
- Musculo-skeletal & connective tissue	40,000	21%	461,000	98%
- Nervous system	10,000	5%	476,000	101%
- Poorly defined cause / chronic pain	8,000	4%	476,000	101%
- Psychological/psychiatric	74,000	39%	489,000	103%
- Other	18,000	10%	471,000	100%
Earnings				
- No earnings	167,000	89%	474,000	100%
- Has earnings	21,000	11%	457,000	97%
Number of children				
- No children	141,000	75%	478,000	101%
- 1 child	25,000	14%	465,000	98%
- 2 children	13,000	7%	449,000	95%
- 3+ children	8,000	4%	431,000	91%
Class before entering '5 Disability Support'				
- Income support	92,000	49%	477,000	101%
- Non income support	10,000	5%	442,000	94%
- Previous client/non client	86,000	46%	471,000	100%

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.

Change in lifetime costs since the 2016 valuation

The lifetime cost for the people in this class is **$351bn**, a small reduction of **$1bn** compared to the June 2016 valuation. This was driven by a reduction in the number of people in this class, almost completely offset by an increase in the average cost:

- Both higher exits (most likely a result of the medical reviews) and lower new entrant numbers into DSP (likely a result of the tightened eligibility assessment process) have contributed to a lower number of people (population) in this class. These changes do not directly impact the average lifetime cost for those people remaining in the class.
- The average cost has increased by $12,000 (2.6%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 36: Breakdown of change in average lifetime cost for class 5 by payment category

	Total	IS			Non IS	
		Disability Support	Other (excl. Age Pension)	Age Pension	Family Supplements	Other Supplements
Jun-16 Total Lifetime Cost	$352bn					
Jun-17 Total Lifetime Cost	$351bn					
Change in Total Lifetime Cost	-$1bn (-0.2%)					
Change due to People in Class	-2.8%					
Change due to Average Lifetime Cost	+$12k (+2.6%)	+$14k	<$1k	-$3k	<$1k	<$1k
- Impact of change in inflation	+$16k	+$9k	<$1k	+$5k	<$1k	+$1k
- Impact of policy changes	<$1k	<$1k	<$1k	<$1k	<$1k	<$1k
- Impact of other changes	-$3k	+$5k	<$1k	-$8k	<$1k	<$1k

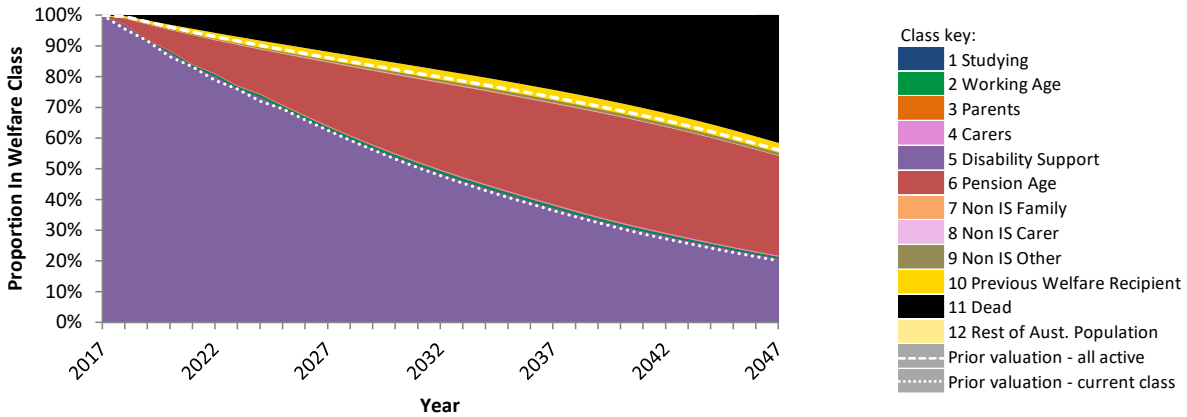
The change in average cost has been primarily driven by:

- an increase in the cost of future payments as a result of inflation;
- the continued impact of the DSP medical reviews and tightened eligibility criteria leading to a group of current DSP recipients who have a more severe disability on average compared to the group of DSP recipients at the previous valuation, and as a result have a higher expected persistence on DSP payments and are expected to receive a higher rate of payment; and
- a reduction in the expected amount of future Age Pension payments - the average Age Pension size has been adjusted in response to the observed increase in average payments to new pensioners. This increase is however more than offset by a smaller proportion of DSP recipients transitioning to Age Pension payments. This may be due to there being a higher proportion of current DSP recipients who have cancer relative to the group at the previous valuation, and as a result being more likely to pass away earlier and draw less on the 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 74: 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.
- 54% 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 37: 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)**	18	54%
- **Age pension (class 6)**	14	41%
Years with non income support payments only	0	1%
Years not receiving any welfare payments	1	4%
Total	34	100%

6.6 Age Pensioners

Key points

There were 2,595,000 people in the Age Pension class in 2017, 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 2016/17 were $38.9 billion representing 9% of Australian Government estimated revenue and 2% of GDP.

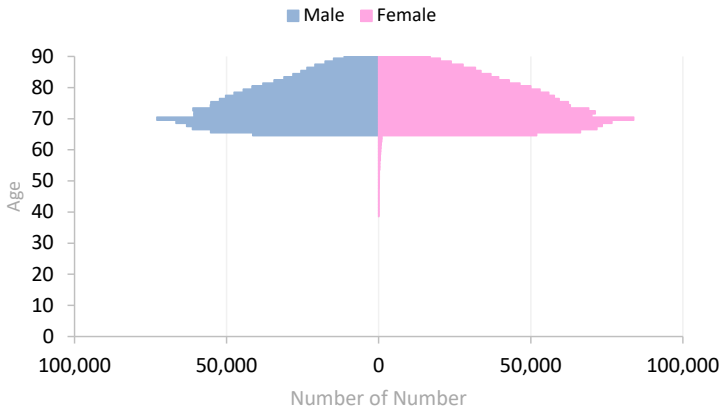
- For the last five years there have been more people entering the Age Pension class than those exiting, resulting in a growing population of age pensioners. This trend is expected to continue well into the future.
- On 1 January 2017 the assets test changes were implemented, increasing the assets threshold 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 others decreasing.
- From 1 July 2017 the Age Pension age will be 65.5. 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.

What does the data tell us about Age Pensioners?

There were 2,595,000 people in the Age Pension class in the 2017 model population. This represents 10.5% of the population of Australia which is a decrease from 10.6% at the previous valuation, and 32.3% 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 75: 2017 profile of people in class 6 – Pension Age (age/gender)



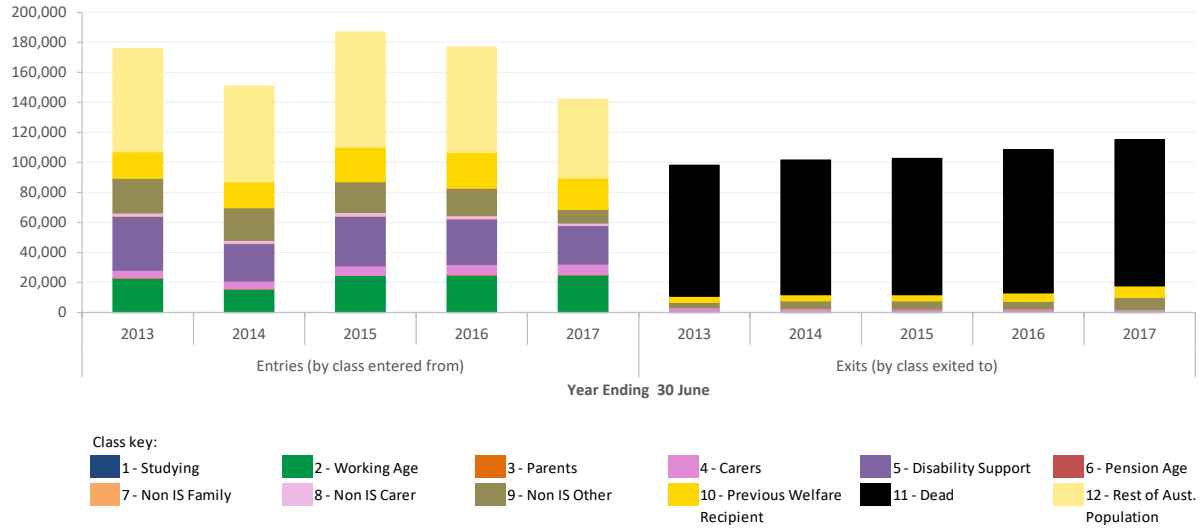
From the chart, we can see that while there are a mix of both men and women, there are more woman at every age. This is most likely a result of greater female longevity. The vast majority of people in the class are past pension age, however a small number of younger people have been included through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

Movements into and out of this class

Over the last three years, an average of 168,600 people (around 6.4% 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 108,800 people (around 4.1% 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 76: Number of people entering and exiting class 6 – Pension Age



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 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. Those who were cancelled will not exit the Age Pension class until 2017/18 as they received the age pension payment for some of 2016/17. As such this cancellation impact is expected in the first year of the projection rather than in the history.

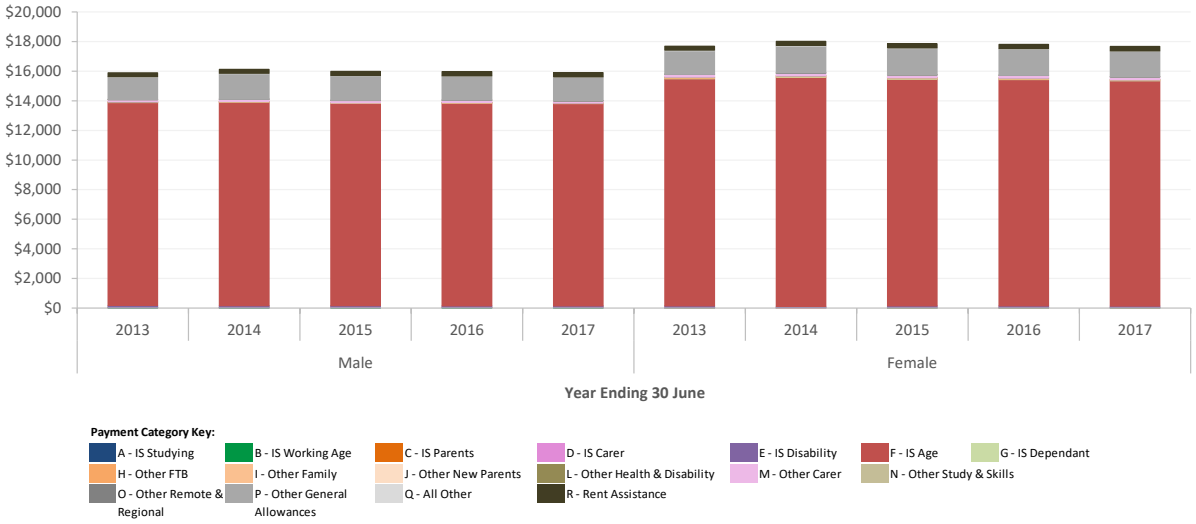
An additional impact is the lower expected entries into age pension following the tightening of this criteria. This will have acted to reduce the number of people entering into age pension after 1 January 2017 and has contributed towards the lower entries seen in 2016/17 above. Note that the 2016/17 year is also impacted by data maturity which has acted to reduce the number of entries shown in the year.

It can also be seen that entries into Age Pension in 2013/14 were lower than in other recent years. This in 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 full period.

Payments received

During 2016/17, people in this class received a total of $45.4 billion. This is 40.8% of the total payments made in 2016/17. 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 77: Average payments per person in class 6 – Pension Age (restated to 2016/17 $ values)



The average payment made in 2016/17 was $16,900. The average payments are slightly higher for women than men, possibly as a result of more of them receiving the single rate.

Changes in model fitting this valuation

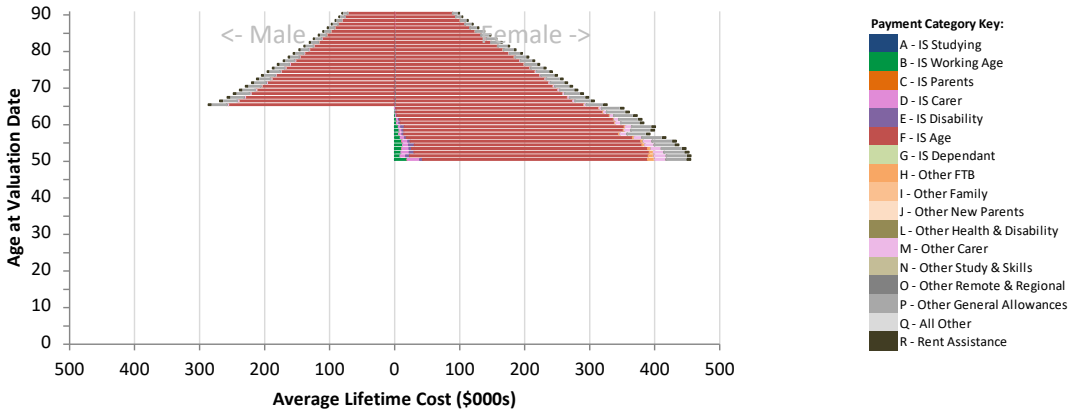
There were no significant changes to the Age Pensioners model assumptions this valuation. The new intergenerational variable was considered but was not found to have a strong relationship with the dynamics of people in class '6 Age Pension' as it was for other income support classes.

What does the model show for current Age Pensioners?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **$542bn** (or **11.6%** of the total lifetime cost). The average lifetime cost for people in this class is **$209,000**. The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 78: 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 **$327,000** for women aged 65 to around **$81,000** 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 supplements and living allowance payment types (e.g. Energy Supplement) that are paid alongside the pension.

There are very small numbers of people in this class below retirement age (approx. 8,000 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 lifetimes.

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 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 38: 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	**635,000**	**100%**	**280,000**	**100%**
Marital status				
- Single	246,000	39%	330,000	118%
- Partnered	389,000	61%	248,000	89%
Received 'Other Carer' payment				
- No	605,000	95%	279,000	100%
- Yes	30,000	5%	293,000	105%
Payment rate (over latest year)				
- Partial rate/partial year	355,000	56%	248,000	89%
- Max partnered rate, full year	108,000	17%	281,000	101%
- Partial single rate/partial year	56,000	9%	332,000	119%
- Max single rate, full year	116,000	18%	349,000	125%

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 2016 valuation

The lifetime cost for the people in this class is $542bn, an increase of $24bn (4.6%) compared to the 2016 valuation. This is due to both an increase in the average cost of people in this class compared to the previous valuation and, to a lesser extent, an increase in the number of people in this class:

- The number of age pensioners has increased by 1.7%; this is below expectations compared to the June 2016 valuation due to decreasing entry rates into this class over the last year.
- The average cost of age pensioners has increased by $6,000 (2.8%) 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 39: Breakdown of change in average lifetime cost for class 6 by payment category

	Total	IS		Non IS	
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-16 Total Lifetime Cost	$518bn				
Jun-17 Total Lifetime Cost	$542bn				
Change in Total Lifetime Cost	+$24bn (+4.6%)				
Change due to People in Class	+1.7%				
Change due to Average Lifetime Cost	+$6k (+2.8%)	<$1k	+$5k	<$1k	<$1k
- Impact of change in inflation	+$7k	<$1k	+$6k	<$1k	<$1k
- Impact of policy changes	<$1k	<$1k	<$1k	<$1k	<$1k
- Impact of other changes	<$1k	<$1k	<$1k	<$1k	<$1k

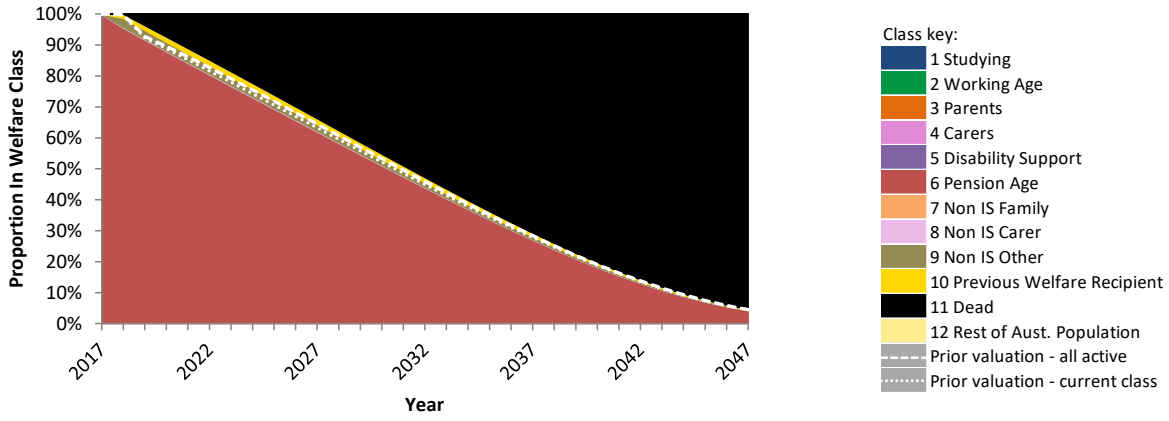
Aside from the increase in the cost of future payments as a result of inflation, the assumption updates at this valuation have had a neutral impact on the lifetime cost assessment for the older group of people who comprise this class.

There has been a reduction in the average lifetime cost of Age Pension payments as a result of a slight increase in the probability of transitioning into class 9 (the observed number of people persisting in class 6 has fallen). This has been fully offset by an increase in the expected amount of Age Pension payments received when receiving the Age Pension - the average Age Pension size has been adjusted in response to the observed increase in average payments to new pensioners.

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 79: Expected future trajectory for people in class 6



We can see that a very small proportion of this class exit and, as is intended 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 40: 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)**	13	94%
Years with non income support payments only	<1	3%
Years not receiving any welfare payments	<1	3%
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 1,544,000 people in the Non IS Family class in 2017. 80% of this class are women and are predominately aged in their mid-twenties to late-forties.

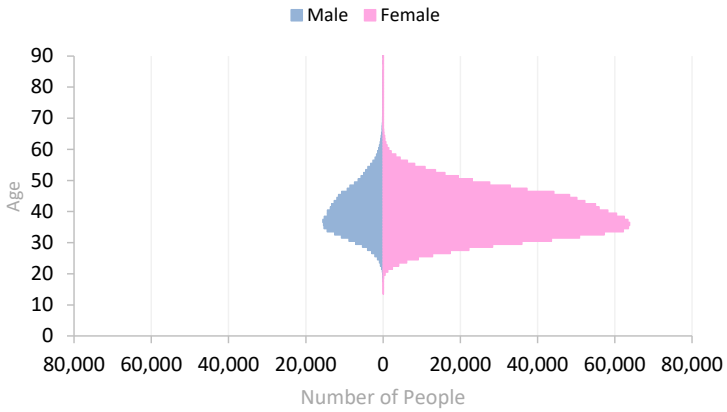
- Over the recent history there have been multiple changes to policies affecting family payments. There has been several changes which have tightened the criteria to receive Family Tax Benefits, and some benefits have been repealed.
- The number of people leaving the class has stabilised over the last three 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.
- Average child care costs per recipient have been increasing by almost 10% per year over the last three years (note that child care costs in this case refer to Government welfare expenditure on child care rather than costs incurred by the individual on child care).

What does the data tell us about the Non IS Family class?

There were 1,544,000 people in the Non IS Family class in the 2017 model population. This represents 6.3% of the population of Australia which is a decrease from 6.4% at the previous valuation, and 19.2% 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 80: 2017 profile of people in class 7 – Non IS Family (age/gender)



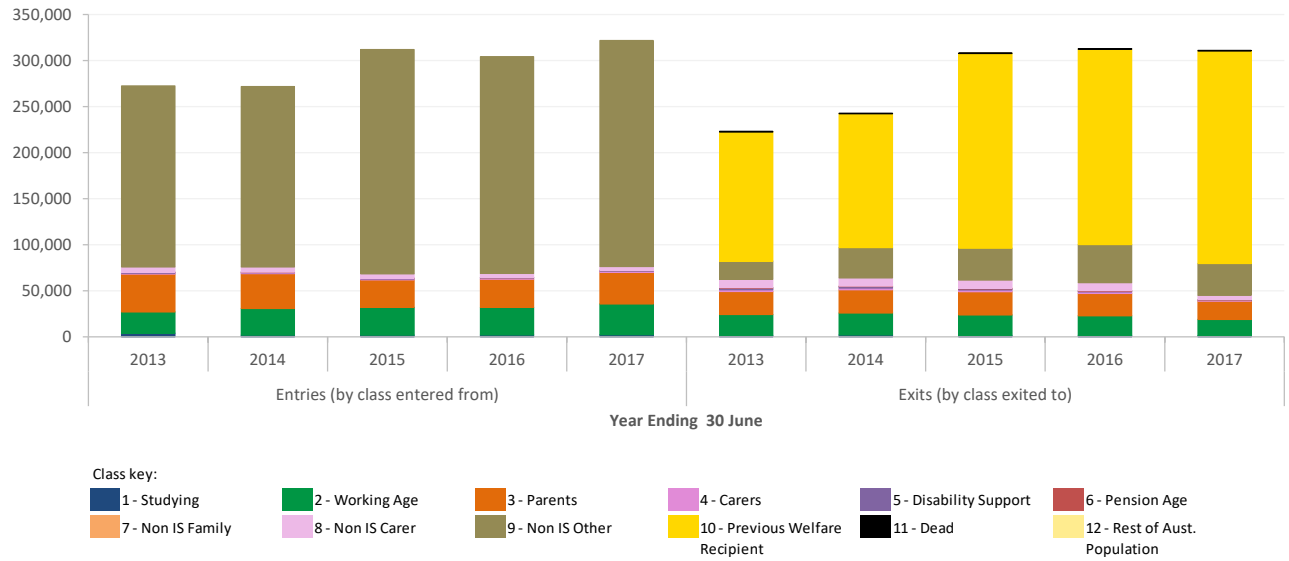
From the chart, we can see that there are a mix of both men and women, albeit with substantially more women at all ages. The people in this class are predominately aged 20 to 60, with class numbers peaking at around the mid-thirties.

Movements into and out of this class

Over the last three years, an average of 312,500 people (around 20.3% 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 310,700 people (around 20.1% 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 81: Number of people entering and exiting class 7 – Non IS Family



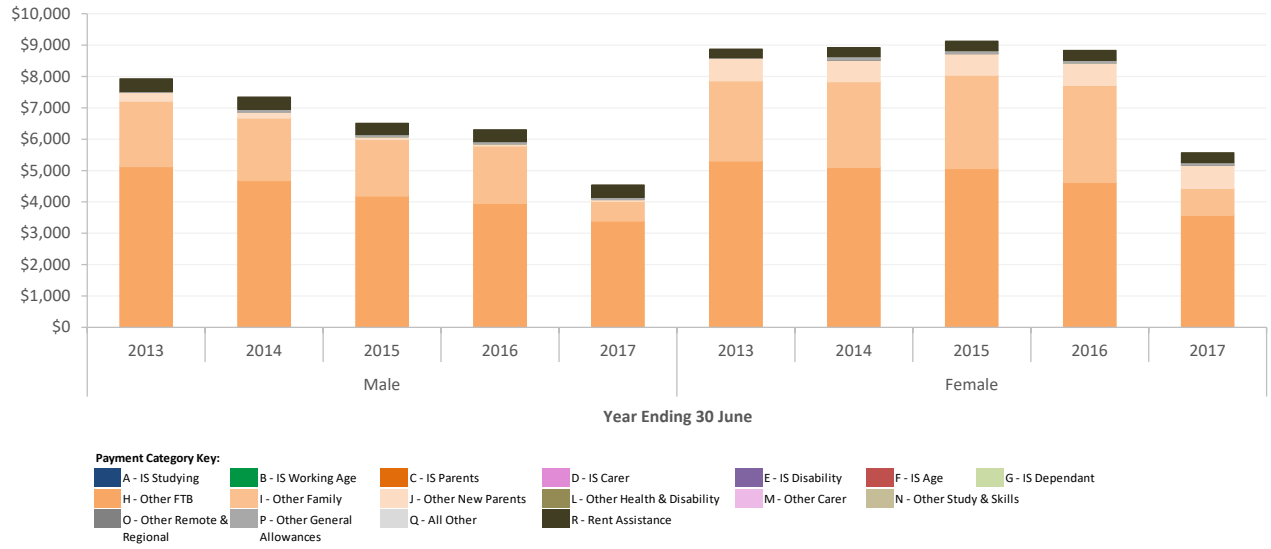
We can see that people predominately enter this class from class '9 Non IS Other' and some enter from class '3 Parents' or '2 Working Age'. We can also see that the majority of people who leave this class also leave the welfare system. Men who don't leave the system tend to transition into class '2 Working 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. There have been a number of policy changes targeted at Family Tax Benefit over this period, including reductions in the maximum age of dependent children and reductions to maximum incomes.

Payments received

During 2016/17, people in this class received a total of $8.3 billion. This is 7.4% of the total payments made in 2016/17. 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 82: Average payments per person in class 7 – Non IS Family (restated to 2016/17 $ values)



As shown in the chart above, the average amount per person for 2016/17 is significantly 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 June 2017. Additional information collected after 30 June (predominately though income tax assessments) updates the data retrospectively and 'corrects' the understatement previously observed in past years.

The average payment made in 2015/16 (noting the understating of 2016/17) was $8,300 with higher average payments being made to women ($8,800) than men ($6,300) 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.

Changes in model fitting this valuation

This year we have enhanced the Non IS Family model assumptions to allow for the intergenerational variable. Use of welfare by a person's parents during childhood was seen to be correlated with a higher likelihood of transitioning onto income support payments or the Carer Allowance.

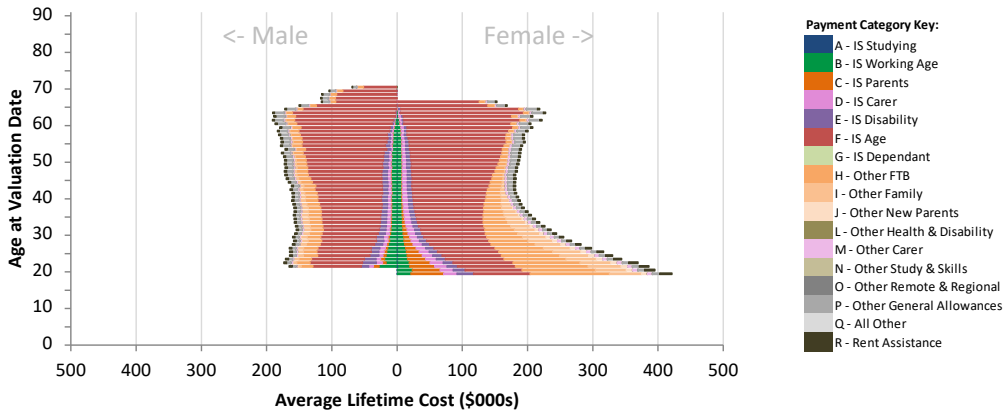
A small adjustment was made to the utilisation assumptions to reflect the policy change which closed the Energy Supplement to new recipients of Family Tax Benefit.

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 **$303bn** (or **6.5%** of the total lifetime cost). The average lifetime cost for people in this class is **$197,000**, with the lifetime cost being higher for women (**$204,000**) than for men (**$164,000**). The variation by age and gender illustrated in the figure below.

Figure 83: 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 family payments, combined with Parenting payments. This difference is substantially higher for younger women, and the reduction in future cost by age reflects the expected future time in receipt of family related payments for older people.

The average lifetime cost pyramid shows a significant change at age 65 with much lower costs for older people. To be above age 65 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 41: 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	**693,000**	**100%**	**200,000**	**100%**
Number of children				
- No children	12,000	2%	169,000	85%
- 1 child	222,000	32%	194,000	97%
- 2 children	302,000	44%	190,000	95%
- 3+ children	157,000	23%	229,000	115%
Age of youngest child				
- No children	12,000	2%	169,000	85%
- New born	57,000	8%	238,000	119%
- 1-6 Years old	512,000	74%	197,000	99%
- 7-8 Years old	50,000	7%	189,000	95%
- 9-15 Years old	58,000	8%	197,000	99%
- 16-18 Years old	4,000	1%	193,000	97%
Marital status				
- Single	57,000	8%	270,000	135%
- Partnered	636,000	92%	193,000	97%
Class before entering '7 Non IS Family'				
- Income support	122,000	18%	243,000	122%
- Non income support	571,000	82%	190,000	95%

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 compared to those who were previously receiving non income support payments.

Change in lifetime costs since the 2016 valuation

The lifetime cost for the people in this class is $303bn, an increase of $2bn compared to the 2016 valuation. This was driven by an increase in the average cost (as opposed to a change in population in this class):

- The number of people in this class has remained relatively similar (0.6% lower) to the previous valuation.
- The average cost has increased by $3,000 (1.4%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 42: Breakdown of change in average lifetime cost for class 7 by payment category

	Total	Income Support		Non Income Support	
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-16 Total Lifetime Cost	$301bn				
Jun-17 Total Lifetime Cost	$303bn				
Change in Total Lifetime Cost	+$2bn (+0.8%)				
Change due to People in Class	-0.6%				
Change due to Average Lifetime Cost	+$3k (+1.4%)	-$2k	+$6k	<$1k	<$1k
- Impact of change in inflation	+$4k	<$1k	+$3k	<$1k	<$1k
- Impact of policy changes	<$1k	<$1k	<$1k	<$1k	<$1k
- Impact of other changes	-$2k	-$3k	+$3k	<$1k	<$1k

Note figures above may not sum to the totals owing to the impact of the '<$1k' items and the impact of other rounding.

The increase in average cost is driven by:

- an increase in the cost of future payments as a result of inflation; and
- an increase in the expected amount of Age Pension payments - the average Age Pension size has been adjusted in response to the observed increase in average payments to new pensioners.

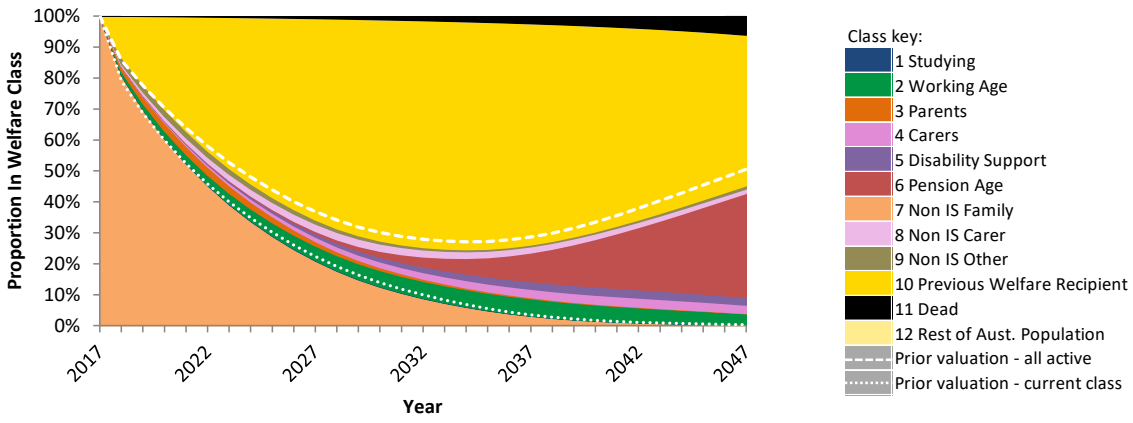
These increases have been mostly offset by:

- higher rates of exiting the welfare system, reducing the likelihood of utilising income support in the future; and
- lower expected amounts of family payments (due to lower expected FTB payments offset by increased child care payments).

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 84: 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 21% 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.

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 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 43: 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)**	4	7%
- **Age pension (class 6)**	16	31%
Years with non income support payments only	7	14%
Years not receiving any welfare payments	24	48%
Total	51	100%

7.2 Non income support – Carers

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

Key points

There were 203,000 people in the Non IS Carers class in 2017. Over 80% of this class are women who are mostly aged from their early-thirties up to retirement age.

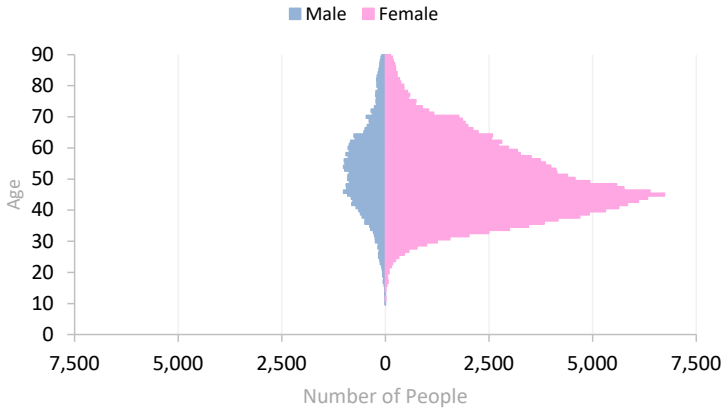
- This is a very stable class with over 80% of people who are aged above 30 continuing to remain in the class each year. Persistence in class 8 increases with the time spent in class 8. This high rate of persistence has increased further in recent times.
- Younger carers leaving the class are most likely 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.

What does the data tell us about the Non IS Carers class?

There were 203,000 people in the Non IS Carers class in the 2017 model population. This represents 0.8% of the population of Australia which is unchanged from the previous valuation, and 2.5% 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 Carers class by age and gender.

Figure 85: 2017 profile of people in class 8 – Non IS Carers (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.

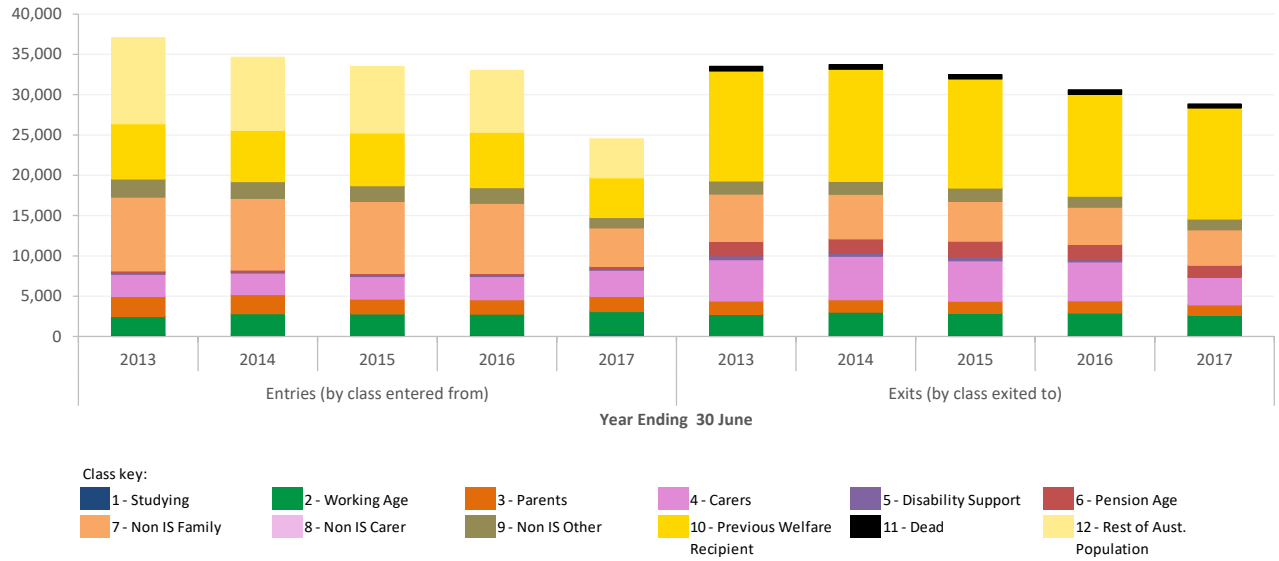
Movements into and out of this class

Over the two years to 2016, an average of 33,200[6] people (around 16.1% 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 30,600 people (around 14.9% of people in this class) per annum have transitioned out of the Non IS Carers class.

[6] This figure excludes the experience of the 2017 year which is significantly impacted by data maturity.

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

Figure 86: Number of people entering and exiting class 8 – Non IS Carers



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. Aside from the 2016/17 year which is affected by data maturity, there has been a relatively stable number of people entering this class over the last few years, however exits from this class have been reducing over time.

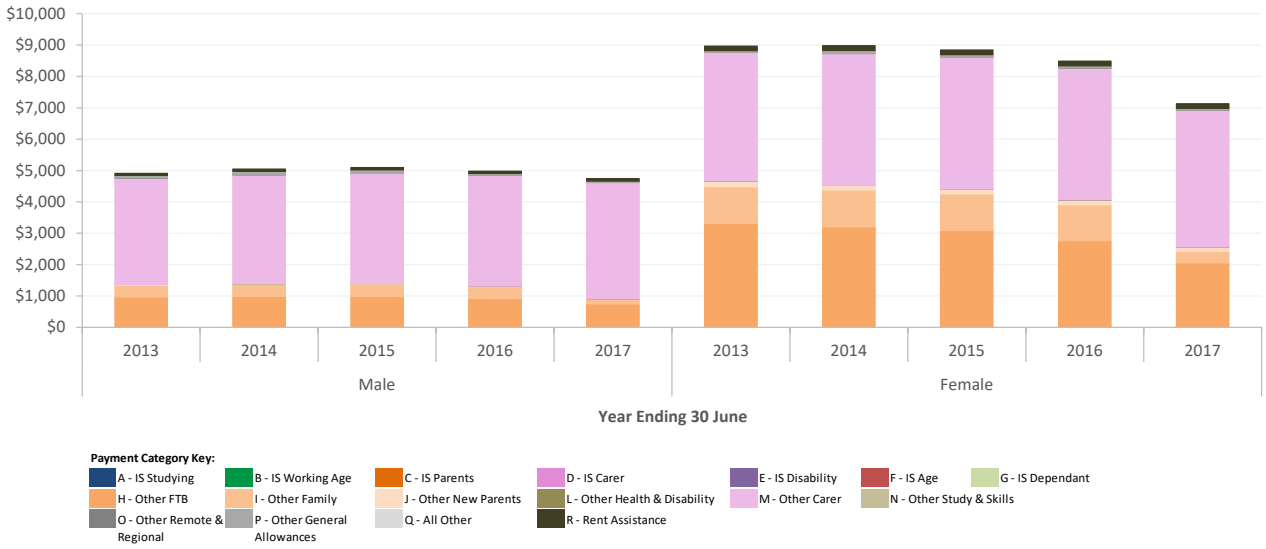
Women entering this class under age 50 have primarily come from class '7 Non IS Family', but with material numbers also coming from Working Age, Parents and Carers (income support) as well. Women entering aged 50 to 65 have primarily come from outside the system, and those aged above age 65 have come 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.

Payments received

During 2016/17, people in this class received a total of $1.4 billion. This is 1.2% of the total payments made in 2016/17. 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 Carers (restated to 2016/17 $ values)



As shown in the chart above, the average amount per person for 2016/17 is significantly lower than prior years, especially for women. This is due to the impact of the data maturity issue discussed earlier.

The average payment made in 2015/16 (noting the understating of 2016/17) was $7,900 with higher average payments being made to women ($8,500) than men ($5,000) as a result of them being more likely to also be claiming FTB and family payments. This average amount per person is much lower than that for people in the income support classes.

Changes in model fitting this valuation

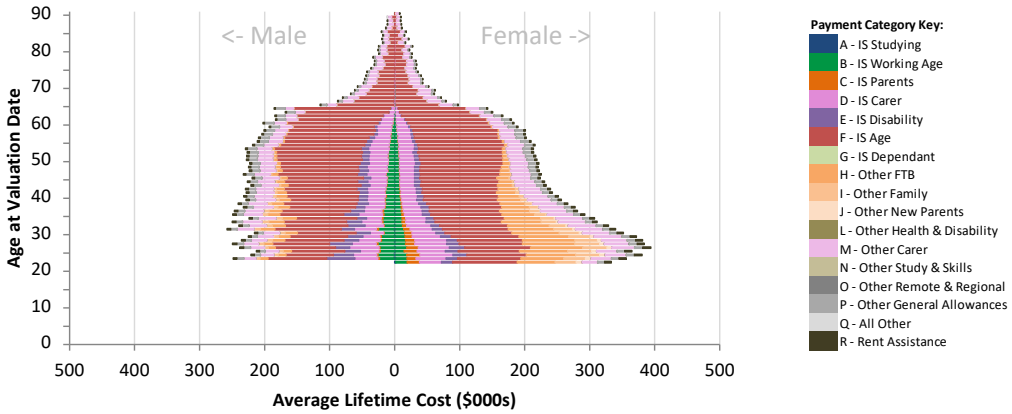
This year we have enhanced the Non IS Carers model assumptions to allow for the intergenerational variable. Use of welfare by a person's parents during childhood was seen to be correlated with a higher likelihood of transitioning onto income support payments.

What does the model show for current Non IS Carers?

Lifetime costs

We estimated the lifetime cost for the people in this class to be **$42bn** (or **0.9%** of the total lifetime cost). The average lifetime cost for people in this class is **$207,000**. 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 $185,000 for men and $212,000 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 family payments.

The general shape of this pyramid is similar to that for the previous class (Non IS Family) with 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 44: 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	**67,000**	**100%**	**231,000**	**100%**
Number of adult/child carees				
- 1 adult caree only	39,000	58%	222,000	96%
- 1 child caree only	20,000	30%	239,000	104%
- 2+ adult carees only	5,000	7%	242,000	105%
- 2+ child carees only	1,000	2%	262,000	114%
- Other	3,000	4%	262,000	114%
Age of youngest child				
- No children	8,000	12%	255,000	110%
- 0-1 Years old	1,000	2%	274,000	119%
- 2-6 Years old	12,000	17%	242,000	105%
- 7-8 Years old	9,000	14%	227,000	98%
- 9-15 Years old	31,000	46%	220,000	95%
- 16-18 Years old	6,000	9%	228,000	99%
Marital status				
- Single	12,000	17%	296,000	128%
- Partnered	55,000	83%	217,000	94%
Class before entering '8 Non IS Carer'				
- Income support	15,000	22%	260,000	113%
- Non income support	34,000	51%	221,000	96%
- Previous client/non client	18,000	27%	225,000	98%

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 welfare 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 2016 valuation

The lifetime cost for the people in this class is $42bn, an increase of $1bn compared to the 2016 valuation. This was driven by an increase in the number of people in this class:

- As expected, the number of people in this class has increased (0.9% higher) since the previous valuation.
- The average cost has increased by $1,000 (0.5%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 45: Breakdown of change in average lifetime cost for class 8 by payment category

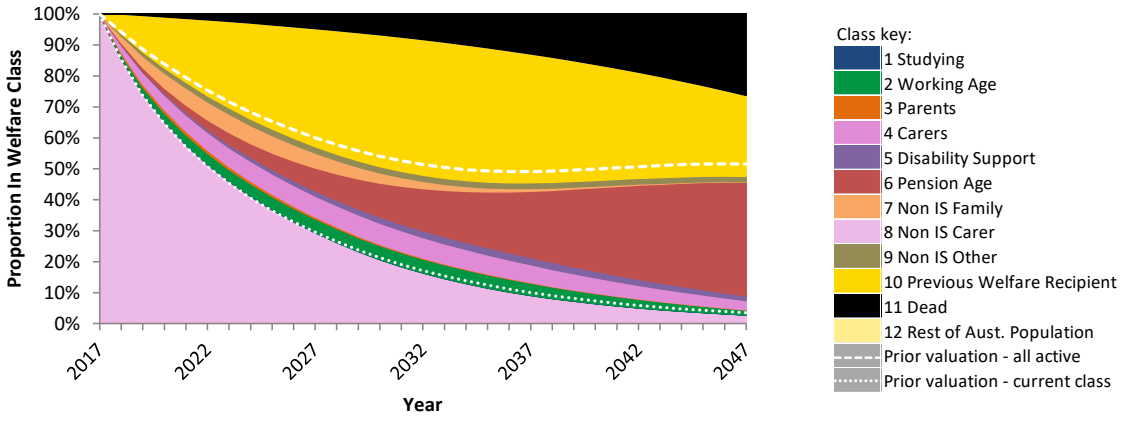
	Total	Income Support		Non Income Support	
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-16 Total Lifetime Cost	$41bn				
Jun-17 Total Lifetime Cost	$42bn				
Change in Total Lifetime Cost	+$1bn (+1.4%)				
Change due to People in Class	+0.9%				
Change due to Average Lifetime Cost	+$1k (+0.5%)	-$2k	+$4k	<$1k	<$1k
- Impact of change in inflation	+$2k	<$1k	+$1k	<$1k	<$1k
- Impact of policy changes	<$1k	<$1k	<$1k	<$1k	<$1k
- Impact of other changes	<$1k	-$3k	+$3k	<$1k	<$1k

The relatively neutral change in average cost is the result of an increase in the cost of future payments as a result of inflation. Also contributing is an increase in the expected amount of Age Pension payments - the average Age Pension size has been adjusted in response to the observed increase in average payments to new pensioners. These increases are partially offset by slightly lower expected transitions onto income support and family payments in response to the continuation of a reducing trend in the experience.

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 71% of people are projected to exit the class over the next 10 years:
  - Around 43% of the starting population are projected to either exit the payment system or die over this 10 year period
  - Around 14% of the stating 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

Duration

The average future life expectancy for the Non IS Carers class is **40** 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 46: 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)**	4	10%
- **Age pension (class 6)**	13	33%
Years with non income support payments only	9	23%
Years not receiving any welfare payments	13	34%
Total	40	100%

7.3 Non income support – Other

Key points

There were 557,000 people in the Non IS Other class in 2017. 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-retirement age people receiving supplements.

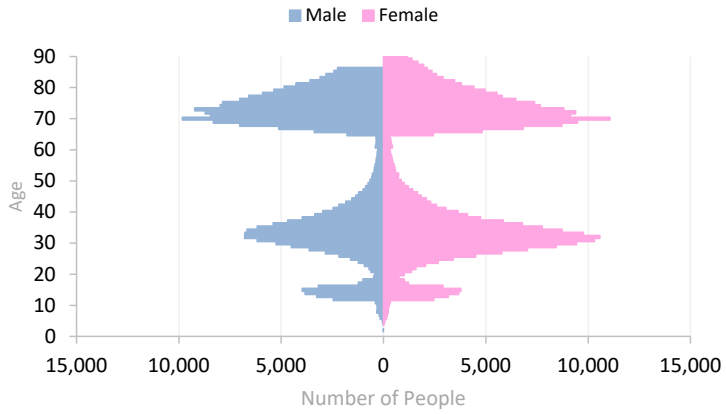
- The recent policy changes which affect family payments have also impacted this class as people receiving family supplements for the first time generally enter the system through the non income support – other class. This has contributed toward reduced entries into this class seen over the last four 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.

What does the data tell us about this class?

There were 557,000 people in the Non IS Other class in the 2017 model population. This represents 2.3% of the population of Australia which is a decrease from 2.2% at the previous valuation, and 6.9% 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: 2017 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 to 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 pension age who are typically receiving Energy Supplements.

Movements into and out of this class

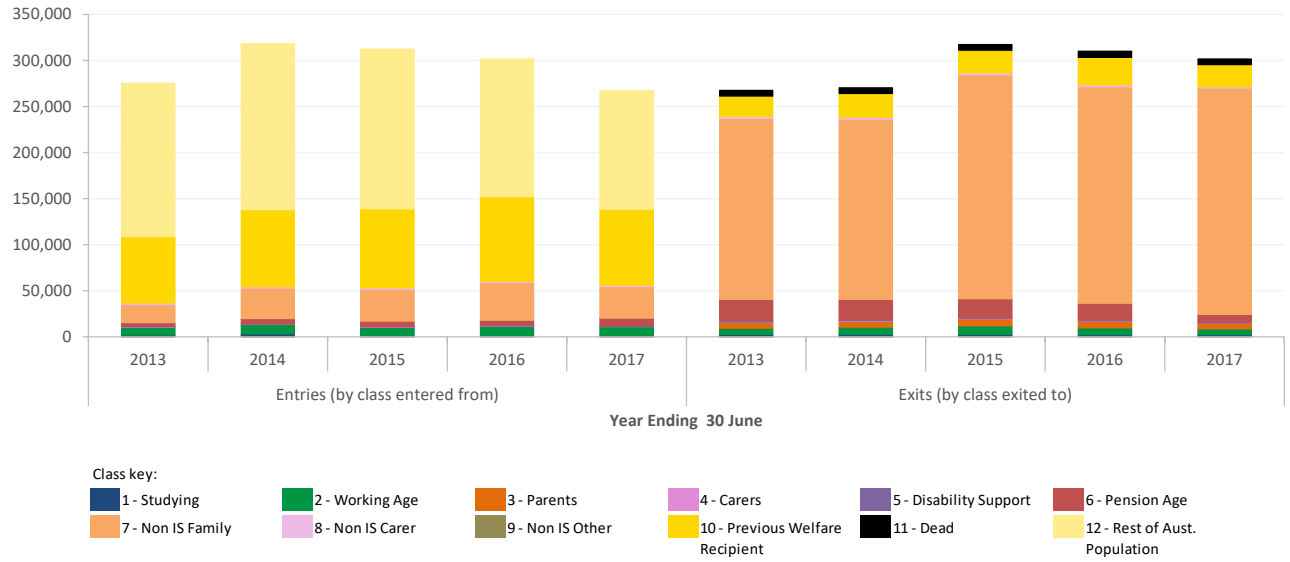
Over the two years to 2016, an average of 306,900[7] people (around 51.0% of the people in this class) per annum entered this class from another welfare class or from outside the welfare system. Over the last three

[7] This figure excludes the experience of the 2017 year which is significantly impacted by data maturity.

years, an average of 309,600 people (around 52.6% 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 and exiting class 9 – Non IS Other



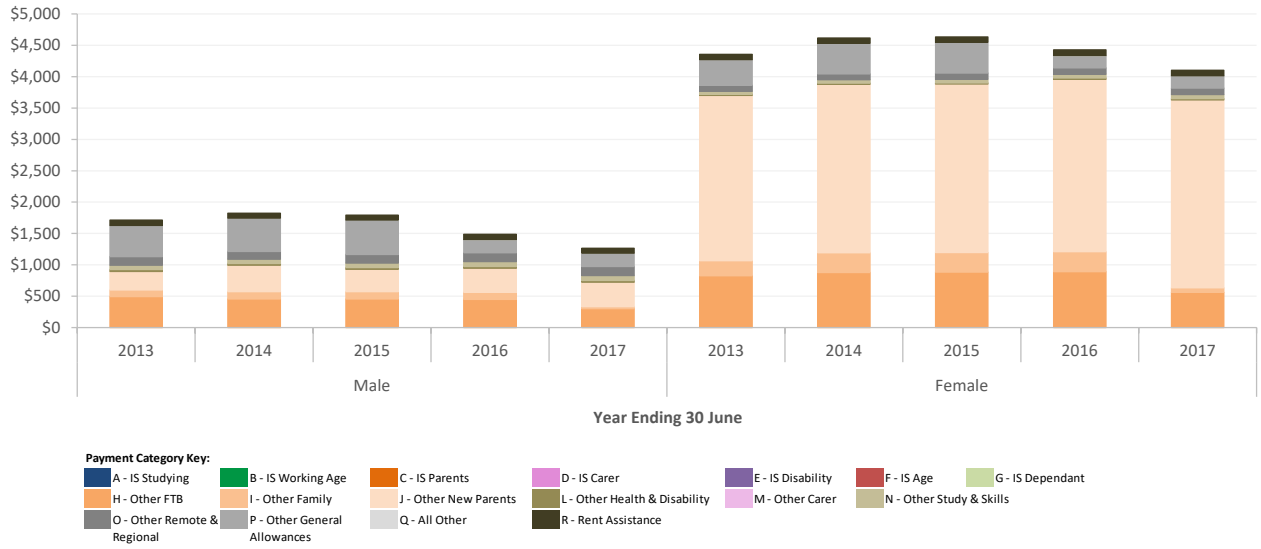
We can see that people predominately enter this class directly from outside the welfare system, and around half of entrants to this class have not received a welfare payment in the 16 years of data available (and therefore enter from the rest of population class). The number of people entering this class has decreased over time. 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 from other active classes typically do so from the Non IS Family class.

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 the age of 65 most people leaving this class transition into class '6 Age Pension'. There has been a reduction in people exiting the class over the last two years with exits slightly outstripping entries for the last three years. In 2017, there has been a noticeable reduction in people moving from this class onto the age pension.

Payments received

During 2016/17, people in this class received a total of $1.6 billion. This is 1.4% of the total payments made in 2016/17. 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 92: Average payments per person in class 9 – Non IS Other (restated to 2016/17 $ values)



As for classes '3 Parents' and '7 Non IS Family' it is worth noting that the average payment for 2016/17 is somewhat understated. This is due to the impact of the data maturity issue discussed earlier.

The average payment made in 2015/16 (noting the understating of 2016/17) 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 ($4,400) than men ($1,500) as a result of women claiming more new parents, FTB and other family payments.

A decrease in the size of payments from category P – Other General Allowances can be observed over the latest two years. This is due to the cessation of the Seniors Supplement which took effect on 20 June 2015. Note this is a much lower average annual payment than for the income support classes and is the lowest of all classes.

Changes in model fitting this valuation

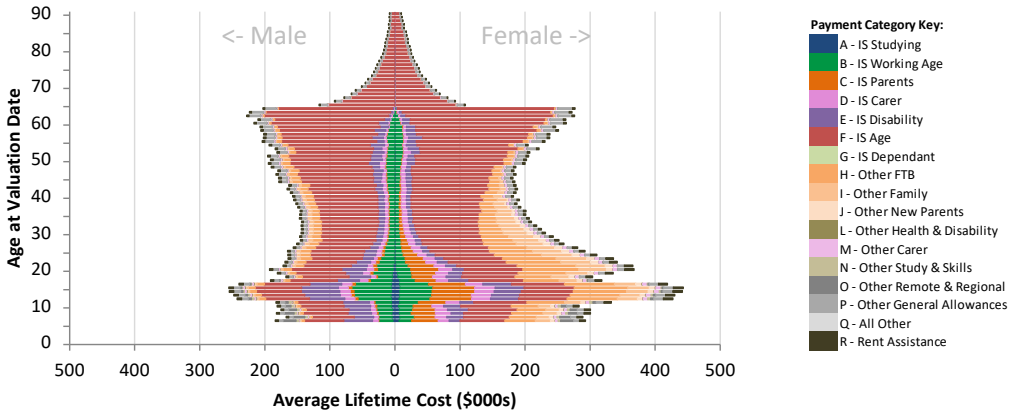
This year we have enhanced the Non IS Other model assumptions to allow for the intergenerational variable. For those who received a family payment during the year, use of welfare by a person's parents during childhood was seen to be correlated with a relatively higher likelihood of transitioning onto Parenting payment rather than moving into class 7.

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 **$72bn** (or **1.5%** of the total lifetime cost). The average lifetime cost for people in this class is **$129,000**. 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 93: 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 47: 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	**133,000**	**100%**	**184,000**	**100%**
Number of children				
- No children	21,000	16%	174,000	94%
- 1 child	72,000	54%	191,000	104%
- 2 children	28,000	21%	171,000	93%
- 3+ children	11,000	8%	191,000	104%
Age of youngest child				
- No children	21,000	16%	174,000	94%
- New born	64,000	48%	189,000	103%
- 1-6 Years old	41,000	30%	182,000	99%
- 7-18 Years old	7,000	5%	181,000	98%
Marital status				
- Single	7,000	5%	279,000	152%
- Partnered	127,000	95%	179,000	97%
Class before entering '9 Non IS Other'				
- Income support	3,000	2%	227,000	123%
- Non income support	19,000	14%	178,000	97%
- Previous client/non client	111,000	84%	184,000	100%

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 2016 valuation

The lifetime cost for the people in this class is $72bn, a decrease of $2bn (-3.1%) compared to the 2016 valuation. This was mainly driven by a decrease in the average cost, offset by an increase in the number of people in the class:

- The number of people in this class has increased by 2.5% since the previous valuation. This is mainly driven by an increase in people entering class 9 above pension age. This is likely to be a reflection of population demography as well as a positive behavioural change if some people have managed their affairs in order to receive the Energy Supplement before the Energy Supplement was closed to new recipients of the Seniors' Health Card (more information on this policy change is available in section 3.2).
- The average cost has decreased by $7,000 (-5.6%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 48: Breakdown of change in average lifetime cost for class 9 by payment category

	Total	Income Support		Non Income Support	
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-16 Total Lifetime Cost	$74bn				
Jun-17 Total Lifetime Cost	$72bn				
Change in Total Lifetime Cost	-$2bn (-3.1%)				
Change due to People in Class	+2.5%				
Change due to Average Lifetime Cost	-$7k (-5.6%)	<$1k	-$6k	<$1k	-$1k
- Impact of change in inflation	+$3k	<$1k	+$3k	<$1k	<$1k
- Impact of policy changes	<$1k	<$1k	<$1k	<$1k	<$1k
- Impact of other changes	-$11k	<$1k	-$8k	<$1k	-$1k

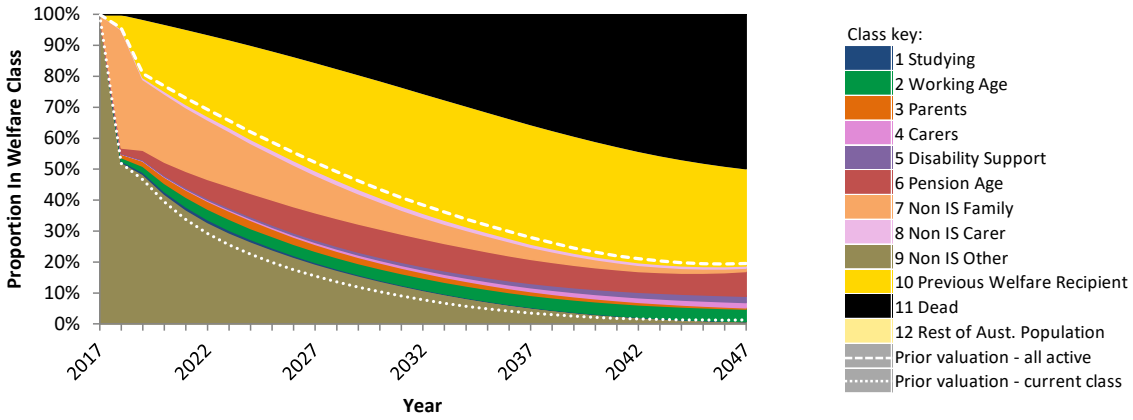
The underlying cause of the decrease in average lifetime cost is a significant reduction for the over 65's subgroup within this class; the change in average size for people in the class below retirement age was relatively small. The change for this older group was caused by a reduced assessment of their likelihood to move into age pension in the future together with reductions in the amount of supplementary payments made.

Given that most people in Non IS Other who are below Age Pension age are expected to transition into Non IS Family in a short period of time, it is unsurprising that many of these average lifetime cost changes are similar to those for the Non IS Family class (discussed in section 7.1).

Future outcomes

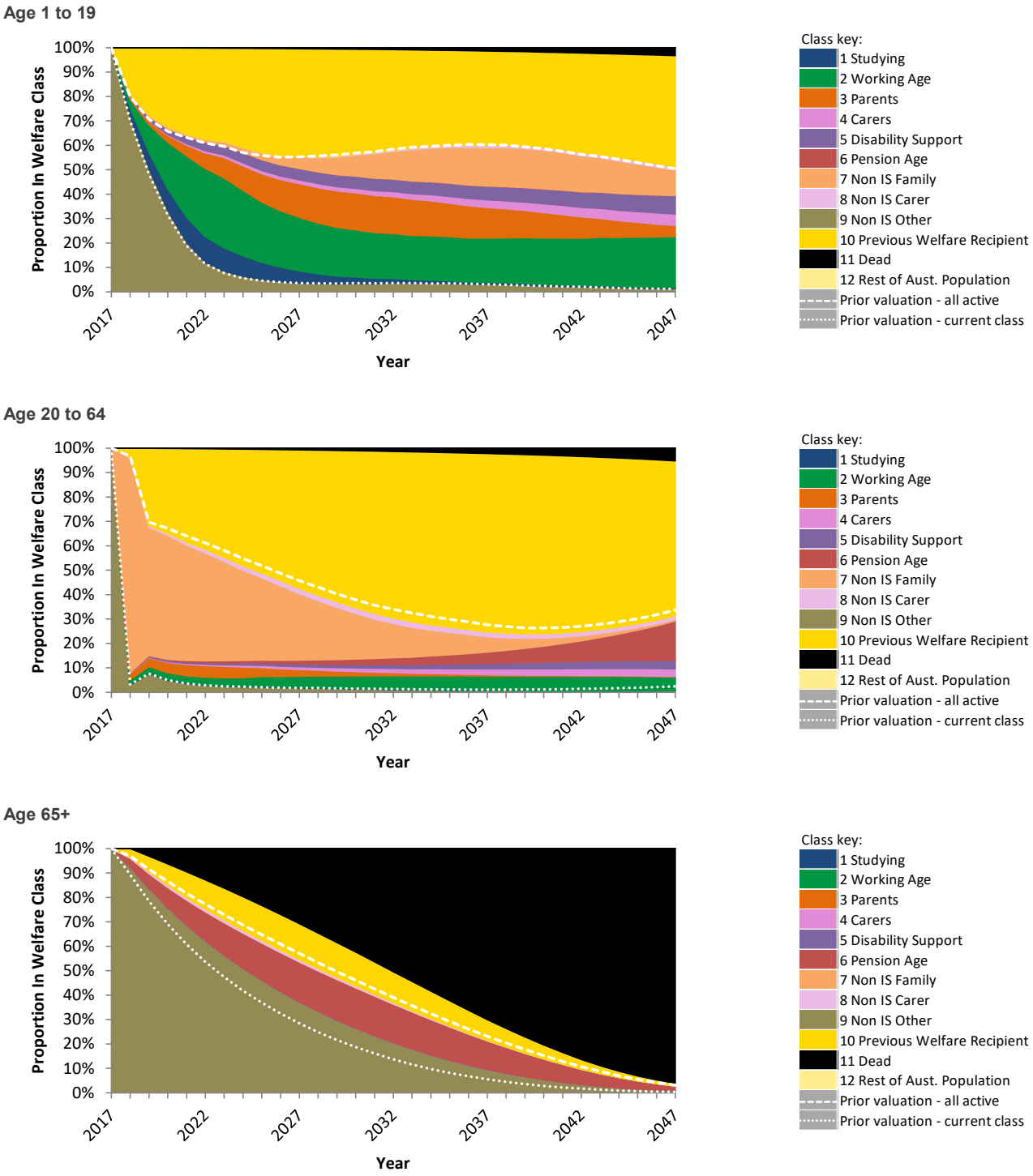
In developing the valuation results the projection model also produces information on the expected transitions for people out of each class, as shown below.

Figure 94: 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 the different age bands.

Figure 95: Expected future trajectory for people in class 9 – by age band



The trajectory results support the previous observations, showing that:

- For people aged 19 and under, in five years, around 10% of people are projected to be in this class (having persisted for the entire period or exited and returned), while approximately 50% are projected to be in receipt of an income support payment, and less than 40% 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 is a highly disadvantaged group.
- For people aged 20 to 64, nearly everyone transitions into class 7 in the first projection year. 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 10% 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 over 65, very few of the surviving people are projected to leave the welfare system. In five years, around 60% of the current class are projected to be in this class (having persisted for the entire period or exited and returned), while approximately around 15% are projected to be in receipt of the age pension, and around 15% are projected to be out of the welfare system.

Duration

The average future life expectancy for the Non IS Other class is **37** 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 49: 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)**	4	10%
- **Age pension (class 6)**	10	27%
Years with non income support payments only	8	23%
Years not receiving any welfare payments	15	41%
Total	37	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 16.6 million people in the model who are non-welfare recipients representing 67.4% of the total model population and capturing 54.4% 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

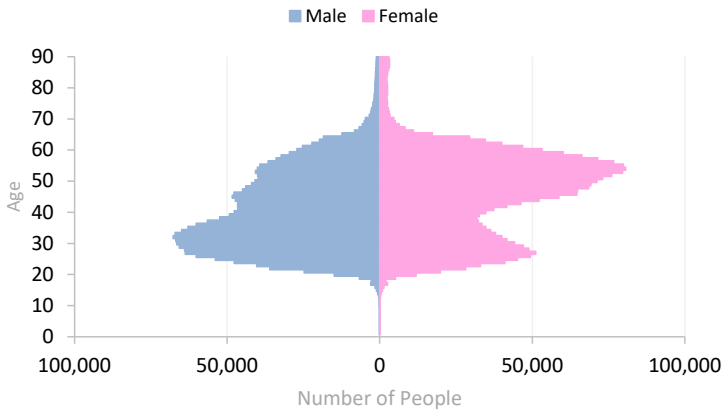
There were 4,490,000 people (or 18% of the Australian population) in the previous welfare recipients class at 30 June 2017 i.e. they have received welfare since the data started in July 2001, but are not currently receiving welfare. 34% of this class recently left the welfare system (within the last 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.
- 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.

There were 4,490,000 people in the previous welfare recipients class in the 2017 model population. This represents 18.2% of the population of Australia which is an increase from 17.3% 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 96: 2017 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 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.

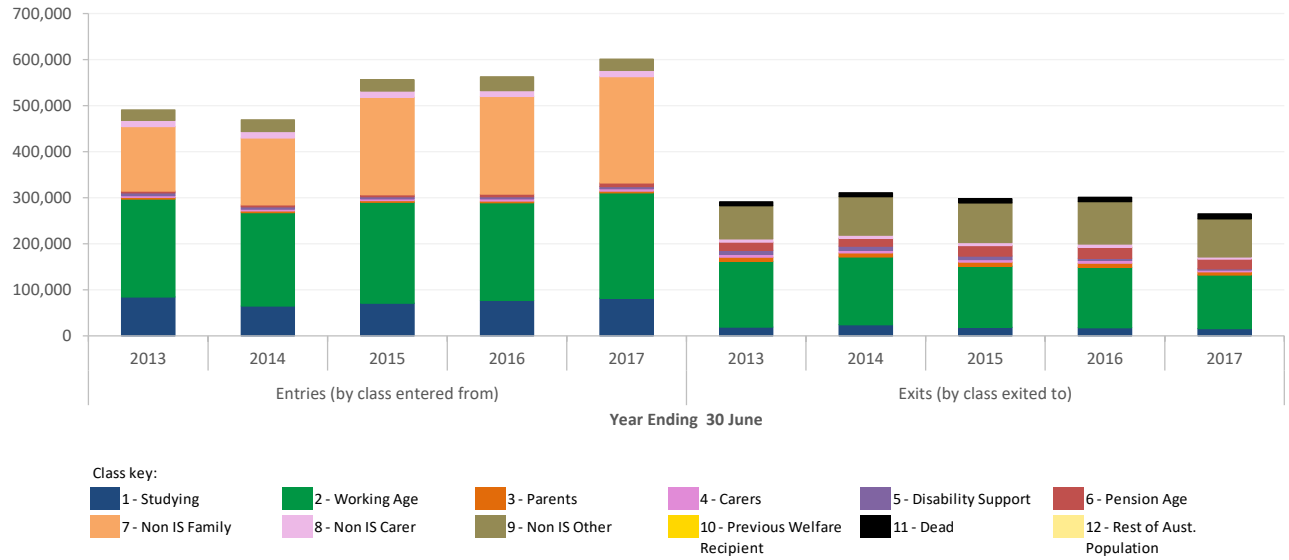
Some of the people have been in the previous welfare recipients class for only a short period; others have been there for longer, up to the maximum of the 16 years available from the data provided. As successive years of data are added to the modelling dataset over time this class will continue to grow 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 573,100 people (around 13.7% of the people in this class) per annum exited their current welfare classes into this class. Over this same period an average of 287,800 people (around 6.9% of people in this class) per annum have 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 97: Number of people entering and exiting class 10 – Previous Welfare Recipient



We can see that most people exiting the welfare system (see left hand side of chart on entries into class 10) 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 (see right hand side of chart on exits from class 10) 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.

Changes in model fitting this valuation

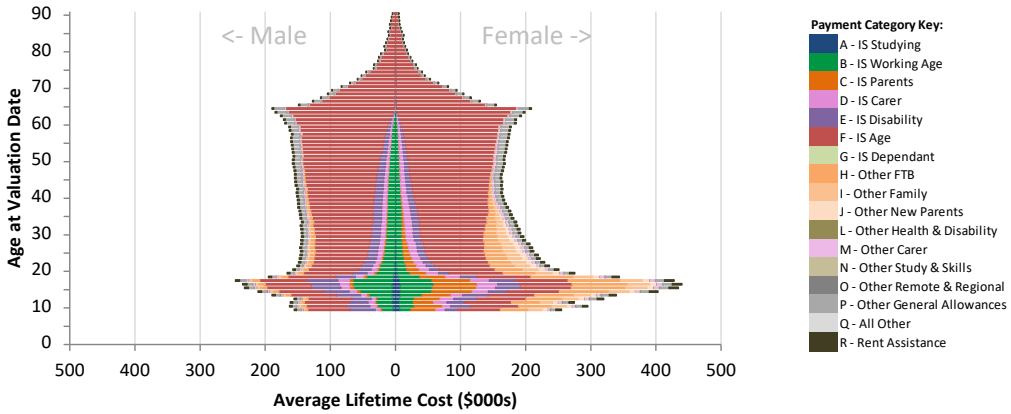
At this valuation we enhanced the re-entry model by incorporating information on parental welfare dependency in order to understand the propensity of people who grew up in families where welfare dependency was high to enter or re-enter the welfare system. More information on this variable is provided in section 2. People with higher parental welfare dependence during their childhood are more likely to re-enter onto Working Age payments after they have left the welfare system.

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 **$735bn** (or **15.7%** of the total lifetime cost). The average lifetime cost for people in this class is **$164,000**, with the lifetime cost being higher for people who have been out of the welfare system for 1 to 3 years (**$178,000**) than those people who have been out for longer (**$156,000**). The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 98: Average lifetime cost by age and gender (class 10)



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 age 65 with much lower costs for older people:

- For people below age 65 - 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 - to be above age 65 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 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 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 50: 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	**397,000**	**100%**	**183,000**	**100%**
Marital status				
- Single	330,000	83%	184,000	101%
- Partnered	67,000	17%	177,000	97%
Education hierarchy				
- Year 10 or less	28,000	7%	197,000	108%
- Year 11	18,000	4%	197,000	108%
- Year 12	169,000	43%	180,000	99%
- Certificate	90,000	23%	201,000	110%
- Diploma	28,000	7%	175,000	96%
- Bachelors	56,000	14%	156,000	85%
- Postgraduate	8,000	2%	155,000	85%
Number of children				
- No children	372,000	94%	182,000	99%
- 1 child	16,000	4%	199,000	109%
- 2 children	7,000	2%	197,000	108%
- 3+ children	2,000	1%	218,000	119%
Level of parental welfare dependence				
- None (0%)	153,000	39%	177,000	97%
- Some (1%-35%)	90,000	23%	183,000	100%
- High (36%-80%)	80,000	20%	187,000	102%
- Very high (81%+)	74,000	19%	191,000	104%
Years in pay class				
- 1 Year	123,000	31%	190,000	104%
- 2-3 Years	153,000	39%	187,000	102%
- 4-5 Years	77,000	19%	172,000	94%
- 6+ Years	43,000	11%	165,000	90%

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 2016 valuation

The lifetime cost for the people in this class is $735bn, an increase of $82bn compared to the June 2016 valuation. This was driven by both an increase in the number of people in this class, and an increase in the average cost:

- The number of people in this class has increased by 7.3% (from 4.2m to 4.5m) since the previous valuation. This increase is largely a result of having one year of extra history in our data which means there is 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 increased by $8,000 (5.3%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 51: Breakdown of change in average lifetime cost for class 10 by payment category

	Total	Income Support		Non Income Support	
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-16 Total Lifetime Cost	$653bn				
Jun-17 Total Lifetime Cost	$735bn				
Change in Total Lifetime Cost	+$82bn (+12.6%)				
Change due to People in Class	+7.3%				
Change due to Average Lifetime Cost	+$8k (+5.3%)	<$1k	+$8k	<$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	+$4k	<$1k	<$1k

The increase in average cost has been primarily driven by:

- an increase in the cost of future payments as a result of inflation; and
- an increase in the expected amount of Age Pension payments - the average Age Pension size has been adjusted in response to the observed increase in average payments to new pensioners.

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 99: Expected future trajectory for people in class 10

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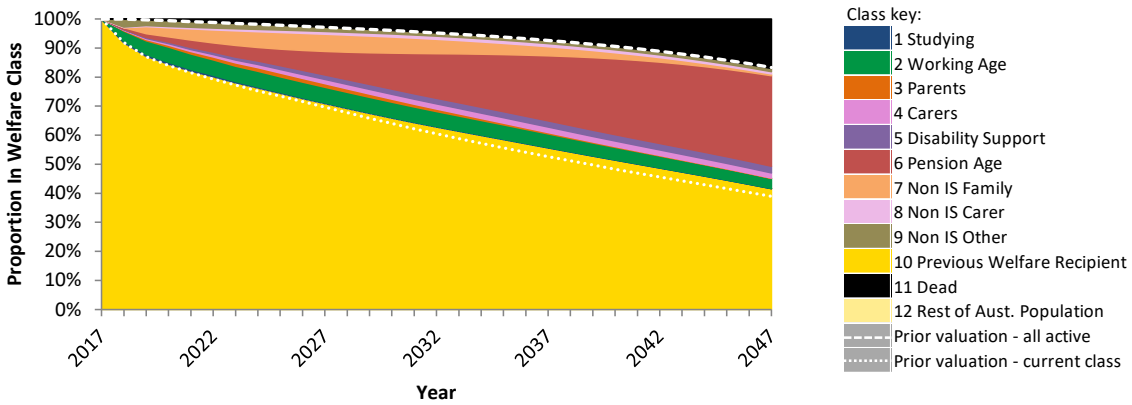


Some observations we can make based on our analysis are that:

- 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 2017) are expected to re-enter the active welfare system at a higher rate (29%) compared with those who exited longer ago (25%). 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.

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 52: 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)**	4	8%
- **Age pension (class 6)**	15	33%
Years with non income support payments only	2	5%
Years not receiving any welfare payments	25	55%
Total	46	100%

8.2 Rest of the Australian population

Key points

There were 12,122,000 people (or 49% of the Australian population) in the rest of the Australian population class at 30 June 2017. 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.

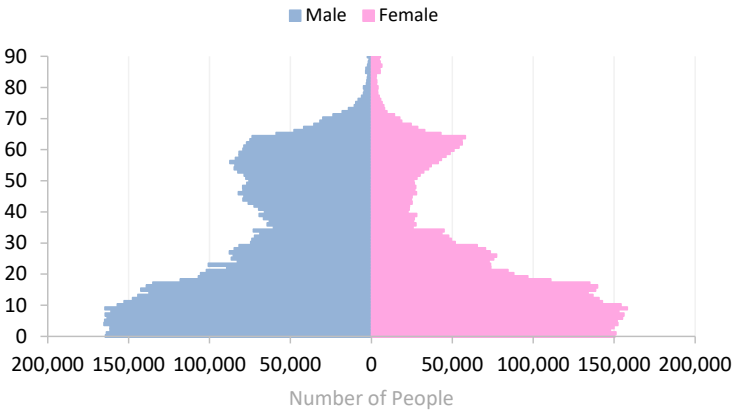
This group (class 12) is the remainder of the population, being the group of people who have not received any payments during the period covered by the data analysed – broadly the last 16 years. This group will include some people who were welfare recipients prior to that time alongside others who have never received a payment.

What does the data tell us about the rest of the Australian population class?

There were 12,122,000 people in the rest of the Australian population class in the 2017 model population. This represents 49.2% of the population of Australia which is a decrease from 49.4% 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 100: 2017 profile of people in class 12 – rest of the Australian population (age/gender)



Across all 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.

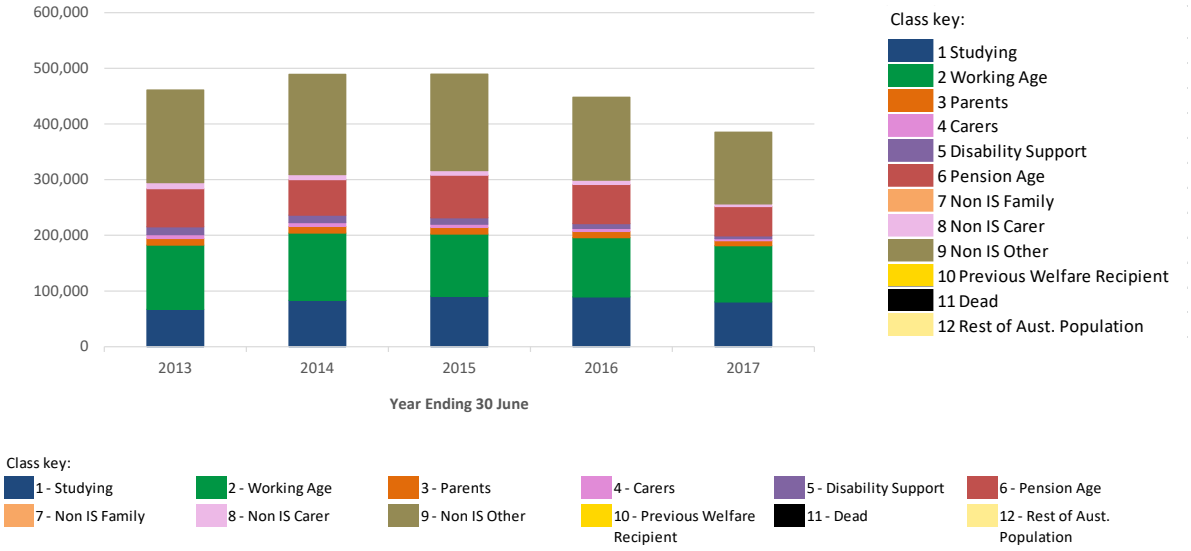
As previously noted the model population includes all Australian residents at the valuation date and overseas welfare recipients who received a payment in the previous year. Between 30 June 2016 and 30 June 2017 we have estimated that there were around 315,000 births and a net migration into Australia of around 188,000. In

addition to this we have allowed for updated information drawn from the 2016 Census, which showed the population was around 150,000 higher than from previous estimates. The majority of these groups have entered the model population as additional people in class 12. There were also around 162,000 deaths during the year which act to reduce the total model population.

Over the last three years, an average of 440,900 people (around 3.7% 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 101: Number of people entering the welfare system from class 12 – Rest of the Australian Population (by class entered into)



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

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.

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.

Changes in model fitting this valuation

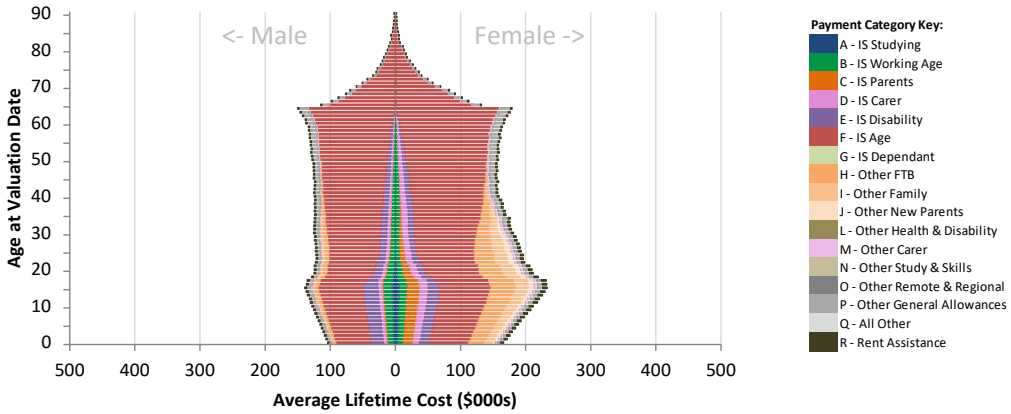
At this valuation we enhanced the entry model by incorporating information on parental welfare dependency in order to understand the propensity of people who grew up in families where welfare dependency was high to enter or re-enter the welfare system. More information on this variable is provided in section 2. People with higher parental welfare dependence during their childhood are much more likely to enter onto working age or studying payments.

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 **$1,812bn** (or **38.7%** of the total lifetime cost). The average lifetime cost for people in this class is **$150,000**. The variation in average lifetime cost by age and gender is illustrated in the figure below.

Figure 102: 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 age 65 with much lower costs for older people:

- For people below age 65 - 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 - to be above age 65 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 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 53: 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	**1,035,000**	**100%**	**158,000**	**100%**
Marital status				
- Single	757,000	73%	155,000	98%
- Partnered	278,000	27%	166,000	105%
Education hierarchy				
- Year 10 or less	92,000	9%	169,000	107%
- Year 11	52,000	5%	162,000	103%
- Year 12	346,000	33%	160,000	102%
- Certificate	233,000	23%	155,000	98%
- Diploma	94,000	9%	155,000	98%
- Bachelors	194,000	19%	152,000	96%
- Postgraduate	24,000	2%	154,000	98%
Number of children				
- No children	964,000	93%	156,000	99%
- 1 child	46,000	4%	189,000	120%
- 2 children	19,000	2%	188,000	119%
- 3+ children	6,000	1%	201,000	127%

From the table above we can see that for the rest of the Australian population:

- **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. We do note however, that those with an educational attainment of Certificate appear to have a much lower average lifetime cost. As mentioned before, this may be due to other underlying characteristics of these individuals, rather as a result of the educational attainment level itself.

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 2016 valuation

The lifetime cost for the people in this class is $1,812bn, an increase of $46bn compared to the 2016 valuation. This was due to an increase in the number of people in this class and, to a lesser extent, an increase in the average cost:

- The number of people in this class has increased by 1.6% 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 increased by $1,000 (1.0%) since the previous valuation. The following table provides a breakdown of the change in average lifetime cost by payment category.

Table 54: Breakdown of change in average lifetime cost for class 12 by payment category

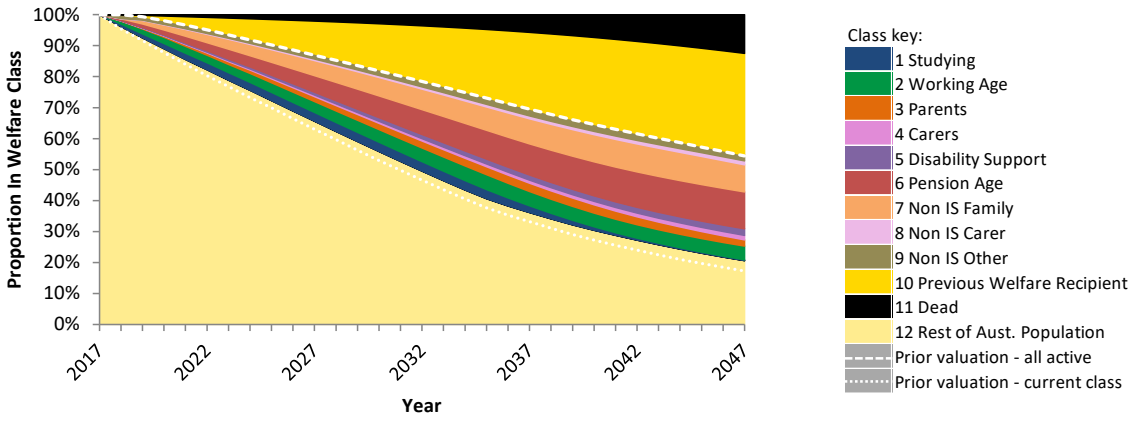
	Total	Income Support		Non Income Support	
		Non Age Pension	Age Pension	Family Supplements	Other Supplements
Jun-16 Total Lifetime Cost	$1,766bn				
Jun-17 Total Lifetime Cost	$1,812bn				
Change in Total Lifetime Cost	+$46bn (+2.6%)				
Change due to People in Class	+1.6%				
Change due to Average Lifetime Cost	+$1k (+1.0%)	-$1k	+$3k	<$1k	<$1k
- Impact of change in inflation	+$4k	+$1k	+$3k	<$1k	<$1k
- Impact of policy changes	<$1k	<$1k	<$1k	<$1k	<$1k
- Impact of other changes	-$3k	-$2k	<$1k	<$1k	<$1k

The increase in average cost is mainly due to an increase in the cost of future payments as a result of inflation offset by lower entry rate assumptions reducing the chance of future transitions into active classes and therefore lower contributions to the average lifetime cost across most payment categories.

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 103: 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 13% 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 22% 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 55: 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)**	6	10%
- **Age pension (class 6)**	15	24%
Years with non income support payments only	4	7%
Years not receiving any welfare payments	37	59%
Total	63	100%

Appendices

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 the valuation date, 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
A regular payment designed to assist with day to day living costs. Examples include Age Pension, Newstart Allowance, Disability Support Pension, Carer Payment and Parenting Payment. Other supplementary payments such as Family Tax Benefit and child care 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 the purchasing power of the payment after inflation.

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 Aged 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 assignation 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.

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.

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 56: Policy changes which were legislated between 2011 and 2017 and took effect on or prior to 30 June 2017

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.

Amendment	Year Effective	Description
Child Care Rebate	2013	The government changed the eligibility criteria for Jobs, Education and Training Child Care Fee Assistance (JETCCFA) program. 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. 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.
Disability Support Pension	Various 2014	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. 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. People who have some capacity to work now or in the future will be helped to do this through programmes, services and activities. 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.
Seniors Supplement Cessation **Social Services and Other Legislation Amendment (Seniors Supplement Cessation) Act 2014**	2014	The Budget 2014 – 15 measure on the cessation of the Seniors Supplement – Commonwealth Seniors Health Card holders commenced on 20 June 2015. 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.
Child Care Rebate (indexation)	2014	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. 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.
Energy Supplement (ES) Social Services and Other Legislation Amendment (2014 Budget Measures No. 6) Act 2014	2014	In September 2014, the Energy Supplement (ES) replaced the CES and indexing was removed.
Other Measures Social Security Amendment (Supporting More Australians into Work) Act 2013	2014	From 20 March 2014, the income free area that applied for certain payments was increased. From 1 January 2014, eligibility for the Pensioner Education Supplement (PES) was extended.
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	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.
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	Remove the FTB Part A per-child add-on to the higher income free area for each additional child after the first.
Changes to the treatment of defined benefit income streams (age pension) Social Services Legislation Amendment (Defined Benefit Income Streams) Act 2015	2016	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.

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 Jab, No Pay Social Services Legislation Amendment (No Jab, 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: • $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.
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.

Amendment	Year Effective	Description
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.
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).

The following table contains the legislated future policy changes of which we are aware. These will take effect after the valuation date.

Table 57: Policy changes which will take effect after the valuation date

Amendment	Year	Description
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.
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.

Amendment	Year	Description
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 201.
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."
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.
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).

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 at 30 June 2017. 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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