



Australian Government
Australian Government Actuary

Australian Priority Investment Approach to Welfare

30 June 2020 Valuation Report



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Executive summary

Background and overview

This report presents the 30 June 2020 actuarial valuation of the Australian income support and social security (welfare) system. The actuarial valuation is part of the Australian Priority Investment Approach to Welfare (PIA), implemented by the Department of Social Services (DSS), and supports a better understanding of the welfare system, both at the population level and for population subgroups of interest.

The valuation is based on the concept of a Lifetime Cost, which is the expected net present value of all future in-scope payments made in respect of the model population over their lifetime. The model population includes both the entire resident Australian population, and all overseas recipients of income support and social security payments, as at 30 June 2020. The in-scope payments represent the welfare system as at 30 June 2020.

Valuation Result and the Impact of COVID-19

The total Lifetime Cost for the model population as at 30 June 2020 is estimated to be \$5,597 billion. This represents a decrease of \$104 billion (1.8%) from the rebased 30 June 2019 valuation of \$5,701 billion. Although the Lifetime Cost has decreased between valuations, the projected utilisation of welfare has increased. The estimated average future years in receipt of welfare has increased slightly from 19.7 years for the 2019 valuation to 19.8 for the 2020 valuation.

The economic impacts of COVID-19 and the Government's response to them have had a significant impact on the 2020 valuation. This impact includes both changes seen to date, such as the significant increase in JobSeeker payments, as well as changes to economic forecasts over the short and medium term.

The primary reason for the decrease in Lifetime Cost is lower payment indexation due to lower projected growth in AWE. This lower indexation reduced the Lifetime Cost by \$278 billion, primarily through lower Age Pension and Disability Support Pension payments.

The immediate impact of COVID-19 on welfare usage has been significant, with the number of working age payment recipients increasing from 1,157,000 in 2018-19 to 2,056,000 in 2019-20, an increase of 78%. The increase in projected welfare utilisation in the 2020 valuation is due mostly to this cohort of people who are forecast to have higher lifetime Working Age payments, along with a resultant increase in future Age Pension usage. This link between current Working Age payments and future Age Pension usage is primarily due to time out of the workforce resulting in lower superannuation savings and hence higher Age Pension reliance.

A key driver of the 2020 valuation result is the rate at which unemployment is projected to decrease over the medium term. Improved economic forecasts in the 2021-22 Budget projected a faster labour market recovery and a lower long-term unemployment rate. In the 2020-21 Budget, the unemployment rate was forecast to remain higher for longer. Under that scenario, the 2020 Lifetime Cost would have been \$242 billion (4.3%) higher, at \$5,839 billion, with the future years in welfare at 20.1 years. Although the direct effect of higher unemployment is higher Working Age payments, it is the resultant longer-term Age Pension usage that drives the increase in Lifetime Cost.

Modelling approach

For those in the model population, the PIA model projects future possible interactions with the welfare system. Detailed data is required in order for this to be modelled. This data is provided by DSS in the form of a longitudinal dataset covering welfare use in Australia. Together with a range of other supplementary data sets, it enables projections of future transitions into and out of the welfare population, transfers within the welfare system, and the type and amount of welfare payments made.

This year, the following updates have been made to the modelling approach:

- A key element of the modelling process is identifying appropriate weightings for characteristics that drive future welfare entry, exit, and payment size, given that future welfare use varies significantly across different individual circumstances. This year we continued the transition of the modelling process, consolidating models into fewer and more complex models that are better suited for Neural Networks.
- Various updates were made to models including the demographics module, and welfare module.
- Data quality is a key factor underlying the modelling process. Updates were made to the process we apply to allow for missing and immature data.
- Adjustments were made to the model to account for exogenous impacts. This included:
 - updating the process to more explicitly adjust for the likely future impact of superannuation on Age Pension;
 - updating how the projected unemployment rate impacts on welfare usage, which enabled the model to better respond to large movements, for example due to the impact of COVID-19; and
 - incorporating a mechanism to adjust fertility rate forecasts.

Rebasing the 30 June 2019 valuation on the above updated modelling process resulted in a small increase (3.6%) to the previously estimated 30 June 2019 Lifetime Cost.

The impacts on the Lifetime Cost from updated experience, including COVID-19 are explained in the next section on population level results. The experience updates include:

- using the current unemployment rate forecast to guide projection of future welfare use post COVID-19;
- implementing adjustments to account for the short-term impact of COVID-19 affecting welfare usage; and
- adjusting fertility forecasts to align with the COVID-19 forecasts published by the Centre for Population.

Population level results

The total Lifetime Cost for the model population as at 30 June 2020 is estimated to be \$5,597 billion. This represents a decrease of \$104 billion (1.8%) from the rebased 30 June 2019 valuation of \$5,701 billion.

The net decrease of \$104 billion is a result of a \$278 billion decrease due to lower indexation, partially offset by a \$77 billion increase due to a 1.5% population growth, and a further \$96 billion increase due to changes in the experience of welfare utilisation and payments in 2019-20, as well as policy changes up to 30 June 2020. These changes are primarily the result of the COVID-19 pandemic, including: an increase in the welfare population from 30% in 2019 to 32% in 2020; an increase in the projected unemployment rate; expanded payment eligibility; and additional payment supports.

The major contributor to the Lifetime Cost is the Age Pension (\$3,251 billion, or 58%). The non-income support family payments (\$589 billion, or 11%) and Disability Support Pension (\$560 billion, or 10%) are other significant contributors to the total Lifetime Cost. These three payment types were also the main contributors to the 2019 estimate. The equivalent rebased figures for 2019 were similar: Age Pension (\$3,369 billion), non-income support family payments (\$599 billion), and the Disability Support Pension (\$585 billion). In this valuation, an additional \$20 billion of Lifetime Cost arose as a result of the temporary welfare measures put in place in response to COVID-19, which included the Coronavirus Supplement and the Economic Support Payment.

The significant influence of the Age Pension is due to [1] the large number of people currently receiving the Age Pension; [2] the large number of people who will receive the Age Pension in the future; [3] the relatively high annual payments being received; and [4] the long duration for which payments are received (19 years, on average). Those not currently in the welfare system contribute 59% of the Age Pension Lifetime Cost, reflecting the expectation that many Australians who are currently not relying on welfare will do so at some point in the future.

Various individual characteristics are correlated with higher welfare utilisation and/or payments in the future. Females are generally expected to have a higher Lifetime Cost for family and parenting payments, and for the Age Pension. Age is influential across most categories of welfare, in particular for Disability benefits where, for example, the age of onset of disability has a bearing on the future duration of support.

The duration of support directly influences the Lifetime Cost. For example, those currently on income support are expected to spend a greater proportion of their future lifetime receiving income support, than those not currently on income support. This is particularly the case for recipients of Carer payments and the Disability Support Pension.

The estimate of the Lifetime Cost is subject to uncertainty, and the COVID-19 pandemic has further accentuated this uncertainty. COVID-19 has had a significant impact on a range of welfare policies, payments and services. The impact of COVID-19 will continue, with the outcomes reflected in the results of future valuations. In addition to large system shocks such as COVID-19 there are various factors that add to the uncertainty of the Lifetime Cost.

How changes in mortality emerge over time can have a significant impact on future welfare utilisation, notably the Age Pension. The greater the future improvement in mortality, then the higher the future life expectancy, and longer the duration of payments that results. A 10% movement in future mortality improvements has an impact of approximately 1% on the Lifetime Cost.

Changes in indexation rates can also have a large impact on the Lifetime Cost. AWE assumptions directly impact the size of payments made, with a 1% increase to the base assumption significantly increasing income support payments over time. Variation in CPI assumptions have a significant effect on non-income support payment categories.

Changes in the unemployment rate affect the number of people both entering and exiting welfare. Working age payments and family payments constitute the main payment categories that are directly impacted, with flow-on impact to other payments.

The behaviour and response of current and future welfare recipients may also change over time in response to policy, and/or economic changes. An interesting observation is that the Lifetime Cost is more sensitive to changes in entry rates from non-welfare into welfare, than exit rates from welfare to non-welfare. This reflects the fact that someone who exits from welfare is more likely to re-enter welfare than someone who has never previously been in welfare.



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February 2022

1 Background and overview

1.1 The Priority Investment Approach to Welfare

- 1.1.1 The Department of Social Services (DSS) implemented the Priority Investment Approach to Welfare (PIA) to support its objective of improving the wellbeing of individuals and families in Australian communities. As part of the implementation of PIA, this report documents and presents the 30 June 2020 actuarial valuation of the Australian income support and social security (welfare) system.
- 1.1.2 The actuarial valuation allows us to better understand the welfare system both at the population level and for population subgroups of interest. By projecting the expected welfare experience of different subgroups of the population, the valuation model provides insights into the potential future outcomes for each subgroup. These projections aggregate into a single valuation measure of the Lifetime Costs of future welfare use for the entire population, which provides a measure of the welfare system as a whole.
- 1.1.3 The valuation model provides a tool for exploring the dynamics of the welfare system and changes to the system, via the impact on Lifetime Cost. The Lifetime Cost is defined as the expected net present value of all future in-scope payments made in respect of the model population over the remainder of their lifetimes. This report estimates the Lifetime Cost as at 30 June 2020.
- 1.1.4 This is the sixth such annual valuation and provides an updated assessment of the Lifetime Cost for the Australian population, together with information on the changes to the system since the 30 June 2019 valuation.

1.2 Model population

- 1.2.1 The model forecasts the welfare experience of the entire resident Australian population, as well as any overseas recipients of income support and social security payments, as at 30 June 2020. Future migrants and future births are not directly included in the model population, but will influence valuations in the future, when they enter the Australian population. At that time, they will contribute to an increase in the total Lifetime Cost. Future births indirectly influence the valuation result by adding to the number of children that a currently modelled individual has, thus impacting their future propensity to utilise welfare.
- 1.2.2 The model population is built up from information and assumptions relating to each individual. The information and assumptions pertain to their demographic characteristics, life situation and welfare history. This allows us to simulate individual trajectories throughout their lifetime and their associated interactions with the welfare system, for each future year.

1.3 Assumptions and policy impacts

- 1.3.1 Detailed assumptions are made in order to reflect how different drivers of experience interact with each other and over time, in respect of welfare use. It is assumed that relevant social security policy settings will persist in perpetuity.
- 1.3.2 Where material changes have been made to relevant policies over the previous year, updated assumptions and/or adjustments are made within the modelling process. This ensures that the projection allows for estimates of the direct impact of any such changes.
- 1.3.3 However, subsequent secondary impacts and/or behavioural changes in response to such policy changes are not modelled directly. Their impact will emerge over time in the data. As such, secondary impacts will be captured within the analysis of experience for future valuations and will impact future valuation results as they arise.

1.4 Uses of the PIA model

- 1.4.1 Results at the whole population level inform not only the overall projected cost of future welfare utilisation, but can also give insights regarding:
 - How welfare utilisation changes in response to movements in the population size and demographic profile. This is of particular relevance in the context of an ageing population and changing family circumstances;
 - The key factors that drive the overall Lifetime Cost and annual expenditures;
 - How the cost is changing over time, which provides information on the financial sustainability of the system; and
 - The impact of changes, both to the welfare system and to external drivers of experience within the system (for example, economic conditions including shocks such as the COVID-19 pandemic).
- 1.4.2 The PIA model also provides insights into the future welfare utilisation for a range of population subgroups, including their expected future pathways through the welfare system. This allows analysis into the experience of population subgroups, as well as how that experience will change over time. Population subgroups can include groupings by age, gender, current payment category or class, geographic location, refugee status, and a range of other characteristics.
- 1.4.3 Exploring the sensitivity of the results to changes in assumptions can provide additional insights. This includes assessing the impact of different economic scenarios, changes in fertility rates, changes in payment design (payment eligibility, amounts or indexation), or changes in other policy parameters. The model is best suited to assessing the impact of such changes over the long term.

1.5 Model limitations

- 1.5.1 Whilst the lifetime trajectory of each individual is simulated in the model, this is based on the risk characteristics that apply at an aggregate level for groups and populations of people. It is not intended or suitable to produce, or infer, conclusive insights about future welfare use based on unique individual characteristics. Rather, it is intended to produce meaningful results for a group of similar individuals – either in total or on average for that group.
- 1.5.2 As with the modelling of any program with long-term financial implications, there is inherent uncertainty of any estimation of such long-term costs. Unanticipated shocks, such as the COVID-19 pandemic, could also rapidly and drastically alter the future. Issues of uncertainty are discussed later in this report and give rise to the need for the provided sensitivity analyses around the reported results.

1.6 Professional standards underlying this report

- 1.6.1 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.
- 1.6.2 The International Actuarial Association's International Standard of Actuarial Practice 2 (ISAP 2) provides (non-binding) guidance to actuaries performing financial analyses of Social Security Programs (SSPs), or for reviewing, advising on, or opining on such analyses. Whilst ISAP 2 is not directly applicable to this valuation, our approach is aligned with the suggested practices that are relevant to this report.

1.7 Reliances

- 1.7.1 The report relies on the completeness and accuracy of information compiled and provided by DSS. Although the modelling process requires and prompts checks for internal consistency and for consistency with other information, ultimate assurance of the fidelity and accuracy of the data resides with DSS.
- 1.7.2 This report has been prepared by the Australian Government Actuary at the request of DSS. It is not intended, or necessarily suitable, for any other purpose other than that described in this report.

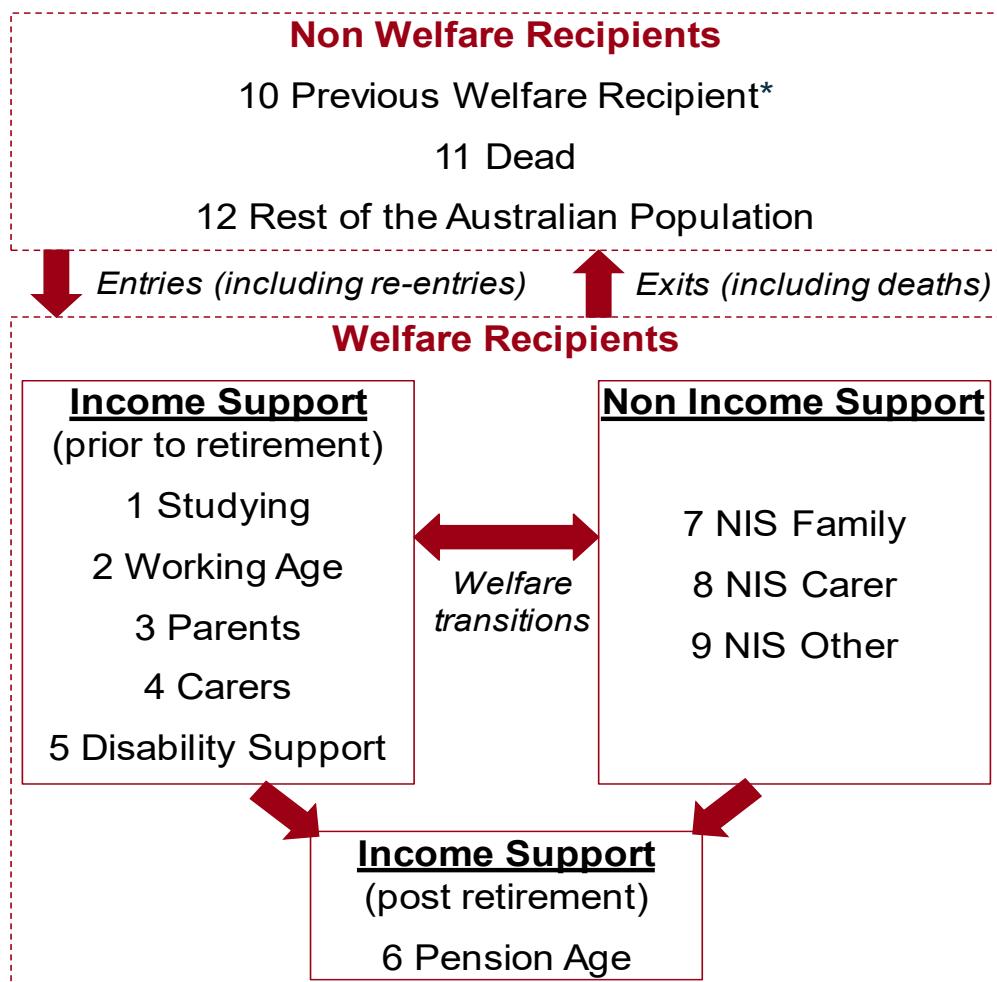
2 Modelling approach

2.1 Overview

- 2.1.1 In order to establish an expected value of the financial cost of the welfare system, two key parameters need to be estimated. First, the number of people expected to receive each of the different welfare payment types at a point in time, and secondly, the expected size of each payment made. The product of those two parameters, summed up across a given population, gives rise to the total expected financial cost of the welfare system at that point in time.
- 2.1.2 Projecting the financial cost for every future year forward of the valuation date of 30 June 2020 and summing these year-on-year estimated costs gives rise to an expected overall future (nominal, indexed but undiscounted) cost of the welfare system. To account for the time value of money, an appropriate interest rate is applied to discount the financial costs estimated in each future year, to give an expected cost in today's dollars. This present value of the expected overall future cost of the welfare system is what this report refers to as the Lifetime Cost.
- 2.1.3 The interest rate used to discount the financial costs of each future year, to the current valuation date of 30 June 2020, is equal to 2.5% plus the projected CPI growth rate (from the 2021 Budget) in that year. This represents a change in the short-term discount rate, to take into consideration the current economic environment. The long-term discount rate remains at 5%. This approach aligns with that used by the Australian Government Actuary in assessing other long-term Commonwealth Government liabilities. The choice of interest rate does not impact the projected cashflows in each future year, but it does impact the present value of the Lifetime Cost as at the valuation date in each future year.
- 2.1.4 This valuation applies the above approach to the entire Australian (welfare and non-welfare) population as at 30 June 2020, to give rise to the Lifetime Cost as at that date.
- 2.1.5 The valuation modelling process requires, as a minimum:
- appropriate details of the model population as at 30 June 2020;
 - data relating to past experiences of those both inside and outside the welfare system;
 - analysis of past experience relating to rates of entry, exit, and transfers within the welfare system;
 - analysis of past experience relating to entitlements and payments within each welfare program (or class);

- adjustments to the above experience, to account for both trends over time, and to account for various changes to the welfare system that have been legislated, but whose impacts are not yet fully evident in the data to date;
 - assumptions about the future macroeconomic environment; and
 - a framework to examine, and appropriately model, the many varied and inter-dependent categories of welfare assistance within the Australian system.
- 2.1.6 With respect to the last point, the following diagram provides an overview of the broad dynamics of the welfare system. This indicates the high-level movements of entries to and exits from the welfare system, and transfers between the broad welfare categories of Age Pension, other income support, and non-income support.

Figure 1: Overview of the Dynamics of the Welfare System



*Received welfare within the previous 18 years

- 2.1.7 The model projects individuals' trajectories through life and their interactions with the welfare system. The average Lifetime Cost for people in each class is driven by the probability of an individual in that model 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 while they are active in the system.

2.2 Data

- 2.2.1 Detailed data for each person in the model population is required in order to project an individual's trajectory through life, in terms of their interaction with the welfare system. DSS produces and maintains a longitudinal dataset covering welfare use in Australia. This dataset provides the major source of relevant information relating to the welfare population, transitions into and out of the welfare population over time, and payments made.
- 2.2.2 Other supplementary data also supports the modelling process. This includes past Census data, the Australian Life Tables, macroeconomic forecasts and projections from Treasury, data from the Australian Bureau of Statistics (ABS), and the Household, Income and Labour Dynamics in Australia (HILDA) Survey.
- 2.2.3 At this valuation, we have used a data extraction (census) date for DSS data of 30 September rather than 30 June. This follows the approach used in previous valuations.
- 2.2.4 A date later than the valuation date of 30 June 2020 is used because some entrants into, and exits from, the welfare system may not have that movement recorded as it occurs for the most recent year. Rather, it is collated after the event due to delays in processing applications and reporting. If an extraction date of 30 June was used instead, then information recorded after this date relating to historical entitlements would not be part of the collected data. This data maturity issue would particularly impact the experience recorded for the most recent year.
- 2.2.5 Hence, adopting a date of data extraction as at 30 September 2020, in respect of the model population as at 30 June 2020, provides more certainty for early projection years in particular.

2.3 Modelling process

- 2.3.1 An individual's contribution to the Lifetime Cost will vary significantly for different people, based on their particular circumstances or characteristics. The extent to which these characteristics are shown to be important differentiators of welfare utilisation or payment size, is therefore a key element of the modelling process.
- 2.3.2 The modelling process identifies appropriate weightings to be given to each characteristic that drives welfare entry, exit, and payment size. Importantly, this

identification and allocation of weighting occurs within a class structure, with different welfare classes defined based on the types of payments received over the last year. These classes are defined in Table 1.

Table 1: Welfare Classes

Class Category	Class Number	Description
Active – income support (IS)	1 Studying	People receiving Austudy, ABSTUDY or Youth Allowance (Student) as their most recent income support payment.
	2 Working Age	People receiving JobSeeker Payment or Youth Allowance (Other) as their most recent income support payment (plus a small number of other recipients). Note – we will use the updated term of JobSeeker Payment rather than Newstart Allowance throughout the document.
	3 Parenting	People receiving Parenting Payment (Partnered or Single) as their most recent income support payment.
	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 (also includes a small number of Widow B Pension and Wife Pension recipients).
Active – non-income support (Non IS)	7 Non IS Family¹	People not receiving any Carer Allowance but receiving one or more family supplement payments (such as a Family Tax Benefit or Child Care Subsidy – see categories H, I and J in Appendix C for a full list).
	8 Non IS Carer	People receiving Carer Allowance.
	9 Non IS Other	People receiving payments but not in any other welfare recipient class (such as those receiving Assistance for Isolated Children or Crisis Payment).
Inactive classes	10 Previous welfare recipient	People who have been in one of classes 1 to 9 within the previous 18 years*, but are not in one of these classes for the latest year. <i>* 18 years is selected here as the modelling dataset used has a maximum of 18 years welfare history. That is, the current data cannot indicate if someone's last welfare interaction was more than 18 years ago.</i>

1 Class 7 has been redefined this year as explained in section 2.4. Due to the hierarchical structure of the pay class definition, this change has also impacted on the definitions of classes 9 and 10.

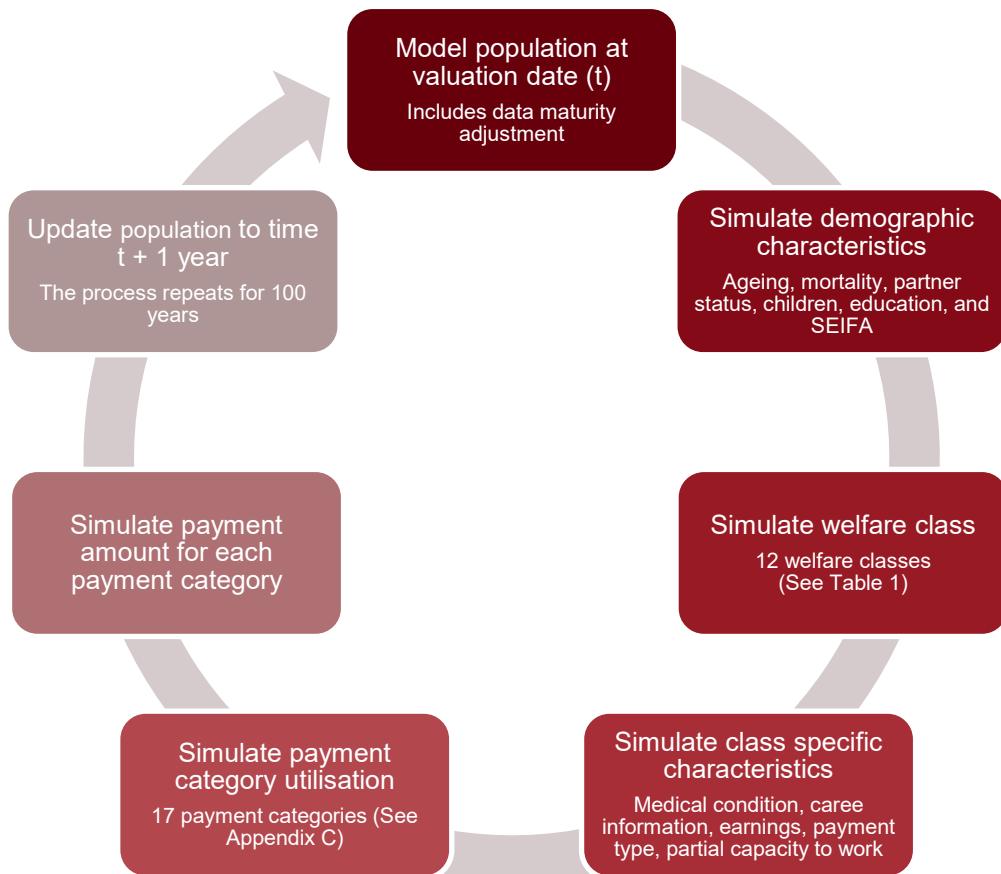
Class Category	Class Number	Description
	11 Dead	People who have died in the previous and prior years.
	12 Rest of Aust. population	Rest of modelled population.

2.3.3 The experience of an individual within each welfare class is influenced by various factors. Significant influences include:

- the particular structure of a welfare class. This includes the eligibility criteria and parameters regarding the length of time for which benefits can be received (for example, age or age of youngest child);
- an individual's characteristics, which inform the expected persistency of receiving a payment (for example, age when first entering welfare system or duration on income support); and
- an individual's characteristics, which inform the level of payment received (for example, gender or partnering status).

2.3.4 The annual simulation of welfare use in each future year is illustrated in Figure 2. This also shows the order in which each variable is simulated.

Figure 2: Illustration of the Simulation Model Structure



- 2.3.5 Underneath the welfare class structure is another modelling structure based on approximately 85 individual payment types, which are themselves grouped into seventeen payment categories. Seven of these payment categories relate to income support payments, and ten relate to non-income support payments.
- 2.3.6 Although 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 payments from multiple categories (and classes) in the same year.
- 2.3.7 The welfare classes are treated in a hierarchical order. For example, if someone receives multiple payments during a given year, 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).

2.4 Model updates

- 2.4.1 The significant impacts of the COVID-19 pandemic have led to much uncertainty and posed additional modelling challenges this year. The use of past experiences alone is insufficient for setting assumptions for the future in the current environment.
- 2.4.2 The timing of the COVID-19 pandemic and the Government's subsequent health and welfare response has meant that the shock to the welfare system has mostly manifested in the model population by 30 June 2020. The subsequent experiences indicate that Australians are gradually returning to work, as restrictions are lifted and the temporary COVID-19 welfare assistances are withdrawn. The future experience of COVID-19 and its impact on future welfare usage remains an additional point of uncertainty at the time of this valuation.
- 2.4.3 For the 2020 valuation, we used 2 years' (2018 and 2019) pre-COVID-19 experience to form assumptions for the long-term, and applied adjustments that reflect the projected employment outlook and transitions in the short term. The 2020 experience was not used in setting the long-term assumptions as the shock is not expected to be repeated in each future year.
- 2.4.4 A number of updates to the modelling approach have been conducted for the purposes of the 2020 valuation, including for the impact of COVID-19. These are described in the following paragraphs.
- 2.4.5 We continued the transition to a more automated, accurate and efficient machine learning approach using Neural Networks. For the 2019 valuation we began to replace generalised linear models (GLMs) with Neural Networks as they require less manual fitting and are more able to identify complex patterns in the data such as interactions between predictors. This means that for the PIA modelling, they are generally both more efficient and more accurate than the GLMs. This year, the Neural Network models were consolidated into fewer and more complex models that are better suited for Neural Networks.
- 2.4.6 Specific updates were made to various models, which include:
- for the demographic module
 - the mortality model was updated to incorporate Neural Network models. This was better able to identify more complex risk factors to be included, and increased the predictive power of the mortality models,
 - further utilising HILDA data analysis to inform trends in non-welfare population,
 - further updating the process of projecting the number of children within the non-welfare population;

- improving the model accuracy for receipt of multiple related payment categories. As explained in section 2.3, individuals can receive multiple payment categories, either sequentially or simultaneously within a one-year period, where some combinations are more likely than others. This year the payment category utilisation models included intra year utilisation predictors (that is current year receipt of other payments), plus additional rule-based adjustments for a more accurate model of payment receipt;
 - updating the payment size models through a more nuanced distribution of payment amounts;
 - additional predictors to some models to increase the predictive power; and
 - updating the process for model fitting at certain ages.
- 2.4.7 The data extraction and simulation processes have been updated. This included:
- updating the imputation of missing values in the model population;
 - updating the methodology to more accurately identify parent/child relationships from different data sources;
 - implementing data maturity adjustments to the most recent year's data for data that matures significantly later than the 30 September census date. A 30 September data census date ensured that most data has matured by this date, as explained in section 2.2. Previously the maturity adjustment was applied to the first year of the simulation rather than to the underlying data. The new approach simplified reporting by using numbers that are consistent with earlier years, and allowed the data to be used for setting assumptions;
 - the above change to data maturity also enabled a more intuitive redefinition of pay class 7. The previous class 7 definition was based on payment receipt in the year previous, to avoid the use of immature payment data from the most recent year. Since the data maturity adjustment effectively matures the most recent year of data, class 7 can now be derived based on current year receipts, consistent with the approach for defining other pay classes. Due to the hierarchical structure of pay class definition explained in section 2.3, this change also impacts the definition of pay classes 9 and 10 which are lower in the hierarchy.
- 2.4.8 Adjustments to the models form a significant component of the modelling process as explained in section 2.1. This year we continued to reduce the number of adjustments. The primary purpose of adjustments now is to incorporate the exogenous effects of long-term trends and shocks. The adjustments include the following:
- **Age Pension:** The Age Pension currently makes up more than half of the total Lifetime Cost. With the average balance of superannuation savings expected to increase from the maturing of the superannuation system, reliance on the Age Pension is expected to diminish, and the proportion of

those receiving a full and part pension is also expected to change over time. This year the Age Pension adjustment methodology has been updated and uses the modelling data from the recent Retirement Income Review and HILDA data to project future asset levels for those aged 67 and over, and the resulting future Age Pension usage. Some key results are discussed in Chapter 3;

- **Unemployment:** The unemployment rate is a key macroeconomic driver of welfare use for working age payments. This year we have updated the methodology so that the modelling can more accurately respond to large changes in employment conditions, which forms the basis of COVID-19 related projections; and
- **Fertility:** The fertility rate is a key demographic driver of welfare use for family payments. Since the 2019 valuation, the Centre for Population (within the Treasury) has published a projection of short-term fertility rates². This year we have updated the modelling process to allow for incorporation of this fertility rate projection.

2.4.9 A number of adjustments were made to reflect the impact of COVID-19. They include:

- The projected medium-term unemployment rate from Treasury provides an important assumption about the likely labour market outlook. This has a direct impact on the working age payments, which are most impacted by the COVID-19 pandemic. The updated unemployment adjustment process described in paragraph 2.4.8 produces the likely impact on welfare usage, given those projected unemployment rates;
- Incorporating the projected short-term impact of COVID-19 on fertility rates, using the 'likely COVID' scenario prepared by the Centre of Population;
- Applying adjustments to override certain long-term assumptions in the short-term. For example, the projected rate of entry onto working age payments in 2021 needed to be reduced relative to the long-term assumption, as COVID-19 has already resulted in many to move onto welfare payments a year earlier; and
- Incorporating the Coronavirus Supplement Payment and Economic Support Payment as temporary first year payments.

2.4.10 Indexation forecasts have been updated. This includes using the latest actual AWE, CPI and Pensioner and Beneficiary Living Cost Index (PBLCI) to derive indexation factors for the first simulation year.

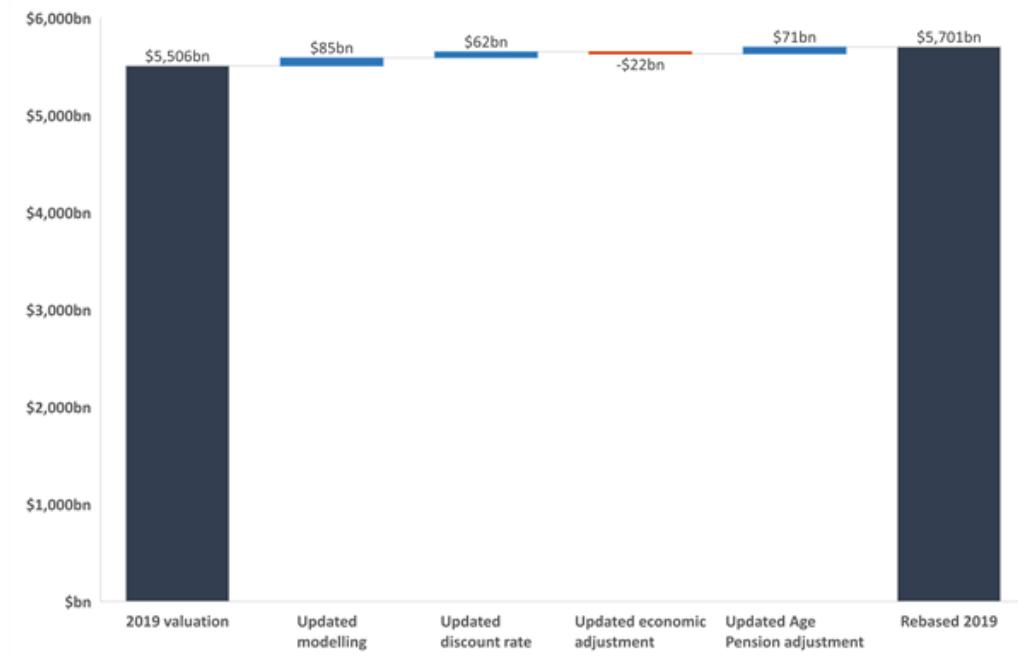
2 A range of relevant research publications can be found at <https://population.gov.au/publications/research>.

- 2.4.11 The census date for policy changes has been set to the valuation date, that is 30 June 2020. The population data is ‘as at’ 30 June 2020, but ‘as known at’ 30 September 2020 to allow for any maturity corrections / updates to the data.

2.5 Rebase of 2019 results

- 2.5.1 In light of the model changes discussed above, and to enable a meaningful analysis of the COVID-19 impact and other changes between the 2019 valuation result and the 2020 valuation result, we have re-run the updated modelling process on the 2019 population. This gives us a valuation as at 30 June 2019 of \$5,701 billion, which is 3.6% higher than the previously modelled 30 June 2019 result of \$5,506 billion.
- 2.5.2 This rebasing of the 2019 valuation result is important, because it supports comparability of the 2019 and 2020 results. In particular, it ensures that changes between those valuations can be attributed to relevant changes over the 2019-20 period. For example, changes in the underlying population, legislative changes, and changes in experience. More pertinently for the 2020 valuation, it allows us to examine the impacts of COVID-19.
- 2.5.3 If the 2019 result was not rebased, then changes between the 2019 and 2020 valuations would be attributed to features that have no relevance to the actual experience of the welfare system *per se* – such as updates to the modelling process, use of certain data, and other aspects of the modelling discussed above.
- 2.5.4 An analysis of the rebased 2019 result, compared to the previous 2019 result, follows.

Figure 3: Rebase of the 2019 Valuation



2.5.5 The updated modelling approach produced a higher valuation result as at the previous valuation date of 30 June 2019. This change arose from four main sources:

- Several model updates explained in section 2.5, and data maturity. Data maturity means that more is now known about the model population at 30 June 2019, compared to when the valuation was conducted 12 months previously.
- Change in the discount rate from a flat 5% to CPI + 2.5%. This change reduced the discount rate in the short term, which resulted in an increase to the Lifetime Cost.
- A relatively small impact is attributed to the update of the economic adjustment methodology. The impact attributed to the change in projected unemployment experience is explained in section 3.7.
- Updating the Age Pension adjustment methodology had an impact on the age distribution of future Age Pension usage, with a consequent increase on the Lifetime Cost.

2.6 Policy updates for 2020

2.6.1 The actuarial valuation reflects relevant policy as legislated at the valuation date, and assumes that these policy settings will persist in perpetuity, with the exception for where a sunset clause applies. This means future changes in

payment design or eligibility have been allowed for in the valuation if the related legislation is in place at the policy census date of 30 June 2020.

- 2.6.2 A number of changes can be made in any given year to the policies underpinning the welfare system. This 30 June 2020 valuation incorporates those changes made since 1 October 2019, as these may impact the types of payments available, the eligibility criteria, and entitlement amounts. These in turn will impact the projected trajectories and payments in the model.
- 2.6.3 Explicit allowances are made as part of the modelling process for material changes to policy. These allowances reflect the estimated direct impact of the changes. No second order or indirect allowance has been made for any flow-on impacts, or behavioural responses, to the changes. Rather, these will be reflected in the emerging experience as they take effect.
- 2.6.4 The table below outlines the material policy changes that have been advised by DSS since the 2019 valuation. The influence of these changes has been accounted for, in the population data through the experiences that emerged, in the current valuation.

Table 2: Summary of Main Material Policy Changes (legislated 1 Oct 2019 to 30 Jun 2020*)

Policy Change	Description of Policy Change
Coronavirus Economic Response Package Omnibus Act 2020	Temporary removal (from 23 March 2020 to 31 March 2021) of the Newly Arrived Resident's Waiting Period for: 1 JobSeeker Payment 2 Parenting Payment 3 Youth Allowance 4 Austudy 5 Special Benefit
Coronavirus Economic Response Package Omnibus Act 2020	Eligibility for JobSeeker Payment and Youth Allowance (other) expanded to assist people who are stood down or lose their employment; sole traders; the self-employed; casual workers; and contract workers who meet the income tests as a result of the coronavirus. This could also include a person required to care for someone who is affected by the coronavirus.
Coronavirus Economic Response Package Omnibus Act 2020	Temporary waiver of assets testing for JobSeeker Payment, Sickness Allowance, Youth Allowance, Austudy, ABSTUDY Living Allowance and Parenting Payment until 24 September 2020.
Coronavirus Economic Response Package Omnibus Act 2020	Temporary waiver from 23 March 2020 of the Ordinary Waiting Period (Until 31 March 2021), the Liquid Assets Waiting Period (Until 25 September 2020) and the Seasonal Work Preclusion

Policy Change	Description of Policy Change
	Period (Until 31 March 2021) for JobSeeker Payment, Sickness Allowance, Youth Allowance and Parenting Payment.
Coronavirus Economic Response Package Omnibus Act 2020	Temporary reduction of the partner income test taper rate from 60 cents to 25 cents for each dollar over \$996 per fortnight from 23 March to 24 September 2020, and 27 cents for each dollar over \$1,165 per fortnight until 31 March 2021.
Coronavirus Economic Response Package Omnibus Act 2020	A \$750 Economic Support Payment made in two rounds (March 2020 and July 2020) to eligible social security and other income support recipients. An additional two payments of \$250 were made in December 2020 and March 2021 to eligible social security and other income support recipients.
Coronavirus Economic Response Package Omnibus Act 2020	From 27 April 2020, the Coronavirus Supplement of \$550 per fortnight is paid to recipients of JobSeeker Payment, Youth Allowance, Sickness Allowance, Parenting Payment, Special Benefit, Partner Allowance and Widow Allowance. This was reduced to \$250 per fortnight from 25 September 2020 and to \$150 per fortnight from 1 January 2021 and ceased on 31 March 2021.
Social Security Deeming Rates	Social security income test deeming rates reduced from 1.00% to 0.25% for those earning below the threshold (\$51,800 for singles). Above the threshold, the deeming rate reduced from 3.00% to 2.25% (\$86,200 for pensioner couples).

* 30 September 2019 was used as the census date for policy updates for the 2019 valuation. These were policies that have been legislated. For the 2020 valuation the census date has been aligned with the valuation date of 30 June 2020. For the Economic Support Payment, and Coronavirus Supplement, an exception was made to include extensions until the payments ceased.

2.7 Model population

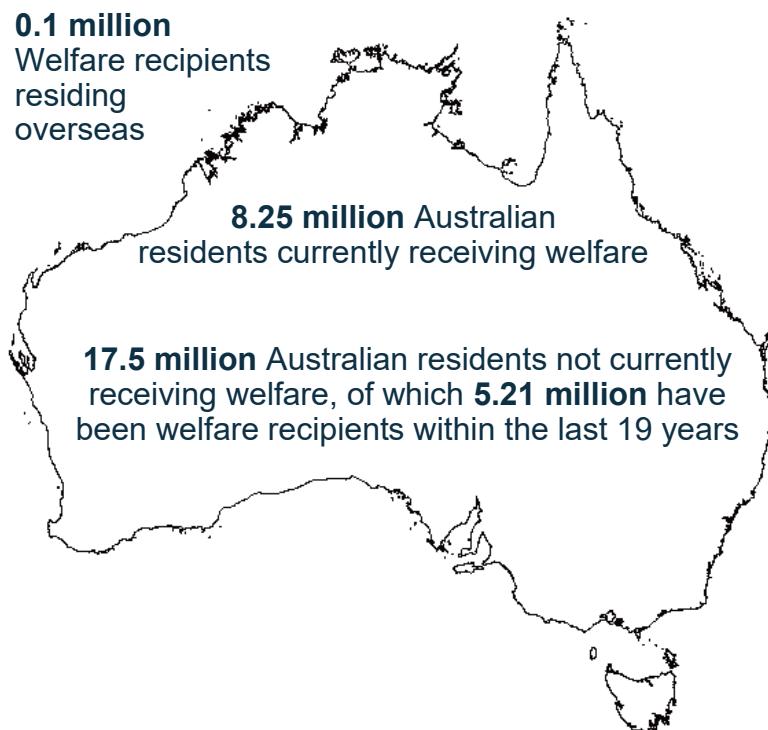
2.7.1 An external driver of the valuation result relates to movement in the underlying population base that is either currently receiving welfare assistance or is not currently receiving welfare assistance but could receive this in the future. As such, the current size and profile of the in-scope (model) population is of interest, as is the movement in this population since 30 June 2019.

Current Model Population

2.7.2 The total model population as at 30 June 2020 is equal to 25.84 million people. This consists of the Australian estimated resident population of 25.74 million, and approximately 0.1 million who are current welfare recipients residing overseas (primarily age pensioners). It includes those who are alive at 30 June 2020.

- 2.7.3 The overall change in population from 30 June 2019 to 30 June 2020 is 1.5%, an increase of 376,000 people. This is the lowest population annual growth rate since June 2005, primarily attributed to the decline in net overseas migration as a result of travel restrictions in response to the COVID-19 pandemic³. Population change due to natural increase (births minus deaths) has been minimal.
- 2.7.4 The total welfare population is lower compared to what would be reported using the previous class 7 definition⁴. This change in welfare population definition is explained in section 2.4.
- 2.7.5 A more detailed breakdown of the composition of the model population as at 30 June 2020 is shown in Figure 4.

Figure 4: Total Model Population 25.84* million at 30 June 2020



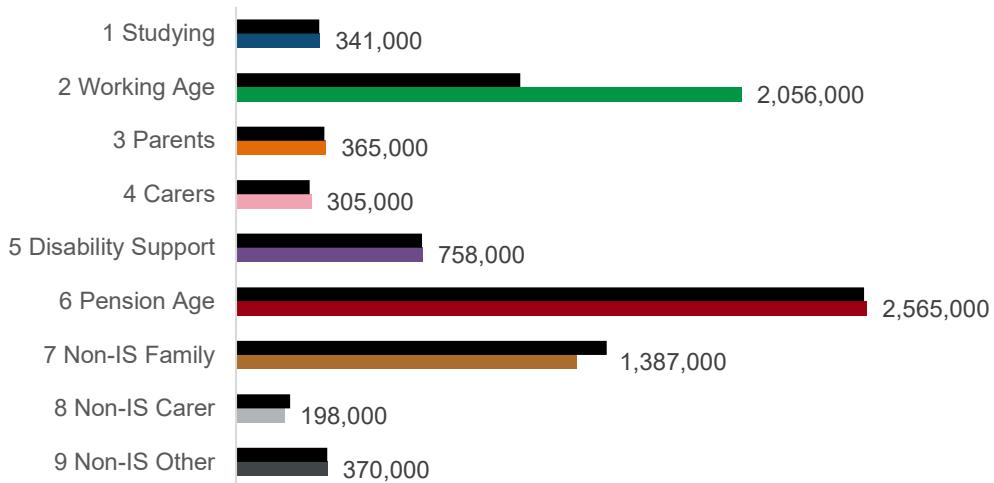
* The sum of parts does not equal 25.84 million due to rounding.

- 2.7.6 An additional breakdown of the current welfare population, distributed across the different welfare classes, is also provided in Figure 5.

3 <https://www.abs.gov.au/articles/population-and-covid-19>

4 The removal of those who received payment in the previous year and no payment in the current year.

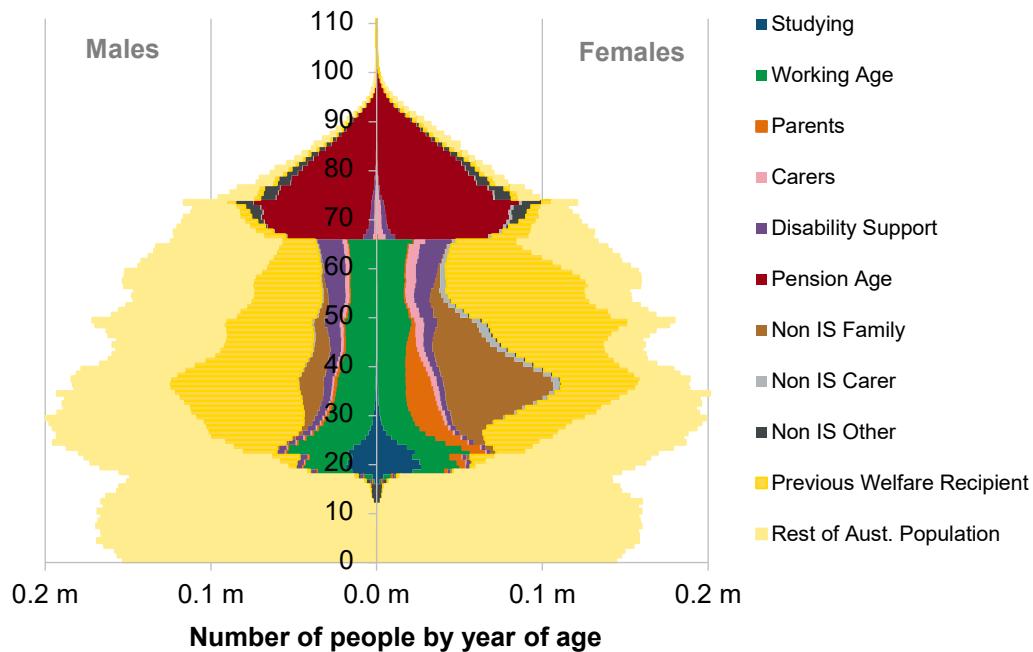
Figure 5: Current Welfare Recipient Population by Welfare Class



Note: Black bars show previous year's population (numbers can be found in Table 3)

- 2.7.7 It is also of interest to compare the demographic characteristics of current welfare recipients, to the whole population. The following population pyramid shows the composition of the model population by age and gender, to illustrate the demographic profile within each welfare class. It also demonstrates the proportions of different combinations of age and gender for current welfare recipients.

Figure 6: Model Population with Class Utilisation



Features of Current Population

- 2.7.8 The age of first direct access to the welfare system is typically from the late teens and will occur via classes 1 or 2.
- 2.7.9 As expected with a government-provided Age Pension, a large proportion of those aged 66 and over are in receipt of welfare payments. In addition, this proportion increases with age. In the years leading up to eligibility for the Age Pension, there is a slight increase in welfare utilisation, mainly in respect of working age, carer and disability support (that is, classes 2, 4 and 5 respectively).
- 2.7.10 There are significant differences in the patterns and type of welfare utilisation between females and males. Females are more likely to receive family payments, as well as larger Age Pension payments over time due to higher utilisation and longer life expectancy.
- 2.7.11 There are significantly more people in class 2 this year due to the higher unemployment rates and relaxed working age payment eligibility criteria in response to the COVID-19 pandemic.

Maturity Adjustments

- 2.7.12 For some welfare payments (primarily non-income support family payments), eligibility and the amount of payment are not finalised until well after the payment period. For these payments the data from the most recent year (2019-20) needs to be matured to account for expected future changes to eligibility and payment amounts.
- 2.7.13 For this valuation this data maturity was achieved by adjusting the model population to account for expected future changes. The adjustments were determined through analysis of how the data matured for similar cohorts from the previous year.

Changes to model population

- 2.7.14 A summary of changes between the model populations as at 30 June 2019 and 30 June 2020 is shown in Table 3. The rebased 30 June 2019 population numbers are used in the comparison, which include changes explained in paragraph 2.4.7 and the more mature data. The impact of those changes on the 2019 data mainly resulted in a reduction in Class 9 population by 278,000, a net reduction in Class 7 population by 39,000, and an increase in Class 10 population by 296,000. The 30 June 2020 model population also includes a maturity adjustment, explained in paragraph 2.4.7.

Table 3: Summary of Changes in Model Population

Class	June 2019		June 2020		Movement from 2019 to 2020	
	Number ('000s)	% of total	Number ('000s)	% of total	Number ('000s)	% change in numbers
1 Studying	339	1.3%	341	1.3%	2	0.5%
2 Working Age	1,157	4.5%	2,056	8.0%	899	77.7%
3 Parents	359	1.4%	365	1.4%	6	1.6%
4 Carers	300	1.2%	305	1.2%	5	1.7%
5 Disability Support	756	3.0%	758	2.9%	2	0.2%
6 Pension Age	2,555	10.0%	2,565	9.9%	10	0.4%
Income support recipient subtotal	5,466	21.5%	6,390	24.7%	924	16.9%
7 Non-IS Family	1,508	5.9%	1,387	5.4%	-122	-8.1%

Class	June 2019 Population (rebased)		June 2020 Population (matured)		Movement from 2019 to 2020	
8 Non-IS Carer	220	0.9%	198	0.8%	-22	-9.9%
9 Non-IS Other	371	1.5%	370	1.4%	-1	-0.2%
Non-income support recipient subtotal	2,099	8.2%	1,955	7.6%	-144	-6.9%
Total welfare recipient population	7,565	29.7%	8,345	32.3%	779	10.3%
10 exited 1-3 years*	1,709	6.7%	1,460	5.7%	-249	-14.6%
10 exited 4- 19 years*	3,694	14.5%	3,750	14.5%	56	1.5%
Total previous client population	5,403	21.2%	5,210	20.2%	-193	-3.6%
12 Rest of Aust. population	12,496	49.1%	12,286	47.5%	-211	-1.7%
Total Australian model population	25,465	100%	25,841	100%	376	1.5%

* In order to highlight the impact of more recent welfare transitions, previous welfare recipients are grouped into those that exited in the last three years, and those that exited four or more years ago. Those that exited over 18 years ago are moved into Class 12.

- 2.7.15 Despite the overall population increase of 1.5% (0.376 million), the number of current welfare recipients has increased from 7.57 million to 8.35 million. Current welfare recipients now make up 32.3% of the population, up from 29.7% at 30 June 2019. Income support recipients now make up 24.7% of the population, up from 21.5% at 30 June 2019. This increase in the population of current welfare recipients is primarily the result of the economic impact of COVID-19 and the Government's response to it. It also reflects other changes in legislation, population size and demographics, and overall welfare system utilisation, as discussed in this chapter.
- 2.7.16 The number of Australians not currently receiving welfare has decreased by 405,000 and now makes up 67.7% of the population (compared to 70.3% at June 2019). Note that this group still contributes to future welfare cost, as many of these people will move into welfare classes in the future. This is especially so in the case of the Age Pension.

2.8 Experience updates for 2020

- 2.8.1 Over time, changes occur in how the population accesses and utilises the welfare system. Where there are material changes in the numbers (or rates, when numbers are expressed as a proportion of the applicable underlying population) who enter into, exit from, or transfer between classes within the welfare system, this is called a change in experience. An additional element of experience is the size of payments received, and how these also change over time.
- 2.8.2 Such changes may arise from behavioural responses to changes in policy settings, or more general changes in societal trends over time. The COVID-19 pandemic has also demonstrated the impact of severe shocks to the welfare system under exceptional circumstances. As a result of the timing of the COVID-19 pandemic for this valuation we have used the 2018 and 2019 experience for assumption setting.
- 2.8.3 For each welfare class, we firstly consider trends in entry rates, exit rates, and rates of transfer between welfare classes. We also provide a commentary of each apparent trend over time, for each class. We then consider changes over time in payments received, also within each class.

Entry and exit rates per class

- 2.8.4 Entries and exits describe the movement into and out of modelled welfare classes, during the year. Rates of entry and exit are expressed as a proportion of each modelled class's population at the start of the year. The start of year population also includes those that received welfare but died during the previous year. Entry rates can exceed 100%, in the situation where the number of entrants into a class exceeds the start of year population.
- 2.8.5 For all presentations of exit rates per class in the following analysis, exit by reason of death is excluded. If it were included, it would dominate the exit numbers and rates at older ages, in particular for Class 6 (Pension Age). Data from the ABS indicates that mortality has remained at similar levels compared to the pre-COVID-19 experience⁵.
- 2.8.6 The experience presented has a data census date of 30 September 2020 as explained in section 2.2.

Overall Welfare Class Experience

- 2.8.7 The following analysis summarises trends in key experience parameters, across all welfare classes as a whole.

⁵ <https://www.abs.gov.au/articles/population-and-covid-19>

Figure 7: Trends in Entry and Exit Rates for Welfare

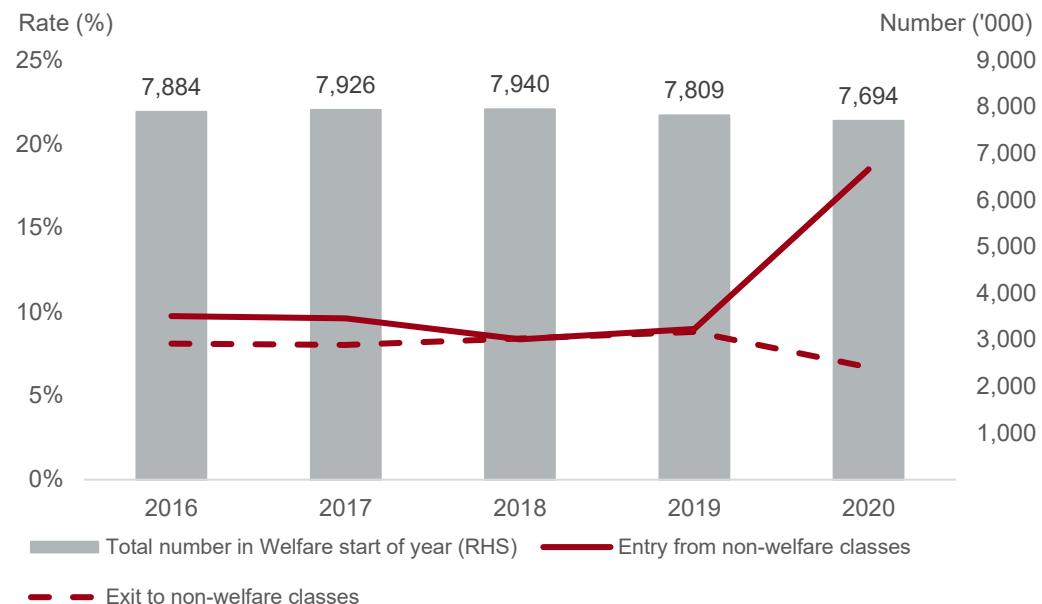
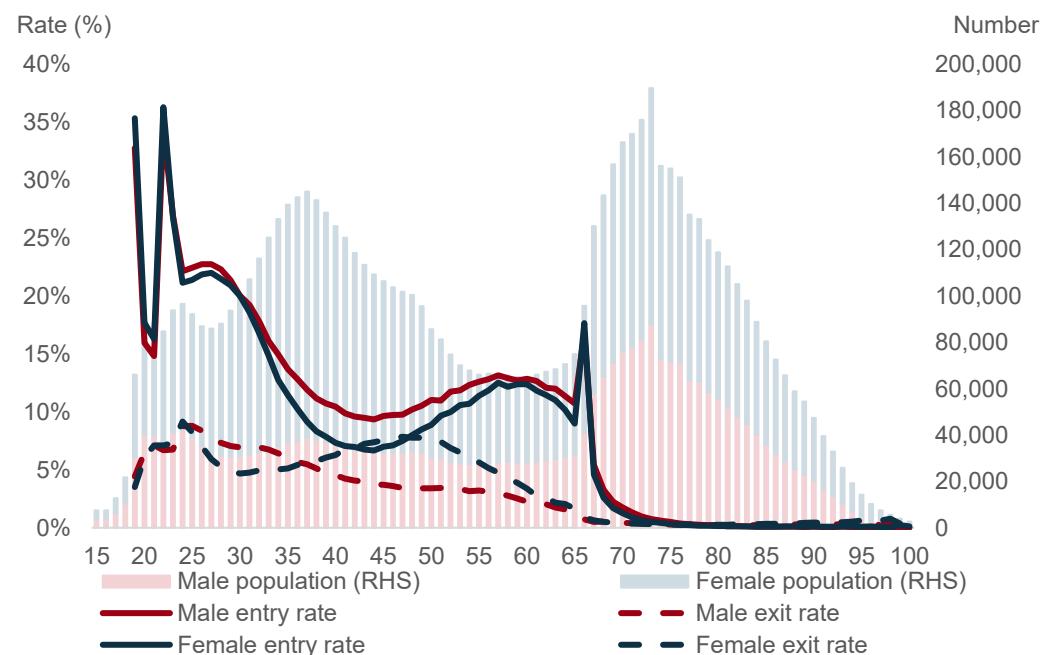


Figure 8: 2019/20 Entry and Exit Experience by Gender and Age



- 2.8.8 The number of people receiving welfare had been in decline over recent years, with both a decreasing rate of entry to welfare, and an increasing rate of exit from welfare. Note that despite this decline, the entry rate is above the exit rate in Figure 7 due to the exclusion of exits due to death. The spike in entries in the

most recent year is due to COVID-19, with the subsequent jump in unemployment and relaxation of welfare eligibility rules.

2.8.9 This year the experience window used for modelling has been reduced from 3 years to 2 years (2018 and 2019). We have not used the 2020 experience for setting long term assumptions as the COVID-19 pandemic shock to the welfare system is not expected to be repeated in every future year.

2.8.10 The population receiving welfare can be broadly categorised into four age ranges.

- 18 – 30s: This group is dominated by student and job seeker payments, as people study or look for work. There are two age spikes for welfare entry. These align with eligibility changes for Youth Allowance at age 18 (from which point full-time students can access Youth Allowance while living at home), and age 22 (from which point young people are considered independent, and parental income tests no longer apply).
- 30s – 50s: Family payments dominate this age range, primarily due to people receiving FTB and child care payments. Because of the broader eligibility of these payments, this age range is one of the peak welfare usage periods.
- 50s – Retirement age: The number of people in welfare by age is lowest in this range. The group is a mix of people still receiving family payments, and those receiving job seeker, disability or carer payments.
- Retirement age onwards: Age Pension payments are received by a large proportion of the Australian population, which makes this age range a peak period of welfare usage.

2.8.11 The widespread impact of COVID-19 pandemic resulted in significant increases in entry into working age payments across the age distribution up to retirement age in 2019/20.

2.8.12 Male and female entry and exit rates differ primarily due to higher entry for females into family and carer payments, and consequent exit rates for females for these payments. Females have a higher entry rate onto the Age Pension at eligibility age, however, males have a higher rate in the years after eligibility age.

Class 1 (Studying) Experience

2.8.13 The following analysis summarises trends in key experience parameters for Class 1.

Figure 9: Trends in Entry and Exit Rates for Class 1

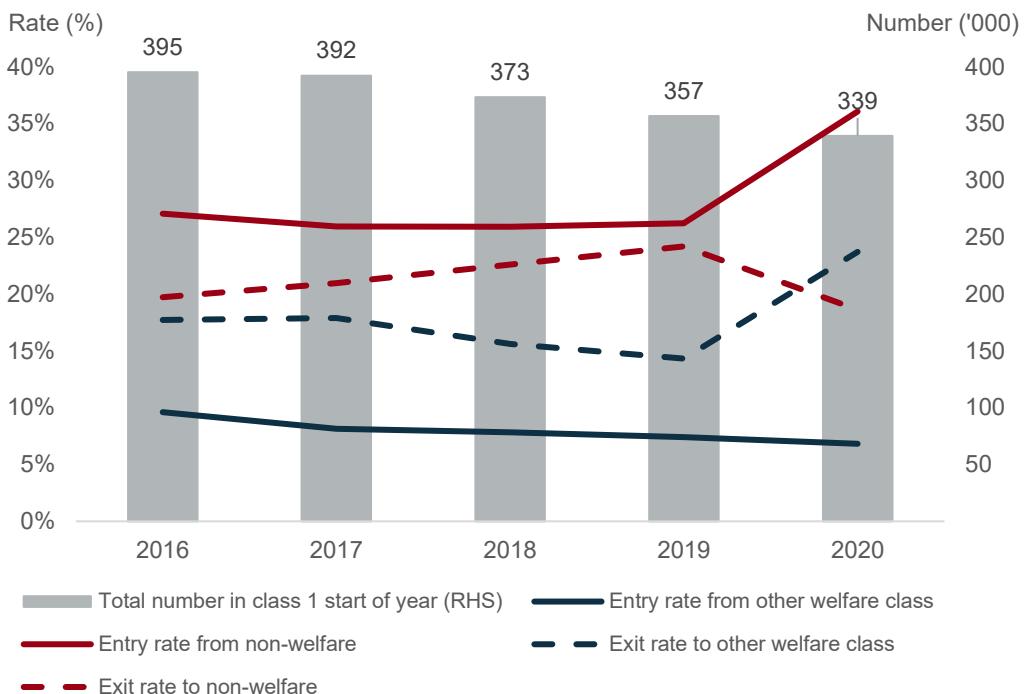
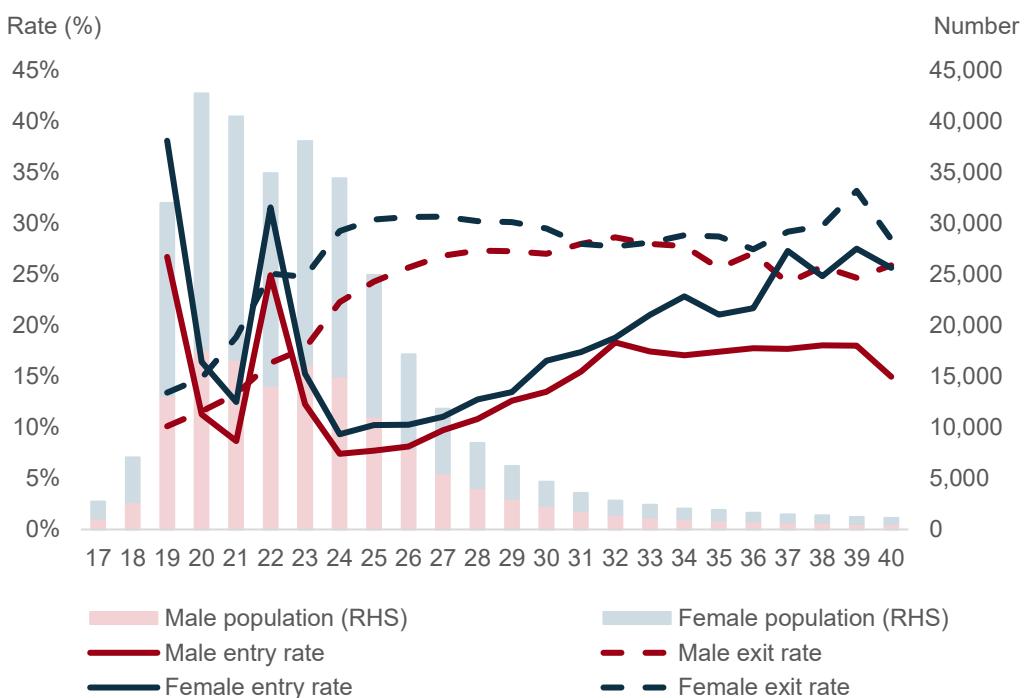


Figure 10: 2019/20 Entry and Exit Experience by Gender and Age for Class 1



- 2.8.14 Class 1 is highly transient, and prior to COVID-19 had the highest entry and exit rates of the income support classes. Most entries into Class 1 are from the non-welfare population, as younger aged students first engage with the welfare system.
- 2.8.15 The recent experience has shown an overall trend of decline of the Class 1 population resulting from a net rate of exit. This was attributed to a declining rate of entry into Class 1, while the overall exit rate remained steady. However, the COVID-19 pandemic has resulted in a large increase in entries from the non-welfare population. These entrants could be new students or existing students who have become eligible for payment e.g. through loss of employment or the relaxation of the newly arrived resident's waiting period. There was also a fall in exits to non-welfare population, and increase in exits to other welfare population, as those on student payment transition onto JobSeeker Payment and Youth Allowance (Other) rather than into employment.
- 2.8.16 The majority of the population receiving Class 1 payments are young. A high rate of entry for ages 19 and younger corresponds with the age eligibility threshold for student payments; and a high rate of entry at age 22 corresponds with the independence age threshold, at which point the parental income test no longer applies. Over the age of 22, exit rates are higher than entry rates as people finish studying and exit the class.
- 2.8.17 Male and female entry and exit rates broadly follow the same age pattern, with more females than males in the class. Females do exhibit increasingly higher entry rates for ages over 30, likely returning to study to reskill after child-rearing.

Class 2 (Working Age) Experience

- 2.8.18 The following analysis summarises trends in key experience parameters for Class 2.

Figure 11: Trends in Entry and Exit Rates for Class 2

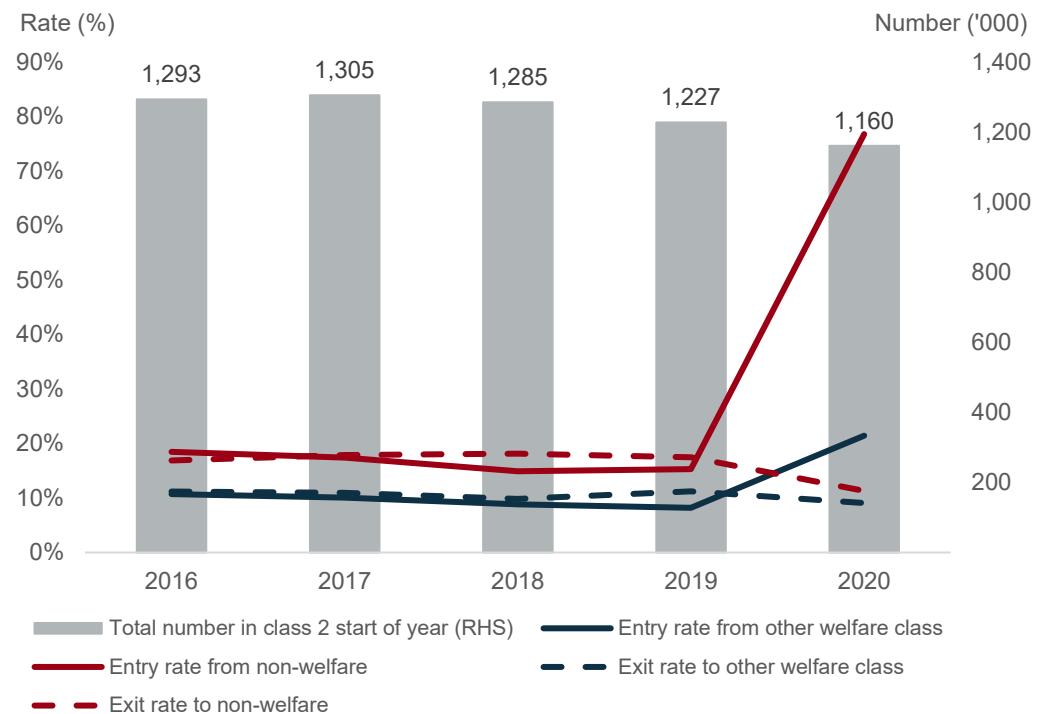
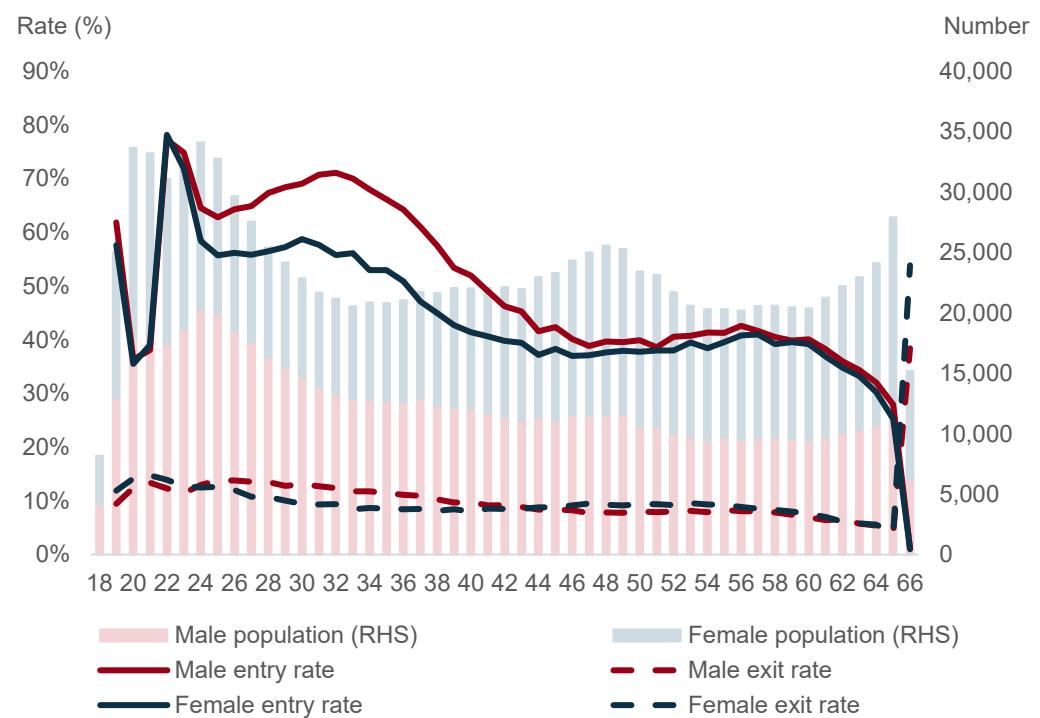


Figure 12: 2019/20 Entry and Exit Experience by Gender and Age for Class 2



- 2.8.19 Similar to Class 1 (Studying), Class 2 recipients are also highly transient. Most entries are from the non-welfare population.
- 2.8.20 The overall entry rate into Class 2 had been in decline, with a net exit in recent years. This was attributable to a decline in entry from other classes, in particular from Class 1 (Studying), while exit rates remained steady. There is a large increase in Class 2 entries in the most recent year due to the COVID-19 pandemic, with the vast majority coming from the non-welfare population, and a smaller increase from welfare population mainly from class 7 family payment recipients who likely lost employment or became eligible due to the relaxation of payment eligibility rules.
- 2.8.21 Class 2 has a relatively flat age distribution. There are slightly more younger people, however there are also age peaks in the late 40s and early 60s. The late 40s entrants correspond to people, mostly women, moving out of parenting payment. The 60s age peak is the result of people moving out of the workforce prior to Age Pension eligibility age. COVID-19 has resulted in significantly higher entry rates across all ages for both males and females, with the increase greater for younger people. The entry peaks at 19 and 22 (the age thresholds of Youth Allowance (Other), and JobSeeker Payment) are still evident, however this year there is also a peak in entrants around age 30.
- 2.8.22 Exit rates are lower this year as COVID-19 reduced the opportunity for those already in Class 2 to leave. However, exit rates for older people, especially those over age 55, are less affected as at that age people are less likely to re-enter the workforce in any year. Most people transfer to the Age Pension at retirement age. Entry and exit rates are generally higher for males up to around age 45. This is at least partially due to females more likely accessing parenting or carer payments.

Class 3 (Parenting) Experience

- 2.8.23 The following analysis summarises trends in key experience parameters for Class 3.

Figure 13: Trends in Entry and Exit Rates for Class 3

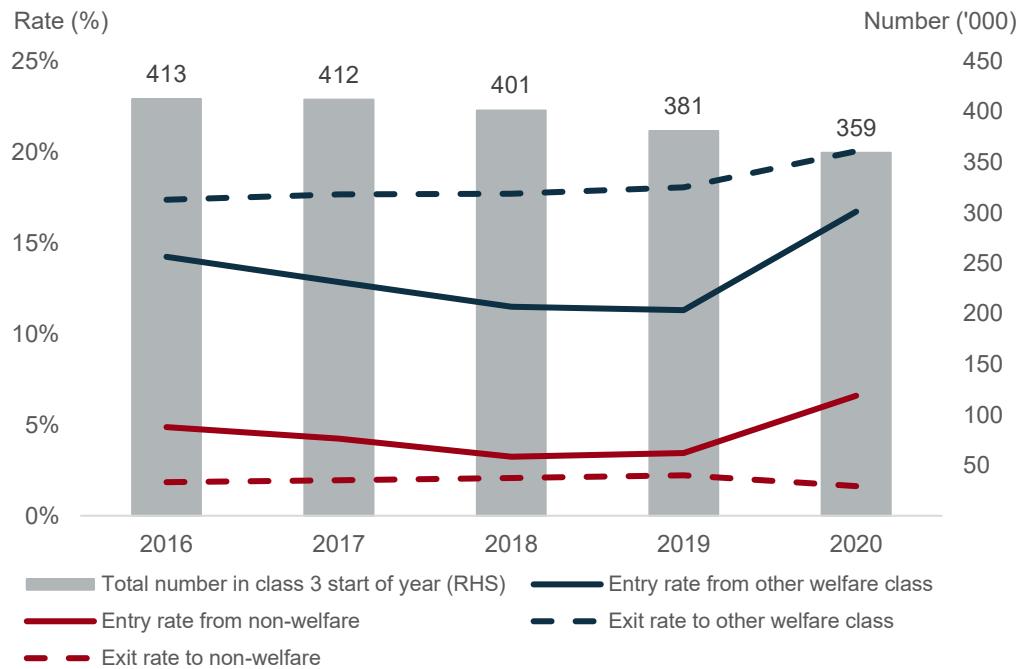
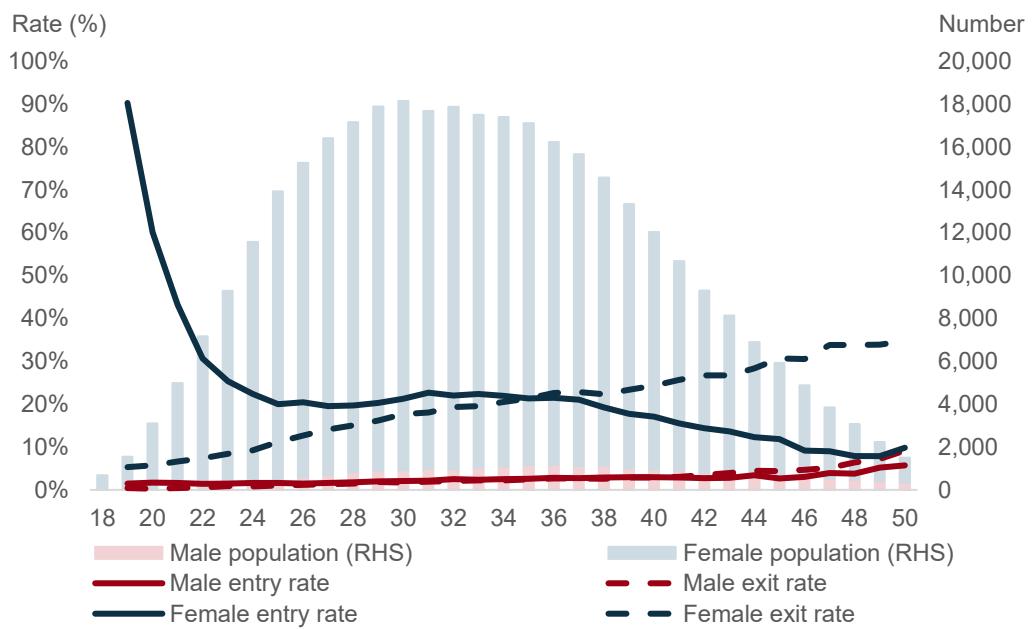


Figure 14: 2019/20 Entry and Exit Experience by Gender and Age for Class 3



- 2.8.24 Class 3 transitions mainly occur with other welfare classes. The rate of exit to non-welfare is very low, suggesting that those in this class have higher ongoing persistency of remaining on some form of welfare.

- 2.8.25 Similar to Classes 1 (Studying) and 2 (Working Age), the Class 3 population has been in decline, mainly resulting from a decreasing trend in entry rates over time. The COVID-19 pandemic resulted in an increase in entry rate from both the welfare and non-welfare population, as parents move onto Parenting Payment likely as a result of losing employment or qualifying after the relaxation of payment eligibility requirements.
- 2.8.26 As expected, entry rates into Class 3 are higher at younger ages. Exit rates increase with age as children grow older, and eventually exceed the eligible age thresholds.
- 2.8.27 The vast majority of Class 3 recipients are female.

Class 4 (Carers) Experience

- 2.8.28 The following analysis summarises trends in key experience parameters for Class 4.

Figure 15: Trends in Entry and Exit Rates for Class 4

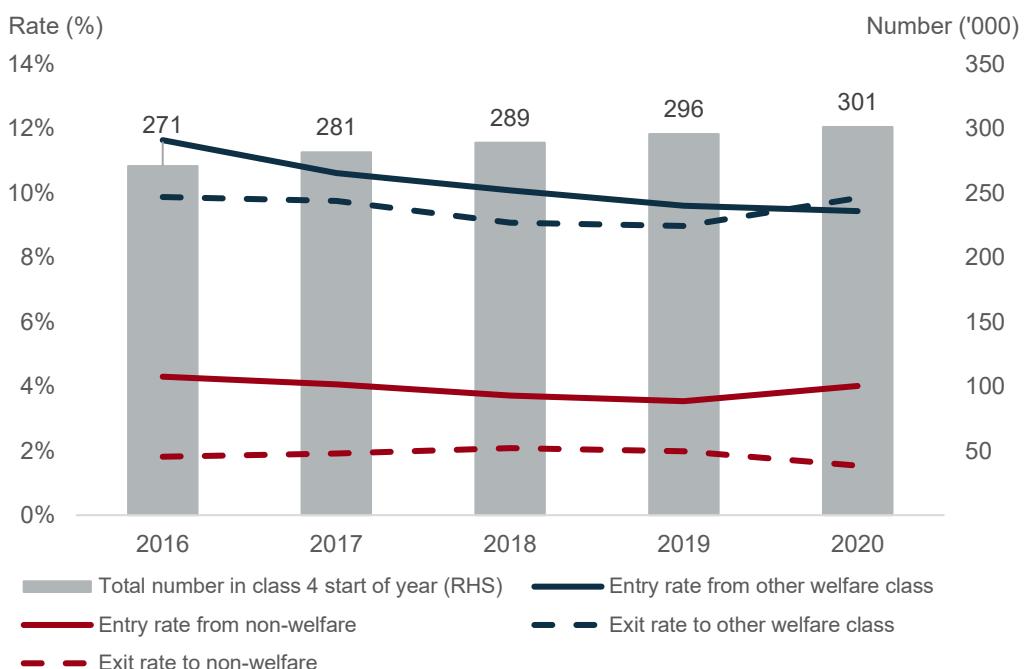
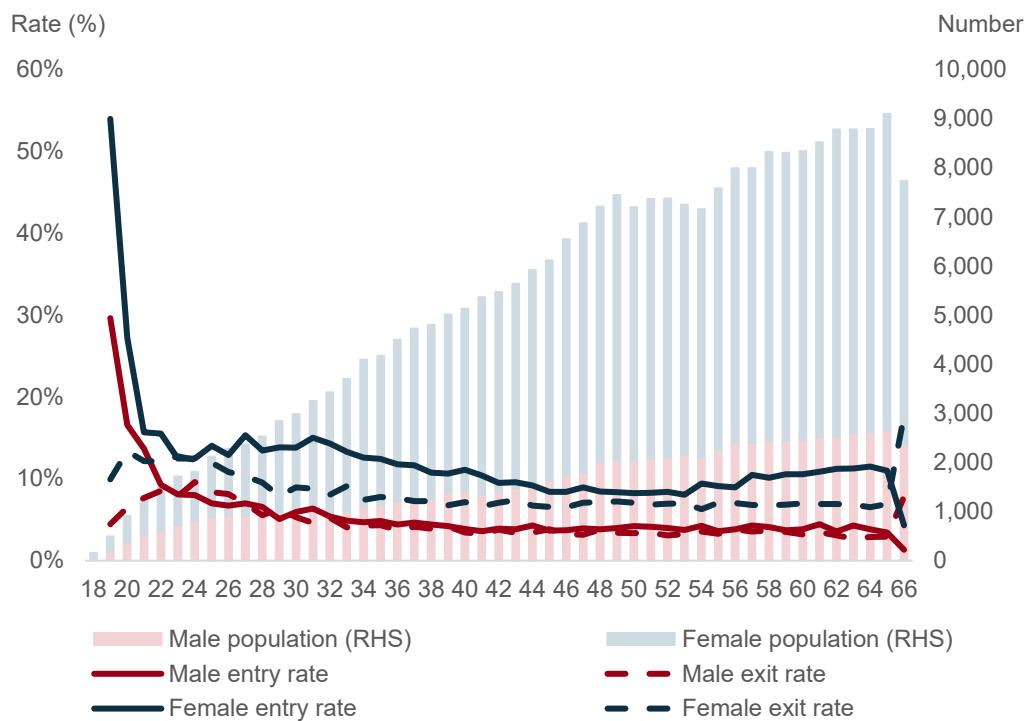


Figure 16: 2019/20 Entry and Exit Experience by Gender and Age for Class 4



- 2.8.29 Most entries into Class 4 carers are from existing welfare recipients. The overall rate of entry and exit are low, suggesting a greater persistency to remain in Class 4.
- 2.8.30 The population of Class 4 carers has been steadily increasing, but at a slowing rate of growth in line with a gradual decrease in the rate of entry. COVID-19 has had a relatively small impact on Class 4, with only a slight reversal in the declining entry rate, and a slight increase in exit to Class 2 (Working Age) as those recently exited Carer Payment move onto JobSeeker Payment.
- 2.8.31 The population of Class 4 recipients increases consistently with age until retirement age when many transfer to the Age Pension.
- 2.8.32 More females than males receive Class 4 payments, with entry rates for females higher than males, particularly through the child-rearing years.

Class 5 (Disability Support) Experience

2.8.33 The following analysis summarises trends in key experience parameters for Class 5.

Figure 17: Trends in Entry and Exit Rates for Class 5

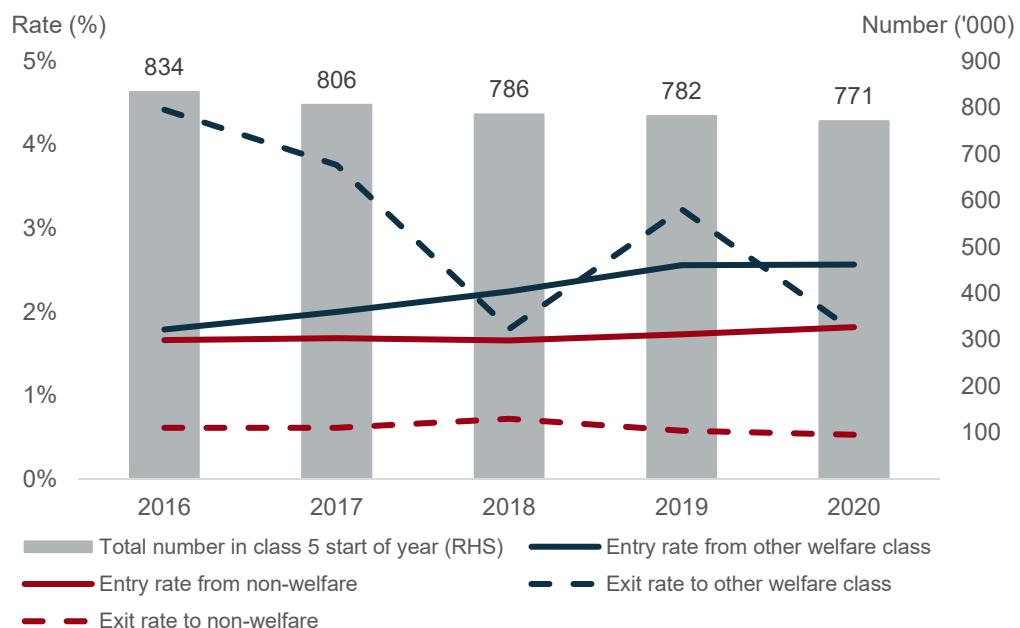
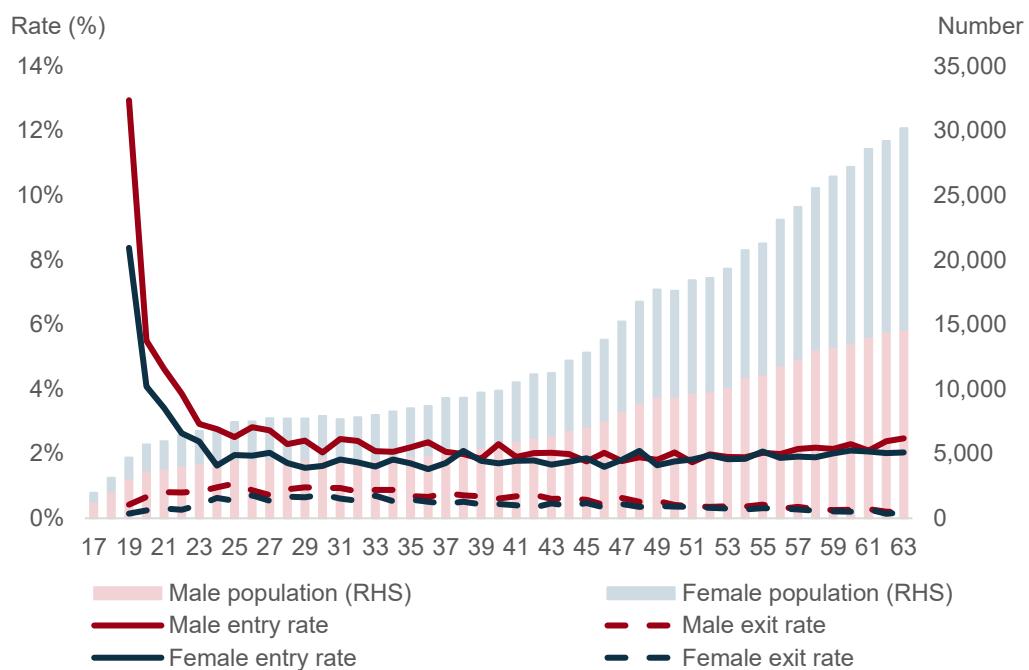


Figure 18: 2019/20 Entry and Exit Experience by Gender and Age for Class 5



(Note: Death is one of the primary reasons for exit from this class, but is not included in the chart above).

- 2.8.34 Class 5 has the highest rate of persistency of all the welfare classes other than Class 6 (Pension Age), with movement onto Age Pension and death as the main reasons for exit. This is why a change to Age Pension eligibility has such a significant impact on this class, with the large decrease in exits in 2017-18 and 2019-20 related to the increase in the Age Pension age from 65 to 65.5 and 65.5 to 66 respectively. A number of policy changes in earlier years resulted in a temporary higher rate of exit to working age payments in 2016 and earlier years. Since then the rate of entry into Class 5 has increased slightly but still remains the lowest entry rate for any payment class. COVID-19 has had minimal impact on this class.
- 2.8.35 The population of Class 5 recipients increases significantly with age until retirement age, when many transfer to the Age Pension.
- 2.8.36 The patterns by age for rates of entry and exit are broadly similar for males and females, with males having slightly higher rates of movement into and out of this class overall.

Class 6 (Pension Age) Experience

- 2.8.37 The following analysis summarises trends in key experience parameters for Class 6.

Figure 19: Trends in Entry and Exit Rates for Class 6

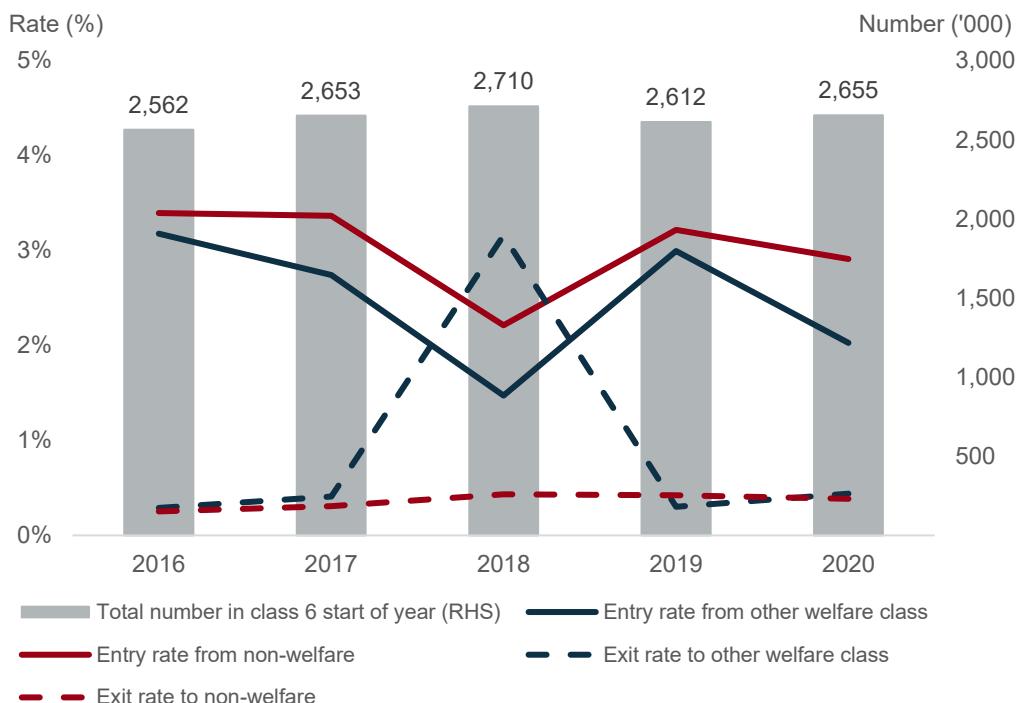
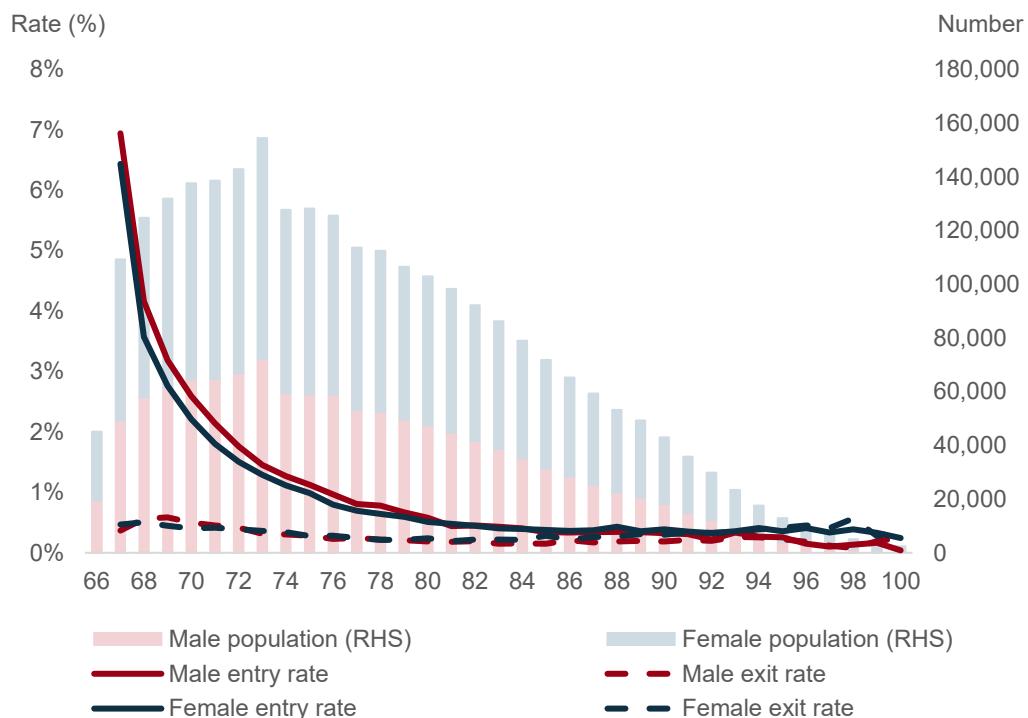


Figure 20: 2019/20 Entry and Exit Experience by Gender and Age for Class 6.



(Note: Death is the primary reason for exit from this class, but is not included in the chart above).

- 2.8.38 Previous valuation reports have explained that the modelling of the Age Pension is an inherently challenging part of the valuation. Age Pension payments are, for some people, many decades into the future and there are many factors which will influence the demand for Age Pension. These include demographic trends, the economic environment and the returns on superannuation savings. Further challenges arise as the data available to support our analysis does not include information on some key drivers, such as levels of superannuation savings, how superannuation assets are drawn down in retirement, and home ownership.
- 2.8.39 Some of these factors offset each other. For example, levels of superannuation savings are increasing over time from the maturing of the superannuation system, which should decrease the reliance on the Age Pension. However, there has also been a material reduction in levels of home ownership, especially for younger generations. This could increase reliance on the Age Pension.
- 2.8.40 In terms of recent experience, there has been a reduction in the proportion of people who access the Age Pension in the first few years after reaching the Age Pension qualifying age. In particular, there has been a reduction in the proportion of full age pensioners within these cohorts.
- 2.8.41 The lower level of entries in the 2018 year was due to an increase in the Age Pension age from 65 to 65.5. A change in the pension assets test on

1 January 2017 also led to a higher rate of exits, of which many transitioned into non-income support classes. Once again, the lower level of entries in the 2020 year was due to an increase in the Age Pension age from 65.5 to 66. There is minimal observable impact on the Age Pension experience due to COVID-19.

- 2.8.42 Most people enter into Class 6 at retirement age, although the entry rate does not flatten off until around age 80. These older entrants include people who have continued working past retirement age, people who have drawn down on savings to a point where they are now eligible for the Age Pension, and migrants who have had to wait for an eligibility period. Although not shown in Figure 17, the major reason for exit from Class 6 is death.

Class 7 (Non-IS Family) Experience

- 2.8.43 The following analysis summarises trends in key experience parameters for Class 7.

Figure 21: Trends in Entry and Exit Rates for Class 7

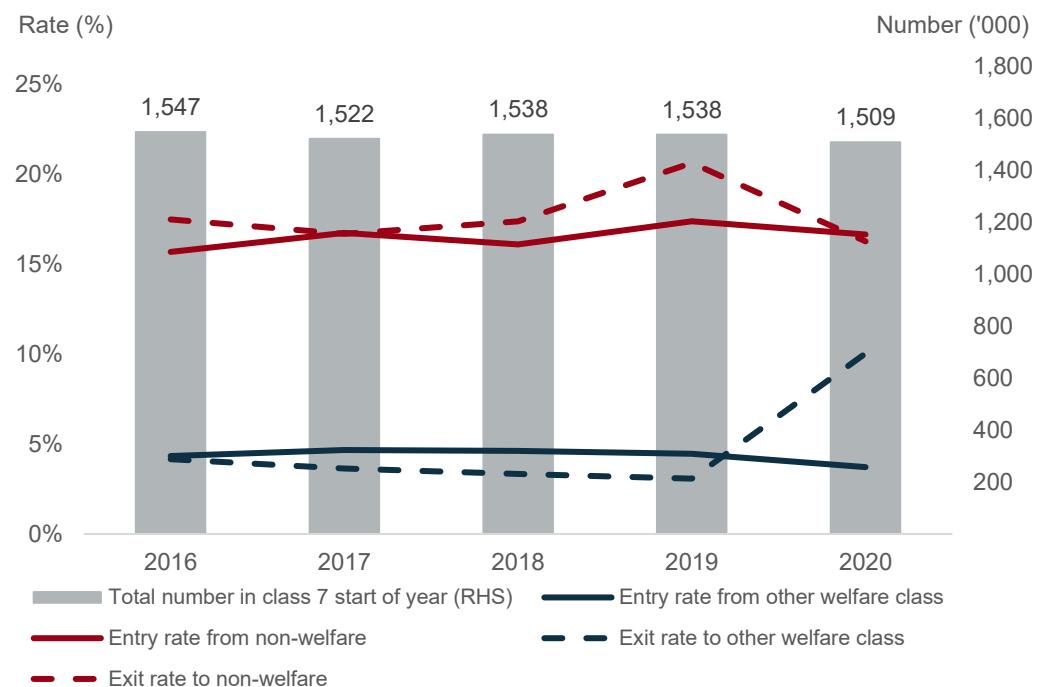
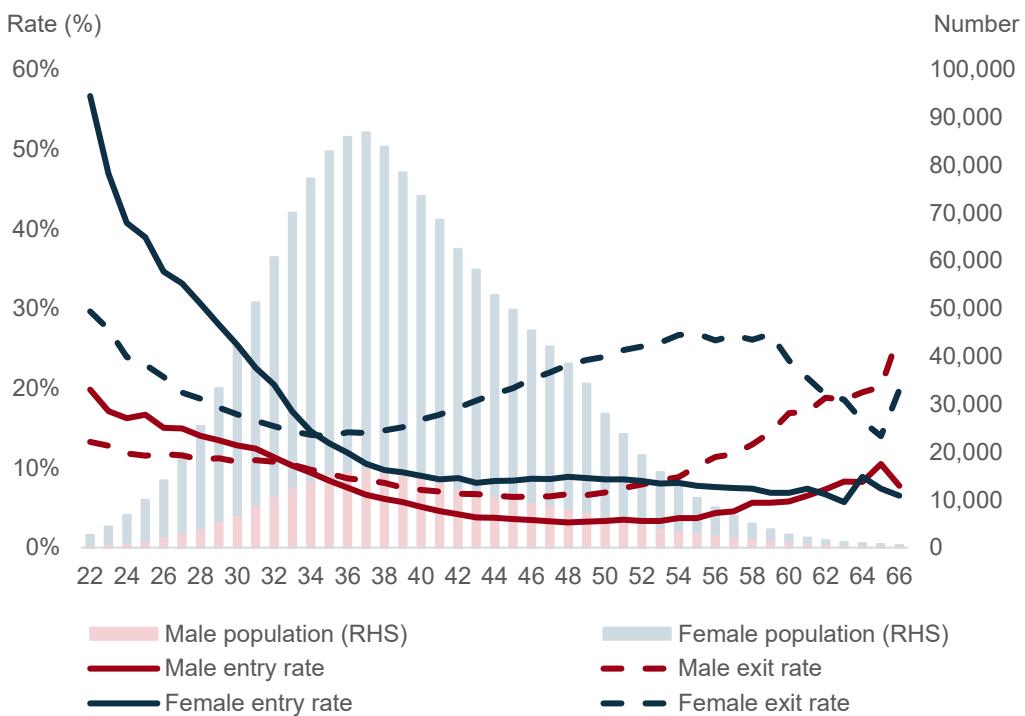


Figure 22: 2019/20 Entry and Exit Experience by Gender and Age for Class 7



2.8.44 The Class 7 definition changed in the 2020 valuation as explained in section 2.4.

2.8.45 We note that the above experience is based on Child Care Benefit (CCB) and Child Care Rebate (CCR) data up to 2018, and Child Care Subsidy (CCS) data from 2019. The CCB, CCR, and CCS experience form the basis of establishing projected utilisation of this class, while CCS experience is used for the size of category I payment.

2.8.46 Class 7 is a family payment class and, as such, shares some of its characteristics with Class 3 (Parenting).

2.8.47 The Class 7 population has remained relatively constant, with both entry and exit rates relatively stable over time. Class 7 transitions mainly occur with non-welfare classes, with most people entering from and then leaving to non-welfare. The new CCS that commenced in 2019 resulted in an increase in exit to non-welfare population with changed eligibility requirements. The COVID-19 pandemic resulted in a fall in exit to non-welfare classes and an increase in exit to Class 2 (Working Age), as recipients of family supplement payments also start receiving working age payments.

2.8.48 At younger ages, entry rates are higher than exit rates as people have children and move into Class 7. Around age 40, exit rates exceed entry rates and there

is a net exit from the class as people lose eligibility as, for example, their children become older than the eligible age thresholds.

2.8.49 The majority of Class 7 recipients are female.

Class 8 (Non-IS Carer) Experience

2.8.50 The following analysis summarises trends in key experience parameters for Class 8.

Figure 23: Trends in Entry and Exit Rates for Class 8

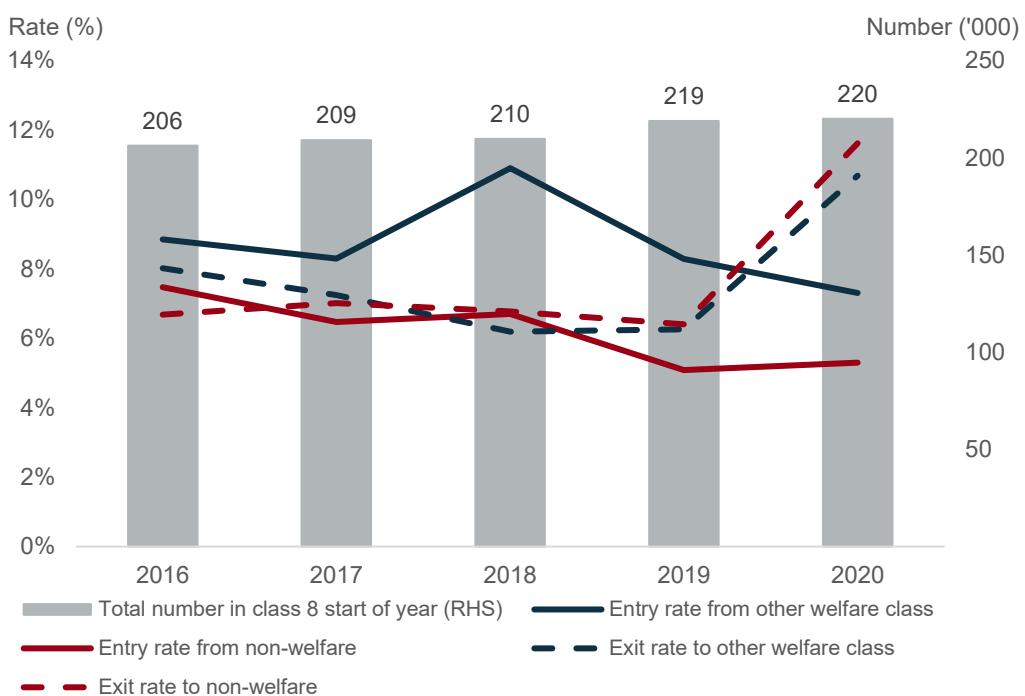
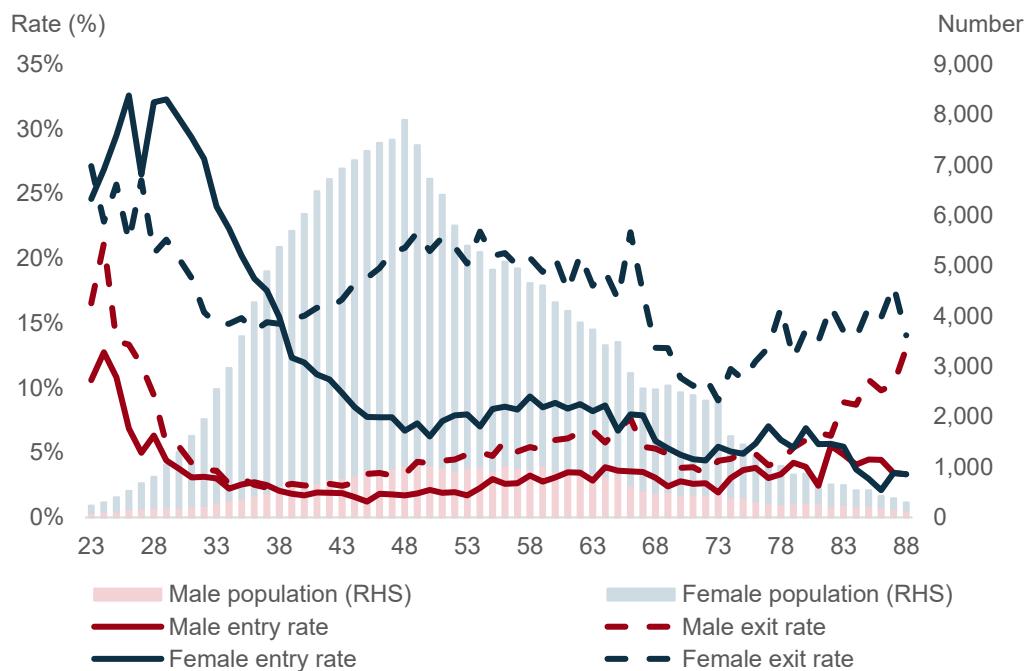


Figure 24: 2019/20 Entry and Exit Experience by Gender and Age for Class 8



- 2.8.51 Class 8 is a carer payment class and, as such, shares some of its characteristics with Class 4 (Carers).
- 2.8.52 The population of Class 8 carers has been increasing over time. The increase in entry rate in 2018 is linked to the change in asset tests in 2017, which meant some people were no longer eligible for income support payments but still eligible for non-income support payments. This resulted in a movement of people out of income support classes, mainly Class 4 (Carers) and Class 6 (Pension Age), some of whom moved into Class 8. The increase in exit rate to non-welfare in 2020 is linked to the introduction of a family income test for Carer Allowance in the 2018/19 year. The COVID-19 pandemic also resulted in an increase in exit to Class 2 (Working Age), as some recipients of non-IS carer payments became eligible for working age payments.
- 2.8.53 The majority of entries into Class 8 are from existing welfare recipients, whereas exits are more evenly split between welfare and non-welfare classes.
- 2.8.54 Entry rates into Class 8 are higher at younger ages, where people are more likely to be caring for their children, their parents or their spouse. Class 8 is a non-income support class so many recipients are not eligible for income support payments. Thus, although a reasonable number move to Class 6 (Pension Age) at retirement age, the retention of recipients within Class 8 is significant.
- 2.8.55 The majority of Class 8 recipients are female.

Class 9 (Non IS Other) Experience

2.8.56 The following analysis summarises trends in key experience parameters for Class 9.

Figure 25: Trends in Entry and Exit Rates for Class 9

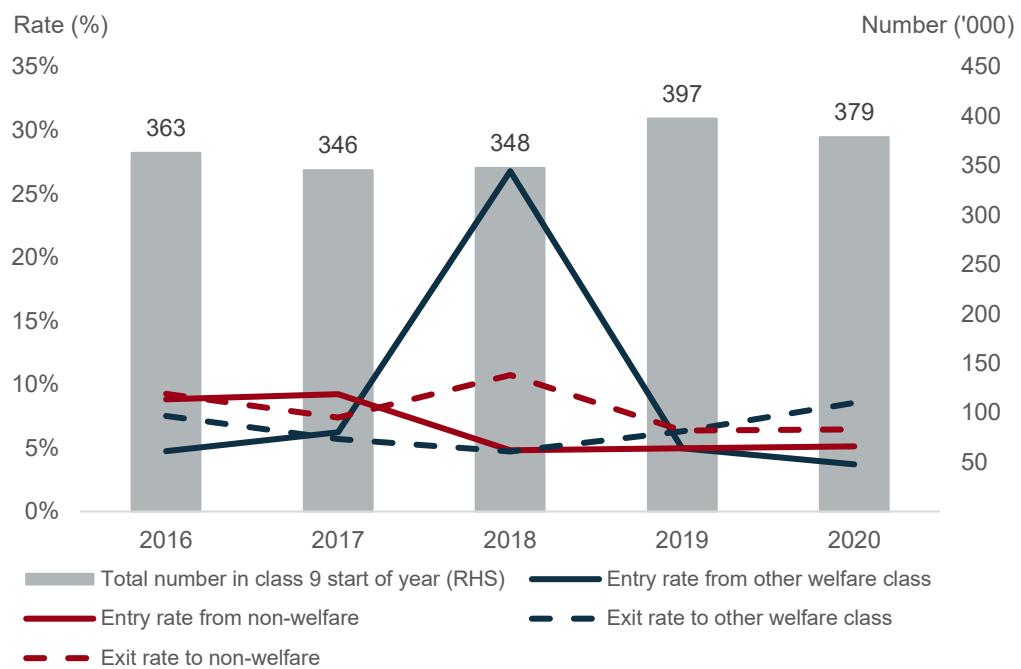
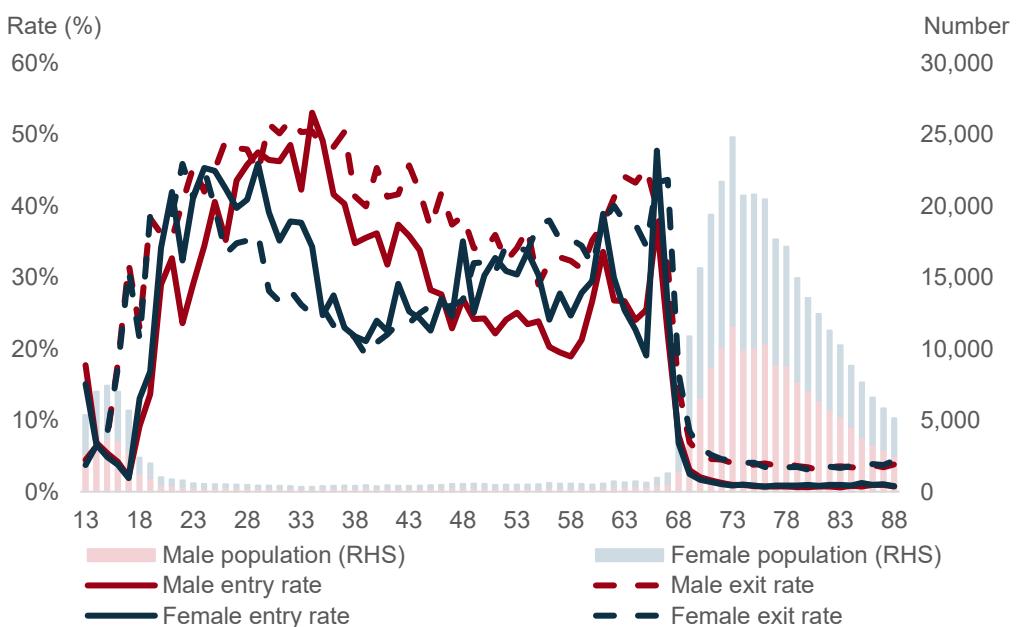


Figure 26: 2019/20 Entry and Exit Experience by Gender and Age for Class 9



- 2.8.57 The composition of Class 9 is a construct for modelling convenience, having consideration for materiality rather than similarity of welfare types. It is one of the smallest payment classes, and receiving the lowest average payment amount. The change to Class 7 (Non-IS Family) definition explained in section 2.4 expands it to include parents transitioning from non-welfare onto family payments, which are no longer part of Class 9. The remaining Class 9 is composed of two different age cohorts:
- Young people receiving school and study related payments (hence, a spike in entries at younger ages); and
 - Retired people who are receiving supplements and not Age Pension (hence, a spike in entries at Age Pension age). This cohort dominates the Class 9 population, and with low rates of entry and exit, Class 9 has one of the highest persistency rates of all welfare classes.
- 2.8.58 Similar to Class 8 (Non-IS Carer), the increase in entries in 2018 is linked to the change in asset tests in 2017. The COVID-19 pandemic had minimal impact on this class.

Interactions of movements between classes

- 2.8.59 As per the prior analysis, the profile of entrants, re-entrants, and exits from the welfare system varies significantly by age and gender, reflecting the way in which females and males access different classes at different stages of life.
- 2.8.60 Apart from overall entrants and exits, the movements of people between the various parts of the welfare system are also a key driver of changes in Lifetime Cost. The following chart shows the transition experience between each of the 9 welfare classes, based on 2018-19 to 2019-20 experience, which includes the exceptional circumstances of the COVID-19 pandemic. As explained earlier in this section, the 2020 experience is not used for setting assumptions. Rates of movement are expressed as a percentage of population of class X.

Table 4: FY2019 to FY2020 Inter-Class Transfer Experience. Transfer Rate (%) and number of people (colour) from Class X to Class Y.

Class X	Class Y											
	1	2	3	4	5	6	7	8	9	11	10&12	
1	58%	22%	1%	0%	0%	0%	1%	0%	0%	0%	19%	
2	1%	79%	1%	1%	1%	1%	2%	0%	1%	0%	11%	
3	0%	10%	78%	1%	0%	0%	8%	1%	0%	0%	2%	
4	0%	6%	1%	88%	0%	2%	0%	1%	0%	0%	2%	
5	0%	0%	0%	0%	96%	2%	0%	0%	0%	2%	1%	
6	0%	0%	0%	0%	0%	95%	0%	0%	0%	4%	0%	
7	0%	7%	2%	0%	0%	0%	74%	0%	0%	0%	16%	

Class X	Class Y										
	1	2	3	4	5	6	7	8	9	11	10&12
8	0%	5%	1%	2%	0%	1%	2%	77%	1%	0%	12%
9	1%	2%	0%	0%	0%	5%	0%	0%	83%	2%	6%
10&12	2%	14%	0%	0%	0%	1%	4%	0%	0%	0%	77%

NOTE: Row totals may not add up to 100% due to rounding.

Table 5: Legend: Cell Colour Reference

Number of People	Colour
> 100,000	Red
20,000 < 100,000	Orange
5,000 ≤ 20,000	Blue
< 5,000	No fill

2.8.61 Across all classes, the high persistency of staying within a class over the 2019 to 2020 period is evident. Classes 5 (Disability Support) and 6 (Pension Age) exhibit the highest persistency, which correspond to the low exit rates demonstrated in Figure 17 and Figure 18 (Class 5), and Figure 19 and Figure 20 (Class 6). Both are characterised by very low transitions to non-welfare (Class 10).

2.8.62 Significant transitions between welfare classes include:

- Most notably movement into Class 2 (Working Age) increased significantly due to the COVID-19 pandemic, which saw an increase in entry from almost all classes other than Classes 5 (Disability Support) and 6 (Pension Age).
- Movements into Class 7 (Non-IS Family) from Class 2 (Working Age) and Class 3 (Parenting).
- Movements into Class 6 (Pension Age) occurs from across the spectrum of the welfare and non-welfare population, notwithstanding that some welfare classes are age-restricted and, hence, are associated with transfer rates of 0% to Class 6. Classes 2 (Working Age), 4 (Carers), 5 (Disability Support) and 9 (Non-IS Other) have significant transitions into Class 6 by both number of transfers and transfer rate.
- Classes 6 (Pension Age), 5 (Disability Support), and 9 (Non-IS Other) have a significant number (and rate) of exits due to death.

2.8.63 Overall, the main entry points into welfare are through Classes 2 (Working Age), 7 (Non-IS Family), 1 (Studying), and 6 (Pension Age). Due to COVID-19, the rate of entry into Class 2 was significantly higher this year at 14%, compared to 4% in the previous year.

2.8.64 It is important to note that the above rates are not age or profile weighted. For example, 3.8% of all people in Class 6 died in the year; although, for older age groups this would have been much higher.

Payment size per class

2.8.65 The average payment per welfare class is a key driver of Lifetime Cost. Table 6 presents the amounts for each class. The numbers are different compared to those in the 2019 valuation due to the change in class 7 definition, and data maturity. The difference between 2019 and 2020 are due to indexation of payments, and changes in experience.

Table 6: Average Payments per Welfare Class, 2018-19 and 2019-20.

Class	Average Payment in Year		% Change in Past Year*
	2020 (matured)**	2019 (rebased)	
1 Studying	6,900	7,100	-2.4%
2 Working Age	8,900	11,800	-24.6%
3 Parents	32,500	33,300	-2.6%
4 Carers	28,600	28,000	2.0%
5 Disability Support	23,600	23,000	2.3%
6 Pension Age	18,800	18,300	2.4%
7 Non-IS Family	9,200	9,800	-5.4%
8 Non-IS Carer	7,500	7,400	1.1%
9 Non-IS Other	700	700	-4.0%
All welfare	14,600	15,500	-5.9%

* The percentage change is calculated on the unrounded values.

** Does not include the Coronavirus Supplement and the Economic Support Payment.

2.8.66 The average amount of payment received per person on welfare is \$14,600 per annum, a 5.9% decrease over the 2019 average of \$15,500 per annum. The primary reason for this decrease is the significant increase in the number of Class 2 recipients who had on average smaller average payments because they received those payments for only part of the 2019-20 year.

2.8.67 The average payment is also significantly weighted to the large number of those receiving the Age Pension, who in Class 6 have an average payment of \$18,800 per annum. Note that this average payment is influenced by both the maximum entitlement amount available (which increases in line with AWE each year), and the mix of age pensioners who receive that maximum amount (full pension), and those who receive less than that amount (part-pension). The mix of full and part pensions is expected to change over time in line with changes in means tests, eligibility criteria, employment and other income, the maturity of the

superannuation system, and movements in individual superannuation and non-superannuation savings.

2.8.68 There is variability between welfare classes in terms of average payment amounts:

- Classes 1 and 2 recipients receive less payments than the average amount, which reflects the lower maximum amounts available.
- Classes 3-6 recipients each receive payments above the average amount, and show relative stability in the past 2 years.

Recipients of support from non-income support classes (7-9) all receive payments below the average amount, as they are supplementary payments.

3 Population level results

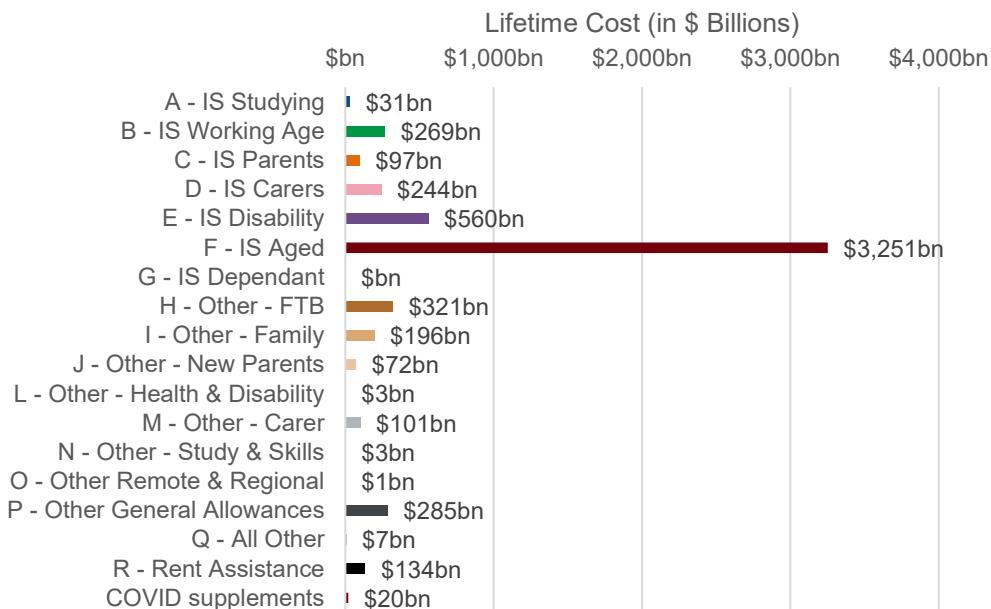
3.1 Total Lifetime Cost

3.1.1 As at 30 June 2020, the total Lifetime Cost for the model population is estimated to be \$5,597 billion. This represents the net present value of the in-scope payments expected to be made over the remaining lifetimes of the full model population. This value also represents a decrease of \$104 billion (1.8%) from the 30 June 2019 rebased valuation of \$5,701 billion.

3.2 Costs by payment category

3.2.1 A breakdown of the total Lifetime Cost by payment category is informative, as it identifies the actual type of welfare being paid. This breakdown is given below. A list of the payments included in these payment categories is included in Appendix C.

Figure 27: Composition of Lifetime Cost (\$ billion) by Payment Category



3.2.2 The major contributors to the total Lifetime Cost are:

- The Age Pension (\$3,251 billion, or 58.1% of the total). The total Lifetime Cost is dominated by the Age Pension, as a large proportion of the model population is likely to receive the Age Pension at some stage in the future, and for a long period of time.

- Non-income support family payments (\$589 billion, or 10.5% of the total). This includes payment categories H, I and J. A large proportion of the population will access these payments, however with a shorter duration and lower payment rate than the Age Pension.
- The Disability Support Pension (\$560 billion, or 10.0% of the total). Although only a small proportion of the population will access these payments, the average duration on payment and the payment rate are both higher than most other payment types.

3.3 Costs by modelled welfare class

- 3.3.1 A breakdown of the total Lifetime Cost by starting payment class aggregates the same payments as above, but allocates them according to the hierarchical class structure that is in place to allow the modelling process to run efficiently. For example, an individual in Class 1 (Studying) at the valuation date will be receiving payments from welfare categories that are part of Class 1, but might also receive payments from other sources of welfare, either at the same time or in future years. A breakdown of payments by category (Figure 27) identifies the actual payment source, whereas a breakdown of payments by starting welfare class allocates payments according to the welfare class that an individual is defined/modelled to be in, in the valuation year.
- 3.3.2 A breakdown of the total Lifetime Cost and average Lifetime Cost per current recipient, by welfare class and payment category, are shown in Table 7 and Table 8.

Table 7: Composition of Lifetime Cost (\$ billion) by Payment Class and Category as at 30 June 2020

Payment class	Total Lifetime Cost (\$ billion) arising from categories:					Total Lifetime Cost
	Income support		Non-income support		COVID supplements*	
	F: Age Pension	A-E,G: Other	H-J: Family	L-R: Other		
1 Studying	43	23	15	7	2	90
2 Working Age	348	236	58	72	10	724
3 Parents	63	77	65	25	2	231
4 Carers	57	70	11	31	0	169
5 Disability Support	73	260	7	45	1	385
6 Pension Age	483	1	1	61	3	548
7 Non-IS Family	219	47	71	32	1	369
8 Non-IS Carer	27	9	4	13	0	53
9 Non-IS Other	13	7	3	4	0	27
10 Previous welfare recipient	736	115	50	91	0	992
12 Rest of Aust. population	1,190	358	305	156	0	2,010
Total	3,251	1,201	589	536	20	5,597

* Include Coronavirus Supplement, and Economic Support Payment.

Table 8: Average Lifetime Cost (\$) by Payment Class and Category as at 30 June 2020

Payment class	Number in model population ('000s)	Average Lifetime Cost (\$) per person arising from categories:					Average Lifetime Cost
		Income support		Non-income support		COVID supplements	
		F: Age Pension	A-E,G: Other	H-J: Family	L-R: Other		
1 Studying	341	127,400	66,400	45,000	21,400	4,600	264,800
2 Working Age	2,056	169,300	114,700	28,200	35,200	5,000	352,400
3 Parents	365	171,500	209,900	177,700	67,200	5,400	631,600
4 Carers	305	187,100	228,500	36,600	100,100	1,200	553,600
5 Disability Support	758	95,700	342,600	8,800	59,100	1,200	507,500
6 Pension Age	2,565	188,200	200	200	23,800	1,200	213,600
7 Non-IS Family	1,418	154,300	32,900	49,900	22,600	500	260,200
8 Non-IS Carer	198	135,900	44,200	20,900	63,600	1,200	265,900
9 Non-IS Other	340	38,900	20,800	8,500	10,900	1,000	80,100
10 Previous welfare recipient	5,205	141,400	22,100	9,600	17,400	0	190,500
12 Rest of Aust. population	12,290	96,800	29,200	24,800	12,700	0	163,500
Total	25,841	125,800	46,500	22,800	20,700	800	216,600

3.3.3 It is important to note that the average age of each class will have an impact on the size and composition of the associated Lifetime Cost. For example, Class 6 (Pension Age) has the oldest average age hence, its average Lifetime Cost is the lowest of the income support classes. Furthermore, people in Class 6 will receive very little other income support or family payments.

3.3.4 The major features of the total Lifetime Cost, as allocated according to the currently modelled welfare classes, are as follows:

- The Age Pension dominates the total Lifetime Cost, with its contribution to the total Lifetime Cost equal to 58%. Of that contribution, 15% arises from those currently in Class 6 (Pension Age), 26% from those who are in the welfare system but are not in Class 6, and 59% from those not currently in the welfare system. This means 85% of future Age Pension costs (corresponding to 49% of the total Lifetime Cost) arises from the projected

future utilisation of the Age Pension from those not currently receiving Age Pension. Other than for those currently in Class 5 (Disability Support), Age Pension is generally the primary source of Lifetime Cost for all current payment classes.

- The other income support payments together contribute 21% to the total Lifetime Cost. The 758,000 people currently receiving the Disability Support Pension account for a major component of these payments due to their high average Lifetime Cost. Their average projected usage of non-Age Pension IS payments is \$342,600 per person, most of which is DSP payments. Due to COVID-19, the number of people currently receiving working age payments has increased to 2,056,000. The size of this group means that they also account for a large component of other income support payments.
- Slightly more than half (51%) of the total non-income support Lifetime Cost arises from family payments. Those who are currently in Classes 3 (Parenting) and 7 (Non-IS Family) have historically been the main contributors from those currently in the welfare system, as they are either currently receiving the payments, or will likely transition onto them. Those who are currently in Class 2 (Working Age) also contribute significantly, after the COVID-19 pandemic resulted in significant entry of younger people into this class. Those in Class 1 (Studying) are generally several years away from the age of parenthood but will likely access family payments in the future, more likely than other non-income support payment categories.
- Other non-income support payments are primarily supplementary payments received alongside an income support payment, such as Commonwealth Rent Assistance. This means that any group with a high projected future income support usage will also have a high projected non-income support payment usage.

3.3.5 Those not currently in welfare (classes 10 and 12) account for a large proportion of the total Lifetime Cost as these classes make up 68% of the model population and reflect the expectation that many Australians who are currently not relying on welfare will need to do so at some point in the future. This is especially the case in respect of the Age Pension. A major difference between classes 10 and 12 concerns the age distribution of each. Those under 18 years of age are generally in Class 12 as they have not accessed welfare yet, whereas Class 10 has an older demographic profile, as people need to be old enough to have accessed and then exited welfare.

3.4 Key drivers of cost

3.4.1 Various factors can be drivers of the overall Lifetime Cost. These arise from:

- the features of each benefit available, in terms of eligibility and payment criteria;

- the (demographic) characteristics that are correlated with or indicative of higher welfare utilisation over time; and
 - those characteristics (namely, age and future life expectancy) which drive costs in terms of calculating a present value.
- 3.4.2 An important driver of Lifetime Cost stems from the specific rules around each payment category. These rules, relating to eligibility and entitlement amounts, clearly have a direct influence on future welfare utilisation. For example, age is an important driver of future costs of the Age Pension, as people younger than the age of eligibility cannot receive an Age Pension. For various study benefits, relevant eligibility and, therefore, drivers of cost include indigenous status, age and SEIFA status. For working age benefits, SEIFA is again relevant, as is one's capacity to work. For parenting benefits, both the presence of children and the age of the youngest child are important drivers of cost, in terms of eligibility and expected duration of payments respectively. Furthermore, someone's partnering status and history are also key for parenting benefits, as those who are single receive a higher rate of payment. For Disability benefits, clearly the presence of certain medical conditions and/or disability status are part of eligibility criteria, and are therefore important drivers of cost as well. The SEIFA status, acting as a proxy variable for underlying levels of financial means (assets and/or income), underlies the eligibility across many welfare categories.
- 3.4.3 A further key driver of Lifetime Cost relates to those characteristics associated with higher future welfare utilisation, or entitlement amounts, or both. These drivers are influential not because of eligibility criteria *per se*, but because of individual characteristics that are shown to be correlated with higher overall payments.
- 3.4.4 For various working age benefits, gender and age are important, with gender in particular a significant factor for future family and parenting payments as females are generally expected to have a higher Lifetime Cost. Age is influential for future costs of carer payments, for two main reasons – [1] once younger carers start caring, they may be doing so for a while and have a longer expected future lifetime during which they can receive payment, and [2] carers who are parents looking after a child also face long durations of care. For disability benefits, age turns out to be influential in association with the type of condition involved. For example, those with congenital conditions typically receive welfare support from a young age and can have long durations of such support, whereas those acquiring a disability at an older age may have a far shorter duration of welfare support. Parental welfare dependence is also a likely driver of Lifetime Cost for an individual, though the assessment of this factor is currently limited as parental welfare information is only available for a subset of the population.
- 3.4.5 Age significantly impacts the present value calculation. For example, those who are close to retirement age will (on average) have a higher Lifetime Cost from

the Age Pension (in present value terms) than someone who is not. Gender also has specific significance for the Age Pension. The lower superannuation and financial assets of females, and their greater longevity, means their average Lifetime Cost from accessing the Age Pension will be greater than that for males.

- 3.4.6 Because of the overall influence of age and gender, a specific additional age/gender analysis is provided in the next section.

3.5 Analysis by age and gender

- 3.5.1 Figure 29 show a breakdown of the Lifetime Cost by age (as at 30 June 2020) and gender. For illustration, Figure 28 presents results up to age 90.

Figure 28: Total Lifetime Cost by Age and Gender

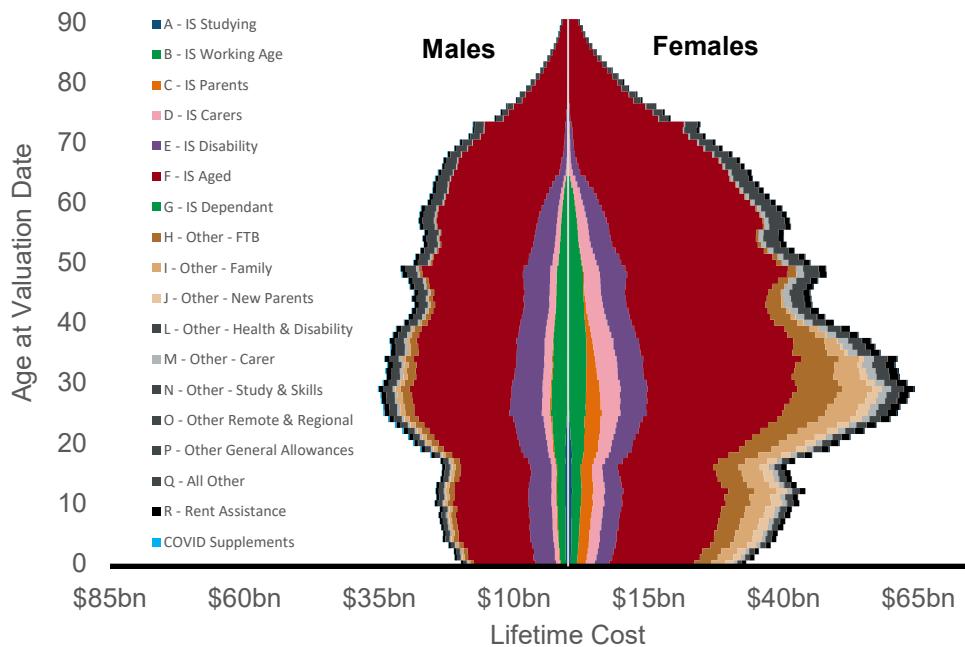
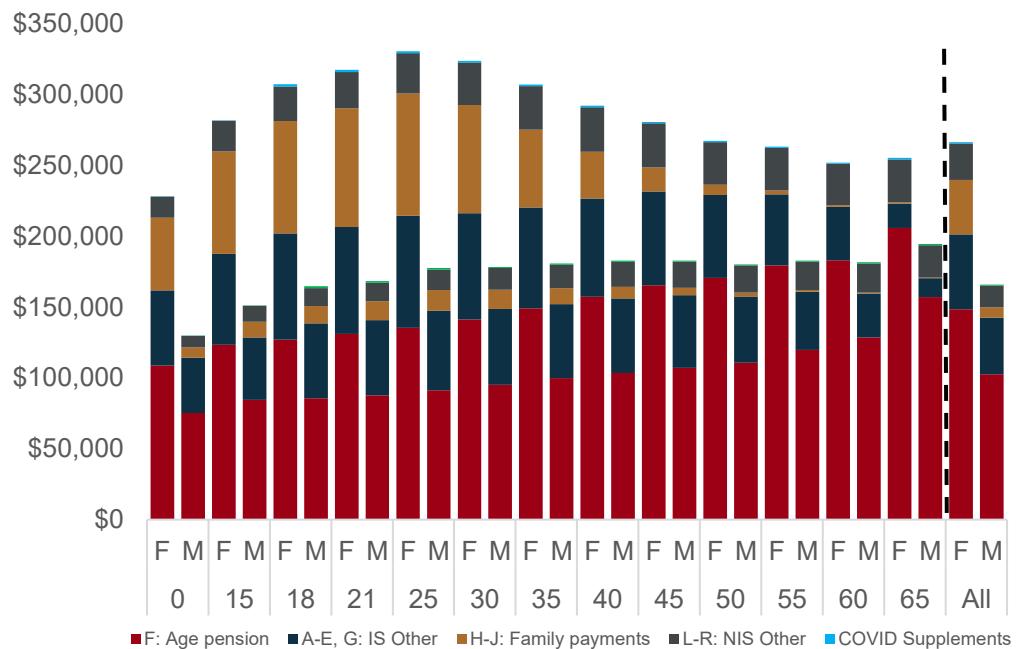


Figure 29: Average Lifetime Cost by Gender and selected ages



3.5.2 The total Lifetime Cost for females is higher than that for males, primarily owing to a higher usage of parenting payments, and non-income support family payments. It is also due to the higher expected longevity of females compared to males, which gives a larger present value of Age Pension payments.

3.5.3 The Lifetime Cost in respect of the Age Pension is lower for younger people than for those who are older, mainly because their receipt of payments is further into the future, thereby discounting those payments more heavily to the valuation date of 30 June 2020. However, across all ages and both genders the dominant contribution of the Age Pension to the Lifetime Cost is again evident. This is due to: [1] the large number of people currently receiving the Age Pension; [2] the large number of people that will receive the Age Pension in the future; [3] the average annual payment being received under the Age Pension being higher than most other classes; and [4] once an individual starts receiving the Age Pension, they are likely to continue to receive the Age Pension for the remainder of their life. In other words, there is a long duration of receiving payments under the Age Pension payment category.

3.6 Differences in duration of payments

3.6.1 The influence of duration of payments also applies to other payment categories. For example, those currently on income support are expected to spend a greater proportion of their future lifetimes receiving income support than those not

currently on income support. This is particularly the case for recipients of Carer Payment and Disability Support Pension. A further example is those on JobSeeker Payment, where there is a correlation between past duration and future duration of receiving this assistance – that is, those remaining on JobSeeker Payment for some time are more likely than others to be receiving JobSeeker Payment in the future.

- 3.6.2 Table 9 below provides a summary of average duration of payments, by payment category, using two measures, [1] continuous use for someone who has just entered that payment category, and [2] overall future use of that payment category per recipient. For example, consider someone who enters payment category D and stays for 3 years, then exits, and re-enters payment category D later on and stays for 2 years. Under [1], there are two separate periods of welfare utilisation with an average duration of 2.5 years. Under [2], there is a total future utilisation of 5 years for that person who has entered payment category D. Only individuals aged under 15 years are included in the calculations for this table, as this cohort is a relatively homogenous age group and are unlikely to have used welfare. Using only people who have not received welfare, and who are of a similar age, removes the impact and potential bias of age and previous/current welfare utilisation on future utilisation

Table 9: Duration of Payments for Each Welfare Payment Category

Payment Category	Average Years of use per New Entrant	Average Years of use per Recipient	Percentage of Population who will Utilise this Category
A - IS Studying	2.7	3.2	31%
B - IS Working Age	3.5	5.9	43%
C - IS Parents	5.1	6.5	12%
D - IS Carers	8.7	10.0	10%
E - IS Disability	22.3	23.1	9%
F - IS Aged	17.3	18.7	70%
G - IS Dependent	Payment closed to new entrants		
H - Other - FTB	5.3	8.5	45%
I - Other - Family	5.7	8.1	41%
J - Other - New Parents	1.5	2.7	51%
L - Other - Health & Disability	4.8	5.2	6%
M - Other - Carer	9.7	11.2	23%
N - Other - Study & Skills	2.2	3.0	22%
O - Other Remote & Regional	6.3	7.2	5%

Payment Category	Average Years of use per New Entrant	Average Years of use per Recipient	Percentage of Population who will Utilise this Category
P - Other General Allowances	12.2	24.0	86%
Q - All Other	1.1	1.5	28%
R - Rent Assistance	6.0	10.6	54%

- 3.6.3 Average years of use per new entrant is a measure of the number of consecutive years people receive a payment. Some payment categories have significantly longer continuous durations, most notably Disability Support Pension and Age Pension. Once people start accessing these payments, they are unlikely to stop for reasons other than death or to transfer from Disability Support Pension onto the Age Pension. Carer payments (D and M) also have a slightly longer continuous duration, with duration driven by the needs and lifetime of the caree.
- 3.6.4 Average years of use per recipient is a measure of the future use of a payment for those who will receive it at some point. The difference between ‘average years of use per new entrant’ and ‘average years of use per recipient’ therefore highlights payment categories that people are more likely to access multiple times in their life. One example is JobSeeker Payment (B) where people may be in and out of work, or may access it when they are first looking for work and then again in the years before retirement. Another example is family payments, predominantly H and I, where people can access payments multiple times with additional children.
- 3.6.5 In terms of assessing the future use of payments for the average Australian, the final column gives an indication of this and therefore infers the proportion of the population who will not access that payment category at all. This measure highlights payments that are used more broadly across the population, with Age Pension, non-income support family payments (H, I, and J), and Working Age payments being the primary examples. Note that people on Working Age payments include those looking for work in the years immediately prior to retirement age.

3.7 Analysis of change from 2019 to 2020

- 3.7.1 Compared to the 30 June 2019 rebased valuation of \$5,701 billion, the 30 June 2020 valuation of \$5,597 billion represents a 1.8% decrease in the Lifetime Cost.
- 3.7.2 Despite the decrease in Lifetime Cost, projected future welfare utilisation has increased slightly, with the average future years in receipt of welfare increasing from 19.7 years for the 2019 valuation to 19.8 years for the 2020 valuation. This

utilisation measure counts the average number of years in which someone in the model population will access welfare over the remainder of their lifetime.

3.7.3 Changes in the valuation will occur over time, as measured at each year's valuation date, for a number of reasons. These reasons include:

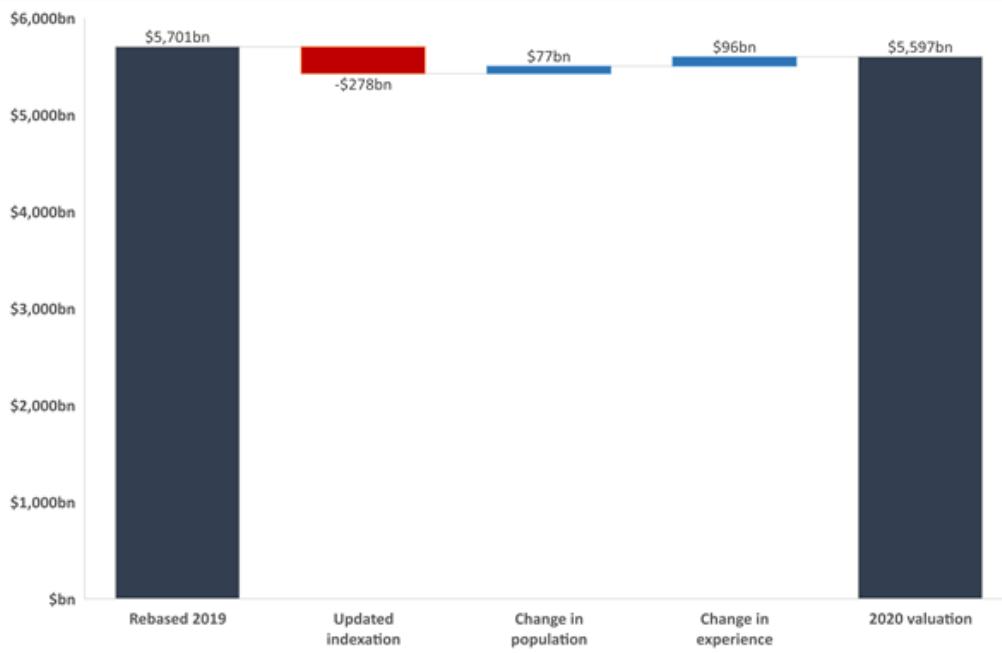
- changes to the size and composition of the population through, for example, births, deaths, and migration since the last valuation; and the ageing of the remaining population by one year in the interim;
- the impact of general economic conditions, such as unemployment and inflation;
- inflationary increases on the rates of payment;
- changes to welfare payments arising from policy changes, and from the changing profile of those receiving payments;
- changes to both the current and expected future utilisation of each part of the welfare system; and
- external changes, such as the change in the discount rate.

3.7.4 In order to understand the overall change in the Lifetime Cost, we now present an analysis of change in the valuation over the last year. This analysis groups together factors that have contributed to this change, and examines the changes occurring within each payment category.

3.7.5 This analysis is sensitive to the order in which the changes are made. For instance, the impact of updating assumptions regarding movements between modelled welfare classes 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 welfare class assumptions are updated.

3.7.6 A visual representation of the analysis of change is shown in Figure 30.

Figure 30: Explanation of change in Lifetime Cost (relative to June 2019-rebased)



Movement due to updated indexation

- 3.7.7 As a result of updated indexation, the valuation result has decreased by \$278 billion (4.9%). The primary driver of this change is lower projected growth in AWE over the short-term. Age Pension payments are most impacted by this change.
- 3.7.8 Indexation updates due to changes in the short-term projections for CPI do not have a significant impact on the valuation. The discount rate in the 2020 valuation is equal to 2.5 percentage points plus the projected growth in CPI for that year. As a result, for payments indexed relative to CPI, changes in indexation are largely offset by changes in the discount rate.

Movement due to population changes

- 3.7.9 Each year, we expect the total Lifetime Cost to change in line with movements in the population. At the June 2020 valuation, the overall Lifetime Cost increased by \$77 billion (1.3% of the 30 June 2019 rebased valuation) due to the change in the model population. Compared to the 1.5% growth in the model population over the 2019-20 financial year, the lower growth rate of 1.3% in Lifetime Cost is the result of the offsetting movement due to the updated indexation explained above, and a slightly older population.

Movement due to 2019-20 experience and policy changes

- 3.7.10 Movement due to 2019-20 experience and policy changes increased the valuation by \$96 billion (1.7%), relative to the rebased 30 June 2019 result.
- 3.7.11 This increase was driven by the economic impacts of COVID-19 and the Government's response to them. A major component of the COVID-19 impact is the increase in the proportion of the population on welfare at the valuation date, which now represents 32.3% of the population (up from 29.7% at June 2019). Most of this increase occurred in Class 2 (Working Age), and it is the increased Working Age payments as well as the resultant increased Age Pension usage of this cohort that has helped drive the increase in Lifetime Cost.
- 3.7.12 The unemployment rate forecast in Budget 2021-22 also contributed to the higher Lifetime Cost as the unemployment rate forecast impacts the rate at which people enter and exit welfare.
- 3.7.13 The largest decrease in forecasted welfare usage is in non-IS family payments, where the forecasted short-term drop in fertility is expected to result in lower payments, particularly for child care subsidy.
- 3.7.14 Changes to the welfare system also directly influence the utilisation and entitlement amounts within each welfare class and payment category. In particular, the Coronavirus Supplement and Economic Support Payments occurring in the 2020-21 financial year are expected to contribute \$20 billion to the Lifetime Cost. Also, the number of welfare recipients in the model population for the 2020 valuation is higher because of periods of relaxed eligibility criteria that included the valuation date.

Total movement by payment category

- 3.7.15 Movements in the Lifetime Cost arising from all changes described above do not impact every welfare class or payment category in the same way. For instance, certain assumption changes will only affect particular classes, population growth may differ by class, and the observed trends in welfare utilisation and behaviour will also differ by class. These changes are better examined by considering category-specific impacts of emerging experience observed over the year, together with changes about assumptions in the future, which are themselves reflective of this experience.
- 3.7.16 For each payment category, the change in Lifetime Cost is considered in respect of changes in experience and future assumptions, regarding entries, exits, and average payment amounts. An analysis of change is shown in Table 10.

Table 10: Change in Lifetime Cost by payment category

Payment Category	Lifetime Cost \$m for Year End:		Change in Lifetime Cost	
	30 June 2020	30 June 2019 (rebased)	\$m	%
A - IS Studying	31,034	29,914	1,119	3.7%
B - IS Working Age	268,615	247,826	20,789	8.4%
C - IS Parents	96,778	96,406	373	0.4%
D - IS Carers	243,983	249,530	-5,547	-2.2%
E - IS Disability	560,442	585,491	-25,049	-4.3%
F - IS Aged	3,251,290	3,369,141	-117,852	-3.5%
G - IS Dependent	100	202	-101	-50.3%
H - Other - FTB	320,935	308,892	12,043	3.9%
I - Other - Family	196,182	217,343	-21,161	-9.7%
J - Other - New Parents	72,182	72,483	-300	-0.4%
L - Other - Health & Disability	2,961	3,018	-57	-1.9%
M - Other - Carer	101,228	100,256	972	1.0%
N - Other - Study & Skills	3,130	3,080	50	1.6%
O - Other Remote & Regional	1,422	1,428	-6	-0.4%
P - Other General Allowances	285,474	279,454	6,020	2.2%
Q - All Other	7,169	7,008	162	2.3%
R - Rent Assistance	134,471	129,942	4,529	3.5%
COVID supplements	19,631	0	19,631	NA
Total	5,597,027	5,701,413	-104,386	-1.8%

3.7.17 The major contributor to the overall decrease in Lifetime Cost is the Age Pension, with \$118 billion of the total decrease. This is primarily attributed to the lower AWE forecast, which reduces the Age Pension indexation. This is partially offset by the increase in Age Pension Lifetime Cost from the change in population, and the flow-on impact from the COVID-19 change in experience.

- 3.7.18 Carer Payment and Disability Support Pension also contributed to the decrease, due to the lower AWE forecast.
- 3.7.19 The Working Age payment together with the COVID supplements made the largest positive contribution to Lifetime Cost due to the COVID-19 impact on experience.
- 3.7.20 Overall, there has been a slight decrease in the Lifetime Cost for non-income support family, in aggregate across payment categories H, I and J. The reduction in the short-term fertility rate forecast due to COVID-19 is expected to reduce these payments. Also, policy introduced in 2018-19 to replace Child Care Benefit (CCB) and Child Care Rebate (CCR) with Child Care Subsidy (CCS) has impacted payment category I.
- 3.7.21 The other significant movements were in payment categories P and R. These payments are predominantly supplementary payments for people on income support payments. The increase in the number of people projected to access income support has thus had a flow-on impact to these payment categories.

3.8 Sensitivity analysis

- 3.8.1 Clearly, many factors may influence future welfare utilisation and the Lifetime Cost. These include changes on the demand side of welfare, with changes in patterns of life and work; changes in the composition of households; and changes in the mix of industries and work opportunities. On the supply side, impacts of trends in population health and healthcare are important, as are changes in the availability and usefulness of informal support provided between members of families and other social groups. Furthermore, the long-term nature of cashflows underlying the Lifetime Cost means the Lifetime Cost is sensitive to key assumptions.
- 3.8.2 We vary key assumptions relating to mortality, economic factors and welfare utilisation in order to indicate the sensitivity of the Lifetime Cost to changes in these assumptions. This highlights that the central estimate of the Lifetime Cost is subject to uncertainty, and some contributors to that uncertainty are broadly quantified in the following analysis. The likelihood of each variation is not assessed.
- 3.8.3 One key demographic assumption relates to future rates of improvement in mortality. With the Age Pension typically having a long duration of payments in respect of an individual recipient, changes to how mortality may change in the future can have a significant impact on how long they receive Age Pension payments. Hence, some variation in this future improvement is considered.

- 3.8.4 Other key assumptions relate to the broader economic environment. The Lifetime Cost is based on this remaining relatively consistent over time, particularly with respect to inflation and unemployment. However, many welfare payments are not received until many years into the future – for example, the Age Pension for those who are currently young. This means small changes in indexation rates can have a large impact on the Lifetime Cost. Rates of unemployment also influence the future utilisation of welfare, thereby the Lifetime Cost as well. The overall Lifetime Cost is also sensitive to the interest rate used to discount future cashflows. As a consequence, variations in these assumptions are considered as well.
- 3.8.5 Any projection of future welfare utilisation is sensitive to a range of factors and, therefore, the projected entry rates and exit rates under each modelled class are sensitive to variations in these assumptions. One such factor relates to legislated policy, for which current policy is assumed to remain in perpetuity, despite the fact that policies relating to the welfare system change frequently. Furthermore, some policy settings, already adopted and included in the valuation, are recent changes which are not yet fully reflected in the observed experience. These considerations mean that the assumptions are inherently uncertain and the actual future experience may differ from that modelled.
- 3.8.6 As well as uncertainties arising from policy assumptions, the behaviour and response of current and future welfare recipients may also change over time – to either policy, and/or economic changes. In addition, changes over time in key individual characteristics do occur, for example educational attainment, SEIFA status, capacity to work, partnering status, and number and ages of children.
- 3.8.7 Importantly, the Lifetime Cost assessment for the non-welfare population may be even more uncertain than the Lifetime Cost for people currently and recently in receipt of welfare. This is because less is known about the characteristics of those not within the DSS data, and because their projected future welfare utilisation is further into the future than for current welfare recipients. Hence, variations in the entry and exit assumptions from welfare to non-welfare, and non-welfare to welfare, are considered as part of the sensitivity analysis.

Sensitivity results

- 3.8.8 The sensitivity of the Lifetime Cost to key assumptions is provided in Table 11. Economic sensitivities are additional changes relative to valuation assumptions (that is, an additive change [$\pm \%$]), and mortality and welfare utilisation sensitivity are proportional change relative to valuation assumptions (that is, a multiplicative change [$\times \{100\% \pm \text{change}\%\}$]).

Table 11: Sensitivity of Lifetime Cost to Changes in Assumptions

Sensitivity Test	Change (%) in future Lifetime Cost in payment categories:					Total change in Lifetime Cost*		
	Income support		Non-income support			\$billion	%	
	F: Age Pension	A-E,G: Other	H-J: Family	L-R: Other				
Mortality	Future improvements: +10%	1.3%	0.7%	0.0%	0.7%	56	1.0%	
	Future improvements: -10%	-1.3%	-0.3%	0.0%	-0.5%	-49	-0.9%	
Economic	Discount rate	+1%	-29.5%	-18.7%	-13.3%	-20.2%	-1,370	-24.5%
		-1%	49.7%	27.0%	16.9%	30.2%	2,202	39.4%
	CPI	+1%	1.8%	6.7%	14.7%	27.7%	375	6.7%
		-1%	-0.1%	-3.8%	-11.8%	-18.6%	-219	-3.9%
	MTAWE	+1%	48.9%	21.7%	1.5%	0.0%	1,861	33.3%
		-1%	-28.1%	-13.3%	-1.2%	0.0%	-1,080	-19.3%
	Long term unemployment rate	+2%	4.5%	26.7%	-5.0%	9.3%	486	8.7%
		+1%	2.3%	12.4%	-2.9%	4.5%	231	4.1%
		-1%	-2.4%	-9.9%	3.6%	-3.7%	-195	-3.5%
	Overall entry rates into welfare from non-welfare: +10%	4.2%	4.4%	4.1%	3.9%	235	4.2%	
Welfare Utilisation	Overall entry rates into welfare from non-welfare: -10%	-4.8%	-4.0%	-4.2%	-4.1%	-252	-4.5%	
	Overall exit rates from welfare to non-welfare: +10%	-0.5%	-2.5%	-2.1%	-1.3%	-67	-1.2%	
	Overall exit rates from welfare to non-welfare: -10%	0.5%	3.4%	2.5%	1.7%	81	1.5%	

* Includes COVID supplements.

- 3.8.9 Changes in mortality improvements primarily impact the Age Pension and disability payments. The greater the future improvement in mortality, then the higher the life expectancy in the future, and longer duration of payments that results. The 10% proportionate movements in future mortality improvements have an impact of approximately 1% on the Lifetime Cost.
- 3.8.10 The discounting assumptions have a large impact on the Lifetime Cost results. Many of the payments, particularly the Age Pension, 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 discount rates can have a large impact on the Lifetime Cost. Note that the change in discount rate has no impact on future cashflows; it only impacts the net present value of these cashflows and, therefore, the estimated Lifetime Cost.

- 3.8.11 Indexation and discount rates both impact on the Lifetime Cost. The impact to the Lifetime Cost is greatest for changes to the discount rate (holding indexation unchanged) as this impacts all future payments over all timeframes. Changes to AWE have a greater impact than changes in the CPI (holding discount rate unchanged), as the payments that occur later in people's lives benefit from AWE benchmarking⁶, and have a longer average duration on payment.
- 3.8.12 The AWE assumptions directly impact the size of payments made, which for the Age Pension, and Disability Support Pension, have the most significant effect on the Lifetime Cost. To highlight the impact of increasing the AWE assumption, for example the 4% valuation assumption is increased to 5%, this represents a 25% proportional increase.
- 3.8.13 The CPI assumptions directly impact the size of some income support and non-income support payments. These payment categories have smaller future Lifetime Costs than Age Pension and Disability Support Pension and hence changes made to them have a smaller impact on total Lifetime Cost.
- 3.8.14 Changes in the unemployment rate affect the number of people both entering and exiting welfare. JobSeeker Payment is the main payment category directly impacted, but there are also impacts to other payments, such as non-IS family payments. Some of the impacts are downstream; for example, a rising unemployment rate may lead to more people entering JobSeeker Payment, which will then increase their propensity for future Disability Support Pension and Age Pension usage.
- 3.8.15 Adjusting entry and exit rates impacts all payment categories, as would be expected, as this directly changes the number of people in welfare. The Lifetime Cost is far more sensitive to changes in entry rates from non-welfare into welfare, than changes to exit rates from welfare to non-welfare. Three drivers of this effect are [1] the larger relative size of the non-welfare population means that small changes result in large movements of people, [2] someone who exits from welfare is more likely to re-enter welfare than someone who has never previously been in welfare, and [3] the difference in entry and exit rates are impacted differently by a proportionate sensitivity adjustment. As an increase in new entrants brings someone into welfare who was not previously in the system,

6 Most pensions are indexed by the greater of CPI or the PBLCI. The amount is then benchmarked against a percentage of MTAWE, which ensures pensioners maintain a certain standard of living, relative to the rest of the population. MTAWE growth rate is generally higher than CPI and PBLCI.

this increases both the immediate cost and the associated costs of greater connection with the welfare system in the longer term. Those leaving welfare are likely to have a continuing connection with welfare at some stage, so the proportionate increase in Lifetime Cost is less with lower exits, than it is with higher entries. Changes to entry rate has a disproportionately larger impact on Age Pension Lifetime Cost than the same proportional change to exit rate, because exit rate from Age Pension is much lower than entry into Age Pension.

Scenario analysis

- 3.8.16 The sensitivity analysis considers each area of uncertainty independently from another. In reality, there is dependence between one item of experience changing, and another. For example, the sensitivity analysis looks at an unemployment increase of 1% in isolation and does not consider any related changes in AWE that may happen. It is likely that an economic shock would not only have an immediate impact on unemployment, but subsequent government responses would impact inflation, welfare policy would likely change, individuals would change their circumstances and plans to adjust, and so on. In an extreme economic shock, aggregate mortality could also be impacted.
- 3.8.17 The recent COVID-19 pandemic highlights the above point. It has had a widespread and significant impact on a range of welfare policies, payments and services, and adversely impacted the result of the previous valuation. Those adverse impacts included the direct costs of short-term support provided, the impact of unemployment, the time taken for employment to recover, and longer-term impacts on retirement savings that will likely eventuate due to periods of lower contributions.
- 3.8.18 The 2020 valuation uses the economic forecast from the 2021-22 Budget, published in May 2021. The economic outlook at this time significantly improved compared to forecasts in the 2020-21 Budget, published in October 2020. In particular, the pace of recovery in the labour market was forecast to be much faster and the projected long-term unemployment rate was lower. It is informative to evaluate the Lifetime Cost, where instead the economic forecasts from the 2020-21 Budget had eventuated. This scenario results in a Lifetime Cost of \$5,839 billion that is \$242 billion (4.3%) higher compared to the 2020 valuation, with the future years in welfare also higher at 20.1 years. Most of the increase is attributed to the working age payments, and the subsequent flow-on impact to the Disability Support Pension and Age Pension.

APPENDIX A: GLOSSARY

Actuarial valuation

Estimation of the Lifetime Cost of future social security payments to the Australian Government 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 DSS 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.

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.

AWE

Average Weekly Earnings.

COVID-19

2019 novel coronavirus.

CPI

Consumer Price Index.

Data

Data refers to sets of information that are being used to inform the project.

Datasets

A set of values of qualitative (characteristics) or quantitative (numbers) variables that is data coded in a form suitable for using in analysis.

Data maturity

The model data is built by attributing payment information into the year in which a welfare recipient was entitled to a payment (which may differ in some cases from the year when the payment was actually received). The data includes all information known and recorded up to 3 months after the valuation date, i.e. 30 September, which is also the 'as known at' date for the data. In some cases, further information about a previous entitlement year will only be known at a later date, and the currently known data is said

to be immature in these cases. The main maturity issues noted in the valuation relate to the latest entitlement year and a key example is FTB. Families can choose to receive their FTB either as payments throughout the year or as a lump sum at the end of the year. Either way, the entitlement amount is finalised after the end of the financial year. The model makes various adjustments to allow for the impact of data maturity.

Demographic module

A collection of programs and processes for simulating synthetic life paths and reproduce population dynamics.

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).

Estimated resident population

The official measure of the population of Australia, and is based on the concept of usual residence. It refers to all people, regardless of nationality, citizenship or legal status, who usually live in Australia, with the exception of foreign diplomatic personnel and their families.

Flow assumptions

This comprises the set of assumptions used to ascertain how each person's individual demographic and risk characteristics change as time progresses.

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 2019/20" or could be "male carers". Generally, groups will be defined by the model structure and individuals' characteristics.

Income support payments

Income support payments provide for the basic living costs of adults, and are paid on a fortnightly basis. Income support payments are the primary form of financial assistance for individuals who are unable, or not expected, to fully support themselves. Examples include Age Pension, JobSeeker Payment (formerly Newstart Allowance), Disability Support Pension, Carer Payment and Parenting Payment. Other supplementary payments are also available to assist people with other specific costs. For example,

Family Tax Benefit Part A is provided for the direct costs of raising children and child care assistance is provided to assist with the costs of child care. For the purposes of this document, these payments are referred to as non-income support payments.

Indexation

Indexation is a technique to adjust payments by means of an index, in order to maintain an equivalence in values across years. For example, indexing in line with price inflation will maintain an equivalence of payments after indexation relative to purchasing power; while indexing in line with wage inflation will maintain an equivalence of payments after indexation relative to community living standards.

Job 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.

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 cashflows arising from future obligations.

Lifetime Cost

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

MTAWE

Male Total Average Weekly Earnings.

Methodology

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 built in order 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.

Model (Australian) population

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

Mutual obligation requirements

A set of activities that must be completed by an individual in order to receive JobSeeker Payment (formerly 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 value of incoming and outgoing cashflows over a period of time.

Neural Network

Neural Networks (or artificial neural networks to differentiate them from biological brains) are a machine learning algorithm originally inspired by biological brains, that can automatically identify patterns in data and then make predictions based on those patterns. From the 2019 valuation they have replaced the Generalised Linear Models (GLMs) used in previous valuations as they require less manual fitting and are more able to identify complex patterns in the data such as interactions between predictors.

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 document, we have only considered the use of income support payments (excluding the Age Pension) by a person's parents / guardians.

Payment

A generic term used to describe all the different types of benefits an individual can be paid. This includes pensions, allowances, entitlements etc.

Payment assumptions

The assumptions that 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 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 identified by codes and mapped to around 100 payment types.

Payment utilisation assumptions

The assumptions that describe the probabilities with which individuals use different payment categories.

PBLCI

Pensioner and Beneficiary Living Cost Index.

Pensions

Pensions provide income support and access to a range of concessions for eligible Australians.

Present Value

The present value is the value of an expected income stream determined as of the date of valuation. The present value is always less than or equal to the future value because money has interest-earning potential, a characteristic referred to as the time value of money.

Probability

Probability is the measure of the likelihood that an event will occur. Probability is quantified as a number between 0 and 1 (where 0 indicates impossibility and 1 indicates certainty). The higher the probability of an event, the more certain we are that the event will occur.

Projection

The use of the model to forecast the future payment experience of the population based on current statistics and trends.

Rebased valuation results

The results from the previous valuation, adjusted to allow for the updated modelling approach and use of more recent demographic data. Rebasing the previous valuation results allows an analysis between the previous and current valuation results that depends only on relevant movements in experience between the valuation dates.

Risk characteristics

Measurable or observable factors or characteristics used to assign each individual to one of the risk classes of a risk classification system. Examples of risk characteristics in the context of the actuarial valuation model include age, gender, family situation and education status.

Risk classes

A set of risks grouped together under a risk classification system.

Risk classification system

The process of systematically arranging risks into groups or categories according to similar risk characteristics.

Risk factors

See 'Risk characteristics'.

SEIFA

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

Simulation

Simulation is the imitation of the operation of a real-world process or system over time. In the context of the actuarial valuation model, we will simulate how the payment system operates. Where the system is stochastic, multiple simulations may be used to show the range of possible outcomes.

Static

A term we are using to describe information or data variables that do not change over time. For example, 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, in aggregate for the entire model population as well as population subgroups of interest.

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.

Welfare class assumptions

The assumptions that 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 module

A collection of programs and processes for simulating welfare usage.

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.

APPENDIX B: POLICY AND OPERATIONAL CHANGES

- B.1 The following table summarises the list of policy changes provided by DSS in respect of earlier years' model development. This includes policy changes that [1] took effect prior to the previous census date of 30 September 2019, [2] took effect subsequent to the previous census date of 30 September 2019 but prior to the current model's census date of 30 June 2020, and [3] will take effect beyond the current model's census date of 30 June 2020.
- B.2 Adjustments made in the previous model to account for potential impacts of policy changes given below, were reviewed and then updated if required.

Table 12: Policy changes advised prior to 30 September 2019

Amendment	Year Effective	Description
Parenting Payment transitional arrangement	2011	Changed ability to access transitional arrangements.
Social Security Amendment (Parenting Payment Transitional Arrangement) Act 2011		
Work rule for Disability Support Pension	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.
Social Security and Other Legislation Amendment (Disability Support Pension Participation Reforms) Act 2012		
Changes to the eligibility criteria for Youth Allowance (Other) and Newstart Allowance	2012	The maximum age for Youth Allowance for non-students and the minimum qualification age for Newstart Allowance increased from 21 to 22 years.
Social Security and Other Legislation Amendment (Income Support and Other Measures) Act 2012		The income free area value was increased from \$62 per fortnight to \$143 per 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	2012-2013	From 1 July 2013, the normal payment indexing arrangements and the Clean Energy Supplement

Amendment	Year Effective	Description
Clean Energy (Household Assistance Amendments) Act 2011		(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	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.
Family Assistance and Other Legislation Amendment Act 2011		
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	2013	Grandfathering provisions for some Parenting Payment recipients were removed.
Social Security Legislation Amendment (Fair Incentives to Work) Act 2012		For certain Newstart Allowance recipients, there were changes to the eligibility for certain supplements and allowances and to income taper rates.
New Income Support Bonus	2013	The Act created 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, and Transitional Farm Family Payment.
Social Security and Other Legislation Amendment (Income Support Bonus) Act 2013		
Austudy	2013	The maximum length of temporary absence was reduced.
Age / study rules for children for family assistance payments	2013	The maximum age of eligibility for FTB Part A was 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.
Social Security and Other Legislation Amendment (2012 Budget and Other Measures) Act 2012		
Child Care Rebate	2013	The government changed the eligibility criteria for the Jobs, Education and Training Child Care Fee Assistance (JETCCFA) program.

Amendment	Year Effective	Description
		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, were subject to review of their impairment (using the revised Impairment Tables) and capacity to work. People with a severe or manifest disability were not reassessed. People who have some capacity to work now or in the future will be helped to do this through programs, services and activities. Under this reform, recipients under 35 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 introduced 15 measures 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 ceased being paid beyond the June 2014 quarterly payment. From this date CSHC holders continued 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 ceased on 30 June 2014. Under this measure, the pause in

Amendment	Year Effective	Description
		<p>indexation continued for the 2014-15, 2015-16 and 2016-17 financial years.</p> <p>For the income years 2014-15, 2015-16, 2016-17, CCR entitlement was 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 occurred on 1 July 2017.</p>
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	<p>From 20 March 2014, the income free area that applied for certain payments was increased.</p> <p>From 1 January 2014, eligibility for the Pensioner Education Supplement (PES) was extended.</p>
Austudy	2015	The residence requirements changed for Austudy in January 2015 and temporary absence is no longer included.
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	Removed 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 introduced 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	Reduced 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	Ceased the Large Family Supplement, which was a component of FTB Part A 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) no longer eligible for 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.

Amendment	Year Effective	Description
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 was paid in July 2016. The Income Support Bonus continued 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 was rebalanced. The assets test free areas were increased to: <ul style="list-style-type: none">• \$250,000 for a single homeowner (an increase of \$48,000)• \$375,000 for a homeowner couple (an increase of \$88,500)• \$450,000 for a single non-homeowner (an increase of \$101,500)• \$575,000 for a non-homeowner couple (an increase of \$142,000). The assets test “taper” (or withdrawal) rate for assets above the new free areas were 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 ceased on 30 June 2017.
Changes to the parental means test Social Services Legislation Amendment (More Generous	2017	Treatment of Child Support maintenance income was further reformed by applying a separate Maintenance Income Test, reducing payments for around 850

Amendment	Year Effective	Description
Means Testing For Youth Payments) Act 2015		young people aged under 18. This test is similar to the one currently applying to Family Tax Benefit Part A.
Closing Carbon Tax Compensation Budget Savings (Omnibus) Act 2016	2017	New recipients of FTB or Seniors Health Cards were no longer 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 stopped receiving it from 20 March 2017 onwards.
Backdating provisions for Carer Allowance Budget Savings (Omnibus) Act 2016	2017	Changes to 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	Removed 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 aligned 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 changed 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 January 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

Amendment	Year Effective	Description
		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 were maintained for a further three years. This was to prevent indexation of income limits for FTB Part A, FTB Part B and Paid Parental Leave for the three years including 2017, 2018 and 2019. It was anticipated that there would be around 100,000 affected recipients.
General interest charge to debts Budget Savings (Omnibus) Act 2016	2017	Introduced 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 applies 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. It 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	Introduced 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

Amendment	Year Effective	Description
		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 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 became eligible for an average increase in payment of \$43 per fortnight (\$1,118 per annum). Around 5,800 families, who missed out on payments due to the higher taper rates, became eligible for an average payment of around \$50 per fortnight (\$1,300 per annum).
Qualifying age for the Age Pension Social Security and Other Legislation Amendment (Pension Reform and Other 2009 Budget Measures)	2017	The Age Pension age was 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	2017	Introduced 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	2017	From 1 July 2017, the single income family supplement is not paid to new recipients. Existing recipients continued to receive the supplement if they remained eligible.
Family Tax Benefit - Maintain child rates for 2 years Social Services Legislation Amendment Act 2017	2017	Maintained 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.
Amendments to Disability Services Act Disability Services Amendment (Linking Upper Age Limits for	2017	Allowed 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

Amendment	Year Effective	Description
Disability Employment Services to Pension Age) Act 2017		removed the reference to '65 years' and replaced it with the term 'pension age'.
Seasonal horticultural work income exemption	2017	This measure provided 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 was trialled for 2 years, commencing 1 July 2017.
Social Services Legislation Amendment (Seasonal Worker Incentives for Jobseekers) Act 2017		
Remove grandfathering for Student Start-Up Scholarships Budget Savings (Omnibus) Act 2016	2018	This bill closed 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	2018	Maintains at level for three years the income free areas for all working age allowances (other than student payments) and for Parenting Payment Single.
Social Services Legislation Amendment Act 2017		
Indexation maintain at level for three years the income free areas for student payments	2018	Maintains at level for three years the income free areas and other means test thresholds for student payments, including the student income bank limits.
Social Services Legislation Amendment Act 2017		
Ordinary Waiting period - Working Age Payments (excluding Widows Allowance)	2018	Created 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).
Social Services Legislation Amendment Act 2017		
Reduce the qualification period for Youth Allowance / Independent test for Youth Allowance and scholarship payments for students	2018	Students who qualify under this provision are 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.
Social Services Legislation Amendment (Simplifying Student Payments) Act 2017		
Align means test with other payments / Means testing for social security benefits	2018	Simplification of means testing for student payments.

Amendment	Year Effective	Description
Social Services Legislation Amendment (Simplifying Student Payments) Act 2017		
Automatically updating geographical classifications / Remoteness structure	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 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.
Reinstate Pensioner Concession Cards to former recipients Social Services Legislation Amendment (Energy Assistance Payment & Pensioner Concession Card) Act 2017	2018	This provided 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 2015.
Queensland Commission Income Management Regime - Cape York Social Services Legislation Amendment (Queensland Commission Income Management Regime) Act 2017	2018	This enabled 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 was a key element of the reforms and assisted in stabilising people's circumstances and fostering behavioural change, particularly in the areas of school attendance, parental responsibility and increasing individual responsibility.
Cessation of Widow Allowance Social Services Legislation Amendment (Welfare Reform) Act 2017	2018	Widow Allowance closed to new entrants from 12 April 2018 and will cease entirely from 1 January 2022.
Start day for some participation payments Social Services Legislation Amendment (Welfare Reform) Act 2017	2018	Changed the date at which payments commence for people transferring to Newstart Allowance and Youth Allowance recipients.

Amendment	Year Effective	Description
Changes to reasonable excuses Social Services Legislation Amendment (Welfare Reform) Act 2017	2018	This amended the Social Security Administration Act to provide a new power to make a legislative instrument setting out matters that must not be taken into account when deciding whether a person has a reasonable excuse for committing a 'no show no pay' failure, a connection failure, a reconnection failure, a serious failure, or a non-attendance failure.
Better Alignment of Student Payments Student Assistance (Education Institutions and Courses) Amendment Determination 2017	2018	From 1 January 2018, approval of tertiary courses for student payments changed. Approved courses have been restricted to VET courses (at diploma level and above) and education providers approved for VET Student Loans and higher education courses offered by providers approved for the Higher Education Loan Program. These changes affect Youth Allowance (Student), Austudy, ABSTUDY and the Pensioner Education Supplement. Existing student payment recipients were grandfathered for the duration of their current course.
Remove the exemptions for Parents in Employment Nil Rate Periods Budget Savings (Omnibus) Act 2016	2018	From 1 July 2018, people are no longer exempt from income testing arrangements and their actual income will be taken into account for the purpose of calculating family and student payments.
Targeted compliance framework	2018	From 1 July 2018, a two-phase compliance framework was introduced to apply strong penalties to job seekers who persistently and deliberately do not comply with their employment pathway plan (EPP) requirements. Explicit adjustments for this framework were removed for the 2019 valuation, with the experience seen in the data sufficient for incorporating the outcomes of this framework into the models.
Introduction of a family income test for Carer Allowance	2018	Introduction of a non-indexed family income test for Carer Allowance with a threshold of \$250,000. Savings realised were invested in a support package for carers, which was introduced progressively from 20 September 2018.
Introduction of Child Care Subsidy (CCS) and Additional Child Care Subsidy (ACCS), and cessation of	2019	The CCS replaced the child care payments including CCB and CCR. ACCS provides improved and targeted support to those families who require it most, such as: families with children at risk of serious abuse

Amendment	Year Effective	Description
Child Care Benefit (CCB) and Child Care Rebate (CCR). Family Assistance Legislation Amendment (Jobs for Families Child Care Package) Act 2017		or neglect; families experiencing temporary financial hardship; families on income support transitioning to work; and grandparent carers on income support.
Changes to activity tests for persons aged 55 to 59 Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Newstart Allowance and certain Special Benefits recipients aged 55-59 are no longer be able to satisfy the activity test by engaging in voluntary work for at least 30 hours per fortnight. Recipients will be taken to satisfy the work test if they are engaged for at least 30 hours per fortnight in a combination of approved unpaid voluntary work and suitable paid work, at least 15 hours of which must be in suitable paid work.
Removal of intent to claim provisions Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Previously, claim entitlement was backdated to the date a claimant initially contacted the Department of Human Services and indicated their intention to claim. It is now the date the claim was made.
Removal of exemptions for drug or alcohol dependence Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Exemptions from the activity test and participation requirements are no longer available in relation to circumstances directly attributable to drug or alcohol misuse (including abuse of drugs or alcohol) for certain social security recipients.
Streamlining tax file number collection Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Allows for a request to provide a tax file number and/or a relevant third party's tax file number as part of a claim for a social security payment, seniors health card or income-tested health care card. Payments or the provision of the cards can be prevented until the request is satisfied.
Information management Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Information or documents obtained about a person under the coercive information gathering provisions in the course of an administrative action by the Department of Human Services can now be used in subsequent investigation and prosecution of criminal offences.
Higher Education Support Legislation Amendment (Student Loan Sustainability) Bill 2018	2019	From 2019–20, when the Higher Education Loan Program (HELP) threshold started to apply to student debts under the Social Security Act 1991 and the Student Assistance Act 1973, debts from the SFSS

Amendment	Year Effective	Description
		will be repaid after HELP debts are discharged, rather than concurrently.
Encouraging self-sufficiency for newly arrived migrants	2019	From 1 January 2019, this measure increased the newly arrived resident's waiting period (NARWP) from 104 weeks to 208 weeks for certain social security payments and concession cards (Newstart Allowance, Youth Allowance, Austudy, Sickness Allowance, Special Benefit, Mobility Allowance, Pensioner Education Supplement, Health Care Card (low income) and Commonwealth Seniors Health Card); introduced a NARWP of 208 weeks for Parenting Payment and Bereavement Allowance; introduced a NARWP of 52 weeks for Family Tax Benefit Part A and Carer Allowance; introduced a NARWP of 104 weeks for Parental Leave Pay and Dad and Partner Pay.
Social Services and Other Legislation Amendment (Promoting Sustainable Welfare) Act 2018		
More Choices for a Longer Life — finances for a longer life	2019	Amended the Social Security Act 1991 and Veterans' Entitlements Act 1986 to: establish new means test rules to accommodate the development of new innovative income streams; change the current rules for lifetime income streams; increase the Work Bonus from \$250 to \$300 per fortnight and extend its application to income earned from remunerative work that involves personal exertion, including self-employment and work undertaken by contractors or consultants; expand the Pension Loans Scheme to increase the access of certain classes of persons to the scheme; and allows the Social Security Act 1991 to make technical amendments.
Social Services and Other Legislation Amendment (Supporting Retirement Incomes) Bill 2018		
Energy Assistance Payment Social Services Legislation Amendment (Energy Assistance Payment) Bill 2019	2019	A one-off energy assistance payment to recipients of the Age Pension, Disability Support Pension, Carer Payment, Farm Household Allowance, Parenting Payment, Austudy, ABSTUDY Living Allowance, Double Orphan Pension, Newstart Allowance, Partner Allowance, Sickness Allowance, Special Benefit, Widow Allowance, Widow Pension B, Wife Pension and Youth Allowance, together with recipients of various veterans' payments, who are payable and residing in Australia on 2 April 2019.
Improved access to Youth Allowance and ABSTUDY for	2019	Increase the parental income cut-off for students accessing the regional workforce independence

Amendment	Year Effective	Description
regional students		
Social Services Legislation Amendment (Student Reform) Bill 2018		criteria from \$150,000 to \$160,000, plus \$10,000 for each additional child in the family; and amend the formula for determining the maintenance income test reducible amount; Social Security (Administration) Act 1999 to ensure the consistent application of the maintenance income test reconciliation process for Youth Allowance; and Student Assistance Act 1973 to enable the minister to determine that a course, that is no longer an eligible course, is to be treated as an eligible course for specified persons in specified circumstances.
50 Years of ABSTUDY - strengthening ABSTUDY for secondary students	2019	The maximum rate of Living Allowance for under 16 year olds living away from home is increased to align with the away from home rate for 16-21 year olds. This new higher rate replaces the Under-16 Boarding Allowance.
Social Security (Administration) Amendment (Income Management and Cashless Welfare) Bill 2019	2019	Extend the Cashless Debit Card trial in three sites, and the income management program in Cape York, to 30 June 2020.
Cashless debit card extensions Social Services Legislation Amendment (Cashless Debit Card) Bill 2017	2019	Amendments to support the extension of Cashless Debit Card arrangements in current sites, and enable the expansion of the Cashless Debit Card to further sites.
Changes to Family Tax Benefit (FTB) Part A higher income free area	2019	This measure introduces a one-off increase to FTB Part A higher income free area from \$94,316 to \$98,988, and a consistent 30 cents in the dollar income test taper for FTB Part A families with an adjusted taxable income (ATI) in excess of the higher income free area (HIFA). This measure changes the income test taper from 20% to 30% for each dollar over the HIFA amount, and subsequent 1 year indexation pause. Indexation of HIFA resumed on 1 July 2021.
Indexation pause for Family Tax Benefit Part B primary earner income limit.	2019	1 year indexation pause - indexation of FTB Part B primary earner income limit (PEIL) resumed on 1 July 2021.
Social Services and Other Legislation Amendment		

Amendment	Year Effective	Description
(Promoting Sustainable Welfare) Act 2018		
Extend existing indexation pauses for income limit on PLP and DAPP Social Services and Other Legislation Amendment	2019	1 year indexation pause - indexation of Parental Leave Pay and Dad and Partner Pay income limit resumed on 1 July 2021.
(Promoting Sustainable Welfare) Act 2018		
Reversal of Disability Support Pension (DSP) reviews	2019	This measure effectively ends the DSP 90,000 reviews measure (National Disability Insurance Scheme Savings Fund), with only some reviews going to progress.
Social Security (Deming Threshold Rates) Determination 2019	2019	Social security income test deeming rates reduced from 1.75% to 1.00% (below the threshold) and from 3.75% to 3.00% (above the threshold).
Overseas Welfare Recipients Integrity Program - Proof of Life Social Services Legislation Amendment (Overseas Welfare Recipients Integrity Program) Bill 2019	2019	This measure will require pensioners who are aged 80 years and over and residing permanently overseas to complete and return a proof of life certificate to continue receiving their pension.
Automatically issue Health Care Cards / Health care cards Social Services Legislation Amendment (Simplifying Student Payments) Act 2017	2020	All students receiving income support will be automatically issued a Health Care Card (HCC).
Creation of the JobSeeker Payment Social Services Legislation Amendment (Welfare Reform) Act 2017	2020	Seven current working age payments have been consolidated into the new JobSeeker Payment, creating a single payment for those of working age with capacity to work now or in the future. From 20 March 2020, recipients of Newstart Allowance, Sickness Allowance, Wife Pension, Bereavement Allowance and Widow B Pension were transitioned into JobSeeker Payment, Age Pension or Carer Payment depending on their circumstances. From 1 January 2022, recipients of Widow Allowance and Partner Allowance will transition to Age Pension.

Amendment	Year Effective	Description
Extend Family Assistance to ABSTUDY Secondary School Boarding Students Aged 16 and Over Family Assistance Legislation Amendment (Extend Family Assistance to ABSTUDY Secondary School Boarding Students Aged 16 and Over) Act 2019	2020	ABSTUDY recipients who need to live away from home to study will now continue to receive Family Tax Benefit until the student finishes Year 12.

- B.3 In addition to the legislative changes above, prior operational developments have also had a material impact on valuation outputs. In particular, changes relating to the medical assessment for the Disability Support Pension are as follows:
- i. Assessments were first introduced as part of the process for new DSP claims from 1 January 2015.
 - ii. A process of reviewing DSP medical assessments for current recipients under the age of 35 commenced from 1 July 2014.
- B.4 These developments have resulted in changes to the welfare population over recent years. In particular, as most of those impacted started receiving Newstart Allowance in place of Disability Support Pension, there was a reduction in the number of DSP recipients and an equivalent increase in Working Age payment recipients. However, whilst the assessments resulted in reduced numbers of DSP recipients, they did not directly impact the average payment levels for Disability Support Pension.

APPENDIX C: PAYMENT MAPPING

Table 13: Description of Payments

Income support (IS) payment category	Components
A - IS Studying	ABSTUDY - studying Austudy Youth Allowance (Student)
B - IS Working Age	ABSTUDY - working Austudy – working Newstart Allowance (closed on 20 March 2020, existing recipients transferred to JobSeeker Payment) Sickness Allowance (closed to new entrants on 20 March 2020, ceased on 20 September 2020, existing recipients transferred to JobSeeker Payment) Special Benefit Youth Allowance (Apprentice) Youth Allowance (Other)
C - IS Parents	Parenting Payment - Partnered Parenting Payment - Single
D - IS Carer	Carer Payment
E - IS Disability	Disability Support Pension
F - IS Age	Age Pension Widow B Pension (closed on 20 March 2020, existing recipients transferred to Age Pension) Wife Pension (closed on 20 March 2020, recipients living in Australia who also receive Carer Allowance transferred to Carer Payment, recipients of Age Pension age transferred to Age Pension, all other recipients living in Australia transferred to JobSeeker Payment)
G - IS Dependent	Partner Allowance (ceases on 1 January 2022 by which time the remaining recipients will transfer to Age Pension as they will be Age Pension age) Widow Allowance (closed to new entrants on 1 July 2018. New entrants under Age Pension age were required to claim Newstart Allowance (now JobSeeker Payment). Ceases on 1 January 2022 when existing recipients will transfer to Age Pension as they will be Age Pension age)

Non-income support (NIS) payment category	Components
H - Other FTB	Family Tax Benefit Part A Family Tax Benefit Part A Supplement Family Tax Benefit Part B Family Tax Benefit Part B Supplement Multiple Birth Allowance Family Tax Benefit Bereavement Payment
I - Other Family	Child Care Subsidy Additional Childcare Subsidy Double Orphan Pension Single Income Family Supplement
J - Other New Parent	Dad and Partner Pay Multiple Birth Allowance Newborn Supplement and Newborn Upfront Payment Parental Leave Pay Stillborn Baby Payment
K - Other Living	<i>(None - this category was discontinued in the 2017 valuation)</i>
L - Other Health & Disability	Mobility Allowance Essential Medical Equipment Payment Incentive Allowance (abolished when DSP was introduced. However, IA remains payable at the rate applicable at 11 November 1991 to recipients who were qualified for IA immediately before 12 November 1991, and were receiving DSP on 12 November 1991.) Youth Disability Supplement
M - Other Carer	Carer Allowance Carer Supplement Child Disability Assistance Payment
N - Other Study & Skills	Pensioner Education Supplement Fares Allowance Relocation Scholarships Education Entry Payment Language Literacy & Numeracy Supplement School Fees Allowance

	School Term Allowance
	Student Start-up Loan
	Work for the Dole
	Approved Program of Work Supplement
	Energy Supplement for ABSTUDY Masters and Doctorate Living Allowance
O - Other Remote & Regional	Assistance for Isolated Children
	Remote Area Allowance
P - Other General Allowances (for general pension supplements)	Work Bonus
	Pension Supplement
	Pension Bonus Scheme (closed to new entrants)
	Pension Bonus Bereavement Payment
	Pension Loans Scheme
	Energy Supplement
	Living Allowances
	Pharmaceutical Allowance
	Residential Costs
	Telephone Allowance
	Utilities Allowance
	Incidentals Allowances
	Seniors supplements and concessions
Q - All Other	Bereavement Allowance (closed to new entrants on 20 March 2020, ceases completely when all current recipients have completed their bereavement period)
	Crisis Payment
R - Rent Assistance	Rent Assistance
COVID supplements	Coronavirus Supplement (ceased on 31 March 2021)
	Economic Support Payment (final lump sum payment in March 2021)