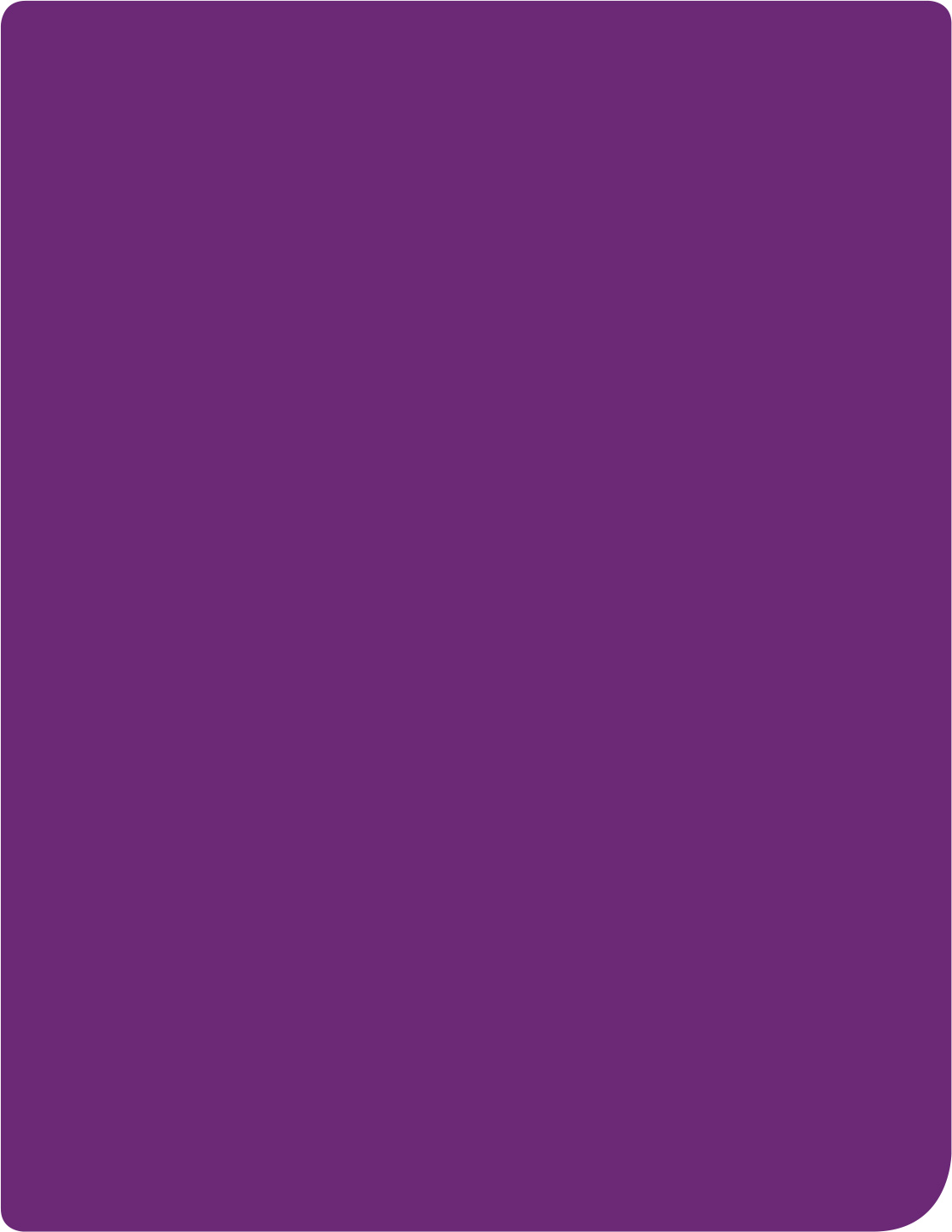
**Annual financial sustainability report - Appendices**

**2017-18**

**Sarah Johnson BCom FIAA**

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# Phasing‑in schedule

The National Disability Insurance Scheme (NDIS) Act received Royal Assent on 28 March 2013, and the NDIS commenced operations on 1 July 2013. At the conclusion of trial (30 June 2016), the NDIS was operational in the nine trial sites shown in Table A.1.

Table A.1 Trial site locations

|  |  |  |  |
| --- | --- | --- | --- |
| **Trial site name** | **LGAs** | **Age groups** | **Commencement date** |
| Hunter trial site - NSW | Newcastle, Lake Macquarie, Maitland | All | 1 July 2013 |
| Tasmania trial site | All | 15-24 year olds | 1 July 2013 |
| Barwon trial site - VIC | Greater Geelong, Surf Coast, Queenscliff, Colac-Otway | All | 1 July 2013 |
| South Australia trial site | All | 0-14 year olds | 1 July 2013 |
| Australian Capital Territory | All | All | 1 July 2014 |
| Perth Hills trial site - WA | Swan, Kalamunda, Mundaring | All | 1 July 2014 |
| Barkly region - NT | All | All | 1 July 2014 |
| Nepean Blue Mountains site - NSW | Blue Mountains, Hawkesbury, Lithgow, Penrith | 0-17 year olds | 1 July 2015 |
| North Queensland site | Townsville, Charters Towers Regional Council | 0-17 year olds | 1 April 2016 |
| Palm Island | 0-64 year olds |

On 1 July 2016 the NDIS commenced transitioning to Full Scheme and at 30 June 2018, the NDIS was operational in the additional locations shown in Table A.2.

Table A.2 Transition site additional locations – 30 June 2018

| **State** | **Regions[[1]](#footnote-1)/LGAs** | **Start date** |
| --- | --- | --- |
| New South Wales | Central Coast, New England, Northern Sydney, South Western Sydney, Southern New South Wales, Western Sydney, and the remainder of the Hunter and Nepean-Blue Mountains regions | 1 July 2016 |
| Far West, Illawarra Shoalhaven, Mid North Coast, Murrumbidgee, Northern NSW, South Eastern Sydney, Sydney and Western NSW | 1 July 2017 |
| Victoria | North East Melbourne region | 1 July 2016 |
| Central Highlands | 1 January 2017 |
| Loddon | 1 May 2017 |
| Inner Gippsland, Western District, Ovens Murray | 1 October 2017 |
| Inner Eastern Melbourne, Outer Eastern Melbourne | 1 November 2017 |
| Hume Moreland | 1 March 2018 |
| Bayside Peninsula | 1 April 2018 |
| Queensland[[2]](#footnote-2) | Townsville region – all ages | 1 October 2016 |
| Mackay region | 1 November 2016 |
| Toowoomba region | 1 January 2017 |
| Ipswich region | 26 May 2017 |
| Bundaberg | 1 September 2017 |
| Rockhampton | 1 November 2017 |
| Northern Territory | Darwin Urban (eligible clients in supported accommodation) and East Arnhem | 1 January 2017 |
| Alice Springs (eligible clients in supported accommodation), Katherine and Darwin Remote | 1 July 2017 |
| Tasmania | Expanded to include 12-14 year olds | 1 July 2016 |
| Expanded to include 25-28 year olds | 1 January 2017 |
| Expanded to include 4-11 year olds | 1 July 2017 |
| Expanded to include 29-34 year olds | 1 January 2018 |
| South Australia | Expanded to include 15-17 year olds | 1 January 2017 |
| Expanded to include 18+ year olds for Barossa, Light and Lower North; and Playford, Salisbury and Port Adelaide Enfield (East) LGAs | 1 July 2017 |
| Expanded to include 18+ year olds for Limestone Coast, Murray and Mallee, and Tea Tree Gully LGA | 1 October 2017 |
| Expanded to include 18+ year olds for Eyre and Western, Far North, Fleurieu and Kangaroo Island, Southern Adelaide, Yorke and Mid North | 1 January 2018 |
| Expanded to include18+ year olds for Adelaide Hills, Eastern Adelaide and Western Adelaide | 1 April 2018 |
| Western Australia[[3]](#footnote-3) | Bayswater, Bassendean, Chittering, Toodyay, York and Northam LGAs | 1 January 2017 |

New South Wales and South Australia are now phasing across all regions and age groups. Phasing is yet to commence in most regions of Western Australia, the Cairns region as well as Brisbane and surrounding areas for Queensland, the southern regions of the Northern Territory, and several regions in Victoria. In addition, infants and participants 35 years and over are yet to commence phasing in Tasmania.

# Actuarial Control Cycle

## Introduction

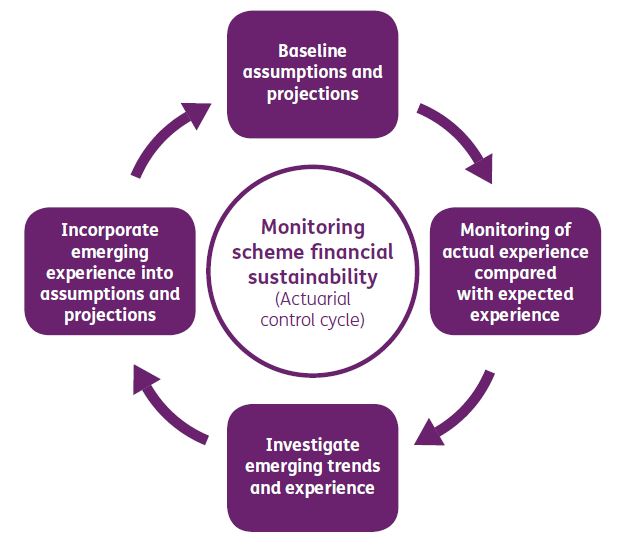
The actuarial control cycle is the methodology for monitoring Scheme financial sustainability. This framework allows for continuous evaluation of the NDIS.

At a high level the key features of the actuarial control cycle are (Figure B.1):

* **Setting of baseline assumptions and projections** including estimates of aggregate participant numbers and costs, as well as by cohort.
* **Monitoring of experience compared with expectations** – this requires monitoring participant outcomes and Scheme costs based on a wide range of variables, both in aggregate and by cohort.
* **Investigation of emerging trends and experience** – using the information obtained in the monitoring, detailed analysis of where and why actual experience has deviated from expected experience is undertaken.
* The **emerging experience** identified in the monitoring and investigation is **incorporated into assumptions and projections** going forward.

A key feature of the actuarial control cycle is the continuous and cyclical nature of the process – this allows ongoing evaluation of performance, both participant outcomes and Scheme financial sustainability. This cycle is described in more detail in the remainder of this section.

Figure B.1 Monitoring Scheme financial sustainability (actuarial control cycle)



## Baseline projection

An aggregate estimate of the number of people likely to receive an individualised support package under the NDIS and the cost of these support packages was derived by the Productivity Commission – approximately 460,000 people and $22.0 billion in 2019-20, assuming that the Scheme has reached Steady Intake at this time.

Additional assumptions have been developed to assist in monitoring the cost of supporting participants over their lifetime. These assumptions enhance the Productivity Commission modelling by determining the trajectory of costs - however, the overall Productivity Commission modelling parameters remain the same.

These additional assumptions divide the aggregate participant numbers into reference groups. Reference groups are groups of participants with similar characteristics. Key variables in each reference group are:

* Age – costs are assumed to increase with age.[[4]](#footnote-4)
* Disability – this assists with projecting the trajectory of costs over time. For example, participants with degenerative disabilities are likely to require more support over time.
* Functional assessment tools providing information on a participant’s level of function.

For each reference group:

* An average estimated expected cost (both an annual expected cost and an expected lifetime cost) was determined.[[5]](#footnote-5)
* Assumptions on new incidence, mortality, and rates of exiting the Scheme were determined.

Further information on reference packages is included in Section 4.3 of the main report.

In addition to the assumptions discussed above, it is also important to establish baseline participant outcomes across the lifespan, including key life transition points (such as starting school, entering the workforce, and leaving home). A participant outcomes framework has been developed and focuses on a number of domains across the life span. Underpinning the outcomes framework are the principles of independence, self-management, social inclusion, and economic participation. The adult participant domains are:

* choice and control
* daily activities
* relationships
* home
* health and wellbeing
* lifelong learning
* work
* social, community and civic participation.

Family/carer outcomes are also collected.

A key purpose of the cycle of actuarial valuations (including this financial sustainability report) is to test the reasonableness of the baseline estimates and to refine them as appropriate.

## Monitoring and investigation of actual experience

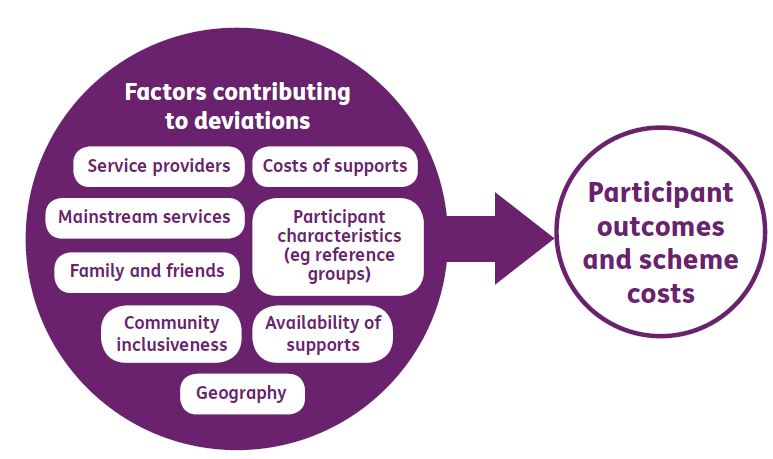
Actual experience is compared with expected experience and detailed analysis of deviations undertaken. The expected experience is derived from the baseline assumptions. Deviations include:

* higher or lower number of participants
* higher or lower Scheme costs
* better or worse participant outcomes.

Detailed actuarial analysis as to the reasons for these deviations between actual and expected experience is then possible. Possible drivers of deviations include (Figure B.2):

* specific participant characteristics (as determined using the reference group data)
* geography and community inclusiveness
* support from family and friends
* service providers
* availability of supports
* cost of supports – both unit cost and intensity of utilisation
* local area coordination and planning
* use of mainstream services.

Figure B.2 Monitoring participant outcomes and costs



This emerging Scheme experience is incorporated into Scheme projections and forms the new baseline assumptions.

## Continuous improvement

The actuarial control cycle is the methodology for monitoring financial sustainability and participant outcomes. This methodology allows for continuous evaluation, and provides the Agency’s management and Board with the information required to make decisions to continue to manage financial sustainability and improve participant outcomes.

As Scheme experience emerges this methodology will allow:

* Identification of successful early investment which leads to good outcomes, including detailed benefit-cost analysis. Life trajectories can be measured and compared for participants with similar characteristics.
* Identification of models of support which lead to increased independence by monitoring life trajectories.
* Benchmarking of participant groups across a number of factors including geography.
* Measurement of the change over time with regards to participant outcomes related to personal goals.
* Measurement of the reduction in the gap between Australia and other OECD countries in including people with a disability in society.
* Measurement of the reduction in the gap between people with a disability and people without a disability in Australia.

Importantly this analysis happens continuously – hence, continuous evaluation of the Scheme, and distinguishes the insurance model from “time-limited evaluation”. This fundamental characteristic of the Scheme reinforces the need for rigorous longitudinal data on Scheme participants.

# Information and Data

Appendix C provides information on how data is captured, stored and extracted for analysis by the Agency. It also outlines the Agency’s commitment to data quality and management.

## Case management systems

Case management systems are used by front-line staff to enter information about participants and their plans. They are also used to capture information about service providers and the supports they are registered to provide under the Scheme. The case management systems are accessed by service providers to claim payments for supports provided to participants, and by participants who are self-managing to claim payments.

* **1 July 2013 – 30 June 2016:** Siebel was the system used for case management, hosted by DSS. The instance of Siebel used by the Agency was shared with other DSS programs, and was principally designed as a grants-management system. While Siebel was used for the Scheme’s trial period, it was intended as an interim system to be replaced with a fit-for-purpose case management system.
* **1 July 2016 – Current:** SAP CRM (Client Relationship Management) is the Agency’s current case management system. Hosted and built by DHS, the system went live with the core functionality required to manage participants, providers and claims for payments. SAP CRM is scheduled to undergo a number of enhancements to increase the system’s capabilities.
  + The Siebel data was migrated to SAP CRM for the 1 July 2016 “go-live” date.
  + The transition to the new case management system caused a disruption to claims for payment. These issues were largely resolved by 31 August 2016.
  + There continue to be enhancements to SAP CRM and improvements to business processes. Until these are implemented, some aspects of data quality have been affected, with the impacts discussed in Section 2.3.

## Data warehouse

A data warehouse is used to store and catalogue data extracted from ICT systems, such as the case management system. The Agency receives daily extracts from its case management system to the data warehouse.

* **1 July 2013 – 30 September 2015:** Normalised Siebel data was landed daily on an SQL database by DSS. The actuarial team converted this information into usable metafiles. Note: this data warehouse did not have a longitudinal capability.
* **1 October 2015 – 30 June 2016:** Hosting of the data warehouse moved from DSS to DHS. As all information systems other than the warehouse continued to be hosted by DSS, daily text-file extracts of Siebel were transmitted by DSS and landed on the DHS Teradata database. All historical Siebel data was migrated to the DHS Teradata database. The Agency’s actuarial division continued to combine this daily data to provide longitudinal records for participants.
* **1 July 2016 – Current:** Raw SAP data tables are landed daily on a Teradata database. These are system tables and are not fit for reporting or analysis. The landed data are normalised in the Integrated Data Store (IDS), which has been progressively built since September 2016. The lack of readily consumable data has delayed the building of reporting and analysis required to monitor financial sustainability. In the interim, the Agency’s actuarial division have met core business needs by transforming data directly from the raw SAP tables – this is a labour‑intensive exercise. In lieu of a mature data warehouse, the Agency’s actuarial division continue to heavily cleanse and transform data. To address the Agency’s data warehouse requirements, a large scale project is underway to deliver a functional IDS and the internal capability to design, build, enhance and expand these data. Further, an action plan to address data quality issues, sponsored by the Executive Leadership Team is being defined.

## Agency commitment to data management

The NDIS has a strong commitment to the delivery of high quality data, reporting and business intelligence capability. This is confirmed in the *NDIS Data Management Strategy 2017-2020* which states the importance of the NDIS having a high quality data asset, with strong governance. Further, the “*NDIS Business Intelligence Strategy 2017-2020*” outlines the strategy to deliver a foundational business intelligence capability within the Scheme based on strong insurance principles using comprehensive and reliable data. Business intelligence is an organisation’s ability to analyse and use its raw data to inform decision‑making and mitigate risks. It underpins the financial sustainability work that is performed within the Agency.

In the previous FSR, it was recommended that data quality, through the Data Management Committee (DMC), be a key priority for the Agency to help respond to data integrity issues. In particular, focus should be given to improving the efficiency of changes being made to the ICT business system.

The NDIA’s DMC met eleven times in 2017-18 to establish policy related to data use and to review data quality. In response to data quality issues, several task forces were established to remediate and prevent specific issues. Task forces were led by the business area most responsible for the business process generating the data with issues. Specific issues addressed include (with responsible business lead):

* Duplicate participant records (National Access Team)
* Classification of inactive participants (National Access Team)
* Review of high-cost plans (Sustainability & Quality / Regional staff)
* Key demographics - disability, country of birth, date of birth (Sustainability & Quality/Regional staff)
* Payments exceeding budgets (Office of the Chief Information Officer (OCIO))

In 2017-18, the Office of the Scheme Actuary’s (OSA) Business Intelligence teams increased reporting to service delivery teams to include metrics on data quality. Regional performance against thresholds for “quality hot spots” have been reported weekly in visual management boards since April 2018. Delivery of exception reporting via the NDIA’s new Enterprise Analytics Platforms through the SAP HANA platform (being piloted as at 30 June 2018) will enable staff to review performance against thresholds, and drill-through to front end systems to address issues. One of the metrics being reported to regions relate to participants’ level of function, where either an incorrect functional assessment tool has been used, or the level of function has changed since the last plan. The use of SAP HANA will enable more consistent reporting across the various regions, as well as the capability for regions to monitor their progress against key metrics in real time. Once SAP HANA is successfully deployed in the regions, it is anticipated that work will commence in enhancing and streamlining key actuarial monitoring reports.

Operationally, the OSA’s Data Services team have commenced development of an NDIS Enterprise Data Utility Framework. In consultation with business and technical areas, this framework defines the necessary quality and availability thresholds that make data usable. Priority has been given to variables critical to sustainability and performance reporting, and supporting metrics have been introduced to monitor quality of those variables.

To improve the effectiveness of the role of DMC, a review of the configuration of the committee has been conducted. Previously aligned to geographies, the revised DMC structure will reflect its functions with one branch dedicated to data quality, and another for information management. The link with the OCIO is to be strengthened, with the NDIA’s information architect to be included in the OCIO’s architectural review process for ICT changes. Further, work will continue to embed the NDIS Enterprise Data Utility Framework in the NDIA’s information and operating models.

A large proportion of the analysis conducted in the OSA relies on the use of SAS Enterprise Guide software and currently all output is stored server shared with DHS. The server space requirements of the team have become much larger in the past year due to rapid growth of the Agency, and consequently the team has experienced substantial delays in processing analysis as a result of server constraints being reached. Significant work is now underway to migrate users in the NDIA to an independent server, to establish more controls around the structure of the server. This work is expected to be completed in the coming year and will result in efficiencies around data processing and reporting.

Furthermore, the OSA’s operational reporting team is currently working to rebuild several of the team’s operational reports into SAS Visual Analytics. This is a graphical user interface program that can enable users to usually explore and report on SAS data. It has significant benefits for the Agency in automating regular reports and avoiding duplication of datasets (as the program will produce reports off existing SAS datasets without the need to create interim datasets).

# Financial Information

One of the key pieces of information used to inform cost is payments and committed supports for participants. This information is regularly checked against the general ledger information.

## Reconciliation of financial information at 30 June 2018

Table D.1 Reconciliation of analysis workbook data against information provided to and received from the Agency’s finance team as at 30 June 2018





The first table reconciles the information used in our analysis against information that is supplied to finance for inclusion in the financial accounts. The second table contains a reconciliation of this information with the amount identified in the Public Sector Collection and Disbursement (PSCD) system. The difference in the latter reconciliation is small in the context of the projections, and generally represents changes in the timing of cash-flows within the actuarial data compared to the PSCD data.

# Participants

## Prevalence

This section provides a comparison of projected prevalence of participants in the Scheme by region compared to that expected using the ‘Need for assistance’ variable in the 2016 ABS Census. The projected prevalence is also split by age band. Table E.1 shows a breakdown by State/Territory, while Table E.2 shows a breakdown by region.

Table E.1 Actual and expected prevalence by State/Territory and age group



Table E.2 Actual and expected prevalence by region and age group



## Participant projections

The following sections outline the data and assumptions used to project participant numbers for regions that have phased into the Scheme at 30 June 2018 using two actuarial techniques; the Chain Ladder analysis and Propensity analysis.

### Chain ladder analysis

**Table E.3 Incremental tabulation of phasing quarter against development quarter**



**Table E.4 Cumulative tabulation of phasing quarter against development quarter**



**Table E.5 Incremental Chain Ladder Factors**



**Table E.6 Projected numbers using chain ladder analysis (cumulative)**



### Propensity analysis

**Table E.7 Expected NDIS population (if all phased in on phasing quarter - increases over development time due to population growth)**



**Table E.8 Cumulative proportion of expected participants**



**Table E.9 Incremental proportion of expected participants**



**Table E.10 Incremental Propensity Factors**



**Table E.11 Projected numbers using propensity analysis (cumulative)**



## Long term population distribution

### Participant mix by age, disability and level of function

**Table E.12 Projected participant numbers aged 0-64 at 30 June 2023**



**Table E.13 Distribution of projected participant numbers aged 0-64 at 30 June 2023**



### SSA assumptions

**Table E.14 Proportion of participants in SSA**



# Committed Supports and payments

## Level of function

Figure F.1 shows the distribution of participants and committed supports by level of function. Participants with high levels of function (1 to 5) make up 30% of all participants but only 9% of costs. Conversely, participants with low levels of function (11 to 15) make up 27% of participants but account for 57% of costs.

**Figure F.1 Distribution of participants and committed supports by level of function**



## Committed support category

Figure F.2 shows a breakdown of total committed supports by support type, with 73% of committed supports expected to be provided for core supports, 21% for capacity building, and 6% for capital supports. Assistance with daily activities is the most common support type, accounting for 49% of total committed supports. Note that the distribution of supports is influenced by the phasing schedule and as such, may not be representative of the full Scheme distribution.

**Figure F.2 Distribution of committed supports by support category as at 30 June 2018**



## Core, capacity building and capital

**Figure F.3 Distribution of core, capacity building and capital supports by age group**



**Figure F.4 Distribution of core, capacity building and capital supports by disability**



## Utilisation rates by State/Territory

As part of the calculation of the participant plan provision for input into the Scheme’s financial accounts, Scheme utilisation is estimated by the year in which the support is expected to be provided by State/Territory. Figure F.5 shows the estimated ultimate utilisation by financial year and State/Territory since the Scheme’s inception.

**Figure F.5 Summary of estimated ultimate utilisation by State/Territory[[6]](#footnote-6)**



This includes payments to date plus projected amounts using a standard chain ladder paid actuarial method. Utilisation has typically varied between 50% and 85%, with some relatively large variations by support year and State/Territory. This variation reflects, in part, the phasing‑in schedule of participants into the Scheme.

Utilisation trends are also monitored over time and across participant characteristics (such as age, disability type, region, level of function, and gender), and across support categories. Key trends mirror those identified in Figure 4.6 of the main report.

The variation in utilisation by State/Territory and by support year makes it difficult to decide on what an appropriate long term utilisation rate may be within the Scheme. However, it is reasonable to assume that it will be above the current levels (influenced by transition to Steady Intake), but below 100%. The variation shown in Figure F.5 and anecdotal evidence has suggested a longer term utilisation rate of between 80% and 90% may be appropriate. Section 5.5.5 of the main report considers the impact on the Scheme financial sustainability under different utilisation scenarios.

## Distribution of utilisation rates by participant plans

Figure F.6 shows the rate of claims for plans that have been active for more than 90 days by State/Territory, noting that the plans themselves may not have reached their plan end date, and hence we estimate the proportion of the plan supports that are expected to have been utilised, assuming supports are utilised uniformly over each plan’s duration.

Across most State/Territories there has been a low rate of claims and a significant proportion of plans in the Northern Territory and Tasmania have had no claims made. However, around 10% of participants have claimed above the amount expected to have been committed to date, especially in Tasmania.[[7]](#footnote-7)

**Figure F.6 Rate of claims by State/Territory**



## Payment assumptions

Payments assumptions have been determined using annualised payment levels for the six months to 30 June 2018 for those active participants at both 31 December 2017 and 30 June 2018 and with a second (or greater) plan start date prior to 31 December 2017.

Note: in the below section level of function has been grouped according to the levels from the disability functional assessment tools, where a lower number reflects a higher level of function and vice versa.

**Figure F.7 Annualised payment assumptions for all disability types (non-SSA) – Part 1**



**Figure F.8 Annualised payment assumptions for all disability types (non-SSA) – Part 2**



**Figure F.9 Annualised payment assumptions for all disability types (SSA) – Part 1**



**Figure F.10 Annualised payment assumptions for all disability types (SSA) – Part 2**



# Baseline Projection

## Assumptions used in baseline projection

This section details the assumptions used in the projection of participant numbers and costs.

Note: in this section level of function has been grouped according to the levels from the disability functional assessment tools, where a lower number reflects a higher level of function and vice versa.

### New incidence assumptions

**Table G.1 Male participant new incidence at 30 June 2023**



**Table G.2 Male participant new incidence at 30 June 2023   
(per 100,000 males in population)**



**Table G.3 Female participant new incidence at 30 June 2023**



**Table G.4 Female participant new incidence at 30 June 2023  
(per 100,000 females in population)**



### Mortality multipliers

**Table G.5 Male mortality multipliers by age, disability and level of function[[8]](#footnote-8)**



**Table G.6 Female mortality multipliers by age, disability and level of function[[9]](#footnote-9)**



### Exit rate assumptions

**Table G.7 Male mortality exit rate assumptions by age, disability** **and level of function**



**Table G.8 Female mortality exit rate assumptions by age, disability** **and level of function**



**Table G.9 Non-mortality exit rate assumptions by age, disability** **and level of function (ages 0 to 64)**



The non-mortality exit rate assumptions for participants aged 65 years or older are the same for all disabilities and levels of function.

**Table G.10 Non-mortality exit rate assumptions by age (ages 65+)**



**Table G.11 Combined exit rate assumptions by age, disability** **and level of function**



### Payment assumptions

**Table G.12 Average annualised payment assumptions – non-SSA** **(current dollars)**



**Table G.13 Average annualised payment assumptions – SSA** **(current dollars)**



### Economic assumptions

The inflation assumptions used in the projections are presented in Table G.14. The impact of the Social and Community Services (SACS) Equal Remuneration Order considers the proportion of supports in the Scheme that are wage related and the proportion of wage-related supports impacted by the SACS award.

The long term normal inflation rate is consistent with the assumptions in the 2015 Intergenerational Report[[10]](#footnote-10), and consists of a long term domestic inflation rate of 2.5% per annum plus an additional 1.5% per annum for productivity growth.

**Table G.14 Inflation and SACS assumptions**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2018-19** | **2019-20** | **Long term** |
| Economic inflation | 3.0% | 3.0% | 4.0% |
| Impact of SACS | 1.3% | 1.3% |  |
| **Total** | 4.3% | 4.3% | 4.0% |

**Figure G.1 CPI inflation (%) from June 2000 to June 2018**



**Figure G.2 Wage price index inflation (%) from June 2000 to June 2018**



## Baseline projection

### Prevalence

**Table G.15 Prevalence by age band**



**Table G.16 Prevalence by disability group**



### Total Scheme cost

**Table G.17 Total Scheme costs by age group ($m)**



**Table G.18 Total Scheme costs by disability group ($m)**



**Table G.19 Total Scheme costs by disability and level of function – non-SSA ($m)**



**Table G.20 Total Scheme costs by disability and level of function – SSA ($m)**



### Lifetime cost estimates

The following table shows how the lifetime cost estimates of current Scheme participants vary by age, disability and level of function. Estimates have been excluded where there are fewer than 20 active Scheme participants in any cell.

**Table G.21 Lifetime cost estimates by age, disability and level of function for current Scheme participants – non-SSA[[11]](#footnote-11)**



**Table G.22 Lifetime cost estimates by age, disability and level of function for current Scheme participants – SSA[[12]](#footnote-12)**



### Detailed change in basis

The following charts show the detailed step-through the assumptions used at the previous FSR compared to the current FSR. Section 5.4.4 in the main report contains a summary of these movements.

Figure G.3 Change in projected participant numbers from previous FSR at 2020



Figure G.4 Change in projected participant cost from previous FSR at 2020



Figure G.5 Change in projected participant numbers from previous FSR at 2023



Figure G.6 Change in projected participant cost from previous FSR at 2023



Figure G.7 Change in projected participant numbers from previous FSR at 2030



Figure G.8 Change in projected participant cost from previous FSR at 2030



# Scenario Analysis

## Scenario 5a: Committed supports and 100% utilisation

The tables below show average costs relating to Scenario 5a, which assumes actual committed supports and 100% utilisation.

**Table H.1 Average annualised cost assumptions for Scenario 5a: Committed supports and 100% utilisation – non-SSA (current dollars)[[13]](#footnote-13)**



**Table H.2 Average annualised cost assumptions for Scenario 5a: Committed supports and 100% utilisation – SSA (current dollars)[[14]](#footnote-14)**



# Participant Outcomes

**Table I.1 Selected key indicators for participants – Daily Living (DL) and Choice and Control (CC)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Indicator** | **0 to before school** | **School to 14** | | **15 to 24** | | **25 and over** |
| DL | % with concerns in 6 or more of the areas: gross motor skills, fine motor skills, self-care, eating, social interaction, communication, cognitive development, sensory processing | 66% |  | |  | |  |
| CC | % who say their child is able to tell them what he/she wants | 74% |  | |  | |  |
| DL | % developing functional, learning and coping skills appropriate to their ability and circumstances |  | 30% | |  | |  |
| DL | % who say their child is becoming more independent |  | 42% | |  | |  |
| CC | % of children who have a genuine say in decisions about themselves |  | 64% | |  | |  |
| CC | % who are happy with the level of independence/control they have now |  |  | 39% | |  | |
| CC | % who choose who supports them |  |  | 34% | | 54% | |
| CC | % who choose what they do each day |  |  | 44% | | 63% | |
| CC | % who had been given the opportunity to participate in a self-advocacy group meeting |  |  | 22% | | 29% | |
| CC | % who want more choice and control in their life |  |  | 80% | | 75% | |

Table I.2 Selected key indicators for participants – Relationships (REL) and Social/ Community Participation (S/CP)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Indicator** | **0 to before school** | **School to 14** | **15 to 24** | **25 and over** |
| REL | % of children who can make friends with people outside the family | 64% | 63% |  |  |
| S/CP | % of children who participate in age appropriate community, cultural or religious activities | 55% |  |  |  |
| REL | % of children who spend time after school and on weekends with friends and/or in mainstream programs |  | 35% |  |  |
| REL | Of these, % who are welcomed or actively included | 63% | 76% |  |  |
| REL | % of children who spend time with friends without an adult present |  | 12% |  |  |
| REL | % with no friends other than family or paid staff |  |  | 29% | 27% |
| S/CP | % who have been actively involved in a community, cultural or religious group in the last 12 months |  |  | 32% | 36% |

Table I.3 Selected key indicators for participants – Lifelong Learning (LL), Work (WK), Home (HM) and Health and Wellbeing (HW)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Indicator** | **0 to before school** | **School to 14** | **15 to 24** | **25 and over** |
| LL | % of children attending school in a mainstream class |  | 57% |  |  |
| HM | % who are happy with their home |  |  | 81% | 76% |
| HM | % who feel safe or very safe in their home |  |  | 85% | 76% |
| HW | % who rate their health as good, very good or excellent |  |  | 68% | 48% |
| HW | % who did not have any difficulties accessing health services |  |  | 68% | 66% |
| LL | % who currently attend or previously attended school in a mainstream class |  |  | 29% |  |
| LL | % who participate in education, training or skill development |  |  |  | 14% |
| LL | Of those who participate, % who do so in mainstream settings |  |  |  | 48% |
| LL | % unable to do a course or training they wanted to do in the last 12 months |  |  |  | 35% |
| WK | % who have a paid job |  |  | 17% | 25% |
| WK | % who volunteer |  |  | 13% | 13% |

Table I.4 Selected key indicators for families/carers of participants

|  |  |  |  |
| --- | --- | --- | --- |
| **Indicator** | **0 to 14** | **15 to 24** | **25 and over** |
| % receiving Carer Payment | 25% | 28% | 23% |
| % receiving Carer Allowance | 55% | 52% | 35% |
| % working in a paid job | 46% | 48% | 34% |
| Of those in a paid job, % in permanent employment | 75% | 74% | 77% |
| Of those in a paid job, % working 15 hours or more | 77% | 84% | 84% |
| % who say they (and their partner) are able to work as much as they want | 41% | 46% | 59% |
| Of those unable to work as much as they want, % who say the situation of their child/family member with disability is a barrier to working more | 86% | 89% | 86% |
| Of those unable to work as much as they want, % who say insufficient flexibility of jobs is a barrier to working more | 39% | 32% | 21% |
| % able to advocate for their child/family member | 78% | 73% | 70% |
| % who have friends and family they see as often as they like | 45% | 45% | 48% |
| % who feel very confident or somewhat confident in supporting their child's development | 86% |  |  |
| % who know what their family can do to enable their family member with disability to become as independent as possible |  | 42% |  |
| % who feel in control selecting services |  | 40% | 42% |
| % who have made plans (or begun to make plans) for when they are no longer able to care for their family member with disability |  |  | 39% |
| % who rate their health as good, very good or excellent | 72% | 61% | 59% |

Table I.5 Results for “Has the NDIS helped?” questions answered at review, for SFOF version ‘Participant 0 to school’ (n=2,879)

|  | **Question** | **% Yes** |
| --- | --- | --- |
| DL | Has the NDIS improved your child's development? | 91% |
| DL | Has the NDIS improved your child's access to specialist services? | 89% |
| CC | Has the NDIS helped increase your child's ability to communicate what they want? | 82% |
| REL | Has the NDIS improved how your child fits into family life? | 72% |
| S/CP | Has the NDIS improved how your child fits into community life? | 59% |

Table I.6 Results for “Has the NDIS helped?” questions answered at review, for SFOF version ‘Participant school to 14' (n=9,616)

|  | **Question** | **% Yes** |
| --- | --- | --- |
| DL | Has the NDIS helped your child to become more independent? | 51% |
| LL | Has the NDIS improved your child's access to education? | 33% |
| REL | Has the NDIS improved your child's relationships with family and friends? | 42% |
| S/CP | Has the NDIS improved your child's social and recreational life? | 42% |

Table I.7 Results for “Has the NDIS helped?” questions answered at review, for SFOF versions ‘Participant 15 to 24' (n=7,458) and 'Participant 25 and over' (n=20,201)

|  | **Question** | **15 to 24 % Yes** | **25+ % Yes** |
| --- | --- | --- | --- |
| CC | Has the NDIS helped you have more choices and more control over your life? | 61% | 67% |
| DL | Has the NDIS helped you with daily living activities? | 59% | 71% |
| REL | Has the NDIS helped you to meet more people? | 53% | 52% |
| HM | Has your involvement with the NDIS helped you to choose a home that's right for you? | 24% | 30% |
| HW | Has your involvement with the NDIS improved your health and wellbeing? | 42% | 50% |
| LL | Has your involvement with the NDIS helped you to learn things you want to learn or to take courses you want to take? | 40% | 31% |
| WK | Has your involvement with the NDIS helped you find a job that's right for you? | 21% | 20% |
| S/CP | Has the NDIS helped you be more involved? | 56% | 59% |

Table I.8 Results for “Has the NDIS helped?” questions answered at review, for SFOF version ‘Family 0 to 14’ (n=14,865); and for SFOF versions ‘Family 15 to 24’ and ‘Family 25 and over’ combined (n=2,254)

| **Question** | **0 to 14 % Yes** | **15+ % Yes** |
| --- | --- | --- |
| Has the NDIS improved your capacity to advocate (stand up) for your child? / Has the NDIS helped you to know your rights and advocate effectively? | 54% | 47% |
| Has the NDIS improved the level of support for your family? | 61% | 57% |
| Has the NDIS improved your access to services, programs and activities in the community? / Has the NDIS helped you to access services, programs and activities in the community? | 64% | 56% |
| Has the NDIS improved your ability/capacity to help your child develop and learn? | 69% |  |
| Has the NDIS improved your health and wellbeing? | 38% | 34% |

# Risk management

Key risks identified

The Agency identifies, monitors and reviews risks across three main categories; strategic, operational and project risks. These categories are defined in Table J.1 below.

Table J.1 NDIS categories of risk

|  |  |  |
| --- | --- | --- |
| Type of risk | Definition | Identification and review |
| Strategic | Risks to delivery of strategic plans (typically enterprise wide) | * Identified and assessed by the Board annually * Refreshed in conjunction with changes to the Agency’s Corporate Plan * Individual risk owners responsible for reporting on these risks and mitigation strategies monthly * Reviewed by the Agency’s Executive Leadership Team and the Board’s Risk Committee. |
| Group and/or division risks | Risks to delivery of day to day operations impacting the ability of divisions to achieve their plans | * General Managers and Branch Managers review and report on these risks quarterly * Each group is responsible for maintaining their own risk register and escalating critical or high risks to the Executive Leadership Team |
| Regional risks | Risks to delivery of day to day operations impacting the ability of regions to achieve their plans/targets | * Regional Managers responsible for reviewing and reporting each month * Reports provided to Deputy CEO |
| Project | Risks to successful delivery of individual projects | * Embedded risk resources in individual projects * Monitored monthly through project governance arrangements |

Risk management needs to ensure a balance between choice and control and reasonable and necessary supports to ensure equitability and sustainability of the Scheme. Some competing priorities also need to be balanced – for example, the pressure to meet bilateral targets must be balanced with the objective of high quality plans.

The following section summarises the current material risks that could adversely affect the financial sustainability of the Scheme as identified within the risk management framework.

Strategic risks

Strategic risks are defined as the risks that can prevent an organisation from achieving its corporate strategy and objectives. These risks have a longer term impact on operational performance, than individual operational risks, and therefore require a greater level of foresight and planning. Strategic risks also have more enterprise-wide interdependencies and therefore can affect the performance of the whole organisation.

The NDIA Board has endorsed seven strategic risks for the Agency for FY17-18. They are strongly aligned with the Agency’s vision as articulated in the Corporate Plan. These risks will grow in importance as the Scheme rolls out, particularly around building market capacity and delivering improved social and economic outcomes for participants. These are outlined below:

1. Failure to meet stakeholder expectations for consistent and quality plans and reviews for people with disability, their families and carers.
2. Failure to deliver high-quality plans and reviews, at the rate required to achieve bi‑lateral estimates, due to an inability to manage and resource effectively.
3. Plan costs, scope or eligibility significantly deviate from Productivity Commission modelling leading to material Scheme costs blowouts.
4. The Scheme fails to deliver expected social and economic outcomes for both people with disability and the community.
5. Failure to put in place systems and processes to prevent, detect and respond to fraud and sharp practice.
6. Failure to facilitate provider market growth resulting in a critical gap in service delivery to participants.
7. Failure to deliver to expectations leads to a loss of participant, political, disability sector and other stakeholder confidence.

Each risk is assigned to an accountable Deputy Chief Executive Officer (DCEO) for management. Quarterly reporting includes the current risk rating, the movement in the risk rating, as well as actions for risk mitigation and minimisation. Risk ratings are based on the likelihood and consequence matrix. Key performance metrics have also been determined for each risk, as well as a corresponding risk tolerance. Quarterly reporting shows the results for each metric at the current and previous quarter, and the overall indicator (beyond tolerance and requires further action, beyond tolerance and requires monitoring, and within tolerance).

As at 30 June 2018, two of the Agency’s strategic risks are rated as Extreme (Quality plans at scale, Support costs and Stakeholder confidence). All others are rated as High. The Agency has set one year and three year targets for each of the seven strategic risks, reflecting the long term nature of the mitigation of these risks. The Board aims to take measures to reduce risks to no higher than a Moderate impact ratings after three years.

Reporting on risks has developed significantly over the past year. This functionality will continue to improve with additional dedicated resources and the introduction of the new Governance, Risk and Compliance system.

Operational risks

Operational risks are those risks to “business as usual” deliverables that contribute to the achievement of strategic objectives. They generally require a short term focus.

Material operational risks, identified through work at the Group/Division or Regional level, can be grouped across the following key areas:

1. Reputation and stakeholder confidence impacted by increased negative media sentiment.
2. Change management and ability to deliver corporate plan and capture value of initiatives.
3. Partners in the Community (PiTC) being in place sufficiently in advance of rollout into new regions and limitations on the ability to monitor productivity levels of PiTC staff.
4. Capability of current ICT systems to adequately support operations, including consistency of decision making and collection of data with quality and integrity.
5. Standardisation of processes across the network.
6. Staff capability and the ability to retain and maintain capability as the Scheme grows.
7. Staff workload and provision of appropriate support.
8. Availability of suitable accommodation across the Agency.

Internal assessment of operational risks show that a significant number are currently at levels higher than acceptable to the business.

1. The mapping from regions to LGAs is given in each State/Territory’s Bilateral Agreement. [↑](#footnote-ref-1)
2. Dates shown reflect the bringing forward of transition for a number of Queensland regions, in accordance with the Joint Media Release issued by Minister Porter, Minister O’Rourke and Assistant Minister Prentice on 26 May 2017. [↑](#footnote-ref-2)
3. Excludes sites currently under the NDIS My Way Scheme in Western Australia. [↑](#footnote-ref-3)
4. The Productivity Commission assumed that for children aged 0-14 years, 30% of the average per person cost was assumed to be met by the NDIS. [↑](#footnote-ref-4)
5. Note: when these average annual costs are multiplied by the number of participants in each cohort, the total cost of support packages is $20.5 billion (or $22.0 billion including operating costs). This average cost assigned to each cohort is called the reference package. [↑](#footnote-ref-5)
6. This chart shows estimated ultimate utilisation using a standard actuarial chain ladder methodology on payments. The actual adopted utilisation shown in Table 4.3 of the main report includes an additional component to allow for uncertainty. This additional utilisation is not shown in this chart. [↑](#footnote-ref-6)
7. Note: plans in this analysis are not complete, so in some instances the amount utilised exceeds the amount expected to have been used based on how long the plan has been in place. [↑](#footnote-ref-7)
8. Average multipliers in each age band have been calculated using a weighting of the expected deaths from each exact age. [↑](#footnote-ref-8)
9. Average multipliers in each age band have been calculated using a weighting of the expected deaths from each exact age. [↑](#footnote-ref-9)
10. Page 30 of the ‘*2015 Intergenerational Report Australia in 2055*’ dated March 2015 [↑](#footnote-ref-10)
11. Lifetime cost estimates only shown if there are more than 20 participants in the age band and disability/level of function cell. [↑](#footnote-ref-11)
12. Lifetime cost estimates only shown if there are more than 20 participants in the age band and disability/level of function cell. [↑](#footnote-ref-12)
13. Level of function has been grouped according to the levels from the disability functional assessment tools, where a lower number reflects a higher level of function and vice versa. [↑](#footnote-ref-13)
14. Level of function has been grouped according to the levels from disability function assessment tools, where a lower number reflects a higher level of function and vice versa. [↑](#footnote-ref-14)