National Disability Insurance Scheme

Annual Financial Sustainability Report

2019-20

Version 4.0

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Board deliberations relating to its statutory functions are confidential
(see Board Resolution of 4 September 2017)

Table of Contents

Overview

This annual financial sustainability report (AFSR) for 2019-20 has been prepared as required under section 180B of the National Disability Insurance Scheme Act 2013 ("the NDIS Act"), providing an overall assessment of the Scheme's financial sustainability as at 30 June 2020.

The National Disability Insurance Scheme (NDIS, or "the Scheme") incepted on 1 July 2013 and was in a trial period for three years. The transition period began from 1 July 2016, with the Scheme progressively rolled out across the country within four years. Since inception, the National Disability Insurance Agency (NDIA, or "the Agency") has rightly had an increasing focus on improving the participant experience. For example, there has been a need to improve the speed of internal decision-making[1] and improve access to reasonable and necessary disability supports by growing provider markets to meet the increased demand.

This focus on improving participant experience and the speed in which it has been undertaken inevitably comes with a cost. Several financial sustainability issues have therefore been building over recent years, the impacts of which are becoming increasingly significant. There is an immediate need to contain double-digit average cost escalation, better manage the initial and continuing eligibility of children in the Scheme, resolve remaining mainstream interface issues, improve the consistency in decision making, and strengthen pricing governance.

Cost projections have increased significantly since the 2018-19 AFSR[2] and projections are above Portfolio Budget Statement (PBS) estimates which will lead to some debate around the Scheme's "value for money". Going forward, there will be a higher level of scrutiny placed on the cost management of disability supports from the general public and all levels of government. It is important for these stakeholders and funders of the Scheme to have trust in its ability to achieve beneficial participant outcomes in a cost-effective manner. While improved participant experience should continue to be a high priority, there will be a more urgent need for this to be balanced with linking outcomes to the spending in the Scheme.

The Scheme's rapid growth has not tapered after seven years of operation

There were 391,999 active participants in the Scheme as at 30 June 2020. This is an increase of 37% in the Scheme population since 30 June 2019 (from 286,015 active participants) and reflects the net effect of intake and exit of participants from the Scheme over the past 12 months. This is also 6% higher than expected from the 2018-19 AFSR (i.e. 369,118 active participants were projected as at 30 June 2020).

[1] 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.
[2] *National Disability Insurance Scheme: Annual Financial Sustainability Report 2018-19*

A reduction in participant intake was anticipated over the 2019-20 financial year as transition-in arrangements were expected to significantly slow down future intake levels. However, there has been no noticeable slow-down in participant intake, largely driven by more children aged 0 to 14 (new to disability supports) accessing the Scheme over the past 12 months than expected. Furthermore, despite the COVID-19 pandemic, working from home has not affected the ability of Agency staff to process access requests and first plans.

Exits from the Scheme have been lower than anticipated, primarily due to the cessation of participant eligibility reassessments during 2019 while the eligibility reassessment[3] strategy was under review and redeveloped. Although eligibility reassessments formally recommenced in March 2020, there have been operational issues impeding progress, much of which is a flow-on from the COVID-19 pandemic. The processing of access requests has also continued to be prioritised ahead of eligibility reassessments.

The 2018-19 AFSR indicated that there was not enough evidence to suggest that the emerging Scheme participant experience was significantly different to the 2011 Productivity Commission benchmark ("PC benchmark").[4] However, the recent material increases in the prevalence rate in the more mature regions[5] has led to the view that ultimate prevalence rates are likely to be higher than the PC benchmark.[6] The experience to 30 June 2020 has been reflected in revised assumptions, resulting in an increase in projected participant numbers relative to the 2018-19 AFSR.[7]

Payments have been consistently tracking above expectations

A total of $24.2 billion of support was allowed for in participant plans for the support year of 2019-20, compared to $14.6 billion in the 2018-19 support year (i.e. around 66% higher). The Scheme made $17.2 billion in payments[8] to meet participant support needs in 2019-20, which is 77% higher than the $9.7 billion in payments[9] made in 2018-19.

Payments for participant disability support needs were 6% higher than expected over the 12 months to June 2020. In particular, payments were 9% higher than expected for

[3] The Scheme is required to assess ongoing eligibility, with this reassessment being especially important for participants who enter the Scheme through the early intervention requirement (Section 25 of the NDIS Act).
[4] Productivity Commission Inquiry Report. 2011. *Disability Care and Support*
[5] Those regions that commenced phasing during the Scheme's trial and early transition period.
[6] This is the case even though it is acknowledged that some of the recent experience likely represents a bringing forward of participant intake as backlogs in access, eligibility and initial plan development are prioritised by the Agency.
[7] Note it is difficult to opine on longer term prevalence given the prevalence is continuing to increase with little sign of flattening. There is considerable subjectivity in the selection of assumptions within the population projection model.
[8] Note these relate to when the payment was made, rather than when the support was provided. This also includes supports provided on an in-kind basis by the State/Territory and Commonwealth governments.
[9] Note this includes all on and off system payments (i.e. in-kind and Residential Aged Care (RAC)), with the exception of $31.2 million of off-system in-kind and Finance payments for supports provided in 2018-19 which cannot be allocated at a participant level.

participants in Supported Independent Living (SIL) and 4% higher than expected for participants not in SIL, for the same period. The higher than expected increase in SIL payments was largely driven by the significant increase in attendant care prices in the 2019-20 SIL quoting tool. This was not allowed for in the 2018-19 AFSR, and it has been a major contributor to payment experience being above expectations. Note that the COVID-19 pandemic impacted the level and type of supports provided during April to June 2020.

Average participant costs have been increasing faster than normal inflation

Since the first quarter of 2018-19, average annualised payments for both SIL and non-SIL participants have increased by almost 40% in total, or nearly 5% per quarter on average. This is significantly higher than normal inflation, which was assumed to be around 1.0% per quarter for the 2018-19 and 2019-20 financial years in previous AFSR projections.

Recent payment experience indicates that SIL costs are continuing to escalate. This is a key sustainability issue for the Scheme, given SIL costs are projected to be a material component of total future participant expenditure.[10]

This review has identified a number of sources of future cost pressures which are likely to emerge over the short to medium term. The allowance for superimposed inflation has therefore been increased at this review, to be an 11.3% increase in costs spread over the next ten years.[11] This is a significant increase from the -1.5% in the 2018-19 AFSR for the 2020-21 year onwards. The assumed superimposed inflation at this review is mainly comprised of the expected resolution of mainstream interface issues, the expected impact of the Agency's new employment strategy, expectations of increased ultimate utilisation as the Scheme matures and additional inflationary pressures from unanticipated sources.[12]

The impact of the COVID-19 pandemic remains uncertain

In March 2020, a pandemic was declared by the World Health Organization (WHO) due to the international spread of the COVID-19 virus. During the 'first wave' of infections, the government imposed lockdowns in Australia in late March 2020, and implemented social distancing and other measures to restrict gatherings, aimed at containing the spread of the

[10] Participants with SIL arrangements are expected to account for about 40% of the total expected participant support costs in the Scheme but only about 6% of the participant population.
[11] The impact of superimposed inflation in the current review includes a modelling allowance for Residential Aged Care participants (2.2% in 2020-21). The overall impact without this allowance is 9.1%, which is more comparable to the previous year's figure from 2020-21 onwards (-1.5%).
[12] An allowance for additional inflation is designed to cover potential changes where the impact of mainstream interfaces are not yet confirmed but reflect likely cost deterioration over time. For example, erosion of access criteria for people with chronic health conditions, expansion of personal care in schools and school transport, planned introduction of a new transport policy (including removal of taxi subsidies), and clarification of funding for children in out-of-home care. Some examples of historical cost deterioration from unanticipated sources include the incomplete rollout of the National Injury Insurance Scheme (NIIS), the inclusion of children with developmental delay in the Scheme, and coverage of student transport and personal care in schools in the Scheme.

virus. The measures had become progressively more restrictive before loosening in June 2020[13] due to a fall in infections.

For the Agency, the identification and prioritisation of critical supports was key in the continued delivery of services to participants. A temporary 10% COVID loading was applied to certain critical core and capacity building supports until 30 June 2020, changes were made to cancellation policies, and advance payments of circa $650 million were made to providers. These measures were implemented to boost providers' short term cash flows, thereby helping providers retain their staff, continue their operations and maintain continuity of supports to participants.

The 'first wave' of the pandemic saw considerable cost shifting between support types within the Scheme, although it did not result in significant changes in the quantum of overall Scheme costs. For example, there were increases in levels of core daily living supports and consumables, which were offset by decreases in social, community and civic supports and employment supports.

There is a large degree of uncertainty surrounding both the future trajectory and impact of the pandemic. A 'second wave' of infections has already occurred in Melbourne and other parts of Victoria as of late July 2020, with a second lockdown imposed in those areas. The eventual implications of the 'second wave' and any later waves will be dependent on similar factors influencing the 'first wave', i.e. the Federal and State/Territory governments' responses, the Agency's response and the community response (particularly the behaviours of the general population).

The modelling in this report has allowed for the future pandemic impact, with payment experience in the three months to 30 June 2020 used to estimate the shorter term pandemic impact. [14] The modelling in this report has also allowed for potential impacts on the economy. The nominal Gross Domestic Product (GDP) projections have decreased, population projections are lower[15], and there has been a reduction in normal inflation assumptions.

Scheme baseline projections indicate continued rapid growth

Table 1 provides a high-level summary of the key participant projection results and comparisons to the 2018-19 AFSR.

The Scheme is projected to have a Steady Intake Date[16] population at 30 June 2023 of about 532,000 participants, of whom almost 508,000 are expected to be aged 0 to 64. This

[13] Note that some restrictions have been re-imposed, particularly in Victoria in July 2020.
[14] The three months to 30 June 2020 saw a largely neutral impact but resulted in some cost shifting between the types of disability supports provided. The modelling is based on no significant 'second wave' occurring and payments gradually returning to pre-pandemic levels over three months. With the resurgence of cases in Victoria, this remains highly uncertain.
[15] The closing of Australian borders has limited net migration population increases.
[16] The point in time when participant intake primarily represents participants with new incidence of disability, as opposed to participants transferring into the Scheme with existing disabilities.

is equivalent to a prevalence rate of 2.27% of the Australian general population aged 0 to 64.

More participants are being projected compared to the 2018-19 AFSR, particularly children with autism and developmental delay. By 30 June 2030, if current Scheme trends continue, then almost 300,000 participants with autism are expected to be in the Scheme, accounting for over 40% of Scheme participants. For comparison, there are currently 122,830 participants with autism, representing about 31% of the Scheme population as at 30 June 2020.

Table 1 Key participant results from the 2019-20 AFSR compared to the 2018-19 AFSR

Number of participants	As at 30 June							
	2020	2021	2022	2023	2024	2025	2030	2035
2019-20 AFSR								
0-64 years	380,523	440,560	479,970	507,668	529,174	550,419	654,561	759,249
65+ years	11,476	15,783	20,209	24,604	28,940	33,080	50,977	63,437
Total	**391,999**	**456,343**	**500,179**	**532,271**	**558,114**	**583,500**	**705,538**	**822,686**
Prevalence (0-64)	1.76%	2.02%	2.18%	2.27%	2.34%	2.41%	2.71%	2.97%
2018-19 AFSR								
0-64 years	359,211	409,818	451,891	477,937	495,781	512,345	585,637	654,631
65+ years	9,907	14,071	18,724	23,554	27,943	32,272	51,008	64,457
Total	**369,118**	**423,889**	**470,615**	**501,491**	**523,723**	**544,617**	**636,645**	**719,088**
Prevalence (0-64)	1.64%	1.85%	2.02%	2.11%	2.16%	2.21%	2.39%	2.53%
Difference								
0-64 years	21,312	30,742	28,080	29,731	33,393	38,075	68,924	104,618
65+ years	1,569	1,713	1,484	1,050	997	808	-30	-1,020
Total	**22,881**	**32,454**	**29,564**	**30,780**	**34,391**	**38,883**	**68,894**	**103,598**
Prevalence (0-64)	0.12%	0.17%	0.16%	0.17%	0.18%	0.20%	0.32%	0.44%

Table 2 provides a high-level summary of the key cost projections and comparisons to the 2018-19 AFSR. The projected Scheme cost for 2022-23 is $30.5 billion on an accrual basis, including $2.2 billion in participant costs for participants aged over 65 years and $1.6 billion in total operating costs. This is an increase of $1.9 billion (or 6.5%) since the 2018-19 AFSR and represents 1.42% of projected GDP. Note that the increase in Scheme cost as a proportion of GDP is material and has also been affected by the expected impact of the COVID-19 pandemic on the economy.

The increases in cost projections have been driven by both upward revisions in participant numbers and average payment assumptions, the latter reflecting the higher than expected payments experience over the past 12 months. Higher superimposed inflation is also a key driver in the projected sustained growth of participant costs over the next 10 years.

Table 2 Key cost results from the 2019-20 AFSR compared to the 2018-19 AFSR

Participant and Scheme costs ($m)	Projection Year 2020-21	2021-22	2022-23	2023-24	2024-25	2029-30	2034-35
2019-20 AFSR							
Participant Costs (cash basis)							
0-64 years	20,815	24,087	26,411	28,550	30,888	45,034	64,267
65+ years	1,141	1,620	2,128	2,661	3,221	6,270	9,246
Total Participant Costs (cash basis)	**21,956**	**25,707**	**28,539**	**31,211**	**34,109**	**51,304**	**73,513**
Participant Costs (accrual basis)							
0-64 years	21,122	24,429	26,722	28,753	31,058	45,343	64,708
65+ years	1,158	1,643	2,153	2,680	3,239	6,313	9,310
Total Participant Costs (accrual basis)	**22,280**	**26,072**	**28,875**	**31,432**	**34,297**	**51,656**	**74,018**
Operating Costs							
0-64 years	1,559	1,520	1,515	1,427	1,544	2,252	3,213
65+ years	85	102	122	133	161	313	462
Operating Costs	**1,645**	**1,623**	**1,637**	**1,561**	**1,705**	**2,565**	**3,676**
Total Scheme Costs (accrual basis)	**23,925**	**27,695**	**30,512**	**32,993**	**36,002**	**54,221**	**77,694**
Projected GDP	1,891,847	2,038,465	2,152,109	2,272,090	2,398,758	3,137,439	4,084,461
As % of GDP:							
Total Scheme Costs (accrual basis)	1.26%	1.36%	1.42%	1.45%	1.50%	1.73%	1.90%
Total Scheme Costs for 0-64 (accrual basis)	1.20%	1.27%	1.31%	1.33%	1.36%	1.52%	1.66%
2018-19 AFSR							
Participant Costs (cash basis)							
0-64 years	19,707	22,619	24,912	26,670	28,222	38,575	52,223
65+ years	896	1,272	1,701	2,147	2,598	5,148	7,756
Total Participant Costs (cash basis)	**20,603**	**23,891**	**26,613**	**28,817**	**30,820**	**43,723**	**59,978**
Participant Costs (accrual basis)							
0-64 years	20,138	22,939	25,146	26,722	28,219	38,806	52,536
65+ years	916	1,290	1,717	2,152	2,598	5,179	7,802
Total Participant Costs (accrual basis)	**21,054**	**24,229**	**26,863**	**28,873**	**30,817**	**43,985**	**60,339**
Operating Costs							
0-64 years	1,391	1,559	1,666	1,680	1,778	2,430	3,290
65+ years	63	88	114	135	164	324	489
Operating Costs	**1,454**	**1,647**	**1,780**	**1,815**	**1,942**	**2,755**	**3,779**
Total Scheme Costs (accrual basis)	**22,508**	**25,875**	**28,643**	**30,689**	**32,759**	**46,740**	**64,118**
Projected GDP	2,078,227	2,194,088	2,316,409	2,445,549	2,581,888	3,376,962	4,396,283
As % of GDP:							
Total Scheme Costs (accrual basis)	1.08%	1.18%	1.24%	1.25%	1.27%	1.38%	1.46%
Total Scheme Costs for 0-64 (accrual basis)	1.04%	1.12%	1.16%	1.16%	1.16%	1.22%	1.27%
Difference							
Participant Costs (cash basis)							
0-64 years	1,108	1,468	1,499	1,880	2,666	6,459	12,044
65+ years	245	348	427	514	623	1,122	1,490
Total Participant Costs (cash basis)	**1,353**	**1,816**	**1,926**	**2,394**	**3,289**	**7,581**	**13,535**
Participant Costs (accrual basis)							
0-64 years	984	1,490	1,576	2,031	2,839	6,537	12,172
65+ years	242	353	436	528	641	1,134	1,507
Total Participant Costs (accrual basis)	**1,226**	**1,843**	**2,011**	**2,559**	**3,480**	**7,671**	**13,679**
Operating Costs							
0-64 years	168	-39	-151	-253	-234	-179	-77
65+ years	22	15	8	-2	-3	-11	-26
Operating Costs	**190**	**-24**	**-143**	**-255**	**-236**	**-189**	**-103**
Total Scheme Costs (accrual basis)	**1,416**	**1,819**	**1,869**	**2,304**	**3,244**	**7,481**	**13,576**
Projected GDP	-186,380	-155,623	-164,300	-173,459	-183,130	-239,523	-311,822
As % of GDP:							
Total Scheme Costs (accrual basis)	0.18%	0.18%	0.18%	0.20%	0.23%	0.34%	0.44%
Total Scheme Costs for 0-64 (accrual basis)	0.16%	0.16%	0.15%	0.17%	0.20%	0.30%	0.39%

Scheme projections are above Portfolio Budget Statement estimates

Table 3 shows that the baseline projection of participant costs is higher than the estimate of reasonable and necessary supports in the PBS. Over the next four years, total participant costs on an accrual basis are projected to be $5.6 billion higher than the latest PBS figures.

Table 3 Comparison against Portfolio Budget Statement estimates[17]

Comparison to Portfolio Budget Statements (PBS) ($m)	Projection Year				
	2020-21	2021-22	2022-23	2023-24	Total
Portfolio Budget Statements (PBS) - draft at 17 August 2020	**21,720**	**24,677**	**27,217**	**29,425**	**103,039**
Participant costs from 2019-20 AFSR (cash basis)	21,956	25,707	28,539	31,211	107,412
Expected changes in participant plan provision	324	365	336	222	1,247
Participant costs from 2019-20 AFSR (accrual basis)	**22,280**	**26,072**	**28,875**	**31,432**	**108,659**
Participant costs, compared to Portfolio Budget Statements	**560**	**1,395**	**1,658**	**2,007**	**5,620**

The baseline projection can also be compared against the projections outlined in the Productivity Commission's 2017 study report on National Disability Insurance Scheme Costs[18] ("2017 PC study report"), updated for unanticipated costs.

Table 4 Estimates of Scheme costs in the 2017 Productivity Commission report

	2020-21	2022-23	2029-30	2034-35
2017 Productivity Commission report	$23.7b	$26.7b	$40.9b	$53.9b
less operating costs	-$1.4b	-$1.5b	-$2.8b	-$3.7b
2017 Productivity Commission participant costs	$22.2b	$25.2b	$38.1b	$50.2b
add unanticipated costs:				
Decrease in NIIS offset as not fully operational	$0.4b	$0.5b	$0.9b	$1.2b
Children with developmental delay	$0.4b	$0.5b	$0.8b	$1.1b
School transport	$0.4b	$0.4b	$0.5b	$0.7b
Personal care in schools	$0.2b	$0.3b	$0.4b	$0.5b
Disability related healh supports	$0.1b	$0.3b	$0.4b	$0.5b
Participant cost allowing for unanticipated costs	**$23.7b**	**$27.2b**	**$41.2b**	**$54.1b**
Baseline projected participant costs (accrual basis)	**$22.3b**	**$28.9b**	**$51.7b**	**$74.0b**

Based on the 2017 PC study report, the expected annual cost of the Scheme in 2020-21 was $23.7 billion, or $22.2 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 a NIIS offset for motor/workplace injuries only, the expected annual participant cost of the Scheme is about $23.7 billion. The baseline projected participant costs in 2020-21 are about $22.3 billion, or about 6% below the 2017 PC estimate, allowing for unanticipated costs. The difference is primarily related to

[17] The PBS figures shown have been agreed upon with the Department of Finance at the time of writing. These figures should be considered draft as at 17 August 2020, subject to any further work that may be done to determine the most appropriate basis for these estimates, which are due to be finalised on 06 October 2020. It is likely that $11.4 billion of these PBS forward estimates will be placed into a contingency reserve which will not be directly allocated to Program 1.1 of the NDIS budget.

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

a slower assumed phase-in of people into the Scheme with existing disabilities (who did not previously receive services), with additional unmet demand still expected over the three years to 2022-23.

By 2022-23, the baseline projected participant cost is about $28.9 billion, i.e. around 6% higher than the 2017 PC estimate after allowing for unanticipated costs ($27.2 billion). The difference is expected to continue to grow, such that by 2034-35, the baseline projected participant costs ($74.0 billion) are 37% above the 2017 PC estimate of $54.1 billion, after allowing for unanticipated costs. This difference is mainly driven by more than expected participants with autism and high levels of superimposed inflation.

Managing cost escalation is crucial to financial sustainability

A range of cost pressures are emerging from a number of sources. There are operational issues with the ability of the Scheme to interact effectively with existing supports across all of the mainstream interfaces – health, education, transport, mental health, and justice. For example, the inclusion of disability-related health supports from 1 October 2019 placed additional future cost pressures on supports provided in the Scheme.

There should be an urgent and critical focus on cost pressures impacting SIL participants. Efforts should focus on reasonable and necessary decision-making that is consistent and fair, implementation of better SIL price controls, and the assessment of more innovative and cost effective housing alternatives where appropriate, for example lower cost Independent Living Options (ILOs), for both new and continuing participants in SIL.

Governance in pricing could be improved

The increase in non-SIL attendant care prices at 1 July 2019 as part of the Annual Price Review for 2019-20 was not intended to apply to SIL supports. However, it was subsequently flowed through to the Agency's internal 2019-20 SIL quoting tool, resulting in increases of 10%-15% for SIL participants. It is recommended that the Agency consider the effectiveness of the existing governance framework for pricing decisions, with changes to the pricing framework supported by improved system controls, including a comprehensive assessment of the likely impact. This will help to reduce unintended consequences of price changes.

The Agency should also consider the alignment of the current pricing model, which has a focus on ground-up costs and individual line items, compared with the goal of "top-down" planning approach, where the participant is able to use their plan budget flexibly to achieve their goals. The "cost plus" approach used currently sees additional line items being added to the price guide each year (for example, for provider transport), which can stifle innovation and provide little incentive for providers to examine the most effective methods for delivery of supports.

It would also be beneficial for extensive, independent benchmarking exercises with other injury support schemes and relevant industries to continue to be undertaken as a direct input into the pricing decision process; this would assist in ensuring that the Agency's model is in line with comparable schemes.

The Agency's decision-making processes need more consistency

The Agency would gain immediate benefit from better embedding insurance principles within the culture of the Agency across all of its functions. As the Scheme matures, issues with existing processes (that were adopted during the trial and transition phases) need to be addressed. Changes should be implemented to enable a more robust and equitable approach to determining eligibility and plan budgets, and monitoring plan implementation. For example, given participant intake levels have been above expectations, there should be an increased focus on ensuring that the decision-making process for access and eligibility is clear and consistent, especially for children.

Eligibility reassessments are a key outcome requirement of the Scheme, especially for those entering through the early intervention requirement, and need to be a continued priority for the Agency. The revised eligibility reassessment strategy reflects the Agency's focus to delivering a centralised approach of assessing continued eligibility of participants. The emphasis of the revised strategy is on procedural fairness and consistency across all jurisdictions. There is a material level of uncertainty around the likely levels of Agency-initiated exits going forward, including the unknown impact of the changes in process and strategy.[19]

The current lack of credible functional assessment information continues to impact the Agency's ability to make consistent access, eligibility and funding decisions across the Scheme. The introduction of Independent Assessments (IAs), which are expected to commence roll-out in 2021, would enable robust eligibility decisions and support an equitable allocation of plan budgets. The IAs will thus be a central component in building a robust and equitable approach to decision-making within the Agency.

Participant outcomes should be an increased focus of the Agency going forward

Participant reported outcomes continue to improve, particularly the longer a participant is in the Scheme. Community and social participation rates have increased, as well as employment rates for younger participants and for families/carers.

The continued achievement of improved participant outcomes is vital to the financial sustainability of the Scheme. The Scheme takes a lifetime approach to supporting people with disability. This means investing in participants in the short-term to provide better

[19] This new process has been rolled out progressively, first as a pilot in Tasmania and then nationally in March 2020. Since the implementation, less than 1,000 participants have been exited through this strategy.

outcomes over their lifetime, as well as to reduce the long term costs of disability support. Strengthening informal and community supports will also be key to achieve this.

The Agency has, rightly so, maintained a participant-centred approach to support provision since Scheme inception. While this participant-centred approach needs to continue, there should be a shift in focus from increasing supports in plans to finding and encouraging better and more innovative ways for participants to utilise their supports which deliver real outcomes. Recent Agency initiatives have been mostly based on broadening the scope of supports, leading to a number of proposals which increase costs but are not balanced with a commensurate cost saving.[20] Now that the Scheme is expected to operate above budgeted PBS levels, there needs to be more accountability around the cost and benefit of proposed initiatives to maintain financial sustainability. While it is important to maintain the focus on participant experience, the Agency needs to establish a better link between costs and outcomes, and apply a financial sustainability lens to all decisions.

Additionally, there is a risk that a culture of dependence on funded supports may be inadvertently created. This would be contra to Scheme philosophy of providing supports to enable participants to build capacity and increase independence, leading to positive outcomes with participants then requiring lower levels of supports (or no longer requiring supports at all) within the Scheme. To date, there has been limited linking of spend (especially for capacity building supports such as therapy and support coordination) to participant outcomes.

Quality assurance reviews and "hot spot" audits are valuable analyses

Risk-based quality assurance audits and focused "hot spot" analyses have assisted in better understanding Scheme experience. Specific "hot spot" audits have been undertaken in areas which pose a risk to financial sustainability. A number of reviews were completed in 2019-20 across a variety of areas including SIL, utilisation, high cost plans, and support coordination.

A consistent theme from the reviews was the need for appropriate documentation and sufficient justification for decision-making to be attached to participant records. Incomplete or inaccurate information recorded through the planning process increases the likelihood of delegate error in decision-making. This could be supported through the development of better business intelligence rules to enable more consistent decision-making.

The Agency should also have a defined process for implementing the findings of the quality assurance reviews. While findings are flown through to individual plans for remediation, further work is required to ensure these activities impact the Scheme on a wider scale in a cycle of continuous improvement. Participants in SIL arrangements and children with autism continue to be particular areas of interest; the associated cost escalation, without adequate

[20] For example, upon plan review, planners tend to retain the existing supports in participants' plans then add more supports (called a "bottom-up approach to planning"), rather than holistically considering the appropriate level of supports for the participant and their current situation. This leads to high levels of inflation from plan to plan.

mitigation strategies, could result in significant and material adverse impacts on financial sustainability.

Proactive management responses to emerging risks will be important

Recommendations to address emerging risks have been identified and are discussed in detail throughout this report. The following table summarises these recommendations.

Table 5 Summary of recommendations to address risks

Recommendation to address risk		Reference	Page
Managing cost escalation			
1	Consider improvements to pricing governance framework	Recommendation 4	68
2	Continued focus on cost pressures impacting participants in SIL	Recommendation 5	70
3	Improve effectiveness of interfaces	Recommendation 6	87
4	Proactive responses to matters arising from AAT cases[21]	Recommendation 7	88
5	Enhance the capability of the case management system	Recommendation 10	123
Consistent and robust decision-making			
6	Consistency and rigour in access decisions	Recommendation 2	36
7	Prioritisation of eligibility reassessment process	Recommendation 3	37
8	Continued focus on the 'Reasonable & Necessary' project	Recommendation 11	126
Increased focus on outcomes			
9	Understanding the cost and outcomes of new initiatives	Recommendation 8	113
10	Increase choice and control in the market	Recommendation 9	119
Quality of information			
11	Improvement in the capture and quality of data in the ICT system[22]	Recommendation 1	30
12	Quality assurance reviews and "hot spot" audits	Recommendation 12	130

[21] AAT stands for Administrative Appeals Tribunal.
[22] ICT stands for Information and Communications Technology.

Recommendation to address risk		Reference	Page
13	The implementation of ACE and incorporating business intelligence rules[23]	Recommendation 13	131

Mitigation strategies are required to address potential adverse scenarios

There is a mounting urgency for an effective response to emerging financial sustainability pressures and for this to be balanced against the need to continue to provide positive participant outcomes. The increase in cost projections within this report highlight the impact of both ongoing double-digit annual average cost escalation, and access and eligibility to the Scheme continuing to increase above expectations. To address the high levels of inflation observed in the Scheme to date, mitigation strategies[24] have been developed by the Agency and will be implemented over the next three years to manage cost escalation.

This report also contains a number of alternative plausible scenarios that would, if risks were not addressed, have material cost impacts on the Scheme. It is important for the Agency to proactively develop mitigation strategies to address the key risks at hand and, equally, lead to better outcomes for both participants and the Scheme. To highlight the financial impact of these key risks if mitigation strategies are not developed, and the potential benefits of mitigation strategies, a suite of scenario analyses have been performed.

Some of the key scenarios and their findings (all other things being equal) are:

- **Costs for participants living in SIL continue to increase.**
  There is considerable unmet need with regards to the provision of appropriate accommodation for people with disability and also an opportunity for lower cost Individual Living Options to be implemented. Plausible alternative views on the provision of different living options for participants in SIL could see cost increases of up to 20% or cost reductions of up to 10%.
- **Sources of superimposed inflation[25] are not adequately addressed.**
  A continuation of historical superimposed inflation, assumed to be 10.1% per annum over the next 3 years, would increase participant costs by over 30% in the longer term. Alternatively, better control over identified sources of superimposed inflation could result in reductions in projected costs of up to 15%.
- **Recent high levels of intake continue.**
  There have been no signs of participant intake slowing down as was originally anticipated in the bilateral agreements. If the higher intake levels observed over the

[23] ACE is a cloud-based case management system from Salesforce.
[24] For details on these mitigation strategies, please see Section 6.3.
[25] Participant costs are assumed to increase over time with inflation, both from normal inflationary sources and from additional cost pressures, termed “superimposed inflation”.

past 12 months continue to an extent[26], with an additional 69,000 participants entering the Scheme over the next three years, there would be an increase in Scheme costs of about 7%. Alternatively, if participant intake slowed significantly over the next two years, there would be a reduction in Scheme costs of about 2%.

- **People with chronic health conditions access the Scheme.**
  There is a risk that people under the age of 65 who have age-related, profound/severe or daily need chronic health conditions gain access to the Scheme. The original intention of the NDIS was for these people to be serviced by the existing health and palliative care systems rather than the Scheme. Three scenarios were constructed that could mean an increase in Scheme costs of around 12% to 16% in 2022-23.

[26] Note that under this scenario, some tapering of participant intake is still assumed to occur over the next three years – the levels would not continue at the same high levels as the previous 12 months. These additional participants are assumed to have an existing disability but are new to disability supports.

Acronyms and definitions

Acronyms

AA	Assistance Animal
AAT	Administrative Appeals Tribunal
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AFSR	Annual Financial Sustainability Report
APRA	Australian Prudential Regulatory Authority
CB	Capacity Building
CCS	Crisis Communication System
CMT	Crisis Management Team
CPI	Consumer Price Index
CRM	Client Relationship Management
CRO	Chief Risk Officer
CY	Calendar Year
DRC	Disability Reform Council
ECEI	Early Childhood Early Intervention
ELT	Executive Leadership Team
ERO	Equal Remuneration Order
ERP	Estimated Residential Population
GDP	Gross Domestic Product
IA	Independent Assessment
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
NT	Northern Territory
PBS	Portfolio Budget Statements
PC	Productivity Commission
PPE	Personal Protective Equipment
PTSD	Post-Traumatic Stress Disorder
QLD	Queensland
RAC	Residential Aged Care

RBA	Reserve Bank of Australia
RMS	Risk Management Strategy
SA	South Australia
SAS	Statistical Analysis System
SDA	Specialist Disability Accommodation
SIL	Supported Independent Living
TAS	Tasmania
TTP	Temporary Transformation Payment
VIC	Victoria
WA	Western Australia
WHO	World Health Organization
WHODAS	World Health Organization Disability Assessment Schedule
WPI	Wage Price Index
YTD	Year To Date

Definitions used in this report

2018-19 AFSR	*National Disability Insurance Scheme: Annual Financial Sustainability Report 2018-19* A summary was included in Chapter 3.1 of the *National Disability Insurance Agency Annual Report 2018-19*, from pages 70 to 73. The annual report was tabled on 15 October 2019: https://www.ndis.gov.au/about-us/publications/annual-report
Accrual basis	Cost is based on when the service was actually provided to the participant
ACE	A cloud-based case management system from Salesforce
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
Commonwealth participants	Participants entering the Scheme from existing Commonwealth programs
COVID-19 pandemic	Ongoing global pandemic of coronavirus disease 2019, with references to the 'first wave', 'second wave' and later waves
Dec19 update	*National Disability Insurance Scheme: 31 December 19 (Dec19) Annual Financial Sustainability Report (AFSR) Update'*
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 active at both 31 December 2019 and 31 March 2020, and had their first plan approved on or prior to 31 December 2018.
NDIS Act	*National Disability Insurance Scheme Act 2013*, as amended
New entrants	All participants entering the Scheme
New incidence	Participants with a newly acquired disability accessing 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.
PC benchmark	Productivity Commission Inquiry Report. 2011. *Disability Care and Support*
2011 PC report	Productivity Commission Inquiry Report. 2011. *Disability Care and Support*
2017 PC study report	Productivity Commission 2017, *National Disability Insurance Scheme (NDIS) Costs*, Study Report, Canberra

PEDI-CAT	The Pediatric Evaluation of Disability Inventory (PEDI) as a computer adaptive test (CAT) measures abilities in three functional domains: Daily Activities, Mobility and Social/Cognitive.
Plan budgets	The reasonable and necessary supports outlined in a participant's plan that will be funded for a specific duration, typically a year. Plan budgets represent the dollar amount of support that has been made available to participants in their plan.
Previously unmet need	Participants with existing disability accessing disability supports for the first time.
Projection Group	A group of participants with similar characteristics. The Projection Groups have been determined by age band, primary disability, level of function, gender and whether the participant is in supported independent living.
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
State/Territory participants	Participants entering the Scheme from existing State/Territory programs
Steady Intake Date	The point in time where participant intake primarily represents participants with new incidence of disability. For this report 30 June 2023 has been assumed.
Supported Independent Living	This includes the assistance with and/or supervising tasks of daily life to develop the skills of individuals to live as autonomously as possible. These supports are provided to a participant in their home, regardless of property ownership, and can be in a shared or individual arrangement.
Tier 2 support	NDIS initial information, linkages and capacity building support provided to all people with disabilities
Trial period	From 1 July 2013 to 30 June 2016
Transition period	From 1 July 2016 to 30 June 2020
Vineland-3	An individually-administered measure of adaptive behavior used to assess individuals with intellectual, developmental, and other disabilities.

1. Introduction

This annual financial sustainability report (AFSR) for 2019-20 has been prepared as required under section 180B of the *National Disability Insurance Scheme Act 2013* ("the NDIS Act"). This report provides an overall assessment of the Scheme's financial sustainability at 30 June 2020 after its seventh year of operation (four years of transition following a three-year trial period).

In accordance with Part 3 of the *National Disability Insurance Scheme – Rules for the Scheme Actuary 2013*[27], this report encompasses detailed analyses and discussion on recent Scheme experience, best estimate projections of future participant numbers and costs (based on emerging experience and future expectations), key risks and issues impacting financial sustainability, and recommendations to manage risks and address issues.

Background

The purpose of the National Disability Insurance Scheme ("the Scheme", or 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 life opportunities. A key cornerstone underlying the operation of the Scheme is strong insurance principles, where evidence-based decisions on access and funding are made by drawing on 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*[28] 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.*

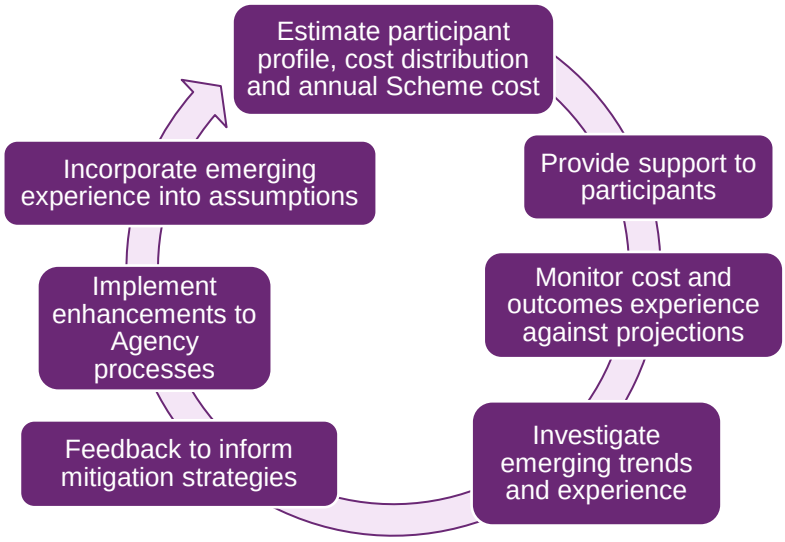
[27] https://www.legislation.gov.au/Details/F2013L01184
[28] Version 5 published November 2016

It is thus 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 and the trust that stakeholders and funders have in the Scheme.

Insurance control cycle

Since inception on 1 July 2013, the Scheme has adopted an insurance control cycle approach to estimating and managing costs. The following figure shows that there is a continuous feedback loop as experience emerges to both refine projections of participant profile and costs, and improve Agency processes to lead to better outcomes.

Figure 1 NDIS insurance control cycle



For example, monitoring of participant intake during the first few years of transition showed that participants being found eligible for the Scheme tended to be lower functioning than expected (based on the Productivity Commission[29] benchmark). In addition, the quality of functional assessment data was inconsistent and, at times, unreliable. The Independent Assessment Pilot Evaluation, which was launched in November 2018, highlighted possible discrepancies in eligibility decisions. In particular, 10% of participants with autism in the Pilot were assessed as likely to be in the normal population using all eight domain scores across both PEDI-CAT and Vineland-3, indicating that there may be issues with access decisions for people with autism.

The Pilot concluded that independently sourcing standardised functional assessments for applicants was beneficial and would improve the consistency and accuracy of eligibility decisions. This has led to the planned introduction of Independent Assessments (IAs), which are scheduled to be rolled out progressively from 2021. This initiative is intended to improve the ability of the National Disability Insurance Agency ("the Agency", or NDIA) to make consistent access, eligibility and funding decisions across the Scheme, as well as provide

[29] Productivity Commission Inquiry Report. 2011. *Disability Care and Support*

credible functional assessment information about participants which would enable more meaningful actuarial trend analysis.

Current financial sustainability position

In the past, Scheme costs have trended well below budget. This was primarily due to participants entering the Scheme slower than initially anticipated in the original 2011 Productivity Commission (PC) costings and subsequent State/Territory bilateral agreements. In 2019-20, Scheme costs have exceeded the most recent budget figures (2018-19 Portfolio Budget Statements (PBS)) for the first time. There is thus some urgency around the need to control cost escalation to support the Scheme's sustainability from a financial perspective. Hence, there should be more direct scrutiny of Scheme costs from the Agency going forward.

All the elements of financial sustainability in this report are considered from the perspective of how the Scheme could ideally operate in the medium to long term as it progresses towards making sure that the right individuals are being determined eligible for individual support packages and that the right amount is being put in plan budgets. In particular, this perspective drives the recommendations to address the current challenges identified throughout the report.

It will be several years until the Scheme's participant intake and costs stabilise, and the longitudinal data collected is consistent and sufficient enough to draw reliable indicators of future experience. However, it is worth keeping this concept in mind given the importance of having a lifetime view of participant costs and outcomes within a scheme founded on insurance principles.

AFSR costing update as at 31 December 2019

In early 2020, an update on the 2018-19 AFSR projections (which were based on data as at 30 June 2019), was performed using data at 31 December 2019 ("Dec19 update"). This update adjusted the assumptions in the 2018-19 AFSR model to incorporate the main components of the six months experience to 31 December 2019, which differed materially from the emerging experience and expectations as at 30 June 2019. In particular:

- Participant intake did not show signs of slowing down as had been anticipated, and tended to skew towards a younger age profile, while noting that part of this participant intake was due to the reduction in backlogs around people trying to access the Scheme;
- Payments consistently tracked above expectations, especially with respect to participants in Supported Independent Living (SIL); and
- Cost pressures emerged from unanticipated sources, such as the inclusion of disability-related health supports from 1 October 2019.

This led to material changes in the projections compared with the 2018-19 AFSR, such as:

- More children (particularly with autism) projected to enter the Scheme, partially offset by fewer adults;
- Higher levels of annual cost assumptions on average, particularly for SIL participants; and
- Additional allowance for future unanticipated costs, through increased superimposed inflation (which will be discussed in Section 5.2.2).

A high-level summary of the key projection results from the Dec19 update is provided in Table 6, noting that the participant and Scheme costs are shown on a cash basis (rather than an accrual basis).

Table 6 Summary of key results from the Dec19 update (with costs on a cash basis)

Number of participants	As at 30 June						
	2020	2021	2022	2023	2024	2025	2030
Dec19 update	387,598	443,232	485,166	518,448	544,040	568,526	685,487
2018-19 AFSR	369,118	423,889	470,615	501,491	523,723	544,617	636,645
Difference	18,480	19,344	14,551	16,957	20,317	23,909	48,842
Difference (%)	5.0%	4.6%	3.1%	3.4%	3.9%	4.4%	7.7%

Participant costs ($m)	Projection Year					
	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30
Dec19 update	21,522	24,997	28,208	31,210	34,002	50,200
2018-19 AFSR	20,603	23,891	26,613	28,817	30,820	43,723
Difference	919	1,106	1,595	2,393	3,182	6,477
Difference (%)	4.5%	4.6%	6.0%	8.3%	10.3%	14.8%

Total Scheme Costs ($m)	Projection Year					
	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30
Dec19 update	22,952	26,572	29,985	33,176	36,144	53,362
2018-19 AFSR	22,057	25,538	28,393	30,632	32,761	46,477
Difference	895	1,034	1,592	2,543	3,382	6,885
Difference (%)	4.1%	4.0%	5.6%	8.3%	10.3%	14.8%

An accompanying report was produced, titled '*National Disability Insurance Scheme: 31 December 19 (Dec19) Annual Financial Sustainability Report (AFSR) Update',* and submitted to the Agency's internal Sustainability Committee in May 2020. This report was intended for internal use only by the Agency in its assessment of the financial sustainability and cost trajectory of the Scheme.

Budget setting for 2020-21

The Dec19 update model was used for Budget setting purposes in conjunction with the Department of Social Services and the Department of Finance. As shown in Table 7, the modelling of mitigation strategies and the expected outcome of the Annual Price Review for 2019-20 were allowed for in the 2020-21 budget figures, resulting in a budget estimate of $21.72 billion for the 2020-21 year. It is worth noting that the modelling for the Dec19 update assumed that the expected net impact of the COVID-19 pandemic was neutral.

At the time of writing, the future budget estimates for the projection years 2021-22 to 2023-24 have been agreed upon with the Department of Finance. These figures should be considered effective as at 17 August 2020, subject to any further work that may be done to determine the most appropriate basis for these estimates.

Table 7 Budget estimates for 2020-21, based on the Dec19 update model[30]

Budget setting for 2020-21 ($m)	Projection Year				
	2020-21	2021-22	2022-23	2023-24	Total
Base cost from 2018-19 AFSR (cash basis)	20,603	23,891	26,613	28,817	99,924
Expected changes in participant plan provision	452	337	250	56	1,095
Base cost from 2018-19 AFSR (accrual basis)	**21,054**	**24,229**	**26,863**	**28,873**	**101,020**
Updated projection using 31 December 2019 data (cash basis)	21,522	24,997	28,208	31,210	105,937
Updated projection using 31 December 2019 data (accrual basis)	**21,894**	**25,400**	**28,561**	**31,467**	**107,322**
Expected outcome of pricing review (accrual basis)	-48	68	76	84	180
Updated projection using 31 December 2019 data (including expected outcome from pricing review)	**21,846**	**25,467**	**28,637**	**31,551**	**107,501**
Projected impact of mitigation scenarios	-126	-833	-1,529	-2,381	-4,869
Updated projection using 31 December 2019 data (accrual basis) with mitigation strategies	**21,720**	**24,634**	**27,108**	**29,170**	**102,632**
Portfolio Budget Statements (PBS) - draft at 17 August 2020	**21,720**	**24,677**	**27,217**	**29,425**	**103,039**
Comparison to Portfolio Budget Statements	**0**	**-43**	**-109**	**-255**	**-407**

COVID-19 pandemic

In March 2020, a pandemic was declared by the World Health Organization (WHO) due to the international spread of the COVID-19 virus. The impact of the 'first wave' of infections in Australia on the Scheme was dependent on a number of factors, such as the Federal and State/Territory governments' responses, the Agency's response and the community response (particularly the behaviours of the general population).

Government-imposed lockdowns occurred worldwide in the first half of 2020, with Australia's measures implemented in late March 2020. The health crisis led to restrictions in gatherings and movement to contain the spread of the virus. The lockdown had become progressively more restrictive before loosening in June 2020[31] due to a fall in infections. The Federal government expanded access to unemployment benefits through initiatives such as JobKeeper and JobSeeker, boosted funding for Personal Protective Equipment (PPE) and other essential equipment, introduced COVID-19 testing sites, continued access to essential health services, and provided investment to find a vaccine and treatments.

[30] The PBS figures shown have been agreed upon with the Department of Finance at the time of writing. These figures should be considered draft as at 17 August 2020, subject to any further work that may be done to determine the most appropriate basis for these estimates, which are due to be finalised on 06 October 2020. It is likely that $11.4 billion of these PBS forward estimates will be placed into a contingency reserve which will not be directly allocated to Program 1.1 of the NDIS budget.

[31] Note that some restrictions have been re-imposed, particularly in Victoria in July 2020.

For the Agency, the identification and prioritisation of critical supports was key in the continued delivery of services to participants. A temporary 10% COVID loading was applied to certain critical core and capacity building supports until 30 June 2020, changes were made to cancellation policies, and advance payments of circa $650 million were made to providers. These measures were implemented to boost providers' short term cash flows, thereby helping providers retain their staff, continue their operations and maintain continuity of supports to participants. Similarly, many participant plans were extended by up to 24 months to increase the capacity of Agency staff to focus on urgent changes to plans.

Given the very contagious nature of the COVID-19 virus, the discipline and ability of the general population to adhere to health advice and government guidelines – specifically to self-isolate, quarantine and practice good hygiene – was crucial in containing the 'first wave' of infections. The heavy fines and penalties imposed by the government helped deter the general public from congregating or undertaking unnecessary travel. Scheme participants, and other people with disability in the community, are particularly "at risk" of having severe symptoms if they do become exposed to the virus, and the containment of the 'first wave' has limited the number of participants infected.

However, there is a large degree of uncertainty surrounding both the future trajectory and impact of the pandemic. A 'second wave' of infections has already occurred in Melbourne and other parts of Victoria as of late August 2020, with a second lockdown imposed in those areas. A more widespread 'second wave' would cause stricter containment measures to be re-imposed elsewhere. The eventual implications of the 'second wave' and any later waves will be dependent on similar factors influencing the 'first wave'.

- **The government's response**. This relates to both the re-imposition of restrictions in gatherings and movement if infections rise substantially (as has happened in Victoria) and the government's economic response, such as increased funding to emergency support providers and incentives to stimulate the economy. In early August, the Federal government announced measures to support Victorians, with expanded eligibility for JobSeeker and related benefits, and a crisis payment to assist individuals in financial hardship due to quarantine or self-isolation.

- **The Agency's response.** The extent to which the Agency is able to continue supporting providers, their staff and Partners to provide critical supports to participants, ensuring continuity of support, is important. The Agency has employed a more targeted response to the 'second wave' to date. This has included temporary changes to funding arrangements for participants in Victoria and New South Wales to claim the cost of PPE and additional funding and supports for participants with COVID-19 or in self-quarantine due to COVID-19. It will be imperative for the Agency to continue to monitor the evolving situation, adapt to changes and find innovative ways to continue supporting participants.

- **The community's response.** Community attitudes towards following health advice and government guidelines continue to be crucial; this includes physical distancing, wearing masks, and self-isolating while infected with the COVID-19 virus or awaiting

tests. In particular, there is a risk that segments of the general public may tire of, and flout, the restrictions and be less willing to undergo a second lockdown if imposed.

Any later waves may have different responses (from both the government and the Agency) and different financial sustainability impacts compared to the 'first wave'. During the first lockdown from late March to late June 2020, the Scheme did not see significant changes in the quantum of overall costs. However, there was considerable cost shifting between support types. For example, there were increases in levels of core daily living supports and consumables, which were offset by decreases in social, community and civic supports and employment supports. A continued decrease in employment and social and community supports could affect participant outcomes, however this evidence will be slow to emerge as the Outcomes Framework questionnaires are administered at plan review.

The modelling in this report has allowed for future potential impacts of the pandemic on participant and payment projections and economic assumptions such as Gross Domestic Product (GDP), Australian population projections and normal inflation rates.

2019-20 AFSR

A comprehensive update has now been completed, involving revisiting all components of the AFSR model (such as new incidence, exits, payment trends, and normal and superimposed inflation) as well as incorporating the 12 months of experience to 30 June 2020.[32] Explicit allowances have also been made for the possible impact of the pandemic, and are discussed throughout the report.

There will be a cost to the advance payments of circa $650 million made to providers, in the form of potential bad debts, which have not been modelled within participant costs in this AFSR. Current estimates indicate that the potential bad debt provision is over $17 million based on analysis of current provider cash flows (for agency-managed payments).

It is worth mentioning that while previous AFSRs focused on participant costs on a cash basis, there is a greater emphasis on participant costs on an accrual basis in the 2019-20 AFSR. This reporting allows for the lag between services being provided and payments being made, and better reflects the level of supports to participants in a given financial year. Furthermore, participant costs on an accrual basis are used in comparisons to budget estimates.

[32] To provide a fuller picture of the modelling changes and experience of the past 12 months, this report focuses on movements in assumptions and projections since the 2018-19 AFSR.

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 and make consistent evidence-based decisions. The success of the Scheme is thus dependent on the body of information that can be relied upon.

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 how participants and the Scheme is progressing over time. In that sense, the Agency is building one of the most comprehensive, longitudinal data sources on disability in the world.

Information and data used for analysis

The detailed actuarial analysis underlying this report uses information from the Agency's case management system, finance system and data warehouse, as well as external sources (such as various industry benchmarks and information from the States/Territories and Commonwealth). While there is a substantial amount of data in the current Information and Communications Technology (ICT) business 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 2020, unless stated otherwise. The sources of data are summarised in Table 8.

Table 8 Summary of data utilised for actuarial analysis

Data	Description
Access requests to the NDIS	• 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	• 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	• Participant submitting the claim for payment • The support category provided • Total cost spend on support category • Period of reimbursement

Data	Description
NDIS participant plans	• Plan approval date • Length of plan • Participant goals • All plan budgets included in the plan • Mainstream and informal supports • Level of function[33] • Reference package and typical support package
In-kind supports data	• Unit record in-kind support details from State/Territory programs including details on support type, level and duration of coverage.
Data on outcomes	• For participants entering the Scheme from 1 July 2016, data on outcomes has been collected from about 98.2% of all participants, with the intention to collect information from all participants.
Data provided by the State/Territory and Commonwealth governments	• 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) 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	• 3222.0 Population Projections, Australia, 2017 (base) to 2101 (Series B). This was published in November 2018.
Financial information	• Data from the SAP[34] CRM system were reconciled with financial information in SAP.
Epidemiological data	• New incidence, prevalence and relative risk mortality on a range of disabilities, from accident compensation schemes, and the Australian Institute of Health and Welfare Burden of Disease Study.
ABS Survey of Disability, Ageing and Carers	• Prevalence of disability in Australia, including demographic and socio-economic profile of people with disabilities.
Economic information	• Government economic forecasts for GDP, inflation indicators, Australian Life Tables and population forecasts.

[33] Since 1 July 2016, information on level of function should be available for all participants. In some cases a default value has been assigned in CRM. As at 30 June 2020, it is estimated that 1.5% of participants who have ever had an approved plan have a missing or default level of function. For those participants with a level of function, the functional assessment tool used is not always the preferred one. For example, there is extensive use of the WHO Disability Assessment Schedule (WHODAS) 2.0 tool, and there is evidence that the quality of these assessments are less robust than the preferred tools.

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

Data integrity

Some data integrity issues have persisted since the 2018-19 AFSR, which place limitations on the ability to perform more meaningful actuarial trend analysis. Nonetheless, these issues are not expected to materially influence the conclusions and analysis in this report.

Key considerations are summarised below.

Inconsistency in collection of functional assessment and disability data

Historical functional assessments have included a mixture of generic functional assessment tools and disability-specific tools, which limits the accuracy of capturing functioning capacity and consistency of decision-making over time. Section 8.3 discusses the IAs, which are due to be progressively rolled out from 2021. This Agency initiative is aimed at improving the robustness of functional assessment scores. This will help facilitate more rigorous and consistent capture of disability type and levels of functional ability to better inform access and planning decisions.

Inconsistent or missing data on new incidence of non-congenital disabilities

Date of disability acquired is not consistently and reliably captured, and is often incomplete. Further, the date recorded is often very recent, perhaps indicating that the field is incorrect, rather than representing the date a condition was acquired. This limits the ability to analyse the new incidence of non-congenital disabilities, which means projections of new entrants cannot be modelled using date of disability acquired.[35]

Lack of a robust process for capturing data on Scheme exits

Participants who have exited the Scheme are identified through merging multiple data sources, including staff inboxes. This process, rather than being fully captured in the participant pathway variables in the Agency's CRM, introduces additional data risk around the accuracy of exit dates. As such, an approximate date of exit is instead derived by comparing snapshots of datasets produced by the Data Office at the end of each month.

There are also issues around the accuracy of the recorded reason of exit for participants. This field is not well populated and has inconsistencies with other data variables which continues to limit its usage. It is worth noting however that some improvements in the quality of the exits data available for analysis have been implemented. These include some significant restructuring in the formatting of internal data sources, and some data cleansing by incorporating external data and individual file reviews.

[35] For people with congenital disabilities, this would be the date of birth. For people with disability resulting from accidents, this would be the date of injury. For people with disability related to degenerative conditions, this would be the date of diagnosis.

Payments data has limitations

There are some limitations to the payments data that currently restrict the ability to perform granular payments data analysis. For example, there are manual processes for recording the provision of in-kind supports and residential aged care (RAC) accommodation supports. This means that the cost of supports may, in some instances, not be an accurate reflection of actual support provision.

In addition, there is little information available on the supports provided to self-managed participants, with payments recorded at the support category level rather than the more detailed item level (as is the case for agency or plan managed payments). This means that additional analysis to understand the trends in self-managed supports is limited. A similar issue exists for periodic cash transport payments, as there is no information on how or when this support is utilised.

Finally, for agency and plan managed payments, there is limited ability to distinguish whether a payment for core or capacity building supports relates to the delivery of the support, provider travel or administration purposes (e.g. writing a report). This distorts the analysis of trends by quantity of supports and unit price.

Limited information on prospective participants

There remain limited ICT capabilities to record interactions with prospective participants. Critical to the sustainability of the Scheme, and outcomes for people with disability, is an effective gateway which provides information, linkages and referrals to mainstream and community organisations, and builds the capacity of individuals and communities. With almost all operations in this space existing off-system, there is little objective evidence regarding the activities or effectiveness of these interactions.

Recommendation 1 Improvement in the capture and quality of data in the ICT system

Improvements to the ICT system are required to better monitor and manage Scheme financial sustainability. As such, improving data quality and ensuring data integrity should remain an Agency priority. These include:

- continuing the development of the system to consistently capture key fields (such as date of disability acquired, and date of exit);
- collecting information to enable robust assessment of ongoing Scheme eligibility (such as prospective participant information, and payment information);
- enhancement of information captured on payments to self-managed participants;
- prioritising the ability to capture structured data on SIL supports such as rosters of care, to allow for effective identification and analysis of trends (Section 5.1.1); and
- introducing business intelligence rules to enable more consistent decision-making (Section 8.1.1).

3. Modelling approach

An experience-based projection model has been used to project Scheme numbers and costs. This is broadly consistent with the underlying modelling framework used in the 2018-19 AFSR, while noting that there have been some changes to the methodology within a number of different components.[36] It is expected that the modelling approach will continue to evolve over time to reflect the maturing of the Scheme.

The modelling approach splits participants into Projection Groups based on characteristics which reflect expected differences in average cost, 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 cost, new entrant and exit assumptions have been developed for each of these characteristics.

The calibration of this experience-based model continues to be challenging, especially as Agency operational processes are changing and developing over time[37] and the approach to accessing various supports is still evolving.[38] Further, the accuracy of functional assessments has had significant limitations which adds a further complicating factor into the modelling process.

The current Scheme participant profile is also unlikely to provide a good representation of the long-term profile.[39]

There may, however, be significant future deviations from emerging experience if particular unknown biases have not been allowed for, as Agency operational processes gradually evolve, or as transition to the Steady Intake Date[40] occurs. Section 6.2 therefore contains a number of other plausible scenarios, with alternative assumptions, to highlight the uncertainty of the current experience-based model.

Figure 2 summarises the modelling approach in graphical format, with the main components of the modelling approach noted below.

[36] The most notable change is the implementation of a transition model which allows for some participants who enter the Scheme with developmental delay to later move into a primary disability of autism or intellectual disability.
[37] For example, the eligibility reassessment criteria has been refined and will likely have an impact on the number and characteristics of participants who exit the Scheme.
[38] For example, the Agency's approach to managing compensation payments continues to evolve.
[39] For example, the participants who have transitioned to date are more typically those from existing State/Territory-based programs, and these participants are likely to be lower functioning and have higher support packages. The modelling approach has made adjustments for known participant profile biases where appropriate.
[40] This has been defined as the point in time when new entrants into the Scheme are participants with new incidence of disability, rather than participants transferring into the Scheme with existing disabilities.

Participant numbers

- Aggregate participant numbers for ages 0 to 64 are estimated using actuarial techniques[41] up until the assumed Steady Intake Date of 30 June 2023.
- The number and profile of participants expected to enter the Scheme in each projection year is based on the historical profile of participants:
    i. From existing State/Territory and Commonwealth programs; and
    ii. New to disability supports, including;
        - new incidence of disability supports; and
        - previously unmet need for disability supports in each State/Territory[42].
- While the distribution of new incidence by age, primary disability, level of function and gender has been explicitly modelled (as explained in detail in Section 4.2), the profile of previously unmet need in each year up until 30 June 2023 is calibrated based on the "gap" between participants new to disability supports and new incidence.[43]
- Annual population projections are calculated by exact age and Projection Group by adding participant intake to the starting population, subtracting mortality and non-mortality exits, and ageing the remaining participants by one year of age.
- Each Projection Group 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 Projection Groups.
- The profile of participants at 30 June in each year has also been determined by Projection Group.
- 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, has been introduced. Some participants with a developmental delay will transition to 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.[44]

[41] A chain ladder analysis, prevalence methodology and decay methodology have been used.
[42] These are participants who have an existing disability and are new to disability supports.
[43] This approach differs from the 2018-19 AFSR, where the profile of participants at the Steady Intake Date was determined first, and then the participant intake and profile of participants expected in each year was extrapolated from the current Scheme population based on the phase-in schedule.
[44] For the 2018-19 AFSR, participants who transitioned were treated as an exit from developmental delay and then a subsequent new entrant to the Scheme for either autism or intellectual disability. This therefore overstated both the number of exits and participant intake. The change in method will enable a better calculation of expected exits from the Scheme and hence a better monitoring of Scheme experience over time. There should be minimal change in the net number of projected participants over time, although inevitably a change in modelling approach will have some impact.

- The intake of participants aged 65 years and over[45] is projected by applying an uplift factor to the intake of participants aged 55 to 64 for each disability type.
- The number of participants in SIL arrangements is modelled based on an assumed proportion of each Projection Group. There are different proportions adopted for the medium-term (i.e. a time horizon of three years to the Steady Intake Date) and long-term (i.e. a 10-year time horizon).

Participant costs

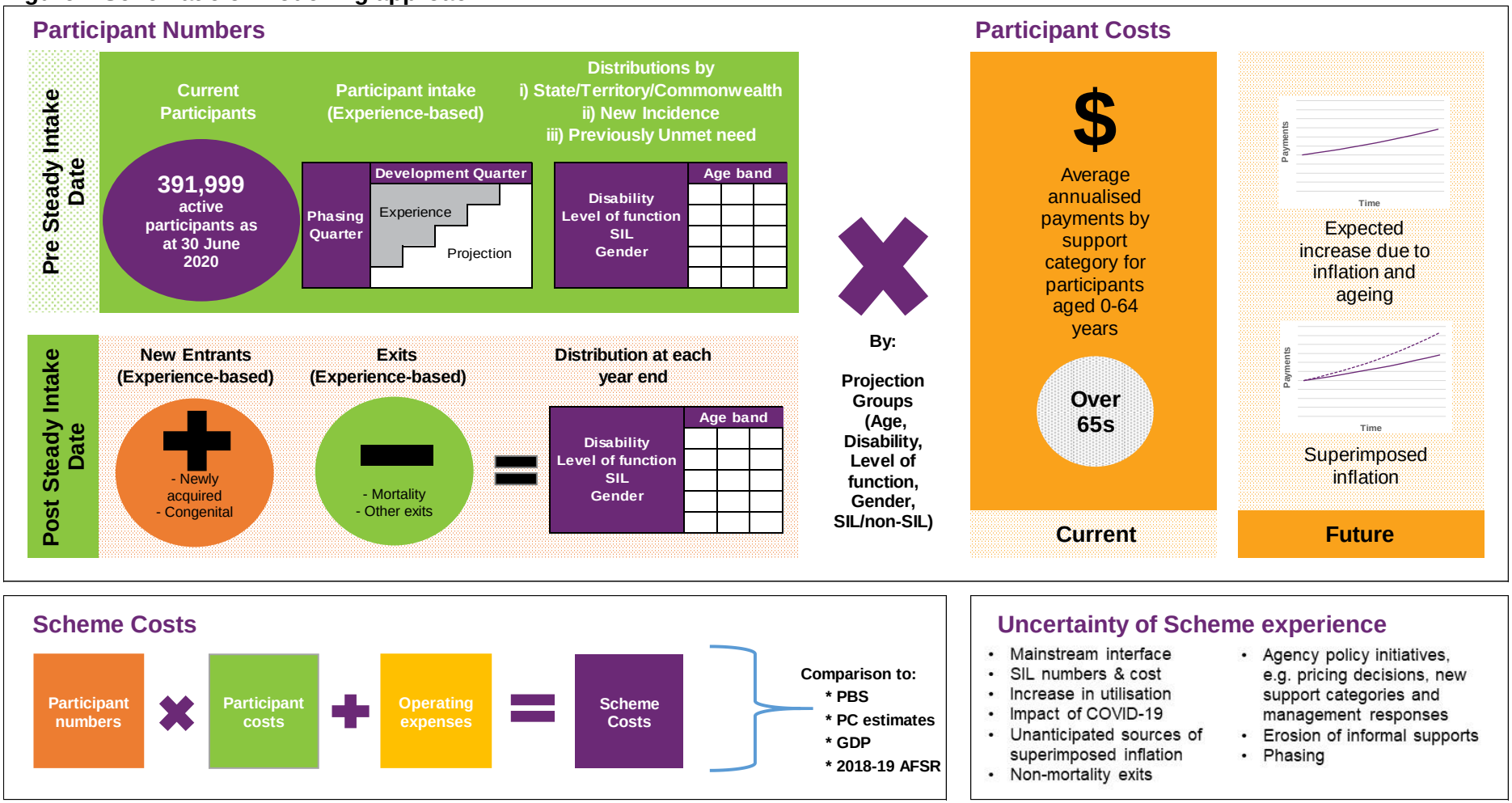
- Participant costs are estimated by Projection Group using annualised payment levels for the three months to 31 March 2020 for "mature participants", i.e. participants who were active at both 31 December 2019 and 31 March 2020, and had their first plan approved on or prior to 31 December 2018.[46] Costs 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 payments are split between 15 different support categories.[47]
- Participant plan budget costs are also estimated by Projection Group for the 15 different support categories using annualised plan budget levels for the three months to 31 March 2020. This approach helps inform projected utilisation rates of the Scheme, as well as provide a theoretical upper bound on projected costs, on the assumption that plan budgets represent reasonable and necessary supports.
- A separate analysis of participant costs from 1 April 2020 to 30 June 2020 has been used to model a pandemic cost adjustment for the 2020-21 projection year.
- Inflation of costs is added in future years from both normal inflationary sources and sources of superimposed inflation.
- An allowance for the expected change in participant plan provision is then made to convert projected 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.

[45] These participants would have submitted their access request before turning 65 but have been deemed eligible and received their first plan at or after age 65.
[46] Experience to 31 March 2020 to project long term cost assumptions has been used to exclude the impact of the COVID-19 pandemic on Scheme payments.
[47] 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 capital 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 2 Schematic of modelling approach



Uncertainty of Scheme experience

- Mainstream interface
- SIL numbers & cost
- Increase in utilisation
- Impact of COVID-19
- Unanticipated sources of superimposed inflation
- Non-mortality exits
- Agency policy initiatives, e.g. pricing decisions, new support categories and management responses
- Erosion of informal supports
- Phasing

4. Participants

The Scheme has experienced rapid growth over its seven years in operation. Regions across Australia have phased into the Scheme at different dates according to the bilateral agreements signed between the Commonwealth government and the States/Territories. As at 1 July 2020, all Australian residents with disability who meet the eligibility requirements can access the Scheme.

The approach to modelling future participant numbers is to start with the existing population at 30 June 2020, add on expected annual participant intake and remove expected participant exits for each future year of projection. The mix of participants entering and exiting the Scheme has been derived based on the emerging Scheme experience and other benchmarks, as appropriate.

4.1 Recent experience

There were 391,999 active participants in the Scheme as at 30 June 2020. This is an increase of 37% in the Scheme population since 30 June 2019 (from 286,015 active participants), and reflects the net effect of intake and exit of participants from the Scheme over the past 12 months.

Intake has been higher than expected in 2019-20

Participant intake was expected to decline over the 2019-20 financial year as transition-in arrangements were largely completed. However, there has been no noticeable slowdown in participant intake, largely driven by more children aged 0 to 14 (new to disability supports) accessing the Scheme than expected, particularly for participants with developmental delay or with autism.

The relatively high level of continued intake has also been impacted by a number of other factors. One of the Ministerial priorities has been to reduce backlogs of access requests in progress and for participants awaiting first plans. Internal Agency Pulse reporting was implemented to closely measure progress, and significant reductions in backlogs have been achieved. Furthermore, despite the COVID-19 pandemic, working from home has not affected the ability of Agency staff to process access requests and first plans. However, at this stage, it is unclear whether the pandemic and clearing of backlogs has had an impact on the quality of decision-making (in terms of both access decisions and budgets allocated to plans).

In addition, more children have been progressing from the Early Childhood Early Intervention (ECEI) gateway to submitting access requests than expected. There has also been a very high eligibility rate for children in general – 96% of all access decisions since Scheme

inception for those aged 0 to 6.[48] To address the high number of children entering the Scheme, an ECEI strategic review has been set up within the Agency to consider potential changes to the gateway and planning processes. While it is currently difficult to assess the timing and impact of any changes, it is worth noting that mitigation strategies may reduce the level of intake for children in due course.

Recommendation 2 Consistency and rigour in access decisions

Given intake has been well above expectations, there should be an increased focus on ensuring that the decision-making around access is clear, robust and consistent, especially for children. The access and eligibility requirements and processes should be reviewed as soon as possible, in favour of a more robust and equitable approach to determining eligibility.

The ECEI gateway should also be assessed to ensure that the threshold for progressing from the gateway to submitting an access request to the Scheme is appropriate. A culture of dependence on funded supports may be inadvertently created through the perception that the ECEI gateway is likely to lead to access to the Scheme. This would be contra to the Scheme's philosophy that providing early intervention supports enables participants to build capacity and increase independence, leading to positive outcomes. Participants may then require lower levels of funded supports or no longer require supports at all within the Scheme.

Exits have been low due to cessation of eligibility reassessments in 2019

In February 2019, the Agency temporarily ceased all Agency-initiated exits while the eligibility reassessment[49] strategy was reviewed and redeveloped. This meant that non-mortality exits were very low in the 2019 calendar year (0.43%), at less than half the rate observed in the 2018 calendar year (1.05%). Although eligibility reassessments formally recommenced on 16 March 2020, there have been some staffing and operational issues impeding progress. As such, Agency-initiated exits have remained below the 2018 calendar year levels in the first six months of the 2020 calendar year (0.73%).

Mortality exit rates have continued to increase over the past few years, at 0.88% in the 2018 calendar year (CY2018), 0.97% in the 2019 calendar year (CY2019) and 1.08% in the 2020 calendar year to date (CY2020 YTD). However, this mortality experience has been more than offset by low levels of non-mortality exits.

[48] This is partly due to the six-month initiative (announced by the Minister for the NDIS in June 2019) aimed at resolving the delays and backlogs for children with disability in accessing ECEI supports. Interim plans of $10,000 covering a period of six months were issued for children who had been found eligible for the Scheme, but are likely to experience a wait time of greater than 50 days between an access decision and getting a plan. This initiative ceased at the end of 2019, having been implemented in a number of specific regions around Australia only.

[49] The Scheme is required to assess ongoing eligibility, with this reassessment being especially important for participants who enter the Scheme through the early intervention requirement (Section 25 of the NDIS Act).

Eligibility reassessments

An important outcome for the Scheme is building the capacity of participants to increase their independence and social and economic participation. However, if these outcomes are not achieved, the Scheme is at risk of creating a culture of dependence on funded supports, especially for higher functioning participants. The Scheme population would then increase rapidly as the cohorts of (mostly children) age.

The eligibility reassessment strategy reflects a shift in the Agency's focus towards delivering a centralised, nationally consistent approach of assessing continued eligibility of participants across all jurisdictions, with an emphasis on procedural fairness. This new process has been rolled out progressively, first as a pilot in Tasmania and then nationally in March 2020. Since the implementation, only 796 participants have been exited through this strategy.

Agency-initiated exits have been relatively low to date in 2020 because the majority of the participants referred for an eligibility reassessment are still at an early, information-gathering stage. The COVID-19 pandemic has hindered participants in gathering their required evidence to demonstrate that they still meet the eligibility requirements for Scheme. As a result, participants have now been given 80 days (increased from 28 days) to gather the required evidence, further extending the information-gathering phase. There has also been a shortage of Agency staff and resources working within the access process, and priority has been given to determining access to new entrants. Although recruitment is in progress, full-functioning capacity for eligibility reassessment decisions is not expected in the shorter term.

Thus, Agency-initiated exits (including the clearance of backlogs) are expected to remain relatively low in the short term, and are not likely to increase significantly until the end of 2020. It will be some time before a consistent, reliable level of Agency-initiated exits re-emerge in the data.

Recommendation 3 Prioritisation of eligibility reassessment process

Reassessment of ongoing eligibility should remain a priority for the Agency. There should also be a focus on those participants who have accessed the Scheme through the early intervention requirement, those transitioning through different life stages (such as leaving school or starting work), and those participants showing evidence of increased functional capacity over time. If the re-eligibility process is not functioning well, then the Scheme population will grow significantly, especially for participants with autism.

The early backlogs in reassessing eligibility and opportunities missed in exiting some participants have potential adverse impacts on financial sustainability.

There is a material level of uncertainty around the likely levels of Agency-initiated exits going forward. There will be a backlog in potential non-mortality exits, as well as the unknown impact of the changes in process and strategy. The non-mortality exit rate experience is expected to vary significantly over the coming 3-12 months and it may be difficult in the

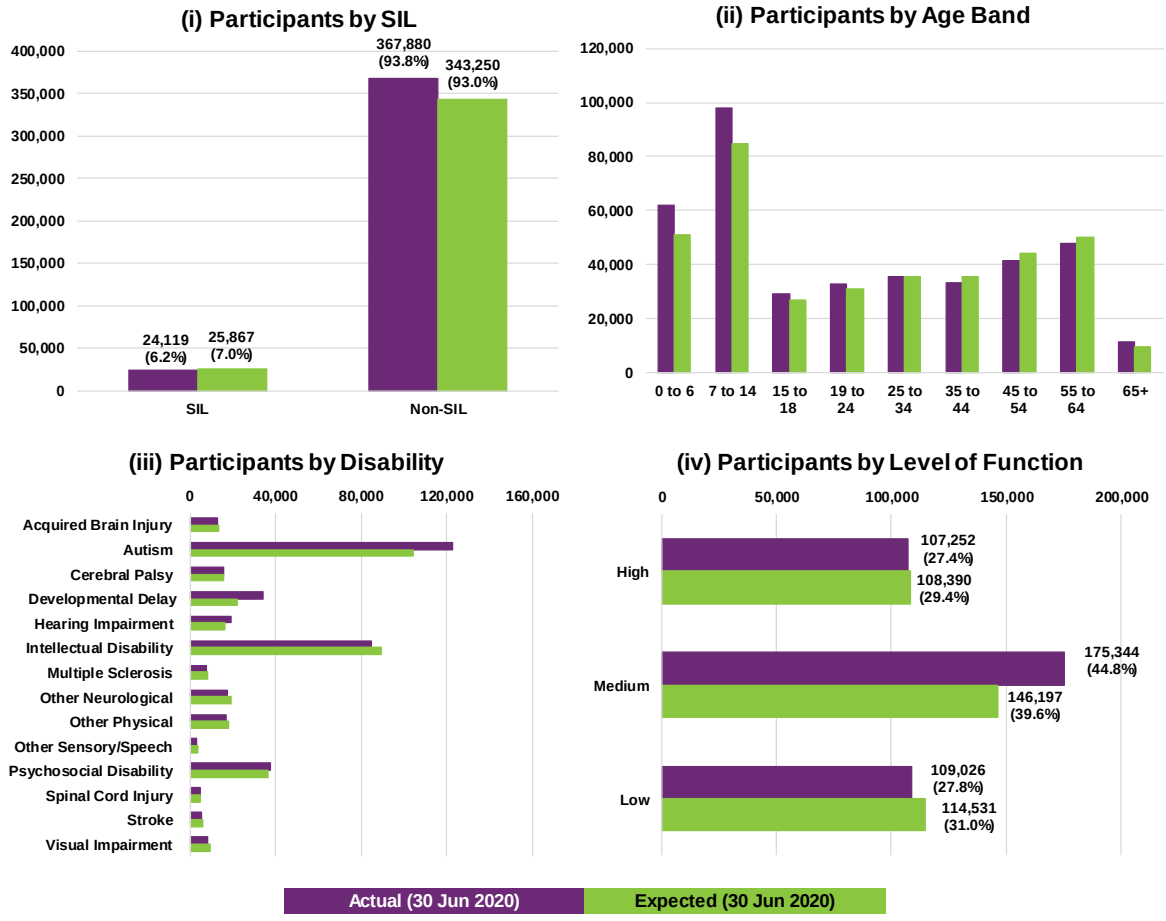
shorter term to gauge the longer-term impact of these revised procedures. It will thus be important to closely monitor this experience, as well as the impact and effectiveness of the new approach, in the lead up to the next AFSR.

Active participants as at 30 June 2020 have been above expectations

There were 391,999 active Scheme participants as at 30 June 2020, which is 6.2% higher than expected from the 2018-19 AFSR (369,118 projected as at 30 June 2020).

Comparing actual experience to expectations is useful to highlight emerging trends, assist in the development of projections and understand the impact on financial sustainability. This comparison is shown in Figure 3 by key participant characteristics (SIL status, age band, disability type and level of function).

Figure 3 Scheme participant characteristics as at 30 June 2020 – actual v expected



This figure shows that compared to the 2018-19 AFSR:

- Fewer participants in SIL have entered the Scheme (or transferred into SIL) than expected (graph i).
- There has been a higher level of younger participants (graph ii), partly as a result of the initiative to progress plans for children waiting longer than 50 days after access

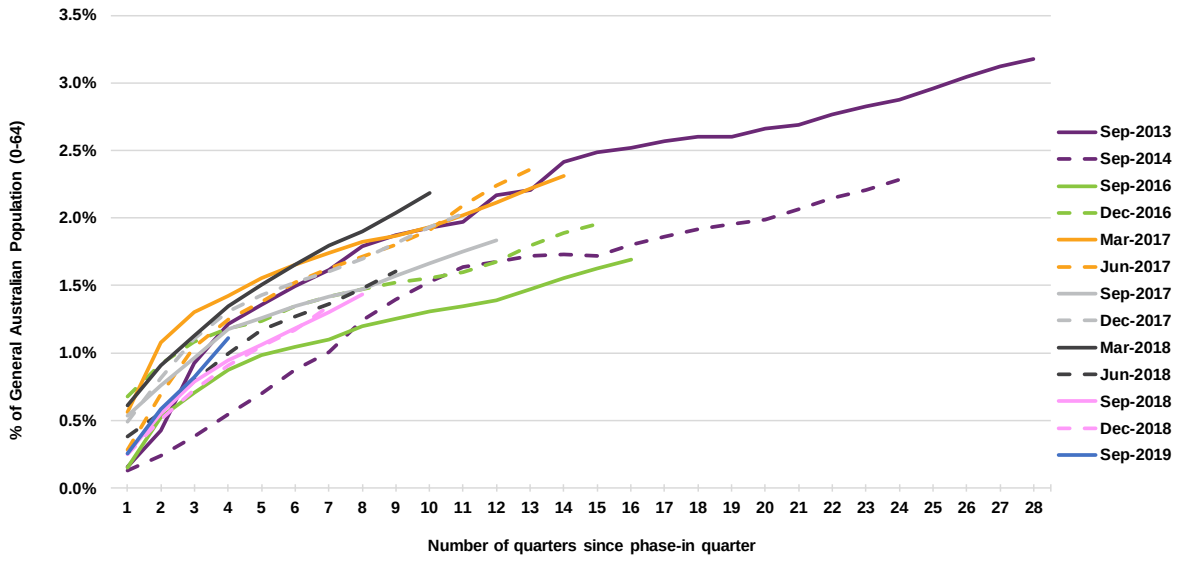
has been met. Partially offsetting this, adults over 25 years old are receiving plans in lower numbers than anticipated.

- A greater proportion of participants with autism, developmental delay and hearing impairment have entered the Scheme than previously expected, and a lower proportion with intellectual disability (graph iii). Since the introduction of the disability-specific participant pathway for people with a psychosocial disability, the proportion of participants with a psychosocial disability is now closer to expectations from the 2018-19 AFSR.
- There are more medium functioning participants than expected[50] (graph iv). As the intake of participants increasingly shifts to participants new to disability supports, the distribution is likely to become more skewed towards higher functioning participants.

Prevalence rates of mature regions are now exceeding benchmark levels

To allow for the different phase-in dates of regions, Figure 4 displays the rate of participant intake by phase-in quarter. The development curves show the proportion of active participants aged 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.

Figure 4 Participants as a proportion of Australian population since phase-in date – aged 0 to 64[51]



Generally, the participant intake patterns for the trial sites (purple lines) are different to those for the transition sites, reflecting the different phase-in timetables and approaches for the

[50] The Agency uses functional assessment scores to understand how a person's disability impacts their functioning in daily life. High, medium and low function is relative within the Scheme population and not comparable to the general population.

[51] Excludes jurisdictions which have phased participants in by age or other non-standard phasing patterns (for example, South Australia, Tasmania and Northern Territory), as these sites would bias these development charts and any chain ladder analysis.

trial period.[52] It is 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. Additionally, New South Wales, South Australia and Australian Capital Territory – the three states/territories with earlier phase-in dates – saw population increases over the past 12 months at levels well above expectations from the 2018-19 AFSR, as shown in Table 9. This supports the notion that prevalence appears to be continuing to increase, especially in the more mature sites.

It is difficult to opine on longer term prevalence given the prevalence has been increasing with little sign of flattening. There is therefore considerable subjectivity in the selection of assumptions within the population projection model. Assuming that some of the experience during 2019-20 has been attributable to a removal of existing backlogs within the access process and cessation of eligibility reassessments, there has been reduced weight placed on the recent 12 months of experience, with the adopted approach calibrated more heavily towards experience prior to 30 June 2019. However, there is a risk that the emerging experience represents the "new normal"' and future Scheme population levels could be significantly higher than projected in the 2019-20 AFSR model. This scenario is considered in Section 6.2 to assess the impact of experience continuing at current levels.

Table 9 Actual versus expected population by State/Territory (all ages)

State / Territory	Population at 30 June 2019	12-month increase in population				Population at 30 June 2020		
		Actual	Expected	AvE	AvE (%)	Actual	Expected	AvE (%)
NSW	**101,252**	**24,469**	**13,087**	**11,382**	**87%**	**125,721**	**114,339**	**10%**
VIC	75,825	30,322	23,116	7,206	31%	106,147	98,941	7%
QLD	49,013	23,349	24,133	-784	-3%	72,362	73,146	-1%
WA	16,269	15,867	13,397	2,470	18%	32,136	29,666	8%
SA	**27,892**	**7,553**	**5,601**	**1,952**	**35%**	**35,445**	**33,493**	**6%**
TAS	6,509	2,288	2,786	-498	-18%	8,797	9,295	-5%
ACT	**6,977**	**998**	**288**	**710**	**246%**	**7,975**	**7,265**	**10%**
NT	2,278	1,138	695	443	64%	3,416	2,973	15%
Total	**286,015**	**105,984**	**83,103**	**22,881**	**28%**	**391,999**	**369,118**	**6%**

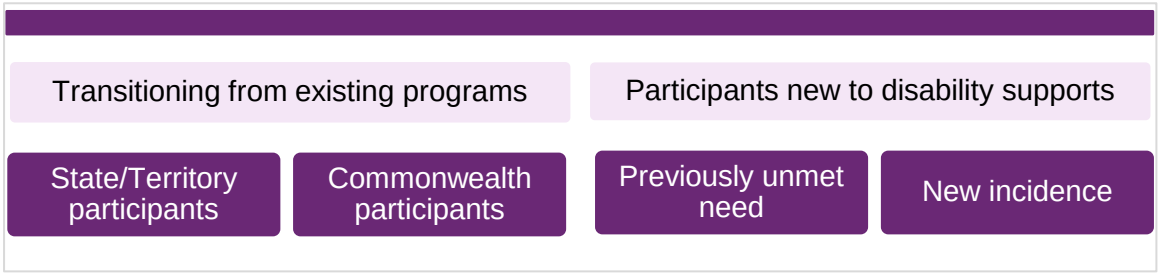
The 2018-19 AFSR indicated that there was not enough evidence to suggest that the emerging Scheme experience was significantly different to the 2011 Productivity Commission benchmark ("PC benchmark")[53]. However, the recent material increases in the prevalence rate in trial regions has led to the view that ultimate prevalence rates are likely to be higher than the benchmark.[54]

[52] For example, Barwon phased-in over an 18 month period.
[53] The benchmark figures were based on estimates of the need for assistance from the 2006 ABS Census of Population and Housing, and scaled to the original 2011 PC Scheme participant number costings.
[54] This is the case even though it is acknowledged that some of the recent experience likely represents a bringing forward of participant intake as backlogs in access, eligibility and initial plan development is prioritised by the Agency.

4.2 Participant intake

The different ways by which participants are accessing the Scheme are illustrated below.

Figure 5 Participant intake (or new entrant) groups



The process of transitioning participants from existing State/Territory and Commonwealth programs is largely complete, with about 2,000 participants per month currently entering the Scheme. Future participant intake is therefore more heavily weighted towards participants new to disability supports.

Projected intake by year

The number of participants from existing State/Territory and Commonwealth programs transitioning into the Scheme is expected to rapidly decrease from historical levels, along with the number of participants with existing disabilities but new to disability supports. At the Steady Intake Date, all participants with existing disabilities are assumed to have entered into the Scheme. This means participant intake from the Steady Intake Date onwards is captured wholly by new incidence of disability.

Table 10 shows the aggregate participant intake by projection year compared to the 2018-19 AFSR.

Participant intake in the 2020-21 year is now projected to be higher than expected from the 2018-19 AFSR by almost 10,000 participants. This is driven by the experience over the past 12 months, where the increase in participant numbers has been higher than expected. This elevated participant intake also occurred in the regions that phased into the Scheme earliest, such that the actual number of entrants in these early phasing regions is higher than the 2011 PC benchmark. As a result, the experience over the past 12 months does not appear to be just a timing issue and this is reflected in the increase in future population expectations within the modelling.

Table 10 Change in participant intake projections since 2018-19 AFSR[55]

Participant intake	Projection Year, to 30 June						
	2021	2022	2023	2024	2025	2030	2035
Projection - 2019-20 AFSR							
Children (0 to 14)	45,849	39,732	35,866	30,441	30,808	32,581	34,430
Young adults (15 to 24)	5,969	2,455	596	603	610	645	682
Adults (25 to 64)	21,697	13,743	8,938	9,051	9,160	9,687	10,237
Older adults (65+)	533	374	283	286	290	307	324
Total	**74,048**	**56,303**	**45,683**	**40,381**	**40,868**	**43,220**	**45,672**
Projection - 2018-19 AFSR							
Children (0 to 14)	31,078	34,693	30,109	27,451	27,768	29,325	30,923
Young adults (15 to 24)	4,796	4,150	2,745	631	638	674	710
Adults (25 to 64)	28,312	19,533	11,161	8,678	8,778	9,271	9,776
Older adults (65+)	0	0	0	0	0	0	0
Total	**64,186**	**58,377**	**44,016**	**36,759**	**37,184**	**39,270**	**41,409**
Difference							
Children (0 to 14)	14,771	5,039	5,757	2,991	3,041	3,256	3,506
Young adults (15 to 24)	1,173	-1,696	-2,149	-28	-28	-28	-28
Adults (25 to 64)	-6,615	-5,790	-2,223	373	381	416	461
Older adults (65+)	533	374	283	286	290	307	324
Total	**9,862**	**-2,073**	**1,668**	**3,622**	**3,684**	**3,951**	**4,263**

While the participant intake level from 2020-21 to 2022-23 varies due to the mix of participants (from existing programs, previously unmet need and new incidence), after 30 June 2023 the participant intake level is fairly steady given it wholly reflects new incidence assumptions. The mix of participants entering the Scheme compared to the 2018-19 AFSR is shown in the following table, while noting that the grouping of participants for projection purposes has been changed.

Table 11 Participant intake projections by grouping[56]

Participant intake	Projection Year, to 30 June						
	2021	2022	2023	2024	2025	2030	2035
Projection - 2019-20 AFSR							
State/Territory/Commonwealth	10,143	6,327	0				
Previously Unmet Need	24,995	10,611	5,805				
New Incidence	38,910	39,365	39,878	40,381	40,868	43,220	45,672
Total	**74,048**	**56,303**	**45,683**	**40,381**	**40,868**	**43,220**	**45,672**
Projection - 2018-19 AFSR							
State/Territory	16,845	12,937	10,466				
New/Commonwealth	47,341	45,440	33,549	36,759	37,184	39,270	41,409
Total	**64,186**	**58,377**	**44,016**	**36,759**	**37,184**	**39,270**	**41,409**
Difference							
Total	**9,862**	**-2,073**	**1,668**	**3,622**	**3,684**	**3,951**	**4,263**

[55] The participant intake numbers for 2018-19 and 2019-20 are not directly comparable, as there has been a change in projection methodology which removes an element of double counting in the 2018-19 participant intake compared to the 2019-20 participant intake. The change in methodology relates to how participants with a developmental delay transition to other disabilities as they age. For 2018-19, transitions from developmental delay to other disabilities (primarily autism and intellectual disability) were modelled by assuming that participants exited the Scheme and then re-entered the Scheme as new participant intake in other disabilities. For 2019-20, a transition model has been introduced and these same participants are now assumed to "transition" from developmental delay to either autism or intellectual disability. Thus, a like-for-like comparison is a better indication of the change in participant intake, and this is shown in Table 12.

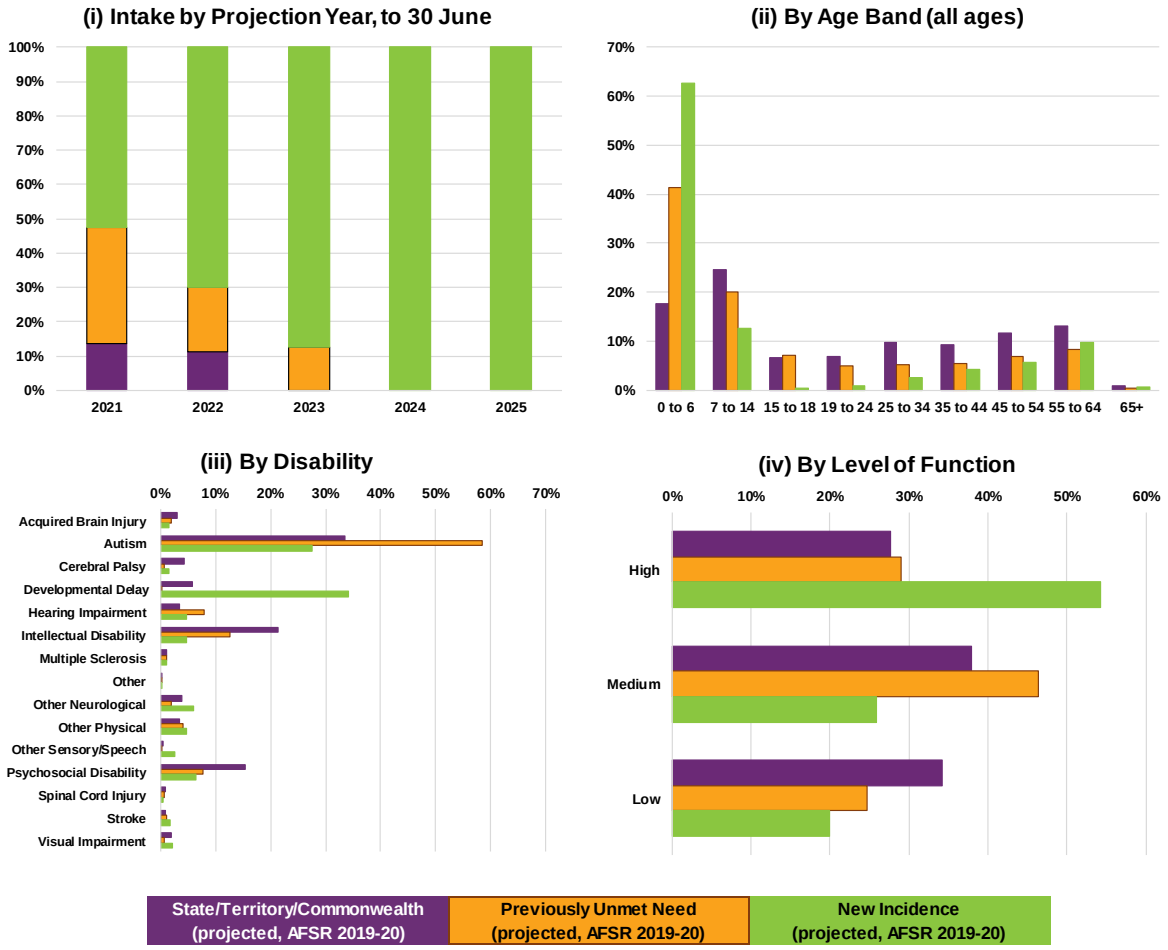
[56] The breakdown of projected participants by State/Territory and New/Commonwealth, shown here for the 2018-19 AFSR, has been estimated based on the projected number of State/Territory and New/Commonwealth participants as at 30 June 2023.

As with the 2018-19 AFSR, the distribution of participant intake is projected to shift rapidly from State/Territory and Commonwealth participants to participants new to disability supports, in particular new incidence, until the Steady Intake Date. For the 2019-20 AFSR, this effect is now more pronounced, with all State/Territory and Commonwealth participants expected to have entered the Scheme by 30 June 2022. Participant intake from State/Territory and Commonwealth programs is estimated to comprise about 14% of the overall intake in 2020-21, then decreasing to 11% of overall intake the next year. As participants new to disability supports are generally younger than participants from existing programs, this has partly driven the expected change in age profile towards younger ages, as discussed earlier.

Intake characteristics

The characteristics of the participant intake groups are very different and this is reflected in Figure 6**.** Participants who have transferred into the Scheme from existing programs are more likely to have high core support needs and/or live in SIL, while participants new to disability supports generally have disabilities requiring lower support levels.

Figure 6 Characteristics of different participant intake groups[57]



[57] In graphs ii, iii and iv, the overall distribution over the three years to 30 June 2023 is shown for 'Previously Unmet Need' after allowing for the transitions model.

Graph (i) reflects the changing mix of participant intake over the next three years to 30 June 2023.

The profile of projected participants differ depending on whether they enter the Scheme from State/Territory and Commonwealth programs, have previously unmet need or are new incidence. In particular:

1) the expected distributions for new incidence and previously unmet need are skewed much younger, especially towards the 0 to 6 age band;

2) there is a significantly greater proportion of new incidence participants with developmental delay compared to the other two groupings;

3) within previously unmet need, there is a significantly greater proportion of participants with autism, reflecting recently high numbers of children entering the Scheme with autism; and

4) new incidence participants are more likely to be higher functioning, while the functional distributions of the other two groupings are more medium functioning.

New incidence of disability

The prevalence rates of disability for New South Wales, Victoria, Australian Capital Territory and Queensland were used to derive an implicit new incidence rate.[58] The model developed for this analysis presumes that the prevalence rate for any age (say X) is equal to the prevalence rate at the previous age (X-1) plus the new incidence rate (for age X) minus the exit rate (again, for age X). From this relationship, a raw new incidence rate for each age can be calculated. An underlying assumption of this relationship is that the rate of onset for each disability and in total has stayed constant over time, while noting that this may not be true for some disabilities.

An investigation into the rate of participant intake for the most mature regions was also performed, with the intention of using this as a cross-check against the new incidence rates calculated using the above method. However, the analysis showed elevated levels of participant intake which indicated that intake continues to represent both new incidence and intake from people with existing disabilities who are new to funded supports. This approach was therefore deemed inappropriate to use for the purpose of either checking or calibrating the new incidence rates.

Note that the new incidence model explicitly uses projected population growth for ages 0 to 64 to estimate the level of new incidence in each projection year after 2020-21. After adopting a lower starting general population number at 30 June 2020 compared to the 2018-19 AFSR, the growth rates have been revised downwards for the next two years due to the expected slowdown in net migration (resulting from the current economic downturn). The

[58] The methodology does not work for regions that phased by age. Hence, South Australia and Tasmania were excluded from the analysis, and the assumption that participants aged 0 to 18 entered with the rest of the population was made for Nepean Blue Mountains and Townsville.

growth rates thereafter are slightly higher than the 2018-19 AFSR due to the higher implied population growth rates from the latest ABS population projections, published in November 2018.

Australian population projection are, on balance, lower than the 2018-19 AFSR

The Australian population projections and population growth rate assumptions used in the prevalence rate calculations have been updated since the 2018-19 AFSR, which were based wholly on the previous ABS projections published in November 2013. For the 2019-20 AFSR, there have been three key changes.

1) First, the estimated residential population (ERP) figures as at 30 June 2019, released by the ABS[59], were adopted. The actual population as at 30 June 2019 was 25.4 million, which is slightly lower than the previous ABS projection of 25.6 million in the 2013 publication[60].

2) Then, the projected population growth rates (implied from the latest ABS population projections published in November 2018[61]) were applied to the ERP as at 30 June 2019, to estimate the population in each projection year (as at 30 June 2020 onwards). Note that the implied population growth rates from the latest 2018 publication are slightly higher than the previous 2013 publication.

3) Lastly, adjustments were made to allow for the current pandemic conditions and expected future economic recovery. The RBA assumed that growth in the population aged 15 years and over would slow considerably over the next year owing to the closure of national borders, before picking up to be 1.5% over the year to 30 June 2022[62].

Figure 7 shows the projected prevalence of all participants in the Scheme for New South Wales, Victoria, Australian Capital Territory and Queensland.[63] The solid lines show the projected Scheme disability prevalence using data to 31 December 2019 while the dashed lines show the equivalent projected prevalence used in the 2018-19 AFSR. The purple line shows results for males, the green line for females and the orange line shows the combined result.

There has been an increase in the total projected prevalence for people aged 0 to 64 since the 2018-19 AFSR. In the regions considered, it is estimated that 2.30% of the general population aged 0 to 64 have a disability and are eligible for the Scheme.[64] This compares to 2.01% of the general population aged 0 to 64 projected in the 2018-19 AFSR.

[59] Table 59, '*3101.0 – Australian Demographic Statistics, Dec 2019'* released 18 June 2020.
[60] Table B9, '*3222.0 – Population Projections, Australia, 2012 (base) to 2101'* released 26 November 2013.
[61] Table B9, '*3222.0 – Population Projections, Australia, 2017 (base) – 2066'* released 22 November 2018.
[62] https://rba.gov.au/publications/smp/2020/may/economic-outlook.html, retrieved 19 June 2020.
[63] The prevalence has been calculated based on existing participants with an additional allowance for the expected number of participants yet to phase into New South Wales, Victoria, Australian Capital Territory and Queensland.
[64] Note that this is a different cohort of participants to that presented in other tables and figures in this section, and hence the projected prevalence is slightly different.

Figure 7 Projected prevalence by age (all disabilities, ages 0 to 64)

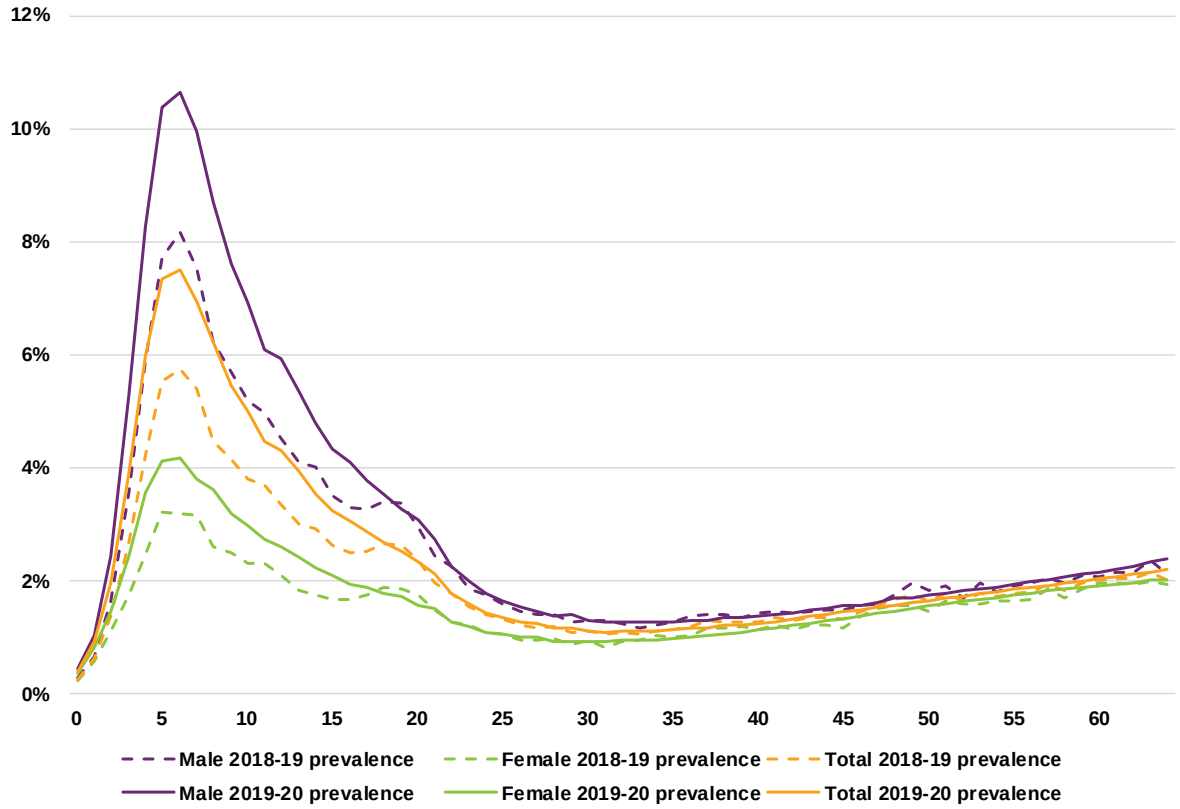


Table 12 shows the change in new incidence assumptions by disability adopted in the participant projections.

Increases in new incidence rates of development delay and autism are significant

The 2019-20 new incidence rates have been adopted based on emerging experience. Due to the higher level of participant intake in the past 12 months, projections of prevalence have increased, leading to the calculation of higher new incidence rates. The age profile of recent participant intake has also skewed younger towards children, a cohort more commonly associated with developmental delay and autism. This results in a greater increase in the new incidence rates for these disabilities, which has been reflected in the participant projections from 30 June 2023 onwards.

A child who has a "developmental delay" can access the Scheme relatively easily under the current wording of the early intervention requirements (Section 25) of the *National Disability Insurance Act 2013.* This is because developmental delay is very loosely defined, and without a change in legislation and more specific definition in operational guidelines, elevated participant intake levels could continue further.

Thus, the overall increase in new incidence rates for the 2019-20 AFSR is primarily attributed to an increase in the new incidence rates of participants with developmental delay and autism.

Table 12 New incidence rate of disability (per 100,000 population) assumed

Disability Type	2018-19 Incidence	2019-20 Incidence before transitions model	Transitions	2019-20 Incidence after transitions model	Overall difference	Overall difference (%)
	(1)	(2)	(3)	(4) = (2) + (3)	(4) - (1)	(4) / (1) - 1
Acquired Brain Injury	4.2	4.0		4.0	-0.1	-3%
Autism	46.8	48.6	22.3	70.9	24.2	52%
Cerebral Palsy	3.2	2.6		2.6	-0.6	-18%
Developmental Delay	23.1	60.5	-25.7	34.8	11.7	51%
Hearing Impairment	6.1	8.3		8.3	2.2	36%
Intellectual Disability	12.8	8.2	3.4	11.6	-1.3	-10%
Multiple Sclerosis	2.5	2.2		2.2	-0.3	-13%
Other Neurological	10.2	10.2		10.2	0.0	0%
Other Physical	8.0	8.3		8.3	0.3	3%
Other Sensory / Speech	7.0	4.5		4.5	-2.5	-36%
Psychosocial Disability	10.2	11.5		11.5	1.4	13%
Spinal Cord Injury	1.5	1.5		1.5	0.0	0%
Stroke	2.8	2.9		2.9	0.2	5%
Visual Impairment	4.0	3.9		3.9	-0.2	-4%
Total	**142.3**	**177.1**	**0.0**	**177.1**	**34.9**	**24%**

In the 2018-19 incidence model, participants who had presented to the Scheme with developmental delay and later transitioned to autism or intellectual disability (once a diagnosis is confirmed) were counted as new incidence twice – once within developmental delay, and again in either autism or intellectual disability. These participants are now captured only once in the new incidence rates (shown in column (1) in the table above).

Column (2) shows that 60.5 people per 100,000 population are expected to present to the Scheme with developmental delay. However, 25.7 would have a diagnosis confirmed sometime after being in the Scheme, with some receiving a diagnosis of autism or intellectual disability. The 25.7 people would be reflected in autism and intellectual disability in column (4) of the above table, and not in developmental delay.

The implied new incidence rates have increased since the 2018-19 AFSR by 24% from 142.3 people per 100,000 population to 177.1.

4.3 Participant exits

Participants may exit the Scheme for various reasons and are grouped into the following categories for projection purposes.

- **Mortality exits:** represent those participants who have died.
- **Non-mortality exits:** represent those participants who had their eligibility revoked by the Agency, have chosen to leave the Scheme of their own accord, or have moved into the aged care system if over the age of 65.

Within the context of financial sustainability, it is important to understand the emerging exits experience of participants. With regards to non-mortality exits, only participants who continue to meet the access criteria of the NDIS Act should continue to receive individualised funding.

Recent exit experience

Over the past 18 months, mortality exits have trended above expectations while non-mortality exit rates were significantly below expectations due to the temporary cessation of the eligibility reassessment process from February 2019. Although the eligibility reassessment process recommenced in March 2020, progress has been slow and Agency-initiated exits are not expected to be in full swing until late 2020.[65] This will be discussed later.

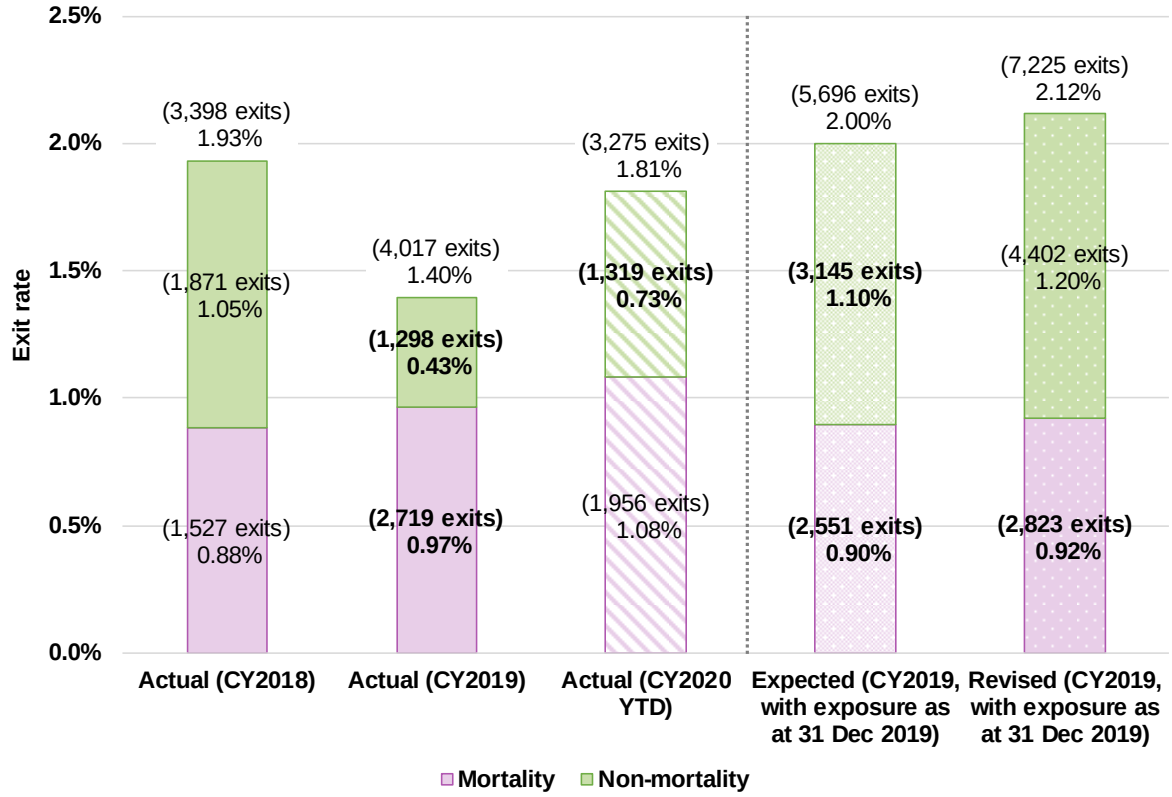
Figure 8 shows how the exit experience in the 2018 and 2019 calendar years, as well as the 2020 year to date, compares to expectations from the 2018-19 AFSR.[66]

For CY2019, the actual mortality exit rate was 0.97% compared to the 0.90% previously expected. Overall, mortality assumptions were revised upwards (from an expected mortality exit rate of 0.90% to a revised 0.92%) to reflect recent experience. This is partly due to a manual data matching process to the Registry of Births, Deaths and Marriages data, as well as significant restructuring in the formatting of internal data sources and data cleansing as a result of individual file reviews. If this experience continues, the mortality assumptions may need to be revised upwards for the 2020-21 AFSR.

The non-mortality exit rate in CY2019 (0.43%) was lower than expected (1.10%) while the eligibility reassessment strategy was under review and redeveloped, and remains low for the CY2020 YTD (0.73%).

[65] In the months of June and July, the eligibility reassessment team has processed only 12 and six exits respectively due to limited staffing resources.
[66] Changes in the projected participant profile at the Scheme level from the 2018-19 AFSR model to this 2019-20 AFSR model would have changed the overall exit rates slightly since the 2018-19 AFSR.

Figure 8 Actual versus expected – mortality and non-mortality exit rate[67]



Modelling mortality exit rates

An experience-based model was used to project mortality exits from the Scheme, drawing on the experience during the 2019 calendar year. For the modelling, actual experience has been explicitly allowed for in the mortality model through a credibility approach, applied at the gender, level of function and primary disability level, and then distributed at the age group level based on exposure. The credibility approach means there is now more transparency and rigour around the allowance of emerging experience in selected assumptions. Participant groups that have had more mortality exits and exposure years will have a higher credibility factor applied to their actual experience over the most recent calendar year. It is worth bearing in mind that some disability types have relatively low exposure and little exits experience, and some participant groups also have exposure levels which were too sparse to be utilised in revising assumptions.

Mortality rates generally increase with age (after the age of 7). To allow for the experience of CY2019, where actual mortality exit rates were above expectations across all age groups, the adopted rates were revised upwards for the 2019-20 AFSR.[68] This was particularly the case for participants over 65, whose mortality exit rate increased from 3.43% in CY2018 to

[67] In this chart 'Expected' refers to the exits expected to have occurred by applying the exit assumptions in the 2018-19 AFSR, while 'Revised' refers to exits expected to have occurred by applying the newly revised exit assumptions for the 2019-20 AFSR model.
[68] Note that there has been a change in the projected participant profile since the 2018-19 AFSR model, which has decreased the overall revised rates for ages 0 to 6 and 7 to 14 slightly.

4.79% in CY2019. Since then, overall mortality rates in the CY2020 YTD have increased to 1.08%, and this is mainly driven by experience for participants aged 35 and over.

Modelling non-mortality exit rates

Non-mortality rates are expected to be higher at younger ages, reflecting early intervention exits, and for participants over the age of 65, as they exit the Scheme into the aged care system. Non-mortality exit rates are also highest for those disabilities with the greatest proportion of participants entering the Scheme through the early intervention requirement (Section 25 of the Act). This includes participants with developmental delay, global developmental delay and those with an "other sensory/speech" disability (most typically children).

The cessation of the eligibility reassessment process meant that the non-mortality exit data in the 2019 calendar year could not be relied upon to form a view on future non-mortality exit experience. As a result, the adopted non-mortality assumptions for all disability types, except developmental delay, were unchanged from the 2018-19 AFSR. This implicitly assumes that Agency-initiated exits will recommence at similar levels to that seen in CY2018. Exit assumptions for participants with developmental delay under the age of 14 have been revised upwards to better reflect the experience of single ages from 0 to 14.[69] This, and the implementation of a transition model, is the key driver of the increased overall non-morality exit rate (from 1.10% to 1.20%).[70]

There remains a high level of uncertainty around the projected level of non-mortality exits, as this will be dependent on the operational implementation of the Agency's eligibility reassessment policy. If inadequate non-mortality exits are achieved, the Scheme population will grow significantly in the longer term and the Scheme risks creating a reliance of funded supports for more highly functioning participants, contrary to Scheme insurance principles.

Note that the non-mortality exit model allows for participants' duration in the Scheme. Non-mortality experience is expected to vary by duration, with relatively low exits expected in the first year that a participant is in the Scheme. As a result, non-mortality exit rates are selected based on participants who have been in the Scheme for more than a year and exited, with a separate non-mortality exit rate assumption selected for participants exiting within a year of entering the Scheme. This is set at 20% of the exit rates for participants in the Scheme for more than a year, based on experience observed in the 2018 calendar year.

[69] The model uses two broad age groups for the selection of non-mortality exit rates for children – 0 to 6 and 7 to 14 years. For developmental delay, however, the actual non-mortality exit experience has varied greatly between single ages. In addition, actual non-mortality experience for single ages 6 to 13 in CY2018 were materially higher than expected for participants with developmental delay who had been in the Scheme for at least a year before exiting. The previously adopted rates for ages 0 to 5 were overstated, while adopted rates for ages 6 to 13 were understated.

[70] Changes in the projected participant profile since the 2018-19 AFSR model have also shifted the overall revised rates for some age groups slightly compared to the expected rates.

Allowance for transitions between different disability types over time

The allowance for transitions between disability types decreases the number of non-mortality exits within the population projections. The number of non-mortality exits were previously overstated because the 2018-19 AFSR model assumed participants with developmental delay (who later received a diagnosis after some time in the Scheme) left the Scheme and then re-entered as new entrants with either autism or intellectual disability. The following table shows the impact of this adjustment to the modelling approach on non-mortality exit rates.

Table 13 Impact of allowing for transitions on non-mortality exit rates

Age Band	Projection Year						
	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30	2034-35
Average non-mortality exit rate - before transitions (a)							
0 to 6	2.8%	4.1%	4.1%	4.3%	4.5%	4.6%	4.6%
7 to 14	2.5%	3.6%	4.2%	4.5%	4.9%	5.6%	5.4%
15 to 64	0.7%	0.8%	0.9%	0.9%	0.9%	1.0%	1.1%
65+	2.4%	2.7%	2.7%	2.7%	2.8%	2.8%	2.8%
Total	**1.5%**	**2.1%**	**2.4%**	**2.5%**	**2.7%**	**2.9%**	**2.8%**
Total (0-64)	1.5%	2.1%	2.3%	2.5%	2.7%	2.9%	2.8%
Average non-mortality exit rate - after transitions (b)							
0 to 6	2.8%	3.6%	3.4%	3.4%	3.7%	3.9%	3.9%
7 to 14	2.5%	2.6%	2.5%	2.4%	2.4%	2.4%	2.5%
15 to 64	0.7%	0.8%	0.9%	0.9%	0.9%	1.0%	1.1%
65+	2.4%	2.7%	2.7%	2.7%	2.8%	2.8%	2.8%
Total	**1.5%**	**1.8%**	**1.8%**	**1.8%**	**1.9%**	**1.9%**	**1.9%**
Total (0-64)	1.5%	1.8%	1.8%	1.8%	1.8%	1.9%	1.8%
% point change (from table a to b)							
0 to 6	0.0%	-0.5%	-0.7%	-0.9%	-0.8%	-0.7%	-0.7%
7 to 14	0.0%	-0.9%	-1.6%	-2.1%	-2.5%	-3.2%	-3.0%
15 to 64	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
65+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	**0.0%**	**-0.3%**	**-0.5%**	**-0.7%**	**-0.8%**	**-1.0%**	**-0.9%**
Total (0-64)	0.0%	-0.3%	-0.6%	-0.7%	-0.9%	-1.1%	-1.0%

In 2021-22, the expected non-mortality exit rate decreased by 0.3% points (from 2.1% to 1.8%). The expected non-mortality exit rate decreases by a greater amount with each projection year, until the decrease is 1.0% point (from 2.9% to 1.9%) in 2029-30.

4.4 Supported independent living

Currently, the increasing number of participants in SIL is mainly due to existing participants moving to SIL arrangements (representing previous unmet need) and, to a lesser extent, new entrants with SIL arrangements in place transferring from existing programs into the Scheme.[71]

Overall, 6.2% of Scheme participants are currently in SIL. The proportion of participants in SIL differs for those participants transitioning from existing State/Territory and Commonwealth programs compared with participants new to disability supports. State/Territory and Commonwealth participants generally have higher support needs, with

[71] This is because most participants from existing programs are now in the Scheme.

the table below also showing a higher proportion in SIL (10.4%) compared to participants new to disability supports (0.9%).

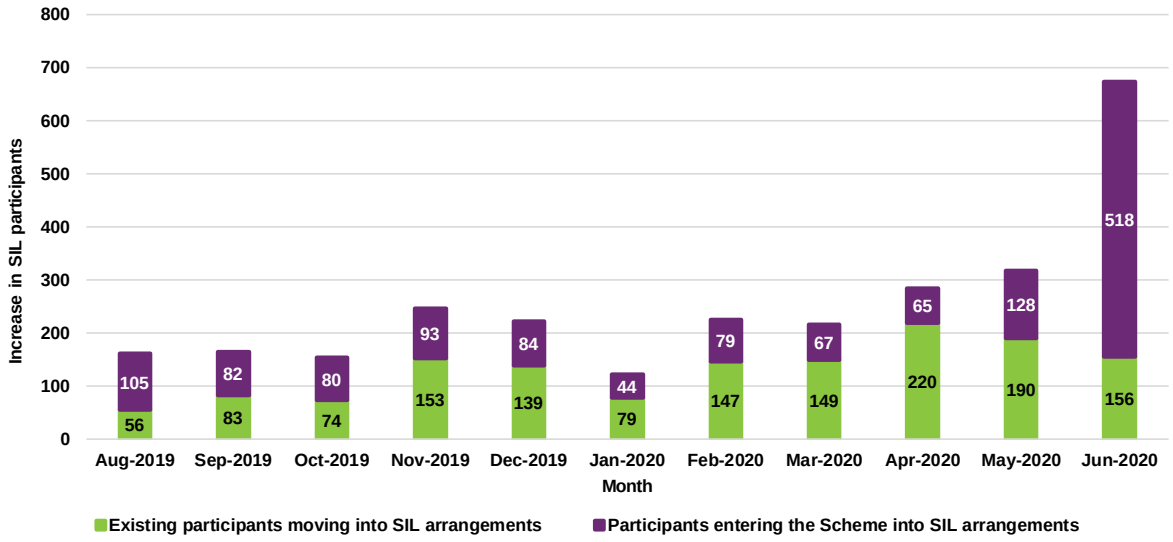
Table 14 Number and proportion of participants in SIL as at 30 June 2020

Entry Type	Number of SIL participants	Number of Scheme participants	% of SIL participants
State/Territory and Commonwealth	22,510	216,431	10.4%
Participants new to disability supports	1,609	175,568	0.9%
Total	**24,119**	**391,999**	**6.2%**

Future participants entering the Scheme to the Steady Intake Date are expected to primarily be participants new to disability supports. Thus, the above analysis suggests a smaller proportion of new SIL participants expected over the medium term.

The following figure shows that while the number of existing participants moving to SIL arrangements has increased in recent months, there were a large number of new entrants into the Scheme with a SIL arrangement in the month of June 2020.

Figure 9 Monthly increase in SIL participants

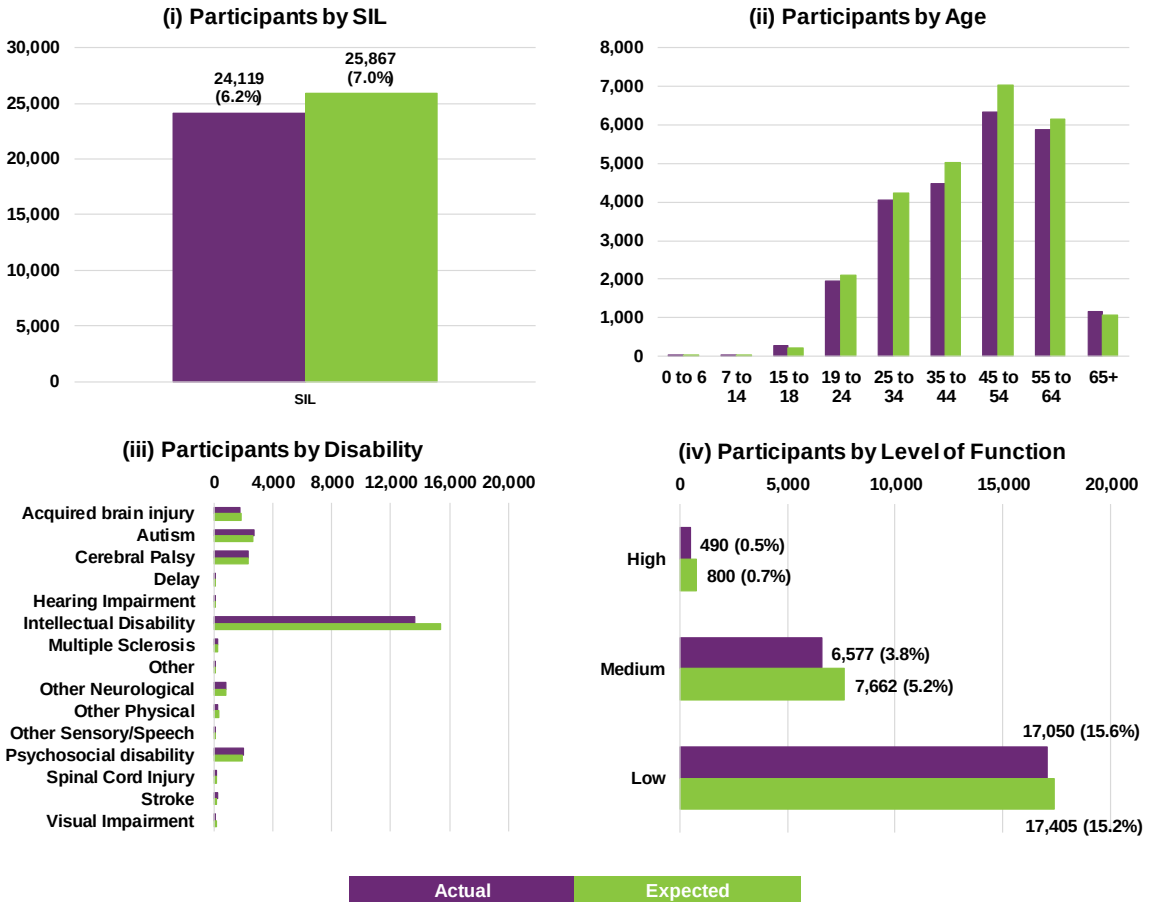


This is mainly due to State/Territory participants from Western Australia; however, this appears to be a one-off instance, as there are currently only another 200 State/Territory participants (who appear to be in SIL arrangements) from Western Australia in the process of transitioning into the Scheme.

Profile and characteristics of SIL participants

The following figure compares the actual number and proportion of participants with SIL arrangements as at 30 June 2020 against expectations by various participant characteristics.

Figure 10 Profile of participants in SIL as at 30 June 2020 – actual versus expected[72]



Insights on participants in SIL arrangements based on this experience are as follows:

- The number of participants in SIL arrangements has been lower than expected, with 6.2% of participants currently in SIL arrangements compared to the 7.0% expected. This experience has been influenced by fewer SIL participants transitioning into the Scheme or transferring into SIL over 2019-20.
- The number of participants in SIL arrangements has been lower than expected across the majority of disability types, with the exception of participants with stroke, psychosocial disability and autism. The number of SIL participants with an intellectual disability continues to account for the majority of the participants in SIL arrangements.[73]
- Although there are fewer SIL participants with a low level of function than expected, the proportion of participants with a low level of function who are in SIL (15.6%) is tracking close to expectations (15.2%). Interestingly, some participants previously classified as SIL with high or moderate function appear to have been reclassified as

[72] The expected numbers have been taken from the 2018-19 AFSR. The percentage shown in brackets (after each of the numbers) is the percentage of all participants in each category who are in SIL arrangements.
[73] About 57% of all SIL Scheme participants have an intellectual disability and 16% of participants with an intellectual disability are in SIL arrangements as at 30 June 2020.

having a low level of function since 30 June 2019; this increases Scheme costs and is possibly evidence of instances of poor outcomes, poor quality supporting information and/or initial functional assessment.

- There continue to be a material number of participants in SIL arrangements who have a high to medium level of function (7,067). This may be a legacy issue from the previous disability system and may mean that there is an opportunity over the medium to longer term for the Scheme to assist in building up the capacity of these participants to live independently, or to move to lower cost Individual Living Options (ILOs) alternatives, if provided with the right supports. Alternatively, other lower cost innovative accommodation arrangements may emerge over time within the Scheme.
- The majority of participants are aged 25 and above, similar to expectations, with about 13% of all participants over the age of 25 in SIL arrangements.

Unmet need

Over time, there will be an increasing number of participants in SIL. Previously this increase was due to participants already in SIL entering the Scheme, while in the future this will more commonly be due to existing participants moving into SIL. This represents the 'unmet need' of current or potential participants who may need SIL or may benefit from interim SIL to build capacity. It is worth noting while participants requiring SIL arrangement may increase, the Scheme should develop and adopt more cost-effective solutions over time, similar to ILOs.

Internal analyses have been undertaken to understand the potential unmet need and form a long-term view of SIL participants in the Scheme. A long-term assumption of almost 6% of Scheme participants in SIL arrangements has been adopted. However, there is a considerable degree of uncertainty around the projection of the number of SIL participants in the Scheme. It is unclear the degree to which the supply of appropriate accommodation will become available. There are some existing Scheme funding incentives for more disability-centric accommodation to be constructed over this duration and some evidence of new accommodation being built over the shorter term.

A time horizon of 10 years has been adopted to reflect the time needed for the Scheme to adequately address the unmet need, again noting uncertainty around this timeframe. Section 6.2 contains some scenario analysis which explores different levels of unmet need which may also reflect alternative projection scenarios.

Projected SIL participant numbers

The key assumptions used to project SIL participant numbers reflects two themes:

- More participants new to disability supports are expected to enter the Scheme, compared to participants from existing programs, over the medium term.
- Addressing the unmet need of current or potential participants who may need or may benefit from SIL arrangements, over the medium to long term.

The assumptions vary by disability type and level of function. Higher percentages of SIL participants are adopted for lower functioning groups, and percentages vary reasonably significantly by disability.

4.5 Scheme population projections

Overall, projected prevalence for ages 0 to 64 has increased by 0.16% points since the 2018-19 AFSR (which adopted the PC benchmark) to the current estimate of 2.27% as at 30 June 2023. The following table shows how the projected prevalence rate varies by State/Territory.

Table 15 PC Benchmark and projected prevalence by State/Territory (aged 0 to 64)

Prevalence item	By State/Territory								
	NSW	VIC	QLD	SA	NT	ACT	WA	TAS	Total
PC Benchmark	2.12%	2.02%	2.33%	2.51%	1.51%	1.93%	1.58%	2.85%	**2.11%**
Projected	2.06%	2.41%	2.24%	2.95%	2.10%	2.07%	2.23%	2.57%	**2.27%**
Difference	-0.06%	0.38%	-0.09%	0.44%	0.60%	0.14%	0.64%	-0.27%	**0.16%**

The key drivers of the increase are the projected prevalence rates for children, autism and developmental delay, as illustrated in Table 16. This table compares the projected prevalence of the main disability categories to previous AFSRs as at 30 June 2023.

Table 16 Prevalence profile of participants at Steady Intake Date (30 June 2023)

Projected prevalence as at 30 June 2023	AFSR			
Category	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Autism[1]	0.41%	0.55%	0.65%	0.87%
Developmental delay / global developmental delay[1]	(0.73%)*	0.15%	0.17%	0.20%
Intellectual disability		0.56%	0.48%	0.44%
Sensory disabilities	0.13%	0.17%	0.17%	0.18%
Psychosocial disability[2]	0.34%	0.25%	0.20%	0.20%
Other children	0.08%	0.09%	0.08%	0.07%
Other adults	0.42%	0.35%	0.35%	0.31%
Total (0 to 64)	**2.10%**	**2.11%**	**2.11%**	**2.27%**
Child Prevalence (0 to 18)	2.63%	3.24%	3.51%	4.39%
Adult Prevalence (19 to 64)	1.89%	1.66%	1.55%	1.45%

Notes:

1. Primarily children
2. Primarily adults

* Developmental delay/global developmental delay (DD/GDD) was implicitly included in intellectual disability in the 2016-17 FSR.

Prevalence of autism and developmental delay in children is expected to increase

The prevalence of disability in children continues to rise, increasing from 3.51% to 4.39% since the 2018-19 AFSR, thereby increasing the number of children expected to enter the Scheme in future. This is partially offset by lower prevalence rates for adults (from 1.55% to 1.45%); the age profile of participant intake will thus shift towards children. The disability profile is thus expected to skew towards disability types more prominent in children, in particular autism and developmental delay. Consequently, the prevalence of autism has increased from 0.65% to 0.87%, and from 0.17% to 0.20% for developmental delay.

The Agency is considering reviewing the Scheme's access and planning process, which may change the new incidence of autism. Under current processes, the prevalence of autism in the Scheme is expected to increase, such that about 45% of participants are projected to have autism as their primary disability by 30 June 2035. In general, a better understanding of the experience of children with autism in the Scheme would help the Agency reflect on its access and eligibility reassessment processes for this group.

Classification lists for eligibility were implemented during the transition period

In the legislation, a functional assessment is required for entry into the Scheme. To accelerate access decisions during the transition period of the Scheme (from 1 July 2016 to 30 June 2020), five classification lists were introduced, thereby automatically allowing some participants to be eligible for the Scheme based on diagnosis (lists A, B and D) or pre-existing, defined programs (lists C and E).

Participants with a primary disability of autism are considered to have met the disability requirements to be accepted into the Scheme, without needing further assessment or additional evidence of disability, if they have a DSM-5 score of 2 or 3 (i.e. are on 'List A') or they entered through defined programs.

These participants will not have had an independent assessment undertaken by the Scheme to verify the data provided for these participants. However, as the diagnosis can be performed by a number of allied health providers, this process may not be the most comprehensive or rational approach to determining access to the Scheme. If autism was removed from List A, participants would require further assessment to be determined eligible, providing more consistency and rigour to the access request process. Participants with autism entering from non-defined programs and/or are new to disability supports would be affected. Since the start of the transition period, 48.4% of all participants with autism aged 0 to 64 recorded a 'List A' diagnosis.

Population by projection year

The extrapolation of the trends seen in trial regions is reflected in the increase in projected participant numbers in the Scheme across all phasing regions, and subsequently all future years as shown in Table 17.

Table 17 Change in projected participant numbers by age band

Number of participants	As at 30 June							
	2020	2021	2022	2023	2024	2025	2030	2035
Projection - 2019-20 AFSR								
Children (0 to 14)	159,796	192,684	215,377	232,816	243,284	252,827	285,943	297,223
Young adults (15 to 24)	62,343	71,904	79,440	85,122	91,334	97,811	139,489	187,598
Adults (25 to 64)	158,384	175,971	185,153	189,730	194,556	199,781	229,128	274,428
Older adults (65+)	11,476	15,783	20,209	24,604	28,940	33,080	50,977	63,437
Total	**391,999**	**456,343**	**500,179**	**532,271**	**558,114**	**583,500**	**705,538**	**822,686**
Projection - 2018-19 AFSR								
Children (0 to 14)	135,558	154,907	175,654	190,265	200,815	209,417	229,350	241,918
Young adults (15 to 24)	57,937	65,487	72,736	78,815	82,999	87,913	118,175	142,926
Adults (25 to 64)	165,716	189,424	203,501	208,858	211,967	215,014	238,111	269,787
Older adults (65+)	9,907	14,071	18,724	23,554	27,943	32,272	51,008	64,457
Total	**369,118**	**423,889**	**470,615**	**501,491**	**523,723**	**544,617**	**636,645**	**719,088**
Difference								
Children (0 to 14)	24,238	37,777	39,723	42,551	42,469	43,410	56,593	55,305
Young adults (15 to 24)	4,406	6,418	6,705	6,307	8,335	9,898	21,314	44,671
Adults (25 to 64)	-7,332	-13,453	-18,348	-19,128	-17,411	-15,233	-8,983	4,641
Older adults (65+)	1,569	1,713	1,484	1,050	997	808	-30	-1,020
Total	**22,881**	**32,454**	**29,564**	**30,780**	**34,391**	**38,883**	**68,894**	**103,598**

In the coming years, more children (aged 0 to 14) are expected to enter the Scheme compared to the 2018-19 AFSR, partially offset by fewer adults (aged 25 to 64). For example, as at 30 June 2021, about 32,000 more participants are now expected compared to the 2018-19 AFSR. This is mainly driven by an additional 38,000 children and 6,000 young adults entering the Scheme, partially offset by 13,000 fewer adults aged 25 to 64.

At 30 June 2030 there are about 69,000 additional participants expected. This increase is driven by more children as well as more young adults (aged 15 to 24), as the child participant intake (from earlier years) age into older age bands. The increase is also reflective of increased new incidence assumptions, particularly for children with autism and developmental delay.

At 30 June 2035, there are about 104,000 additional participants, with more participants expected across all age groups under 65. Fewer older adults over 65 is reflective of the higher mortality rates adopted in the 2019-20 AFSR, as was discussed in Section 4.3.

Table 18 has the same projections split by disability group.

Table 18 Change in projected participant numbers by disability group[74]

Number of participants	As at 30 June							
	2020	2021	2022	2023	2024	2025	2030	2035
Projection - 2019-20 AFSR								
Autism	122,830	152,493	175,610	194,980	209,505	224,209	298,706	373,259
Intellectual Disability	84,769	92,662	97,925	101,228	103,797	106,433	120,096	133,637
Psychosocial Disability	37,795	43,795	47,122	48,744	50,331	51,893	59,306	66,067
Developmental Delay	34,451	39,376	42,316	44,581	46,452	47,838	51,478	54,449
Sensory	30,632	36,775	40,395	42,745	44,986	47,145	56,896	65,373
Other	81,522	91,242	96,811	99,993	103,043	105,982	119,056	129,900
Total	**391,999**	**456,343**	**500,179**	**532,271**	**558,114**	**583,500**	**705,538**	**822,686**
Total (Ex Autism)	**269,169**	**303,850**	**324,569**	**337,291**	**348,609**	**359,291**	**406,832**	**449,427**
Projection - 2018-19 AFSR								
Autism	104,417	119,863	135,674	148,015	157,579	167,132	214,839	262,273
Intellectual Disability	89,661	99,507	107,895	113,258	114,668	116,034	122,679	129,112
Psychosocial Disability	36,603	43,401	47,721	49,257	50,559	51,834	57,831	63,183
Developmental Delay	22,223	26,473	32,212	37,533	42,398	46,169	55,691	60,379
Sensory	29,336	34,801	39,257	41,540	43,740	45,867	55,289	62,943
Other	86,877	99,844	107,856	111,887	114,780	117,581	130,315	141,197
Total	**369,118**	**423,889**	**470,615**	**501,491**	**523,723**	**544,617**	**636,645**	**719,088**
Total (Ex Autism)	**264,700**	**304,025**	**334,941**	**353,476**	**366,144**	**377,485**	**421,805**	**456,814**
Difference								
Autism	18,413	32,629	39,936	46,965	51,926	57,077	83,867	110,985
Intellectual Disability	-4,892	-6,844	-9,970	-12,030	-10,871	-9,602	-2,583	4,525
Psychosocial Disability	1,192	395	-599	-513	-228	59	1,475	2,884
Developmental Delay	12,228	12,903	10,104	7,048	4,055	1,669	-4,213	-5,930
Sensory	1,296	1,974	1,138	1,205	1,246	1,279	1,607	2,430
Other	-5,355	-8,602	-11,045	-11,894	-11,737	-11,599	-11,259	-11,296
Total	**22,881**	**32,454**	**29,564**	**30,780**	**34,391**	**38,883**	**68,894**	**103,598**
Total (Ex Autism)	**4,469**	**-175**	**-10,372**	**-16,184**	**-17,535**	**-18,194**	**-14,973**	**-7,387**

Increasing prevalence of autism is the key driver of the higher projections

The increase in projected participant numbers is mainly attributable to increasing numbers of participants with autism. The trajectory is consistent with the increasing trends seen in successive Surveys of Disability, Caring and Ageing (released by the ABS) but projected to increase at a faster rate.

By 30 June 2030, almost 300,000 participants with autism are expected in the Scheme, accounting for over 40% of Scheme participants. By 30 June 2035, more than 373,000 participants with autism are expected in the Scheme, accounting for over 45% of Scheme participants.

Excluding autism, there is relatively little change (at an aggregate level) of the population projections compared to the 2018-19 AFSR. There have been some decreases in the projected number of participants with intellectual disability up to 30 June 2030, although there may be a substitution effect over time between the classification of participants with

[74] 'Sensory' disabilities include hearing impairment, visual impairment and other sensory/speech disabilities.
'Other' disabilities include acquired brain injury, cerebral palsy, multiple sclerosis, other neurological, other physical, spinal cord injury and stroke.

autism and intellectual disability. In addition, the guidelines for the diagnosis of people with autism have evolved in recent years, leading to relatively few older participants classified as having autism. Nonetheless, the combined impact is an increase in projected participants with either autism or an intellectual disability.

An allowance for transitions from developmental delay has been made

A transition model has been implemented in this AFSR, which explicitly allows for participants with developmental delay later receiving a diagnosis of another disability type. This usually takes place between the ages of 5 to 8, reflective of the Agency's operational guideline in reviewing participants with developmental delay at age 7.

As shown in Table 19, as at 30 June 2021, 14.9% of participants with developmental delay are projected to receive a diagnosis and move to another disability type each year. This proportion is expected to become 15.7% by 30 June 2030.

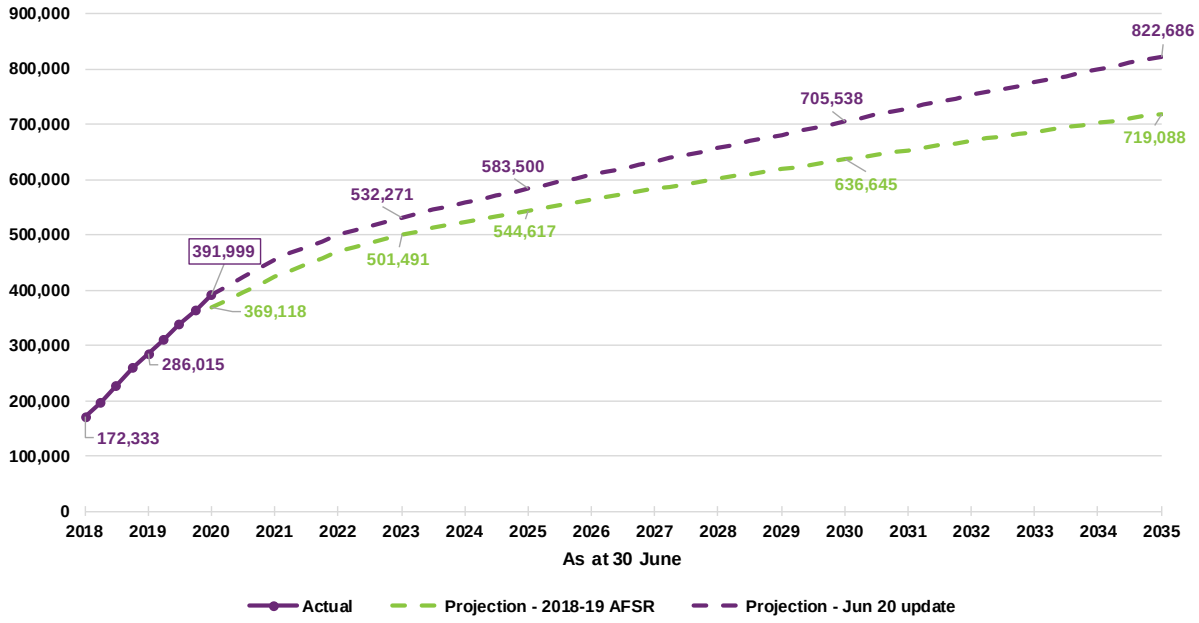
While participants with developmental delay can transition into other disability types, emerging experience has shown that the majority will move into autism or intellectual disability.

Table 19 Number of participants transitioning from developmental delay

Number of participants	As at 30 June							
	2020	2021	2022	2023	2024	2025	2030	2035
Participants with Developmental Delay	34,451	39,376	42,316	44,581	46,452	47,838	51,478	54,449
Transition out of Developmental Delay		5,876	6,262	6,588	6,935	7,282	8,090	8,566
% transitioned out of Developmental Delay		**14.9%**	**14.8%**	**14.8%**	**14.9%**	**15.2%**	**15.7%**	**15.7%**
Transition into Autism		4,008	4,335	4,600	4,864	5,101	5,599	5,925
Transition into Intellectual Disability		1,868	1,927	1,988	2,071	2,180	2,491	2,640
% transition into Autism		**68.2%**	**69.2%**	**69.8%**	**70.1%**	**70.1%**	**69.2%**	**69.2%**
% transition into Intellectual Disability		**31.8%**	**30.8%**	**30.2%**	**29.9%**	**29.9%**	**30.8%**	**30.8%**

Figure 11 shows the projected number of participants graphically, including a comparison with the 2018-19 AFSR.

Figure 11 Participant numbers for all ages – actual vs expected



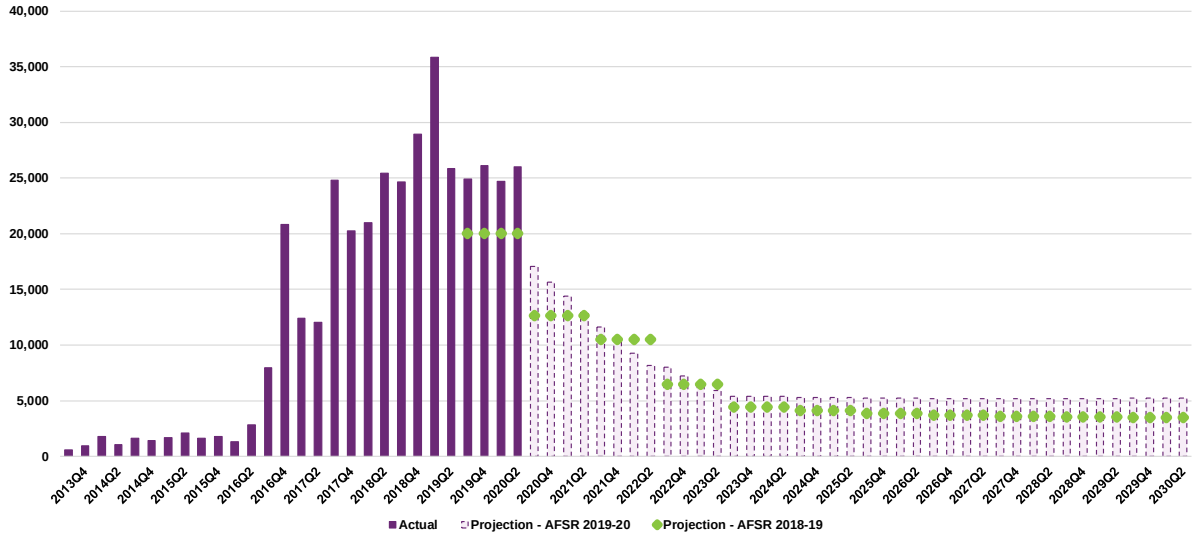
The projected number of participants as at 30 June 2023 has increased from the 2018-19 AFSR by 6.1% (from 501,491 to 532,271 participants). After 30 June 2023, the participant numbers aged 0 to 64 are projected to trend above the 2018-19 AFSR.

The proportion of participants aged 65 and over is expected to grow from 2.9% to 7.7% over the next ten years. The age group 65 and over represents an increasing proportion of the participant population over time because, while only people under age 65 are initially eligible for the Scheme[75], they will remain in the Scheme once they reach the age of 65, unless they move to a residential aged care facility or exit the Scheme for other reasons. This model projects more participants aged 65 and over compared with the 2018-19 AFSR to reflect experience to date.

The following figure compares the historical, incremental number of active participants in the Scheme against expectations on a quarterly basis. The projected quarterly increases from 1 July 2020 are also displayed.

[75] Only participants aged 0 to 64 are eligible to access the Scheme. However, some participants aged 64 gain eligibility to the Scheme, but do not receive an active plan until after they turn 65.

Figure 12 Incremental number of active participants – actual and expected by reporting quarter for ages 0 to 64



This figure shows the rapid Scheme growth over the transition period (1 July 2016 to 30 June 2020). After 30 June 2023, new entrants into the Scheme are expected to all be new incidence. However, there is significant uncertainty around the trajectory of intake (and exits) until the Steady Intake Date.

A material decrease in the incremental number of active participants is projected after 30 June 2020. This sharp fall is reflective of two drivers.

1) The backlog of access requests in progress and participants awaiting a first plan has decreased by over 40% since 30 June 2019. This indicates that the current intake levels might similarly decline.

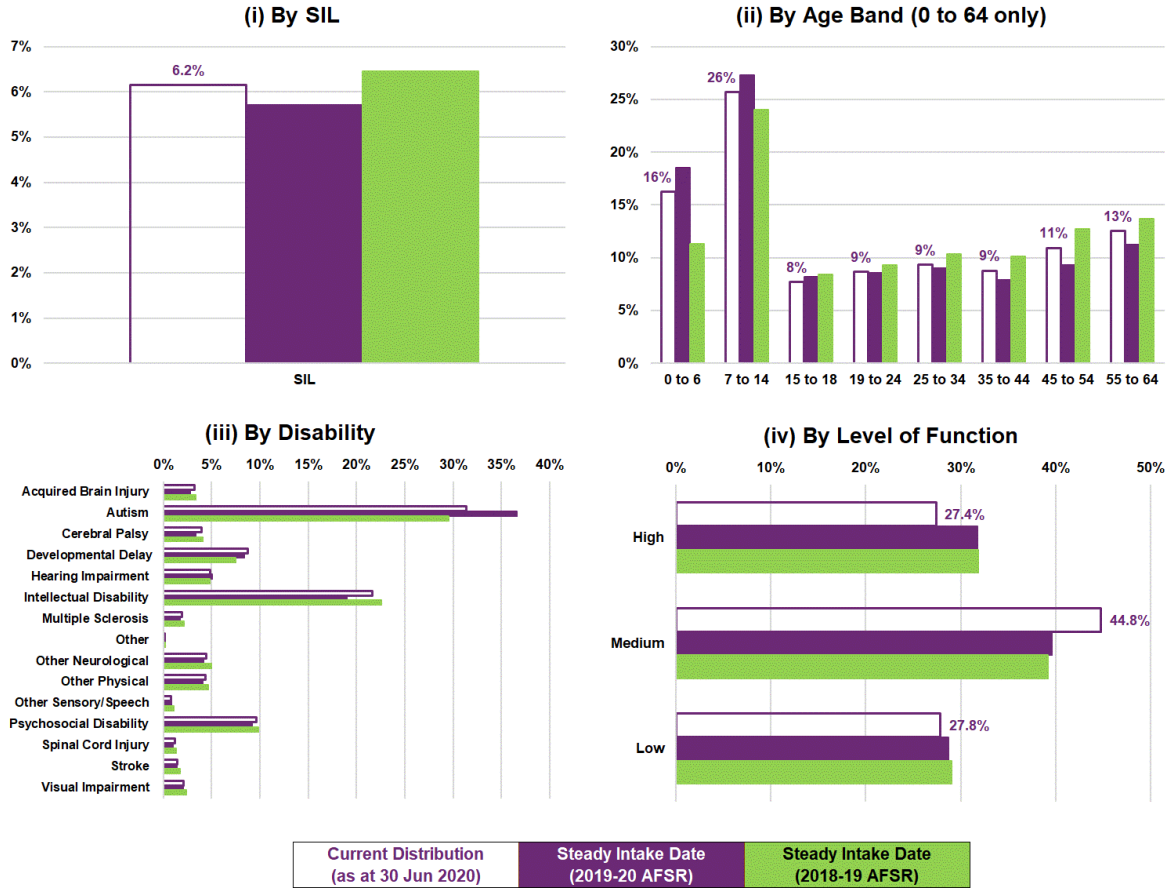
2) The transition of participants from existing State/Territory and Commonwealth programs is expected to come to an end within the next two years.

By contrast, if current intake levels do continue to an extent, there could be over 574,000 participants aged 0 to 64 projected to be in the Scheme by 30 June 2023. As discussed in Section 6.2, that scenario has been constructed to demonstrate the Scheme cost impact if the high levels of participant intake were to continue to an extent.

Participant profile

Figure 13 shows how the projected Scheme participant profile (at the Steady Intake Date of 30 June 2023) has changed, and how it compares to the current distribution.

Figure 13 Projected Scheme participant profile – at Steady Intake Date (30 June 2023)



The profile of projected participants in the 2019-20 AFSR model differs from the 2018-19 AFSR. In particular:

1) the expected proportion of participants in SIL has decreased from 6.5% to 5.7% at the Steady Intake Date, reflecting fewer SIL participants entering the Scheme compared to expected[76];
2) the age distribution has shifted further towards children, reflecting the higher intake of younger participants observed over the past 12 months;
3) there is a greater proportion of projected participants with autism, developmental delay and hearing impairment, and a smaller proportion with intellectual disability, than previously expected[77]; and
4) the functional distribution has shifted slightly towards high and medium functioning participants.[78]

[76] The current proportion of SIL participants (6.2%) is higher than the projected percentage at Steady Intake, primarily due to the early phasing of SIL participants into the Scheme.
[77] This reflects emerging Scheme experience and also the revised modelling approach.
[78] The current population has a greater percentage of medium and low functioning participants, as the focus had been on participants in existing State/Territory and Commonwealth programs entering the Scheme. As more participants new to disability supports enter the Scheme, who tend to have a higher functioning profile, the distribution is expected to become higher functioning.

SIL participant projections

Figure 14 shows the projected level of SIL participants compared to the 2018-19 AFSR.

There are fewer SIL participants at 30 June 2020 than expected due to the slower emergence of participants in SIL since 30 June 2019.

The slower SIL intake to the Steady Intake Date reflects the emerging experience and the smaller proportion of Scheme participants in SIL arrangements adopted over the medium term. After 30 June 2023, the number of SIL participants projected (purple line) increases to become closely aligned with the projected SIL participant numbers from the 2018-19 AFSR (green line), which is consistent with the long-term view of SIL participants to address unmet need.

Longer term expectations to 30 June 2030 thus remain relatively unchanged, however there is a slower trajectory of participants entering SIL than in the 2018-19 AFSR. After 2030, the SIL projections are higher than the 2018-19 AFSR, primarily due to higher numbers of participants with autism.

Figure 14 SIL participants by financial year – actual versus expected

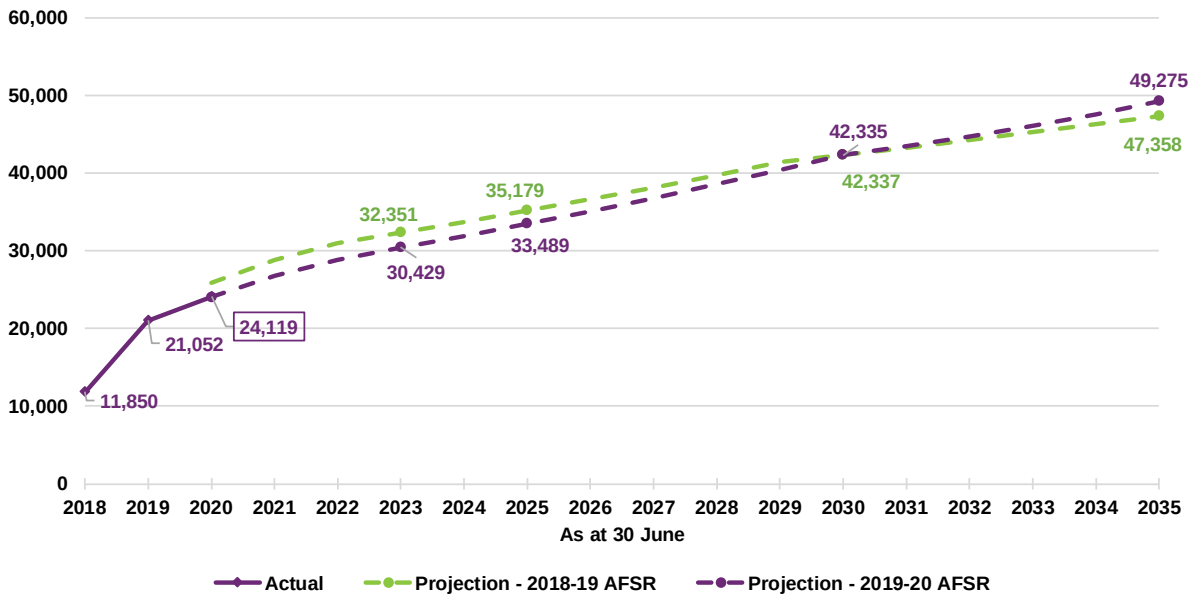


Table 20 shows the current population projections, split between participants in SIL and those not in SIL, while noting there is a considerable degree of uncertainty around the projection of the number of SIL participants in the Scheme, as modelled in the scenario analyses in Section 6.2.

Table 20 Change in projected participant numbers by SIL group

Number of participants	As at 30 June							
	2020	2021	2022	2023	2024	2025	2030	2035
Projection - 2019-20 AFSR								
Non-SIL	367,880	429,554	471,340	501,843	526,201	550,011	663,203	773,411
SIL	24,119	26,789	28,839	30,429	31,913	33,489	42,335	49,275
Total	**391,999**	**456,343**	**500,179**	**532,271**	**558,114**	**583,500**	**705,538**	**822,686**
Projection - 2018-19 AFSR								
Non-SIL	343,250	395,028	439,604	469,140	489,961	509,438	594,307	671,729
SIL	25,867	28,861	31,011	32,351	33,762	35,179	42,337	47,358
Total	**369,118**	**423,889**	**470,615**	**501,491**	**523,723**	**544,617**	**636,645**	**719,088**
Difference								
Non-SIL	24,630	34,526	31,736	32,703	36,240	40,573	68,896	101,681
SIL	-1,748	-2,072	-2,172	-1,922	-1,849	-1,690	-2	1,917
Total	**22,881**	**32,454**	**29,564**	**30,780**	**34,391**	**38,883**	**68,894**	**103,598**

SIL as a % of Total Population

Projection - 2019-20 AFSR	6.2%	5.9%	5.8%	5.7%	5.7%	5.7%	6.0%	6.0%
Projection - 2018-19 AFSR	7.0%	6.8%	6.6%	6.5%	6.4%	6.5%	6.7%	6.6%

The number of participants with autism in SIL has a material impact on Scheme costs

Along with the increasing projections for participants with autism, the number of participants with autism in SIL is also expected to increase as participants age. As shown in Table 21, an additional 465 participants with autism are expected to have SIL supports by 30 June 2023, increasing to an additional 1,491 by 30 June 2030 and an additional 2,792 by 30 June 2035.

Given participants with autism in SIL arrangements have one of the highest levels of support costs, an increase in the prevalence of autism directly impacts the longer term costs of the Scheme and should be monitored closely.

There is also uncertainty around the current approach of extrapolating the current SIL autism experience into the future, especially given the concerns around the robustness of current functional assessments and the access process.

Table 21 Participants with autism in SIL

Number of participants	As at 30 June							
	2020	2021	2022	2023	2024	2025	2030	2035
Projection - 2019-20 AFSR								
Participants with autism	122,830	152,493	175,610	194,980	209,505	224,209	298,706	373,259
Participants in SIL	24,119	26,789	28,839	30,429	31,913	33,489	42,335	49,275
Participants with autism in SIL	2,694	3,209	3,687	4,143	4,653	5,236	9,297	14,670
% of participants with autism - who are in SIL	**2.2%**	**2.1%**	**2.1%**	**2.1%**	**2.2%**	**2.3%**	**3.1%**	**3.9%**
% of participants in SIL - who have autism	**11.2%**	**12.0%**	**12.8%**	**13.6%**	**14.6%**	**15.6%**	**22.0%**	**29.8%**
Projection - 2018-19 AFSR								
Participants with autism	104,417	119,863	135,674	148,015	157,579	167,132	214,839	262,273
Participants in SIL	25,867	28,861	31,011	32,351	33,762	35,179	42,337	47,358
Participants with autism in SIL	2,617	2,964	3,313	3,678	4,122	4,613	7,806	11,878
% of participants with autism - who are in SIL	**2.5%**	**2.5%**	**2.4%**	**2.5%**	**2.6%**	**2.8%**	**3.6%**	**4.5%**
% of participants in SIL - who have autism	**10.1%**	**10.3%**	**10.7%**	**11.4%**	**12.2%**	**13.1%**	**18.4%**	**25.1%**
Difference								
Participants with autism	18,413	32,629	39,936	46,965	51,926	57,077	83,867	110,985
Participants in SIL	-1,748	-2,072	-2,172	-1,922	-1,849	-1,690	-2	1,917
Participants with autism in SIL	77	245	374	465	531	623	1,491	2,792
% of participants with autism - who are in SIL	**-0.3%**	**-0.4%**	**-0.3%**	**-0.4%**	**-0.4%**	**-0.4%**	**-0.5%**	**-0.6%**
% of participants in SIL - who have autism	**1.1%**	**1.7%**	**2.1%**	**2.2%**	**2.4%**	**2.5%**	**3.5%**	**4.7%**

5. Costs

The prudent management of participant costs is important in maintaining the future financial sustainability of the Scheme. In this section, costs refer to payments made by the Scheme for supports provided to meet participant needs and assist in the achievement of goals set out in plans.[79] These supports can help to increase a participant's independence, encourage higher levels of social and economic engagement, and improve life outcomes for the Scheme's participants. The supports span a wide spectrum of domains, which are subsequently classified into three support classes and further sub-divided into 15 support categories.

The recent payment experience of the Scheme reflects the level of supports currently being provided to meet participant support needs, and is therefore a lead indicator of future Scheme costs. These payments can be used as a starting point to inform Scheme cost projections. In 2019-20, payments were higher than PBS budgets for the first time since Scheme inception, driven by continued high inflation of participant costs.

Plan budgets is another measure of Scheme costs. However, not all amounts in the plan budget are being used. The proportion of plan budgets which is used is referred to as the "utilisation rate".[80]

5.1 Recent experience

5.1.1 Payments

There were $9.7 billion in payments[81] made in respect of participant costs in the 12 months to 30 June 2019 and $17.2 billion in payments in the 12 months to 30 June 2020.[82]

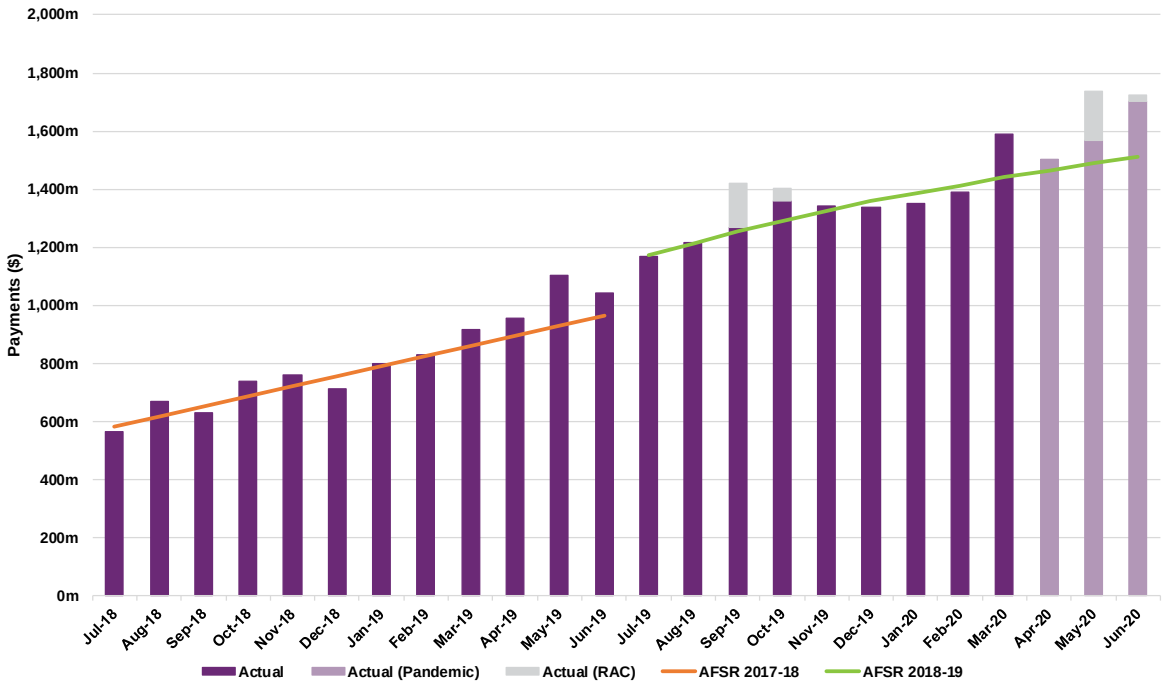
Overall payments have trended higher than expected

The following figure shows the monthly total payments from 1 July 2018 to 30 June 2020. This can be compared with payments projected in the 2017-18 AFSR (based on data to 30 June 2018) and the 2018-19 AFSR (based on data to 30 June 2019).

[79] Payments also include amounts for supports provided by the States/Territories and the Commonwealth governments on an in-kind basis as well as cross-billing amounts with the Department of Health for participants in residential aged care (RAC).
[80] The proportion of plan budgets utilised by participants cannot, by definition and due to governance controls in the Scheme, exceed 100% at a participant level. However, there are some circumstances where manual payments mean that utilisation can exceed 100%.
[81] Note this includes all on and off system payments (i.e. in-kind and RAC), with the exception of $31.2 million of off system in-kind and Finance payments for supports provided in 2018-19 which cannot be allocated at a participant level.
[82] Note these relate to when the payment was made, rather than when the support was provided. This also includes supports provided on an in-kind basis by the State/Territory and Commonwealth governments. This excludes $2.5 million of off system in-kind payments for supports provided in 2019-20 which cannot be allocated at a participant level.

Note that total payments for the months of September 2019 and May 2020, and to a lesser extent October 2019 and June 2020, were affected by cross-billing payments totaling $383 million for RAC supports provided in 2017-18, 2018-19 and 2019-20.

Figure 15 Total payments by month – actual versus expected



Payments were 6% higher than expected in the 12 months to June 2020. In particular, payments were 4% higher than expected for participants not in SIL, and 9% higher than expected for participants in SIL for the same period.

Payments have been impacted by the COVID-19 pandemic in the June 2020 quarter

Overall, the effect of the pandemic on total payments has been relatively neutral over the three months to 30 June 2020. The spike in payments observed during this period is mostly driven by the $189 million in RAC cross-billing payments, and the impact of seasonality as a result of providers finalising accounts in the lead up to the end of the financial year.

However, the impact of the pandemic on payments at a support category level varies, with some cost shifting occurring between support categories. For example, there have been reductions in payments for Social Community Civic and Capacity Building Employment compared with pre-pandemic payments experience, due to lockdown and physical distancing measures which restricted face-to-face services. This has been offset by increases in Consumables, such as low-cost assistive technology, PPE and an element of stockpiling in the early weeks of the pandemic due to supply concerns. Payments for Daily Activities also increased, primarily as a result of the temporary 10% loading on price limits for core supports.

Due to the impact of the pandemic on payments in the three months to 30 June 2020, it is not appropriate to utilise this experience to project longer term Scheme costs by support

category. Consequently, for the remainder of this section, actual experience compared to expectations are based on payments in the nine months to 31 March 2020.

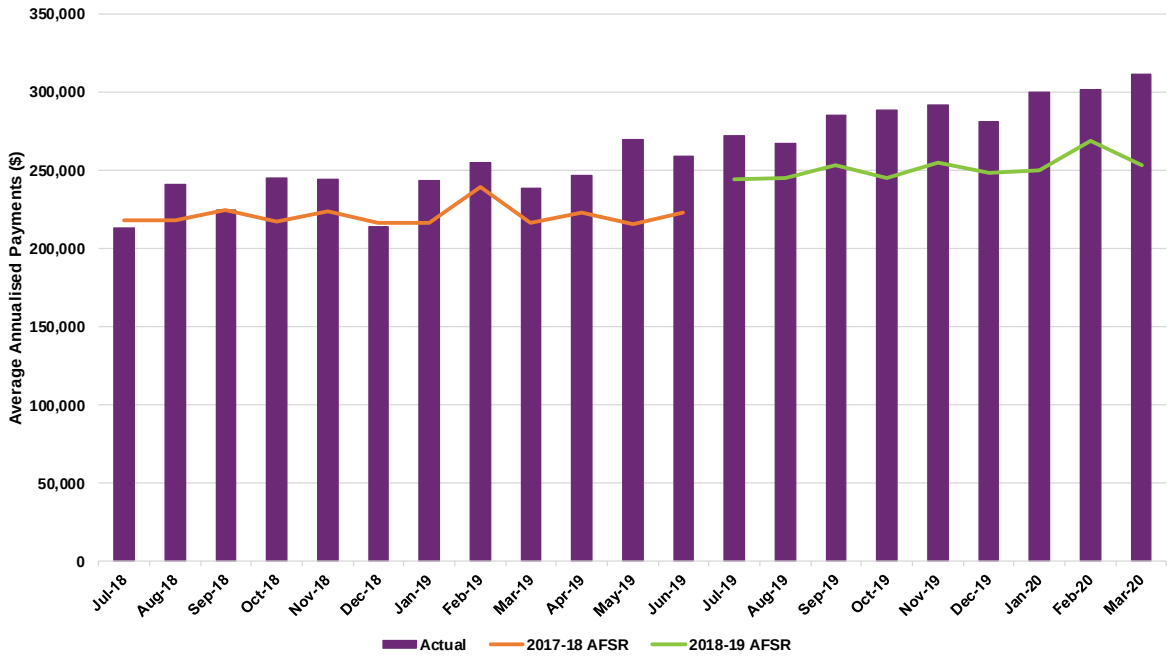
Average payments have continued to track above projections

In the nine months to 31 March 2020, total payments were 3% higher than expected (i.e. 1% higher than expected for participants not in SIL, and 7% higher than expected for participants in SIL). The variance in total payments compared with expected is driven by increases in average annualised payment amounts.

The 2018-19 AFSR projection of average annualised payments was based on the six months of experience from 1 January 2019 to 30 June 2019, which increased significantly from the previous six months. It was unclear whether this increase would continue after 30 June 2019. The nine months of experience to 31 March 2020 suggests that the increasing trend is continuing, over and above the total inflation assumption used in the 2018-19 AFSR.

Figure 16 shows that this has been driven by higher than expected increases in average annualised payments for participants in SIL, partially offset by lower than expected increases in average annualised payments for participants not in SIL (Figure 17).

Figure 16 Average annualised payments by month – actual versus expected (SIL)



For SIL participants, in the nine months to 31 March 2020, average annualised payments have been consistently tracking above expectations. This is mainly driven by the significant increase in attendant care prices for non-SIL supports at 1 July 2019 which were subsequently applied to the 2019-20 SIL quoting tool. This increase was not intended to apply to SIL supports and was not allowed for in the 2018-19 AFSR.

Recommendation 4 Consider improvements to pricing governance framework

The increase in non-SIL attendant care prices that was subsequently flowed through to the Agency's internal SIL tool resulted in increases of 10%-15% for SIL participants. It is recommended that the Agency consider the effectiveness of the existing governance framework for pricing decisions and the need for improved controls, including the comprehensive assessment of likely impact.

The Agency should also consider the alignment of the current pricing model, which has a focus on ground-up costs and individual line items, compared with the goal of "top-down" planning, where the participant is able to use their plan budget flexibly to achieve their goals. The "cost plus" approach used currently sees additional line items being added to the price guide each year (for example, for provider transport), which can stifle innovation and provide little incentive for providers to examine the most effective methods for delivery of supports.

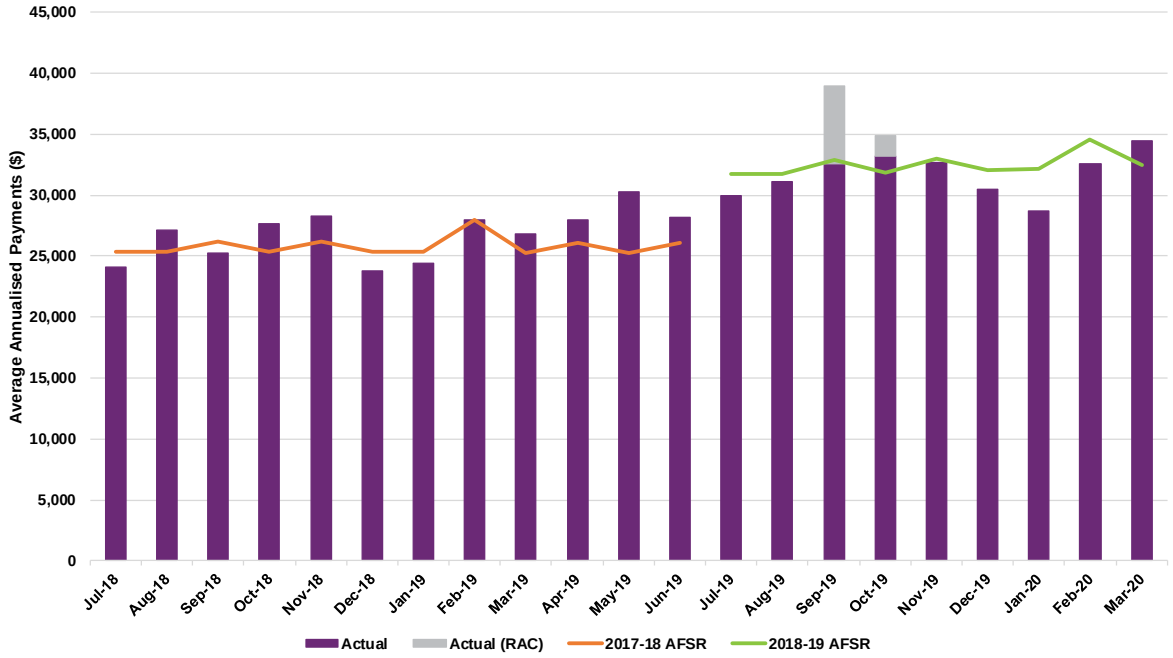
It would also be beneficial to continue to undertake extensive, independent benchmarking exercises with other injury support schemes and relevant industries as a direct input into the pricing decision process; this would assist in ensuring that the Agency's model is in line with like-for-like schemes.

Finally, changes to the pricing governance framework should be supported by effective system controls. This will help to reduce unintended consequences of price changes, such as the inflation of plan budgets as the result of the temporary 10% COVID loading which occurred in recent months.[83]

For non-SIL participants, in the nine months to 31 March 2020, average annualised payments have mostly tracked below expected. Whilst average annualised payments have increased across most participant cohorts, this is more than offset by the higher than expected intake in children (aged 0 to 14 years), who generally have lower average annualised payments compared to adults. The spike in average annualised payments observed in both September 2019 and October 2019 was the result of the cross-billing payments for RAC.

[83] It was not intended that the temporary 10% COVID loading for critical supports or any other Agency initiative in response to the pandemic would flow through to plan budgets. However, evidence suggests that some approved plans with a review between 25 March 2020 and 30 June 2020 were subject to an inflated budget (annual in most cases) if the plan included supports at a line item level. The extent of this impact is not yet known.

Figure 17 Average annualised payments by month – actual versus expected (non-SIL)



Payment experience has been mainly driven by payments to SIL participants

Whilst SIL participants make up only 6% of total active participants as at 31 March 2020, payments attributable to SIL participants account for almost 40% of total Scheme costs. It is therefore important to manage SIL costs to ensure financial sustainability.

For example, ILOs have been introduced as an alternative to SIL for some participants. While SIL focuses on funding of rostered support within group living arrangements, ILOs respond to each individual's requirements within their chosen home environment by building tailored supports into their plan and providing a range of housing support options. Although ILOs provide more individualised supports, the average cost of participants in ILOs is around 30% lower than participants in SIL.

Table 22 shows actual versus expected payments by support category in the nine months to 31 March 2020, for participants in SIL and not in SIL.

Table 22 Actual versus expected payments by support category in the nine months to 31 March 2020[84]

Support Category	Actual versus expected payments			Proportion of payments		
	SIL	Non-SIL	Total	SIL	Non-SIL	Total
Core				**93%**	**74%**	**79%**
Daily Activities	9%	-5%	3%	79%	42%	56%
Social Community Civic	-4%	-8%	-7%	13%	24%	18%
Transport	-10%	-2%	-3%	1%	6%	4%
Consumables	19%	34%	32%	0%	2%	2%
Capital				**2%**	**5%**	**4%**
Assistive Technology	10%	23%	21%	1%	4%	3%
Home Modifications	-10%	-4%	-8%	2%	1%	1%
Capacity Building				**4%**	**21%**	**16%**
CB Daily Activities	16%	21%	20%	1%	13%	10%
Support Coordination	-6%	13%	9%	1%	3%	2%
CB Employment	-15%	-19%	-18%	1%	3%	2%
CB Choice and Control	101%	74%	75%	0%	1%	1%
Other CB supports	0%	5%	4%	1%	2%	1%
Total	**7%**	**1%**	**3%**	**100%**	**100%**	**100%**

The majority of payments for SIL participants are for Daily Activities (79%) and Social Community Civic (13%) supports. For Daily Activities, actual payments were 9% higher than expected over the nine months to 31 March 2020, largely driven by the significant increase in attendant care prices in the 2019-20 SIL quoting tool mentioned above.

Recommendation 5 Continued focus on cost pressures impacting participants in SIL

Cost escalation for SIL participants remains one of the most critical risks to Scheme financial sustainability. Urgent and effective management responses are required to ensure that the double-digit inflation seen in recent years does not continue. Efforts should focus on reasonable and necessary decision-making (that is consistent and fair), SIL price controls, and the assessment of more innovative and cost effective housing alternatives where appropriate (e.g. ILOs) for both new and continuing participants in SIL.

Management responses should be supported by improved data capture, with updates to the CRM to include the structured collection of rosters of care and other key provider inputs. A monitoring framework to conduct internal monitoring of plan budgets is also required.

For non-SIL participants, the majority of payments are for Daily Activities (42%), Social Community Civic (24%) and Capacity Building Daily Activities (13%). Lower payments were observed for Daily Activities and Social Community Civic than expected, particularly for supports provided in a group/community environment. In contrast, payments for Capacity Building Daily Activities[85] were above expectations. This is largely driven by increases in

[84] A number of smaller Capacity Building support categories have been grouped together (CB Relationships, CB Social Community Civic, CB Health and Wellbeing, CB Home Living and CB Lifelong Learning). These categories represent around 1% of payments combined.
[85] Supports in this category primarily relate to the cost of the delivery of therapy to Scheme participants, including specialised therapy supports in early childhood.

payments for supports relating to therapy other than psychology and physiotherapy[86], as well as supports for self-managed participants.

Across both SIL and non-SIL participants, higher payments than expected can be seen for Consumables (32% higher overall) and Assistive Technology (21% higher overall). This is attributable to the reduction in backlogs in the provision of assistive technology[87] and, to a lesser extent, the stockpiling of continence aids in March 2020 in response to the emerging COVID-19 pandemic. Payments for Capacity Building Choice and Control, which cover monthly processing fees for financial intermediaries, have also been 75% higher than expected in the nine months to 31 March 2020, with an increasing proportion of participants accessing these supports.

Actual versus expected average annualised payments by participant characteristics

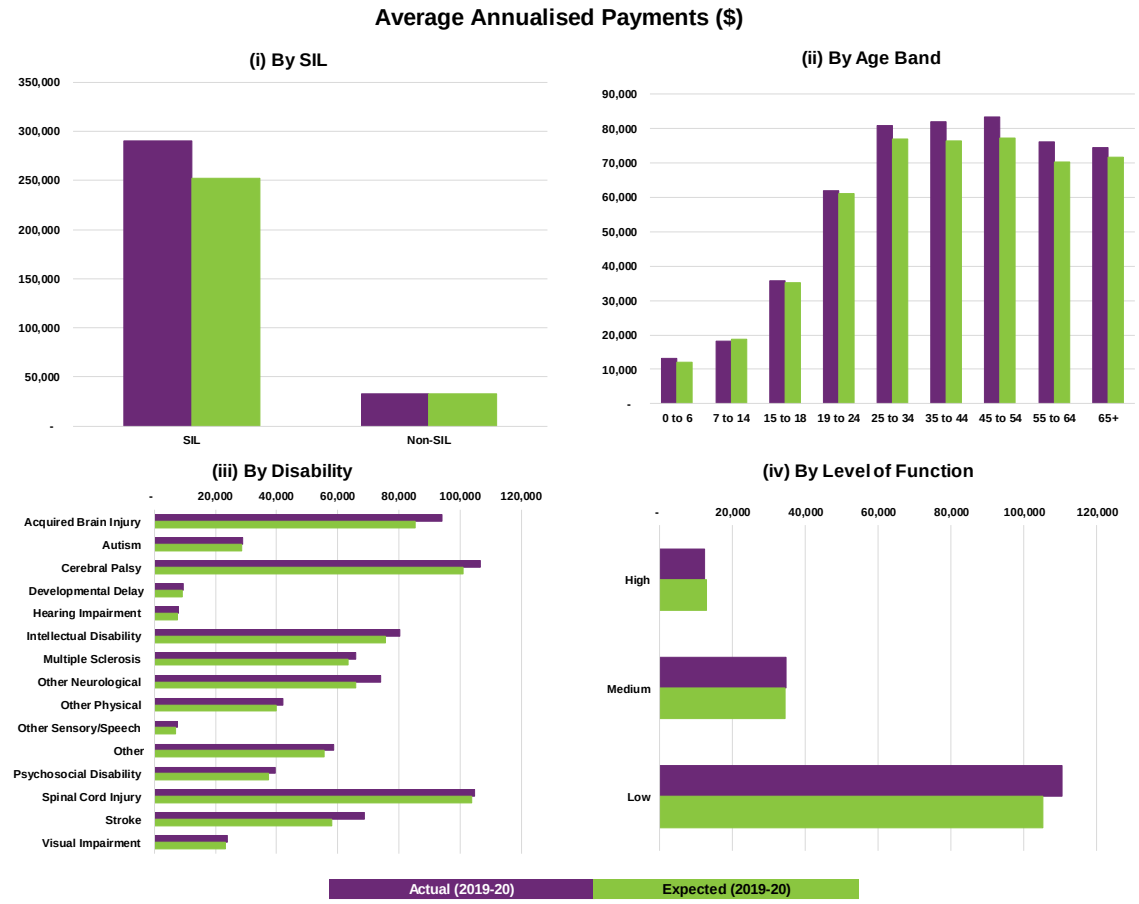
Comparing actual experience to expectations by various participant characteristics is also useful to highlight emerging trends and understand key cost pressures on the Scheme. Figure 18 shows average annualised payment levels by SIL, age band, disability type and level of function. Note that the payment experience is impacted by emerging participant mix, as well as trends at the support category level.

Figure 18 shows that compared to the 2018-19 AFSR:

- Average annualised payments to SIL participants are higher than expected (graph i).
- Despite fewer than expected adults over 25 entering the Scheme, average annualised payment experience for these participants are higher than expected (graph ii).
- Similarly, average annualised payment experience has been higher than expected across all disabilities (graph iii), particularly for acquired brain injury, cerebral palsy, other neurological and stroke.
- Average annualised payments to participants with low levels of function have been much higher than expected (graph iv), partly driven by higher than expected average payments for SIL participants.

[86] Note that 'Other Therapy' makes up a large proportion of therapy supports within Capacity Building Daily Activities. No further detail is available in the data to understand the specific therapy services within this category.
[87] Note that low cost assistive technology has been categorised within Consumables since July 2019 as a mechanism to reduce waiting times.

Figure 18 Average annualised payments in the nine months to 31 March 2020 by participant profile - actual vs expected



5.1.2 Plan budgets

In a mature scheme, plan budgets should provide a robust indicator of the reasonable and necessary supports required for each participant if there were no supply constraints. Plan budgets can thus be used to determine a reasonable upper bound on potential longer-term participant costs within the Scheme.

Plan budgets for the 2019-20 support year were $24.2 billion, about 66% higher than for the 2018-19 support year. This represents considerable growth in potential payments and reflects the continued rapid growth of the Scheme even as it is reaching maturity.

Overall plan budgets during the 12 months to 30 June 2020 have been consistently higher than expected each month (12% higher overall). Plan budgets were 10% higher than expected for participants not in SIL, and 15% higher than expected for participants in SIL for the same period. This is mainly attributable to higher than expected average annualised plan budgets.

Figure 19 shows actual average annualised plan budgets by SIL, age band, disability type and level of function in the nine months to 31 March 2020. This is compared to the 2018-19 AFSR, noting that plan amounts have not been adjusted for inflation.

Figure 19 Average annualised plan budgets in nine months to 31 March 2020 by participant characteristics – actual versus expected

Average annualised plan budgets have generally been higher than expected across each of the different participant characteristics. Key trends include**:**

- Average annualised plan budgets for participants in SIL are around 22% higher than expected (graph i). While part of this is attributable to the erroneous indexation of attendant care prices from the Annual Price Review for 2019-20, there have been other factors driving the increase in SIL supports, such as changes to rosters of care over time.
- There have been higher average annualised plan budgets experience across all ages (graph ii).
- Average annualised plan budgets have been higher than expected across all disabilities (graph iii). As for payments, various disabilities, such as acquired brain injury, cerebral palsy, intellectual disability, and multiple sclerosis have higher than expected average annualised plan budgets.

- Average annualised plan budgets to participants with medium to low levels of function have been higher than expected (graph iv).

5.1.3 Utilisation

To estimate the ultimate utilisation rate in any support year, it is important to consider the estimated value of supports provided prior to 30 June 2020, but not yet included in the payments made to date.[88] Table 23 provides an overview of the plan budgets, projected ultimate payments and projected ultimate utilisation by support year.[89]

Table 23 Projected ultimate utilisation as at 30 June 2020 – by support year[90]

Utilisation component	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Plan budgets ($m)	**133**	**497**	**939**	**3,234**	**7,742**	**14,554**	**24,169**	**51,267**
Payments to date ($m)	86	371	704	2,185	5,428	10,333	16,108	35,216
Participant plan provision - central estimate ($m)	0	0	0	1	12	78	1,363	1,454
Expected RAC payments ($m)	0	0	0	0	0	0	244	244
Projected ultimate payments ($m)	**86**	**371**	**704**	**2,186**	**5,440**	**10,411**	**17,716**	**36,914**
Projected ultimate utilisation (%)	**64.7%**	**74.7%**	**75.0%**	**67.6%**	**70.3%**	**71.5%**	**73.3%**	**72.0%**

Utilisation rates have increased since the start of the transition period, from 68% for support year 2016-17 to 73% projected for support year 2019-20. Utilisation rates remain lower than at the end of the trial period (75% for support years 2014-15 and 2015-16), reflecting the rapid expansion of the Scheme.

Utilisation has remained well below 100% through the trial and transition period, with experience varying at individual and cohort levels, and changing over time. These rates are likely to increase as the Scheme moves towards the Steady Intake Date, which will impact on the financial results of the Scheme. One of the main drivers of under-utilisation is the time it may take some participants to learn to navigate Scheme processes or to build their capacity to implement a plan; this is reflected in evidence that a participant's utilisation typically increases over successive plans.[91] It is also possible that the amount in the plan was above what was needed by the participant, service providers have not claimed for support provided, and/or there is insufficient market capacity.

As a result, current utilisation rates may not necessarily be representative of the longer term experience. It is likely that utilisation rates in a mature Scheme will remain below 100%[92] although it is not yet clear what an appropriate long term utilisation rate will be.

[88] This has been estimated using information on plan budgets, the payment patterns emerging over time relating to these plan budgets and the expected ultimate utilisation of those plan budgets.
[89] Note that these figures are on an accrual basis so differ to earlier estimates of payments plan budgets by financial year.
[90] RAC stands for Residential Aged Care. This accommodation cost is paid for off-system.
[91] This is highlighted on page 68 of the *NDIS Quarterly Report to disability ministers 30 June 2020* which shows average utilisation increasing from 54% for a participant's first plan to 79% for their fifth plan or higher.
[92] For example, participant circumstances will inevitably change throughout their plan period meaning changes in the level of supports required.

5.2 Participant costs

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).[93]
- Payments relating to 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 Projection Group and support category. The adopted averaging period is the three months to 31 March 2020.[94] In modelling the payments based on the three-month period, the AFSR model can align more closely to recent payment experience, which continues to increase over time, while still ensuring there is sufficient stability in cost patterns. Using data to 31 March 2020 also removes the impacts of the pandemic, which is dealt with as a separate adjustment and discussed later.

Based on the average annualised payments experience of this three-month period, inflated to 30 June 2020[95], annual cost assumptions have been calculated for each Projection Group[96] for mature participants.[97]

[93] 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.
[94] This is in contrast to the methodology used in the 2018-19 AFSR where payments were based on average annualised payment levels for the six months to 30 June 2019.
[95] Actual payments have been inflated to 30 June 2020 using a 3.3% per annum inflation rate. This includes a normal inflation rate of 4.0% per annum and a superimposed inflation rate (excluding the pricing review and allowance for RAC) of -0.7% per annum adopted in the 2018-19 AFSR. The superimposed inflation rate of 6.7% per annum for the pricing review was excluded, as this impact should already be reflected in the payment experience. Further, the superimposed inflation rate of 2.2% per annum for the allowance of RAC is allowed for separately in the projection.
[96] Separate projections are performed for primary disability, level of function, age and whether or not a participant is in SIL.
[97] "Mature participants" are defined as those who were active at both 31 December 2019 and 31 March 2020, and had their first plan approved on or prior to 31 December 2018.

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, provider claiming behaviour and holiday periods. By utilising a shorter period to inform annual cost 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 March 2020 quarter as the averaging period. The two key drivers of seasonality appear to be the number of business days in a quarter, and participant and provider behaviour.[98] The seasonality impact also tends to differ at a support category level.

Analysis of historical payments experience in 2017-18 indicated that the three-month payment period to 31 March 2020 tended to be on average 1% higher than the overall payments average for the year, after removing inflationary impacts. This is in contrast to the payments experience in 2018-19 which suggested that payments in the three-month period to 31 March 2020 were about 2% lower on average. This is the result of less active provider claiming with fewer business days in the March quarter for the 2018-19 year (compared to other quarters in the year). As the number of business days in the March quarter for the 2019-20 year is more in line with the 2017-18 year, greater weighting has been placed on the 2017-18 payment experience.

Table 24 shows that seasonality factors have been adopted at the support category level, mostly driven by observed payment relativity[99] and to a lesser extent, the number of business days relative to the rest of the year. Overall, payment assumptions have been increased by 1% to allow for the seasonality impact.

Table 24 Adopted seasonality factors by support category

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

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.

No seasonality impact is adopted for Assistive Technology and Home Modifications as capital supports are generally one-off purchases, as opposed to continual supports, which causes volatility in payments. Furthermore, clearing of backlogs and long wait times for approval of support have impacted payment experience in these support categories over time.

[98] 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.
[99] 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 take time to navigate the Scheme and to access supports, often resulting in lower first-year payment levels. From this perspective, it is the payment experience of "mature participants", defined as those who were active at both 31 December 2019 and 31 March 2020, and had their first plan approved on or prior to 31 December 2018, which has been used to inform the view of longer term payment experience. A reduction in payment experience was then adopted for participants in their first year to account for the lower rate of payment.

- For non-SIL participants, this reduction is 20% (compared to 25% in the 2018-19 AFSR).
- For SIL participants, this reduction is 10% (compared to 15% in the 2018-19 AFSR).

The smaller reductions adopted in the 2019-20 AFSR reflect a reduction in barriers to timely plan implementation over time, although the effect remains evident.

Payments for participants aged 65 years and over

Costs 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 cost 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 costs for this cohort should increase above normal inflation until a more mature state is reached. The estimated impact is an $8 million (or 0.03%) increase in projected costs over 2021-22, increasing to around $260 million (or 0.5% higher) by 2029-30.

Allowance for the impact of the COVID-19 pandemic

Whilst the pandemic remains active around the world, social distancing and lockdown has begun to ease in most States/Territories around Australia, with people beginning to return to their normal daily routines. As such, the future pandemic impact has been modelled based on no 'second wave' occurring and payments gradually returning to pre-pandemic levels over three months. With the resurgence of cases in Victoria, this remains highly uncertain.

Payment experience in the three months to 30 June 2020 was used to estimate the shorter term pandemic impact. The estimated impact of the pandemic is a $134 million (or 0.6%) decrease in projected costs over 2020-21. Experience based on the 'first wave' provided some comfort that physical distancing, combined with lockdown and rigorous testing, can be effective in managing the impacts of the pandemic. It is less clear whether this will continue into the future for subsequent waves of the virus.

Annual cost assumptions have increased on average, particularly for SIL

Figure 20 and Figure 21 show the change in average adopted payment assumptions from the 2018-19 AFSR by support category for mature participants in SIL and not in SIL respectively.

The overall average annualised payment for mature participants is about $52,100 in current dollars (6% higher than the assumption adopted for the 2018-19 AFSR, inflated to current dollars), noting that this average contains biases based on the phase-in patterns of the Scheme. The average annualised payment for mature participants in SIL is around $310,000 (12% higher than the inflated 2018-19 AFSR assumption), compared to around $34,400 for those who are not in SIL (3% higher than the inflated 2018-19 AFSR assumption).

For SIL participants, the increase is mainly driven by the increase in Daily Activities (15% higher). For non-SIL participants, the increase is driven by the increase in Capacity Building and Capital supports, primarily CB Daily Activities (+13%), and offset by the decreases across Daily Activities (-1%), Social Community Civic (-4%) and Transport (-5%).

Figure 20 Comparison of adopted average annualised payments for mature SIL participants (dollars as at 30 June 2020)

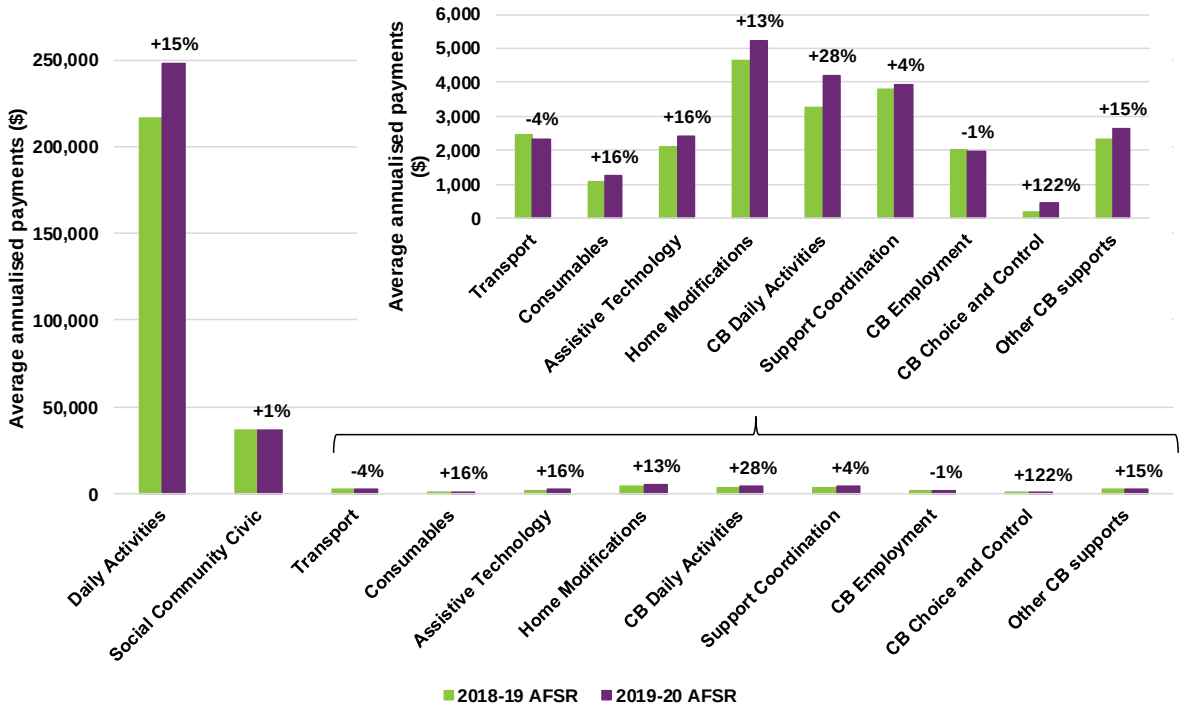
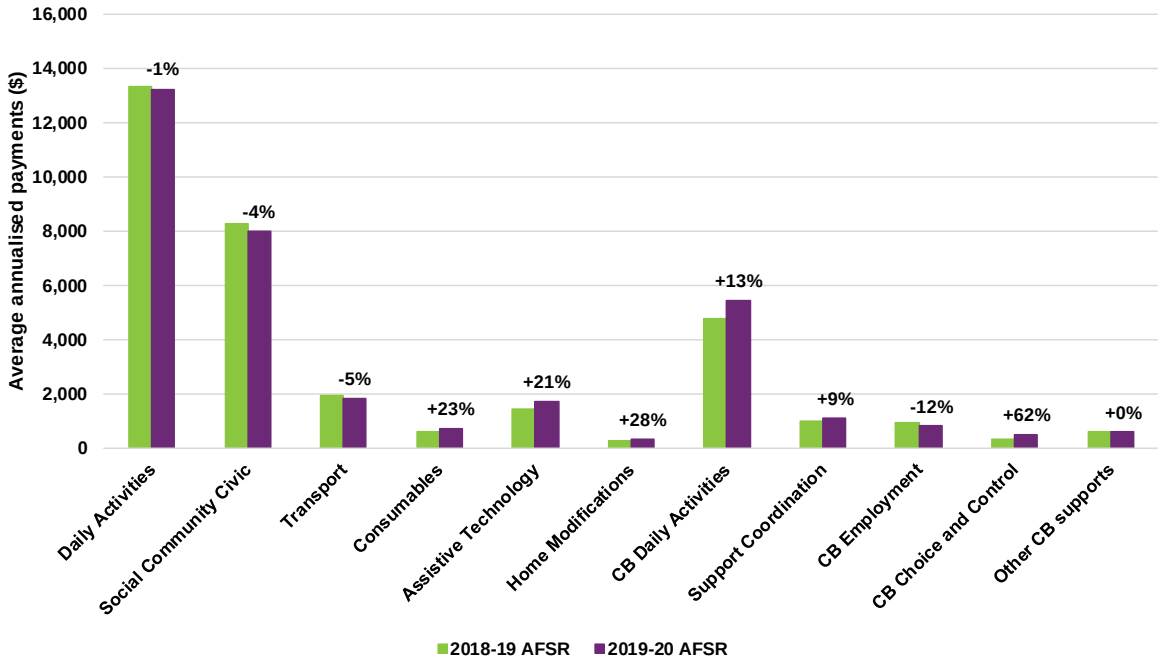


Figure 21 Comparison of adopted average annualised payments for mature non-SIL participants (dollars as at 30 June 2020)



5.2.1 Payment and plan budget assumptions

Table 25 displays the projected average annual payment and plan budget costs (in current dollars) and the implied utilisation rate split by disability and age band for the 2022-23 financial year. The following table shows that:

a) The average annualised payment amount for all Scheme participants in 2022-23 is $48,800 in current dollars. This compares to an average annual plan budget amount of $64,700, representing a utilisation rate of 75%.

b) Children have lower average annualised payments and plan budgets than adults, reflecting a higher proportion of early intervention participants, less usage of SIL arrangements and more informal supports, primarily provided by parents.

c) Participants with intellectual disability and other disabilities[100] have the largest average costs.

d) Participants with sensory disabilities[101] and developmental delay have the lowest average costs and utilisation rates.

e) Participants with intellectual disability and other disabilities[102] have the highest utilisation rates.

f) Utilisation rates tend to be higher for adults than children, partly reflecting the higher average utilisation rates for participants in SIL arrangements.

[100] In particular, participants with spinal cord injury, cerebral palsy and acquired brain injury.
[101] This includes hearing impairment, visual impairment and other sensory/speech disabilities.
[102] Namely spinal cord injury and cerebral palsy.

Table 25 Projected average annual payments ($), plan budgets ($) and implied utilisation rate by age band and disability group in 2022-23 (current dollars)[103]

Average payments ($)

Disability Group	0-6	7-14	15-18	19-24	25-34	35-44	45-54	55-64	65+	Total
Autism	15,783	17,413	29,946	57,614	84,328	119,963	149,027	144,854	164,505	29,646
Intellectual Disability	24,290	25,078	43,483	69,088	93,638	113,039	143,799	155,058	175,012	83,847
Psychosocial Disability	5,981	16,908	32,303	43,271	45,597	47,111	46,221	49,378	51,729	47,010
Developmental Delay	10,811	7,237								10,386
Sensory	10,576	7,734	9,619	10,614	14,553	17,912	17,933	18,093	19,515	13,222
Other	42,973	38,545	57,797	97,877	109,861	104,673	89,411	80,736	82,300	82,433
Total	14,944	18,774	33,856	61,914	81,370	85,539	84,116	80,416	83,887	48,832

Average plan budgets ($)

Disability Group	0-6	7-14	15-18	19-24	25-34	35-44	45-54	55-64	65+	Total
Autism	23,433	23,828	43,606	74,725	104,426	140,914	170,887	169,141	191,629	39,501
Intellectual Disability	35,045	34,213	61,143	88,704	117,022	136,047	168,161	180,441	202,421	103,021
Psychosocial Disability	10,800	29,114	50,847	63,859	66,518	68,548	67,941	72,231	75,398	68,814
Developmental Delay	17,872	11,590								17,123
Sensory	18,857	12,935	16,870	17,939	23,814	28,139	28,314	28,481	30,078	21,593
Other	59,207	52,201	77,783	124,709	138,504	132,529	119,052	112,288	115,098	110,489
Total	22,940	25,885	48,515	80,380	103,523	108,238	108,293	106,812	112,088	64,682

Utilisation rate

Disability Group	0-6	7-14	15-18	19-24	25-34	35-44	45-54	55-64	65+	Total
Autism	67%	73%	69%	77%	81%	85%	87%	86%	86%	75%
Intellectual Disability	69%	73%	71%	78%	80%	83%	86%	86%	86%	81%
Psychosocial Disability	55%	58%	64%	68%	69%	69%	68%	68%	69%	68%
Developmental Delay	60%	62%								61%
Sensory	56%	60%	57%	59%	61%	64%	63%	64%	65%	61%
Other	73%	74%	74%	78%	79%	79%	75%	72%	72%	75%
Total	65%	73%	70%	77%	79%	79%	78%	75%	75%	75%

Similarly, the expected average annual payment and plan budget assumptions (in current dollars) and implied utilisation in 2022-23, split by support category and age band, are shown in Table 26. The averages are a weighted combination of the assumptions by Projection Group for each support category at the Steady Intake Date.

[103] Excluding groups with less than 20 participants.

Table 26 Projected average annual payments ($), plan budgets ($) and implied utilisation rate by age band and support category (current dollars)[104]

Average payments ($)

Support Category	0-6	7-14	15-18	19-24	25-34	35-44	45-54	55-64	65+	Total
Consumables	500	604	542	622	860	977	1,162	1,314	1,478	799
Daily Activities	2,148	6,319	14,783	31,411	45,883	51,913	52,922	49,928	52,463	26,218
Social Community Civic	200	1,654	6,052	16,256	20,156	17,597	14,695	13,579	13,582	8,761
Transport	633	1,950	3,453	1,996	1,908	1,724	1,630	1,586	1,619	1,735
Assistive Technology	1,068	593	886	1,166	1,518	2,089	2,544	3,312	3,908	1,559
Home Modifications	74	83	181	487	1,206	1,578	1,857	1,824	1,976	768
CB Daily Activities	9,856	6,031	4,276	3,087	3,144	3,259	3,465	3,800	4,142	5,304
CB Employment	0	0	906	3,505	2,910	2,524	1,962	1,390	995	1,175
Support Coordination	130	477	1,134	1,605	1,986	2,336	2,439	2,366	2,393	1,300
Other CB supports	336	1,063	1,642	1,780	1,799	1,542	1,441	1,319	1,332	1,213
Total	14,944	18,774	33,856	61,914	81,370	85,539	84,116	80,416	83,887	48,832

Average plan budgets ($)

Support Category	0-6	7-14	15-18	19-24	25-34	35-44	45-54	55-64	65+	Total
Consumables	1,003	1,147	1,081	1,291	1,834	2,048	2,392	2,635	2,879	1,608
Daily Activities	2,592	7,331	18,353	36,130	52,487	59,053	60,934	59,524	63,028	30,574
Social Community Civic	368	2,341	9,256	22,106	26,973	24,578	21,976	21,120	21,512	12,650
Transport	552	1,723	3,245	2,046	2,000	1,843	1,755	1,700	1,724	1,695
Assistive Technology	1,511	886	1,281	1,727	2,365	3,267	4,034	5,276	6,176	2,402
Home Modifications	88	105	233	641	1,607	2,097	2,466	2,412	2,594	1,013
CB Daily Activities	16,135	9,750	7,999	6,033	6,228	6,384	6,603	7,063	7,516	9,190
CB Employment	0	0	2,369	4,951	4,038	3,069	2,327	1,627	1,200	1,614
Support Coordination	226	711	1,604	2,171	2,697	3,108	3,248	3,174	3,212	1,779
Other CB supports	464	1,891	3,094	3,283	3,293	2,791	2,557	2,280	2,248	2,156
Total	22,940	25,885	48,515	80,380	103,523	108,238	108,293	106,812	112,088	64,682

Utilisation rate

Support Category	0-6	7-14	15-18	19-24	25-34	35-44	45-54	55-64	65+	Total
Consumables	50%	53%	50%	48%	47%	48%	49%	50%	51%	50%
Daily Activities	83%	86%	81%	87%	87%	88%	87%	84%	83%	86%
Social Community Civic	54%	71%	65%	74%	75%	72%	67%	64%	63%	69%
Transport	115%	113%	106%	98%	95%	94%	93%	93%	94%	102%
Assistive Technology	71%	67%	69%	68%	64%	64%	63%	63%	63%	65%
Home Modifications	84%	79%	78%	76%	75%	75%	75%	76%	76%	76%
CB Daily Activities	61%	62%	53%	51%	50%	51%	52%	54%	55%	58%
CB Employment	0%	0%	38%	71%	72%	82%	84%	85%	83%	73%
Support Coordination	57%	67%	71%	74%	74%	75%	75%	75%	74%	73%
Other CB supports	72%	56%	53%	54%	55%	55%	56%	58%	59%	56%
Total	65%	73%	70%	77%	79%	79%	78%	75%	75%	75%

The support categories with the highest utilisation rates are for Transport and Daily Activities. The utilisation rate of Transport for children is projected to be over 100%, reflecting a combination of in-kind transport supports, which are assumed to be 100% utilised, and the fungibility of core supports.

5.2.2 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, termed superimposed inflation.

[104] This table excludes groups with less than 20 participants.

Normal inflation

Normal inflation is applied to projections of payments and plan budgets.

The adopted inflation rate in the 2018-19 AFSR was 4.0% for each projection year. Table 27 shows that the selected inflation rates for the next five years have since decreased.

Table 27 Selected normal inflation rates

		Projection year					
Inflationary estimates		**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**Long-term**
1)	Increases in the Annual Price Review	2.47%					
2)	Other benchmark sources						
a)	Pre-election Economic and Fiscal Outlook 2019	3.30%	3.50%	3.50%			
b)	In-kind supports in Bilateral Agreements	4.00%	4.00%	4.00%	4.00%		
c)	2015 Intergenerational Report						4.00%
3)	Potential impact of economic downturn	-0.25%	-0.50%	-0.50%			
Selected inflation rate		**3.00%**	**3.00%**	**3.00%**	**3.50%**	**3.50%**	**4.00%**

The adopted inflation rate for the coming three years is 3.0% per annum, increasing to 3.5% per annum for the next two years, and then plateauing at 4.0% per annum thereafter. These selections are based on the following sources.

1) **Increases in the Annual Price Review** are based on wage rates and consumer prices specific to the supports being provided within the Scheme. The estimated price indexation increases are for:

   - attendant care supports (3.00%) – based wholly on labour costs[105];
   - capacity building for non-therapy supports (2.12%) – based 80% on labour costs and 20% on non-labour costs[106]; and
   - capital-related supports (2.20%) – based wholly on non-labour costs.[107]

   These estimated price indexation increases were then weighted by the distribution of payments by support category projected for 2020-21.

2) **Different benchmark sources** have published forecasts, as outlined below. Note that the benchmark sources described were published before the COVID-19 pandemic lockdown and generally represent broader economic measures, which may not fully reflect the inflationary pressures of the Scheme. In particular, Scheme costs may be more specifically influenced by shorter to medium term imbalances

[105] For attendant care, the increase in provider costs is driven by wages of support workers, who are employed under the Social, Community, Home Care and Disability Services Industry Award. On 1 July 2020, there was a 1.75% annual wage increase based on the Fair Work Commission's Annual Wage Review, and the Equal Remuneration Order (ERO) increase is estimated to be, on average, 2.16%. However, as the ERO increase is not applicable until 1 December 2020, its impact does not apply to all of 2020-21.

[106] Increase in labour costs is based on the annual Wage Price Index (WPI) inflation rate to 31 March 2020, while increase in non-labour costs is based on the annual Consumer Price Index (CPI) inflation rate to 31 March 2020. The former was 2.10% while the latter was 2.20%.

[107] Increase in non-labour costs is based on the annual CPI inflation rate to 31 March 2020, which was 2.20%.

between supply and demand of attendant care services as the Scheme continues to mature.

a) Wage growth, as measured by the Wage Price Index (WPI), was forecast to increase from 3.3% in 2020-21 to 3.5% in 2022-23 based on the Pre-election Economic and Fiscal Outlook 2019.[108]

b) The Full Scheme bilateral agreements, released before the 2018-19 AFSR, have in-kind supports agreed up to 30 June 2023. The prices will increase according to the type of support and program, with the annual unit price increase for in-kind programs across jurisdictions being around 4.0%.

c) The 2015 Intergenerational Report[109] assumed a long-term wage inflation rate of 4.0% per annum which consists of a long term domestic inflation rate of 2.5% per annum plus an additional 1.5% per annum for productivity growth.

3) **Potential impact of the economic downturn** (due to the COVID-19 pandemic) on inflation is based on estimates released by the Reserve Bank of Australia (RBA). The figures shown in the table are the forecast impact on consumer price index (CPI) growth[110] from the RBA's Economic Outlook in the May 2020 *Statement on Monetary Policy.*[111]

It is worth noting that there is a degree of uncertainty surrounding the future trajectory of normal inflation:

- In the short term, it is unclear what the future wage decisions will be going forward after the last increase related to the Equal Remuneration Order (ERO) occurs on 1 December 2020.
- In the medium to longer term, there is significant uncertainty around the economic recovery, affecting when, or if, the long-term assumption of 4% per annum emerges.

Superimposed inflation

Superimposed inflation is defined as the increase in average plan budgets and/or payments above the normal inflation rate. 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 or increased over time, despite the increasing maturity of the Scheme. The sustained high levels of superimposed inflation remain one of the most critical sustainability pressures for the Scheme given its material impact on projected costs.

[108] Table 2 of the '*Pre-election Economic and Fiscal Outlook 2019*' dated April 2019.
[109] Page 30 of the '*2015 Intergenerational Report Australia in 2055*' dated March 2015
[110] These figures are based on trimmed mean inflation, which is the calculation of the mean after discarding equal parts of the probability distribution or sample at the high and low end.
[111] https://rba.gov.au/publications/smp/2020/may/economic-outlook.html, retrieved 19 June 2020.

There have been high levels of inflation within the Scheme since its inception

Sources of previous superimposed inflation have included participants moving into more expensive accommodation arrangements (such as long-term SIL), changes to in-kind arrangements, participants assessed as having reducing levels of function, decreasing levels of informal supports, higher utilisation rates, pricing changes above normal inflation levels[112] and unanticipated costs and price changes.[113]

Since the first quarter of 2018-19, average payments for both SIL and non-SIL participants have increased by almost 40% in total, or 4.9% per quarter on average. This is significantly higher than normal inflation (assumed to be around 1.0% per quarter for the 2018-19 and 2019-20 financial years in the 2018-19 AFSR projections).

Significant levels of superimposed inflation are particularly evident for SIL participants. The increase in average payments each quarter for SIL participants has been consistently high over time, typically 4%-7% each quarter. While growth in average annualised payments for non-SIL participants has been more volatile on a quarterly basis, the overall increase is in line with that observed for SIL participants.

The main sources of expected superimposed inflation going forward are discussed below.

Increased focus on participant experience

- **Increasing use of support coordination and of plan management.** This reflects a greater desire from participants for more choice and control.
- **Allowance for inflation from unanticipated sources.** There are inevitably cost pressures from unknown and unanticipated sources which emerge over time. While these unanticipated cost pressures may lead to both cost increases and cost reductions, the experience of the Scheme to date has seen significant bias towards cost increases. Further cost pressures are likely to emerge from these unanticipated sources, for example as recommendations from various government reviews[114] and commissions are implemented.

[112] This was the most significant factor driving plan budget increases in 2019-20. These include those implemented in the July 2019 Price Guide, where Core Daily Activities and Core Social Community and Civic participant supports increased by approximately 15%, Capacity Building Daily Activities increased by approximately 6% and prices for other support categories increased between 1.3% and 2.1%. There were additional increases in loadings for remote and very remote participants.
[113] This include recent policy changes to include disability-related health supports and COVID-19 price changes.
[114] For example, the increased focus on plan flexibility and other recommendations to improve the participant experience (such as new standards and processes to support the delivery of the Participant Service Guarantee) arising from the 2019 review of the NDIS Act undertaken by independent expert Mr David Tune AO PSM.

Unanticipated cost inflation from Administration Appeal Tribunal (AAT) cases

A particularly complex support that is seeing a significant number of requests for an AAT review is participants seeking an Assistance Animal (AA), particularly children with autism and participants with psychosocial issues, including post-traumatic stress disorder (PTSD). There has been a strong push from mental health groups and some new AA trainers and providers[115] to encourage people with autism and mental health/psychosocial issues to seek an AA, including information from government sources such as Health Direct[116]. These new providers, as well as medical professionals, are increasingly providing opinions that an AA will be beneficial.

The definition of an AA is also often conflicting, with the public discourse having an expansive definition that includes 'therapy dogs', 'companion animals' (an animal that provides informal support for a person with a diagnosed mental illness or other condition), medical alert dogs, as well as the more well-known 'service dogs' such as dogs for the blind or hearing impaired (which is closer to a NDIS narrower definition). Despite the Agency's new AA operational guidance updated in July 2020, there are many complex and unresolved issues related to the provision of any AA to participants under the Scheme. These include the level of registration that providers and trainers should have in terms of internationally recognised standards, the appropriate level of ongoing, long-term support from providers of AA and the public liability risk if an accident occurs with an AA, either in private or in public.

Participants who self-manage are also able to purchase an assistance animal from any provider without the need to seek Scheme approval. It is likely that some participants have already used Scheme funds to purchase assistance animals.

Emerging cost pressures due to interactions with the mainstream interfaces

The Scheme is facing a number of pressures related to Scheme entry and funding decisions. Many of these are related to operational issues which limit the ability of the Scheme to interact effectively with existing supports across all mainstream interfaces.

For example, one complex, ongoing education interface issue is the provision of Special School Transport (SST) and Personal Care in Schools (PCIS), where the collective and shared nature of these services are very difficult to implement through an individualised planning approach. The high level of interaction and implementation required at the local school level makes it more equitable and efficient to provide outside the Scheme, despite it clearly being a disability-related support. Student transport and personal care in schools are now being included as in-kind supports for most jurisdictions up until 2022-23. This was not originally intended in the 2011 PC costing.

Expansion of coverage means the Scheme may be required to meet unanticipated costs that would otherwise be met through the State/Territory education, health, transport, or justice

[115] https://www.minddog.org.au/
[116] https://www.healthdirect.gov.au/assistance-dogs

systems. The following sources of superimposed inflation due to Scheme interfaces with mainstream services have been allowed for in the model.

- **Addition of disability-related health supports.**[117] In mid-2019, the Disability Reform Council (DRC) clarified the roles and responsibilities of the NDIS and health system for funding disability-related health supports. Participants will be able to receive funding for the disability-related health supports they need as a direct result of their disability, and as part of their daily life, through their plans. These supports were not previously covered under the NDIS. The impact is highly uncertain, with the most material change likely to be driven by the use of registered or community nurses to deliver these supports, who have higher hourly costs than a disability support worker.
- **The Agency's new supported employment strategy.** To be implemented in 2020-21, the new pricing framework introduces an hours-based, per-participant model. This new model reflects the actual hours of support provided to the participant at work, will vary depending on the intensity of workplace support needed, and is in line with existing pricing for Social Community Civic group activities in a centre.

  The new pricing model is expected to give participants greater choice and control about where and how they work. Furthermore, it is expected to stimulate growth in the supported employment market by increasing price incentives and creating opportunities for alternative models of support outside Australian Disability Enterprises.[118]
- **Allowance for participants in Residential Aged Care.** These costs are currently being met through the aged care system and are paid for off-system. The allowance reduces over time as younger participants in RAC are expected to move into alternative SIL or ILO arrangements. Note however that the total impact on the Scheme is an expected increase in future Scheme costs, as these alternative arrangements are more costly.
- **An allowance for additional inflation** is designed to cover potential changes where the impact of mainstream interfaces are not yet confirmed but are likely to result in cost deterioration over time.[119] For example, erosion of access criteria for people with chronic health conditions, expansion of personal care in schools and school transport, resolution of transport interface (including removal of taxi subsidies), and clarification of funding for children in out-of-home care.

  Section 6.2 provides an example of how mainstream health pressures may manifest in the form of expanded Scheme access for people with 'chronic health and/or mental

[117] Disability-related health supports include (but are not limited to) assistance with continence, respiratory care, nutrition, wound and pressure care, dysphagia, diabetes, podiatry and epilepsy.
[118] Note that the new supported employment strategy is a medium to long term strategy, with increased employment expected to reduce costs over time.
[119] Some examples of historical cost deterioration from unanticipated sources include the incomplete rollout of the National Injury Insurance Scheme (NIIS), the inclusion of children with developmental delay in the Scheme, and coverage of student transport and personal care in schools in the Scheme.

health conditions[120]. The original intention of the 2011 PC report was that people with chronic ageing-related health conditions, including life limited conditions, would receive services through the health, PBS, palliative and aged care sectors.

Recommendation 6 Improve effectiveness of interfaces

The Productivity Commission's 2017 study report on National Disability Insurance Scheme Costs[121] ("2017 PC study report") highlighted that interfaces are both important for the financial sustainability of the Scheme and also essential for good participant outcomes.

"The NDIS is not designed nor funded to replace mainstream services. For the NDIS to be successful and financially sustainable, there must be clear lines of responsibility between mainstream services and the scheme. Also, as people with disability can require supports across a number of service systems, it is essential that service systems work well together so that people receive the right services and achieve the best possible outcomes." (Page 244, Chapter 6)

The Agency should prioritise initiatives to improve the effectiveness of the interfaces between the Scheme and other providers[122], so that these other supports are not eroded over time and the Scheme is not a "funder of last resort". Many of these interface issues can only be resolved by legislative change or Ministerial decision. The Agency should have a clear, consistent point of view on these issues and ensure that the financial impact of decisions relating to interface issues are effectively conveyed to all decision makers.

At a participant level, the Agency should identify any potential inclusion of supports provided by other systems in participant plans and develop proactive strategic responses to incentivise the continuation of these supports, which may be more effective than funded supports. This should include support for plan implementation to allow participants to connect with these alternative services when needed.

A previous qualitative review of plans which were deemed to be overvalued highlighted "that planners are unsure of the role of mainstream services…. and have funded things more appropriately funded by justice, family and community services, housing and health." In some cases this funding has been at the participant request, without the involvement of the mainstream agency. There is therefore a training requirement for planners to better understand how supports should interface with mainstream supports. This should be supported by clear operational guidance.

[120] These health conditions include heart disease, depression & anxiety, chronic obstructive pulmonary disease (lung diseases), arthritis, diabetes, back pain, osteoporosis, cancer, and kidney disease.
[121] Productivity Commission 2017, *National Disability Insurance Scheme (NDIS) Costs*, Study Report, Canberra (Table 2.3).
[122] In this context, other support providers would be broad, but would include mainstream services, informal supports and community supports.

Interface pressures may manifest in the form of requests for an AAT review

AAT decisions have no formal legal precedent value[123], although subsequent AAT decisions often make reference to earlier decisions. Combined with the public nature of AAT decisions, this means that in practice these decisions may set 'practical precedents' that can lead to restrictions in the Scheme's ability to set policies and operational guidance. AAT cases may thus create future cost inflation through an expansion of supports beyond that which was intended, or additional participant numbers through a weaker interpretation of Section 24 of the NDIS Act. The adverse financial impact of these decisions, and the accumulation of decisions, could potentially be material.

Some interface issues that occur at the individual participant level may be the result of planning decisions such as the inclusion of supports that would normally be expected to be funded by another system. Some recent AAT decisions have resulted in an interpretation of the NDIS legislation that where another system of support is not providing a service (or perhaps underfunding the service), the NDIS is then required to fund these services, even if the service is not normally considered a disability support.

An example is mental health services, where Medicare has a limit of 10 sessions per year but NDIS funding has no limits. This can put pressures on both access requests and costs, e.g. people with long standing depression and/or PTSD may be encouraged to apply for access to the Scheme. Current participants may access psychology supports from NDIS funding, rather than through Medicare or private health insurance.

Other areas that have been tested by participants in AAT cases include supports for medications that are not listed on the Pharmaceutical Benefits Scheme but where participants have found an item to be personally beneficial, the inclusion of costs which the Agency deems are ordinary costs of living[124], and requests for home modifications and assistive technology that the Agency has determined are not reasonable and necessary.[125]

Recommendation 7 Proactive responses to matters arising from AAT cases

The NDIS AAT Branch should be proactive in identifying trends in AAT matters that have the potential to compromise the ongoing financial sustainability of the Scheme, and in particular where AAT decisions have weakened the interpretation of legislation. As well as changes to legislation, clarity around Agency policies and a clear stance for key issues also assist in this regard.

The Agency focus on moving towards more robust decision making should also be continued. Making good decisions that are transparent and consistent is expected to result in fewer AAT cases.

[123] AAT is case-by-case, merit based and reviewed based on the individual circumstances of a participant. Note that Federal Court interpretations and decisions are precedent-setting.
[124] For example, the cost of delivered meals from weight loss providers.
[125] There are a number of AAT decisions where this has been tested. For example, the determination of whether expensive "gold-standard" supports fall under the definition of reasonable and necessary.

The Scheme is rapidly maturing

- **Utilisation expected to increase over time.** As participants become more familiar and adept at navigating the Scheme, and the provider market for supports develops, utilisation of plan budgets is expected to increase towards an ultimate level.
- **Unwinding the Temporary Transformation Payment (TTP).** A 7.5% TTP, introduced at 1 July 2019, was designed to support providers as they moved from previous block funding arrangements to the Scheme, thereby offsetting some of the short-term overhead costs of transitioning into the Scheme. The removal of the TTP is expected to occur over the next five years, leading to future reductions in costs.
- **Payment calibration bias.** Participants from existing State/Territory programs have higher payment levels than those from Commonwealth programs or those previously not receiving supports. Analysis has shown that there is an implicit bias in the payment assumptions as these participants currently make up a greater proportion of participants than they will at the Steady Intake Date. A decrease in projected Scheme costs is thus expected as the participant profile changes and this payment bias recedes.
- **Increases in the usage of specialist disability accommodation (SDA).** Over time more participants are expected to access SIL arrangements and this will increase SDA costs. In addition, around 40% of current participants in SIL do not yet have SDA in their plans and costs are expected to increase as this backlog is removed.

The following table shows that the overall impact of superimposed inflation is estimated to be an 11.3% increase in costs spread over the next ten years.[126]

Table 28 Impact of adopted superimposed inflation assumptions on payments

Source of superimposed inflation	Projection Year										
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Plan management	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Support coordination	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
Additional inflation	0.2%	0.3%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%
Participant experience	**0.2%**	**0.5%**	**0.5%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**1.5%**
Disability-related health supports	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
Employment	0.3%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
Allowance for RAC	2.2%	-0.2%	-0.4%	-0.4%	-0.4%	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.4%
Additional inflation	0.3%	0.5%	0.5%	0.8%	1.1%	0.5%	0.0%	0.0%	0.0%	0.0%	3.7%
Mainstream interface	**3.3%**	**1.3%**	**0.2%**	**0.4%**	**0.7%**	**0.3%**	**-0.1%**	**0.0%**	**0.0%**	**0.0%**	**6.1%**
Ultimate utilisation	0.5%	1.0%	1.0%	1.1%	1.1%	0.9%	0.6%	0.4%	0.3%	0.2%	7.2%
Payment bias	-0.9%	-1.2%	-0.4%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-2.9%
Unwinding of TTP	-0.1%	-0.2%	-0.2%	-0.2%	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	-1.1%
SDA	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
Maturing Scheme	**-0.4%**	**-0.2%**	**0.5%**	**0.7%**	**0.8%**	**0.8%**	**0.6%**	**0.4%**	**0.3%**	**0.2%**	**3.7%**
Total superimposed inflation	**3.1%**	**1.6%**	**1.2%**	**1.3%**	**1.5%**	**1.1%**	**0.5%**	**0.4%**	**0.3%**	**0.2%**	**11.3%**

Note that superimposed inflation has been allowed for at a support category level, rather than at a total level, as many of the sources are likely to impact specific support categories only. This table shows the estimated total Scheme impact.

[126] Note that some sources of superimposed inflation have a different expected impact on plan budgets compared with payments. Namely, superimposed inflation related to increases in utilisation over time only applies to payments and the allowance for participants in RAC is smaller for plan budgets as most RAC supports are already captured in plans.

Total inflation

Normal inflation has been combined with superimposed inflation rates to calculate total inflation. The following figure shows the total annual inflation rates that have been applied to payments and plan budgets separately from 2020-21 onwards.

Figure 22 Adopted inflation for payments and plan budgets

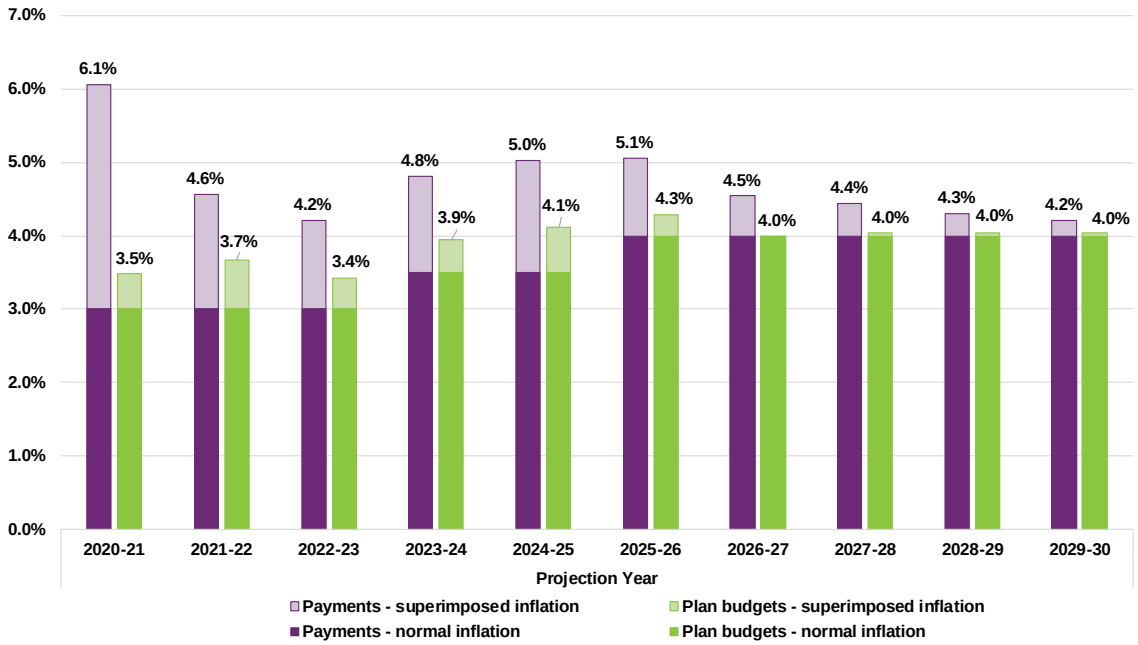


Table 29 shows that the adopted inflation rates for payments have increased since the 2018-19 AFSR.

Table 29 Projected inflation rates for payments compared to 2018-19 AFSR[127]

Inflation on Payments	Projection Year										
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Thereafter
2019-20 AFSR											
Normal inflation	3.0%	3.0%	3.0%	3.5%	3.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Superimposed inflation	3.1%	1.6%	1.2%	1.3%	1.5%	1.1%	0.5%	0.4%	0.3%	0.2%	0.0%
Total inflation	**6.1%**	**4.6%**	**4.2%**	**4.8%**	**5.0%**	**5.1%**	**4.5%**	**4.4%**	**4.3%**	**4.2%**	**4.0%**
2018-19 AFSR											
Normal inflation	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Superimposed inflation	-0.4%	0.1%	-0.2%	-0.4%	-0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total inflation	**3.6%**	**4.1%**	**3.8%**	**3.6%**	**3.4%**	**4.0%**	**4.0%**	**4.0%**	**4.0%**	**4.0%**	**4.0%**
Difference (% points)											
Normal inflation	-1.0%	-1.0%	-1.0%	-0.5%	-0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Superimposed inflation	3.5%	1.5%	1.4%	1.7%	2.1%	1.1%	0.6%	0.5%	0.3%	0.2%	0.0%
Total inflation	**2.5%**	**0.5%**	**0.4%**	**1.2%**	**1.6%**	**1.1%**	**0.6%**	**0.5%**	**0.3%**	**0.2%**	**0.0%**

The overall impact of higher superimposed inflation and lower normal inflation compared to the 2018-19 results in an estimated increase of 7.5% in costs over the next 10 years.

[127] Note that these inflationary sources have been applied at a support category level for payments, and this is the estimated total Scheme impact.

5.2.3 Participant cost projections

Table 30 shows the impact of the changes in experience and assumptions since the 2018-19 AFSR on projected participant costs, split between participants in SIL and those not in SIL. Projected costs for participants in SIL have significantly increased compared to the 2018-19 AFSR (7% in 2022-23 and 21% in 2034-35). For participants not in SIL, costs have increased by 7% in 2022-23, rising to 19% in 2029-30 and 23% by 2034-35. The increase in projected participant costs observed across all years is driven by higher projected participant numbers, the overall 6% increase in average payment assumptions, and higher total inflation assumptions.

Table 30 Change in projected participant costs by SIL group (on a cash basis)

Participant Costs ($m)	Projection Year						
	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30	2034-35
Projection - 2019-20 AFSR							
Non-SIL	13,832	16,292	18,042	19,662	21,386	31,310	44,661
SIL	8,124	9,415	10,497	11,549	12,723	19,994	28,852
Total	**21,956**	**25,707**	**28,539**	**31,211**	**34,109**	**51,304**	**73,513**
Projection - 2018-19 AFSR							
Non-SIL	12,939	15,074	16,801	18,058	19,080	26,315	36,180
SIL	7,664	8,818	9,812	10,759	11,740	17,408	23,798
Total	**20,603**	**23,891**	**26,613**	**28,817**	**30,820**	**43,723**	**59,978**
Difference							
Non-SIL	893	1,218	1,241	1,605	2,306	4,995	8,481
SIL	460	598	685	789	983	2,587	5,054
Total	**1,353**	**1,816**	**1,926**	**2,394**	**3,289**	**7,581**	**13,535**
Percentage difference							
Non-SIL	7%	8%	7%	9%	12%	19%	23%
SIL	6%	7%	7%	7%	8%	15%	21%
Total	**7%**	**8%**	**7%**	**8%**	**11%**	**17%**	**23%**

Table 31 shows that across all support categories, projected participant costs have increased substantially compared to the 2018-19 AFSR. One of the major contributors to the increased participant costs is the Core Daily Activities support category. Projected participant costs are initially 6% higher in 2020-21, gradually increasing to 18% higher in 2034-35. This is mainly driven by higher than expected numbers of participants with autism, for whom Daily Activities represent around 45% of overall payments.

For the Capacity Building Daily Activities support category, the projected increase from around 25% to 38% over the 15 years reflects the higher payment experience, coupled with the increase in projected participant numbers, particularly children. Further, significantly higher participant costs can be observed for Home Modifications (16% to 64%)[128], Consumables (35% to 53%) and Capacity Building Choice and Control (75% to 124%)[129] support categories.

[128] The significant increase from 2020-21 to 2034-35 reflects the expected removal of the backlog of SDA requests for participants in SIL (around 40% of current participants in SIL do not yet have SDA in their plans), and the increasing proportion of SIL participants over time.
[129] This mainly reflects a greater desire from participants for increased plan flexibility and choice and control.

Table 31 Change in projected participant costs by support category (on a cash basis)

Participant Costs ($m)	Projection Year						
	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30	2034-35
Projection - 2019-20 AFSR							
Core							
Daily Activities	12,160	13,967	15,322	16,654	18,150	27,332	39,067
Social Community Civic	3,942	4,672	5,120	5,557	6,054	9,076	13,341
Transport	782	898	1,014	1,131	1,258	1,960	2,843
Consumables	346	418	467	514	563	823	1,126
Capital							
Assistive Technology	710	822	911	994	1,083	1,544	2,075
Home Modifications	279	373	449	490	537	802	1,105
Capacity Building							
CB Daily Activities	2,269	2,702	3,100	3,456	3,786	5,544	7,569
Support Coordination	543	651	760	854	939	1,405	2,011
CB Employment	408	589	687	761	848	1,413	2,307
CB Choice and Control	214	261	309	352	390	595	856
Other CB supports	303	353	400	448	502	808	1,213
Total	**21,956**	**25,707**	**28,539**	**31,211**	**34,109**	**51,304**	**73,513**
Projection - 2018-19 AFSR							
Core							
Daily Activities	11,439	13,217	14,667	15,881	17,022	24,244	33,103
Social Community Civic	4,142	4,754	5,235	5,589	5,872	8,266	11,539
Transport	791	930	1,054	1,153	1,241	1,803	2,516
Consumables	256	302	339	367	394	544	736
Capital							
Assistive Technology	636	746	831	897	964	1,330	1,780
Home Modifications	242	280	310	335	359	504	674
Capacity Building							
CB Daily Activities	1,812	2,147	2,463	2,717	2,944	4,093	5,477
Support Coordination	480	567	638	693	743	1,046	1,441
CB Employment	402	475	541	597	647	968	1,409
CB Choice and Control	122	145	165	180	194	275	381
Other CB supports	279	328	372	408	441	650	922
Total	**20,603**	**23,891**	**26,613**	**28,817**	**30,820**	**43,723**	**59,978**
Difference							
Core							
Daily Activities	720	750	655	774	1,128	3,089	5,964
Social Community Civic	-200	-82	-115	-32	182	810	1,802
Transport	-9	-32	-40	-22	17	157	327
Consumables	90	116	128	146	169	279	390
Capital							
Assistive Technology	75	76	81	98	120	214	295
Home Modifications	38	94	139	155	178	298	432
Capacity Building							
CB Daily Activities	457	555	637	739	841	1,451	2,092
Support Coordination	63	84	122	161	195	359	570
CB Employment	5	114	146	164	202	445	898
CB Choice and Control	92	117	145	171	196	320	474
Other CB supports	24	25	28	40	61	158	291
Total	**1,353**	**1,816**	**1,926**	**2,394**	**3,289**	**7,581**	**13,535**
Percentage difference							
Core							
Daily Activities	6%	6%	4%	5%	7%	13%	18%
Social Community Civic	-5%	-2%	-2%	-1%	3%	10%	16%
Transport	-1%	-3%	-4%	-2%	1%	9%	13%
Consumables	35%	38%	38%	40%	43%	51%	53%
Capital							
Assistive Technology	12%	10%	10%	11%	12%	16%	17%
Home Modifications	16%	33%	45%	46%	49%	59%	64%
Capacity Building							
CB Daily Activities	25%	26%	26%	27%	29%	35%	38%
Support Coordination	13%	15%	19%	23%	26%	34%	40%
CB Employment	1%	24%	27%	27%	31%	46%	64%
CB Choice and Control	75%	80%	88%	95%	101%	116%	124%
Other CB supports	9%	8%	8%	10%	14%	24%	32%
Total	**7%**	**8%**	**7%**	**8%**	**11%**	**17%**	**23%**

Table 32 shows that increases in projected participant costs are across all age groups. Projected participant costs for children aged 0 to 14 have increased significantly compared to the 2018-19 AFSR (21% in 2020-21, peaking at 40% in 2029-30, then remaining high at 32% in 2034-35). This is due to higher numbers of children expected to enter the Scheme. For young adults (aged 15 to 24), projected participant costs increase from 9% higher in 2020-21 to 52% higher in 2034-35, reflecting the higher child participant intake (from earlier years) ageing into older age bands.

For adults (aged 25 to 64), projected costs are only slightly higher (by 2% in 2020-21), with higher average payments offset by fewer than expected adults projected to enter the Scheme. However, higher projected costs can be observed from 2024-25 onwards, reflecting a higher proportion of SIL participants (with a low level of function and a primary disability of either autism and psychosocial disability), as well as the higher rates of superimposed inflation adopted compared with the 2018-19 AFSR.

Table 32 Change in projected participant costs by age group (on a cash basis)

Participant Costs ($m)	Projection Year						
	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30	2034-35
Projection - 2019-20 AFSR							
Children (0 to 14)	3,077	3,762	4,371	4,942	5,466	8,164	10,467
Young adults (15 to 24)	3,467	4,068	4,501	4,903	5,360	8,529	14,453
Adults (25 to 64)	14,271	16,257	17,539	18,704	20,062	28,341	39,348
Older adults (65+)	1,141	1,620	2,128	2,661	3,221	6,270	9,246
Total	**21,956**	**25,707**	**28,539**	**31,211**	**34,109**	**51,304**	**73,513**
Projection - 2018-19 AFSR							
Children (0 to 14)	2,547	2,966	3,377	3,709	4,029	5,829	7,946
Young adults (15 to 24)	3,180	3,653	4,097	4,476	4,787	6,737	9,533
Adults (25 to 64)	13,979	16,000	17,437	18,485	19,406	26,008	34,743
Older adults (65+)	896	1,272	1,701	2,147	2,598	5,148	7,756
Total	**20,603**	**23,891**	**26,613**	**28,817**	**30,820**	**43,723**	**59,978**
Difference							
Children (0 to 14)	530	796	993	1,234	1,437	2,334	2,520
Young adults (15 to 24)	287	414	404	427	573	1,792	4,920
Adults (25 to 64)	292	257	102	219	656	2,333	4,604
Older adults (65+)	245	348	427	514	623	1,122	1,490
Total	**1,353**	**1,816**	**1,926**	**2,394**	**3,289**	**7,581**	**13,535**
Percentage difference							
Children (0 to 14)	21%	27%	29%	33%	36%	40%	32%
Young adults (15 to 24)	9%	11%	10%	10%	12%	27%	52%
Adults (25 to 64)	2%	2%	1%	1%	3%	9%	13%
Older adults (65+)	27%	27%	25%	24%	24%	22%	19%
Total	**7%**	**8%**	**7%**	**8%**	**11%**	**17%**	**23%**

Table 33 shows that the majority of the increase in projected participant costs is attributable to participants with autism (55% higher than the 2018-19 AFSR in 2034-35). Additionally, there is also a significant increase in the projected cost of participants with psychosocial disability (30% higher than 2018-19 AFSR in 2034-35), partly driven by the increase in the projected number of SIL participants.

For developmental delay, the increases are significant in the earlier years, before decreasing to 2% lower in 2034-35. This reflects the transitioning of participants with developmental delay to autism or intellectual disability. Increases in projected costs are slightly offset in the

short to medium term by lower projected costs for participants with an intellectual disability, due to lower than expected intake.

Table 33 Change in projected participant costs by disability group (on a cash basis)

Participant Costs ($m)	Projection Year						
	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30	2034-35
Projection - 2019-20 AFSR							
Autism	4,207	5,267	6,219	7,187	8,223	15,182	26,088
Intellectual Disability	7,615	8,676	9,452	10,158	10,916	15,118	19,732
Psychosocial Disability	1,908	2,301	2,551	2,761	2,993	4,299	5,781
Developmental Delay	387	452	511	567	621	845	1,089
Sensory	453	550	622	691	767	1,177	1,653
Other	7,385	8,461	9,183	9,847	10,589	14,683	19,171
Total	**21,956**	**25,707**	**28,539**	**31,211**	**34,109**	**51,304**	**73,513**
Total (Ex Autism)	**17,749**	**20,440**	**22,320**	**24,024**	**25,886**	**36,121**	**47,426**
Projection - 2018-19 AFSR							
Autism	3,388	3,988	4,604	5,205	5,821	10,208	16,834
Intellectual Disability	7,711	8,802	9,747	10,519	11,160	14,890	18,864
Psychosocial Disability	1,626	1,948	2,168	2,307	2,448	3,360	4,434
Developmental Delay	241	302	385	462	528	817	1,113
Sensory	432	514	580	629	681	1,008	1,409
Other	7,206	8,338	9,129	9,694	10,182	13,439	17,323
Total	**20,603**	**23,891**	**26,613**	**28,817**	**30,820**	**43,723**	**59,978**
Total (Ex Autism)	**17,215**	**19,904**	**22,009**	**23,612**	**24,999**	**33,514**	**43,144**
Difference							
Autism	820	1,280	1,615	1,982	2,402	4,974	9,253
Intellectual Disability	-95	-126	-295	-361	-243	227	868
Psychosocial Disability	283	353	383	454	545	939	1,346
Developmental Delay	146	151	126	104	93	28	-25
Sensory	21	36	42	62	86	169	244
Other	179	123	54	153	407	1,244	1,848
Total	**1,353**	**1,816**	**1,926**	**2,394**	**3,289**	**7,581**	**13,535**
Total (Ex Autism)	**534**	**536**	**310**	**412**	**887**	**2,607**	**4,281**
Percentage difference							
Autism	24%	32%	35%	38%	41%	49%	55%
Intellectual Disability	-1%	-1%	-3%	-3%	-2%	2%	5%
Psychosocial Disability	17%	18%	18%	20%	22%	28%	30%
Developmental Delay	61%	50%	33%	23%	18%	3%	-2%
Sensory	5%	7%	7%	10%	13%	17%	17%
Other	2%	1%	1%	2%	4%	9%	11%
Total	**7%**	**8%**	**7%**	**8%**	**11%**	**17%**	**23%**
Total (Ex Autism)	**3%**	**3%**	**1%**	**2%**	**4%**	**8%**	**10%**

5.3 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, with adjustments to allow for the normal inflation assumptions and participant projections in this report. This approach is consistent with that adopted in previous AFSRs.

Table 34 shows that actual operating expenses in 2019-20 (at $1.5 billion) were higher than budgeted in the PBS (by $53.6 million, or 3.7%) and expected in the 2018-19 AFSR (by $79.7 million, or 5.6%).

Table 34 Actual operating expenses compared to expectations for 2019-20

Operating expenses - full year to 30 June 2020	$m
Actual	**1,509.8**
Budget (from 2018-19 PBS)	1,456.2
Expected (from 2018-19 AFSR)	1,430.1

Difference	$m	%
Actual vs Budget	53.6	3.7%
Actual vs Expected	79.7	5.6%

For the 2019-20 AFSR, allowances have also been made for three broad initiatives recommended in the Tune Review[130] which are outlined below.

- **NDIA Efficiency and Maturity Program.** This program aims to improve the efficiency of the Agency's operations to support an efficient and effective mature state. For example, savings are expected to be generated in service delivery through changes to the CRM and other enhancements to ICT functionality.

- **Service Delivery Initiatives.** Participant pathway reforms have been designed to improve participant experiences, with key components including the implementation of joint planning and collaborative access processes. The Independent Assessment Program will also provide an independent assessment for participants.

- **Enabling Function Initiatives.** The Payments Platform Program involves designing, developing and implementing a real-time payments platform, while the Digital Marketplace Program aims to build a digital ecosystem where interactions and transactions between providers and participants can occur directly without the Agency as an intermediary.

The financials provided in the Tune Review indicated that the efficiency savings from these initiatives would be $986.8 million over the next four years (comprising $597.8 million for the NDIA Efficiency and Maturity Program, and $389.0 million for the other initiatives). This compares to costs of $437.0 million (associated with joint planning, collaborative access, independent assessments, and payments platform and digital marketplace) over the same period. In line with internal Agency modelling, the 2019-20 AFSR model assumes all of the estimated efficiency savings will be realised. However, note that there are likely to be delays in the roll-out of some programs due to the COVID-19 pandemic, and uncertainty surrounding these estimates in general. This approach will be revisited in advance of the 2020-21 AFSR.

Operating expenses, as a percentage of participant costs, are projected to be higher in the shorter term. This reflects the higher costs associated with bringing new participants into the Scheme. In the longer term, it is assumed that expenses will comprise 5.0% of participant

[130] '*Review of National Disability Insurance Agency Operating Costs*', David Tune AO PSM, January 2020

costs, compared with 6.3% for the 2018-19 AFSR. Operational costs (in total dollars) are thus projected to be lower than the 2018-19 AFSR after 2020-21. This is shown in Table 35.

Table 35 Operating expenses for the 2019-20 AFSR compared to the 2018-19 AFSR

Operating and Participant Costs ($m)	Projection Year to 30 June						
	2021	2022	2023	2024	2025	2030	2035
2019-20 AFSR							
Participant Costs (cash basis)	21,956	25,707	28,539	31,211	34,109	51,304	73,513
Operating Costs	**1,645**	**1,623**	**1,637**	**1,561**	**1,705**	**2,565**	**3,676**
As a % of Participant Costs	7.5%	6.3%	5.7%	5.0%	5.0%	5.0%	5.0%
2018-19 AFSR							
Participant Costs (cash basis)	20,603	23,891	26,613	28,817	30,820	43,723	59,978
Operating Costs	**1,454**	**1,647**	**1,780**	**1,815**	**1,942**	**2,755**	**3,779**
As a % of Participant Costs	7.1%	6.9%	6.7%	6.3%	6.3%	6.3%	6.3%
Difference							
Participant Costs (cash basis)	1,353	1,816	1,926	2,394	3,289	7,581	13,535
Operating Costs	190	-24	-143	-255	-236	-189	-103
As a % of Participant Costs	0.4%	-0.6%	-1.0%	-1.3%	-1.3%	-1.3%	-1.3%

Operating expenses are estimated to be 7.5% of participant costs during 2020-21, progressively decreasing to 5.0% from 2023-24 onwards. Operating costs are then explicitly projected to remain at the long-term assumption of 5.0% of participant costs. This expense rate is at the lower end of the range of expense rates seen in comparable injury support schemes around Australia, even allowing for the greater scale of the Scheme.

5.4 Cost projections

Table 36 compares the 2019-20 AFSR cost projections with the 2018-19 AFSR.

Participant costs at the Steady Intake Date in 2022-23 are estimated to be $28.5 billion (on a cash basis), including $2.1 billion for people aged over 65 years. This represents an overall increase of $1.9 billion in participant costs (on a cash basis) since the 2018-19 AFSR because actual participant numbers and payments have continued to track above previous expectations.

Projections of participant costs continue to be higher than the 2018-19 AFSR after the Steady Intake Date; this is primarily attributable to higher average payment assumptions, higher superimposed inflation and more participants with autism.

The proportion of costs attributable to participants over the age of 65 increases gradually over time, making up about 5% of participant costs in 2020-21 and increasing to about 12% of participant costs from 2029-30 onwards.

Total Scheme costs on an accrual basis, including operating expenses, is projected to be 1.42% of GDP in 2022-23. This is 0.18% points higher than in the 2018-19 AFSR. This increase is driven by both higher participant costs and the impact of the COVID-19 pandemic on the economy, which has caused GDP projections to decrease. Section 6.1.1 contains further details on the updated GDP projections.

Table 36 Baseline projection of Scheme costs – compared to the 2018-19 AFSR

Participant and Scheme costs ($m)	Projection Year						
	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30	2034-35
2019-20 AFSR							
Participant Costs (cash basis)							
0-64 years	20,815	24,087	26,411	28,550	30,888	45,034	64,267
65+ years	1,141	1,620	2,128	2,661	3,221	6,270	9,246
Total Participant Costs (cash basis)	**21,956**	**25,707**	**28,539**	**31,211**	**34,109**	**51,304**	**73,513**
Participant Costs (accrual basis)							
0-64 years	21,122	24,429	26,722	28,753	31,058	45,343	64,708
65+ years	1,158	1,643	2,153	2,680	3,239	6,313	9,310
Total Participant Costs (accrual basis)	**22,280**	**26,072**	**28,875**	**31,432**	**34,297**	**51,656**	**74,018**
Operating Costs							
0-64 years	1,559	1,520	1,515	1,427	1,544	2,252	3,213
65+ years	85	102	122	133	161	313	462
Operating Costs	**1,645**	**1,623**	**1,637**	**1,561**	**1,705**	**2,565**	**3,676**
Total Scheme Costs (accrual basis)	**23,925**	**27,695**	**30,512**	**32,993**	**36,002**	**54,221**	**77,694**
Projected GDP	1,891,847	2,038,465	2,152,109	2,272,090	2,398,758	3,137,439	4,084,461
As % of GDP:							
Total Scheme Costs (accrual basis)	1.26%	1.36%	1.42%	1.45%	1.50%	1.73%	1.90%
Total Scheme Costs for 0-64 (accrual basis)	1.20%	1.27%	1.31%	1.33%	1.36%	1.52%	1.66%
2018-19 AFSR							
Participant Costs (cash basis)							
0-64 years	19,707	22,619	24,912	26,670	28,222	38,575	52,223
65+ years	896	1,272	1,701	2,147	2,598	5,148	7,756
Total Participant Costs (cash basis)	**20,603**	**23,891**	**26,613**	**28,817**	**30,820**	**43,723**	**59,978**
Participant Costs (accrual basis)							
0-64 years	20,138	22,939	25,146	26,722	28,219	38,806	52,536
65+ years	916	1,290	1,717	2,152	2,598	5,179	7,802
Total Participant Costs (accrual basis)	**21,054**	**24,229**	**26,863**	**28,873**	**30,817**	**43,985**	**60,339**
Operating Costs							
0-64 years	1,391	1,559	1,666	1,680	1,778	2,430	3,290
65+ years	63	88	114	135	164	324	489
Operating Costs	**1,454**	**1,647**	**1,780**	**1,815**	**1,942**	**2,755**	**3,779**
Total Scheme Costs (accrual basis)	**22,508**	**25,875**	**28,643**	**30,689**	**32,759**	**46,740**	**64,118**
Projected GDP	2,078,227	2,194,088	2,316,409	2,445,549	2,581,888	3,376,962	4,396,283
As % of GDP:							
Total Scheme Costs (accrual basis)	1.08%	1.18%	1.24%	1.25%	1.27%	1.38%	1.46%
Total Scheme Costs for 0-64 (accrual basis)	1.04%	1.12%	1.16%	1.16%	1.16%	1.22%	1.27%
Difference							
Participant Costs (cash basis)							
0-64 years	1,108	1,468	1,499	1,880	2,666	6,459	12,044
65+ years	245	348	427	514	623	1,122	1,490
Total Participant Costs (cash basis)	**1,353**	**1,816**	**1,926**	**2,394**	**3,289**	**7,581**	**13,535**
Participant Costs (accrual basis)							
0-64 years	984	1,490	1,576	2,031	2,839	6,537	12,172
65+ years	242	353	436	528	641	1,134	1,507
Total Participant Costs (accrual basis)	**1,226**	**1,843**	**2,011**	**2,559**	**3,480**	**7,671**	**13,679**
Operating Costs							
0-64 years	168	-39	-151	-253	-234	-179	-77
65+ years	22	15	8	-2	-3	-11	-26
Operating Costs	**190**	**-24**	**-143**	**-255**	**-236**	**-189**	**-103**
Total Scheme Costs (accrual basis)	**1,416**	**1,819**	**1,869**	**2,304**	**3,244**	**7,481**	**13,576**
Projected GDP	-186,380	-155,623	-164,300	-173,459	-183,130	-239,523	-311,822
As % of GDP:							
Total Scheme Costs (accrual basis)	0.18%	0.18%	0.18%	0.20%	0.23%	0.34%	0.44%
Total Scheme Costs for 0-64 (accrual basis)	0.16%	0.16%	0.15%	0.17%	0.20%	0.30%	0.39%

Lifetime cost estimates[131]

Lifetime cost estimates summarise the average expected cost of Scheme supports over a participant's entire lifetime. 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 2020 assuming a discount rate of 5.0% per annum for the next three years, 5.5% per annum for the two years after, and 6.0% thereafter.[132]

Table 37 shows these calculated average lifetime costs by disability type, which are then applied to the estimated annual population of new incidence in 2020-21.

Table 37 Average & Total Lifetime Costs for New Incidence in 2020-21

		On a cash basis	
Disability Type	**New Incidence population (2020-21)**	**Average Lifetime Costs ($m)**	**Total Lifetime Costs ($m)**
ABI	625	1.71	1,068
Autism	10,745	1.78	19,129
Cerebral Palsy	575	3.53	2,028
Hearing Impairment	1,830	0.20	366
Intellectual Disability	1,836	3.13	5,752
Multiple Sclerosis	478	1.51	723
Delay	13,323	0.79	10,541
Other	66	0.96	64
Other Neurological	2,318	0.92	2,122
Other Physical	1,862	0.56	1,040
Other SensorySpeech	992	0.04	40
Psychosocial disability	2,503	1.06	2,661
Spinal Cord Injury	234	2.35	550
Stroke	662	1.05	694
Visual Impairment	860	0.45	388
Total	**38,910**	**1.21**	**47,166**

Projected GDP (2020-21)	1,891,847
% of GDP	**2.49%**

[131] 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 four years or less. These estimates therefore reflect emerging experience, assuming the same costs and exit rates were to continue over the lifetime of participants.
[132] The real gap between the inflation rate and discount rate is assumed to be 2.0% per annum. The inflation rate used for this analysis is 3.0% p.a. for three years (from 2020-21 to 2022-23), 3.5% p.a. for two years (from 2024-25 to 2025-26) and then 4.0% p.a. thereafter. The results are very sensitive to the real gap.

The total lifetime cost for an annual cohort of new incidence is projected to be $47.2 billion based on current long term assumptions, representing 2.49% of projected GDP levels.

It is worth noting that there have been allowances made for participants moving into SIL and transitions of participants from developmental delay to autism or intellectual disability over time. These allowances were not made in the 2018-19 AFSR and the impact of both has been significant. To a lesser extent, the lifetime cost estimates have also been affected by reduced GDP projections due to the COVID-19 pandemic (see Section 6.1.1 for more details), higher assumptions for superimposed inflation and costs, and the explicit modelling of 65+ participants in the new incidence population.

Ongoing monitoring of changes in lifetime costs at the support class 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 37 indicates that about 40% of total lifetime costs attributable to an annual cohort of new entrants into the Scheme are for participants with autism. This reflects a continuation of current experience, as high numbers of children are presenting to the Scheme with autism and there have been relatively few exits[133]. A significant increase in the number of participants with autism is thus projected over the medium term, especially for older ages. However, note that there is considerable uncertainty surrounding these estimates.

In addition, although there are relatively few participants with autism aged over 30, the average plan budget for these participants over age 30 is above $120,000. A significant number are in SIL; as at 30 June 2020, of all participants currently in SIL, there are 2,694 (or 11.2%) with autism and this proportion is expected to almost double to 22.0% by 30 June 2030. Indeed, this experience has a material impact on Scheme costs, accounting for the majority of the increase in baseline Scheme costs over time. A scenario where there is a greater long term proportion of participants in SIL in general is explored in Section 6.2.

The total lifetime cost for the 391,999 participants currently in the Scheme has been estimated to be $753.2 billion, or almost 40% of projected GDP for the 2020-21 year. The average lifetime cost estimate of these participants is $1.9 million; this is higher than the $1.2 million for a new incidence cohort due to the different disability and age distributions of the current Scheme population. For example, the age profile of current participants is skewed to older participants and lower functional levels compared with the new incidence cohort. 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 many of whom are expected to exit the Scheme.

[133] This is especially true given the pause on eligibility reassessments in the 2019 calendar year.

6. Scheme projection summary

6.1 Baseline projection summary

The baseline projection can be considered the best estimate, based on the evidence available to date, of the longer term cost trajectory for the Scheme as it reaches maturity. Hence, it is a useful basis from which to monitor the actual Scheme experience.

Table 38 shows that the Scheme is projected to have a Steady Intake Date population at 30 June 2023 of over 532,000 participants, of whom almost 508,000 are expected to be aged 0 to 64. This is equivalent to a prevalence rate of 2.27% of the Australian general population aged 0 to 64.

The projected Scheme cost (accrual basis) for 2022-23 is $30.5 billion, including almost $1.6 billion in operating costs.

Table 38 Baseline projection of participant numbers and total Scheme costs

Number of participants	As at 30 June							
	2020	2021	2022	2023	2024	2025	2030	2035
0-64 years	380,523	440,560	479,970	507,668	529,174	550,419	654,561	759,249
65+ years	11,476	15,783	20,209	24,604	28,940	33,080	50,977	63,437
Total	**391,999**	**456,343**	**500,179**	**532,271**	**558,114**	**583,500**	**705,538**	**822,686**
Prevalence (0-64)	1.76%	2.02%	2.18%	2.27%	2.34%	2.41%	2.71%	2.97%

Scheme Costs ($m)	Projection Year						
	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30	2034-35
Plan Budgets	28,770	33,115	36,426	39,478	42,763	62,757	89,782
Utilisation Rate	76%	78%	78%	79%	80%	82%	82%
Total Participant Costs (cash basis)	21,956	25,707	28,539	31,211	34,109	51,304	73,513
Total Participant Costs (accrual basis)	**22,280**	**26,072**	**28,875**	**31,432**	**34,297**	**51,656**	**74,018**
Operating Costs	**1,645**	**1,623**	**1,637**	**1,561**	**1,705**	**2,565**	**3,676**
Total Scheme Costs (accrual basis)	**23,925**	**27,695**	**30,512**	**32,993**	**36,002**	**54,221**	**77,694**

Projected GDP	1,891,847	2,038,465	2,152,109	2,272,090	2,398,758	3,137,439	4,084,461
As % of GDP:							
Total Scheme Costs (accrual basis)	1.26%	1.36%	1.42%	1.45%	1.50%	1.73%	1.90%
Total Scheme Costs for 0-64 (accrual basis)	1.20%	1.27%	1.31%	1.33%	1.36%	1.52%	1.66%

6.1.1 Costs as proportion of Gross Domestic Product (GDP)

Total Scheme costs (accrual basis) are estimated to represent 1.42% of GDP in 2022-23, increasing to 1.73% in 2029-30 and 1.90% in 2034-35. For ages 0 to 64, this is 1.31% of GDP in 2022-23, 1.52% of GDP in 2029-30 and 1.66% of GDP in 2034-35.

As shown in Figure 23, Scheme costs as a proportion of GDP are projected to be significantly higher than the 2018-19 AFSR. This is driven by both higher cost projections and lower GDP projections.

Figure 23 Total Scheme costs (accrual basis) as a proportion of GDP

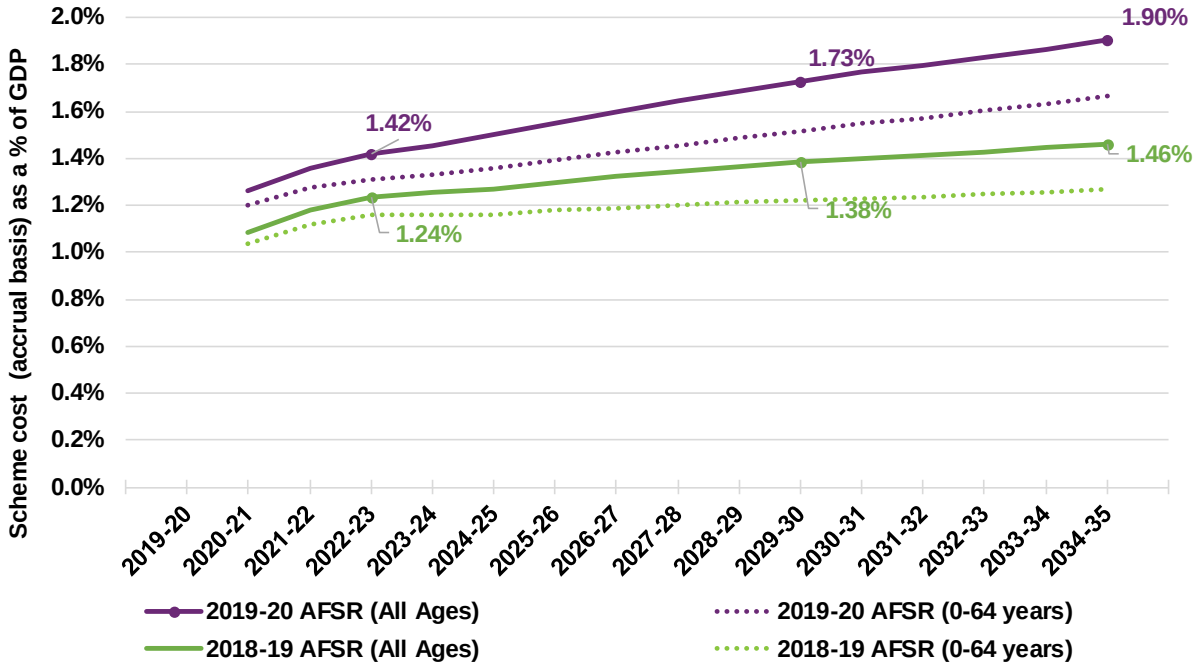


Table 39 shows that the nominal GDP projections have decreased since the 2018-19 AFSR.

Table 39 Nominal Gross Domestic Product (GDP) projections

	Projection Year									
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30	2034-35
2019-20 AFSR										
GDP ($ million)		**1,947,246**	1,986,191	1,891,847	2,038,465	2,152,109	2,272,090	2,398,758	3,137,439	4,084,461
GDP growth (%)			**2.00%**	**-4.75%**	**7.75%**	5.58%	5.58%	5.58%	5.48%	5.38%
2018-19 AFSR										
GDP ($ million)	1,847,675	1,940,059	2,003,111	2,078,227	2,194,088	2,316,409	2,445,549	2,581,888	3,376,962	4,396,283
GDP growth (%)		5.00%	3.25%	3.75%	5.58%	5.58%	5.58%	5.58%	5.48%	5.38%
Change since 2018-19 AFSR										
GDP ($ million)		7,187	-16,920	-186,380	-155,623	-164,300	-173,459	-183,130	-239,523	-311,822
GDP (%)		0.37%	-0.84%	-8.97%	-7.09%	-7.09%	-7.09%	-7.09%	-7.09%	-7.09%

- The latest nominal GDP figure of $1.95 trillion for 2018-19 is sourced from the *Expenditure of Gross Domestic Product 2018-19*, released by the ABS.[134]
- The projected growth in GDP over the next two years is sourced from the Federal Government's *Economic and Fiscal Update*, published in July 2020[135]. This paper noted that nominal GDP growth is forecast to have slowed to 2.0% in 2019-20, with nominal GDP expected to contract by 4.75% in 2020-21.[136]
- The nominal GDP growth of 7.75% for 2021-22 is estimated based on projected real GDP growth of 5% (from the RBA's Economic Outlook in their *Statement on*

[134] Table 2 of '*5204.0 Australian System of National Accounts, 2018-19*' retrieved 10 June 2020.
[135] Table 1.2, pg. 3, https://budget.gov.au/2020-efu/downloads/JEFU2020.pdf, retrieved 30 July 2020.
[136] In response to the COVID-19 pandemic, the government-imposed lockdowns in the June 2020 quarter caused the Australian economy to be in a recession, with real GDP forecast to have contracted by 0.25% in 2019-20, based on the Federal Government's Economic and Fiscal Update, released in July 2020.

Monetary Policy, published in May 2020[137]) and an assumed gap of 2.75% between real and nominal GDP growth.

- Longer term GDP growth rate projections are unchanged from the 2018-19 AFSR, with expected nominal GDP growth of 5.58% over the medium term from 2022-23, and a gradual decrease in expected nominal GDP growth to 5.08% by 2049-50.[138]

6.1.2 Change in basis

This section presents the main drivers of movements in participant numbers and projected costs from the 2018-19 AFSR to the 2019-20 AFSR, known as a "change in basis". A comparison of the Dec19 update to the 2019-20 AFSR is also shown.

Change in basis from 2018-19 AFSR

Table 40 shows the main drivers of movements in participant numbers at various points in time, as well as the total movement from the 2018-19 AFSR.

Table 40 Change in projected participant numbers from 2018-19 AFSR

Change in projected participant numbers	As at 30 June			
	2021	2023	2030	2035
2018-19 AFSR *AFSR model as at 30 June 2019*	**423,889**	**501,491**	**636,645**	**719,088**
a) 2018-19 AFSR, with a year of experience *2018-19 AFSR model with 1 July 2019 to 30 June 2020 experience*	+23,341	+19,919	+12,453	+12,177
b) Population growth *Impact of updated population growth assumptions*	-	-	+431	+1,052
c) Participant projection *Impact of new population assumptions*	+9,862	+8,987	-358	-1,364
d) Higher new incidence *Impact of updated new incidence assumptions*	-	-	+60,992	+93,097
e) Higher exits *Impact of new exit assumptions*	-748	-2,534	-7,061	-8,475
f) Transition rates implemented *Impact of participants transitioning out of Developmental Delay*	-	+4,408	+2,437	+7,111
2019-20 AFSR model *Projections based on assumptions in this report*	**456,343**	**532,271**	**705,538**	**822,686**
Total movement from 2018-19 AFSR to 2019-20 AFSR model	**+32,454 (+7.7%)**	**+30,780 (+6.1%)**	**+68,894 (+10.8%)**	**+103,598 (+14.4%)**

The projected number of participants at 30 June 2021 has increased by about 32,500 compared to the 2018-19 AFSR. Actual experience of higher participant intake and lower exits has been the main contributor of the increase (about +23,000), with further upward revisions due to assumption changes (almost +10,000).

Similarly, for 30 June 2023, the overall increase in Scheme participants is mainly driven by more active participants in the Scheme as at 30 June 2020 than expected in the 2018-19 AFSR (about +20,000) and the new population assumptions increasing the projections

[137] https://rba.gov.au/publications/smp/2020/may/economic-outlook.html, retrieved 19 June 2020.
[138] '*The Macroeconomic Context*' speech by the Deputy Secretary dated November 2015.

(about +9,000). The introduction of a transition model into the projection methodology has decreased the non-mortality exit rate and thus increased the active number of participants (about +4,400), partially offset by higher mortality exit rate assumptions.

As at 30 June 2030, the projected population of about 705,000 represents an increase of more than 10% from expected in the 2018-19 AFSR. Higher new incidence assumptions, due to the increasing prevalence observed for children, especially with developmental delay and autism, is the key driver of this result. The same drivers have a larger impact by 2034-35, with projected participant numbers of about 823,000, more than 14% higher than in the 2018-19 AFSR.

Table 41 shows the main drivers of movements in participant costs at various points in time, as well as the total movement from the 2018-19 AFSR to the 2019-20 AFSR.

Table 41 Change in projected participant costs from 2018-19 AFSR

Change in projected participant costs (cash basis)	Projection Year			
	2020-21	2022-23	2029-30	2034-35
2018-19 AFSR *AFSR model as at 30 June 2019*	**$20.6b**	**$26.6b**	**$43.7b**	**$60.0b**
a) 2018-19 AFSR, with a year of experience *2018-19 AFSR model with 1 July 2019 to 30 June 2020 experience*	-$0.1b	+$0.3b	+$0.6b	+$0.8b
b) Population growth *Impact of updated population growth assumptions*	-	-	+$0.0b	+$0.0b
c) Participant projection *Impact of new population assumptions*	+$0.0b	-$0.3b	-$0.4b	-$0.1b
d) Higher new incidence *Impact of updated new incidence assumptions*	-	-	+$1.2b	+$2.4b
e) Higher exits *Impact of new exit assumptions*	-$0.0b	-$0.0b	-$0.2b	-$0.3b
f) Transition rates implemented *Impact of participants transitioning out of Developmental Delay*	-$0.0b	+$0.1b	+$0.3b	+$0.6b
g) SIL assumptions *Impact of new SIL participant number assumptions distinguished between short, medium and long term*	+$0.0b	-$0.6b	-$0.4b	+$0.6b
h) Higher payments by support category *Impact of new payment assumptions split by support category, SIL/non-SIL and new/existing entrants*	+$1.3b	+$1.7b	+$3.0b	+$4.4b
i) Normal inflation *Impact of lower normal inflation assumptions in shorter term*	-$0.1b	-$0.4b	-$1.4b	-$1.9b
j) Superimposed inflation *New superimposed inflation assumptions applied*	+$0.2b	+$1.2b	+$4.9b	+$7.2b
2019-20 AFSR *Projections based on assumptions in this report*	**$22.0b**	**$28.5b**	**$51.3b**	**$73.5b**
Total movement from 2018-19 AFSR to 2019-20 AFSR model	**+$1.4b (+6.6%)**	**+$1.9b (+7.2%)**	**+$7.6b (+17.3%)**	**+$13.5b (+22.6%)**

In 2020-21, the projected participant cost is about $1.4 billion higher than the 2018-19 AFSR, mainly attributable to increased payment assumptions by support category, which reflect the higher than expected average payments experience over the past 12 months.

In 2022-23, the projected cost of $28.5 billion in this report is over 7% higher than the 2018-19 AFSR. The impact of higher payments by support category and higher

superimposed inflation is partially offset by lower normal inflation assumptions and lower projected numbers of SIL participants at this point in time.

In 2029-30, the projected cost is higher at $51.3 billion compared to $43.7 billion previously. In addition to higher payments and superimposed inflation, the higher projected cost in 2029-30 is also attributable to higher new incidence. The same drivers have a larger impact by 2034-35, with participant costs ($73.5 billion) over 23% higher than in the 2018-19 AFSR.

Change in basis from Dec19 update

The projected number of participants from the Dec19 update has increased by about 13,100 at 30 June 2021, increasing to about 30,700 higher at 30 June 2035. As shown in Table 42, the main drivers of movements are higher levels of participant intake observed over the past six months, which translated to increased population assumptions, as well as higher new incidence assumptions.

Table 42 Change in projected participant numbers from Dec19 update

	As at 30 June			
Change in projected participant numbers	**2021**	**2023**	**2030**	**2035**
Dec19 update *AFSR model as at 31 December 2019*	**443,232**	**518,448**	**685,487**	**791,961**
a) Dec19 update, with six months of experience *Dec19 update model with 1 January 2020 to 30 June 2020 experience*	+4,423	+4,091	+4,371	+4,299
b) Population growth *Impact of updated population growth assumptions*	-	-	+509	+1,241
c) Participant projection *Impact of updated population assumptions*	+9,359	+7,570	+841	-996
d) Higher new incidence *Impact of updated new incidence assumptions*	-	-	+18,004	+26,274
e) Higher exits *Impact of updated exit assumptions*	-671	-2,246	-6,110	-7,204
f) Transition rates implemented *Impact of participants transitioning out of Developmental Delay*	-	+4,408	+2,437	+7,111
2019-20 AFSR model *Projections based on assumptions in this report*	**456,343**	**532,271**	**705,538**	**822,686**
Total movement from Dec19 update to 2019-20 AFSR model	**+13,111 (+3.0%)**	**+13,823 (+2.7%)**	**+20,052 (+2.9%)**	**+30,724 (+3.9%)**

Table 43 shows that the projected participant cost in 2020-21 is about $0.4 billion higher than the Dec19 update, increasing to about $1.1 billion higher in 2029-30 and about $2.7 billion higher by 2034-35. Higher superimposed inflation and higher observed levels of participant intake, particularly for participants in SIL in the six months to 30 June 2020, have been the main contributors of the increase. This is partially offset by lower payment assumptions by support category[139] and lower normal inflation assumptions.

[139] In the Dec19 update, the payment assumptions were inflated using an inflation rate which included superimposed inflation sources related to the price review and an allowance for RAC. As the impact of these sources should already be reflected in the payment experience, this resulted in over-inflation of costs. This was removed from the inflation rate used for the payment assumptions in the 2019-20 AFSR.

Table 43 Change in projected participant costs from Dec19 update

	Projection Year			
Change in projected participant costs (cash basis)	**2020-21**	**2022-23**	**2029-30**	**2034-35**
Dec19 update *AFSR model as at 31 December 2019*	**$21.5b**	**$28.2b**	**$50.2b**	**$70.8b**
a) Dec19 update, with six months of experience *Dec19 update model with 1 January 2020 to 30 June 2020 experience*	+$0.7b	+$0.5b	+$0.5b	+$0.5b
b) Population growth *Impact of updated population growth assumptions*	-	-	+$0.0b	+$0.1b
c) Participant projection *Impact of updated population assumptions*	+$0.1b	+$0.5b	+$0.3b	+$0.7b
d) Higher new incidence *Impact of updated new incidence assumptions*	-	-	+$0.1b	+$0.2b
e) Higher exits *Impact of updated exit assumptions*	-$0.0b	-$0.0b	-$0.1b	-$0.1b
f) Transition rates implemented *Impact of participants transitioning out of Developmental Delay*	+$0.0b	+$0.2b	+$0.3b	+$0.7b
g) SIL assumptions *Impact of new SIL participant number assumptions distinguished between short, medium and long term*	+$0.0b	-$0.1b	-$0.1b	+$0.5b
h) Lower payments by support category *Impact of new payment assumptions split by support category, SIL/non-SIL and new/existing entrants*	-$0.6b	-$0.7b	-$1.2b	-$1.7b
i) Normal inflation *Impact of lower normal inflation assumptions in shorter term*	-$0.1b	-$0.4b	-$1.5b	-$2.1b
j) Superimposed inflation *New superimposed inflation assumptions applied*	+$0.2b	+$0.4b	+$2.7b	+$4.0b
2019-20 AFSR model *Projections based on assumptions in this report*	**$22.0b**	**$28.5b**	**$51.3b**	**$73.5b**
Total movement from Dec19 update to 2019-20 AFSR model	**+$0.4b (+2.0%)**	**+$0.3b (+1.2%)**	**+$1.1b (+2.2%)**	**+$2.7b (+3.8%)**

6.1.3 Comparison with Portfolio Budget Statements

Table 44 shows that the baseline projection is higher than the estimate of reasonable and necessary supports drafted for the PBS from 2020-21 onwards.

Table 44 Total Participant costs (accrual basis) compared to PBS[140]

Comparison to Portfolio Budget Statements (PBS)	Projection Year				
($m)	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**Total**
Portfolio Budget Statements (PBS) - draft at 17 August 2020	**21,720**	**24,677**	**27,217**	**29,425**	**103,039**
Participant costs from 2019-20 AFSR (cash basis)	21,956	25,707	28,539	31,211	107,412
Expected changes in participant plan provision	324	365	336	222	1,247
Participant costs from 2019-20 AFSR (accrual basis)	**22,280**	**26,072**	**28,875**	**31,432**	**108,659**
Participant costs, compared to Portfolio Budget Statements	**560**	**1,395**	**1,658**	**2,007**	**5,620**

[140] The PBS figures shown have been agreed upon with the Department of Finance at the time of writing. These figures should be considered draft as at 17 August 2020, subject to any further work that may be done to determine the most appropriate basis for these estimates, which are due to be finalised on 6 October 2020. It is likely that $11.4 billion of these PBS forward estimates will be placed into a contingency reserve which will not be directly allocated to Program 1.1 of the NDIS budget.

6.1.4 Comparison with 2017 Productivity Commission report

The baseline projection can be compared against the projections outlined in 2017 PC study report[141], updated for unanticipated costs.

Table 45 Estimates of Scheme costs in the 2017 PC study report[142]

	2020-21	2022-23	2029-30	2034-35
2017 Productivity Commission report	$23.7b	$26.7b	$40.9b	$53.9b
less operating costs	-$1.4b	-$1.5b	-$2.8b	-$3.7b
2017 Productivity Commission participant costs	$22.2b	$25.2b	$38.1b	$50.2b
add unanticipated costs:				
Decrease in NIIS offset as not fully operational	$0.4b	$0.5b	$0.9b	$1.2b
Children with developmental delay	$0.4b	$0.5b	$0.8b	$1.1b
School transport	$0.4b	$0.4b	$0.5b	$0.7b
Personal care in schools	$0.2b	$0.3b	$0.4b	$0.5b
Disability related healh supports	$0.1b	$0.3b	$0.4b	$0.5b
Participant cost allowing for unanticipated costs	**$23.7b**	**$27.2b**	**$41.2b**	**$54.1b**
Baseline projected participant costs (accrual basis)	**$22.3b**	**$28.9b**	**$51.7b**	**$74.0b**

Table 45 shows that based on the 2017 PC study report, the expected annual cost of the Scheme in 2020-21 was $23.7 billion, or $22.2 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 a NIIS offset for motor/workplace injuries only, the annual participant cost of the Scheme is about $23.7 billion. By comparison, the baseline projected participant costs in 2020-21 are about $22.3 billion, or about 6% below the 2017 PC estimate, allowing for unanticipated costs. The difference is primarily related to a slower assumed phase-in of people with existing disabilities (who did not previously receive services), with additional unmet demand expected over the three years to 2022-23.

However, in 2022-23, the baseline projected participant cost is about $28.9 billion, i.e. about 6% higher than the 2017 PC estimate after allowing for unanticipated costs ($27.2 billion). The difference is expected to continue to grow, such that by 2034-35, the baseline projected participant costs ($74.0 billion) are 37% above the 2017 PC estimate of $54.1 billion, after allowing for unanticipated costs. This difference is mainly driven by higher than expected numbers of participants with autism and higher levels of superimposed inflation.

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

[142] 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.

6.2 Scenario analysis

To assess the level of uncertainty that surrounds the 2019-20 projections, a number of plausible alternative scenarios have been modelled, with the results compared to the baseline projection. These scenarios are based on key risks and assumptions that are most material to Scheme costs, thereby reflecting the main drivers of uncertainty for financial sustainability. This section presents the financial impact of, if all else being equal, certain aspects of Scheme experience emerging differently to that adopted in the baseline projection.

The high-level results of the scenario analyses on participant numbers (Table 46) and participant costs (Table 47) are summarised below.

The first three scenarios in Table 46 relate to mainstream interfaces (discussed in Section 5.2.2) and explore the impact on projected participant numbers if people (under the age of 65) who have age-related, profound/severe or daily need chronic health conditions were to gain access to the Scheme. Each of these three scenarios reflects different eligibility criteria that could be used, and are estimated as:

- 44,000 additional participants, 17,000 of whom have a physical chronic health condition[143] and 27,000 have a mental health condition.[144]

- 60,000 additional participants, representing 33,000 who have a physical chronic health condition and 27,000 have a mental health condition.

- 99,000 additional participants, representing 33,000 who have a physical chronic health condition and 66,000 who have a mental health condition.

The next two scenarios in Table 46 relate to different levels of participant intake over the next three years (discussed in Sections 4.1 and 4.2).

- Participants from existing programs or those who have an existing disability but are new to disability supports may finish entering the Scheme two years earlier than expected – i.e. the Steady Intake Date is 30 June 2021 instead of 30 June 2023. The number of participants at 30 June 2023 would be about 510,000 (-4.2%).

- However, there have been no signs of participant intake slowing down as was originally anticipated in the bilateral agreements (by 2019-20). If the higher intake levels observed over the past 12 months continue to an extent, an additional 69,000 participants[145] may enter the Scheme over the next three years, as modelled in this

[143] This includes arthritis, asthma, cancer, health and cardiovascular diseases, chronic obstructive pulmonary disease (COPD), diabetes, kidney disease, pain/back pain and osteoporosis.
[144] This includes depression, anxiety and PTSD.
[145] The additional 69,000 participants are assumed to have an existing disability but are new to disability supports.

scenario. The number of participants at 30 June 2023 would be just over 600,000 (+12.7%).

Table 46 Summary of scenarios – change in projected participant numbers

Impact of Scenario on Participant numbers	As at 30 June						
	2021	2022	2023	2024	2025	2030	2035
Mainstream interface impact							
a) 44,000 additional participants	9.4%	8.7%	8.3%	8.0%	7.7%	6.8%	6.1%
b) 60,000 additional participants	12.8%	11.8%	11.3%	10.9%	10.5%	9.2%	8.4%
c) 99,000 additional participants	21.2%	19.5%	18.6%	18.0%	17.4%	15.2%	13.8%
Different levels of participant intake							
Steady Intake Date at 30 June 2021	0.0%	-3.4%	-4.2%	-4.0%	-3.8%	-2.9%	-2.3%
Higher intake levels sustained for 3 years	8.2%	11.7%	12.7%	12.0%	11.3%	8.6%	6.8%

The impact of these scenarios on projected participant costs has also been considered, as shown in Table 47.

Alternative scenarios related to costs for participants in SIL (Sections 4.4 and 5.2.2) and normal and superimposed inflation (Section 5.2.2) have also been considered given the materiality, and potential subjectivity, of these assumptions to Scheme costs and financial sustainability. The total number of participants remains the same as the baseline in these scenarios.

Table 47 Summary of scenarios – change in projected participant costs (cash basis)[146]

Impact of Scenario on Participant costs ($m) - cash basis	Projection year						
	2020-21	2021-22	2022-23	2023-24	2024-25	2029-30	2034-35
Inflation assumptions							
Continuation of historical superimposed inflation	5.1%	15.6%	27.1%	33.1%	33.1%	33.1%	33.1%
Removal of 1% p.a. additional superimposed inflation	-0.9%	-2.3%	-3.2%	-4.2%	-5.1%	-5.6%	-5.6%
Alternative normal inflation	0.1%	-0.1%	-0.6%	-1.3%	-2.3%	-8.9%	-15.3%
Alternative SIL arrangement assumptions							
Higher proportion of participants in SIL over long term	1.2%	3.3%	5.2%	7.2%	9.1%	18.5%	20.0%
Continuation of increasing SIL cost for 2 years	2.6%	8.1%	11.0%	11.0%	11.1%	11.6%	11.7%
SIL cost innovation	-8.9%	-8.6%	-8.6%	-8.7%	-8.8%	-9.2%	-9.2%
Mainstream interface impact							
a) 44,000 additional participants	14.6%	13.0%	12.3%	11.8%	11.3%	9.7%	8.7%
b) 60,000 additional participants	16.4%	14.6%	13.8%	13.2%	12.7%	10.9%	9.8%
c) 99,000 additional participants	19.6%	17.5%	16.5%	15.8%	15.2%	13.0%	11.7%
Different levels of participant intake							
Steady Intake Date at 30 June 2021	0.1%	-0.8%	-2.5%	-2.7%	-2.6%	-2.2%	-2.2%
Higher intake levels sustained for 3 years	2.0%	6.5%	8.0%	8.2%	8.0%	6.8%	6.7%

As shown in Table 47, some of these plausible scenarios lead to considerable additional costs for the Scheme (increases of up to 33%) and realisation of these scenarios pose a material risk to its long-term financial sustainability. Other scenarios displayed result in reduced costs (reductions of up to 10%-15% in costs), demonstrating the potential favourable impact of successful mitigation strategies to address escalating costs.

Inflation assumptions

- A continuation of historical superimposed inflation (assumed to be 10.1% per annum over the next three years) would increase participant costs by almost 27% above the baseline projection for 2022-23 and almost 33% above the baseline projection thereafter. These results highlight the importance of ensuring that historical sources

[146] Note that changes in participant numbers will have flow-on effects to operational expenses. These expenses are not considered in this table.

of superimposed inflation are controlled. The current level of superimposed inflation within the Scheme is not financially sustainable.

- On the other hand, reducing the assumed superimposed inflation rate via Agency and broader government initiatives by 1% per annum over the next five years is expected to reduce projected costs by 3.2% in 2022-23, with the reduction around 5.6% by 2029-30.
- If the normal inflation rate is 2.5% per annum, i.e. closer to consumer price inflation rather than wage price inflation in the longer term, the projected participant costs would decrease materially. The reduction would be 8.9% in 2029-30 and 15.3% in 2034-35.

Alternative SIL arrangement assumptions

- Increasing the long-term proportion of SIL participants in the Scheme at 30 June 2030 from 6% (42,300) to about 10% (70,100) results in participant costs being higher across all years, with the difference increasing over time as the long-term SIL proportion is reached. By 2029-30, participant costs would be more than 19% above the baseline projection.
- If the recent increases in SIL costs continue over the next two years, participant costs would be almost 12% higher by 2029-30. This demonstrates the material impact on projected Scheme costs if SIL cost escalation is not adequately addressed.
- Assuming that robust SIL operating procedures and the increased use of innovative solutions as an alternative to SIL arrangements, such as ILOs, could reduce average SIL costs by 30%, participant costs would be around 9% lower every year for the next 15 years. This highlights the importance of having robust SIL operating procedures and promoting innovation in the delivery of these supports, both of which could lead to cost efficiencies.

Mainstream interface impacts

- The overall cost of the Scheme is very sensitive to the ability of the Scheme to interface effectively with existing mainstream supports. Based on actual average plan costs of current participants with relevant disability types at 31 March 2020, average plan costs are estimated to be $94,000 for participants with physical chronic health conditions and $69,000 for participants with mental health conditions. Assuming these average plan costs, Scheme costs could be around 12% to 16% higher in 2022-23 if people with chronic health conditions enter the Scheme.

Different levels of participant intake

- Reaching the Steady Intake Date two years earlier would reduce the number of participants by 4.2% as at 30 June 2023, leading to lower cost projections (by 2.7%). The reduction in costs would be 2.2% lower than the baseline projection by 2029-30.
- On the other hand, if the higher intake levels observed over the past 12 months continue to an extent (with an additional 69,000 participants entering the Scheme),

the projected cost impact is an 8.0% increase in 2022-23, becoming 6.8% by 2029-30.

Robust mitigation strategies are required to respond to emerging cost pressures

The adverse results in many of these scenarios show that the recent experience of high inflation, additional unanticipated supports being covered by the Scheme, higher SIL numbers and higher participant intake will lead to significant increases in Scheme costs over the medium to longer term if not addressed. Unless robust mitigation strategies can successfully respond to these emerging cost pressures, Scheme costs may escalate well above the recent budget estimates.

It is also worth noting that the relatively lower cost of operational expense initiatives can have multiplicatively favourable impacts on the financial sustainability of the Scheme. This reaffirms the opportunity for the Scheme to invest in appropriate mitigation strategies to deliver a financially sustainable Scheme.

6.3 Mitigation strategies

In the 12 months to 30 June 2020, there has been further deterioration in experience across a number of key sustainability pressures identified in the 2018-19 AFSR. This includes interface cost creep with mainstream, community and informal supports, rapidly escalating average costs for SIL participants, and high historical levels of superimposed inflation. Management have developed the following mitigation strategies to address these sustainability pressures.

Independent assessments

Results of the initial Independent Assessment Pilot indicated that approximately 10% of participants with autism and approximately 4% of participants with intellectual disability who were found eligible for the Scheme would not have been found eligible if independent assessments were used. Further, some participants currently classified as “moderate function” would have been classified as “high function” using these independent assessments.

Noting that more data will become available as independent assessments are progressively rolled out from 2021, it has been assumed that there will be:

- A reduction in the number of high functioning participants aged 0 to 18 (10% for autism and 2% for all other disabilities); and
- A shift in the number of medium functioning participants to a high level of function (40% for autism and 10% for other participants).

Reduction in payments to SIL participants

Average payments for SIL participants continue to be higher than expected (almost 40% increase in total, or 4.9% per quarter on average, since the first quarter of 2018-19).[147] To address the escalating growth in payments, management have proposed curbing growth in average payments for SIL participants to $315,000 (or 6% increase) over 2020-21 and then a 2% annual average increase until 2023-24. This would require a 13% cumulative reduction from the current projected trajectory by the end of the four-year projection period.[148]

Possible mitigation strategies to achieve this include:

- Shift in needs profile of participants to more “Standard needs” (rather than “Higher needs);
- Shift in roster of care for supports provided 1:1[149] ;
- Removal of the ability to approve a quote above Assisted Daily Living rates;
- Updating the quoting process[150]; and
- Transition towards having approximately 20% of participant who would otherwise be in SIL, be in an ILO.

Reductions in payments to non-SIL participants

Similar to SIL participants, average payments for non-SIL participants have increased by almost 40% in total since the first quarter of 2018-19. Management have proposed curbing average payments for non-SIL participants at the projected $34,700 in 2020-21, with the projected average payments being $35,600 in 2021-22 and then growing at 2% per annum until 2023-24. This would require a 4% cumulative reduction from the current trajectory by the end of the four-year projection period.[151]

This will be achieved through:

- Improving reasonable and necessary decision-making; and
- Improving the plan review process, which tends to result in high increases in plan budgets.

[147] Note that one of the drivers of the increase is a 10%-15% increase in unit costs in the SIL quoting tool between the 2018-19 version and the 2019-20 version.
[148] The current projected trajectory is based on the 2019-20 AFSR model.
[149] For example, a 10% reduction in 1:1 supports (assumed to be delivered at a 1:2 ratio instead) would result in an annual cost saving of 1.6%, which a 25% reduction would result in an annual cost saving of 4.1%.
[150] To estimate an annual plan, the current quoting process uses 53 weeks. Moving towards a 52-week plan period instead of an annual plan would reduce the risk of 53 weeks being claimed.
[151] Note that no change has been made over 2020-21 for non-SIL participants as the current trajectory projects average payments to be slightly below the proposed average payment (around $34,700).

Summary of results with mitigation strategies

Table 48 shows the results of the 2019-20 AFSR with all mitigation strategies implemented. This can be compared to the 2019-20 AFSR baseline model and the estimate of reasonable and necessary supports drafted for the PBS from 2020-21 onwards. If all mitigation strategies were successfully implemented, the projected participant costs (accrual basis) would emerge about $4.3 billion lower than the baseline projections over the next four years.

Compared to the PBS, the projected participant costs (accrual basis) would be $0.5 billion higher in 2020-21; however, by 2023-24, it would be slightly lower than the PBS. Over the four years, projected participant costs with mitigation strategies (accrual basis) would be $1.3 billion higher than the PBS, compared to $5.6 billion higher without mitigation strategies.

Table 48 Estimated impact of mitigation strategies

Total participant costs ($m) - accrual basis	Projection Year				
	2020-21	2021-22	2022-23	2023-24	Total
(i) Participant costs from 2019-20 AFSR (accrual basis)	**22,280**	**26,072**	**28,875**	**31,432**	**108,659**
Impact of mitigation strategies (accrual basis)					
Introduction of independent functional capacity assessments	0	-99	-281	-448	-828
Manage cost escalation in payments to SIL participants	-107	-484	-790	-1,128	-2,509
Manage cost escalation in payments to non-SIL participants	0	-214	-298	-483	-995
(ii) Total impact of mitigation strategies (accrual basis)	**-107**	**-797**	**-1,369**	**-2,059**	**-4,332**
(iii) Participant costs from 2019-20 AFSR - with mitigation strategies	**22,173**	**25,275**	**27,506**	**29,373**	**104,327**
(iv) Portfolio Budget Statements (PBS) - draft at 17 August 2020	21,720	24,677	27,217	29,425	103,039
(v) Participant costs with mitigation strategies, compared to Portfolio Budget Statements (iii) - (iv)	453	598	289	-52	1,288

Note that the impact of the mitigation strategies is different under the 2019-20 AFSR model (compared to the Dec19 update) due to more participants now being projected in the Scheme.

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.[152] 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.

In the coming years, it will become 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. A question might arise around whether there is an increasing reliance on funded supports (especially in group activities with people with disability). This would lead to increased plan utilisation but not necessarily improving participant outcomes, while simultaneously risking the Scheme's financial sustainability.

Understanding the link between the funding invested into the Scheme and the outcomes achieved (both for participants and their families/carers) is becoming increasingly important, especially as there is growing pressure on funding levels and Scheme costs. The perception of the Scheme by the general public, who contribute through taxation, needs to be considered to ensure the Scheme receives continual 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.

Recommendation 8 Understanding the cost and outcomes of new initiatives

The Agency has, rightly so, maintained a participant-centred approach to support provision since Scheme inception. This participant-centred approach needs to continue, albeit with a shift in focus from increasing support levels to finding and encouraging better and more innovative ways for participants to utilise their supports that lead to better outcomes. Some recent initiatives have been based on broadening the scope of supports, leading to a number of proposals which increase costs but are not balanced with other initiatives which lead to a commensurate cost saving in other areas. Now that the Scheme is operating at PBS budget, there needs to be more accountability around the cost and benefit of proposed initiatives to maintain financial sustainability.

The Agency should consider a stronger governance framework that would reinforce the accountability of the Scheme to optimise budgeted funding amounts. For example, this may require a strong business case for each policy change as well as a consideration of

[152] In 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.

the longer term outcome benefits to participants. This would help filter out supports being provided that do not directly lead to improved participant outcomes. While it is important to maintain the focus on participants' experience, the Agency needs to establish a better link between costs and outcomes, and apply a financial sustainability lens to all major decisions.

The NDIS Outcomes Framework

A key component of 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 collected on an approximately annual basis to track changes in individual outcomes over time.[153] This longitudinal data could then be used to assess how changes in outcomes impact funded supports and overall Scheme costs.[154]

7.1 Participant outcomes

7.1.1 Economic and social participation

Monitoring 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 (Table 49) and the proportion of participants involved in community and social activities (Table 50). Changes in outcomes have been measured for participants who have been in the Scheme for at least two years. This is beginning 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 2020. The COVID-19 pandemic may have affected some of the responses, however any such impact would be slow to emerge in the data as the Outcomes Framework is administered at plan review. Thus, the circumstances surrounding the pandemic would, in these sections, only affect any plan reviews in the three to four months to 30 June 2020, if at all. Nonetheless, it is worth bearing in mind the challenges of the pandemic which could directly affect participant experience and outcomes.

[153] At 30 June 2016, 23,461 Short-Form Outcomes Framework questionnaires had been completed by trial participants: 13,082 for participants and 10,379 for their family/carers. For participants entering the Scheme from 1 July 2016, this information has been collected from about 99% of all participants, with the intention to collect information from all participants.
[154] Other aspects of the NDIS Outcomes Framework include satisfaction surveys, usage of mainstream and community supports, and participant goals.

Employment

Table 49 shows the changes in reported employment outcomes observed between the baseline plan and subsequent plan reviews as at 30 June 2020 for:

- participants who entered the Scheme between 1 July 2016 and 30 June 2017 (and have been in the Scheme for at least three years), i.e. the 2016-17 cohort; and
- participants who entered the Scheme between 1 July 2017 and 30 June 2018 (and have been in the Scheme for at least two years), i.e. the 2017-18 cohort.

Table 49 Longitudinal changes in participant employment outcomes between baseline and subsequent plan reviews

Participants in paid work	Baseline	Year 1	Year 2	Year 3	2020-21 Target
2016-17 cohort					
Aged 15 to 24 years	13%	17%	21%	25%	
Aged 25+	26%	26%	22%	24%	**24%**
Aged 15+ (average)	**23%**	**24%**	**22%**	**24%**	
2017-18 cohort					
Aged 15 to 24 years	15%	18%	21%		
Aged 25+	25%	24%	23%		**24%**
Aged 15+ (average)	**23%**	**23%**	**23%**		

Across both cohorts, there has been little change in the employment rate after two to three years in the Scheme. However, employment outcomes are more long-term in nature than other domains (e.g. assistance with daily living); as such, measurable progress may take more than a few years to emerge.

For participants aged 15 to 24 in the 2016-17 cohort, there has been a 12% point increase in the number of participants in paid work, from 13% at baseline to 25% at their third plan review. Similarly, there has been a 6% point increase in the number of participants in the 2017-18 cohort in paid work, from 15% at baseline to 21% at their second plan review. This indicates that employment outcomes are improving for this age group the longer the participants are in the Scheme.

The increase in reported employment outcomes for the 15 to 24 year old age group may be partially attributable to age-related development, as a greater proportion of these participants will have finished school after two to three years in the Scheme and will be actively looking for a job. However, the increase in employment has also been found to reflect the positive impact of Scheme reasonable and necessary supports on employment for young adult participants. In particular, the School Leaver Employment Supports program is a funded support for eligible school leavers to help them transition from school to employment. This program aims to build capacity, deliver vocational skills and contribute to the participant achieving a positive employment outcome.[155]

[155] A statistical analysis of employment outcomes for participants aged 15 to 24 found that building capacity, increasing independence and working in an unpaid job improved the likelihood of the participant finding paid work, which are all key supports available through the NDIS.

For participants aged 25 and older, the percentage in paid work has reduced slightly for both cohorts. The reduction in employment rates may be a result of age-development as more participants will be nearing or have reached retirement age after two to three years in the Scheme. Some participants may also have fewer skills and lower levels of confidence due to long breaks from paid employment.[156] It is worth noting that the new employment supports model, which was scheduled to be introduced from 1 July 2020, is intended to further incentivise participants and employers with the aim of increasing the proportion of participants in paid work.

In November 2018, the Department of Social Services and the Agency formed a NDIS Participant Employment Taskforce. The taskforce, in consultation with a number of stakeholders, developed a NDIS Participant Employment Strategy[157] which was released on 30 September 2019. This strategy aims to improve employment outcomes for participants and people with disability more broadly, and to guide the Agency over the next three to five years in becoming a leader and advocate of disability employment.

Social and community participation

Table 50 shows the changes in reported social and community participation for the 2016-17 and 2017-18 cohorts of participants as at 30 June 2020.

Table 50 Longitudinal changes in participant community and social participation outcomes between baseline and subsequent plan reviews

Participants in community and social activities	Baseline	Year 1	Year 2	Year 3	2020-21 Target
2016-17 cohort					
Aged 15 to 24 years	31%	37%	43%	45%	**50%**
Aged 25+	36%	41%	46%	49%	
Aged 15+ (average)	**35%**	**40%**	**45%**	**48%**	
2017-18 cohort					
Aged 15 to 24 years	33%	39%	43%		**50%**
Aged 25+	36%	42%	45%		
Aged 15+ (average)	**35%**	**41%**	**44%**		

The percentage of participants aged 15 and over involved in community and social activities has increased from 35% to 48% after three years for the 2016-17 cohort, and from 35% to 44% after two years for the 2017-18 cohort. 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.

[156] Productivity Commission Inquiry Report. 2011. *Disability Care and Support* pg. 960.
[157] More details can be found here: https://www.ndis.gov.au/about-us/strategies/participant-employment-strategy

7.1.2 "Has the NDIS helped?"

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 2020, 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 strengthens the ongoing financial sustainability of the Scheme.

The following table summarises opinions on whether the Scheme has helped, by domain, for children from birth to before starting school. Across all domains, opinions improved slightly between first, second and third reviews.

Table 51 "Has the NDIS helped?" – for children from birth to before starting school

Proportion of positive responses	Year 1	Year 2	Year 3	From years:
2016-17 cohort				**1 to 3**
Child's development	91%	94%	95%	↑
Access to specialist services	89%	91%	94%	↑
Ability to communicate	81%	84%	83%	↑
Fit into family life	71%	74%	76%	↑
Fit into community life	57%	61%	64%	↑
2017-18 cohort				**1 to 2**
Child's development	92%	96%		↑
Access to specialist services	90%	94%		↑
Ability to communicate	83%	87%		↑
Fit into family life	74%	79%		↑
Fit into community life	61%	65%		↑

Opinions on whether the Scheme has helped tend to be positive for young children, particularly in relation to the child's development and access to specialist services. Specialist services such as speech pathology, physiotherapy, occupational therapy and psychology can help children with a disability or a developmental delay to achieve better longer-term outcomes, especially when delivered through an early intervention approach. Specialist services would thus be expected to improve the outcomes of children to a point where they may no longer need individualised support from the Scheme.

Similarly, Table 52 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 access to education; however, the mainstream education system would have a much bigger role in ensuring successful outcomes than the Scheme. The percentage responding positively was highest for the child's independence.

Table 52 "Has the NDIS helped?" – for children from starting school to 14

Proportion of positive responses	Year 1	Year 2	Year 3	From years:
2016-17 cohort				**1 to 3**
Child's independence	56%	64%	69%	↑
Access to education	36%	38%	41%	↑
Family and friends	45%	50%	54%	↑
Social and recreational life	43%	46%	49%	↑
2017-18 cohort				**1 to 2**
Child's independence	58%	66%		↑
Access to education	36%	42%		↑
Family and friends	46%	53%		↑
Social and recreational life	42%	47%		↑

Table 53 summarises the percentage of positive responses on whether the Scheme has helped, by domain, for young adults aged 15 to 24. Note that the percentage for the work domain (2017-18 cohort) has decrease slightly, although due to rounding still shows 17%.

Table 53 "Has the NDIS helped?" – for young adults aged 15 to 24

Proportion of positive responses	Year 1	Year 2	Year 3	From years:
2016-17 cohort				**1 to 3**
Choice and control	59%	63%	67%	↑
Daily living	58%	64%	70%	↑
Relationships	50%	52%	55%	↑
Home	22%	19%	18%	↓
Health and wellbeing	41%	44%	46%	↑
Lifelong learning	37%	36%	36%	↓
Work	18%	16%	15%	↓
Social, community and civic participation	54%	57%	61%	↑
2017-18 cohort				**1 to 2**
Choice and control	58%	66%		↑
Daily living	58%	67%		↑
Relationships	48%	53%		↑
Home	20%	18%		↓
Health and wellbeing	40%	45%		↑
Lifelong learning	34%	36%		↑
Work	17%	17%		↓
Social, community and civic participation	53%	59%		↑

Opinions on whether the Scheme has helped vary considerably by domain for this young adult group. The percentage of positive responses is highest for choice and control and daily living. The percentage who think that the Scheme has helped is lowest for work; however support also needs to come from other government areas and from employers. The percentage is also low for home; however, support is also needed from social housing systems. This indicates that there are some challenges for participants in dealing with other external systems, and reflects the importance of resolving the mainstream interfaces for the Agency.

Similarly, Table 54 shows the proportion of positive responses for adults aged 25 and older.

Table 54 "Has the NDIS helped?" – for adults aged 25 and older

Proportion of positive responses	Year 1	Year 2	Year 3	From years:
2016-17 cohort				**1 to 3**
Choice and control	67%	73%	77%	↑
Daily living	71%	79%	83%	↑
Relationships	52%	59%	63%	↑
Home	29%	30%	32%	↑
Health and wellbeing	50%	56%	59%	↑
Lifelong learning	31%	33%	33%	↑
Work	20%	19%	18%	↓
Social, community and civic participation	60%	66%	70%	↑
2017-18 cohort				**1 to 2**
Choice and control	65%	75%		↑
Daily living	70%	79%		↑
Relationships	50%	58%		↑
Home	27%	30%		↑
Health and wellbeing	47%	54%		↑
Lifelong learning	29%	30%		↑
Work	18%	17%		↓
Social, community and civic participation	57%	65%		↑

For adult participants aged 25 and older, opinions on whether the Scheme has helped them are highest for daily living, followed by choice and control. However, adult participants generally did not perceive that the Scheme had helped them with finding paid work, for which support also needs to come from other government areas and from employers.

Choice and control

The previous two tables showed that the proportion of participants who answered positively to the question "Has the NDIS helped you have more choices and more control over your life?" has increased with more time in the Scheme, and is relatively high for both the 15 to 24 age group (over 65%) and the 25 and older age group (over 75%). Despite this, the Scheme does not appear to be influencing or shifting the market with alternatives for participants to increase their choice and control.

Recommendation 9 Increase choice and control in the market

The Agency could develop 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 platforms such as Skype, 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. It would also be good to empower participants to better think about funding being used for specific outcomes (rather than specific outputs, e.g. hours of therapy).

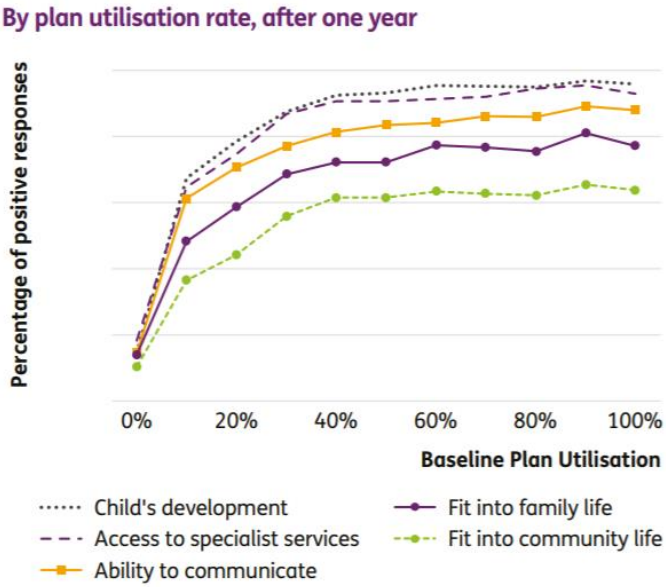
7.1.3 Impact of plan utilisation

This section explores the relationship between the plan utilisation rate (for participants' first plan) and the extent to which participants perceive the Scheme as having helped (after one year in the Scheme) across various domains.

The results presented in this section have been summarised based on the *'NDIS Participant Outcomes 30 June 2019*' report, which tracks how participants' outcomes have changed from their baseline results when they joined the Scheme in 2016-17 or 2017-18 until the latest results as at 30 June 2019.[158] This report has been publicly released and provides further, detailed information on the latest analyses of participant outcomes.

As expected, higher plan utilisation is associated with participants who have reported that the Scheme has helped them in the domains relevant for their life stage. The following figure shows that higher plan utilisation is strongly associated with a positive response after one year in the Scheme for children from birth to before starting school. This is also the case after two years in the Scheme.

Figure 24 Participants from birth to before starting school



For children (from starting school to age 14), higher plan utilisation is similarly strongly associated with a positive response[159] after one year in the Scheme, as well as after two years in the Scheme. For participants over 15, plan utilisation tends to be higher when there

[158] https://data.ndis.gov.au/reports-and-analyses/participant-outcomes-report
[159] The domains covered for participants from starting school to age 14 are: child's independence, access to education, family and friends, and social and recreational life.

is a positive response[160] after one year in the Scheme; however, this relationship does not appear to be as strong as for participants 14 and under.

Whether the increased plan utilisation is due to a continuing reliance on funding supports, placing pressure on Scheme financial sustainability, may be questioned in future years. The high levels of inflation observed in plan budgets suggest that further work needs to be done to reduce reliance on funded supports.

Additionally, it will become increasingly important for the Agency to demonstrate that the Scheme is meeting one of its primary objectives – building the capacity of participants to maximise their opportunities for independence and economic and social participation. Further progress needs to be made in this area, as shown by the results for employment outcomes and if non-mortality exits continue to be low in future (after eligibility reassessments have properly recommenced).

7.2 Family and carer outcomes

The NDIS Outcomes Framework measures outcomes for the families and carers of participants as well, 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 are likely to find the caring role easier, which may lead to increased wellbeing and greater opportunities for social and economic participation. This improved situation should in turn translate into further improved outcomes for participants[161].

The '*NDIS Family and Carer Outcomes 30 June 2019*' report, which "analyses the baseline results of the outcomes framework questionnaires for families and carers of people who entered the Scheme in 2016-17, 2017-18, and 2018-19" [162] has been publicly released. Of particular note in that report, from the perspective of financial sustainability, is that:

- Employment levels for family/carers of participants aged 0-14 have increased by 5% points (from 46.4% to 51.7%) in the two years since their child entered the Scheme (in 2016-17). Of these family/carers, the percentage who work 15 or more hours per week in a paid job increased by almost 5% points (from 79.1% to 83.9%).[163]

- After two years in the Scheme, over 90% of parents/carers of children aged from birth to before starting school say the Scheme had improved their child's development (94%) and access to specialist services (91%).

[160] The domains covered for participants aged 15 and over are: choice and control, relationships, health and wellbeing, work, daily living, home, lifelong learning, and social, community and civic participation.
[161] Productivity Commission Inquiry Report. 2011. *Disability Care and Support* pp. 54-55,131
[162] https://data.ndis.gov.au/reports-and-analyses/family-and-carer-outcomes-report
[163] For family/carers of participants who entered in 2017-18, the percentage working in a paid job increased by almost 2% (from 48.1% to 50.1%) in the year following Scheme entry. Of these, the percentage who work 15 or more hours per week in a paid job increased by almost 3% (from 77.4% to 79.9%).

8. Administrative infrastructure, processes and risk management

8.1 Information systems

During the three years of trial, the Department of Social Services hosted the Agency's information systems. From 1 July 2016, the Department of Human Services has been the Agency's ICT supplier.

The Agency has a clear vision around the future direction of data management and business intelligence. While some progress has been made over the past year on the data issues identified in the 2018-19 AFSR, further work needs to be done as discussed in Section 2.

8.1.1 Case management systems

The Agency currently uses SAP CRM as its case management system. The CRM system was deployed as a Minimum Viable Product on 1 July 2016. The primary objective of this delivery was to enable critical operational activities, such as plan approvals and payments. This approach was not specifically tailored to the needs of the Agency, and as a consequence, has meant the implementation of necessary enhancements to the CRM has not been straightforward.

The CRM is subject to a number of limitations:

- The design does not easily allow for necessary enhancements to meet changing business requirements and has limited ability to adequately capture and/or manage some aspects of information for important business processes. Instead, manual processes have been developed in lieu of an appropriate CRM solution, and these do not always have the appropriate risk management or governance structures to ensure the reliability of the data. It would be useful to improve the functionality of the CRM to be able to capture and manage information on participants receiving in-kind services[164] and process compensation recovery amounts.
- The current ICT system has limited capability to prioritise and direct work to the appropriate staff member to complete a task. There is also no system capability for defining and enforcing the sequence of tasks that need to be executed in a business process. Reliance on written documentation and staff compliance has resulted in poor data quality, inconsistent decision-making and delays in processing participant plans. A number of off-system workarounds mitigate some of these issues, however

[164] There are many examples where there is a known difference between the NDIS benchmark price and the in-kind agreed price, requiring an adjustment to be made to the participant's plan budget to accurately reflect the support provision.

there remains material uncertainty over the validity of data related to business activities and timeframes.

- While the current ICT system has the ability to record key decisions, such as those related to Scheme access and plan approvals, there is limited ability to understand the history of those decisions. That is, the system does not support scenarios where a decision changes over time. The administrative details for many changes are captured in notes, with the system only reflecting the current decision status. This impacts the ability to accurately reflect the true status of a decision at any point in time, and the ability to review those decisions as changes are made.
- There remains limited ICT capabilities regarding interactions with prospective participants and the work undertaken with Tier 2 and ECEI participants. Critical to the sustainability of the Scheme, and outcomes for people with disability, is an effective Tier 2 gateway which provides information, linkages and referrals to mainstream and community organisations, and builds the capacity of individuals and communities. With almost all operations existing off-system, there is little objective evidence regarding the activities or effectiveness of these interactions.

Recommendation 10 Enhance the capability of the case management system

Current CRM limitations are impacting on the ability of the Agency to provide the most effective case management for participants. For example, implementation of better front-end business intelligence rules could assist in providing more consistent decision-making, while better data capture of prospective participants would assist in analysing the effectiveness of the ECEI gateway.

In addition, the system does not adequately identify, manage and monitor compensation reduction amounts (CRAs) in participant plans. Compensation processes are currently being administered off-system, limiting the ability to provide sound financial management of these adjustments to plan budgets. Thus, there is uncertainty around the materiality of these compensation amounts and the ability of the Agency to recover compensation amounts in the first place.

The Agency should continue to focus on operationalising these processes so that it can lead to better Scheme outcomes.

From October 2020, the Agency will progressively move to its new case management system, ACE (Salesforce). ACE is a true case management system, 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 move to ACE will be a key priority for the Agency and help to address the limitations of the CRM as the focus shifts from prioritising participant intake to consolidating operational robustness, consistent decision-making and improved business intelligence capability.

8.1.2 Finance systems

SAP Finance is the Agency's finance system. All payments to and from the Agency are made using SAP Finance. In line with the Department of Human Services practice, the Agency commenced the use of SAP Public Sector Collection and Disbursement as an intermediary between the case management system and SAP Finance from 1 July 2016. As part of the recommendations from the Tune review, work will be undertaken to design and implement a new payments platform (Section 5.3).

8.1.3 Data warehouse

Improvements to the data warehouse have continued over the past 12 months, including some good progress made on data issues identified in the 2018-19 AFSR. The continual improvement of databases and analytical tools allow the Office of the Scheme Actuary to:

- monitor, analyse and provide operational support to the Agency;
- work more closely with Operations to understand experience; and
- allow this monitoring to occur in a more timely way.

Examples of this include the refined datasets tailored for actuarial analysis from the Data Office, the SAS Visual Analytics reporting and the Integrated Data Store 2.0 project which has improved the breadth and quality of data being recorded. While good progress has been made in improving data quality and promoting data integrity in the past year, there are still improvements that can be made.[165] This should therefore remain a priority in 2020-21.

8.2 Monitoring

The Office of Scheme Actuary has processes in place to monitor the emerging experience of the Scheme. A suite of regular monthly actuarial reporting spreadsheets provide analysis relevant to the financial sustainability of the Scheme, and these modules are listed in the following table.

Table 55 Regular reporting modules

Regular reporting module	Description
1. Access and eligibility	Profile of participants seeking access and eligibility to the Scheme

[165] For example, there continue to be opportunities to improve the data quality of participant information for culturally and linguistically diverse participants and housing indicators for participants.

Regular reporting module	Description
2. Plan approvals	Profile of participants with approved plans
3. Plan monitoring	Utilisation of plan budgets by profile of participant
4. Plan reviews	Analysis of increases in plan budgets at plan review
5. Provider monitoring	Profile of registered providers delivering supports for the Scheme
6. Reference packages	Analysis of the guided planning process and reference packages
7. Exits	Analysis of source of exits from the Scheme
8. Payments (x2)	Analysis of participant payment levels within the Scheme
9. Actual versus expected	Comparison of Scheme experience to the most recent AFSR (for the past 12 months, this was the 2018-19 AFSR)

The monitoring includes one-way tabulations for various participant cohorts, a comparison of Scheme experience against expectations, monthly trends over time and functionality for multi-way analysis. The content of this regular reporting is constantly evolving to meet the monitoring requirements of the Scheme.

Quarterly actuarial reports[166] are provided to the Agency's Sustainability Committee and management. These reports leverage the regular monitoring process to compare emerging Scheme experience to projections from the most recent AFSR (for the past 12 months, this was the 2018-19 AFSR). These reports also identify issues and trends that are discussed at the Sustainability Committee, with issues escalated if necessary through formal management responses. Over time, the impact of the Agency's formal responses can then be assessed through the regular monitoring process.

8.3 Insurance principles culture

One of the key immediate focuses of the Agency should be better embedding insurance principles within the culture of the Agency across all its functions. As the Scheme matures, issues with existing processes that were adopted during the trial and transition phases need to be addressed. In particular, changes to the processes for access, plan budgets, plan implementation and eligibility reassessment are required.

The current lack of credible functional assessment information continues to impact the Agency's ability to make consistent access, eligibility and funding decisions across the Scheme. The Independent Assessments, which are expected to commence roll-out in 2021,

[166] Note that the quarterly actuarial report is different to the publicly available quarterly reports (see: https://www.ndis.gov.au/about-us/publications/quarterly-reports) which contain information (including statistics) about participants in each jurisdiction and the funding or provision of supports by the Agency in each jurisdiction.

would enable consistent eligibility decisions and support an equitable allocation of plan budgets. The independent assessments will thus be a central component to building a robust and equitable approach to all decision-making within the Agency.

'Reasonable & Necessary' project

The 'Reasonable & Necessary' project, which is currently being undertaken by the Agency, aims to improve transparency and fairness in the way in which participants can access and utilise supports. The scope of this project is broad-ranging and covers reviewing the approaches to:

- **Determining Scheme eligibility**, such that processes are better aligned with the NDIS Act. This includes reconsidering the use of disability lists (also discussed in Section 4.5) and re-evaluating the types and sources of evidence accepted for eligibility assessments;
- **Assessing functional and environmental capacity**, by introducing and facilitating the independent assessments which will be consistently administered by approved suppliers and move away from being based on diagnosis;
- **Building personalised plan budgets**, by developing a resource funding allocation strategy that is holistic and considers a participant's environmental factors[167], thereby strengthening the guided planning process;
- **Increasing plan flexibility**, to support participants to choose how to use their funding in a way that best allows them to achieve their goals; and
- **Monitoring plan progress**, driven by data analytics, which could result in actions for Agency staff to follow up on, such as a participant check-in, a referral for an independent assessment, or a plan implementation meeting.

A successful implementation of these measures would see changes in culture across the Agency, with the ultimate goal of a greater focus on insurance principles and consistency in decision-making. These measures would also improve the reliability of data and the efficiency of reporting within the Agency.

Recommendation 11 Continued focus on the 'Reasonable & Necessary' project

The 'Reasonable & Necessary' project should be a continued priority for the Agency to better strengthen the insurance principles underlying the creation of the Scheme. In particular, it is important to maintain focus on the independent assessments; a robust framework for assessing functional capacity would enable the clear and consistent decision-making criteria to be implemented across the whole participant pathway.

In developing new Agency processes, there needs to be a focus on an equitable approach to all access, planning and funding decisions for participants. For example, the package of supports that a participant has should be comparable to other participants with similar

[167] Environmental factors include a participant's informal supports, whether they live in a remote area, and their socio-economic background.

characteristics, such as disability type, age, functional capacity and environmental factors. However, currently, when plans are reviewed, supports from the previous plan tend to be retained with more supports added on. Thus, the current process for allocating plan budgets unintentionally favours participants who entered the Scheme earlier, as they will end up with more supports built up over time compared to participants with similar needs who join the Scheme at a later date.

Ultimately, the result of the 'Reasonable & Necessary' project should be ensuring the right level of supports are provided for the people whom the Scheme was intended to support – regardless of the State/Territory in which they live, and regardless of their disability. This will mean the right assessment questions and tools are being used to inform objective access and planning decisions that are more consistent and fair. This is consistent with the 2019 Review of the NDIS Act[168] which recommends amendments to the NDIS Act to achieve these outcomes.

8.4 Risk management

The Agency's risk management framework and risk management strategy

The Agency has a comprehensive risk management framework[169] in place, including the adoption of a three "lines of defence" model for risk management. The first line of defence is the dedicated risk owners embedded within divisions, the second line undertakes a "review and challenge" role[170], and the third line is independent assurance by a third party that undertakes risk-based reviews of key processes and compliance obligations.

Significant work was undertaken in previous years to ensure the Agency's risk management framework meets the requirements stipulated by the Australian Prudential Regulatory Authority (APRA) within Prudential Standard CPS 220.[171] Core risk management elements, such as a collection of toolkits to guide all levels of the Agency to identify and manage risks and opportunities appropriately, are internally available.

The NDIA Board has formulated a risk management strategy[172] (RMS) that outlines managerial responsibilities and controls in relation to risk. This RMS has six areas of focus to help build a robust, high-performing, professional and systems-based Agency that

[168] The review was undertaken by Mr David Tune AO PSM. See https://www.dss.gov.au/disability-and-carers-programs-services-for-people-with-disability-national-disability-insurance-scheme/2019-review-of-the-ndis-act-and-the-new-ndis-participant-service-guarantee
[169] A risk management framework is a set of components that provide the foundations and organisational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management processes in an entity.
[170] Risks include operational risk, specialist strategic risks, assurance (both quality and process/compliance) and governance.
[171] This standard is applicable to APRA-regulated banks and insurers in Australia.
[172] A risk management strategy sets out an entity's approach to managing risks and opportunities arising from the effects of uncertainty.

continues to improve its practices: culture and behaviour, leadership, capability, processes and approach, operating model and risk governance, and supporting infrastructure.

Clear processes for the identification and ongoing management of risks are also outlined, as well as how the Agency will ensure there is an appropriate risk culture within the organisation. The Agency's current risk management strategy was approved by the Board in August 2019 and has received approval by the Disability Reform Council.[173] It has been developed to meet the Agency's obligations under federal law, including the NDIS Act, *The Public Governance, Performance and Accountability Act 2013*, and *The National Disability Insurance Scheme – Risk Management Rules 2013*.

The Agency's approach to risk management is supported by a governance framework designed to proactively monitor risk management efforts. The RMS outlines the risk governance relationship between the Board, Board committees and senior management. In particular, the Board has dedicated risk and audit committees, supported by a Chief Risk Officer (CRO) and Chief Internal Auditor, respectively. The CRO assists the Board and Agency executives by providing objective risk reviews, oversight, monitoring and reporting.

In 2019-20, a number of changes were made to the governance structure, with the appointment of a permanent CRO in March 2020 after a period of interim arrangements. Three teams report into the CRO who provides central oversight: Risk, Scheme Integrity and Audit/Controls assurance. Further implementation of the embedded risk partner model also occurred, following another round of recruitment. The role of a risk partner is to help assess the risks and impacts of activities in each team and to assist the team to flow these through to the operational risk register.

Key risk management developments over 2019-20

Over 2019-20, there has been an increasing maturity of the risk management functions of the Scheme. Many of the policies and procedures in place to support the assessment and mitigation of risk within the Agency required only non-material changes in its recent annual cycle of refinement. Minimal changes were made to key framework documents. Instead, the focus has shifted to the consolidation of documents and tools, and effective implementation of these policies. New strategic risks were developed, with a focus on "plans on a page" and bringing risk ratings down.

A number of initiatives to educate staff[174] and develop risk literacy[175] within the Agency were launched. While these initiatives are positive steps toward bringing risk into the everyday

[173] The risk management strategy is reviewed at least annually by the Disability Reform Council.
[174] Mandatory training sessions were held for all Agency staff on the behaviours needed to be confident in engaging with risk. Controls awareness training was also introduced for senior staff with the aim of ensuring a consistent understanding of risk controls and their importance. Each session was tailored by division to increase their relevance.
[175] The Agency held its second annual Risk Week in February 2020. Risk Week is designed to promote thinking about risk in everyday activities by all staff, regardless of their role, in order to develop a positive and proactive risk culture within the Agency. This year's Risk Week involved the launch of Speak Up, an online reporting tool for staff to easily locate and report incidents and issues.

thinking of the Agency, more effectively embedding a risk management culture within the Agency remains a key challenge moving forward.

Insight, the Agency's new integrated risk management system, has been successfully implemented. Insight is a web-based solution that enables the Agency to capture, manage and analyse risk data in a single, secure system. This new approach provides greater visibility of risks across each group and allows the Agency to keep in touch with the risks that staff are exposed to on a daily basis. Insight also allows for the clear identification of control owners, which was limited under the previous paper-based system.

In 2019-20, the Scheme Integrity branch completed delivery of the Fraud and Compliance Roadmap to achieve the objective of building an autonomous and industry-leading fraud and compliance function. The Roadmap allows the Agency to effectively detect and respond to instances of identified fraud and non-compliance risks.

The Crisis Communication System (CCS), a mass communication tool used by the Agency to communicate essential information to Agency staff during disasters, emergencies and/or business disruptions, was introduced. The CCS allows the Agency to send important and relevant alerts and updates to staff via text messages and email, and addresses the risks faced with previous manual communication processes during critical events.

Extensive work was also undertaken to identify critical business activities and document the processes relating to those activities. This was used in business continuity planning during times of business disruption, specifically the bushfire season and the COVID-19 pandemic. There has also been an increased awareness of risk within the Agency as the result of the bushfires and COVID-19 pandemic. These incidents have contributed to an improved understanding of, and capability, to address business continuity threats.

Management of these two major incidents was led by the Emergency Response and Recovery Committee, supported by the Agency's Business Resilience team. Each of these incidents involved significant interruption to normal working arrangements and tested the Agency's business continuity arrangements and preparedness of its systems. During the COVID-19 pandemic, the Agency stood up its Crisis Management Team (CMT) for the first time. The CMT, comprised of the Executive Leadership Team (ELT) and core function senior executives, is used when significant operational decisions are required for business continuity, which are beyond the decision-making power of the Emergency Response and Recovery Committee.

The CMT considered a range of issues relating to the Agency's operations as a result of the pandemic, including ensuring continuity of service from providers and minimising the impact on participants. The move to large-scale remote working arrangements was successful and the Agency continued to meet targets for access and planning. Initiatives such as outbound calls to vulnerable participants and unique codes for grocery home delivery also received positive feedback. The successful navigation of this challenging period has provided many lessons for the Agency going forward.

Nonetheless, experience in recent years suggests that while the identification of risks continues to evolve and improve, the quality and effectiveness of controls is not as well developed. A number of key financial sustainability risks persist, such as high levels of superimposed inflation (Section 5.2.2), despite mitigation strategies designed to address these risks. Several initiatives have been flagged for 2020-21 in order to respond to this, including the management of SIL costs and focus on alternative models of housing support, and the use of independent assessments to support reasonable and necessary decision-making.[176]

The Agency's Risk team has also identified several areas of focus in 2020-21. These are the development of a new Enterprise Risk Management plan that sits under the RMS, improved data quality and input into Insight, re-establishing periodic monitoring and review of risks in Insight (thereby strengthening quality of controls), greater visibility of material risks such as operational risks, and resourcing to expand the number of dedicated risk staff.

Quality assurance reviews

The Agency's *Quality Assurance Strategy 2019-20* outlined a program of quality assurance activities, such as end-to-end audits, that measured process compliance and quality of decision-making when building and approving plans. It also included more specific "hot spot" audits to be undertaken in areas which pose a risk to financial sustainability. A number of "hot spot" reviews across a variety of areas were completed in 2019-20, such as SIL, utilisation, supports for children aged 0 to 6 years with autism (including ECEI), high cost plans, participants aged under 18 with high core supports, and support coordination.

Regular assurance reviews are also conducted by the Agency. These audits focus on compliance with internal processes and procedures, as well as the quality of documentation and justifications in the participant record. Results of these audits are reported regularly to ELT and the Risk Committee.

Recommendation 12 Quality assurance reviews and "hot spot" audits

It is important for the Agency to continue undertaking risk-based quality assurance audits and focused "hot spot" analyses to better understand Scheme experience. Participants in SIL arrangements and children with autism continue to be particular areas of interest as the associated cost escalation, without adequate mitigation strategies, could result in significant and material adverse impacts on financial sustainability.

The Agency should also have a defined process for implementing the findings of the quality assurance reviews. For example, recent quality assurance activities found that there was a need for appropriate documentation and sufficient justification for decision-making to be attached to participant records. The qualitative reviews found that incomplete or inaccurate information recorded through the planning process increases the

[176] These will be supported by the newly reformed internal Sustainability Committee. Members of the ELT and other key Agency staff will meet to discuss challenges to Scheme sustainability, actions proposed to address the challenges and updates on the effectiveness of those actions.

likelihood of delegate error in decision-making. It also reduces the Agency's ability to communicate decisions to participants, reducing transparency and impacting plan implementation.

While the Agency has established appropriate processes and procedures to support planning and decision-making, the results show inconsistency in the application of these policies by planners. This finding was flown through to individual plans for remediation but further work is required to ensure these activities impact the Scheme on a wider scale in a cycle of continuous improvement.

Recommendation 13 The implementation of ACE and incorporating business intelligence rules

Both the quality assurance audits and the "hot spot" analyses highlighted an absence of system controls to support accurate decision-making. In particular, the Agency's CRM does not fully support participant planning, lacking automated controls 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 appropriate 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.

Risk management summary

While the Agency's tools, processes and procedures are adequate for an entity at this level of maturity, they must 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 on the depth of its risk management processes, implementing systems to better support consistent decision-making (particularly around access and plan budgets), better governance around pricing 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. Reliances and limitations

This work was conducted for the sole use and benefit of the National Disability Insurance Agency and the NDIA Board to assist with monitoring, reporting, and management of the financial sustainability of the Scheme as at 30 June 2020.

No liability is accepted for loss or damage howsoever arising in 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 full understanding of the reliance and limitations noted herein, or for errors or omissions arising from the provision of inaccurate or incomplete information.

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Given the long-tail nature of the Scheme, experience continues to be relatively immature and many aspects remain difficult to interpret. There have been many biases in the experience due to the phase-in timetable and the lack of consistent longitudinal data with which to inform Scheme projection assumptions. Scheme operational procedures continue to rapidly evolve, meaning that past experience may not be the best indicator of future experience. In addition, in the data available and emerging experience to date, there have been some issues with the current resource allocation process, and specifically the lack of a mechanism for robust functional 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 impact on the cost estimates in this report.

The COVID-19 pandemic, in particular, poses significant uncertainty to participant experience, outcomes and cost trajectory of the Scheme over the short (and medium) term. While the Agency is closely monitoring developments, it is an evolving situation with numerous health, economic, and sustainability risks attached. At the time of writing, there is a ‘second wave’ of infections occurring in parts of Victoria and New South Wales, with some re-imposition of restrictions depending on the area. Extreme scenarios based on sustained, severe outbreaks overseas are not implausible, and the response of the Federal and State/Territory governments, the Agency and the community to such cases will be crucial. This will all have an impact on Scheme experience in the next few years, and thus will affect the projections in this report.

This report has been prepared in accordance with all relevant Code of Professional Conduct guidelines of the Institute of Actuaries of Australia. Further, where appropriate, this Report has also been prepared in accordance with the International Standard of Actuarial Practice 2: Financial Analysis of Social Security Programs.