

National Disability Insurance Scheme

Annual Financial Sustainability Report

2020-21

Sarah Johnson BCom FIAA

Scheme Actuary

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Executive Summary

An annual financial sustainability report (AFSR) is required under section 180B of the NDIS Act and provides an assessment of the financial sustainability of the National Disability Insurance Scheme (“the Scheme”, or NDIS). The AFSR is produced using data at 30 June each year and a summary of each year’s AFSR has been included in the NDIA annual report. This report uses data to 30 June 2021 to project the future cost of the Scheme. It includes analyses and discussion on recent Scheme experience, best estimate projections of future participant numbers and average payments (based on emerging experience and future expectations), scenarios relating to plausible variances in the projections, and recommended strategies to address risks to sustainability.

The previous such report was an interim update to the AFSR released on 3 July 2021.¹ It was based on data to 31 December 2020, with commentary about experience to 31 May 2021 (the “previous review”). References to the “previous review” throughout this report refer to results contained within that report.

Financial sustainability

The *NDIS Insurance Principles and Financial Sustainability Manual*² outlines the NDIS’ insurance model in detail and defines financial sustainability as the state where:

- *The Scheme is successful on the balance of objective measures and projections of economic and social participation and independence, and on participants’ views that they are getting enough money to buy enough goods and services to allow them reasonable access to life opportunities - that is, reasonable and necessary support;*
- *Contributors think that the cost is and will continue to be affordable, under control, represents value for money and, therefore, remain willing to contribute.*

The current government expectation of Scheme cost is included in the annual Portfolio Budget Statements (PBS)³, noting it is not only the financial cost of the Scheme that is important within the context of financial sustainability, but also the outcomes achieved by the Scheme.⁴

¹ [NDIS Publications](#)

² [Insurance Principles and Financial Sustainability Manual \(PDF Download\)](#)

³ [Portfolio budget statement 2021-2022 \(PDF Download\)](#)

⁴ Outcomes for participants and their families/carers are reported regularly in the NDIA’s quarterly reports to Disability Ministers, and more detailed analysis and data is available on the [NDIA Data and Insights website](#)

Projection model

In projecting future Scheme costs, assumptions on both the number of participants in the Scheme and the average payment per participant are required. The number of participants each year is derived based on assumptions on both the number of participants entering and the number of participants exiting the Scheme. Average payments are based on current payment levels which are then inflated each year.

Participant characteristics and levels of support need differ substantially amongst participants in the Scheme. Therefore, assumptions on participant numbers and average payments are calibrated by different participant cohorts. Specifically, assumptions are derived by age group, disability, level of function, gender, and whether the participant resides in Supported Independent Living (SIL).⁵ This results in approximately 2,000 unique cohorts.

Assumptions have been set using both past Scheme experience and expectations of future Scheme performance. That is, the best estimate projection in this report is not simply an extrapolation of past Scheme trends; rather, a forward-looking approach is taken, which assumes operational initiatives undertaken by the NDIA will result in past trends not necessarily continuing to the same extent.

As with any projection, there is uncertainty in the results. As the Scheme continues to mature, Scheme experience can change, perhaps materially, resulting from the decisions and actions of the Agency and governments, and this would affect the eventual trajectory of participant costs. Uncertainty is explored further in Section 6.1, where plausible high and low case estimates of Scheme cost are quantified.

Number of participants

The number of the participants in the Scheme each year, and the projection of future participants is presented in Figure 1. In 2024-25 it is estimated that there will be 670,400 participants in the Scheme (of which 633,596 are under the age of 65 years), and in 2029-30 it is estimated that the number of participants will increase to 859,328 (of which 798,341 are under the age of 65 years). These figures are significantly higher than originally envisaged by the Productivity Commission - the 2017 Productivity Commission Study report⁶ assumed 582,860 participants in the Scheme at 2029-30 (of which 513,162 would be under 65 years). In 2029-30 the number of participants is therefore estimated to be 276,468 (or 47%) higher than estimated in the 2017 Productivity Commission Study report.

⁵ Supported Independent Living is modelled separately due to the high average payment per participant. SIL participants represent 5.7% of all participants, and 34% of payments made in the 2020-21 financial year to date. The average annualised payments year to date for SIL participants is \$318,000, and \$37,400 for participants not in SIL.

⁶ Productivity Commission 2017, *National Disability Insurance Scheme (NDIS) Costs*, Study Report, Canberra (Table 2.3)

The projected number of participants at this review is compared to those from the previous review in Figure 2. It shows that the projection at this review is very similar to the previous review, with the projection having reduced by 1.8% by June 2025 and 1.3% by June 2030.

Figure 1 Comparison of actuals, future projections (total, and participants aged 0 to 64) and 2017 Productivity Commission estimates

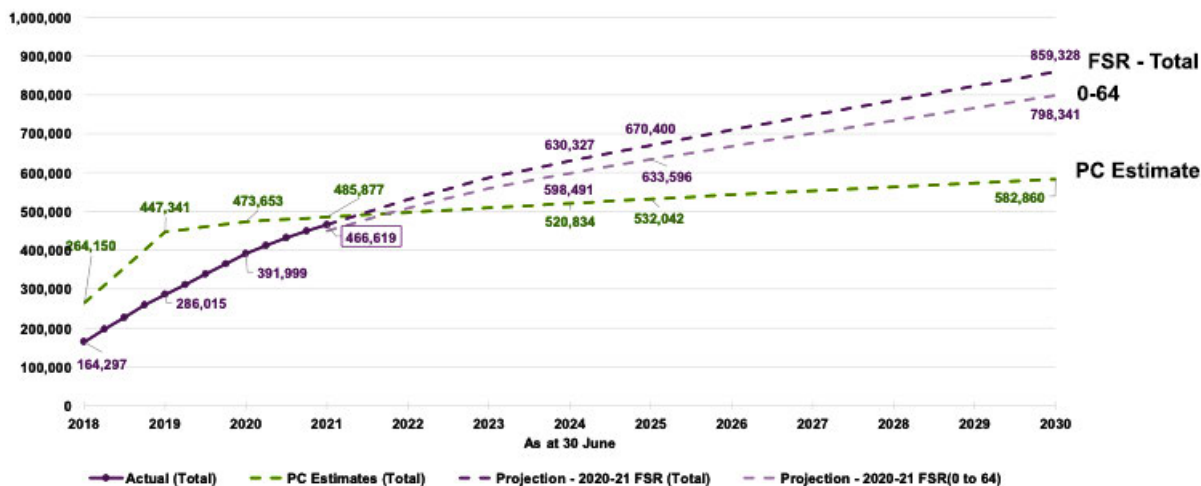
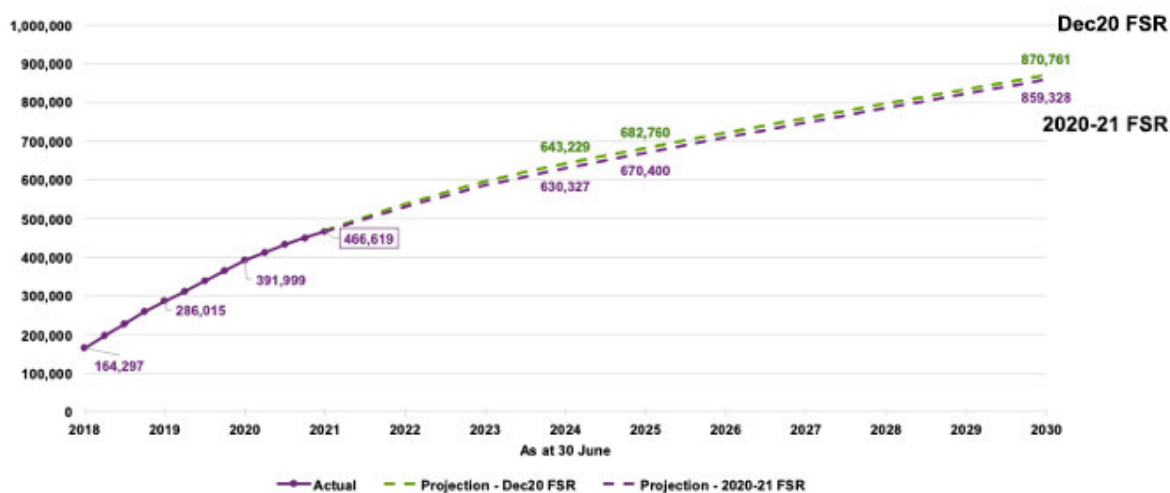
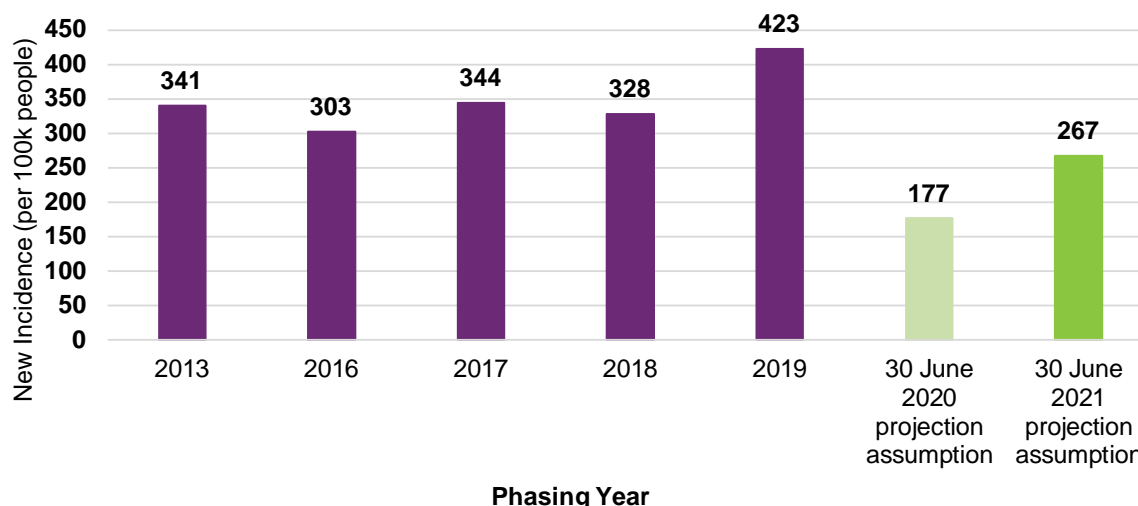


Figure 2 Comparison of participant numbers to previous review



The two drivers in the growth in the number of participants are the rate of new entrants to the Scheme, and the rate at which participants exit the Scheme. The rate of new entrants to the Scheme continues to be very high, especially in the geographical areas where the Scheme has been operating for several years. As an example, the rate of new entrants in geographical areas that commenced in 2013 was 341 per 100,000 people over 2020-21, which is approximately 93% higher than the 30 June 2020 AFSR assumed rate of 177 per 100,000 people, and 28% higher than the rate assumed at this review of 267 per 100,000 people.

Figure 3 Observed new incidence rate by phasing year and assumptions at 30 June 2020 and 2021⁷



The assumption adopted at this review (267 per 100,000 people), is lower than the rates recently observed but higher than the rate assumed at 30 June 2020 and prior reviews. This is based on an assumption that the longer term rate of new entrants will be lower than previously observed. The adopted assumption is approximately 80% of the observed experience (and approximately 70% for adult participants, where there is greater uncertainty about the longer term number of new participants). There therefore remains upside risk in this assumption (that is, the risk that participant numbers will be higher).

In response to this uncertainty the Agency has undertaken further analysis to understand the reasons for the high number of new entrants. Specifically, a sample of recent adult new entrants from early geographic areas was analysed. 61% of the sample was regarded as likely to be true new incidence⁸ (and can therefore be regarded as indicative of future levels of new incidence).

For the remaining 39% it is less clear whether they represent true new incidence or previously unmet need⁹ (who would therefore **not** be regarded as indicative of future levels of new incidence). Many of these participants where there is uncertainty have interacted with the justice and/or mental health systems, and it is plausible to expect that it has taken some time for participants such as these to access the Scheme. Based on the analysis of this sample, the assumed rate of new incidence has been left unchanged since the previous review, as the current assumption does not appear unreasonable. Nonetheless there

⁷ Observed new incidence rates for 2013 to 2019 phasing years show the number of new entrants per 100K population over the 2020-21 financial year in the relevant geographic areas which phased into the Scheme in that year

⁸ i.e. participants who acquired their disability recently, **or** those who have only recently met the necessary criteria for access to the Scheme.

⁹ i.e. participants who acquired their disability some years prior who only accessed the Scheme recently (for various reasons)

remains a high degree of uncertainty around this underlying assumption (especially considering the range of disabilities and conditions of participants entering the Scheme). This is further explored in Section 6.1 of this report.

The rate at which participants exit the Scheme for reasons other than mortality is also lower than expected. Section 25 of the NDIS Act allows participants to enter the Scheme to receive early intervention support, and it was assumed that some participants would receive this support and then be supported by mainstream and community services. However, the rate of non-mortality exits compared to expectations in the year to 30 June 2021 (as seen in Figure 4 and Figure 5 below), is considerably less than the current long term assumption. For example, non-mortality exit rates were assumed to be 1.02% for 0-6 year olds, and the rate in the past year to 30 June 21 was 0.75%.

Similarly, for participants aged 7+ years, the actual non-mortality exit rate experience to 30 June 2021 remains noticeably lower than the long term assumptions.

Figure 4 Actual versus expected non-mortality exits for participants aged 0 to 6

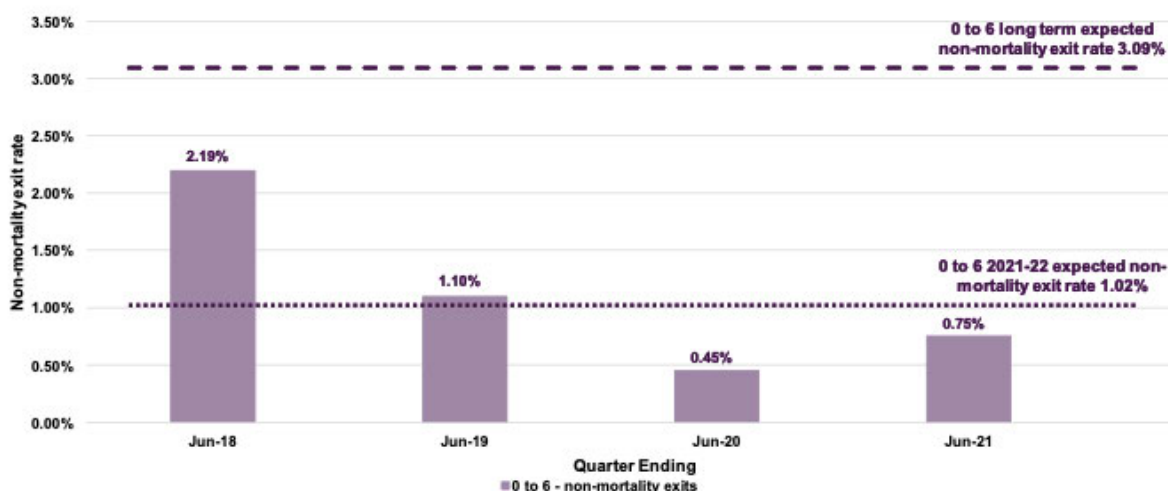
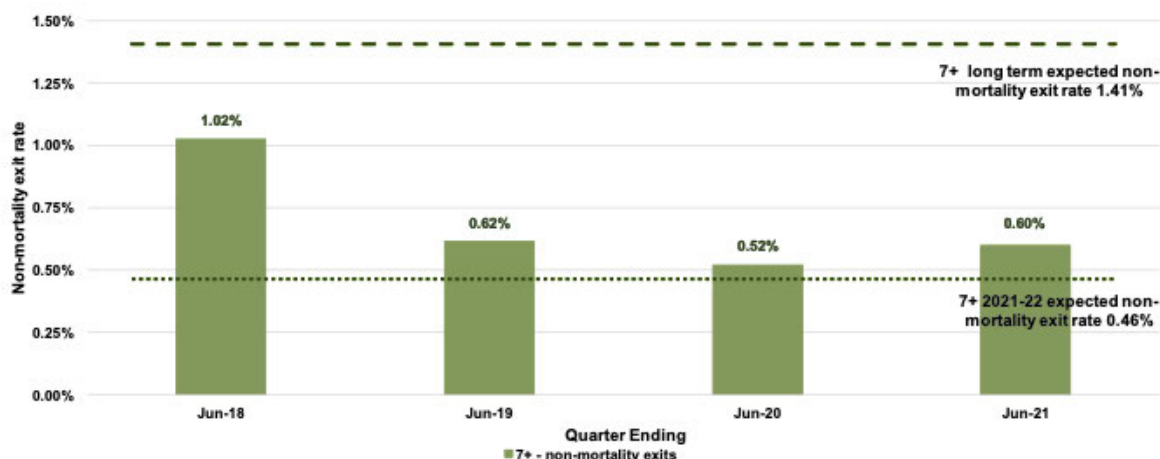


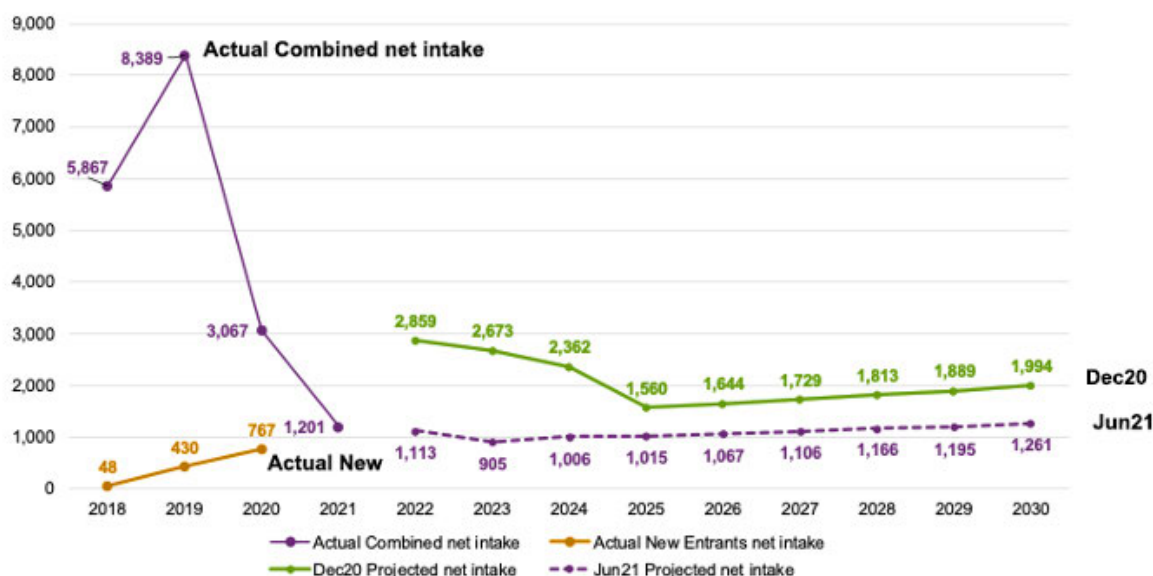
Figure 5 Actual versus expected non-mortality exits for participants aged over 7



There remains significant uncertainty around these assumptions. In light of this uncertainty the long-term exit rate assumptions have remained unchanged from the previous review. It continues to be assumed that rates of exit will increase as participants receive early intervention supports, and the NDIA focuses on ensuring participants continue to meet the access criteria (as per the NDIS Act). As the current long-term assumption is considerably higher than observed experience, there again remains upside risk in this assumption (that is, the risk that participant numbers will be higher). An alternative scenario regarding the rate of non-mortality exits is considered in Section 6.1.

Since the previous review, analysis has been undertaken to understand the composition of the new SIL participant intake between those participants transitioning from existing schemes and those who were new to disability supports. This indicated that the number of new SIL participants who were new to disability supports is lower than the assumption at the previous review. Figure 6 below highlights that the revised projection is more in line with the actual new entrant net intake than was the previous projection.

Figure 6 SIL participants intake experience to date and trajectory¹⁰

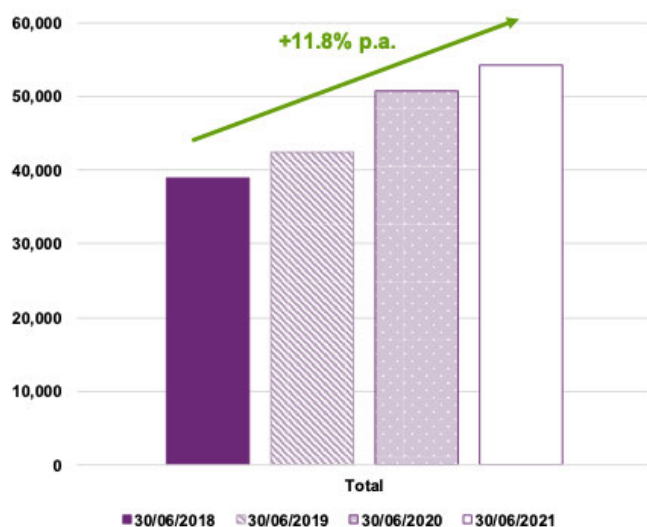


Average payments per participant

Average annualised payments have continued to increase year on year (Figure 7). Average payments have increased by 11.8% p.a. over the last four years.

¹⁰ The impact of lower projected participants in SIL is shown in Table 4 below, which indicates a reduction in estimated cost of \$5.0 billion in the four years to 2024-25.

Figure 7 Average annualised payments over time¹¹



Over the past four years, the mix of participants in the Scheme has changed. That is, as the Scheme has rolled out across the country, the proportion of participants by different characteristics has changed. In particular, the proportion of children in the Scheme is higher in 2020-21 compared with 2017-18, and the proportion of SIL participants in the Scheme is lower in 2020-21 compared with 2017-18.

Analysing the change in average payment over time by whether or not participants are in SIL indicates that the average annual increase in average payment has been consistently high across both participant groups. Specifically, the average annual payment has increased for SIL participants by 12.0%p.a., and the average annual payment has increased for non-SIL participants by 17.1%p.a. (Figure 8). These averages are higher than the overall average (of 11.8%p.a.), as the proportion of participants in SIL has decreased over the period. The average inflation over the past three years (removing the effect of change in mix) was 14.9% p.a.

¹¹ Average annualised payments have been calculated on a cash basis using the 12 months over each year ending 30 June.

Figure 8 Average annualised payments over time by SIL group¹²

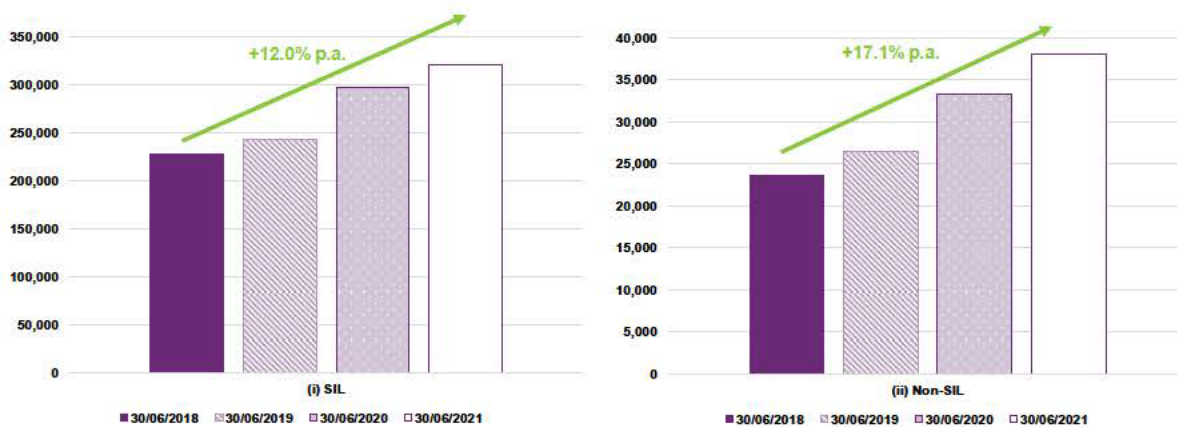
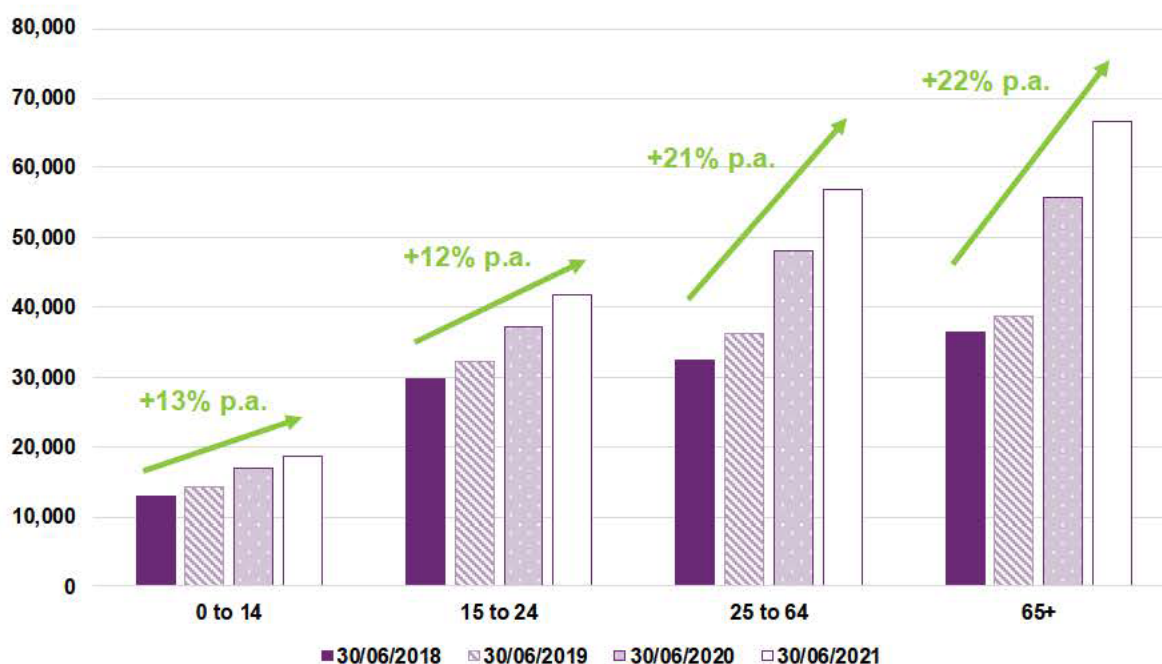


Figure 9 analyses the change in average payment over time by age band for participants not in SIL¹³. The average increase for 0 to 14 year olds is 13%p.a., the average increase for 15 to 24 year olds is 12%p.a., the average increase for 25 to 64 year olds is 21%p.a., and the average increase for participants aged over 65 is 22%p.a. For participants not in SIL, average payments have increased at a faster rate for adults (those aged over 25) and reflect material increases in the hours of attendant care support received by these participants.

¹² Average annualised payments have been calculated on a cash basis using the 12 months over each year ending 30 June.

¹³ For further information, refer to Addendum 2 to NDIA's Quarterly Report to Disability Ministers at 30 June 2021: <https://www.ndis.gov.au/media/3475/download?attachment>

Figure 9 Average annualised payments over time for non-SIL participants by age band¹⁴



A forward looking approach to inflation has been adopted, that is, it is not assumed past trends will continue. Inflation is expected to be 6.7% in 2021-22 and 3.5% in 2022-23. These figures include the impact of the change in mix in Scheme population (with average reported functional capacity increasing¹⁵), and the consequent expected reduction in average payment per participant. The historic average shown implicitly includes change in mix, and so the most appropriate comparison to past experience is the total including change in mix.

Figure 10 and Table 1 below, which compare historic inflation experience with the adopted total inflation in this review, shows that the forecast inflation (including change in mix) is below the observed average over the preceding three years. In particular, the assumed rate of 9.7% from 2020-21 to 2021-22 is higher than future years noting that just over half of this inflation has already occurred in the latter half of 2020-21¹⁶. There is considerable uncertainty regarding these future levels of superimposed inflation, and the impact of different scenarios is quantified in Section 6.1.

¹⁴ Average annualised payments have been calculated on a cash basis using the 12 months over each year ending 30 June.

¹⁵ New entrants to the Scheme have higher levels of functional capacity on average than existing participants, which means that the average functional capacity of Scheme participants is expected to increase over time, which (all else being equal) is expected to result in a reduction in average payment per participant.

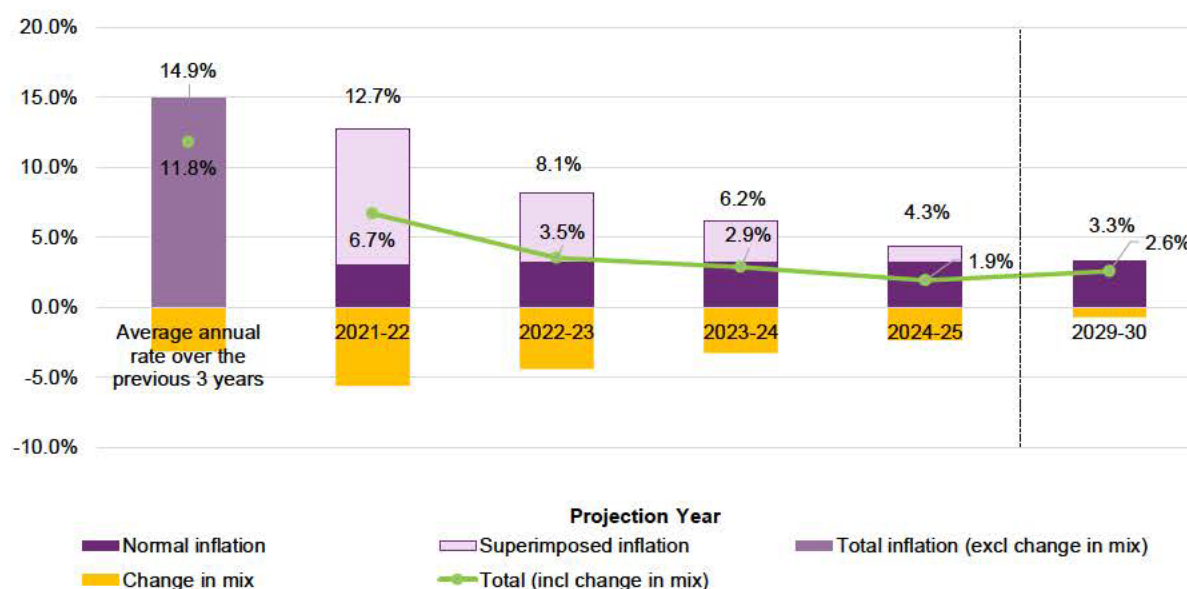
¹⁶ Of the superimposed inflation of 9.7% in 2021-22, which represents the increase from the 2020-21 year to the 2021-22 year, 5.2% had already occurred at 30 June 2021, and the remaining 4.3% (compounded) is assumed to occur in future.

Table 1 Comparison of historical inflation experience and adopted total inflation¹⁷

Inflation on Payments	Average Annual rate over the previous 3 years	2021-22	2022-23	2023-24	2024-25	2029-30	Thereafter
2020-21 AFSR							
Normal Inflation		3.0%	3.2%	3.2%	3.2%	3.2%	3.2%
Superimposed Inflation		9.7%	5.0%	3.0%	1.1%	0.0%	0.0%
Total (excl change in mix)	14.9%	12.7%	8.1%	6.2%	4.3%	3.3%	3.3%
Change in mix	-3.1%	-5.6%	-4.4%	-3.2%	-2.3%	-0.7%	
Total (incl change in mix)	11.8%	6.7%	3.5%	2.9%	1.9%	2.6%	

Further, adopted total inflation at this review (excluding change in mix) is higher than the previous review for the next three years (Figure 11).

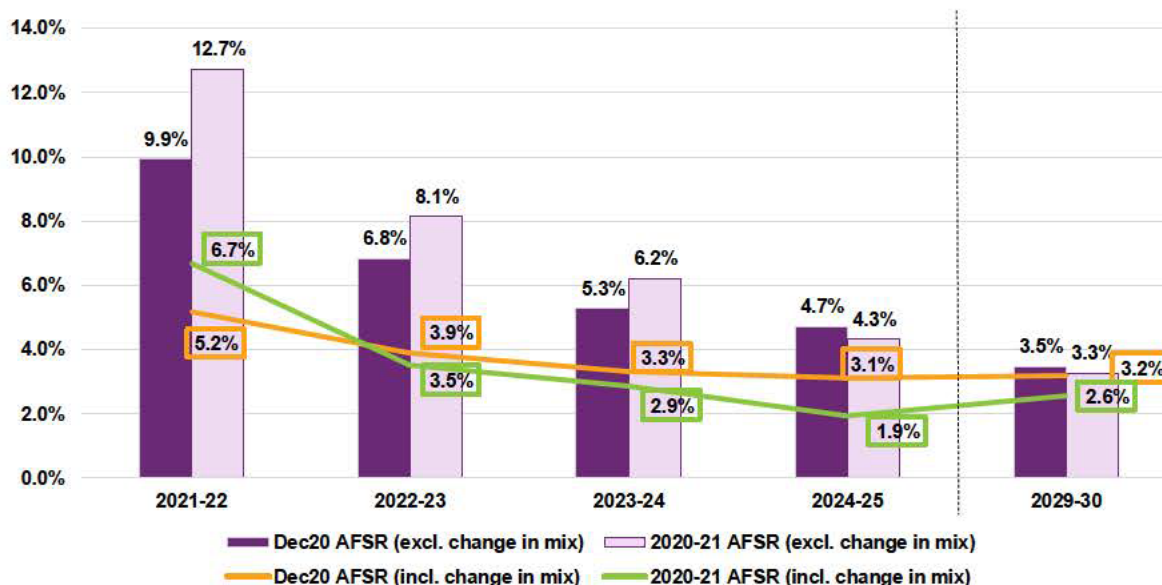
Figure 10 Comparison of historic inflation experience and adopted total inflation¹⁸



¹⁷ *ibid*

¹⁸ Total expected inflation shown is lower than normal inflation plus superimposed inflation because the change in mix of participants is expected to lead to reductions in average payment per participant (before allowing for normal inflation and superimposed inflation). The historic average shown implicitly includes change in mix, and so the most appropriate comparison to past experience is the total including change in mix. Of the superimposed inflation of 9.7% in 2021-22, which represents the increase from the 2020-21 year to the 2021-22 year, 5.2% had already occurred at 30 June 2021, and the remaining 4.3% (compounded) is assumed to occur in future.

Figure 11 Comparison of adopted total inflation with previous review¹⁹



Total participant costs

Combining the information on the projected number of participants and projected average payment per participant, results in total participant costs of \$29.2 billion in 2021-22, \$41.4 billion in 2024-25, and \$59.3 billion in 2029-30 (on an accrual basis).²⁰

Table 2 Projected participant costs (cash and accrual basis)

Participant costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
Participant Costs (cash basis)					
Participant Costs (0-64)	26,994	30,965	34,345	37,067	51,471
Participant Costs (65+)	1,837	2,464	3,114	3,748	7,012
Total Participant Costs (cash basis)	28,831	33,429	37,459	40,814	58,483
Total Participant Costs (accrual basis)					
Participant Costs (0-64)	27,359	31,386	34,812	37,569	52,169
Participant Costs (65+)	1,864	2,501	3,161	3,803	7,115
Total Participant Costs (accrual basis)	29,223	33,886	37,973	41,373	59,284

As noted above, this projection is not simply an extrapolation of past trends. Instead, a forward-looking approach has been adopted for new entrants, non-mortality exit rates, and inflation in average payments. The scenario analysis in Section 6.1 considers a range of uncertainties in relation to these key assumptions.

¹⁹ *ibid*

²⁰ Cost is based on when the service was actually provided to the participant recognising some services are paid for after the end of the period. Estimates in the PBS are on an accrual basis.

Comparison with previous AFSR

The projected participant costs are approximately \$3.9 billion **higher** than the previous review in the four years to June 2025, and about \$1.0 billion **lower** in 2029-30 (Table 3).

Table 3 Total Participant costs (accrual basis) compared to previous review

Projected Participant Costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30	Total 2021-25
2020-21 AFSR	29,223	33,886	37,973	41,373	59,284	142,455
Dec20 AFSR	28,139	32,900	36,906	40,659	60,324	138,603
Difference	1,085	987	1,066	714	-1,040	3,852

The sources of variance between this projection and the previous review are shown in Table 4:

- Changes to assumptions regarding population numbers (predominantly the number of new participants entering Supported Independent Living) have **reduced** the projection by \$5.0 billion in the four years to June 2025 and \$3.2 billion in 2029-30
- Higher base payment assumptions (i.e. the average payment per participant in the immediate future), resulting from higher recent payment experience have **increased** the projection by \$3.5 billion in the four years to June 2025 and \$1.4 billion in 2029-30
- An increased allowance for future inflation (i.e. **in addition** to the higher base payment assumptions), has **increased** the projection by \$7.1 billion in the four years to June 2025 and \$2.6 billion in 2029-30
- A reduction of 8.5% in the allowance for the average payment for new entrants has **reduced** the projection by \$1.8 billion in the four years to June 2025 and \$1.9 billion in 2029-30. This reduction arises from new entrants, on a mix-adjusted basis, being observed to cost less than existing participants.

Table 4 Variance between this projection and previous review

Total Participant costs – accrual basis (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30	Total 2021-25
Updated population numbers and assumptions	-486	-1,121	-1,513	-1,882	-3,163	-5,002
Updated base payment assumptions	818	849	901	967	1,404	3,535
Updated inflation assumptions	866	1,613	2,262	2,422	2,646	7,163
Lower cost of new entrants	-112	-354	-584	-793	-1,927	-1,843
Total impact of experience and modelling	1,085	987	1,066	714	-1,040	3,852
Updated population numbers and assumptions	-1.7%	-3.4%	-4.1%	-4.6%	-5.2%	-3.6%
Updated base payment assumptions	2.9%	2.6%	2.4%	2.4%	2.3%	2.6%
Updated inflation assumptions	3.1%	4.9%	6.1%	6.0%	4.4%	5.2%
Lower cost of new entrants	-0.4%	-1.1%	-1.6%	-1.9%	-3.2%	-1.3%
Total impact of experience and modelling	3.9%	3.0%	2.9%	1.8%	-1.7%	2.8%

Comparison with PBS and Productivity Commission estimates

Projected participant costs are higher than the most recent 2021-22 Portfolio Budget Statements (Table 5), and higher than the 2017 Productivity Commission costing (Table 6).²¹

Table 5 Projected total Participant costs (accrual basis) compared to PBS

Comparison to Portfolio Budget Statements (PBS) (\$m)	2021-22	2022-23	2023-24	2024-25	Total
2021-22 Portfolio Budget Statements (PBS)	26,487	28,257	29,425	31,884	116,053
Participant costs from Jun21 AFSR (cash basis)	28,831	33,429	37,459	40,814	140,534
Estimated costs for support provided but not yet paid	392	457	513	558	1,921
Participant costs from Jun21 AFSR (accrual basis)	29,223	33,886	37,973	41,373	142,455
Participant costs, compared to Portfolio Budget Statements	2,736	5,629	8,548	9,489	26,402

Table 6 Projected total Participant costs (accrual basis) compared to estimates of Scheme costs in the 2017 PC study report^{22,23}

Participant costs – accrual basis (\$b)	2021-22	2022-23	2023-24	2024-25	2029-30
2017 Productivity Commission report	25,158	26,740	28,351	30,555	40,915
<i>less operating costs</i>	-1,450	-1,503	-1,511	-2,054	-2,784
2017 Productivity Commission participant costs	23,708	25,238	26,839	28,500	38,130
Baseline projected participant costs (accrual basis)	29,223	33,886	37,973	41,373	59,284
Difference	5,515	8,649	11,133	12,872	21,154

²¹ This projection is also higher than the 2021 Intergenerational Report projection which is based on the 2021-22 PBS in the short-term.

²² The Productivity Commission costings did not include an explicit allowance for children with developmental delay, for the student transport and personal care in schools in-kind support programs and for disability related health supports, noting that these four items could account for an additional \$1.5 billion per annum.

The 2021-22 PBS included an increase in future expenditure for 2021-22 onwards compared with the 2020-21 PBS (of \$12.0 billion). A comparison of actual participant costs and previous Portfolio Budget Statements is shown in Table 7, with a negative amount reflecting underspend on participant costs and a positive amount reflecting an overspend.

Table 7 Comparison of actual participant costs and PBS estimates

Total Participant Costs (\$m)	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Portfolio Budget Statements 2021-22						26,487	28,257	29,425	31,884
Portfolio Budget Statements 2020-21					21,720	23,807	24,022	24,315	
Portfolio Budget Statements 2019-20				16,262	20,903	22,116	23,361		
Portfolio Budget Statements 2018-19			15,139	19,537	21,064	22,300			
Portfolio Budget Statements 2017-18		8,045	14,267	17,856	19,165				
Portfolio Budget Statements 2016-17	3,487	8,813	15,905	20,077					
Actual participant costs (accrual)	2,238	5,418	10,460	17,589	23,347				
Actual participant costs compared with latest PBS	-1,249	-2,627	-4,679	1,327	1,627				

Operating Costs

The Agency maintains a detailed activity-based costing of its operations. The operating expenses adopted in this AFSR are based on this internal model. In 2020-21 actual operating expenses (at \$1.5 billion) were lower than budgeted in the PBS by \$40.7 million, or 2.7% (Table 8). In 2020-21 operating costs represented 6.3% of participant costs.

Table 8 Actual operating expenses compared to expectations for 2020-21

Operating expenses – full year to 30 June 2021	\$m
Actual	1,481.0
Budget (from 2019-20 PBS)	1,521.7
Difference (Actual – Budget)	-40.7

Operating expenses, as a percentage of participant costs, are projected to reduce over time, as the relative cost of bringing new participants into the Scheme is expected to reduce, and also because the average payment per participant is expected to increase at a faster rate than the inflation rate assumed to underpin the Scheme's operating costs (Table 9).

Operating costs are forecast to be 6.0% of participant expenses in 2021-22, reducing to 5.0% in 2024-25, and 4.1% in 2029-30.

²³ Productivity Commission 2017, *National Disability Insurance Scheme (NDIS) Costs*, Study Report, Canberra (Table 2.3), excluding operating costs and interim years are calculated on a consistent basis.

Table 9 Agency operating costs

Operating and Participant Costs (\$m)	2022	2023	2024	2025	2030
2020-21 AFSR					
Participant Costs (accrual basis)	29,223	33,886	37,973	41,373	59,284
Operating Costs	1,760	1,879	1,978	2,055	2,452
As a % of Participant Costs	6.0%	5.5%	5.2%	5.0%	4.1%

The forecast operating costs of \$1,760m in 2021-22 are approximately \$250m (or 18%) higher than those in 2020-21 (and a similar amount higher than the amount allowed for in the 2021-22 PBS), however this variance is regarded as relatively small in the context of the sustainability risks relating to participant costs which are identified in this report, and the recommended operating expense range in the 2017 PC study report, of 7-10%.²⁴

Variability in cost projections – scenario analysis

The projections presented in Section 5 of this report represent the “baseline” estimate of Scheme population and costs. As highlighted throughout this report, there is considerable uncertainty in relation to these projections, and the actual cost may vary from the baseline projections possibly significantly. More specifically there is significant uncertainty in relation to:

- **Numbers of new entrants to the Scheme** – observed numbers of new participants, whilst slightly lower than the previous review are significantly higher than those forecast in earlier reports and in the 2017 PC Study Report. Whilst the number of new entrants per annum is reducing it is unclear when they will stabilise and at what level
- **The average payment for new entrants to the Scheme** - there are relatively few years of experience from which to determine the average payment for new entrants, compared to existing participants. As more new entrants enter the Scheme the relative average payment for new entrants may vary substantially from that previously observed
- **Rates of non-mortality exits** – observed rates of non-mortality exits are significantly lower than forecast in previous reports and in the 2017 PC Study Report and the long term rates assumed may not eventuate.
- **Rates of superimposed inflation** – average payments per participant have grown at rates substantially exceeding normal inflation for several years. Whilst some of the pressures giving rise to past increases remain, these would not be expected to continue indefinitely and hence past rates of inflation do not provide definitive guidance regarding likely future rates of inflation.
- **Numbers of participants transitioning into Supported Independent Living** – there is only one year of experience of participants transitioning into Supported Independent Living following all geographic regions gaining access to the Scheme.

²⁴ Productivity Commission 2017, *National Disability Insurance Scheme (NDIS) Costs*, Study Report, Canberra (Page 412).

Longer term SIL participant numbers are therefore based on relatively little experience.

To consider the uncertainty inherent within the projection revised projections have been calculated for a number of scenarios. These consider a range of plausible outcomes in relation to the uncertainties above. Table 10 shows the range of plausible scenarios estimated. Comments about specific scenarios are as follows:

- *Two additional years of high inflation* is assumed at the same rate as observed over the past three years, which is higher than that assumed in the baseline projection
- *Higher long term new incidence assumptions* are consistent with the rate observed over the past year which is higher than that assumed in the longer term in the baseline projection
- *Lower non-mortality exit rates* are consistent with those recently observed, which are lower than those assumed in the longer term in the baseline projection
- *Higher cost of new entrants* assumes new entrants having the same average payment as existing participants in the same cohort²⁵
- *One year less of high inflation* assumes that inflation reduces to a lower long term level one year earlier (i.e. the long-term assumption is adopted from 2027-28 onwards compared with 2028-29 onwards in the baseline projection).
- *Lower long term new incidence assumptions* projects new entrants consistent with that assumed at 30 June 2020, which is about 33% below current assumptions
- *Lower cost of new entrants* assumes new entrants having average payments 17% below existing participants, consistent with the recent observed experience (under the baseline projection the cost of new entrants is assumed to be 8.5% lower than existing participants)
- *Other scenarios* include
 - variances in the number of SIL participants (200 less p.a. in the reduction scenario and 500 more p.a. in the increase scenario)
 - lower general population growth (i.e. lower growth in the Australian population)
 - three additional years of new entrant numbers in excess of the long term rate (i.e. the new incidence rate stabilises in 2026-27 instead of 2023-24).

The plausible range estimated in 2024-25 is between \$39.0 billion and \$47.8 billion, whilst the plausible range estimated in 2029-30 is between \$53.2 billion and \$74.2 billion.

²⁵ Each cohort is a unique combination of age group, gender, primary disability, level of function and SIL status. There are a total of 2,052 cohorts which are separately projected.

Table 10 Plausible range of cost outcomes

Scenarios – all participants (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30	Total 2021-25
Baseline Projection	29,223	33,886	37,973	41,373	59,284	142,455
Cost increase scenarios						
Two additional years of high inflation	1,183	2,508	3,247	5,240	10,180	12,179
Higher long term new incidence assumptions	0	76	500	1,253	6,272	1,828
Lower non-mortality exit rates	15	82	233	488	2,655	818
Higher cost of new entrants	113	355	585	794	1,929	1,845
Other	150	269	689	1,301	3,275	2,409
Total of cost increase scenarios	1,461	3,290	5,253	9,075	24,312	19,079
Plausible high case (variance)	1,264	2,726	3,883	6,470	14,872	14,344
Cost reduction scenarios						
One year less of high inflation	-871	-1,217	-1,697	-2,015	-3,718	-5,800
Lower long term new incidence assumptions	0	0	0	0	-1,789	0
Lower cost of new entrants	-113	-355	-585	-794	-1,929	-1,845
Other	-60	-98	-177	-268	-1,918	-603
Total of cost decrease scenarios	-1,044	-1,670	-2,459	-3,077	-9,354	-8,249
Plausible low case (variance)	-917	-1,364	-1,960	-2,403	-6,125	-6,645
Plausible high case (total)	30,487	36,613	41,855	47,843	74,156	156,799
Plausible low case (total)	28,306	32,523	36,012	38,970	53,159	135,811

The plausible high and low case scenarios shown combine the various components of variance. Low positive correlation is assumed between the various components, resulting in the overall plausible scenarios being less extreme than the totals of the individual components.

It is also noted that the range adopted includes considerably more upside (that is, higher costs) than downside (that is, lower costs) risk. This results from considerably greater upside risk relating to superimposed inflation (that is, superimposed inflation could be higher), new incidence rates (that is, new incidence rates could be higher) and exit rates (that is, exit rates could be lower).

1. Introduction

An annual financial sustainability report (AFSR) is required under section 180B of the NDIS Act and provides an assessment of the financial sustainability of the National Disability Insurance Scheme (“the Scheme”, or NDIS). This report includes analyses and discussion on recent Scheme experience, best estimate projections of future participant numbers and costs (based on emerging experience and future expectations), and strategies to address risks to sustainability.

Background

The purpose of the NDIS is to provide reasonable and necessary funding to people with a permanent and significant disability so that they have choice and control over the supports and services they need to pursue an ordinary life. A key cornerstone underlying the operation of the Scheme is strong insurance principles, where evidence-based decisions on access and planning are made by drawing on objective information on individuals and the longitudinal data that is collected on participants in the Scheme. Experience is closely and regularly monitored to allow emerging risks and issues to be identified and where required, remediation strategies to be implemented.

Importantly, the Scheme has a lifespan, person-centric approach to its model of support for people with disability, where early investment in core, capacity building and capital supports are anticipated to drive better outcomes for participants and their family/carers over their lifetime.

The *NDIS Insurance Principles and Financial Sustainability Manual*²⁶ outlines the insurance model in detail and defines financial sustainability as the state where:

- *the Scheme is successful on the balance of objective measures and projections of economic and social participation and independence, and on participants’ views that they are getting enough money to buy enough goods and services to allow them reasonable access to life opportunities - that is, reasonable and necessary support;*
- *contributors think that the cost is and will continue to be affordable, under control, represents value for money and, therefore, remain willing to contribute.*

The current government expectation of Scheme cost is included in the annual Portfolio Budget Statements (PBS), noting it is not only the financial cost of the Scheme that is important within the context of financial sustainability, but also the outcomes for participants achieved by the Scheme.

²⁶ [Insurance Principles and Financial Sustainability Manual \(PDF Download\)](#)

Outcomes for participants and their families/carers are reported regularly in the NDIA's quarterly reports to Disability Ministers, and more detailed analysis and data is available on the NDIA Data and Insights website.²⁷

Current financial sustainability position

The NDIS has been in operation since 1 July 2013. The first three years of the Scheme were a trial period, and this was followed by the transition period which commenced on 1 July 2016, with the Scheme progressively rolled out across the country within four years. Since inception, the National Disability Insurance Agency ("the Agency", or NDIA) has had an increasing focus on improving participant experience. For example, from 2017 there was significant work undertaken on the participant pathway to improve the participant experience, a need to improve the speed of internal decision-making²⁸, and a need to improve access to reasonable and necessary disability supports by growing provider markets to meet the increased demand. Several financial sustainability issues have also been building over the years, the impacts of which are becoming increasingly significant.

Specifically, these financial sustainability issues are evident when compared to the PBS. Between 2016-17 and 2018-19, total Scheme costs trended well below the estimates in the PBS. This was primarily due to participants entering the Scheme more slowly than initially anticipated in the bilateral agreements between the Commonwealth and State/Territory governments. However, in 2019-20, Scheme costs exceeded the 2019-20 PBS for the first time (costs were \$17.6 billion compared with \$16.3 billion). Costs in 2020-21 have also significantly exceeded the 2020-21 PBS (participant costs of \$23.3 billion compared with the PBS estimate of \$21.7 billion).

The 2021-22 PBS included an increase in future expenditure for 2021-22 onwards compared with the 2020-21 PBS (of \$12.0 billion). A comparison of actual participant costs and portfolio budget statements is shown in Table 11, with a negative amount reflecting underspend on participant costs and a positive amount reflecting an overspend.

Table 11 Comparison of actual participant costs and PBS estimates

Total Participant Costs (\$m)	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Portfolio Budget Statements 2021-22						26,487	28,257	29,425	31,884
Portfolio Budget Statements 2020-21					21,720	23,807	24,022	24,315	
Portfolio Budget Statements 2019-20				16,262	20,903	22,116	23,361		
Portfolio Budget Statements 2018-19			15,139	19,537	21,064	22,300			
Portfolio Budget Statements 2017-18		8,045	14,267	17,856	19,165				
Portfolio Budget Statements 2016-17	3,487	8,813	15,905	20,077					
Actual participant costs (accrual)	2,238	5,418	10,460	17,589	23,347				
Actual participant costs compared with latest PBS	-1,249	-2,627	-4,679	1,327	1,627				

²⁷ [NDIS outcomes and goals](#)

²⁸ In particular, over the past year, the Agency has made a concerted focus on clearing internal backlogs in several areas such as access decisions, first plans, assistive technology, internal reviews, and manual payments.

The estimates in the 2021-22 Portfolio Budget Statements now also exceed the estimates in the 2017 Productivity Commission study report by \$12.1 billion over the four years to 2024-25. A comparison of the 2021-22 PBS estimates with the 2017 PC estimates is included in Table 12.

Table 12 Comparison of 2017 Productivity Commission estimates²⁹ and PBS estimates

Total Participant costs (\$m)	2021-22	2022-23	2023-24	2024-25	Total
2017 Productivity Commission Estimates	23,664	25,158	26,740	28,351	103,914
Portfolio Budget Statements 2021-22	26,487	28,257	29,425	31,884	116,053
Difference	2,823	3,099	2,685	3,533	12,139

Reliances and limitations

This work was conducted for the sole use and benefit of the NDIA to assist with monitoring, reporting, and management of the financial sustainability of the Scheme.

No liability is accepted for loss or damage arising from the use of this document by the Agency or third parties for other than the purpose stated above, or for any use of this document, without a full understanding of the reliance and limitations noted herein, or for errors or omissions arising from the provision of inaccurate or incomplete information.

It is the responsibility of the Agency and third parties to ensure that recipients of copies of, or extracts from, this document understand the reliances on which any conclusions in this document are based.

Given the long-tail nature of the Scheme, experience continues to be relatively immature and many aspects remain difficult to interpret. Specifically, estimation of future expenditure based on past experience is inherently challenging given the relative size, complexity, and immaturity of the Scheme, meaning there is significant uncertainty in the projection. In addition, in emerging experience to date, issues have been identified with the current resource allocation process, and in particular the lack of a mechanism for robust assessment of support need. As the Scheme continues to mature, and staff, operational and governance capabilities improve, there is an expectation that the Scheme experience will change, perhaps materially, and this would affect the eventual trajectory of participant costs.

Future events, which cannot currently be predicted, may also occur and would have an unexpected impact on Scheme experience and thus the projections in this report. For example, the COVID-19 pandemic over the 2020 and 2021 calendar years was an

²⁹ The 2017 Productivity Commission estimates were sourced from the 2017 Productivity Commission Study Report into NDIS costs (Table 2.3. pp 100) excluding operating costs, with interim years calculated on a consistent basis.

unforeseen event that posed some initial uncertainty to participant experience, outcomes and cost trajectory of the Scheme over the short and medium term.

Lastly, more data on Scheme experience is available in NDIA quarterly reports and on the NDIA Data and Insights website.³⁰

³⁰ [NDIA Data and Insights Website](#)

2. Information and data integrity

An integral part of an insurance model is the collection of accurate data in a timely manner. This is because quality data drives the ability of the Agency to monitor emerging experience, perform meaningful analyses, project the financial position of the Scheme and, hence make consistent evidence-based decisions to support the Scheme objectives. The success of the Scheme is dependent on the availability and quality of the data and information collected.

The data collected by the Agency is varied and broad-reaching, and covers information across each step of the participant pathway, from Scheme access and eligibility to participant plan approval, plan implementation and plan review. Payments for disability supports and the outcomes for participants and their family/carers are also collected regularly to track progress of participants and the Scheme. The information being collected enables the Agency to continually build one of the most comprehensive, longitudinal data sources on disability in the world.

Information and data used for analysis

The actuarial analysis underpinning this report relies upon the Agency's case management system, finance system and data warehouse, as well as external sources (such as various industry benchmarks and population surveys). While there is a substantial amount of data in the current Client Relationship Management (CRM) system, this section focuses on the data utilised for the analysis presented in this report.

The analysis in this report is based on data at 30 June 2021, unless stated otherwise. The sources of data are summarised in [Table 13](#).

Table 13 Summary of data utilised for actuarial analysis

Data	Description
Access requests to the NDIS	<ul style="list-style-type: none"> Demographic information (age, gender, disability, geographic location, living arrangements and other participant profile information) Contact details Access request date Outcome of request (for example: eligible, ineligible)
Payments to service providers	<ul style="list-style-type: none"> Service provider submitting the claim for payment Participant for whom the support was provided The support item and cost of support provided Dates of when the support was provided
Payments to participants	<ul style="list-style-type: none"> Participant submitting the claim for payment The support category provided Total cost spend on support category Period of reimbursement

Data	Description
NDIS participant plans	<ul style="list-style-type: none"> • Plan approval date • Length of plan • Participant goals • All plan budgets included in the plan • Mainstream and informal supports • Level of function³¹ • Reference package and typical support package
In-kind supports data	<ul style="list-style-type: none"> • Unit record in-kind support details from State/Territory programs including details on support type, level and duration of coverage.
Data provided by the State/Territory and Commonwealth governments	<ul style="list-style-type: none"> • List of clients receiving support from service providers in the previous disability system, including age and contact details. This data is loaded into the Client Relationship Management (CRM) system for the National Access Team to contact potential participants. • Projected Scheme costs and numbers from the State, Territory and Commonwealth bilateral agreements.
Australian Bureau of Statistics (ABS) population projections	<ul style="list-style-type: none"> • 3222.0 Population Projections, Australia, 2017 (base) to 2101 (Series B). This was published in November 2018. • 3235.0 Regional Population by Age and Sex, Australia. This was published in August 2020.
Data on outcomes	<ul style="list-style-type: none"> • For participants entering the Scheme from 1 July 2016, data on outcomes has been collected from 98.7% of all participants, with the intention to collect information from all participants.
Financial information	<ul style="list-style-type: none"> • Data from the SAP³² CRM system were reconciled with financial information in SAP.
ABS Survey of Disability, Ageing and Carers	<ul style="list-style-type: none"> • Prevalence of disability in Australia, including demographic and socio-economic profile of people with disabilities.
Economic information	<ul style="list-style-type: none"> • Government economic forecasts for GDP • Inflation indicators • Australian Life Tables – published in October 2019 • Population forecasts – estimated for the 2021 Intergenerational Report

³¹ As at 30 June 2021, it is estimated that 4% of participants who have ever had an approved plan have a missing or default level of function.

³² SAP is a software company that makes enterprise software. Also known as Systems, Applications and Products in Data Processing.

3. Modelling approach

An experience-based projection model has been used to project Scheme participant numbers and average payments. The modelling approach splits participants into cohorts based on characteristics which reflect expected differences in average payment, new entrant rates and/or exit rates between different groups of participants. The characteristics allowed for are age, primary disability type, level of function, gender, whether a participant is in SIL arrangements, and the duration that a participant has been in the Scheme. Separate average payment, new entrant and exit assumptions have been developed for each of these cohorts. These assumptions are described in more detail through this report.

The assumptions in the projection model are at a national level. This best reflects the nationally consistent approach of the Scheme and enables the experience-based projection model to utilise the greatest volume of available data to inform assumptions.

Figure 12 summarises the modelling approach in graphical format, with the main components of the modelling approach noted below.

Participant numbers

- Aggregate participant numbers for ages 0 to 64 are estimated using actuarial techniques³³ up until the assumed Steady Intake Date³⁴ of 30 June 2024.
- The number and profile of participants expected to enter the Scheme in each projection year is based on the historic profile of participants, by:
 - i. True new incidence of disability; and
 - ii. Previously unmet need for disability supports.³⁵
- Annual population projections are calculated by exact age and cohort by adding participant intake to the starting population, subtracting mortality and non-mortality exits, and ageing the remaining participants by one year.
- Each cohort is differentiated by age band (summarised into nine groups), primary disability and level of function (57 groups), gender (two groups) and whether a participant is in SIL (two groups). This leads to 2,052 unique cohorts.
- The profile of participants at 30 June each year has also been determined by cohort.
- There is also a transition model to explicitly allow for participants who enter the Scheme with developmental delay, but are later determined to have autism or an intellectual disability. Some participants with a developmental delay will transition to

³³ A chain ladder analysis, prevalence methodology and decay methodology have been used.

³⁴ The estimated future date at which point in time where participant intake primarily represents true new incidence (in other words when participants with previously unmet needs have entered the Scheme).

³⁵ Participants who acquired their disability some years prior who only accessed the Scheme recently (for various reasons).

another disability once a diagnosis has been made. This transfer typically happens between the ages of 5 to 8, although this can also occur outside of these ages.

- The number of participants in SIL arrangements is modelled based on an assumed proportion of each cohort, with the increase in the total number of SIL participants being based on recently observed experience. SIL participants are modelled specifically as, despite only comprising 5.4% of all participants, they contribute significantly to Scheme costs (34% over 2020-21).

Participant costs

- Participant costs are estimated by cohort using annualised payment levels for the three months to 31 May 2021 for “mature participants”, i.e. participants who were active at both 28 February 2021 and 31 May 2021, and had their first plan approved on or prior to 29 February 2020. Allowance is made for monthly seasonality typically observed and payments in June 2021 were checked to ensure that they did not vary substantially from those assumed.³⁶
- Explicit allowance is made for variance in average payment per participant for future new entrants, relative to the broader Scheme population.
- Costs are projected on a cash flow basis, representing the estimated rate of outflows from the Scheme (noting in-kind supports are expected to be used evenly throughout a participant’s plan). Projected costs are split between 15 different support categories.³⁷
- Inflation of costs is added in future years from both normal inflationary sources and sources of superimposed inflation.
- Accrual factors are derived for each of the 15 different support categories to convert the participant costs from a cash basis to an accrual basis.

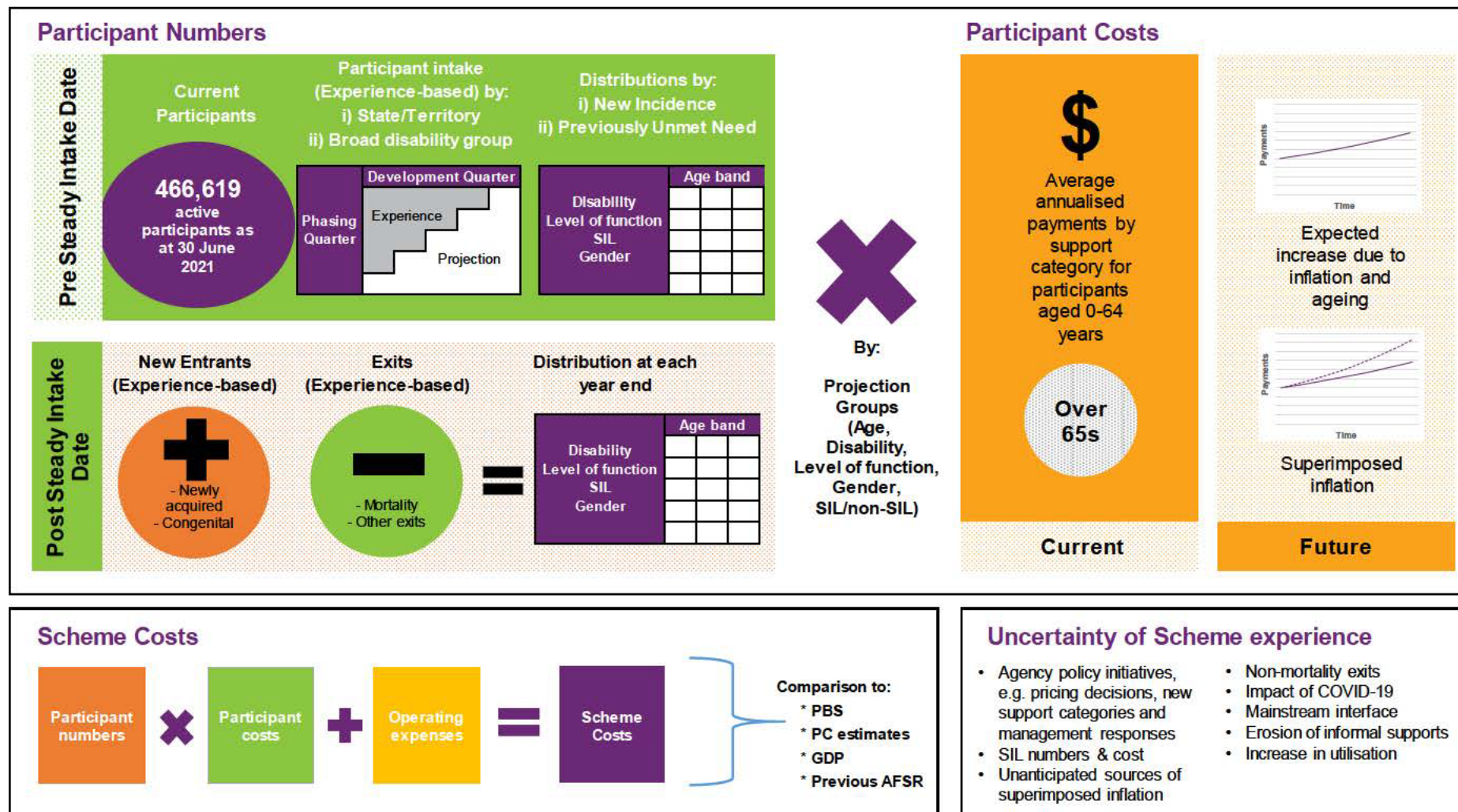
Total Scheme costs

- Operating expenses are added to total participant costs to calculate total Scheme costs.
- Comparisons are made to relevant benchmarks and alternative, plausible scenarios are presented to reflect uncertainty within the projections.

³⁶ Plan budgets represent the dollar amount of support that has been made available to participants in their plan. The proportion of plan budgets which are used is referred to as the ‘utilisation rate’, and the dollar amount of the plan budget used is referred to as ‘payments’. Payments are modelled as this is the actual cost to the Scheme.

³⁷ The 15 support categories include four core support categories (Transport, Consumables, Daily Activities and Social Community Civic), two capital support categories (Assistive Technology and Home Modifications) and nine capacity building (CB) support categories (Support Coordination, CB Relationships, CB Lifelong Learning, CB Home Living, CB Health and Wellbeing, CB Employment, CB Daily Activities, CB Choice and Control and CB Social Community Civic).

Figure 12 Schematic of modelling approach



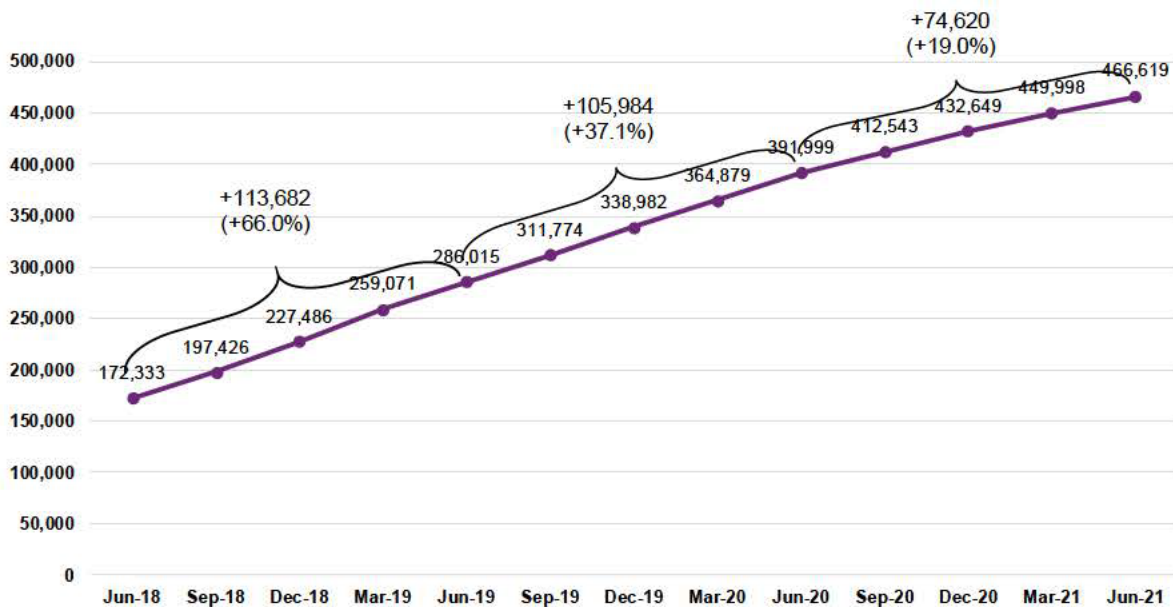
4. Scheme experience

This section includes trends in Scheme experience to 30 June 2021. Comparisons of actual experience are made to projections from the previous review, and where relevant the 2020-21 PBS estimates.

4.1 Participant numbers

There were 466,619 active participants in the Scheme as at 30 June 2021. This is an increase of 8% in the Scheme population since 31 December 2020 (from 432,649 active participants), and 19% since 30 June 2020. This reflects the net effect of intake and exit of participants from the Scheme over the past 12 months. This can be seen in Figure 13 below.

Figure 13 Active participants in the Scheme by quarter over the past 3 years



Experience since previous review has been relatively stable³⁸

The Scheme population of 466,619 active participants as at 30 June 2021 was 0.4% (or 2,073) lower than that expected from the previous review. It assumed 36,043 additional participants would enter the Scheme in the six months to 30 June 2021. Actual experience was broadly consistent with this, with an actual result of 33,970 additional participants in the six months to 30 June 2021 (6% lower net intake than expected).

The comparison of actual experience to that expected from the previous review is shown in [Figure 14](#), [Figure 15](#), [Figure 16](#) by key participant characteristics (SIL status, age band, disability type and level of function respectively).

³⁸ The expected number of participants in this comparison is based on the estimates from the previous review.

Figure 14 illustrates that there were fewer (3%) than expected participants in SIL as at 30 June 2021.

Figure 15 illustrates that actual participant numbers across most age groups were in line with expected projections. The biggest differences were in the cohort of children aged 0 to 6, where there were 2,050 fewer participants (2.8% lower than expected), followed by 7 to 14 years olds where there were 1,106 more participants (0.9% higher than expected). Intake of children aged 0 to 6 continues to remain significantly higher than the original Productivity Commission (PC) assumptions.

Figure 16 illustrate that actual participants across most disability groups were in line with expected projections. The most notable deviations arose from autism and developmental delay disability groups. There were 5,021 (3.4%) more participants with autism than expected who entered the Scheme. This was offset by 6,031 (11.3%) fewer than expected participants with developmental delay.

Since the introduction of the disability-specific participant pathway for people with psychosocial disability, the proportion of participants with psychosocial disability has been increasing. However, it should be noted that the number of participants with a psychosocial disability remains lower than the estimate in the 2011 Productivity Commission report.

Figure 14 Profile of Scheme participants as at 30 June 2021 – actual versus expected by SIL type

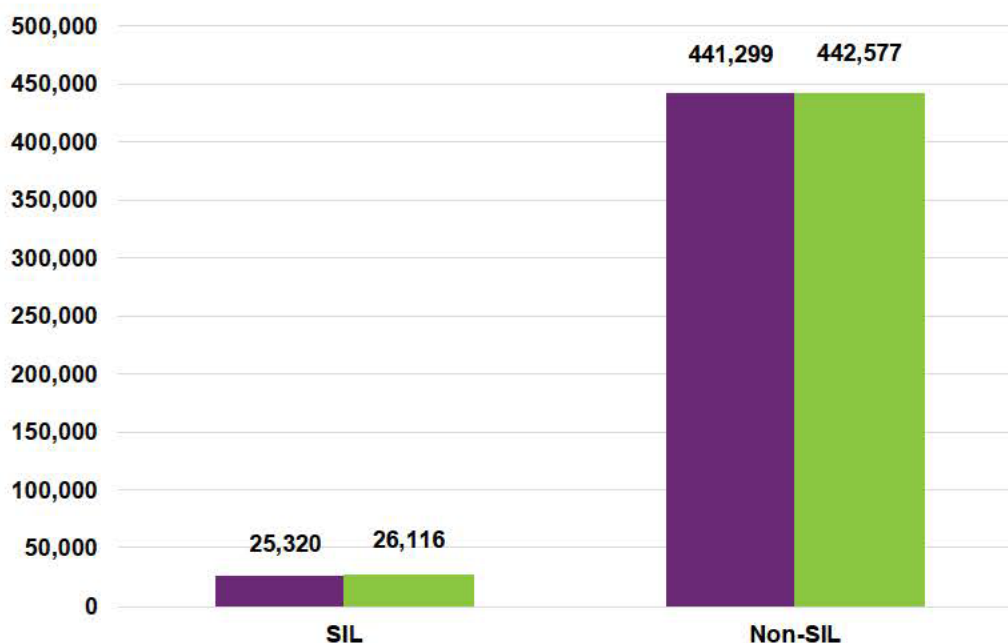


Figure 15 Profile of Scheme participants as at 30 June 2021 – actual versus expected by age band

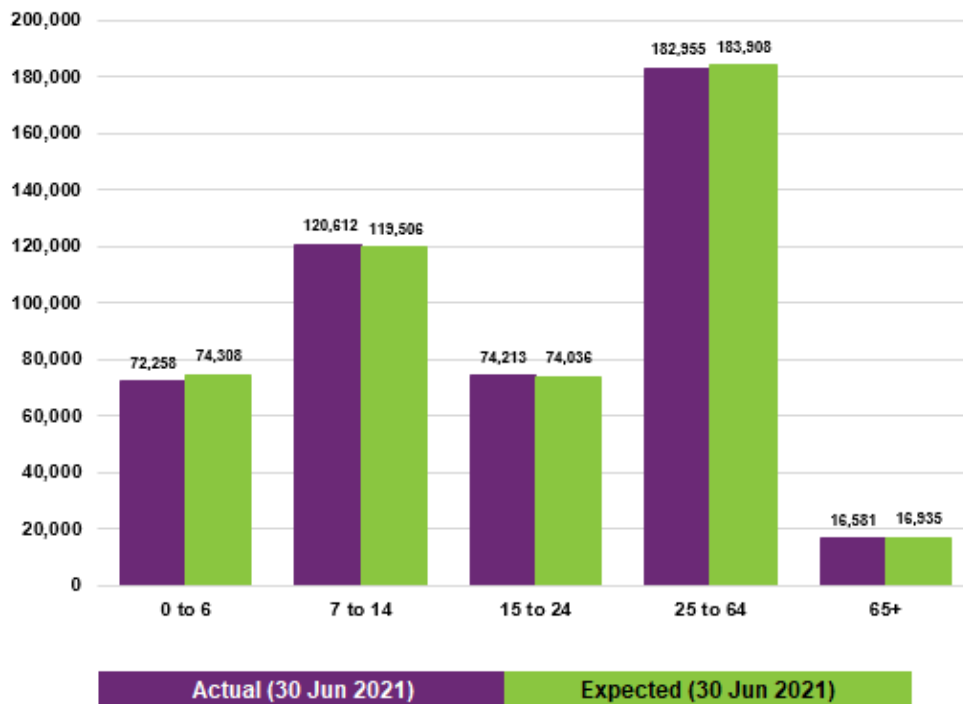
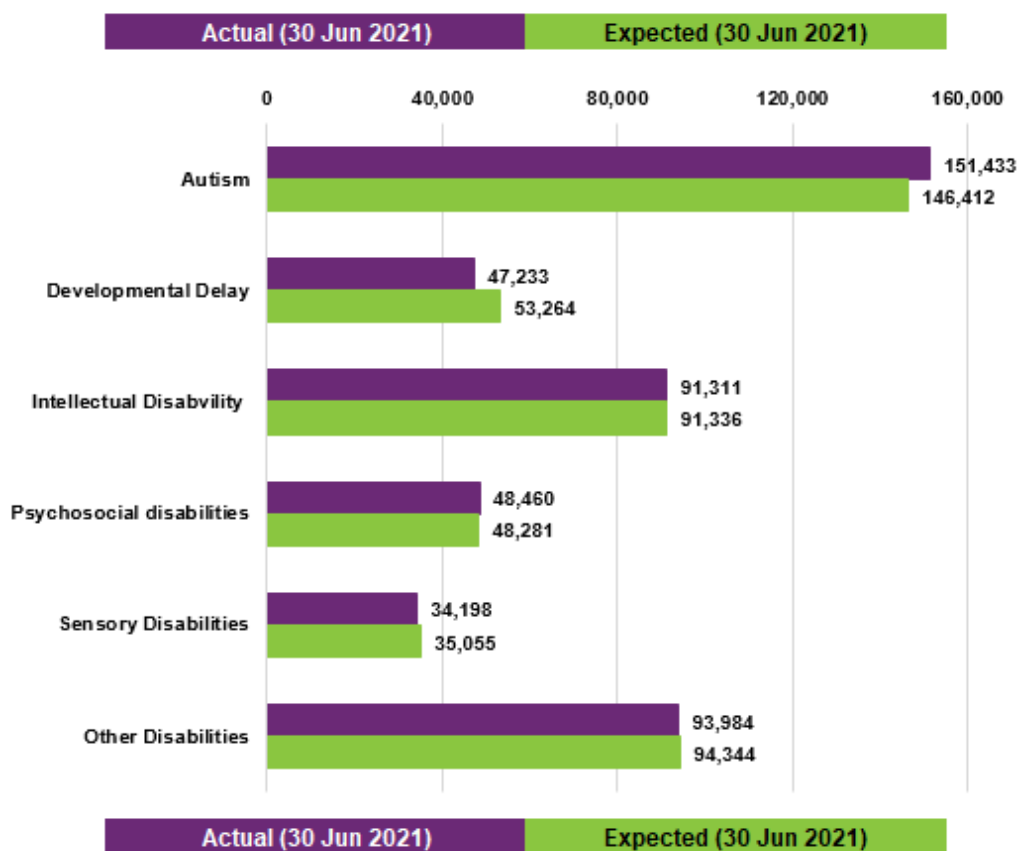


Figure 16 Profile of Scheme participants as at 30 June 2021 – actual versus expected by disability group

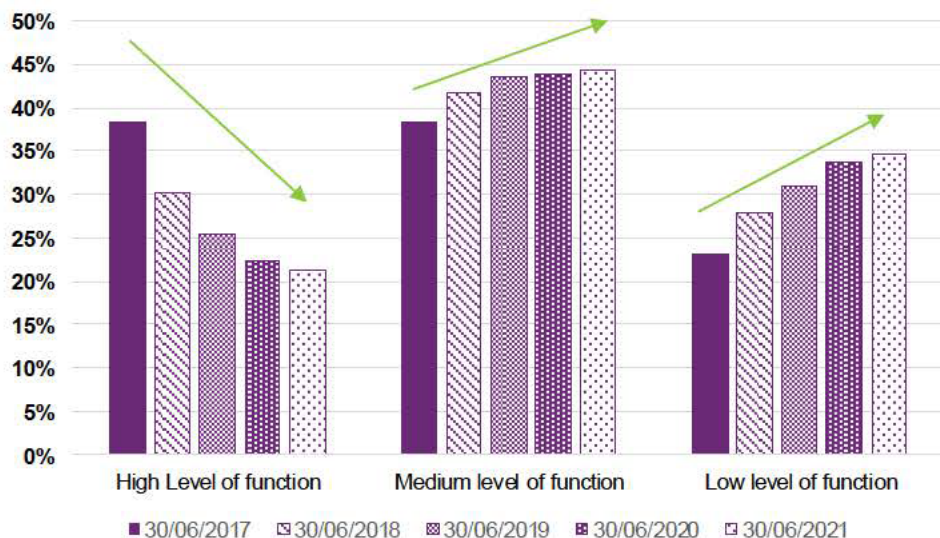


The distribution of the reported level of function continues to shift

A persistent shift in the reported distribution of function is observed within the participant population. This can be seen in Figure 17 which shows the reported functional distribution for participants who entered the Scheme prior to 30 June 2017. It indicates that over time the proportion with a high level of function has decreased, and the proportions with medium and low levels of reported function have increased. Given the relative lack of ability to control the consistency of functional assessments, it is likely that this trend reflects inconsistent assessments over time. It has been associated with increasing costs (as participants with lower function on average have higher support packages and hence average payments). This trend has also been observed for participants who entered in later years (post 2017).³⁹

³⁹ For further information, refer to [Addendum 1 to NDIA's Quarterly Report to Disability Ministers at 30 June 2021](#)

Figure 17 Change in reported functional distribution from 30 June 2017 to 30 June 2021⁴⁰



Growth in participants in supported independent living has slowed

Overall, approximately 5.4% of Scheme participants currently have SIL arrangements, an increase of 1,201 participants over the last 12 months. The increasing number of participants in SIL is mainly due to existing participants moving into SIL and, to a lesser extent, new entrants with SIL arrangements in place transferring from existing programs into the Scheme.

However, the proportion of Scheme participants with SIL arrangements continues to decrease over time (Figure 18), as the growth in SIL participant numbers is lower than the growth in total participant numbers. This can be also be seen below in Figure 19 which shows the split of new participants between those new to disability supports, and those who transitioned from State/Territory and Commonwealth programs. This gradual change in mix reduces the overall (Scheme level) average payment per participant as the new participants have a lower cost, on average, than existing participants.

⁴⁰ This chart only considers participants that were active at 30 June 2017. For further information, refer to Addendum 1 to NDIA's Quarterly Report to Disability Ministers at 30 June 2021: <https://www.ndis.gov.au/media/3476/download?attachment>

Figure 18 Active participants in the Scheme by quarter over the past 3 years, split by SIL type

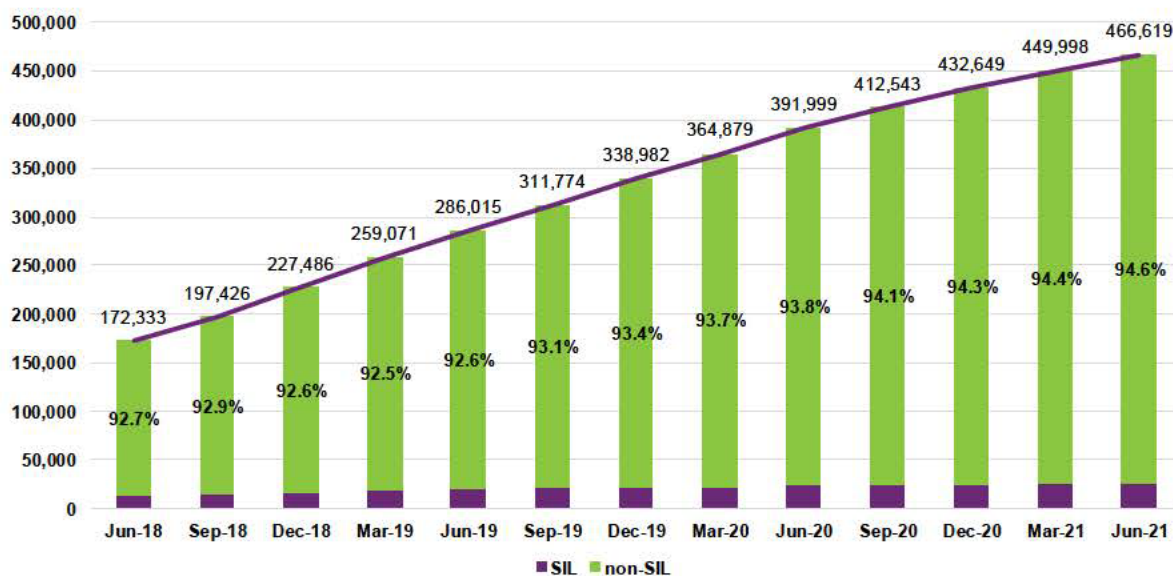


Figure 19 SIL participants intake in the Scheme by quarter over the past 3 years, split by access entry group⁴¹

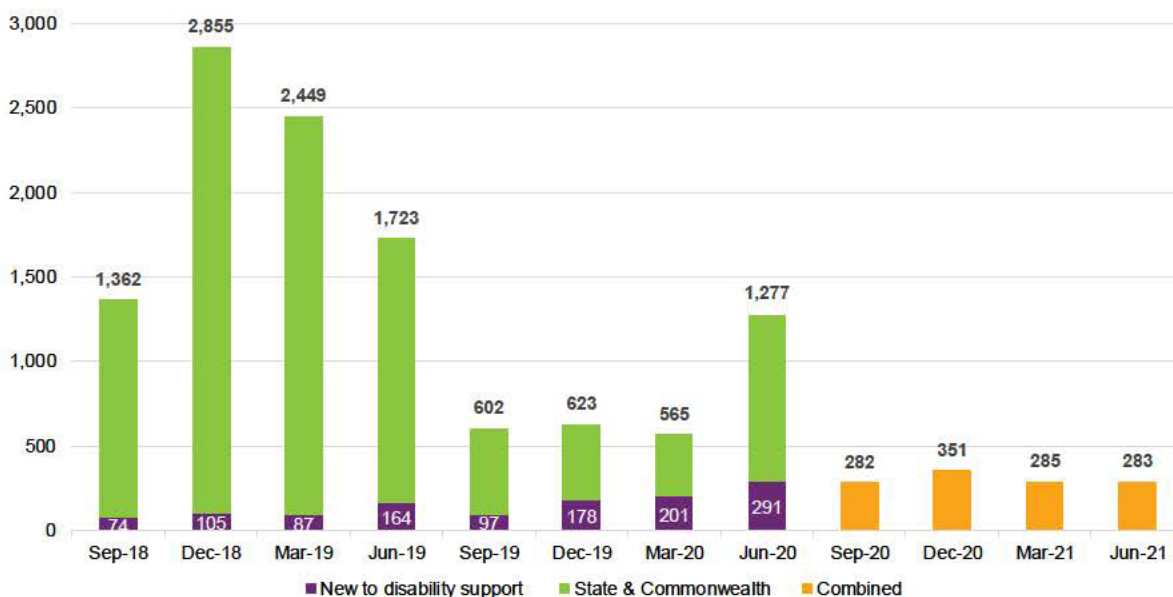


Figure 20, Figure 21 and Figure 22 below compare the actual number and proportion of participants with SIL arrangements as at 30 June 2021 against expectations from the previous review by various participant characteristics:

⁴¹ For quarters prior to 30 June 2020, the split of intake by entry type has been shown, while for quarters after 30 June 2020, the overall number of new SIL participants are shown. The majority of new participants after 30 June 2020 would be expected to be new to disability supports.

- The number of participants in SIL arrangements is slightly lower than expected (Figure 20).
- The number of participants in SIL arrangements has been lower than expected across the majority of disability types, with the exception of participants with other disability and stroke (Figure 22). The number of SIL participants with an intellectual disability continues to account for the majority of the participants in SIL arrangements.⁴²
- The majority of SIL participants are aged 25 and above, similar to expectations, with about 12% of all participants over the age of 25 in SIL arrangements (Figure 21).

⁴² About 54% of all SIL Scheme participants have an intellectual disability and 15% of participants with an intellectual disability are in SIL arrangements as at 30 June 2021.

Figure 20 Profile of participants in SIL as at 30 June 2021 – actual versus expected by SIL type

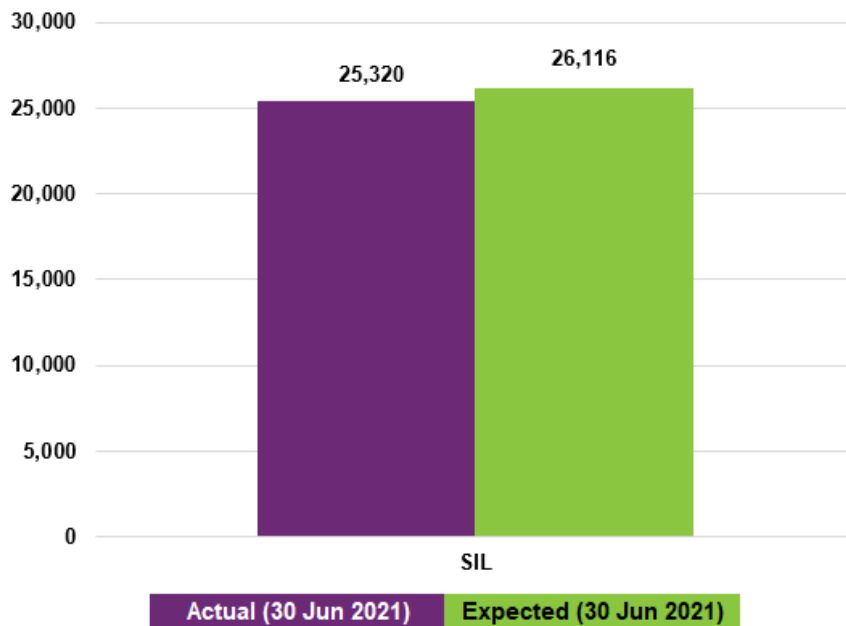


Figure 21 Profile of participants in SIL as at 30 June 2021 – actual versus expected by age band

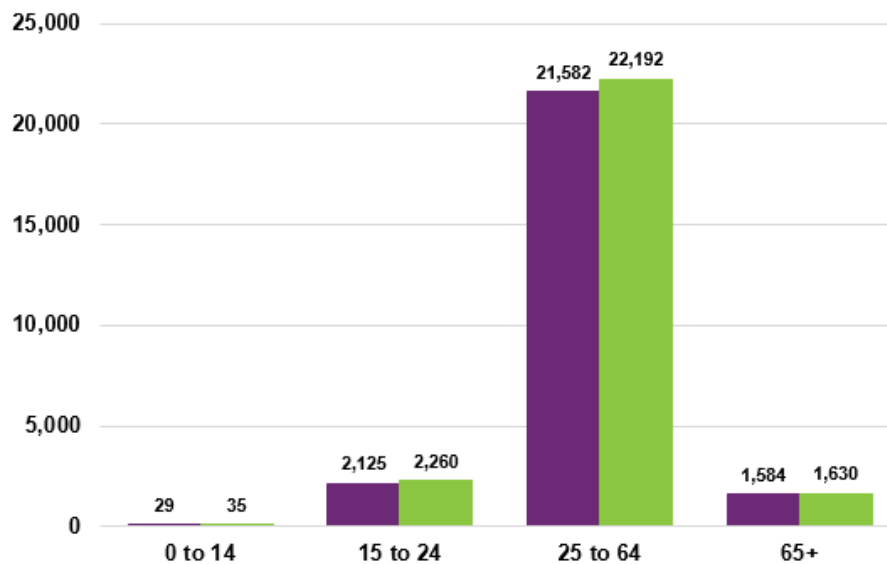


Figure 22 Profile of participants in SIL as at 30 June 2021 – actual versus expected by disability group



Prevalence rates continue to increase⁴³

Participant intake was expected to decline in the 2020-21 financial year as transition from the State/Territory arrangements concluded. Some decline was observed in the experience in the six months to 30 June 2021, where intakes were fewer than expected in the previous review and the 2020-21 PBS estimates.

However, the prevalence rates of mature regions⁴⁴ continue to exceed benchmark levels assumed in the original Scheme design. Figure 23 displays the rate of participant intake by phase-in quarter. The development curves show the proportion of active participants aged from 0 to 64 (compared to the general population) in the Scheme at specific development points in time. Increases over development time reflect participants entering the Scheme while reductions reflect participants exiting the Scheme and/or turning age 65.

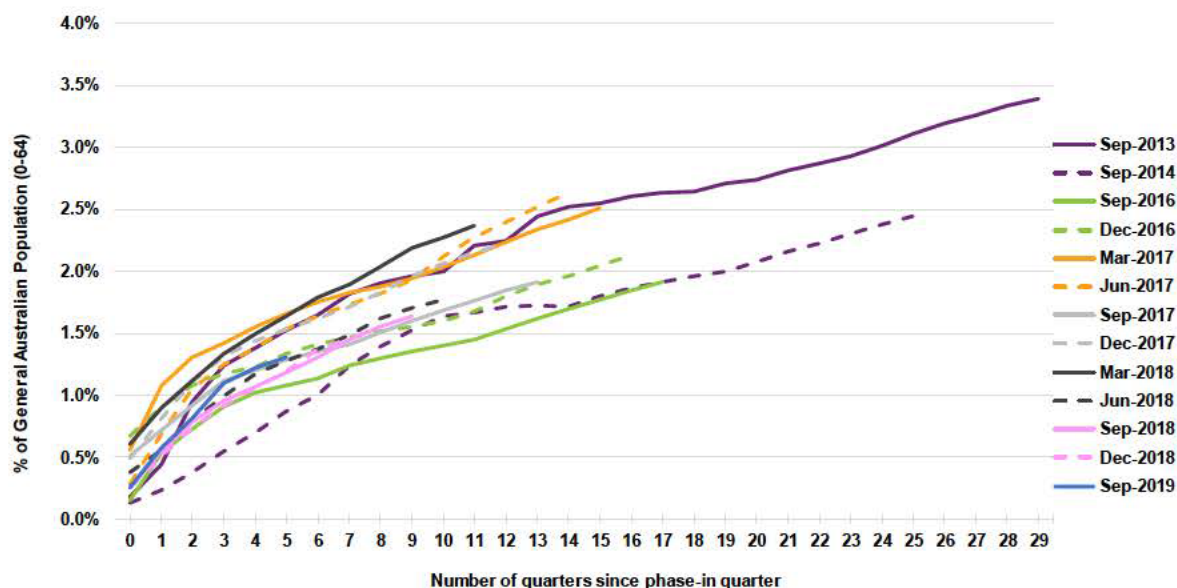
It was expected that these prevalence curves would “flatten out” over time. However, the Scheme population in these regions continues to increase above general population growth, and prevalence rates for ages 0 to 64 have thus continued to rise in the more mature sites. As an example, the unbroken dark purple line represents the prevalence rate of all regions that phased into the Scheme in the September 2013 quarter (e.g. Barwon and Newcastle). It

⁴³ Prevalence is defined as the proportion of the general population that have a disability and are accessing Scheme supports

⁴⁴ The regions that commenced phasing during the Scheme’s trial and early transition period.

is evident that even after 29 quarters (more than seven years), there is still an upward trend in the number of participants entering the Scheme and this trend is yet to taper off (which would indicate growth in line with population growth).

Figure 23 Participants as a proportion of Australian population since phase-in date – aged 0 to 64⁴⁵



Non-mortality exit rates remain well below expected

Within the context of financial sustainability, it is important to understand the emerging exit experience of participants. Participants may exit the Scheme for various reasons and are analysed in two categories for projection purposes:

- **Mortality exits:** participants who have died.
- **Non-mortality exits:** participants who no longer meet the Scheme’s eligibility criteria, have chosen to leave the Scheme of their own accord, or have chosen to move into residential aged care if over the age of 65.

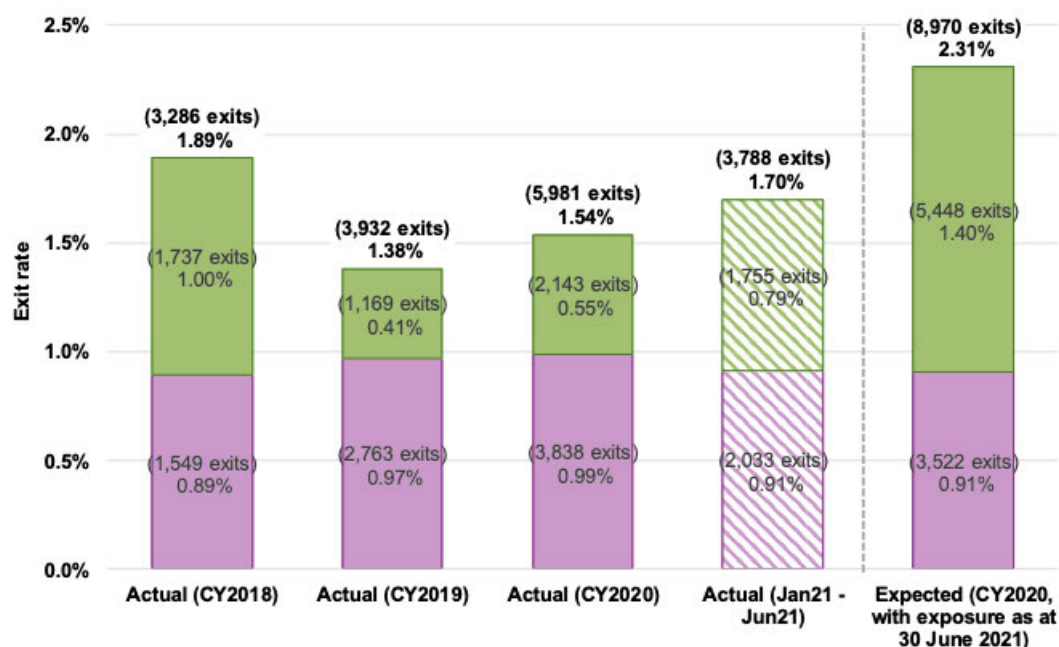
Figure 24 shows the exit experience in the 2018, 2019, 2020 and first half of 2021 calendar year, compared to long term expectations from the previous review.

The non-mortality exit experience has been showing an increasing trend from 0.41% in CY2019 to 0.79% in the six months to 30 June 2021 (CY2020) but remains well below long term assumptions (1.40%).

⁴⁵ Excludes jurisdictions which phased participants in by age or other non-standard phasing patterns (for example, South Australia, Tasmania and Northern Territory), as inclusion of these sites would lead to bias in development charts.

Mortality exit rates have remained broadly in line with recent experience – at 0.99% in CY2020 and 0.91% in the six months to 30 June 2021 compared to 0.97% in the previous calendar year (CY2019).

Figure 24 Actual versus expected – mortality and non-mortality exit rate



4.2 Average payment per participant

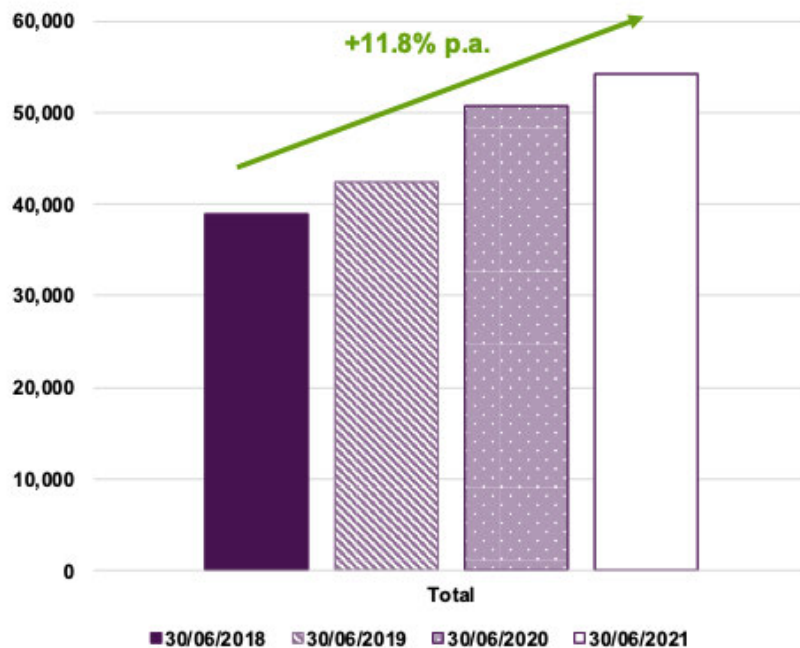
Average payments have continued to track above projections

On a cash basis⁴⁶, there were \$12.5 billion in payments made in respect of participant costs in the 6 months to 30 June 2021. Over this period, total payments were 5% higher than projected in the previous review (that is, \$12.5 billion compared with \$11.9 billion). The variance in total payments compared with that expected was predominantly caused by increases in average payments per participant, particularly for non-SIL participants (which were 6% higher than expected). Participant numbers were relatively close to expected since the previous review.

Experience has demonstrated that average annualised payments have continued to increase year on year. The annual increase in average payment is 11.8%p.a. over the last four years (Figure 25).

⁴⁶ Dates of payments relate to when the payment was made, rather than when the support was provided.

Figure 25 Average annualised payments over time⁴⁷



Over the past four years, the mix of participants in the Scheme has changed. That is, as the Scheme has rolled out across the country, the proportion of participants by different characteristics has changed. In particular, the proportion of children in the Scheme is higher in 2020-21 compared with 2017-18, and the proportion of SIL participants in the Scheme is lower in 2020-21 compared with 2017-18.

Analysing the change in average payment over time by whether or not participants are in SIL indicates that the average annual increase in average payment has been consistently high across both participant groups. Specifically, the average annual payment has increased for SIL participants by 12.0%, and the average annual payment has increased for non-SIL participants by 17.1% (Figure 26). Each of these average increases are similar to or higher than the overall average (of 11.8%), as the proportion of participants in SIL has decreased over the period. The average inflation over the past three years (removing the effect of the change in mix) was 14.9% p.a.

⁴⁷ Average annualised payments have been calculated on a cash basis using the 12 months over each year ending 30 June.

Figure 26 Average annualised payments over time by SIL type and in total⁴⁸

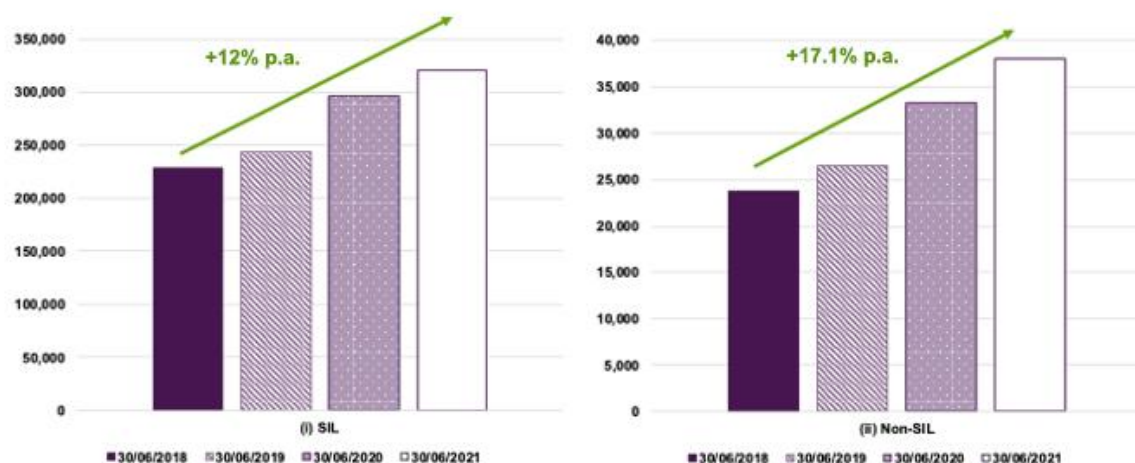
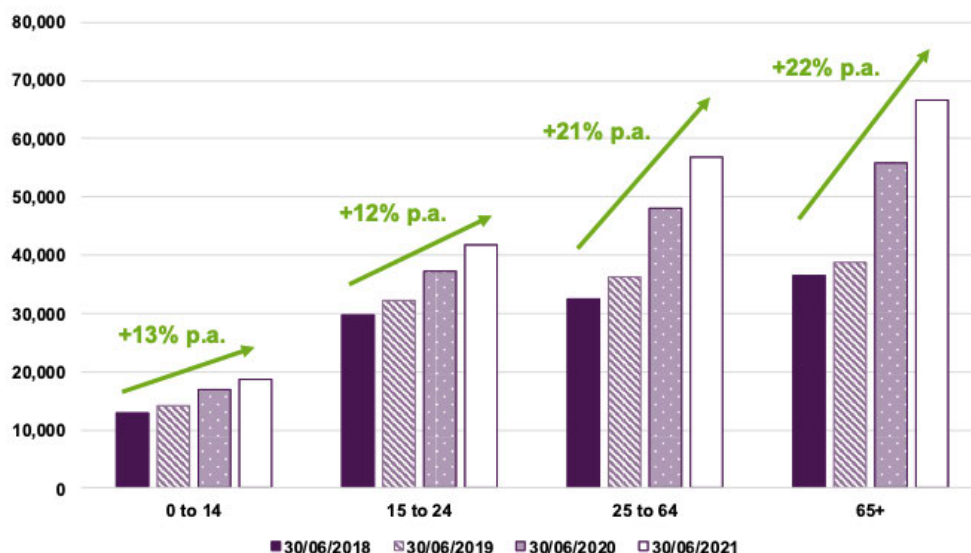


Figure 27 analyses the change in average payment over time by age band for participants not in SIL. The average increase for 0 to 14 year olds is 13%, the average increase for 15 to 24 year olds is 12%, the average increase for 25 to 64 year olds is 21%, and the average increase for participants aged over 65 is 22%. For participants not in SIL, average payments have increased at a faster rate for adults (those aged over 25) and reflects a material increase in the hours of attendant care support these participants are receiving over time.

Figure 27 Average annualised payments over time for non-SIL participants by age band⁴⁹



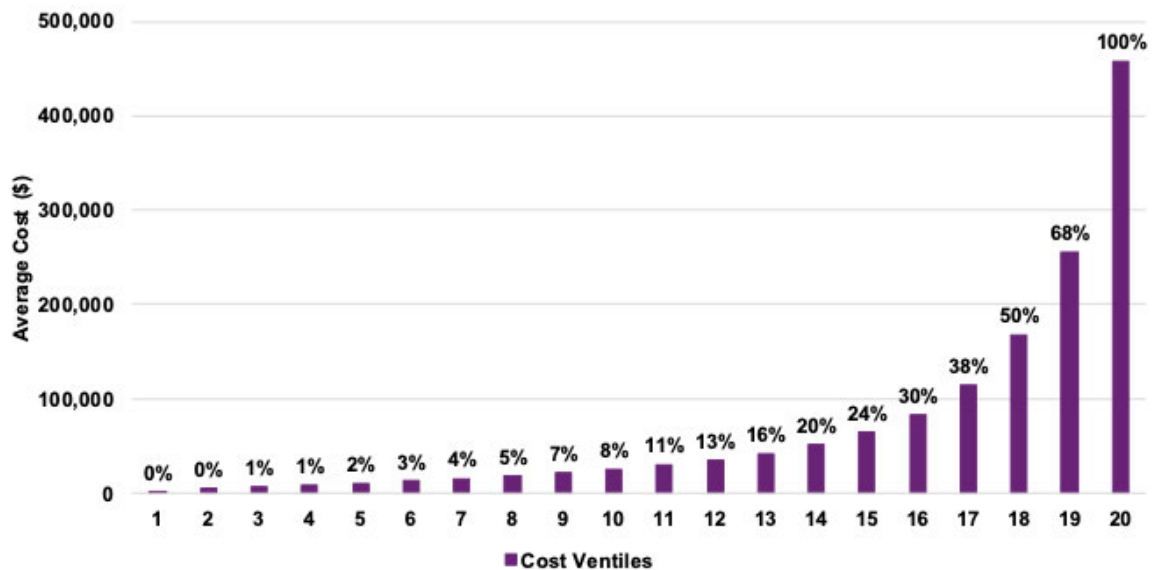
⁴⁸ Average annualised payments have been calculated on a cash basis using the 12 months over each year ending 30 June.

⁴⁹ Average annualised payments have been calculated on a cash basis using the 12 months over each year ending 30 June.

The distribution of Scheme cost is highly skewed

The Scheme supports participants with a diverse range of needs. Of the payments over the 12 months to 30 June 2021 to mature participants⁵⁰, 50% related to the top 10%⁵¹ of participants when ranked by cost over the period. Conversely, the bottom 40%⁵² of participants represent 5% of payments made (Figure 28).

Figure 28 Average payment and cumulative percentage of Scheme cost by ventile (5% band)



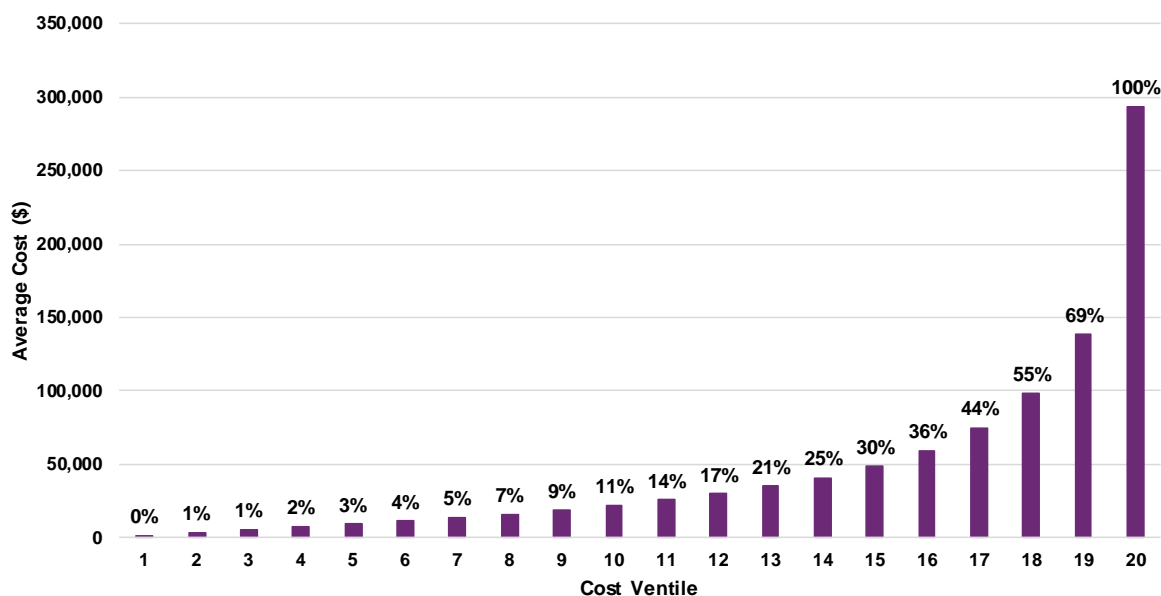
This distribution does not vary greatly even when removing the impact of SIL participants (who have far higher payments on average). 45% of payments are made in respect of the top 10% of non-SIL participants, whilst only 7% are made in respect of the bottom 40% of non-SIL participants (Figure 29).

⁵⁰ Those participants who had been in the Scheme for at least one year as at 30 June 2020

⁵¹ The top 10% is equivalent to ventiles 19 and 20

⁵² The bottom 40% is equivalent to ventiles 1 to 8

Figure 29 Average payment and cumulative percentage of Scheme cost by ventile (5% band) – non-SIL only



These observations are common in long-tail insurance schemes, and understanding these trends assist with monitoring Scheme sustainability.

The average payment per participant is lower for new entrants (on a mix-adjusted basis)

Since the previous review, a further analysis of 200 recent new entrants was undertaken to understand the drivers of the higher than expected number of new entrants. This review indicated that insufficient evidence was gathered regarding the level of function determined for 45% of the participants in the sample. This finding indicates broad uncertainty regarding the functional capacity of new entrants, and more specifically to the use of the level of function as a determinant of the average payment of new entrants. (The average payment for future new entrants assumed in these projections is based on the participant’s level of function along with their age, primary disability and SIL status).

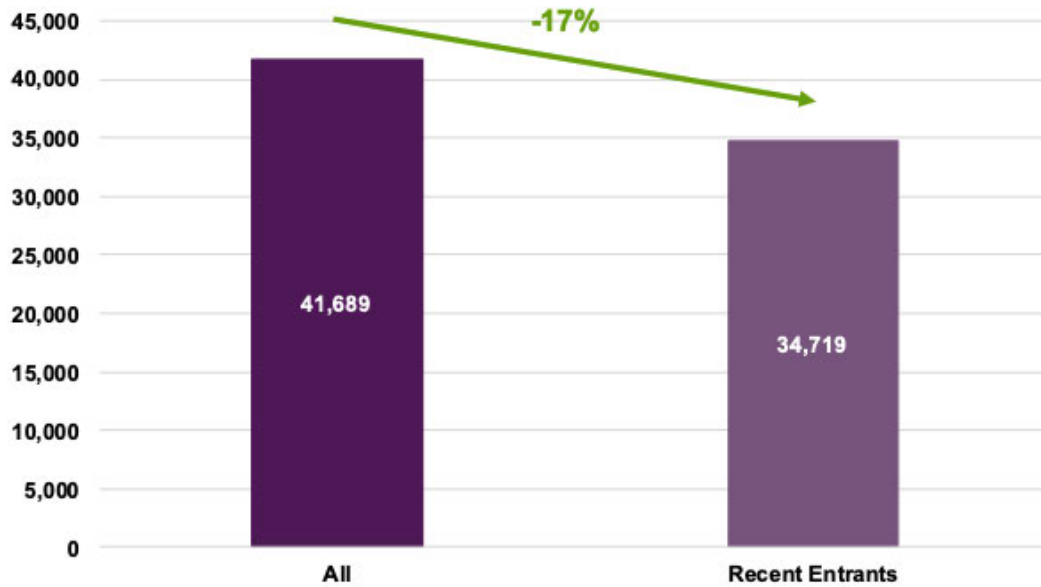
Analysis was therefore undertaken to identify any difference in average payment between new entrants that entered the Scheme in more recent years and the overall average payment for participants who form the basis of the payment per participant assumptions.

The analysis indicated that the average payment for recent non-SIL new entrants is approximately 17% lower than the average payment for all participants, on a mix-adjusted basis⁵³ (Figure 30). Given that age and primary disability are relatively objective, it is

⁵³ This analysis includes Non-SIL participants for phasing financial years 2016-2019. The mix-adjusted average payment shows the average payment for each cohort on a comparable basis, i.e. based on a consistent mix of participants by age, disability type and level of function. The variance in average payment between all participants and recent entrants therefore relates purely to lower payments per participant, and not due to any change in mix.

reasonable to infer that this variance results from the average payment for new entrants with a given level of function varying from that of the population more broadly.

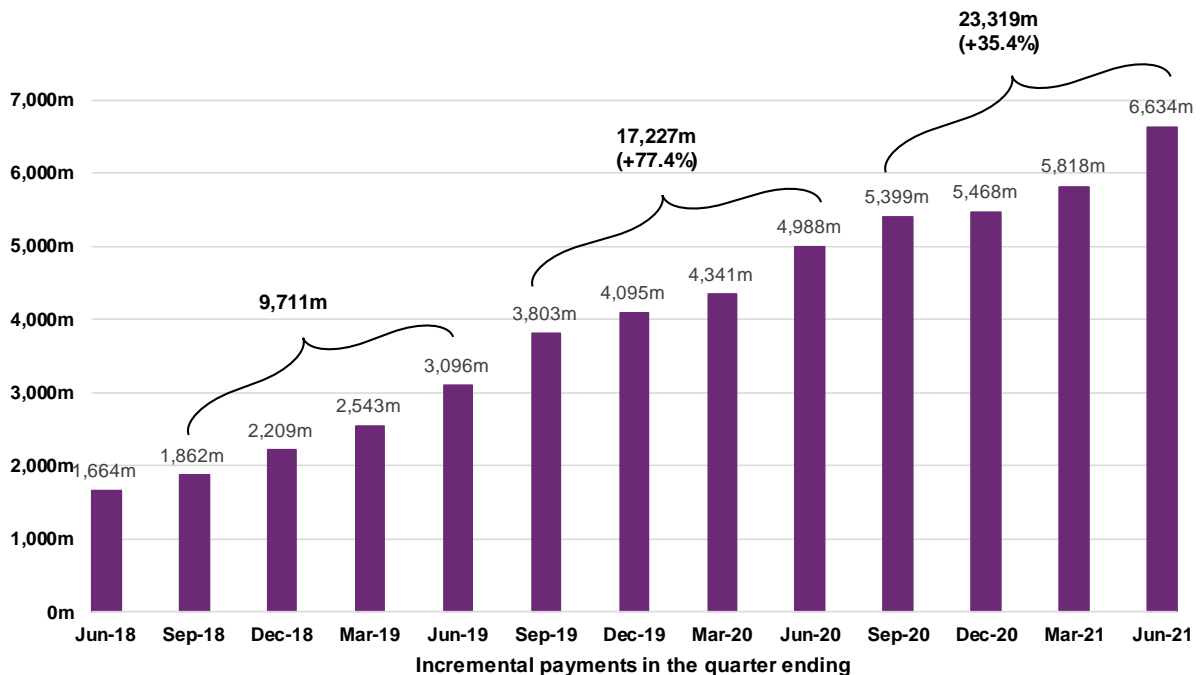
Figure 30 Mix-adjusted Non-SIL average payment



4.3 Total payments

Figure 31 below illustrates Scheme spend on participant supports by quarter on a cash basis. The rapid growth in Scheme spend reflects the higher than expected number of active participants and higher than expected average payments per participant described in the sections above.

Figure 31 Scheme spend (cash basis) on participant supports by quarter over the past 3 years (\$)



Overall payments have been higher than expected

Comparing actual experience to expectations (based on the previous review) by various participant characteristics highlights emerging trends and key cost pressures on the Scheme. Figure 32, Figure 33 and Figure 34 show total payment levels on a cash basis by SIL status, age band and disability group. Note that the payment experience is impacted by emerging participant mix, as well as trends at the support category level.

Compared to expectations from the previous review, this shows:

- Higher than expected payment experience for non-SIL participants (Figure 32).
- Higher than expected payment experience for participants across all ages groups except 0 to 14 (Figure 33).
- Higher than expected payment experience for psychosocial and other disabilities, somewhat offset by lower than expected payment experience for intellectual disabilities and sensory disabilities (Figure 34).

Figure 32 Total payments (\$m) in the six months to 30 June 2021 by participant profile – actual vs expected by SIL status

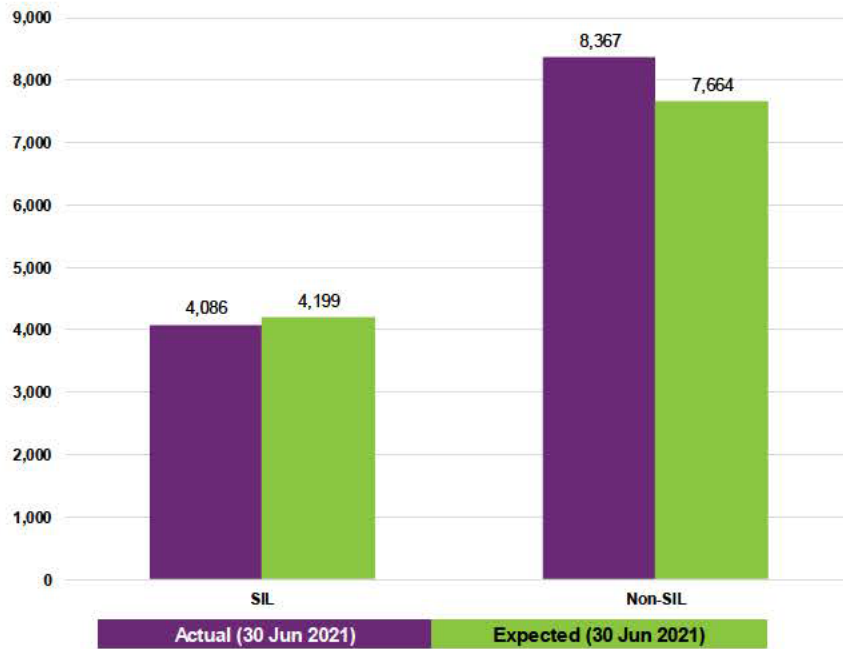


Figure 33 Total payments (\$m) in the six months to 30 June 2021 by participant profile – actual vs expected by age band

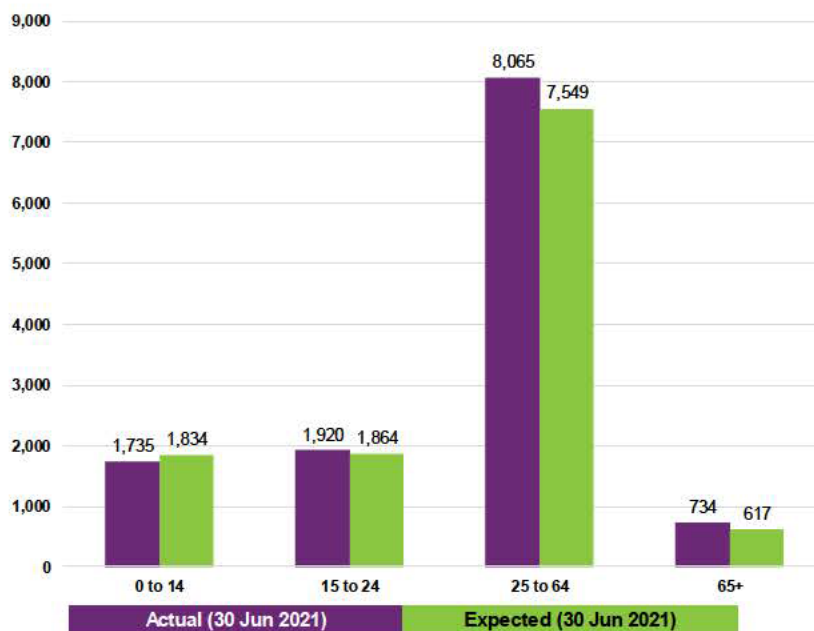
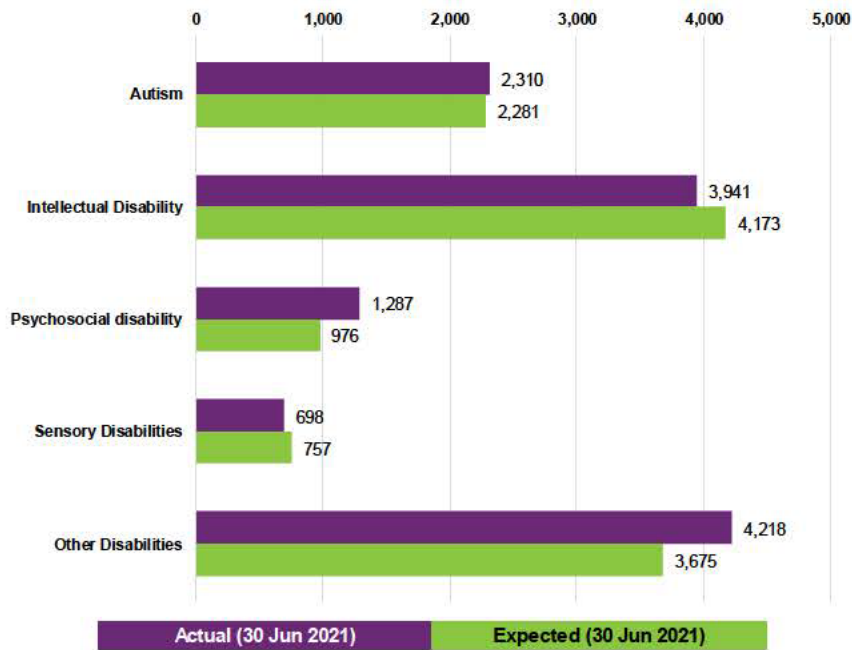


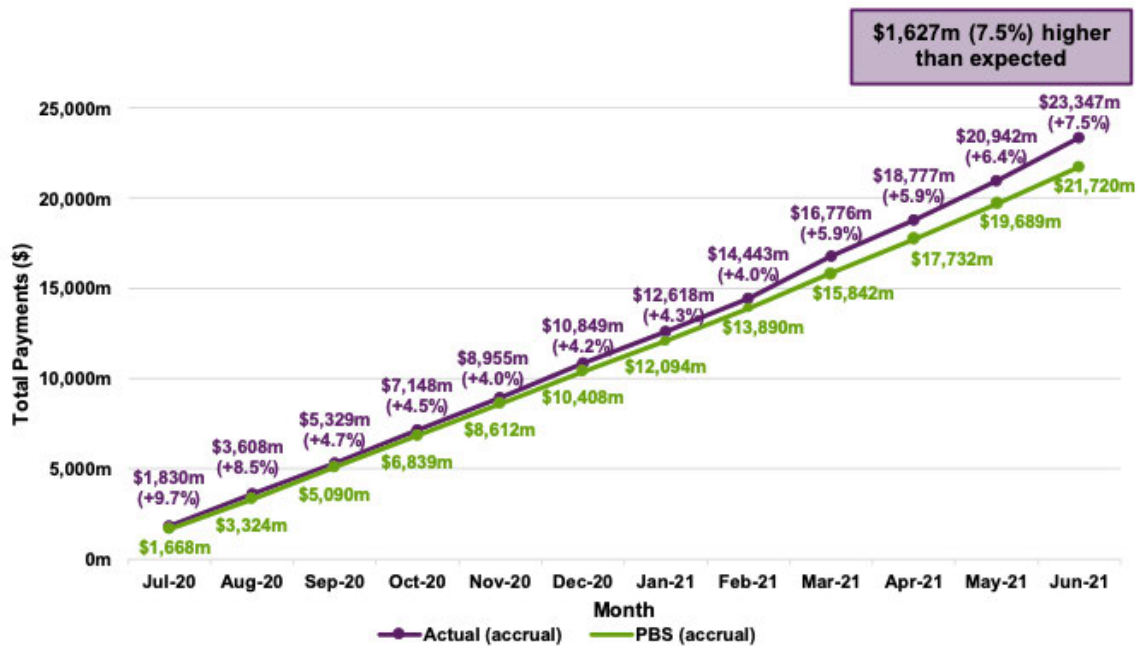
Figure 34 Total payments (\$m) in the six months to 30 June 2021 by participant profile – actual vs expected by disability group



4.4 Actual vs Expected from 2020-21 PBS Estimate

Figure 35 shows that total cumulative payments (on an accrual basis) have tracked above the 2020-21 PBS estimates since the start of the 2020-21 financial year. By June 2021, actual experience exceeded the projected amount by 7.5%, an equivalent of \$1,628m.

Figure 35 Total Payments (accrual basis) in the 2020-21 financial year – actual vs expected⁵⁴



Cumulative participant numbers have also tracked above the PBS estimates since the start of the 2020-21 financial year. The Scheme provided supports to an additional 23,387 participants, or 5.3%, compared to the projection.

⁵⁴ PBS results have not been adjusted for the revised estimates in the recent 2021 Federal budget, which for June 2021 is \$23,234m. Additionally, total payments in 2020-21 include \$119.33 million spent on COVID-related expenses.

Figure 36 Total active participants in the 2020-21 financial year – actual vs expected



4.5 Historic utilisation

Plan budgets represent the dollar amount of support that has been made available to participants in their plan. Historically, there is a reasonably significant gap between plan budgets and supports which are actually utilised. The proportion of plan budgets which are used is referred to as the ‘utilisation rate’.

After being relatively flat for several years, utilisation has increased over the past several months, which can be seen when considering plan budgets by support year. Over the three year period to 30 June 2020, utilisation rates were essentially flat, between 70% and 71% of plan budgets, however in the past year the utilisation rate has increased to 74%.

Table 14 provides an overview of utilisation rates⁵⁵ by support year as at 30 June 2021.

Table 14 Estimated utilisation rate by support year as at 30 June 2021

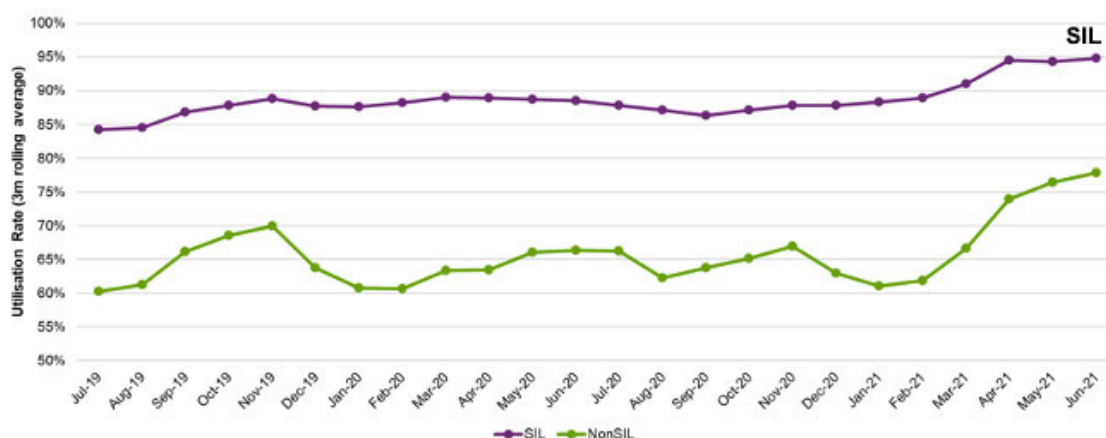
Utilisation component	2016-17 and prior	2017-18	2018-19	2019-20	2020-21	Total
Plan budgets (\$m)	4,816	7,775	14,582	24,648	32,096	83,918
Payments to date (\$m)	3,348	5,436	10,368	17,287	22,139	58,578
Estimated future payments (\$m)	0	2	13	66	1,679	1,760
Projected ultimate payments (\$m)	3,348	5,438	10,381	17,352	23,819	60,337
Utilisation to date (%)	69.5%	69.9%	71.1%	70.1%	69.0%	69.8%
Projected ultimate utilisation (%)	69.5%	69.9%	71.2%	70.4%	74.2%	71.9%

⁵⁵ The utilisation rates shown are “ultimate” rates, considering both payments already made and payments for supports already provided but not yet paid. This is to allow for the impact of payment delays when calculating ultimate utilisation for a given support year.

A consistent result is observed when separating the experience between participants in SIL and those not in SIL. Whilst the utilisation rate is consistently higher for participants in SIL arrangements, the utilisation for both SIL and non-SIL participants has increased significantly since January 2021 ([Figure 37](#)).

The increases are observed across almost all support categories, especially Core supports such as Non-SIL Daily Activities, which had the biggest increase since January 2021. This is followed by increase in other Core supports (Social and Community and Consumables) and Capacity Building Daily Activities.

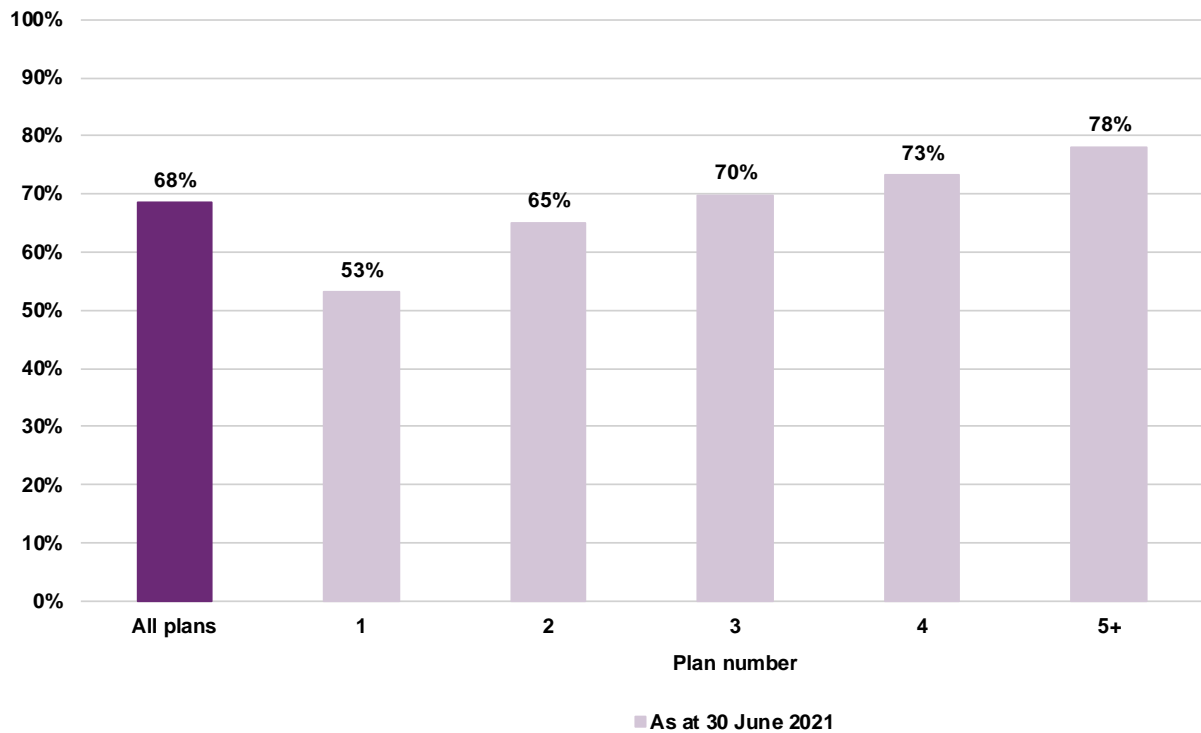
Figure 37 Three month rolling utilisation rates by SIL type from July 2019 to June 2021



Also noteworthy is that utilisation has consistently been observed to increase, the longer participants have been in the Scheme. This is shown in [Figure 38](#) which shows the breakdown of utilisation rates by plan number. Utilisation of plan budgets for participants on their first plan is 53%, compared to 78% for participants on their fifth plan. This increase in plan utilisation, with increased duration in the Scheme, is implicitly reflected in the allowance for superimposed inflation.

Of the increases in utilisation rate observed since January 2021, the maturing of the participant mix has contributed between 20% and 30%, with the remainder of the increase coming from an overall increase in utilisation within each cohort.

Figure 38 Utilisation of plan budgets by plan number from 1 October 2020 to 31 March 2021 based on data to 30 June 2021⁵⁶



⁵⁶ Utilisation for all plans include both cash and in-kind supports. However, the calculation of utilisation by plan number excludes participants with in-kind supports as it is not possible to accurately separate in-kind payments and plan budgets between plans. Only utilisation of plan budgets between 1 October 2020 and 31 March 2021 is shown, as experience in the most recent quarter is still emerging.

5. Projections

This section includes the projection of Scheme costs from 2021-22 to 2029-30, using data as at 30 June 2021. The methodology for the projection is included in section 3. As outlined in section 4 of this report, actual payment experience over the past six months exceeded projections undertaken at the previous review. It also exceeded the 2020-21 PBS estimates over the past twelve months, driven by higher participant numbers and higher average payments per participant. The projections take into account this experience, and also adopt a forward-looking view regarding future Scheme inflation (i.e. future assumed inflation is lower than inflation recently observed).

5.1 Total participant cost projections

Combining participant number projections with average payment assumptions result in total participant cost projections for each financial year on a cash basis. An allowance for support provided as at by 30 June 2021 but not yet paid takes the projected costs from a cash basis to an accrual basis.

Participant number projections

Table 15 shows that the Scheme is projected to have a Steady Intake Date⁵⁷ population at 30 June 2024 of over 630,000 participants, of whom 598,000 are expected to be aged 0 to 64. This is equivalent to a prevalence rate of 2.77% of the Australian general population aged 0 to 64.

Table 15 Baseline projection of participant numbers

Number of participants as at June 30	2021	2022	2023	2024	2025	2030
2020-21 AFSR						
0-64 years	450,038	508,974	559,846	598,491	633,596	798,341
65+ years	16,581	21,483	26,587	31,835	36,804	60,987
Total	466,619	530,457	586,433	630,327	670,400	859,328
Prevalence (0-64)	2.10%	2.39%	2.61%	2.77%	2.90%	3.49%

Table 16 and Table 17 show the split in the projection between existing participants and future participants (i.e. new entrants post 30 June 2021). 43.5% of projected participants in 2029-30 are estimated to be current Scheme participants, with 56.5% being new entrants to the Scheme.

Table 16 Split of participant numbers between existing and future participants

Number of participants as at June 30	2021	2022	2023	2024	2025	2030
Existing Scheme participants	466,619	457,715	445,815	432,888	420,023	373,426
Future participant intake	0	72,741	140,618	197,439	250,377	485,902
Total Number of Participants	466,619	530,457	586,433	630,327	670,400	859,328

⁵⁷ The point in time where participant intake primarily represents participants with new incidence of disability. For this report 30 June 2024 has been assumed.

Table 17 Proportional split of participants between existing and future participants

Number of participants % as at 30 June	2021	2022	2023	2024	2025	2030
Existing Scheme participants	100.0%	86.3%	76.0%	68.7%	62.7%	43.5%
Future participant intake	0.0%	13.7%	24.0%	31.3%	37.3%	56.5%
Total Number of Participants	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Participant costs projection

Projected participant costs on an accrual basis are \$29.2 billion in 2021-22, increasing to \$59.3 billion in 2029-30. This is equivalent to 1.37% of GDP in 2021-22 and 1.95% of GDP in 2029-30 ([Table 18](#)).

Table 18 Baseline projection of participant costs (and comparison to GDP)

Participant Costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
Participant Costs (cash basis)					
Participant Costs (0-64)	26,994	30,965	34,345	37,067	51,471
Participant Costs (65+)	1,837	2,464	3,114	3,748	7,012
Total Participant Costs (cash basis)	28,831	33,429	37,459	40,814	58,483
Participant Costs (accrual basis)					
Participant Costs (0-64)	27,359	31,386	34,812	37,569	52,169
Participant Costs (65+)	1,864	2,501	3,161	3,803	7,115
Total Participant Costs (accrual basis)	29,223	33,886	37,973	41,373	59,284

Participant Costs as % of GDP (accrual basis):	2021-22	2022-23	2023-24	2024-25	2029-30
Total Participant Costs (all)	1.37%	1.56%	1.67%	1.74%	1.95%
Total Participant Costs (0-64 years)	1.28%	1.44%	1.53%	1.58%	1.72%

[Table 19](#) shows the participant cost projections on an accrual basis, split between existing Scheme participants and future participant intake (post 30 June 2021). In 2029-30, 63.3% of projected cost relates to current Scheme participants, with 36.7% relating to new entrants.

Table 19 Breakdown of participant costs between existing and new participants

Participant Costs (\$m) - accrual basis	2021-22	2022-23	2023-24	2024-25	2029-30
Existing Scheme participants	27,917	30,227	31,735	32,722	37,546
Future participant Intake	1,306	3,659	6,238	8,650	21,738
Total Participant Costs	29,223	33,886	37,973	41,373	59,284

Participant Costs (%) - accrual basis	2021-22	2022-23	2023-24	2024-25	2029-30
Existing Scheme participants	95.5%	89.2%	83.6%	79.1%	63.3%
Future participant intake	4.5%	10.8%	16.4%	20.9%	36.7%
Total Participant Costs	100%	100%	100%	100%	100%

5.2 Comparison with previous AFSR

This section compares the 2020-21 AFSR cost projections with those from the previous review. The projected participant costs are approximately \$3.9 billion **higher** than the previous review in the four years to June 2025, and about \$1.0 billion **lower** in 2029-30 ([Table 20](#)).

Comparisons with the 2021-22 PBS Estimates and the 2017 PC Study report are shown in Section 6.3 and more detailed comparisons with the previous review are shown in Appendix C.

Table 20 Comparison of 2020-21 AFSR with 2019-20 AFSR

Projected Participant Costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30	Total 2021-25
2020-21 AFSR	29,223	33,886	37,973	41,373	59,284	142,455
Dec20 AFSR	28,139	32,900	36,906	40,659	60,324	138,603
Difference	1,085	987	1,066	714	-1,040	3,852

The sources of variance between this projection and the previous review are shown in [Table 21](#):

- Changes to assumptions regarding population numbers (predominantly the number of new participants entering Supported Independent Living) have **reduced** the projection by \$5.0 billion in the four years to June 2025 and \$3.2 billion in 2029-30
- Higher base payment assumptions (i.e. the average payment per participant in the immediate future), resulting from higher recent payment experience have **increased** the projection by \$3.5 billion in the four years to June 2025 and \$1.4 billion in 2029-30
- An increased allowance for future inflation (i.e. **in addition** to the higher base payment assumptions) has **increased** the projection by \$7.1 billion in the four years to June 2025 and \$2.6 billion in 2029-30
- A reduction in the allowance for the average payment for new entrants, has **reduced** the projection by \$1.8 billion in the four years to June 2025 and \$1.9 billion in 2029-30. This reduction arises from new entrants, on a mix-adjusted basis, being observed to cost less than existing participants.

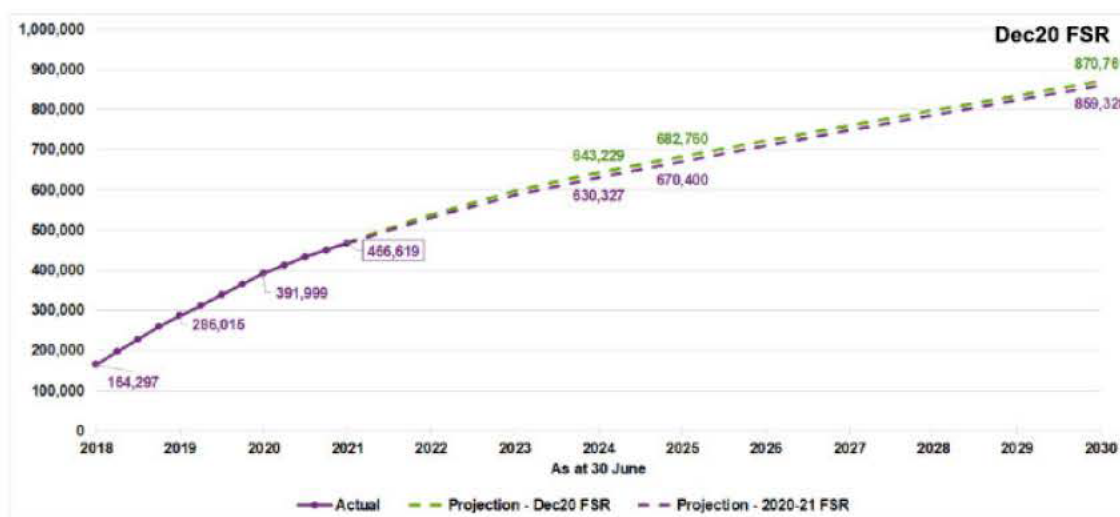
Table 21 Participant cost projection movements since previous review due to experience and updated assumptions

Total Participant Costs – accrual basis (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30	Total 2021-25
Updated population numbers and assumptions	-486	-1,121	-1,513	-1,882	-3,163	-5,002
Updated base payment assumptions	818	849	901	967	1,404	3,535
Updated inflation assumptions	866	1,613	2,262	2,422	2,646	7,163
Lower cost of new entrants	-112	-354	-584	-793	-1,927	-1,843
Total impact of experience and modelling	1,085	987	1,066	714	-1,040	3,852
Updated population numbers and assumptions	-1.7%	-3.4%	-4.1%	-4.6%	-5.2%	-3.6%
Updated base payment assumptions	2.9%	2.6%	2.4%	2.4%	2.3%	2.6%
Updated inflation assumptions	3.1%	4.9%	6.1%	6.0%	4.4%	5.2%
Lower cost of new entrants	-0.4	-1.1%	-1.6%	-1.9%	-3.2%	-1.3%
Total impact of experience and modelling	3.9%	3.0%	2.9%	1.8%	-1.7%	2.8%

5.3 Participant projections

The current projections indicate a marginal reduction in projected participant numbers, compared to the previous FSR (Figure 39). Whilst the projected participant numbers are slightly lower, the trajectories of the two projections are largely unchanged.

Figure 39 Projected participant numbers (all ages)



New incidence

In setting future assumptions relating to new incidence, it is necessary to estimate, of the observed experience, the proportional split between

- *True new incidence* – i.e. participants who acquired their disability relatively recently, or who have only recently met the necessary criteria for access to the Scheme.

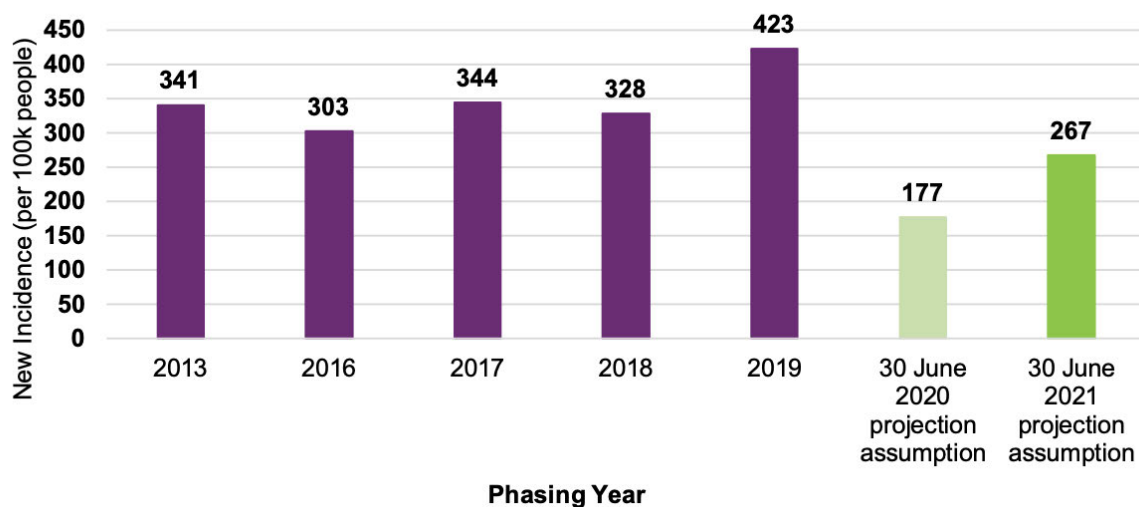
These participants **would** therefore be indicative of likely longer term levels of new incidence.

- *Previously unmet need* – i.e. participants who acquired their disability some years prior who only accessed the Scheme recently (for various reasons). These participants **would not** therefore be indicative of likely longer term levels of new incidence.

At the previous review new incidence assumptions were increased significantly, in response to observed experience being significantly higher than previously assumed. This was observed in particular in geographic areas which phased into the Scheme at least three years earlier (and which therefore would be expected to be relatively representative of longer term expected experience). The range of disabilities and conditions of participants entering the Scheme also contributes to the challenge in setting future new incidence assumptions.

The adopted assumption at this review, as well as the assumptions adopted at the 30 June 2020 review as well as observed experience by phasing year is shown in [Figure 40](#).

Figure 40 Observed new incidence rate by phasing year and assumptions at 30 June 2020 and 2021⁵⁸



The assumption adopted at this review (267 per 100,000 people), which is unchanged from the previous review, is higher than assumptions adopted prior to the previous review, but lower than the rates observed. The adopted assumption is approximately 80% of the observed experience (and approximately 70% for adult participants, where there is greater uncertainty about the long term number of new participants). There therefore remains upside risk in this assumption (that is, the risk that participant numbers will be higher).

⁵⁸ Observed new incidence rates for 2013 to 2019 phasing years show the number of new entrants per 100K population over the 2020-21 financial year in the relevant geographic areas which phased into the Scheme in that year

To assist in refining this assumption, a sample of recent new entrants from these earlier geographic areas was analysed. This analysis is summarised below in Table 22. Key findings are discussed below:

- 61% of the sample are regarded as likely to be true new incidence. This figure comprises participants who acquired their disability in the past three years (29%) as well as participants with a disability acquired more than three years previously but where there was a recent event, or change in circumstances giving rise to their gaining access to the Scheme (32%).
- For 39% of the sample it is less clear whether they represent true new incidence or previously unmet need. Many of these participants have interacted with the justice and/or mental health systems for years, and it is plausible to expect that it has taken some time for participants such as these to access the Scheme and that the number of such participants will eventually drop

Table 22 Analysis of sample of recent new entrants⁵⁹

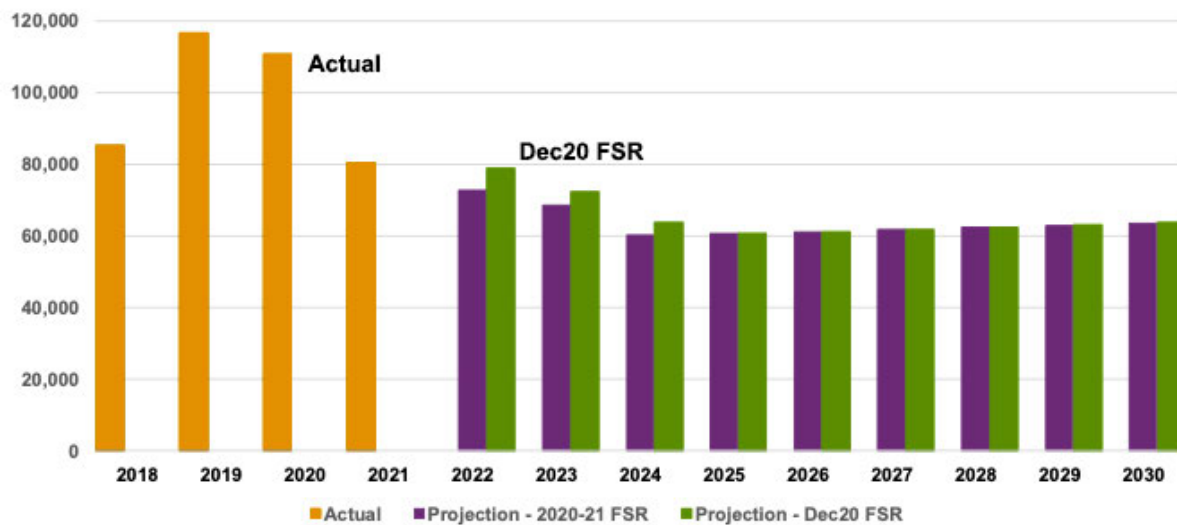
	Number	Percentage
Likely to be true new incidence		
Disability Acquired within past 36 months	58	29%
Disability Acquired prior to past 36 months		
Recent loss of Informal supports	13	
Previous application denied	25	
Substantial functional impairment now reached	13	
Recent life-stage event (employment, education)	14	
Sub-total	65	32%
Total	123	61%
Unclear if true new incidence		
Interface with Justice and/or Mental Health System	48	
Other	30	
Total	78	39%
Grand Total	201	100%

Based on the analysis of this sample, the assumed rate of new incidence has been left unchanged since the previous review, as the current assumption (about 70% of the observed rate for adults) appears reasonable (with 61% of the sample being likely to be true new incidence and 39% being uncertain). Nonetheless there remains a high degree of uncertainty within the assumptions, which is further explored in the scenario analysis discussion presented in Section 6.1.

Past and projected new entrants are shown in Figure 41 which shows that projected new entrant numbers are expected to reduce from more than 80,000 in 2020-21 to approximately 60,000 per year in 2023-24.

⁵⁹ Sample comprises adult participants from geographic areas which phased into the Scheme in 2018 and earlier

Figure 41 Past and Projected New Entrants⁶⁰



Exits – mortality and non-mortality

Both mortality and non-mortality exits assumptions have been revised since the previous review. Mortality exit assumptions has been revised slightly upwards reflecting recent experience. Short term non-mortality exit assumptions have been revised downwards, also reflecting recent experience. Long term non-mortality exit assumptions have remained unchanged as it continues to be assumed that rates of exit will increase as more children exit the Scheme after receiving early intervention support, and the NDIA focuses on ensuring participants continue to meet the access criteria (as per the NDIS Act).

Figure 42 (ages 0 to 6) and Figure 43 (aged over 7) below compare actual non-mortality exit rates over the 12 months to 30 June 2021 by quarter with the long term non-mortality exit rates and 2021-22 expected non-mortality exit rates based on 12 months to 30 June 2021 exposures.

⁶⁰ Observed new incidence rates for 2013 to 2019 phasing years show the number of new entrants per 100K population over the 2020-21 financial year in the relevant geographic areas which phased into the Scheme in that year

Figure 42 Actual versus expected non-mortality exits for participants aged 0 to 6

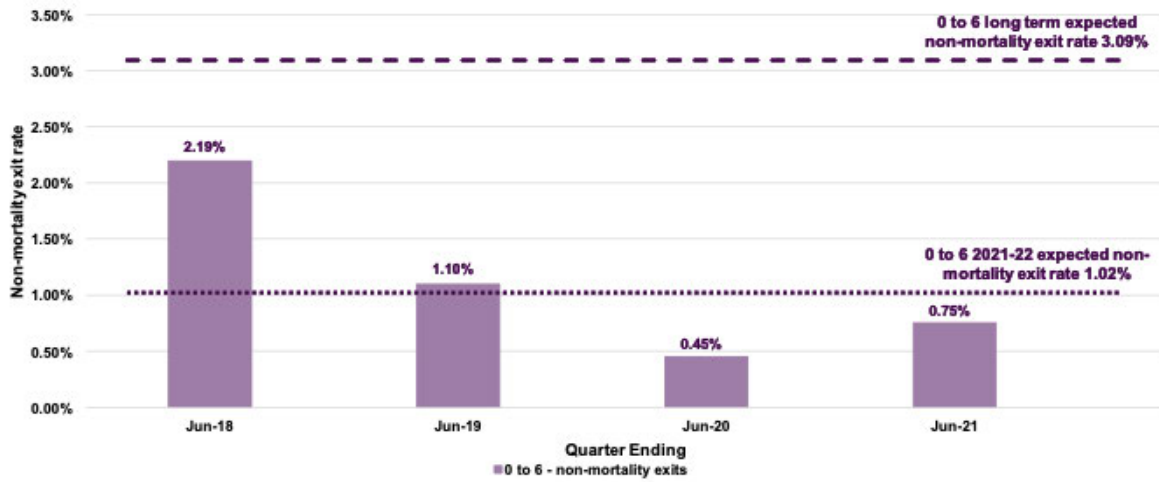
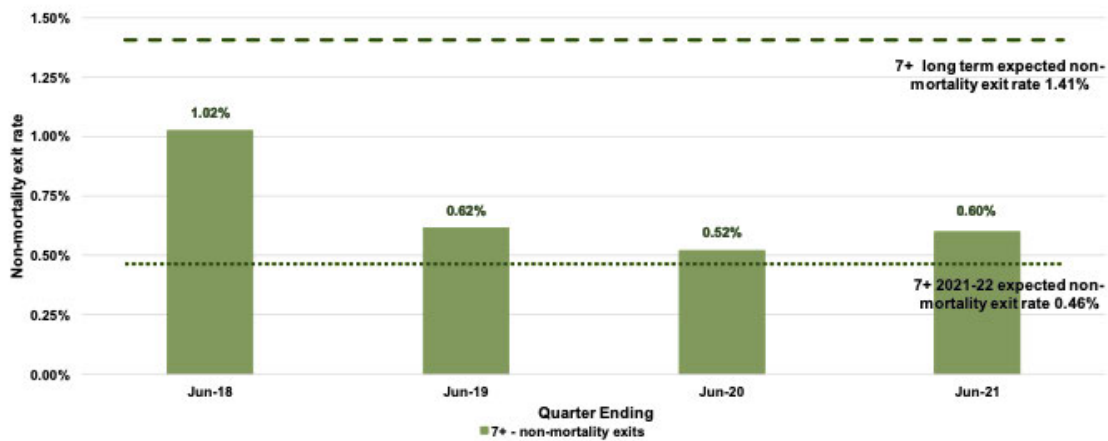
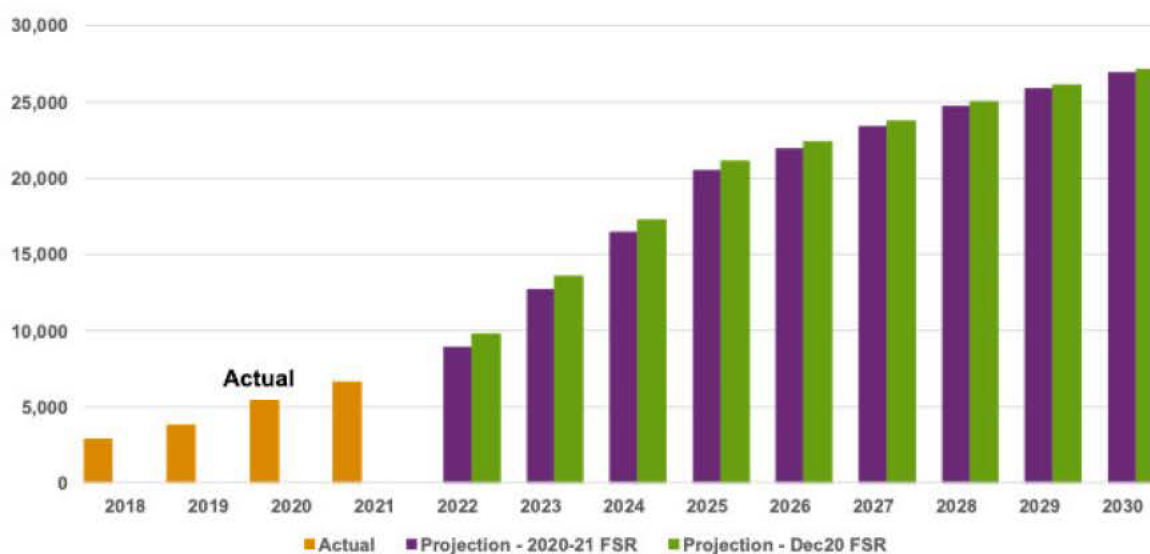


Figure 43 Actual versus expected non-mortality exits for participants aged over 7



Past and projected Scheme exits are shown in [Figure 44](#) which shows that exits are expected to increase from less than 7,000 in 2020-21 to over 20,000 per year by 2024-25, which result from an increase in the exit rate as well as the scheme population.

Figure 44 Past and projected exits



Scheme population projection

The expected number of participants at the end of each year is calculated as the starting participant population adding on participant intake and subtracting participant exits over the year. The resulting participant projection by age group is shown in [Table 23](#) below.

Table 23 Projected participant numbers by age band

Number of participants As at 30 June	2021	2022	2023	2024	2025	2030
Children (0 to 14)	192,870	222,274	246,098	262,728	275,599	315,719
Young adults (15 to 24)	74,213	86,267	98,193	109,819	121,833	191,015
Adults (25 to 64)	182,955	200,433	215,555	225,943	236,164	291,608
Older adults (65+)	16,581	21,483	26,587	31,835	36,804	60,987
Total	466,619	530,457	586,433	630,327	670,400	859,328
Children (0 to 14)	41.3%	41.9%	42.0%	41.7%	41.1%	36.7%
Young adults (15 to 24)	15.9%	16.3%	16.7%	17.4%	18.2%	22.2%
Adults (25 to 64)	39.2%	37.8%	36.8%	35.8%	35.2%	33.9%
Older adults (65+)	3.6%	4.0%	4.5%	5.1%	5.5%	7.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Young adults represent a growing proportion of the Scheme's participant numbers as the children from the intake of prior projection years begin to age and transition into older age bands. [Table 24](#) illustrates the projections split by disability group.

Table 24 Projected participant numbers by disability group

Number of participants as at 30 June	2021	2022	2023	2024	2025	2030
Autism	151,433	175,257	198,056	217,468	236,946	337,908
Intellectual Disability	91,311	98,114	104,590	110,136	115,551	143,716
Psychosocial Disability	48,460	55,595	61,676	65,835	69,735	88,180
Developmental Delay	47,233	60,496	70,138	76,848	80,867	89,250
Sensory	34,198	37,970	41,270	43,853	46,160	57,179
Other	93,984	103,024	110,704	116,187	121,141	143,095
Total	466,619	530,457	586,433	630,327	670,400	859,328
Autism	32.5%	33.0%	33.8%	34.5%	35.3%	39.3%
Intellectual Disability	19.6%	18.5%	17.8%	17.5%	17.2%	16.7%
Psychosocial Disability	10.4%	10.5%	10.5%	10.4%	10.4%	10.3%
Developmental Delay	10.1%	11.4%	12.0%	12.2%	12.1%	10.4%
Sensory	7.3%	7.2%	7.0%	7.0%	6.9%	6.7%
Other	20.1%	19.4%	18.9%	18.4%	18.1%	16.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The expected increase in projected participant numbers from 2021 to 2030 is consistent with the previous review. Autism and intellectual disability continue to be the largest drivers of new incidence for future projections. Over time the proportion of autism participants in the Scheme is expected to continue to increase and the proportion of developmental delay participants is expected to reduce, as some participants with developmental delay are assumed to receive an autism diagnosis over time.

SIL population projection

Table 25 presents the projections split by whether or not the participant is in SIL.

Table 25 Projected participant numbers by SIL type

Number of participants as at 30 June	2021	2022	2023	2024	2025	2030
Non-SIL	441,299	504,024	559,095	601,982	641,041	824,174
SIL	25,320	26,433	27,338	28,344	29,359	35,154
Total	466,619	530,457	586,433	630,327	670,400	859,328

SIL as a % of Total Scheme Population

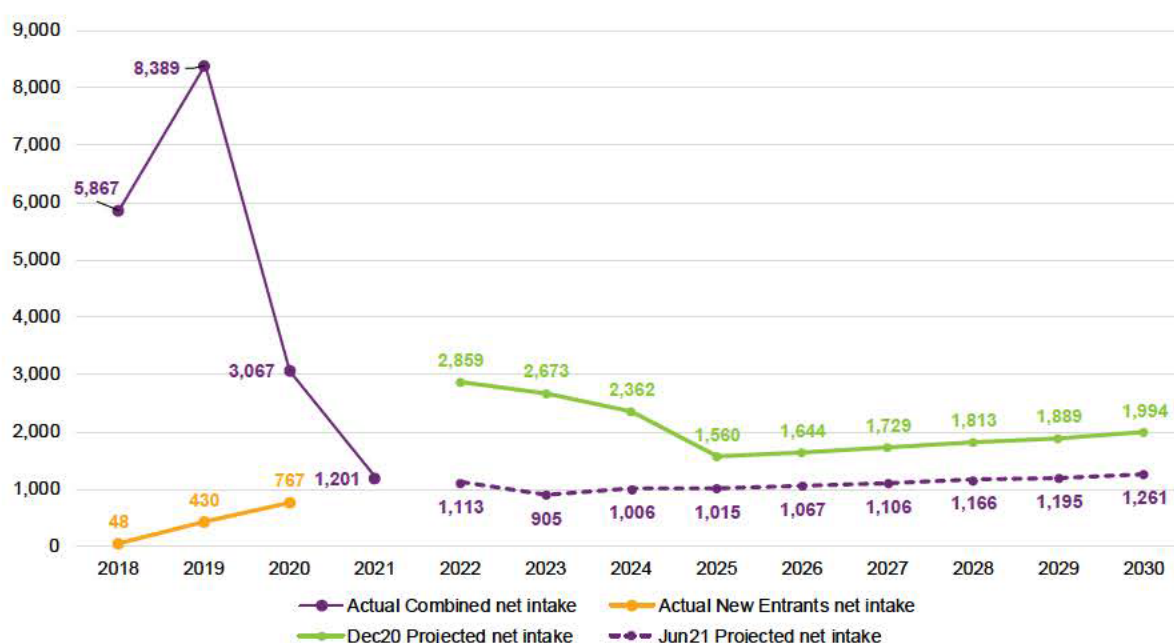
Projection	5.4%	5.0%	4.7%	4.5%	4.4%	4.1%
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The number of participants with SIL arrangements is projected to increase over time to reflect both existing participants moving to SIL arrangements and a small number of new entrants to the Scheme accessing SIL. However, it is expected that the vast majority of new entrants into the Scheme will not require SIL which results in the projected proportion of participants in SIL decreasing over time.

Since the previous review, analysis has been undertaken to understand the composition of the new SIL participant intake between those participants transitioning from existing schemes and those who were new to disability supports. This indicated that the number of new SIL participants who were new to disability supports is lower than the assumption at the previous review.

Figure 45 below highlights that the revised projection is more in line with the observed net intake over the past year compared with the previous projection. SIL intake for 2022 and 2023 financial years is assumed to be a combination of new entrants and a small number of transitions from residential aged care. From FY2024 onwards, the SIL projections are driven by transition of existing Scheme participants into SIL arrangements.

Figure 45 SIL participants intake experience to date and trajectory⁶¹



5.4 Average payment assumptions

Scheme experience over the past twelve months has reflected higher average payments per participant than expected when compared to previous assumptions. The base average payment assumptions were derived using 31 May 2021 data, reflecting the actual payment experience over the 3 months to 31 May 2021.

This can be seen in [Table 26](#) which displays the projected average annual payments (in current dollars) by grouped disability and age band for the 2021-22 financial year:

- The average annualised payment amount for all Scheme participants in 2021-22 is \$55,800.

⁶¹ The impact of lower projected participants in SIL is a reduction in estimated cost of approximately \$5.0 billion in the four years to 2024-25 (as shown in Table 21).

- Children have lower average annualised payments than adults, reflecting a higher proportion of early intervention participants, less usage of SIL arrangements and more informal supports, primarily provided by parents.
- Participants with intellectual disability and other disabilities⁶² have the largest average payments.
- Participants with sensory disabilities⁶³ and developmental delay have the lowest average payments.

Table 26 Average annual payments (\$) by age band and disability group in 2021-22 (current dollars)

Disability Group	0 to 6	7 to 14	15 to 18	19 to 24	25 to 34
Autism	23,200	20,300	35,400	64,100	88,000
Intellectual Disability	28,300	30,500	52,100	80,600	100,900
Psychosocial Disability		18,600	39,300	61,900	55,100
Developmental Delay	12,300	9,800			
Sensory	10,200	7,800	8,000	11,100	15,300
Other	39,100	47,400	74,900	110,800	124,500
Total	17,000	21,900	41,100	71,700	88,300
Disability Group	35 to 44	45 to 54	55 to 64	65+	Total
Autism	109,100	121,600	138,700	161,500	34,600
Intellectual Disability	117,600	141,700	153,800	164,700	90,500
Psychosocial Disability	55,200	56,300	60,500	64,800	57,300
Developmental Delay					12,000
Sensory	20,700	22,100	21,600	22,800	14,700
Other	112,600	103,700	97,700	96,000	96,000
Total	90,500	91,300	91,300	93,200	55,800

Similarly, the expected average annual payment assumptions (in current dollars) in 2021-22, split by support category and age band, are shown in [Table 27](#). The averages presented in the tables below are a weighted combination of the assumptions by cohort for each support category.

⁶² In particular, participants with spinal cord injury, cerebral palsy and acquired brain injury.

⁶³ This includes hearing impairment, visual impairment and other sensory/speech disabilities.

Table 27 Average annual payments (\$) by age band and support category in 2021-22 (current dollars)

Support Category	0 to 6	7 to 14	15 to 18	19 to 24	25 to 34
Consumables	600	700	700	800	1,100
Daily Activities	2,300	7,100	19,500	37,700	51,600
Social Community Civic	300	1,800	7,000	19,200	22,000
Transport	700	1,800	3,000	2,000	1,900
Assistive Technology	600	500	600	700	1,000
Home Modifications	0	100	100	300	800
CB Daily Activities	11,600	8,000	6,000	4,500	4,300
CB Employment	0	0	900	2,700	1,300
Support Coordination	200	500	1,300	1,600	2,100
Remaining CB	700	1,400	2,000	2,200	2,200
Total	17,000	21,900	41,100	71,700	88,300
Support Category	35 to 44	45 to 54	55 to 64	65+	Total
Consumables	1,300	1,500	1,700	1,900	1,000
Daily Activities	55,300	58,300	58,400	59,300	30,700
Social Community Civic	19,700	16,700	15,600	15,400	10,200
Transport	1,700	1,700	1,700	1,700	1,700
Assistive Technology	1,400	1,700	2,300	2,800	1,100
Home Modifications	1,100	1,400	1,600	1,600	600
CB Daily Activities	4,500	4,800	5,400	5,900	6,800
CB Employment	900	700	500	400	600
Support Coordination	2,500	2,700	2,600	2,600	1,500
Remaining CB	2,100	1,800	1,500	1,600	1,600
Total	90,500	91,300	91,300	93,200	55,800

5.5 Inflation assumptions

Participant costs are assumed to increase over time with inflation, both from normal inflationary sources (such as general increases in wages and consumer prices) and from additional cost pressures, referred to as “superimposed inflation”. Superimposed inflation may arise from a variety of sources including price increases in excess of normal inflation, increased volumes of service being utilised by participants, reductions in levels of informal support received by participants, and increases in scope of supports provided by the Scheme. These increases may be reflected in increased plan values, increased plan utilisation, or a combination of both.

Observed increases in average payment per participant (at an aggregate level) are also influenced by ongoing changes in the mix of participants. Specifically, new entrants to the scheme have lower impacts on functional capacity than existing participants. Taken in isolation this change will lead to a reduction in average payment per participant (which will be observed as offsetting other sources of inflation which increase the average payment per participant). Changes in average payment resulting from participant mix are not explicitly

modelled; rather they arise as a function of assumptions relating to new incidence, and mortality and non-mortality exits by cohort.

Normal inflation

The adopted normal inflation rate for the coming five years is 3.0% to 3.2% per annum, and then continues at 3.2% per annum in the longer term. This comprises:

- **3.5% per annum for attendant care rates⁶⁴**, which for the 2021-22 to 2024-25 years comprises a 3.0% per annum increase due to changes in minimum wages, as well as an additional amount of 0.5% per annum to allow for the increase in the superannuation guarantee rate. For the 2025-26 and later years, a 3.5% per annum increase has been adopted due to expected changes in minimum wages, as it is expected that by this time Australia will have returned to a higher inflation environment; and
- **Rates varying between 1.8% and 2.5% per annum for the remaining support categories** (predominantly assistive technology, home modifications and therapy supports). This increase is based on the Consumer Price Index forecasts currently adopted by the Commonwealth Treasury department, in which the 2.5% per annum increase adopted in the 2023-24 and later years is based on the target Consumer Price Index range set by the Reserve Bank of Australia.

These rates have been increased since the previous review, when short term rates were 2.6% to 2.8% p.a. The increases arose from an improved economic outlook following Australia’s relatively successful response to the COVID-19 pandemic at the time that the Treasury forecasts were set (Q4 of 2020-21), noting the increase in COVID-19 cases over July and August 2021 and hence likely deterioration in short term outlook.

Table 28 Selected normal inflation rates

Normal inflation	2021-22	2022-23	2023-24	2024-25	2025-26	Long-term
Attendant care	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Other supports	1.8%	2.3%	2.5%	2.5%	2.5%	2.5%
Overall	3.0%	3.2%	3.2%	3.2%	3.2%	3.2%

Superimposed inflation

Superimposed inflation is defined as the increase in average payments above the normal inflation rate (after allowing for the change in mix of participants). In the early years of the Scheme, this inflation reflected the dynamic and rapidly changing environment of a newly established Scheme. However, these high levels of superimposed inflation have persisted each year, despite the increasing maturity of the Scheme. This is evidenced in the observed

⁶⁴ Applied to supports for Activities of Daily Living and Social and Community Participation.
National Disability Insurance Scheme: Annual Financial Sustainability Report 2020-21

inflation rate of 11.8% p.a. over the past three years for Scheme participants (or 14.9% p.a. when the effect of the change in population mix has been removed).

The sustained high levels of superimposed inflation remains one of the most critical sustainability pressures for the Scheme given its material impact on projected costs. Whilst a number of specific sources of future superimposed inflation have previously been identified and modelled, a substantial proportion of past superimposed inflation arises from sources which are not able to be directly modelled, in particular increases in hours of care provided to participants and a shift from informal (unpaid) attendant care to paid care. Forward superimposed inflation assumptions have therefore been set at this review at an aggregated level, taking into consideration:

- observed high past levels of superimposed inflation and the likelihood that the forces giving rise to that growth are likely to continue (albeit at lower levels) for at least the next two-three years,
- the current utilisation rate (which will, in time, exert a ceiling on the total volume of supports provided), and
- the ability of the market to continue to expand and hence provide greater future volumes of service to participants.

It is recognised that substantial judgment is involved in the setting of these assumptions. Alternative scenarios are considered in Section 6.1. The adopted superimposed inflation is shown in Table 29.

In particular, it is noted that the assumed rate of 9.7% in 2021-22 (i.e. the increase from 2020-21), whilst producing an overall inflation rate of 6.7% which is well below the level observed in recent years, is high in absolute terms, and well above the long term level assumed. In relation to the future superimposed inflation assumptions, the following should be noted:

- The average cost per participant for the three months to June 2021 was \$57,431. This was 6.0% higher than the overall average payments for participant for the 2020-21 year
- The three months to June are typically high cost months, which would mean that higher payments would typically be expected over these three months. However the change in mix referred to above would (all else being equal) lead to lower payments per participant. Combining the effects of seasonality and change in mix with the most recent payment experience results in an increase of 5.2% relative to the average payment per participant in 2020-21
- The 9.7% shown in Table 29 Impact of adopted superimposed inflation assumptions on payments therefore comprises 5.2% which has already occurred and 4.3% is assumed to occur in future. This remaining (i.e. future) superimposed inflation of 4.3%, combined with inflation assumed in future years, means that there is an allowance for a total of 14.4% future superimposed inflation

- This total future assumed superimposed inflation of 14.4% is significantly lower in the context of **average per annum** inflation of 14.9% in the three years to 30 June 2021 (the majority of which was superimposed inflation)
- However, given that plan utilisation at 30 June 2021 was slightly below 80%, total future payment inflation of 14.4% would result in total utilisation of approximately 90% based on current plan values. Current plan values can therefore be regarded as providing some upper bound on the level of possible future inflation, noting that future inflation in plan values would increase the level of non-utilised funds and hence create capacity for further inflation.

Table 29 Impact of adopted superimposed inflation assumptions on payments⁶⁵

	2021-22	2022-23	2023-24	2024-25	Total after
Superimposed inflation	9.7%	5.0%	3.0%	1.1%	0.4%

Total inflation

Normal inflation has been combined with superimposed inflation rates to calculate total inflation. [Table 30](#) and [Figure 46](#) below detail the underlying normal and superimposed inflation assumptions adopted for each projection year, with a comparison made to historic inflation experience. The comparison to historic experience is shown both including and excluding changes in population mix. Additionally, [Figure 47](#) compares the total adopted inflation with the previous review.

Table 30 Comparison of historic inflation experience and adopted total inflation⁶⁶

Inflation on payments	Average annual rate over the previous 3 years	2021-22	2022-23	2023-24	2024-25	2029-30	Thereafter
2020-21 AFSR							
Normal inflation		3.0%	3.2%	3.2%	3.2%	3.2%	3.2%
Superimposed inflation		9.7%	5.0%	3.0%	1.1%	0.0%	0.0%
Total (excl change in mix)	14.9%	12.7%	8.1%	6.2%	4.3%	3.3%	3.3%
Change in mix	-3.1%	-5.6%	-4.4%	-3.2%	-2.3%	-0.7%	
Total (incl change in mix)	11.8%	6.7%	3.5%	2.9%	1.9%	2.6%	

It is evident that the Scheme has experienced high levels of historic inflation, and these levels substantially exceed the adopted total inflation assumptions in the projections. Given that a proportion of past superimposed inflation arose from price increases in excess of normal inflation, and that future such increases are less likely, a lower rate of future

⁶⁵ Of the superimposed inflation of 9.7% in 2021-22, which represents the increase from the 2020-21 year to the 2021-22 year, 5.2% had already occurred at 30 June 2021, and the remaining 4.3% (compounded) is assumed to occur in future.

⁶⁶ Ibid.

superimposed inflation is regarded as reasonable, although this assumption remains highly uncertain.

Figure 46 Comparison of historic inflation experience and adopted total inflation⁶⁷

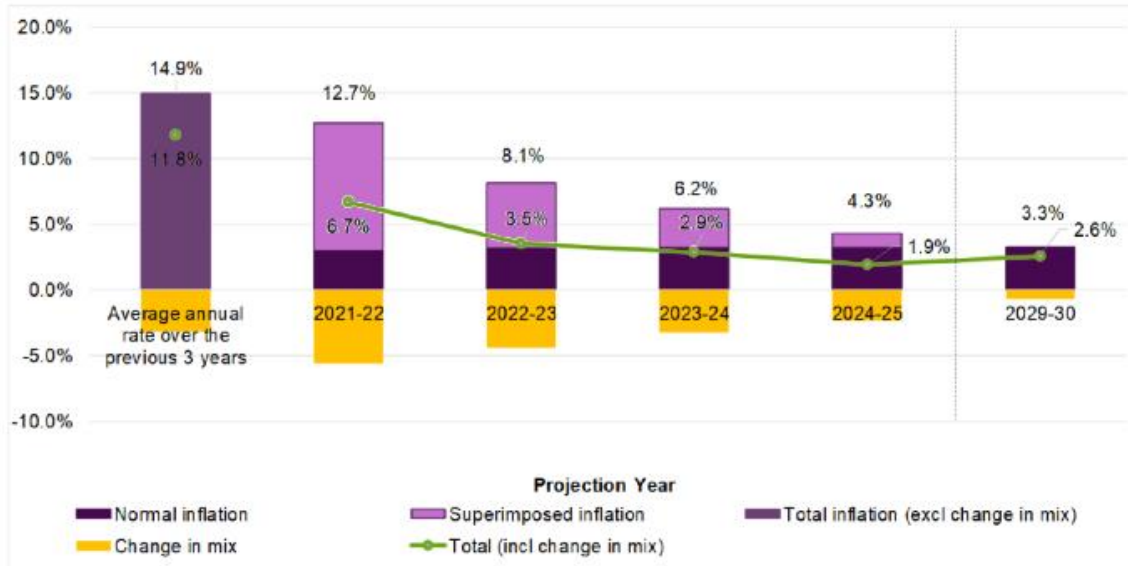
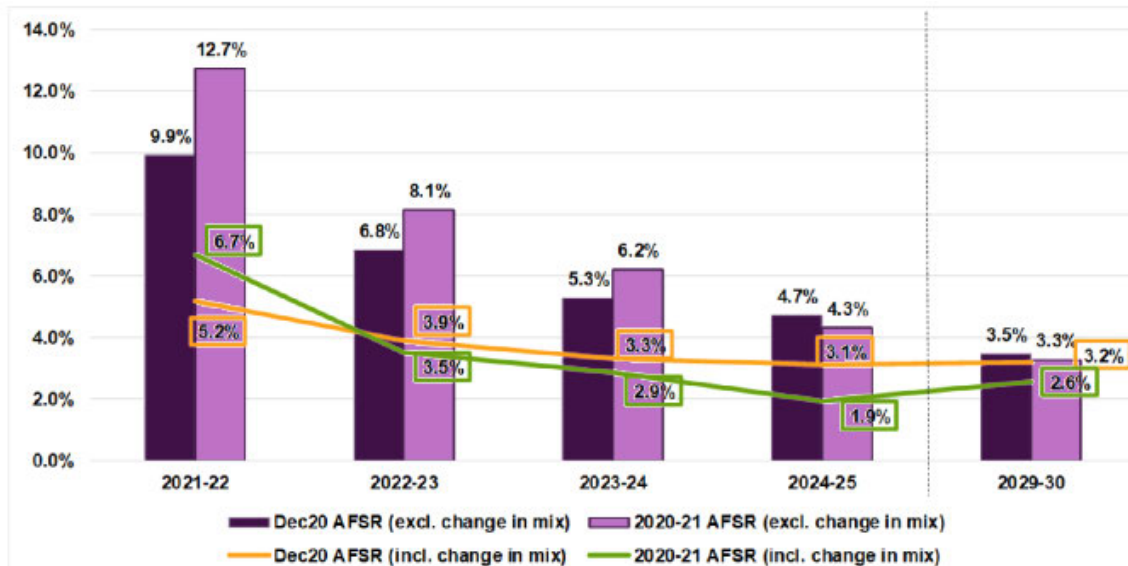


Figure 47 Comparison of adopted total inflation with previous review



⁶⁷ Total expected inflation shown is lower than normal inflation plus superimposed inflation because the change in mix of participants is expected to lead to reductions in average payment per participant (before allowing for normal inflation and superimposed inflation). The historic average shown implicitly includes change in mix, and so the most appropriate comparison to past experience is the total including change in mix.

Average payment per participant assumptions after inflation

Table 31 shows the projected average payment by SIL status and the growth in average payment by year, as well as the components of this growth, split between base inflation, superimposed inflation, and change in mix.

Table 31 Average annual payments (\$) by SIL status and inflation components

Average Cost Per Participant (\$)	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30
June 2021 Projection						
Non-SIL	38,000	42,200	44,900	46,800	48,000	53,100
SIL	321,500	343,000	355,900	368,800	381,500	453,200
Total	54,200	57,800	59,900	61,600	62,800	69,500
Total Growth						
Non-SIL		11.2%	6.3%	4.4%	2.4%	2.5%
SIL		6.7%	3.8%	3.6%	3.5%	3.5%
Total		6.7%	3.5%	2.9%	1.9%	2.6%
Change in Mix						
Non-SIL		-4.1%	-3.4%	-2.6%	-2.1%	-0.7%
SIL		-0.4%	-0.3%	-0.2%	-0.1%	0.1%
Total		-5.6%	-4.4%	-3.2%	-2.3%	-0.7%
Normal inflation						
Non-SIL		2.9%	3.1%	3.1%	3.1%	3.2%
SIL		3.4%	3.4%	3.4%	3.4%	3.4%
Total		3.0%	3.2%	3.2%	3.2%	3.2%
Superimposed inflation						
Non-SIL		12.7%	6.8%	3.9%	1.4%	0.0%
SIL		3.6%	0.7%	0.4%	0.1%	0.0%
Total		9.7%	5.0%	3.0%	1.1%	0.0%

Table 32 details the resulting average annual payments by age group in each projection year after total inflation has been applied to the base average cost assumptions. Actual average annual payments for 2020-21 are also included for comparison.

Table 32 Average annual payments (\$) by age group and projection year

Age group	2021-22	2022-23	2023-24	2024-25	2029-30
Children (0 to 14)	18,500	20,800	23,000	23,700	26,200
Young adults (15 to 24)	53,300	58,800	61,800	61,900	63,900
Adults (25 to 64)	88,800	93,700	100,000	101,800	110,500
Older adults (65+)	89,400	96,500	106,600	109,200	119,400
Total	54,200	57,800	61,600	62,800	69,500

Average annual payments increases each year across all age groups. [Table 33](#) illustrate the percentage change in average annual payments by age group and projection year. The average annual payments, and therefore percentage change each year is impacted by the change in the mix of participants.

Table 33 Change in average annual payments (\$) by age group and projection year

Age group	2021-22	2022-23	2023-24	2024-25	2029-30*
Children (0 to 14)		5.6%	4.7%	3.0%	2.0%
Young adults (15 to 24)		3.5%	1.6%	0.1%	0.7%
Adults (25 to 64)		3.7%	2.9%	1.9%	1.6%
Older adults (65+)		6.2%	4.0%	2.4%	1.8%
Total		3.5%	2.9%	1.9%	2.1%

The greatest growth in average annual payments occurs for participants aged 0 to 14 and over 65.

[Table 34](#) below displays the projected average annual payments (in 2024-25 dollars) by grouped disability and age band for the 2024-25 financial year. The following table shows that:

- The average annualised payment amount for all Scheme participants in 2024-25 is \$62,800 in 2024-2025 dollars.
- Children have lower average annualised payments than adults, reflecting a higher proportion of early intervention participants, less usage of SIL arrangements and more informal supports, primarily provided by parents.
- Participants with intellectual disability and other disabilities⁶⁸ have the largest average payments.
- Participants with sensory disabilities⁶⁹ and developmental delay have the lowest average payments.

Table 34 Average annual payments (\$) by age band and disability group in 2024-25 (2024-25 dollars)

Disability Group	0 to 6	7 to 14	15 to 18	19 to 24	25 to 34
Autism	27,000	25,400	40,600	72,900	99,400
Intellectual Disability	37,000	33,500	59,300	95,500	116,300
Psychosocial Disability	8,300	31,200	48,300	71,700	67,000
Developmental Delay	14,400	12,300			
Sensory	12,500	9,300	9,800	13,800	17,700
Other	53,600	55,200	81,600	121,800	143,400
Total	19,300	26,500	45,100	79,900	101,100

⁶⁸ In particular, participants with spinal cord injury, cerebral palsy and acquired brain injury.

⁶⁹ This includes hearing impairment, visual impairment and other sensory/speech disabilities.

Disability Group	35 to 44	45 to 54	55 to 64	65+	Total
Autism	123,500	131,600	150,900	190,300	43,100
Intellectual Disability	136,100	157,800	170,500	193,400	100,800
Psychosocial Disability	67,300	67,900	72,500	78,700	69,600
Developmental Delay					14,100
Sensory	24,500	25,600	25,800	27,300	17,700
Other	129,200	117,200	108,200	114,100	109,700
Total	104,300	101,700	100,900	109,200	62,800

Similarly, the expected average annual payment assumptions (in 2024-25 dollars) in 2024-25, split by support category and age band, are shown in Table 35. The averages presented in the tables below are a weighted combination of the assumptions by cohort for each support category.

Table 35 Average annual payments (\$) by age band and support category in 2024-25 (2024-25 dollars)

Support Category	0 to 6	7 to 14	15 to 18	19 to 24	25 to 34
Consumables	700	800	700	900	1,200
Daily Activities	2,700	8,300	20,200	39,400	56,700
Social Community Civic	300	2,200	7,600	21,800	26,100
Transport	700	2,200	3,300	2,400	2,300
Assistive Technology	600	500	500	700	1,100
Home Modifications	0	100	100	300	1,000
CB Daily Activities	13,200	9,900	7,100	5,300	5,100
CB Employment	0	0	1,400	4,300	2,100
Support Coordination	300	700	1,600	2,000	2,700
Remaining CB	800	1,800	2,600	2,800	2,800
Total	19,300	26,500	45,100	79,900	101,100
Support Category	35 to 44	45 to 54	55 to 64	65+	Total
Consumables	1,500	1,700	1,900	2,200	1,100
Daily Activities	61,700	62,400	62,000	67,400	32,900
Social Community Civic	23,500	19,500	18,100	18,800	11,800
Transport	2,100	2,000	2,000	2,100	2,100
Assistive Technology	1,600	2,000	2,600	3,300	1,200
Home Modifications	1,300	1,600	1,800	2,000	700
CB Daily Activities	5,300	5,700	6,200	7,100	8,100
CB Employment	1,500	1,000	800	600	1,000
Support Coordination	3,400	3,500	3,400	3,500	1,900
Remaining CB	2,400	2,300	2,100	2,200	2,000
Total	104,300	101,700	100,900	109,200	62,800

5.6 Operating expenses

The Agency maintains a detailed activity-based costing of its operations. The operating expenses adopted in this AFSR are based on this internal model. In 2020-21 actual operating expenses (at \$1.5 billion) were lower than budgeted in the PBS by \$40.7 million, or 2.7% (Table 36). In 2020-21 operating costs represented 6.3% of participant costs.

Table 36 Actual operating expenses compared to expectations for 2020-21

Operating expenses - full year to 30 June 2021	\$m
Actual	1,481.0
Budget (from 2019-20 PBS)	1,521.7
Difference (Actual - Budget)	-40.7

Operating expenses, as a percentage of participant costs, are projected to reduce over time, as the relative cost of bringing new participants into the Scheme is expected to reduce, and also because the average payment per participant is expected to increase at a faster rate than the inflation rate assumed to underpin the Scheme's operating costs (Table 37).

Operating costs are forecast to be 6.0% of participant expenses in 2021-22, reducing to 5.0% in 2024-25, and 4.1% in 2029-30.

Table 37 Operating expenses for the 2020-21 AFSR as proportion of participant costs

Operating and Participant Costs (\$m)	2022	2023	2024	2025	2030
2020-21 AFSR					
Participant Costs (accrual basis)	29,223	33,886	37,973	41,373	59,284
Operating Costs	1,760	1,879	1,978	2,055	2,452
As a % of Participant Costs	6.0%	5.5%	5.2%	5.0%	4.1%

The forecast operating costs of \$1,760m in 2021-22 are approximately \$250m (or 18%) higher than those in 2020-21 and a similar amount higher than the amount allowed for in the 2021-22 PBS. In adopting an estimate which is considerably higher than both the actual expenses in 2020-21 and budgeted expenses in 2021-22 it is noted that:

- Development of stronger non-compliance payment controls and fraud mitigants, together with continued focus on sustainability initiatives and the continued improvement in participant experience (as prescribed by the Participant Service Guarantee), and associated outcomes requires significant investment. This investment needs to take the form of frontline capability and capacity, as well as strategic investments in broader organisation capabilities. Without adequate operational funding for the Agency, risks associated with participant costs increases, which is quantified in Section 6.1.
- The adopted level of operating expenses essentially assumes a consistent level of resources per participant supported. Any reduction in operating costs below this level

is consistent with reductions in resources, increased workloads and less capacity to support participants and manage risk, including fraud and integrity.

- In the 2017 PC study report⁷⁰, a target operating expense range of 7-10% was recommended, and the adopted level of expenses is therefore well below the recommended range. The adopted expense rate is also at the lower end of, or below the range of expense rates seen in comparable injury support schemes around Australia, even allowing for the greater scale of the Scheme.

5.7 Lifetime cost estimates

In addition to annual projections, the AFSR is required to include estimates of lifetime cost⁷¹ for participants. These estimates summarise the average expected payments made for Scheme supports over participant's entire lifetimes. They provide a useful benchmark to monitor the financial sustainability of the Scheme, as better outcomes for participants should generally result in lower long-term costs of disability support in the future. Therefore, as more experience emerges, the lifetime cost estimates for participants may be expected to reduce, on average.

Average participant lifetime costs have been projected based on the assumptions underlying the baseline projections, excluding operating expenses, and then discounted to a present value as at 30 June 2021 assuming a long term discount rate of 5.0% per annum for all future years.⁷²

⁷⁰ Productivity Commission 2017, *National Disability Insurance Scheme (NDIS) Costs*, Study Report, Canberra (Page 412).

⁷¹ There is considerable uncertainty in the calculation of lifetime cost estimates in this section. There is limited longitudinal experience within the Scheme to inform assumptions, with most participants having been in the Scheme for five years or less. These estimates therefore reflect emerging experience, assuming the same average payments and exit rates were to continue over the lifetime of participants.

⁷² The adopted long term discount rate of 5.0% corresponds to the long term expectation for nominal GDP growth, which is the combination of average long term productivity growth of 1 per cent per annum, employment growth of 1.5 per cent per annum (noting employment growth is expected to fall over time due to the impact of ageing and slowing population growth on the labour force) and price inflation of 2.5 per cent per annum. This assumption is consistent with the long term discount rate used for Australian government superannuation liability valuations.

Table 38 shows these calculated average lifetime costs by disability type, which are then applied to the estimated annual population of new entrants in 2021-22.

Table 38 Average Payments & Total Lifetime Costs for New Entrants in 2021-22

Disability Type	New Incidence population (2021-22)	Average Lifetime Costs (\$m)	Total Lifetime Costs (\$m)	Total Lifetime Costs (%)
ABI	914	1.77	1,618	2%
Autism	12,303	1.76	21,649	32%
Cerebral Palsy	679	1.99	1,349	2%
Hearing Impairment	2,672	0.16	429	1%
Intellectual Disability	3,749	2.11	7,914	12%
Multiple Sclerosis	638	1.13	719	1%
Developmental Delay	24,599	0.84	20,551	31%
Other	937	0.79	738	1%
Other Neurological	2,602	0.96	2,491	4%
Other Physical	2,511	0.57	1,432	2%
Other Sensory/Speech	433	0.05	22	0%
Psychosocial disability	5,193	1.13	5,848	9%
Spinal Cord Injury	276	2.15	592	1%
Stroke	1,020	1.23	1,259	2%
Visual Impairment	653	0.56	367	1%
Total	59,178	1.13	66,978	100%

Projected GDP (2021-22)	2,131,988
% of GDP	3.14%

The total lifetime cost for an annual cohort of new incidence is projected to be \$67.0 billion based on current long term assumptions, representing 3.14% of projected GDP for 2021-22.

Ongoing monitoring of changes in lifetime costs at the support category level will provide insight into how long-term costs for Scheme participants may change over time, prior to the actual experience being reflected in the assumption base. For example, participants utilising more capacity building supports may increase lifetime cost estimates today, but could also indicate a reduction in future lifetime costs if capacity building is able to reduce their needs for other supports in the long term.

Table 38 indicates that about 75% of total lifetime costs attributable to an annual cohort of new entrants into the Scheme are for participants with Developmental Delay, Autism and Intellectual disability.

The figures above relate to one year of (future) new entrants to the scheme. The total lifetime cost for the 466,619 existing participants in the Scheme has been estimated to be \$940.5 billion. The average lifetime cost estimate of these participants is \$2.0 million; this is significantly higher than the average of \$1.1 million for new entrants due to the different disability and age distributions of the two populations. In particular the profile of current participants is skewed to towards those with lower functional levels compared with new entrants. The new incidence cohorts have a greater number of higher functioning children, many of whom have entered the Scheme through the early intervention requirement (Section 25 of the Act), and who are expected to exit the Scheme and hence have a lower average lifetime cost.

6. Scenario analysis and comparisons to benchmarks

6.1 Scenario Analysis

The projections presented in Section 5 of this report represent the “baseline” estimate of Scheme population and costs. As highlighted throughout this report, there is considerable uncertainty in relation to these projections, and the actual cost may vary from the baseline projections, possibly significantly. More specifically there is significant uncertainty in relation to:

- **Numbers of new entrants to the Scheme** – observed numbers of new participants, whilst slightly lower than the previous review are significantly higher than those forecast in earlier reports and in the 2017 PC Study Report. Whilst the number of new entrants per annum is reducing, it is unclear when they will stabilise and at what level.
- **The average payment for new entrants to the Scheme** - there are relatively few years of experience from which to determine the average payment for new entrants, compared to existing participants. As more new entrants enter the Scheme the average payments for new entrants may vary substantially from that previously observed.
- **Rates of non-mortality exits** – observed rates of non-mortality exits are significantly lower than forecast in previous reports and in the 2017 PC Study Report and the long term rates assumed may not eventuate.
- **Rates of superimposed inflation** – average payments per participant have grown at rates substantially exceeding normal inflation for several years. Whilst some of the pressures giving rise to past increases remain, these would not be expected to continue indefinitely and hence past rates of inflation do not provide definitive guidance regarding likely future rates of inflation.
- **Numbers of participants transitioning into Supported Independent Living** – there is only one year of experience of participants transitioning into Supported Independent Living following all geographic regions gaining access to the Scheme. Longer term SIL participant numbers are therefore based on relatively little experience.

To consider the uncertainty inherent within the projection revised projections have been calculated for a number of scenarios. These consider a range of plausible outcomes in relation to the uncertainties above.

As there are differing relative impacts of the scenarios on existing participants and new participants, the impact of each of these scenarios is shown separately for existing participants, new participants, and in total. The total Scheme projection, split between existing participants and new entrants (from 1 July 2021 onwards) is shown in Table 39.

Table 39 Split of participant costs between existing and new participants

Participant Costs (\$m) - accrual basis	2021-22	2022-23	2023-24	2024-25	2029-30
Existing Scheme participants	27,917	30,227	31,735	32,722	37,546
Future participant intake	1,306	3,659	6,238	8,650	21,738
Total Participant Costs	29,223	33,886	37,973	41,373	59,284

Existing Participants

Table 40 shows various scenarios in relation to existing participants. Comments on specific scenarios are as follows:

- Lower long term non-mortality exit rates (equal to the rate observed over the past year) adds \$0.5 billion in 2024-25 and \$2.7 billion in 2029-30
- Continuation of current rates of superimposed inflation for two additional years adds \$4.1 billion in 2024-25 and \$6.4 billion in 2029-30
- Higher numbers of SIL participants adds \$0.5 billion in 2024-25 and \$1.5 billion in 2029-30

Table 40 Scenarios regarding existing participants

Scenarios - existing participants (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30	Total 2021-25
Baseline Projection	27,917	30,227	31,735	32,722	37,546	122,601
Population (variances to baseline)						
Higher SIL numbers (+500 p.a.)	135	210	362	524	1,524	1,231
Lower SIL numbers (-200 p.a.)	-54	-84	-145	-210	-610	-493
Lower non-mortality exit rates	15	82	233	488	2,655	818
Cost (variances to baseline)						
One year less of high inflation	-832	-1,086	-1,418	-1,594	-2,354	-4,930
Two additional years of high inflation	1,130	2,237	2,714	4,145	6,447	10,226
1%p.a. additional long term inflation	136	435	767	1,121	3,266	2,459
1%p.a. less long term inflation	-136	-432	-756	-1,094	-3,032	-2,417
Population (variances to baseline)						
Higher SIL numbers (+500 p.a.)	0.5%	0.7%	1.1%	1.6%	4.1%	1.0%
Lower SIL numbers (-200 p.a.)	-0.2%	-0.3%	-0.5%	-0.6%	-1.6%	-0.4%
Lower non-mortality exit rates	0.1%	0.3%	0.7%	1.5%	7.1%	0.7%
Cost (variances to baseline)						
One year less of high inflation	-3.0%	-3.6%	-4.5%	-4.9%	-6.3%	-4.0%
Two additional years of high inflation	4.0%	7.4%	8.6%	12.7%	17.2%	8.3%
1%p.a. additional long term inflation	0.5%	1.4%	2.4%	3.4%	8.7%	2.0%
1%p.a. less long term inflation	-0.5%	-1.4%	-2.4%	-3.3%	-8.1%	-2.0%

New Participants

Table 41 shows various scenarios in relation to new participants. Comments on specific scenarios are as follows:

- Higher rates of new incidence (if long term rates are equal to the rate observed in the past year) add \$1.3 billion in 2024-25 and \$6.3 billion in 2029-30
- Slower transition to the Steady Intake Date (three additional years) adds \$0.7 billion in 2024-25 and \$1.6 billion in 2029-30
- Higher average payments for new entrants (if new entrants have the same average payment as existing participants in the same cohort) adds \$0.8 billion in 2024-25 and \$1.9 billion in 2029-30
- Continuation of current rates of superimposed inflation for two years adds \$1.1 billion in 2024-25 and \$3.7 billion in 2029-30
- The projections of the cost of new entrants are relatively insensitive to variations in general population growth and numbers of SIL participants

Table 41 Scenarios regarding new participants

Scenarios - new participants (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30	Total 2021-25
Baseline Projection	1,306	3,659	6,238	8,650	21,738	19,854
Population (variances to baseline)						
Lower long term new incidence assumptions	0	0	0	0	-1,789	0
Higher long term new incidence assumptions	0	76	500	1,253	6,272	1,828
Lower general population growth	0	-4	-17	-35	-171	-56
Higher SIL numbers (+500 p.a.)	15	23	40	58	169	137
Lower SIL numbers (-200 p.a.)	-6	-9	-16	-23	-68	-55
Three extra years to reach steady state	0	36	287	718	1,581	1,041
Cost (variances to baseline)						
Lower cost of new entrants	-113	-355	-585	-794	-1,929	-1,845
Higher cost of new entrants	113	355	585	794	1,929	1,845
One year less of high inflation	-39	-131	-279	-421	-1,363	-870
Two additional years of high inflation	53	271	533	1,096	3,733	1,953
1%p.a. additional long term inflation	6	53	151	296	1,891	506
1%p.a. less long term inflation	-6	-52	-149	-289	-1,755	-496
Population (variances to baseline)						
Lower long term new incidence assumptions	0.0%	0.0%	0.0%	0.0%	-8.2%	0.0%
Higher long term new incidence assumptions	0.0%	2.1%	8.0%	14.5%	28.9%	9.2%
Lower general population growth	0.0%	-0.1%	-0.3%	-0.4%	-0.8%	-0.3%
Higher SIL numbers (+500 p.a.)	1.1%	0.6%	0.6%	0.7%	0.8%	0.7%
Lower SIL numbers (-200 p.a.)	-0.5%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%
Three extra years to reach steady state	0.0%	1.0%	4.6%	8.3%	7.3%	5.2%
Cost (variances to baseline)						
Lower cost of new entrants	-8.6%	-9.7%	-9.4%	-9.2%	-8.9%	-9.3%
Higher cost of new entrants	8.6%	9.7%	9.4%	9.2%	8.9%	9.3%
One year less of high inflation	-3.0%	-3.6%	-4.5%	-4.9%	-6.3%	-4.4%
Two additional years of high inflation	4.0%	7.4%	8.6%	12.7%	17.2%	9.8%

Scenarios - new participants (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30	Total 2021-25
1%p.a. additional long term inflation	0.5%	1.4%	2.4%	3.4%	8.7%	2.5%
1%p.a. less long term inflation	-0.5%	-1.4%	-2.4%	-3.3%	-8.1%	-2.5%

Combined impact

Table 42 shows the combined effect of scenarios relating to existing and new participants. Comments about specific scenarios are as follows:

- *Two additional years of high inflation* is assumed at the same rate as observed over the past three years, which is higher than that assumed in the baseline projection
- *Higher long term new incidence assumptions* are consistent with the rate observed over the past year which is higher than that assumed in the longer term in the baseline projection
- *Lower non-mortality exit rates* are consistent with those recently observed, which are lower than those assumed in the longer term in the baseline projection
- *Higher cost of new entrants* assumes new entrants having the same average payment as existing participants in the same cohort⁷³
- *One year less of high inflation* assumes that inflation reduces to a lower long term level one year earlier (i.e. the long-term assumption is adopted from 2027-28 onwards compared with 2028-29 onwards in the baseline projection).
- *Lower long term new incidence assumptions* projects new entrants consistent with that assumed at 30 June 2020, which is about 33% below current assumptions
- *Lower cost of new entrants* assumes new entrants having average payments 17% below existing participants, consistent with the recent observed experience (under the baseline projection the cost of new entrants is assumed to be 8.5% lower than existing participants)
- *Other scenarios include*
 - variances in the number of SIL participants (200 less p.a. in the reduction scenario and 500 more p.a. in the increase scenario);
 - lower general population growth (i.e. lower growth in the Australian population);
 - three additional years of new entrant numbers in excess of the long term rate (i.e. the new incidence rate stabilises in 2026-27 instead of 2023-24).

Commentary on the ranges derived is as follows:

- The plausible range estimated in 2024-25 is between \$39.0 billion (5.8% lower than baseline) and \$47.8 billion (15.6% higher than baseline)
- The plausible range estimated from 2021-22 to 2024-25 is between \$135.8 billion (4.6% lower than baseline) and \$156.8 billion (10.1% higher than baseline)

⁷³ Each cohort is a unique combination of age group, gender, primary disability, level of function and SIL status. There are a total of 2,052 cohorts which are separately projected.

- The plausible range estimated in 2029-30 is between \$53.2 billion (10.3% lower than baseline) and \$74.2 billion (25.1% higher than baseline)

Table 42 Overall plausible high and low scenarios⁷⁴

Scenarios - all participants	2021-22	2022-23	2023-24	2024-25	2029-30	Total 2021-25
Baseline Projection	29,223	33,886	37,973	41,373	59,284	142,455
Cost increase scenarios						
Two additional years of high inflation	1,183	2,508	3,247	5,240	10,180	12,179
Higher long term new incidence assumptions	0	76	500	1,253	6,272	1,828
Lower non-mortality exit rates	15	82	233	488	2,655	818
Higher cost of new entrants	113	355	585	794	1,929	1,845
Other	150	269	698	1,301	3,275	2,409
Total unfavourable	1,461	3,290	5,253	9,075	24,312	19,079
Plausible high case (variance)	1,264	2,726	3,883	6,470	14,872	14,344
Cost reduction scenarios						
One year less of high inflation	-871	-1,217	-1,697	-2,015	-3,718	-5,800
Lower long term new incidence assumptions	0	0	0	0	-1,789	0
Lower cost of new entrants	-113	-355	-585	-794	-1,929	-1,845
Other	-60	-98	-177	-268	-1,918	-603
Total of cost decrease scenarios	-1,044	-1,670	-2,459	-3,077	-9,354	-8,249
Plausible low case (variance)	-917	-1,364	-1,960	-2,403	-6,125	-6,645
Plausible high case (total)	30,487	36,613	41,855	47,843	74,156	156,799
Plausible low case (total)	28,306	32,523	36,012	38,970	53,159	135,811

The plausible high and low scenarios shown combine the various components of variance. Low positive correlation is assumed between the various components, resulting in the overall plausible scenarios being considerably less extreme than the total of the individual components.

It is also noted that the range adopted includes considerably more upside (unfavourable) than downside (favourable) risk. This results from considerably greater upside risk relating to superimposed inflation, new incidence rates and exit rates.

6.2 Historic AFSR projections

The projections in the AFSR will always contain uncertainty. With each update of the AFSR, projection assumptions balance both the emerging experience (considering the significance and duration of the trends), and future expectations. Projections of Scheme costs do not only consider past trends but also consider future operational responses. As a result future projections can look quite different to historic experience. Updates to assumptions consider both the significant growth in the Scheme over the past five years and the relative immaturity of the Scheme. As more and more data becomes available and as the Scheme continues to evolve, the projection of Scheme costs does as well.

⁷⁴ The plausible low and high case scenarios assume that the individual variance items are slightly positively correlated, with 20% pairwise correlation.

The Scheme started slowly with 30,000 participants by the end of the third year (30 June 2016), and this increased to 90,000 by 30 June 2017. The experience in the first four years did not provide enough evidence to re-forecast the Scheme (from the Productivity Commission estimate). However, the experience in the first four years of the Scheme indicated a number of emerging risks to sustainability which have persisted. The 2015 -16 AFSR summary identified risks to the Scheme of:

- Higher than expected numbers of children entering the Scheme
- Increasing package costs over and above the impacts of inflation and ageing (“superimposed inflation”)
- Potential participants continuing to approach the Scheme
- Lower than expected participants exiting the Scheme
- A mismatch between benchmark package costs and actual package costs.

These risks were quantified in scenario analysis undertaken for that report (and subsequent reports including this one).

The 2017-18 AFSR (using data at 30 June 2018) included an experience-based projection to forecast Scheme costs, as have subsequent AFSR projections. Consequently, the projection has changed over time reflecting the emerging Scheme experience. The changes in both estimates of participant numbers, average payments per participants and total participants costs is below.

Table 43 Total participant costs – AFSR projections, 2017 PC estimates and 2021-22 PBS estimates

Total participant costs (\$b)	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
PC estimates								
2017 Productivity Commission Estimates	7.7	14.7	20.8	22.2	23.7	25.2	26.8	28.5
2017 Productivity Commission Estimates (including unanticipated costs)			21.9	23.8	25.5	27.2	29.0	30.8
PBS								
Portfolio Budget Statements 2021-22					26.5	28.3	29.4	31.9
AFSR								
30 June 2021 AFSR projection					29.2	33.9	38.0	41.4
31 December 2020 AFSR projection ¹					28.1	32.9	36.9	40.7
30 June 2020 AFSR projection				22.3	26.1	28.9	31.4	34.3
31 December 2019 AFSR projection				21.8	25.4	28.5	31.4	34.2
30 June 2019 AFSR projection			16.7	21.1	24.2	26.9	28.9	30.8
30 June 2018 AFSR projection ²		9.5	16.0	20.3	23.6	26.6	29.5	31.7
Comparison with actuals								
Actual participant costs (accrual)	5.4	10.5	17.6	23.3				
Actual participant costs compared with June AFSR		0.9	0.8	1.0				

¹ Previous review, released on 3 July 2021

² Projections have been adjusted from a cash basis to an accrual basis using accrual factors from the 30 June 2019 AFSR

Total participant cost projections have been revised upwards for each successive AFSR projection. Nonetheless actual costs for each of the past three years have exceeded the estimate from the most recent AFSR by amounts between \$0.8 billion and \$1.0 billion, highlighting the challenge of achieving accurate projections of Scheme cost even in the short term.

Table 44 below highlights the difference between the 30 June 2021 AFSR projections with the 2017 PC estimates (including unanticipated costs), 2021-22 PBS and the 30 June 2018 AFSR projections over the next four years.

Table 44 AFSR projections compared to 2017 PC estimates, 2021-22 PBS estimates and 2018 AFSR projections

Total participant costs (\$b)	2021-22	2022-23	2023-24	2024-25
30 June 2021 AFSR projections compared with 2017 PC Estimates	+3.7	+6.7	+9.0	+10.6
30 June 2021 AFSR projections compared with 2021-22 PBS	+2.7	+5.6	+8.5	+9.5
30 June 2021 AFSR projections compared with 30 June 2018 AFSR	+5.6	+7.2	+8.4	+9.7

While a component of the increases in the AFSR projection over time is from a greater intake of participants than previously expected, particularly in regions that phased in during the trial period, the main driver is the average payment per participant which has continued to significantly increase. This is discussed in further detail below.

Table 45 Participant numbers - AFSR projections, 2017 PC estimates and 2021-22 PBS estimates

Total participant numbers	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
PC estimates								
2017 Productivity Commission Estimates	264,100	447,300	473,700	485,900	497,700	509,300	520,800	532,000
PBS								
Portfolio Budget Statements 2021-22				468,700	531,000	565,300	583,100	590,700
AFSR								
30 June 2021 AFSR projection					530,500	586,400	630,300	670,400
31 December 2020 AFSR projection					537,900	596,600	643,200	682,800
30 June 2020 AFSR projection				456,300	500,200	532,300	558,100	583,500
31 December 2019 AFSR projection				443,200	485,200	518,400	544,000	568,500
30 June 2019 AFSR projection			369,100	423,900	470,600	501,500	523,700	544,600
30 June 2018 AFSR projection		306,200	380,500	426,600	465,100	499,300	521,000	541,700
Comparison with actuals								
Actual participant numbers	172,300	286,000	392,000	466,600				
Actual participant numbers compared with June AFSR		-20,200	22,900	10,300				

Participants entered the Scheme more slowly than initially anticipated in the bilateral agreements between the Commonwealth and State/Territory governments. The PC estimates also assumed that participants would initially enter the Scheme more rapidly. Participant projections for each successive AFSR projection have been revised to reflect the pace at which participants have entered the Scheme, with increases in assumptions at each review to 31 December 2020. In the 30 June 2021 AFSR, participant intake assumptions have been revised downwards slightly to reflect the emerging experience of lower than expected participant intake into the Scheme relative to expectations at the previous review. However future projections remain well above all earlier estimates as well as the PC estimates.

Table 46 Average participant payments - AFSR projections, 2017 PC estimates and 2021-22 PBS estimates

Average participant payments	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
PC estimates								
2017 Productivity Commission Estimates	39,900	41,300	45,100	46,400	48,200	50,100	52,100	54,100
2017 Productivity Commission Estimates (including unanticipated costs)			47,500	49,500	51,900	54,100	56,300	58,500
PBS								
Portfolio Budget Statements 2021-22					53,000	51,600	51,200	54,300
AFSR								
30 June 2021 AFSR projection					58,600	60,700	62,400	63,600
31 December 2020 AFSR projection					55,900	58,000	59,500	61,300
30 June 2020 AFSR projection				52,500	54,500	55,900	57,700	60,100
31 December 2019 AFSR projection				52,600	54,600	56,900	59,200	61,500
30 June 2019 AFSR projection			51,100	53,100	54,200	55,300	56,300	57,700
30 June 2018 AFSR projection ¹		39,800	46,500	50,200	52,900	55,300	57,900	59,700
Comparison with actuals								
Actual average participant payments (accrual)	41,400	45,600	51,900	54,300				
Actual average participant payments compared with AFSR		5,800	800	1,800				
Projections have been adjusted from a cash basis to an accrual basis using accrual factors from the 30 June 2019 AFSR								

Assumptions for average participant payments have generally been revised upwards at successive AFSR projections. This reflects the emerging experience of sustained significant growth in actual average participant payments over an extended period of time. Despite these substantial increases, the AFSR projections have under-projected average payments in each following year. Projections have assumed operational initiatives would lead to reduced inflation in average payments over time, however, inflation has not subsided. Further detail on average participant payments by SIL type over time can be seen in Appendix E.

Actual inflation and assumed inflation assumptions are included in

Table 47. Lower inflation is assumed at this review, primarily as a result of the change in mix of participants (with fewer assumed future SIL participants).

Table 47 Actual and assumed rates of growth in average payments per participant

Total growth rate	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
30 June 2021 AFSR projection				6.7%	3.5%	2.9%	1.9%
31 December 2020 AFSR projection				5.2%	3.9%	3.3%	3.1%
30 June 2020 AFSR projection			1.2%	3.8%	2.6%	3.1%	4.2%
31 December 2019 AFSR projection			1.3%	3.9%	4.1%	4.0%	3.9%
30 June 2019 AFSR projection		12.0%	3.8%	2.0%	2.0%	1.9%	2.4%
30 June 2018 AFSR projection	-3.7%	16.8%	7.9%	5.3%	4.4%	4.8%	3.1%
Actual experience as at 30 June	10.3%	13.7%	4.7%				

As noted above, the AFSR projection is not an extrapolation of past trends. Instead, assumptions have been set using a forward-looking approach. Hence, there is significant upside risk in the projection. Appendix F summarises the range of scenarios that have been considered in historic AFSR projections.

6.3 Comparison with PBS estimates and the Productivity Commission estimates

Comparison with Portfolio Budget Statements

The baseline projection is higher than the estimate of reasonable and necessary supports included in the 2021-22 PBS over the next four years (Table 48).

Table 48 Total Participant costs (accrual basis) compared to PBS

Comparison to Portfolio Budget Statements (PBS) (\$m)	2021-22	2022-23	2023-24	2024-25	Total
2021-22 Portfolio Budget Statements (PBS)	26,487	28,257	29,425	31,884	116,053
Participant costs from Jun21 AFSR (cash basis)	28,831	33,429	37,459	40,814	140,534
Estimated costs for support provided but not yet paid	392	457	513	558	1,921
Participant costs from Jun21 AFSR (accrual basis)	29,223	33,886	37,973	41,373	142,455
Participant costs, compared to Portfolio Budget Statements	2,736	5,629	8,548	9,489	26,402

Comparison with 2017 Productivity Commission report

The baseline projection can be compared against the projections outlined in the 2017 PC study report⁷⁵, updated for unanticipated costs (Table 49).

⁷⁵ Productivity Commission 2017, *National Disability Insurance Scheme (NDIS) Costs*, Study Report, Canberra (Table 2.3).

Table 49 Estimates of Scheme costs in the 2017 PC study report⁷⁶

Participant costs - accrual basis (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
2017 Productivity Commission report	25,158	26,740	28,351	30,555	40,915
<i>less operating costs</i>	-1,450	-1,503	-1,511	-2,054	-2,784
2017 Productivity Commission participant costs	23,708	25,238	26,839	28,500	38,130
<i>add unanticipated costs:</i>					
Decrease in NIIS offset as not fully operational	463	507	552	599	864
Children with developmental delay	452	511	567	621	845
School transport	387	409	426	443	539
Personal care in schools	269	292	304	316	385
Disability related health supports	242	270	296	320	420
Participant cost allowing for unanticipated costs	25,521	27,227	28,984	30,800	41,182
Baseline projected participant costs (accrual basis)	29,223	33,886	37,973	41,373	59,284
Difference	3,703	6,659	8,988	10,573	18,102

Table 49 shows that based on the 2017 PC study report, the expected annual cost of the Scheme in 2021-22 was \$25.2 billion, or \$23.7 billion attributable to participant costs.

By allowing for unanticipated costs such as children with developmental delay, school transport, personal care in schools, disability related health supports and an NIIS offset for motor/workplace injuries only, the annual participant cost of the Scheme is about \$25.5 billion. By comparison, the baseline projected participant costs in 2021-22 are about \$29.2 billion, or about 15% above the 2017 PC estimate, allowing for unanticipated costs.

This difference is expected to continue to grow. By 2029-30, the baseline projected participant costs (\$59.3 billion) are 44% above the 2017 PC estimate of \$41.2 billion, after allowing for unanticipated costs. This difference is driven by higher expected future participant intake and significantly higher average payments in the baseline projection and is reflective of the emerging experience over the recent period.

⁷⁶ The Productivity Commission costings did not include an explicit allowance for children with developmental delay, for the student transport and personal care in schools in-kind support programs and for disability related health supports, noting that these four items could account for an additional \$1.5 billion per annum at the Steady Intake Date.

7. Outcomes

The achievement of participant outcomes is critical to the financial sustainability of the Scheme. As an insurance-principles based support model, the Scheme takes a lifetime approach to supporting people with disability. This means investing in participants in the short term in order to maximise their opportunities for independence and economic and social participation over their lifetime.⁷⁷ Over time, the Scheme is expected to help participants engage more in the community, thereby reducing their need for funded supports. This would be a positive reflection on the Scheme's functions and demonstrate the effectiveness of the Scheme in helping participants achieve better outcomes while simultaneously reducing the long-term costs of disability support, especially compared to the old disability systems.

As the cost of the Scheme increases, it becomes increasingly important for the Agency to demonstrate how the Scheme is successfully building the capacity of participants to increase their independence and economic and social participation. The perception of the Scheme by the general public, who contribute through taxation, needs to be considered to ensure the Scheme receives ongoing support from the community. A positive cost/benefit analysis, where there is evidence of marginal gains being achieved with the funding, will help to demonstrate the success of, and engender trust in the Scheme.

Central to the NDIS Outcomes Framework is a series of questionnaires that collect information on how participants and their families/carers are progressing in different areas (domains) of their lives. The questionnaires are administered approximately annually to track changes in individual outcomes over time. Consistent with the insurance principles on which the Scheme is based, this longitudinal data is able to be used to assess the relationship between participant outcomes, funded supports at an individual participant level, and ultimately overall Scheme costs.⁷⁸ An insurance-based approach considers the lifetime average payment for participants (including early investment), and the outcomes achieved across participants' lifetimes.

7.1 Participant outcomes

7.1.1 Economic and social participation

Understanding changes in participants' economic and social participation is important for understanding whether the reasonable and necessary supports funded by the Scheme are resulting in better participant outcomes. In the NDIS Corporate Plan 2020-2024, Aspiration 2 is "*a quality experience and outcomes for participants*", and there are specific performance metrics and targets outlined, such as the proportion of participants in work and the

⁷⁷ By comparison, the previous disability support system took a welfare approach, generally providing short-term block funding which gave participants little choice and control over supports they received.

⁷⁸ Other aspects of the NDIS Outcomes Framework include satisfaction surveys, usage of mainstream and community supports, and participant goals.

proportion of participants involved in community and social activities. Changes in outcomes have been measured for participants who have been in the Scheme for at least two years, to allow sufficient time for the reasonable and necessary supports provided by the Scheme to have an influence on participant outcomes.

Sections 7.1.1 and 7.1.2 show analyses of participant outcomes as at 30 June 2021. It is worth bearing in mind that the global COVID-19 pandemic that took hold from early 2020 has had an impact on at least some participant and family/carer outcomes, such as employment and community participation. The nature and extent of the impact to 30 June 2020 has been investigated using multiple regression models, the results of which are summarised in a publicly available report.⁷⁹ Comparing outcomes before the start of the pandemic with those during the pandemic identified a number of indicators potentially affected by the pandemic; the longitudinal analysis showed that participants aged 15 to 24 were less likely to deteriorate between baseline and second review in relation to wanting to do certain things in the last 12 months but being unable to, when the later response occurred during the COVID period. For families and carers of participants aged 0 to 14, the longitudinal analysis showed that they were more likely to deteriorate over two years with respect to having a paid job. However, they were less likely to deteriorate in having people they can ask for practical help.

The '*Baseline outcomes for NDIS participants 30 June 2020*' report⁸⁰ (which summarises the baseline results for NDIS participants entering the Scheme during the four year period from 1 July 2016 to 30 June 2020), as well as the '*Longitudinal outcomes for NDIS participants 30 June 2020*' report⁸¹ (which summarises longitudinal outcomes for families and carers of NDIS participants who have been in the Scheme for one year or more at 30 June 2020), have both been publicly released.

Employment

The NDIA recognises the critical role of employment in boosting the well-being, economic security and social inclusion of people with disability. From a sustainability perspective, when an NDIS participant works they contribute to the economy, NDIS participants use less support for other activities to fill their days, and family members and carers can also return to work and contribute to the economy. The NDIA has a target of 30 per cent of working-age participants in paid employment by June 2023 (relative to a current rate of 23 per cent). The NDIS Participant Employment Strategy 2019-22⁸² which was released on 30 September 2019, sets out how this target will be reached. The strategy aims to improve employment outcomes for participants and people with disability more broadly, and to guide the Agency over the next two to four years in becoming a leader and advocate of disability employment.

The table below shows the progress against the NDIA's corporate plan metrics for the participant employment rate at entry, first, second, third and fourth plan review, for participants who entered the Scheme between 1 July 2016 and 30 June 2017.

⁷⁹ "[Participant and family/carer outcomes: COVID-19 impact | Executive summary, to 30 June 2020](#)"

⁸⁰ "[Baseline outcomes for NDIS participants 30 June 2020](#)' report

⁸¹ "[Longitudinal outcomes for NDIS participants 30 June 2020](#)' report

⁸² More details can be found here: [The NDIS Participant Employment Strategy 2019-22](#)

Table 50 Longitudinal changes in participant employment outcomes between baseline and subsequent plan reviews

Participant employment rate	Baseline	Review 1	Review 2	Review 3	Review 4	2020-21 Target
Aged 15 to 24 years	12%	16%	21%	25%	26%	24%
Aged 25+	26%	26%	24%	21%	22%	
Aged 15+ (average)	23%	24%	23%	22%	23%	

Further details about the employment outcomes for NDIS participants can be found in the publicly available report titled “Employment outcomes for NDIS participants as at 31 December 2020”.⁸³

Social and community participation

The table below shows the progress against the NDIA’s corporate plan metrics for the participant social and community engagement rate at entry, first, second, third and fourth plan review, for participants who entered the Scheme between 1 July 2016 and 30 June 2017.

Table 51 Longitudinal changes in participant social and community engagement outcomes between baseline and subsequent plan reviews

Participant social and community engagement rate	Baseline	Review 1	Review 2	Review 3	Review 4	2020-21 Target
Aged 15 to 24 years	32%	38%	44%	45%	46%	50%
Aged 25+	36%	41%	47%	48%	50%	
Aged 15+ (average)	35%	40%	46%	47%	49%	

A proportion of this growth in community participation is likely a result of participants becoming involved in groups for people with disability. This improvement in participant social outcomes provides evidence of the effectiveness of Scheme supports, as assistance with social and community participation is a core funded support in participants’ plans.

7.1.2 “Has the NDIS helped?”

Participants who have entered the Scheme since 1 July 2016 have been asked “Has the NDIS helped?” at each participant plan review, allowing the Agency to gain valuable longitudinal insights. The results shown in this section of the report are based on responses provided at the first participant plan review, compared with those from the most recent review, for participants who have been in the Scheme for at least two years. The results are

⁸³ <https://data.ndis.gov.au/reports-and-analyses/outcomes-and-goals/employment-outcomes-participants-their-families-and-carers>

based on outcomes recorded from 1 July 2016 to 30 June 2021, and trial participants have been excluded.

On the whole, perceptions of the Scheme have been positive, with participants and their families/carers more likely to report that the Scheme had helped them in various areas of their lives the longer the participant was in the Scheme. These results, based on data as at 30 June 2021, suggest a growing level of support for the Scheme by its participants and the family members and carers of participants. This helps demonstrate the effectiveness of the Scheme and in the long term strengthens the ongoing financial sustainability of the Scheme.

Table 52 below summarises opinions on whether the Scheme has helped, by domain, for children from birth to before starting school. Across all domains, opinions improved between the first and their most recent plan review.

Table 52 “Has the NDIS helped?” – for children from birth to before starting school

Proportion of positive responses	Review 1	Most recent plan review	From Review 1 to Most recent plan review
Child's development	92%	95%	↑
Child's access to specialist services	91%	95%	↑

Table 53 below shows the proportion of positive responses by domain for children from starting school to 14 years of age. The percentage responding positively was lowest for the proportion of parents and carers that felt the NDIS had improved their child's relationship with family and friends. The percentage responding positively was highest for the parents and carers that felt that their child had become more independent as a result of the NDIS.

Table 53 “Has the NDIS helped?” – for children from starting school to 14

Proportion of positive responses	Review 1	Most recent plan review	From Review 1 to Most recent plan review
Child's independence	60%	70%	↑
Child's relationship with family and friends	48%	57%	↑

Table 54 below summarises the percentage of positive responses on whether the Scheme has helped, by domain, for young adults aged 15 to 24. Opinions on whether the Scheme has helped vary considerably by domain for this young adult group. The percentage of positive responses is highest for participants that said that the NDIS had helped them with daily living activities. A reduction in positive responses was recorded for participants that felt that their involvement with the NDIS improved their health and wellbeing at their most recent plan review, compared to their first review.

Table 54 “Has the NDIS helped?” – for young adults aged 15 to 24

Proportion of positive responses	Review 1	Most recent plan review	From Review 1 to Most recent plan review
Health and well being	64%	48%	↓
Daily living activities	61%	69%	↑

Table 55 below shows the proportion of positive responses for adults aged 25 and older. For adult participants aged 25 and older, opinions on whether the Scheme has helped them are highest for participants that said the NDIS had helped them with daily living activities, followed by participants that felt that their involvement with the NDIS improved their health and wellbeing.

Table 55 “Has the NDIS helped with health and wellbeing?” and “Has the NDIS helped with daily living activities?” – adults aged 25 and older

Proportion of positive responses	Review 1	Most recent plan review	From Review 1 to Most recent plan review
Health and well being	51%	58%	↑
Daily living activities	71%	82%	↑

7.2 Family and carer outcomes

The NDIS Outcomes Framework measures outcomes for the families and carers of participants as well as participants, recognising that the outcomes for people with a disability and the people who care for them are likely to be closely linked. Families and carers of participants who are well supported under the Scheme and who are achieving greater independence and social and economic participation, are likely to find the caring role easier and to experience increased wellbeing and greater opportunities for social and economic participation themselves. This improved situation for families and carers should in turn translate into further improved outcomes for participants⁸⁴.

The ‘*Baseline outcomes for families and carers of NDIS participants 30 June 2020*’ report⁸⁵ (which summarises the baseline results for families and carers of NDIS participants entering the Scheme during the four year period from 1 July 2016 to 30 June 2020), as well as the ‘*Longitudinal outcomes for families and carers of NDIS participants 30 June 2020*’ report⁸⁶ (which summarises longitudinal outcomes for families and carers of NDIS participants who have been in the Scheme for one year or more at 30 June 2020), have both been publicly released.

⁸⁴ Productivity Commission Inquiry Report. 2011. *Disability Care and Support* pp. 54-55,131

⁸⁵ [Baseline outcomes for families and carers of NDIS participants 30 June 2020](#)

⁸⁶ [Longitudinal outcomes for families and carers of NDIS participants 30 June 2020](#)

The table below shows the progress against the NDIA’s corporate plan metrics for parent and carer employment rate outcomes at entry, first, second, third and fourth plan review, for participants who entered the Scheme between 1 July 2016 and 30 June 2017. This is a key finding from the perspective of financial sustainability.

Table 56 Longitudinal changes in parent and carer employment rate outcomes between baseline and subsequent plan reviews

Parent and carer employment rate	Baseline	Review 1	Review 2	Review 3	Review 4	2020-21 Target
Aged 15 to 24 years	43%	47%	49%	52%	53%	50%
Aged 25+	52%	56%	52%	51%	52%	
Aged 15+ (average)	44%	48%	50%	52%	53%	

8. Information systems and risk management approach

The agency's Information systems (comprising case management, finance and data warehouse) and risk management approach are important infrastructure in ongoing financial sustainability.

8.1 Information systems

8.1.1 Case management systems

The Agency currently uses SAP Customer Relationship Management (CRM) as its case management system. The CRM system was deployed as a Minimum Viable Product on 1 July 2016 and is hosted and maintained by Services Australia. The primary objective of this delivery was to enable critical operational activities, such as plan approvals and payments. This approach did not meet the needs of the Agency, and as a consequence, has meant the implementation of necessary enhancements to the CRM has not been straightforward. The existing system has a number of limitations, in particular an over-reliance on manual and off-system business processes, and limited capability to prioritise and direct work to the appropriate staff member to complete a task. This is mitigated somewhat by PANDA reporting which provides a single view of work for planning staff (work in progress) and leadership through individual and team dashboards. Business Intelligence (BI) tools consolidate and prioritise CRM work according to Service Level Agreements. Business Data Owners approve definitions with the oversight of the Data Management Committee.

The NDIA is rolling out an alternative Cloud Environment (ACE) business system. ACE is a true case management system, implemented by Salesforce, where the end-to-end business process for service delivery activities will be managed on-system. This includes the creation of work items, the allocation and prioritisation of work, the interactions between the Agency, participants and other external parties, the supporting materials to ensure consistent decision making, and the tracking of activities to agreed service levels and timeframes. The implementation of ACE is expected to provide and enable better oversight on queues of work and streaming and prioritisation of work based on risk, urgency and other factors.

The first release of ACE went live in February 2021. This release implemented Supported Disability Accommodation (SDA) application and dwelling enrolment processes. As of July 2021, the ACE data is available in the Enterprise Data Warehouse for reporting and analysis purposes. Data management considerations are being incorporated into ACE build requirements which will ensure the quality of data recorded in the new business system. In 2022 an initial major release of ACE will occur which will improve the participant pathway (access and planning) from a system perspective.

8.1.2 Finance systems

SAP Finance is the Agency's finance system and was introduced on 1 July 2016. All payments to and from the Agency are made using SAP Finance. In line with Services Australia's practice, the Agency uses the SAP Public Sector Collection and Disbursement (SAP PSCD) system as an intermediary between the SAP CRM and SAP Finance (operated by Services Australia as a shared service). Work is being undertaken to design and implement additions to the Agency's claims and payment functionalities to include e-invoicing and real-time payments capabilities.

8.1.3 Data warehouse

Over the past 12 months, the strategic Enterprise Data Warehouse Platform (Integrated Data Store 2.0 or IDS2) has been built. The data users and reporting functions are being transitioned to this new IDS2 platform, and the transition is scheduled to be completed in 2021.

The installation of the IDS2 platform was a pre-requisite for data ingestion, analysis and usage, from future sources like the ACE CRM.

The transition will realise significant benefits for the Agency, such as:

- Unification of disparate data sources to a common source of truth. This ensures integrity across the Agency's reporting, BI and analysis functions
- Enables decommissioning of the legacy data platform and processes, thus reducing maintenance and resourcing demands
- Facilitate integration with strategic data sources (like Salesforce), with minimal disruption to end users
- Transition to IDS2 offers an opportunity to establish enterprise standards, best practices in nomenclature and development standards
- Data quality and data exceptions can be identified sooner in the data processing lifecycle, which minimises impacts to reporting and data analysis
- Data cleansing is standardised, and ensures robust data loads and extractions.

A stable data warehouse platform is expected to enhance integration with reporting and analytical tools and, continue improving the quality and width of data being recorded and reported.

While good progress was made in improving data integrity, by adoption of a strategic data warehouse and better data quality standards, there are improvements still to be made.

The areas of focus in 2021-22 will be:

- Integration of the ACE CRM to the strategic data warehouse platform
- Extending capability to ingest unstructured data from wider sources (like through a data lake)
- Enhance data design, transformation capability and processes.

8.2 Risk management

The Agency has a structured approach to identifying, managing, escalating and communicating key risks. This is critical to the effective and efficient delivery of the Scheme. The Agency is committed to ensuring that participant supports, provider services and other critical business functions are maintained or quickly restored in the event of a significant outage, incident or crisis. The proactive use of risk management within the Agency has enabled effective business planning and operations with an evidence-based approach within the appetite set by the Board.

On an annual basis, the Board determines the strategic risks for the Agency, which are directly aligned to the Corporate Plan. The Board determined nine strategic risks for 2020-21 in the areas of:

- Participant Experience
- Participant Outcomes
- Partner Performance
- Provider Market Quality
- Financial Sustainability
- Scheme Integrity
- People Capability and Capacity
- ICT Delivery and Support
- System Interruption.

The strategic risks are monitored against key indicators and performance is reported to the Board Risk Committee on a quarterly basis. The strategic risks are complemented by operational risks and controls which are owned and managed at group level.

The Agency has established and practically tested its Business Continuity Management Framework (most recently during the COVID-19 pandemic and NSW floods) to ensure the

rapid resumption of participant and provider services and critical business activities in emergency situations.

The Agency's integrated risk management system has been enhanced to provide a single platform for managing operational, strategic and regulatory risks, audit recommendations, incidents and business continuity plans. The system gives accountable executives extended visibility to the risks and controls within their business and the broader Agency, and provides for a connected risk environment through which inter-dependencies can be identified and managed.

Risk management summary

While the Agency's tools, processes and procedures are adequate for an entity at this level of maturity, they should continue to evolve with the Scheme. Future development in risk maturity should focus on better embedding positive risk behaviours and a risk culture within the Agency, continuing to improve the depth of its risk management processes, implementing systems to better support consistent decision-making (particularly around access and plan budgets), better governance and implementation of policy changes, and focusing on the need to proactively manage financial sustainability risks.

Managing the strategic and operational risks discussed in this section such that they are at an acceptable level is fundamental to the success of the Scheme. While strategies to mitigate these risks are articulated in current risk reporting, it will be important to monitor the effectiveness of these strategies in real time to ensure that they are having the desired impact, as well as continuing to actively manage these risks to an acceptable level in future.

9. Recommendations

The AFSR is required, to include “a discussion of the key risks and issues identified and, where these have an adverse impact on financial sustainability, recommendations designed to manage the risks or address the issues”⁸⁷. This section sets out the recommendations arising from the analysis undertaken in development of this report, that are intended to manage identified risks and achieve greater certainty in relation to the long term financial sustainability of the Scheme.

Embed insurance principles in NDIS culture and communications

The financial sustainability of the NDIS is central in the NDIS Act and a key expectation outlined in the Ministerial Council’s Statement of Strategic Guidance for the NDIA’s Board⁸⁸. The NDIA is committed to deliver the Scheme in line with the requirements of the NDIS Act and within a sustainable level of funding.

To meet this commitment, the NDIA’s financial responsibilities and associated insurance principles must be clearly understood by all NDIA stakeholders (participants, disability groups, NDIA staff, partners and other stakeholders) and embedded into the long-term future of the Scheme. NDIA initiatives, including those recommended below, must be underpinned with communications that emphasise the Scheme’s intent and its insurance principles.

Recommendation 1: *The NDIA should ensure that NDIS insurance principles are embedded in its strategic communications with participants, disability groups, staff, partners and other stakeholders.*

Focussing on participant outcomes

The NDIA needs to be effective in supporting participants to achieve positive outcomes by ensuring support costs are expended, as much as possible on early intervention enabling participants to achieve improved economic and social participation outcomes. This is central to the purpose of the NDIS, and will have longer term benefits for financial sustainability via reducing future reliance on funded supports over participants’ lifetimes.

Whilst the agency is assisting participants to set goals and achieve outcomes, further work is required to:

- Understand the supports available that are evidence-based and have proven to be effective for other participants
- Monitor a participant’s progress towards significant outcomes
- Measure the impact of different types of support or “pathways to outcomes”.

Recommendation 2: *The NDIA should continue work on prioritising, implementing and measuring the impact of initiatives that aim to improve participant outcomes.*

⁸⁷ *National Disability Insurance Scheme—Rules for the Scheme Actuary 2013*

⁸⁸ [PB Statement of Strategic Guidance 2017 \(PDF Download\)](#)

A number of projects are in progress and should be a priority for completion in the coming year:

- Increasing the capacity and capability of NDIA staff and partners to find, generate and use evidence for decision-making through a range of activities led by the Research and Evaluation Branch
- Developing “supported decision guides” to help participants make informed, evidence-based choices
- Completing and releasing the “Participants Like Me” interactive web tool, for participants to access information on the supports and pathways that have helped other participants to reach their goals
- Providing participants with support to make more structured goals, through additional fields in the CRM, to enable them to clearly communicate their expectations to providers and other people supporting them.

Recommendation 3: *The NDIA should prioritise the completion of existing projects that support participants to make and communicate informed, evidence-based decisions.*

The NDIA should continue to focus its research on the evidence base for a range of clinical and non-clinical supports and publish these in accessible formats. In particular, the provision of early intervention supports should benefit a participant by reducing their future need for disability supports. The NDIA can facilitate better lifetime outcomes whilst achieving long-term cost reductions by supporting participants with information on evidence-based early intervention supports.

Recommendation 4: *The NDIA should continue to make progress in reviewing, developing and communicating the evidence base for different forms of early intervention supports.*

Given its scale and market influence, the Agency could develop further initiatives to foster innovation in the delivery of supports in the market, thereby increasing choice and control for participants. This may also involve increasing the awareness of different service delivery methods, such as therapy through online platforms, to assist participants who have difficulty finding the ‘right’ providers in their area or who are in remote locations. Another option is encouraging providers to invest in new technologies, support types and markets, e.g. providers who have the technologies (or would be able to invest in new technologies) to enter new markets and/or expand their support type offerings.

In general, the Agency could focus on empowering and enabling participants to select the support and delivery channels that best suit them, their lifestyle and time commitments, and then request these from providers.

Recommendation 5: *The NDIA should continue to develop initiatives that provide participants with a greater range of service options to suit their own needs and circumstances. This includes innovations in market development and provider service delivery.*

Consistent and equitable agency decision-making

Given the baseline cost projections, and related uncertainty described in this report, it is imperative that NDIA aims to improve the certainty of the Scheme's costs over the long-term, through improvements to the consistency and equity of decision-making and the quality of information provided from and to prospective participants and participants.

In July 2021 the Commonwealth and State/Territory disability ministers agreed to work in partnership with those with lived disability experience to co-design a person-centred assessment approach that delivers consistency and equity in access and planning outcomes. This is consistent with the NDIS Act and its insurance principles.

A foundational component of this equity and consistency is an approach to assessment of function which achieves robust and consistent assessment of participants' functional capacity, as well as their environmental and personal circumstances (to the extent that these circumstances are relevant to determining reasonable and necessary supports for participants).

Recommendation 6: *The NDIA should, consistent with the NDIS Act, actively pursue via co-design an assessment approach which measures functional capacity in line with relevant chapters of the International Classification of Functioning, Disability and Health, and which incorporates environmental and personal factors that are salient to the determination of reasonable and necessary supports.*

Recommendation 7: *The NDIA should co-design new guidance materials with medical and allied health practitioners, to ensure more consistent evidence is received and that the NDIA makes more consistent decisions on access requests and the development of plan budgets.*

Recommendation 8: *The NDIA should implement stronger controls on the type and quality of evidence accepted to ensure consistent minimum standards are adopted across the NDIA's access and planning functions.*

The number of exits from the Scheme continues to be below expected long-term levels, due to challenges in measuring the benefit of early intervention and the continuing need for Scheme supports.

Recommendation 9: *The NDIA should reassess eligibility for participants who entered through early intervention as part of the normal course of business, whilst providing reassurance to those who exit the Scheme that it will be available to them in the future should their circumstances change.*

Recommendation 10: *The NDIA should ensure that the co-designed assessment approach is appropriate for eligibility reassessments in addition to access and planning decisions, for instances where it is appropriate to undertake a reassessment in line with the purposes of the Scheme. This would provide consistency in Scheme entry and exit processes.*

Within the current CRM system, the date when disability is acquired is often incomplete or not reliably captured. This limits the ability to analyse new incidence of non-congenital

disabilities, which means projections of new entrants cannot be reliably modelled using date of disability acquired.

As identified at the previous review, and discussed in Section 5.3 of this report, the number of new participants has been significantly higher than previously assumed, in particular in geographic areas which phased into the Scheme at least three years earlier. Uncertainty exists as to the degree to which this unfavourable observed experience represents true new incidence”, “previously unmet need” or expansion of eligibility.

Recommendation 11: *The NDIA should undertake further detailed analysis to better understand the drivers of higher than expected new entrants, to increase confidence in long term assumed new incidence rates.*

Scheme scope and coverage

There needs to be continued focus on the National Disability Strategy and the Applied Principles and Tables of Support (APTOS) to ensure that planners and participants systematically identify and access supports provided by other systems. The NDIA must develop proactive strategic responses to incentivise the continuation of these supports. This would include support for plan implementation to allow participants to connect with alternative services when needed.

Recommendation 12: *The NDIA should focus on plan development and implementation processes to systematically ensure that participants identify and are supported to access appropriate supports from other service systems.*

The NDIA should be proactive in identifying trends in AAT matters that have the potential to significantly impact the ongoing financial sustainability of the Scheme. In response to such trends the NDIA should ensure that there is clarity on Agency policies and in operational guidelines. It is anticipated that the Agency’s focus on improving the consistency, equity and transparency of its decisions should result in fewer AAT cases over time.

Recommendation 13: *The NDIA should continue to focus on risks to financial sustainability associated with mainstream interfaces and themes from AAT cases.*

Improving operational processes

Quality assurance reviews demonstrate significant improvements over the past year, including more comprehensive documenting of plan decisions in participant records. It is important for the Agency to continue undertaking risk based quality assurance reviews to better understand Scheme experience and continue to improve processes.

Recommendation 14: *The NDIA should ensure that the results of ongoing quality assurance reviews are embedded as operational improvements.*

The quality assurance reviews highlighted possible improvements in ICT system controls to support accurate decision-making. In particular, the Agency’s CRM does not fully support end-to-end participant planning, or referrals to higher delegates. It also does not enforce

mandatory requirements in the Operational guidelines such as recording interactions, relying on Agency staff to comply with these policies and increasing the scope for manual errors or omissions.

The implementation of ACE provides an opportunity to ensure that consistent controls are built into the system to better support the decision making process. The incorporation of business intelligence around key business processes would also assist in ensuring more effective and consistent decision making.

Recommendation 15: *The NDIA should embed improved controls into current and future CRM to ACE system changes to improve the integrity of the participant planning process.*

The NDIA's documentary evidence requirements are lower for services rendered to participants by non-registered suppliers. This reduces the NDIA's ability to identify fraudulent or "sharp" practices, for example providers charging for supports that were not provided, charging multiple times for the same service, or charging unreasonable amounts. The Agency's fraud detection efforts would be strengthened through consistent documentation requirements for services rendered, irrespective of a supplier's registration status.

Recommendation 16: *The NDIA should strengthen its ability to detect fraud through increasing the supporting data and documentation requirements for payments to non-registered suppliers.*

Acronyms and definitions

Acronyms

AAT	Administrative Appeals Tribunal
ABS	Australian Bureau of Statistics
AFSR	Annual Financial Sustainability Report
CB	Capacity Building
CRM	Client Relationship Management
CY	Calendar Year
GDP	Gross Domestic Product
ICT	Information and Communications Technology
ILO	Independent Living Option
LCE	Lifetime Cost Estimates
NDIA	National Disability Insurance Agency
NDIS	National Disability Insurance Scheme
NIIS	National Injury Insurance Scheme
NSW	New South Wales
PBS	Portfolio Budget Statements
PC	Productivity Commission
RAC	Residential Aged Care
SAS	Statistical Analysis System
SDA	Specialist Disability Accommodation
SIL	Supported Independent Living
YTD	Year To Date

Definitions used in this report

2019-20 AFSR	<i>National Disability Insurance Scheme: Annual Financial Sustainability Report 2019-20</i> A summary was included in Chapter 3.2 of the <i>National Disability Insurance Agency Annual Report 2019-20</i> , from pages 93 to 97. The annual report was tabled on 15 October 2020: National Disability Insurance Agency Annual Report 2019-20
Accrual basis	Cost is based on when the service was actually provided to the participant, recognizing that some services are paid for after the end of a period.
ACE	A cloud-based case management system from Salesforce used by the Agency
the Agency	National Disability Insurance Agency
Bilateral agreements	Agreements signed between the Commonwealth government and the States/Territories
Cash basis	Cost is based on when the cash is paid out by the Agency, regardless of when the support was provided
COVID-19 pandemic	Ongoing global pandemic of coronavirus disease (March 2020), with references to the 'first wave', 'second wave' and later waves
In-kind supports	Before the NDIS was established, States/Territories and the Commonwealth governments paid providers to deliver services to people with disability. States/Territories and the Commonwealth continue to pay for some services. State/Territory and Commonwealth governments receive a revenue offset.
Level of function	A participant's functional ability, measured using a range of widely accepted and validated tools which were selected based on expert advice from professionals with specialist disability knowledge, such as disability organisations, clinicians and researchers.
Mature participants	Participants who were active at both 28 February 2021 and 31 May 2021, and had their first plan approved on or prior to 29 February 2020.
NDIS Act	<i>National Disability Insurance Scheme Act 2013</i> , as amended
New entrants	All participants entering the Scheme
Participant intake	All participants entering the Scheme
Participants new to disability supports	Participants accessing disability supports for the first time, regardless of whether the disability was existing or newly acquired.
2017 PC study report	Productivity Commission 2017, <i>National Disability Insurance Scheme (NDIS) Costs</i> , Study Report, Canberra
Plan budgets	The reasonable and necessary supports outlined in a participant's plan that will be funded for a specific duration. Most typically this is one year although durations vary across participants. Plan budgets represent the dollar amount of support that has been made available to participants in their plan.
Portfolio Budget Statements	The purpose of the Portfolio Budget Statements is to inform Senators and Members of Parliament of the proposed allocation of resources to government outcomes by agencies within the relevant portfolio. Estimates of government expenditure in the Portfolio Budget statements are on an accrual basis.

Previous Review	National Disability Insurance Scheme: 31 December 2020 (Dec20) Financial Sustainability Report (FSR), released on 3 July 2021. This was based on data to 31 December 2020, with commentary about experience to 31 May 2021.
Previously unmet need	Participants who acquired their disability some years prior who only accessed the Scheme recently (for various reasons)
SAP	SAP is a software company that makes enterprise software. Also known as Systems, Applications and Products in Data Processing.
the Scheme	National Disability Insurance Scheme
Steady Intake Date	The point in time where participant intake primarily represents participants with new incidence of disability. For this report 30 June 2024 has been assumed.
Superimposed inflation	Inflation over and above normal inflation. Normal inflation includes the consumer price index and increases in the minimum wage.
Supported Independent Living	This includes help and/or supervision of daily tasks to help participants live as independently as possible, while building their skills. It is most commonly used in shared living arrangements
Trial period	From 1 July 2013 to 30 June 2016
Transition period	From 1 July 2016 to 30 June 2021
True new incidence	Participants who acquired their disability relatively recently, or who have only recently met the necessary criteria for access to the Scheme.

Appendix A: Average Payment Assumption setting details

Average payment assumptions have been calculated separately for each of the 15 different support categories, with different types of participant costs treated as follows:

- Payments to participants and providers are treated on a cash basis (when the cash is paid out by the Agency, regardless of when the support was provided).
- Payments relating to in-kind supports are treated on an accrual basis (when the service was actually provided to the participant).⁸⁹
- Payments relating to Residential Aged Care (RAC) supports have been removed due to the infrequent occurrence of cross-billing payments which distort the payment experience in a given period. Costs relating to RAC are allowed for separately in the projection.

The key components considered in setting payment assumptions are discussed below.

The most appropriate averaging period for payment experience

The selection of an averaging period must balance the need to reflect recent experience with minimising volatility of cost patterns by cohort and support category. The adopted averaging period is the three months to 31 May 2021.⁹⁰ By modelling the payments based on the three-month period, the projections align more closely to recent payment experience, which continues to increase over time, while still ensuring there is sufficient stability in cost patterns.

Annual average payment assumptions have been calculated for mature participants⁹¹ in each cohort⁹² based on the average annualised payments experience of this three-month period, inflated to 30 June 2021⁹³.

⁸⁹ This approach was taken to remove any timing bias related to payments, given that there is a general lag between when supports are provided and when data is received from States/Territory and Commonwealth governments.

⁹⁰ By comparison, the 2019-20 AFSR considered average annualised payments for the three months to 31 March 2020.

⁹¹ "Mature participants" are defined as those who were active at both 28 February 2021 and 31 May 2021, and had their first plan approved on or prior to 29 February 2020.

⁹² Separate projections are performed for primary disability, level of function, age, gender and whether or not a participant is in SIL.

⁹³ Actual payments have been inflated to 30 June 2021 using a 6.1% per annum inflation rate over 2.5 months. This includes a normal inflation rate of 3.0% per annum and a superimposed inflation rate of 3.1% per annum, as per the adopted assumptions in the previous AFSR for the 2020-21 financial year.

Impact of seasonality on the payment experience

Seasonality refers to fluctuations in payment levels over a period of time due to factors such as the number of business days, public holidays and provider claiming behaviour. By utilising a shorter period to inform average payment assumptions, the seasonality impact can result in understatement or overstatement of costs. Hence, the average annualised payments assumptions need to be modified to allow for the seasonality impacts resulting from the use of the three months to 31 May 2021 as the averaging period. The two key drivers of seasonality appear to be the number of business days in the period, and participant and provider behaviour.⁹⁴ The seasonality impact also tends to differ at a support category level.

Analysis of previous payments experience between 2018 and 2021 indicated that the overall payments average for the year after removing inflationary impacts was 3% lower than the three-month payment period to 31 May 2021.

Table 57 shows that seasonality factors have been adopted at the support category level, mostly driven by observed payment relativity⁹⁵ and to a lesser extent, the number of business days relative to the rest of the year. Overall, payment assumptions have been decreased by 3% to allow for the seasonality impact.

Average monthly payments for Transport are mainly driven by the number of fortnightly payments made in a given month. This is due to the fortnightly periodic cash payments made directly to the majority of participants, unique to Transport, which comprise 46% of payments within this support category.

Table 57 Adopted seasonality factors by support category

Support Category	Adopted Seasonality Factor
Core	
Daily Activities	
<i>SIL supports</i>	-1%
<i>Non-SIL supports</i>	-3%
Social Community Civic	-5%
Consumables	-5%
Transport	-3%
Capital	
Assistive Technology	0%
Home Modifications	0%
Capacity Building	
CB Daily Activities	-8%
Support Coordination	-4%
CB Employment	0%
Other CB supports	-8%
Total	-3%

⁹⁴ For example, payments tend to exhibit a higher peak during May and June. This is likely to be due to providers finalising accounts in the lead up to the end of the financial year.

⁹⁵ Payment relativity is defined as average annualised payments for the period relative to the overall average annualised payments for the financial year.

Allowance for time in Scheme

Participants in their first year in the Scheme are observed to have lower average payments, which is likely to arise from time taken to familiarise themselves with the Scheme and the process of accessing supports. Average payment assumptions are therefore set based on “mature participants”, defined as those who were active at both 28 February 2021 and 31 May 2021, and had their first plan approved on or prior to 28 February 2020 (i.e. those who had been active for at least 12 months as at 28 February 2020).

A reduction in average payments is therefore adopted for participants in their first year to account for the lower rate of payment. The adopted assumption is 80% (of the average payment for mature participants) for non-SIL participants and 90% for SIL participants. These assumptions have been relatively stable in the past twelve months and are unchanged from the previous FSR.

Residential Aged Care

Supports for participants in Residential Aged Care (RAC) are currently being met through the aged care system. These costs are recorded in the CRM, but are irregular, distorting the payment experience in a given period. As a result, these payments have been excluded from the payment experience and the resulting base average payment assumptions, and instead allowed for separately in the model. The impact of this adjustment is an increase of 1.4% to the participant cost projections spread over the next five years. The allowance is expected to decrease over time as younger participants in RAC move into alternative SIL or ILO arrangements, and as a result payments to these participants are captured on-system and become more regular in nature.

Adjustment for “SIL indicator” issue

Operational changes in the way SIL is entered into the plan in the CRM (support category level, rather than at the support line item level) from 1 July 2020 has limited the ability to accurately identify SIL participants, as the support category is not detailed enough to distinguish between SIL supports and other activities of daily living. Since SIL participants are higher cost than non-SIL participants, not adjusting for this misclassification would overstate the average payment assumptions for non-SIL participants.

To mitigate this issue, a manual review was completed of participants who were in SIL prior to 1 July 2020 but not flagged as SIL as at 31 May 2021. This involved identifying participants who were receiving SIL in-kind supports in the 2020-21 FY as well as matching on participants with payments for SIL items in their current plan. However, there are cases where a participant’s SIL status is still uncertain. In these cases these participants were excluded from the payment analysis and did not contribute to the average payment calculations.

As at 31 May 2021, 713 participants have been identified as likely SIL participants. The Agency has and is continuing to implement processes to reduce the impact arising from this operational change, with fewer participants now identified as likely SIL participants.

Payments for participants aged 65 years and over

Payments for participants aged over 65 years are assumed to increase at the rate of 1.0% per annum above the normal wage inflation rate for participants whose primary disability is acquired brain injury, spinal cord injury, autism, intellectual disability or cerebral palsy, up to a maximum loading of 25.0%. These primary disabilities are expected to have average payment assumptions that increase with age, although there is limited experience to support this to date. The average age for the 65 years and over age group will increase gradually over time as the Scheme matures. Hence, average payments for this cohort should increase above normal inflation until a more mature state is reached. The estimated impact is an \$11 million (or 0.03%) increase in projected costs over 2022-23, increasing to around \$220 million (or 0.4% higher) by 2029-30.

Appendix B: Comparison to previous review – detailed tables

Participant Costs

Table 58 Baseline projection of participant costs (cash basis) – compared to the previous review

Projected participant costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
2020-21 AFSR					
Participant Costs (cash basis)					
0-64 years	26,994	30,965	34,345	37,067	51,471
65+ years	1,837	2,464	3,114	3,748	7,012
Total Participant Costs (cash basis)	28,831	33,429	37,459	40,814	58,483
Dec20 AFSR					
Participant Costs (cash basis)					
0-64 years	25,916	30,049	33,597	36,705	52,778
65+ years	1,783	2,387	3,025	3,680	7,140
Total Participant Costs (cash basis)	27,699	32,436	36,622	40,385	59,918
Difference					
Participant Costs (cash basis)					
0-64 years	1,078	916	748	362	-1,306
65+ years	55	78	89	68	-128
Total Participant Costs (cash basis)	1,132	994	837	430	-1,435
% Difference					
Participant Costs (cash basis)					
0-64 years	4%	3%	2%	1%	-2%
65+ years	3%	3%	3%	2%	-2%
Total Participant Costs (cash basis)	4%	3%	2%	1%	-2%

Table 59 Baseline projection of participant costs (accrual basis) – compared to the previous review

Projected participant costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
2020-21 AFSR					
Participant Costs (accrual basis)					
0-64 years	27,359	31,386	34,812	37,569	52,169
65+ years	1,864	2,501	3,161	3,803	7,115
Total Participant Costs (accrual basis)	29,223	33,886	37,973	41,373	59,284
Dec20 AFSR					
Participant Costs (accrual basis)					
0-64 years	26,328	30,479	33,858	36,954	53,135
65+ years	1,811	2,421	3,049	3,705	7,189
Total Participant Costs (accrual basis)	28,139	32,900	36,906	40,659	60,324
Difference					

Projected participant costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
Participant Costs (accrual basis)					
0-64 years	1,031	907	954	616	-967
65+ years	53	80	112	98	-73
Total Participant Costs (accrual basis)	1,085	987	1,066	714	-1,040
% Difference					
Participant Costs (accrual basis)					
0-64 years	4%	3%	3%	2%	-2%
65+ years	3%	3%	4%	3%	-1%
Total Participant Costs (accrual basis)	4%	3%	3%	2%	-2%

Participant Costs by SIL and Non-SIL

Table 60 shows the impact of the changes in emerging experience and assumptions compared with the previous review on projected participant costs, split between participants in SIL and those not in SIL. Projected costs for non-SIL participants have significantly increased (6% in 2021-22 and 8% in 2024-25). For participants in SIL, costs have decreased by 1% in 2021-22, and further decreases to 15% in 2026-27 and 18% by 2029-30. Cost projections are impacted by a decrease in projected participants, particularly those in SIL, offset by increasing average payments per participant.

Table 60 Change in projected participant costs by SIL type (cash basis)

Participant Costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
2020-21 AFSR					
SIL	8,876	9,570	10,268	11,007	15,647
Non-SIL	19,955	23,860	27,192	29,807	42,836
Total	28,831	33,429	37,459	40,814	58,483
Dec20 AFSR					
SIL	8,939	10,306	11,632	12,863	19,132
Non-SIL	18,760	22,129	24,990	27,522	40,787
Total	27,699	32,436	36,622	40,385	59,918
Difference					
SIL	-63	-737	-1,365	-1,856	-3,484
Non-SIL	1,195	1,730	2,202	2,285	2,049
Total	1,132	994	837	430	-1,435
% Difference					
SIL	-1%	-7%	-12%	-14%	-18%
Non-SIL	6%	8%	9%	8%	5%
Total	4%	3%	2%	1%	-2%

Participant cost projections have increased for non-SIL and decreased for SIL relative to the previous review (Table 60). This results in a neutral impact on the projection by 2026-27, and a decrease in total participant costs in 2029-30.

Participant Costs by Age Band

Table 61 Change in projected participant costs by age band (cash basis)

Participant Costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
2020-21 AFSR					
Children (0 to 14)	4,318	5,143	5,850	6,373	8,183
Young adults (15 to 24)	4,715	5,610	6,427	7,165	11,760
Adults (25 to 64)	17,962	20,213	22,068	23,529	31,528
Older adults (65+)	1,837	2,464	3,114	3,748	7,012
Total	28,831	33,429	37,459	40,814	58,483
Dec20 AFSR					
Children (0 to 14)	3,961	4,714	5,359	5,908	8,090
Young adults (15 to 24)	4,281	5,081	5,821	6,541	10,980
Adults (25 to 64)	17,674	20,254	22,416	24,256	33,708
Older adults (65+)	1,783	2,387	3,025	3,680	7,140
Total	27,699	32,436	36,622	40,385	59,918
Difference					
Children (0 to 14)	356	428	491	465	93
Young adults (15 to 24)	434	529	605	623	781
Adults (25 to 64)	288	-41	-348	-727	-2,180
Older adults (65+)	55	78	89	68	-128
Total	1,132	994	837	430	-1,435
% Difference					
Children (0 to 14)	9%	9%	9%	8%	1%
Young adults (15 to 24)	10%	10%	10%	10%	7%
Adults (25 to 64)	2%	0%	-2%	-3%	-6%
Older adults (65+)	3%	3%	3%	2%	-2%
Total	4%	3%	2%	1%	-2%

Participant Costs by Disability Group

Table 62 Change in projected participant costs by disability group (cash basis)

Participant Costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
2020-21 AFSR					
Autism	5,856	7,216	8,545	9,797	17,586
Intellectual Disability	8,878	9,838	10,670	11,376	15,030
Psychosocial Disability	3,088	3,744	4,290	4,716	6,817
Developmental Delay	667	857	1,013	1,113	1,273
Sensory	551	648	731	796	1,092
Other	9,791	11,126	12,211	13,017	16,685
Total	28,831	33,429	37,459	40,814	58,483
Dec20 AFSR					
Autism	5,350	6,622	7,876	9,133	17,025
Intellectual Disability	8,526	9,606	10,552	11,412	15,538
Psychosocial Disability	3,217	3,966	4,603	5,131	7,718
Developmental Delay	760	954	1,112	1,235	1,603
Sensory	554	650	732	803	1,147
Other	9,292	10,637	11,748	12,671	16,887
Total	27,699	32,436	36,622	40,385	59,918
Difference					
Autism	506	594	668	663	561
Intellectual Disability	352	231	118	-36	-508
Psychosocial Disability	-129	-222	-313	-414	-901
Developmental Delay	-93	-97	-99	-122	-329
Sensory	-3	-2	0	-7	-56
Other	499	489	463	346	-202
Total	1,132	994	837	430	-1,435
% Difference					
Autism	9%	9%	8%	7%	3%
Intellectual Disability	4%	2%	1%	0%	-3%
Psychosocial Disability	-4%	-6%	-7%	-8%	-12%
Developmental Delay	-12%	-10%	-9%	-10%	-21%
Sensory	-1%	0%	0%	-1%	-5%
Other	5%	5%	4%	3%	-1%
Total	4%	3%	2%	1%	-2%

Participant Costs by Support Categories

Table 63 shows projections by support categories have shifted substantially compared to the previous review. The greatest difference is the decrease in the longer term in projected

participant costs for the Core Daily Activities support category, and is driven by a relative decrease in the projected number of SIL participants in the longer-term.

For the Capacity Building Daily Activities support category, projected costs are higher than the previous review. This reflects the higher payment experience, and is impacted by the projected increase in intake of children, a cohort that spends a substantial amount on this support category.

Table 63 Change in projected participant costs by support category (on a cash basis)

Participant Costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
2020-21 AFSR					
Core					
<i>Daily Activities</i>	15,852	17,947	19,800	21,407	30,417
<i>Social Community Civic</i>	5,289	6,184	6,994	7,684	11,650
<i>Transport</i>	881	1,059	1,209	1,336	1,948
<i>Consumables</i>	532	616	689	747	990
Capital					
<i>Assistive Technology</i>	552	634	705	758	972
<i>Home Modifications</i>	311	372	419	446	579
Capacity Building					
<i>CB Daily Activities</i>	3,517	4,191	4,796	5,279	7,156
<i>Support Coordination</i>	750	947	1,111	1,218	1,735
<i>CB Employment</i>	315	469	569	648	1,139
<i>CB Choice and Control</i>	363	456	535	592	854
<i>Other CB supports</i>	469	554	632	699	1,042
Total	28,831	33,429	37,459	40,814	58,483

Participant Costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
Dec20 AFSR					
Core					
<i>Daily Activities</i>	15,098	17,398	19,489	21,405	31,549
<i>Social Community Civic</i>	5,159	6,015	6,795	7,509	11,609
<i>Transport</i>	707	850	969	1,078	1,632
<i>Consumables</i>	543	629	704	770	1,067
Capital					
<i>Assistive Technology</i>	668	767	853	928	1,246
<i>Home Modifications</i>	283	344	382	416	566
Capacity Building					
<i>CB Daily Activities</i>	3,305	3,930	4,493	4,995	7,099
<i>Support Coordination</i>	673	850	999	1,105	1,624
<i>CB Employment</i>	481	703	839	951	1,655
<i>CB Choice and Control</i>	326	408	478	532	795
<i>Other CB supports</i>	456	541	621	695	1,075
Total	27,699	32,436	36,622	40,385	59,918

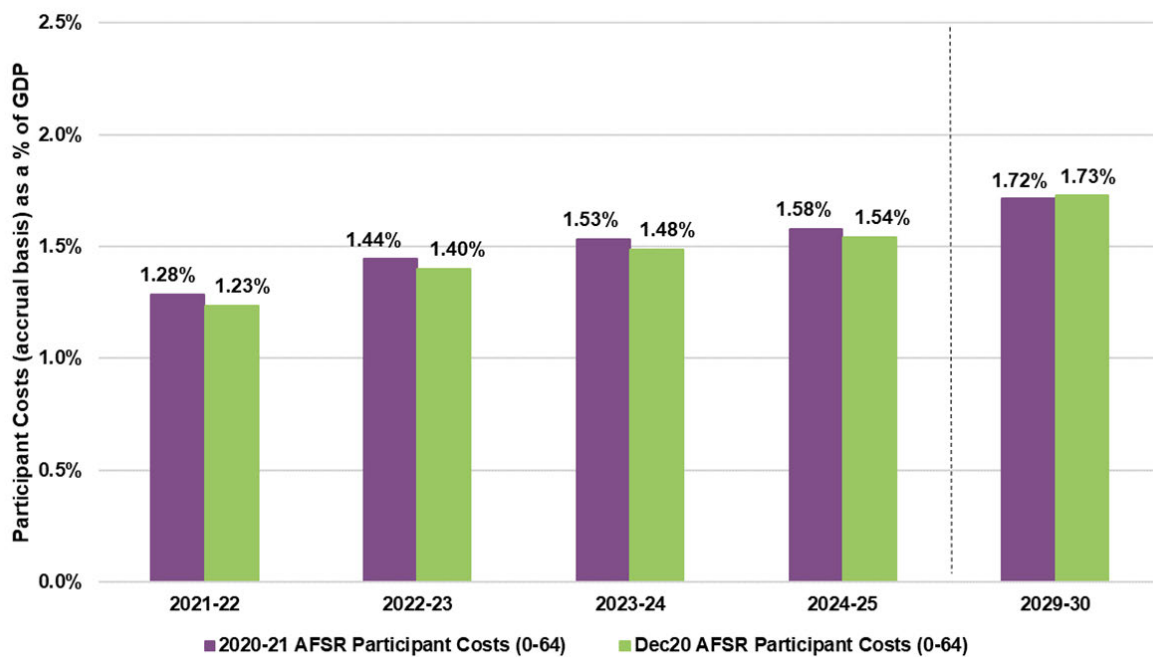
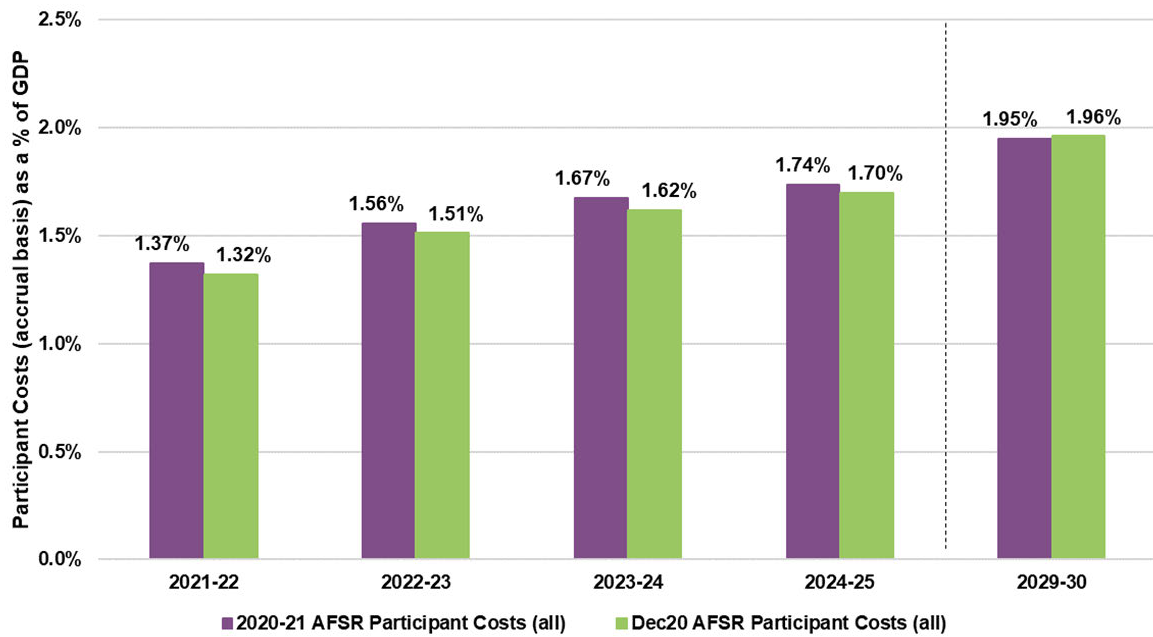
Participant Costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
Difference					
Core					
<i>Daily Activities</i>	754	549	310	2	-1,131
<i>Social Community Civic</i>	130	170	199	175	41
<i>Transport</i>	174	209	241	258	316
<i>Consumables</i>	-12	-13	-14	-23	-77
Capital					
<i>Assistive Technology</i>	-116	-133	-149	-170	-274
<i>Home Modifications</i>	29	28	37	30	13
Capacity Building					
<i>CB Daily Activities</i>	212	261	303	284	57
<i>Support Coordination</i>	78	97	112	113	112
<i>CB Employment</i>	-166	-234	-270	-303	-516
<i>CB Choice and Control</i>	37	48	58	60	59
<i>Other CB supports</i>	13	12	11	4	-34
Total	1,132	994	837	430	-1,435

Participant Costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
% Difference					
Core					
<i>Daily Activities</i>	5%	3%	2%	0%	-4%
<i>Social Community Civic</i>	3%	3%	3%	2%	0%
<i>Transport</i>	25%	25%	25%	24%	19%
<i>Consumables</i>	-2%	-2%	-2%	-3%	-7%
Capital					
<i>Assistive Technology</i>	-17%	-17%	-17%	-18%	-22%
<i>Home Modifications</i>	10%	8%	10%	7%	2%
Capacity Building					
<i>CB Daily Activities</i>	6%	7%	7%	6%	1%
<i>Support Coordination</i>	12%	11%	11%	10%	7%
<i>CB Employment</i>	-35%	-33%	-32%	-32%	-31%
<i>CB Choice and Control</i>	11%	12%	12%	11%	7%
<i>Other CB supports</i>	3%	2%	2%	1%	-3%
Total	4%	3%	2%	1%	-2%

Participant Costs as proportion of Gross Domestic Product (GDP)

Total participant costs (accrual basis) are estimated to represent 1.37% of GDP in 2021-22, increasing to 1.78% in 2025-26 and 1.95% in 2029-30. For ages 0 to 64, this is 1.28% of GDP in 2021-22, 1.60% of GDP in 2025-26 and 1.72% of GDP in 2029-30. Scheme costs as a proportion of GDP are projected to be slightly higher than the previous review (Figure 49).

Figure 48 Comparison of Participant Costs (accrual basis) as a proportion of GDP



Appendix C: Reconciliation to previous review

Table 64 shows the main drivers of movements in participant numbers as well as the total movement from the previous review.

Table 64 Change in projected participant numbers from previous review (31 December 2020)

Change in projected participant numbers As at June 30	2022	2023	2024	2025	2030
Dec20 FSR <i>FSR model as at 31 December 2020</i>	537,900	596,647	643,229	682,760	870,761
a) Dec20 FSR, with 6 months of experience <i>Dec20 FSR model with 1 Jan 2021 to 30 June 2021 experience</i>	-1,402	-687	-3	+555	+1,484
b) Population growth and life table <i>Impact of updated population growth assumptions and life table assumptions</i>	+73	+127	+155	+226	+366
c) Participant projection <i>Impact of new population assumptions</i>	-6,182	-9,694	-12,921	-12,691	-11,407
d) Lower New Incidence assumptions <i>Impact of updated new incidence assumptions for over 65</i>	-51	-101	-147	-191	-375
e) Change in exits assumptions <i>Impact of lower non-mortality experience and higher mortality assumptions</i>	+120	+141	+15	-258	-1,501
2020-21 FSR model <i>Projections based on assumptions in this report</i>	530,457	586,433	630,327	670,400	859,328
Total movement from Dec20 FSR to 2020-21 FSR model	-7,443 (-1.4%)	-10,214 (-1.7%)	-12,902 (-2.0%)	-12,360 (-1.8%)	-11,433 (-1.3%)

The projected number of participants at 30 June 2022 has reduced by about 7,400 compared to the Dec20 FSR, mainly driven by a downward adjustment of the population assumptions reflecting lower than expected active participants as at 30 June 2021.

While there are less active participants in the Scheme, there are more young participants in the Scheme, in particular age 7 to 14, increasing the number of active participants projected.

Table 65 shows the main drivers of movements in participant costs as well as the total movement from the previous review.

Table 65 Change in projected participant costs (cash basis) from previous review (31 December 2020)

Change in projected participant costs (cash basis)	2021-22	2022-23	2023-24	2024-25	2029-30
Dec20 FSR <i>FSR model as at 31 December 2021</i>	\$27.7b	\$32.4b	\$36.6b	\$40.4b	\$59.9b
a) Dec20 FSR, with 6 months of experience <i>Dec20 FSR model with 1 January 2021 to 30 June 2021 experience</i>	-\$0.1b	+\$0.2b	+\$0.2b	+\$0.1b	+\$0.2b
b) Population growth and life table <i>Impact of updated population growth assumptions and life table assumptions</i>	+\$0.0b	+\$0.0b	+\$0.0b	+\$0.0b	+\$0.1b
c) Participant projection <i>Impact of new population assumptions</i>	-\$0.1b	-\$0.3b	-\$0.5b	-\$0.6b	-\$0.6b
d) Lower New Incidence assumptions <i>Impact of updated new incidence assumptions for over 65</i>	-\$0.0b	-\$0.0b	-\$0.0b	-\$0.0b	-\$0.0b
e) Change in exits assumptions <i>Impact of lower non-mortality experience and higher mortality assumptions</i>	-\$0.0b	-\$0.0b	-\$0.0b	-\$0.0b	-\$0.1b
f) Change in SIL Assumptions <i>Impact of updated SIL propensity assumptions</i>	-\$0.3b	-\$1.0b	-\$1.5b	-\$1.7b	-\$3.0b
g) SIL base payments assumptions <i>Impact of updated payment assumptions for SIL only</i>	+\$0.5b	+\$0.6b	+\$0.6b	+\$0.7b	+\$1.0b
h) Non-SIL base payments assumptions <i>Impact of updated payment assumptions for all participants</i>	+\$0.3b	+\$0.3b	+\$0.3b	+\$0.3b	+\$0.4b
i) Normal inflation <i>Impact of higher normal inflation assumptions</i>	+\$0.1b	+\$0.3b	+\$0.5b	+\$0.7b	+\$1.3b
j) Payment adjustment - RAC <i>Impact of allowing for Residential Aged Care supports</i>	+\$0.5b	+\$0.5b	+\$0.5b	+\$0.5b	+\$0.5b
k) Superimposed inflation <i>Impact of updated superimposed inflation assumptions</i>	+\$0.2b	+\$0.8b	+\$1.2b	+\$1.2b	+\$0.8b
l) Lower average costs of New Entrants <i>Impact of allowing for lower average costs of New Entrants</i>	-\$0.1b	-\$0.3b	-\$0.6b	-\$0.8b	-\$1.9b
2020-21 FSR model <i>Projections based on assumptions in this report</i>	\$28.8b	\$33.4b	\$37.5b	\$40.8b	\$58.5b
Total movement from Dec20 FSR to 2020-21 FSR model	+\$1.1b (+4.1%)	+\$1.0b (+3.1%)	+\$0.8b (+2.3%)	+\$0.4b (+1.1%)	-\$1.4b (-2.4%)

In 2021-22, the projected participant cost is about \$1.1 billion higher than the previous review, mainly attributable to increases in base payment and inflation assumptions by support category, which reflect the higher than expected average payments experience over the past 12 months.

While participant cost is projected to continue to be higher than previous review, the difference is projected to be smaller over time and, in 2029-30, the projected cost is lower than previous review by 2.4% (\$1.4 billion). The reduction is mainly driven by the lower SIL assumptions as well as the lower average costs for new entrants.

Appendix D: State and Territory Breakdown

The projection model adopts a national view on its assumptions, and therefore its projected participant numbers and costs. A separate model has been developed to allocate projected national participant numbers and costs by State and Territory. The resulting participant numbers and costs by jurisdiction can be seen below in Table 66 and Table 67.

Table 66 Projected participant numbers by jurisdiction

Participant numbers	2021-22	2022-23	2023-24	2024-25	2029-30
NSW	165,955	183,194	193,967	206,298	264,436
VIC	141,074	155,937	168,487	179,199	229,700
QLD	108,648	123,084	135,275	143,875	184,421
SA	43,226	46,083	48,659	51,753	66,337
WA	45,707	50,453	54,727	58,207	74,610
TAS	12,245	13,509	14,500	15,422	19,768
ACT	8,985	9,090	9,212	9,797	12,559
NT	4,616	5,085	5,499	5,849	7,497
Total	530,457	586,433	630,327	670,400	859,328

Table 67 Projected participant costs by jurisdiction

Participant costs (\$m)	2021-22	2022-23	2023-24	2024-25	2029-30
NSW	9,270	10,724	12,005	13,079	18,742
VIC	6,808	7,855	8,720	9,501	13,614
QLD	6,502	7,695	8,780	9,566	13,708
SA	2,380	2,725	3,044	3,316	4,752
WA	2,543	2,934	3,284	3,578	5,127
TAS	765	896	1,016	1,107	1,586
ACT	463	498	524	570	817
NT	492	559	601	654	938
Total	29,223	33,886	37,973	41,373	59,284

Appendix E: Historic average participant payments by SIL type

Table 68 Previous AFSR projections – average participant payments (non-SIL)

Average participant payments (non-SIL)	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
PBS								
Portfolio Budget Statements 2021-22					37,500	37,600	39,500	42,200
AFSR								
30 June 2021 AFSR projection					42,800	45,500	47,500	48,600
31 December 2020 AFSR projection					41,900	43,200	44,200	45,400
30 June 2020 AFSR projection				35,200	36,700	37,500	38,500	40,000
31 December 2019 AFSR projection				35,900	36,800	37,500	38,400	39,500
30 June 2019 AFSR projection			34,300	35,800	36,600	37,300	37,700	38,200
30 June 2018 AFSR projection		23,900	30,000	32,700	34,400	35,700	37,500	38,700
Comparison with actuals								
Actual average participant payments (accrual)	24,300	27,100	34,100	38,600				
Actual average participant payments compared with AFSR		3,200	-200	3,400				

Table 69 Previous AFSR projections – average participant payments (SIL)

Average participant payments (SIL)	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
PBS								
Portfolio Budget Statements 2021-22					292,700	282,000	290,000	307,600
AFSR								
30 June 2021 AFSR projection					347,700	360,800	373,800	386,700
31 December 2020 AFSR projection					345,400	359,400	372,600	382,500
30 June 2020 AFSR projection				321,000	343,900	359,300	373,400	391,700
31 December 2019 AFSR projection				320,300	341,400	361,300	382,100	403,600
30 June 2019 AFSR projection			269,400	286,200	298,700	312,600	326,100	340,500
30 June 2018 AFSR projection		261,600	279,400	292,900	304,600	314,600	326,800	340,100
Comparison with actuals								
Actual average participant payments (accrual)	234,000	249,600	304,400	325,500				
Actual average participant payments compared with AFSR		-12,000	35,000	4,500				

Appendix F: Scenario analysis from previous AFSRs

This section summarises the cost projection scenarios considered in historic Annual Financial Sustainability Report projections since 2016-17. These scenarios assist in understanding the range of plausible projections based on reasonable alternative assumptions.

2016-17 Scenarios

Total participant costs (\$m)	2020	2025	2030
2016-17 Baseline	21,240	30,492	41,783
Scenario 1a. Committed supports + utilisation of 85%	20,436	28,943	38,863
Scenario 1b. Committed supports + utilisation of 90%	21,638	30,645	41,149
Scenario 1c. Committed supports + utilisation of 100%	24,042	34,050	45,721
Scenario 2a. 1% p.a. superimposed inflation	21,756	32,762	47,095
Scenario 2b. 2% p.a. superimposed inflation	22,279	35,179	53,022
Scenario 2c. 10% p.a. superimposed inflation for 2 years	25,509	36,619	50,179
Scenario 2d. 5% p.a. superimposed inflation for 5 years	23,897	38,551	52,826
Scenario 3a. Increase incidence 0 to 18 by 15%	22,345	32,201	44,258
Scenario 3b. Reduce incidence 25+ by 5%	20,662	29,676	40,695
Scenario 3c. Combination of 3a. and 3b.	21,766	31,385	43,171
Scenario 4a. Halve non-mortality exits ages 0 to 64	21,240	31,315	44,041
Scenario 4b. Double non-mortality exits for ages 65+	21,237	30,434	41,532
Scenario 4c. Increase excess mortality by 50%	21,168	30,017	40,583
Scenario 4d. Reduce excess mortality by 50%	21,252	30,899	42,984
Scenario 5a. 5% of new incidence to highest LoF	21,240	31,154	43,486
Scenario 5b. 5% of starting population to highest LoF	25,216	35,449	47,576
Scenario 5c. Combination of 5a. and 5b.	25,216	36,112	49,279
Scenario 6a. Increase SSA Numbers by 10%	20,970	29,684	39,818
Scenario 6b. Increase SSA average cost by 25%	21,822	30,939	41,570
Scenario 6c. Combination of 6a. and 6b.	22,495	31,880	42,796
Scenario 7a. Remove age based loadings for 65+	21,176	30,068	40,729
Scenario 10a. Exclude GI/MM from NIIS	21,240	30,492	41,783

2017-18 Scenarios

Total participant costs (\$m)

Total participant costs (\$m)	2020	2025	2030
2017-18 Baseline	15,638	31,715	44,395
1a Higher Autism exits	15,453	30,171	40,485
1b Lower Autism exits	15,676	32,099	45,579
2 Intellectual disability new incidence hump 17-22 yrs	15,638	32,008	46,518
3a Higher Proportion of participants in SSA (SIL)	17,636	35,769	50,034
3b Lower Proportion of participants in SSA (SIL)	15,405	31,197	43,556
3c SSA cost innovation	12,489	29,261	41,178
4a Increased Number of adults	16,276	38,193	53,883
4b Decreased number of children	14,213	30,962	43,463
4c Increased new entrants	15,887	36,377	50,143
5a Committed supports and 100% utilisation	18,957	38,064	53,473
5b Committed supports and 75% utilisation	13,839	28,548	40,105
7a AAT and mainstream	18,123	37,118	51,450
7b AAT, mainstream and level of function movement	18,400	37,686	52,236
7c AAT access decisions	16,670	34,352	47,592
8a 3% pa superimposed inflation for 10 years	15,676	35,882	55,465
8b 0% superimposed inflation	14,810	29,407	41,164

2018-19 Scenarios

Total participant costs (\$m)	2020	2025	2030
2018-19 Baseline	16,327	30,820	43,723
1a Additional Cost of chronic health (low range)	19,333	34,760	48,886
1b Additional Cost of chronic health (mid range)	20,770	36,644	51,356
1c Additional Cost of chronic health (high range)	22,404	38,785	54,162
2 Lower autism and higher psychosocial disability numbers	16,347	31,077	43,893
3 Intellectual disability new entrants hump for 17-22yrs	16,327	31,209	46,322
4a Higher proportion of participants in SIL over long term	16,434	32,930	48,951
4b Long term SIL reached over 20 years	16,302	30,331	42,573
4c SIL cost innovation	14,874	27,978	39,510
5 85%/100% utilisation rate for non-SIL/SIL respectively	19,380	34,844	49,343
6a Transport policy: Strict tightened eligibility	16,125	30,469	43,215
6b Transport policy: tightened eligibility & increased budget	16,454	31,041	44,043
6c Transport policy: tightened eligibility & bottom up approach	18,800	35,115	49,941
7 Steady intake date at 30 June 2020	16,425	28,286	41,344
8a Additional 3% pa superimposed inflation from 2021	16,327	35,152	56,030
8b Additional 1% pa superimposed inflation from 2021	16,327	32,264	47,825

2019-20 Scenarios

Total participant costs (\$m)

Total participant costs	2020	2025	2030
2019-20 Baseline		34,109	51,304
Scenario 1a. => Continuation of historical superimposed inflation		45,399	68,282
Scenario 1b. => Removal of 1% p.a. additional superimposed inflation		32,364	48,447
Scenario 1c. => Alternative normal inflation		33,332	46,735
Scenario 2a. => Higher proportion of participants in SIL over long term		37,230	60,805
Scenario 2b. => Continuation of increasing SIL cost for 2 years		37,909	57,276
Scenario 2c. => SIL cost innovation		31,119	46,600
Scenario 3a. => 44,000 additional participants		37,955	56,268
Scenario 3b. => 60,000 additional participants		38,430	56,879
Scenario 3c. => 99,000 additional participants		39,287	57,982
Scenario 5a. => Steady Intake Date at 30 June 2021		33,207	50,180
Scenario 5b. => Higher intake levels sustained for 3 years		36,821	54,774