

# What happened to people who left the benefit system

During the year ended 30 June 2019

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#### Disclaimer

These results are not official statistics. They have been created for research purposes from the Integrated Data Infrastructure (IDI) which are carefully managed by Stats NZ. For more information about the IDI please visit <u>https://www.stats.govt.nz/integrated-data/</u>.

The results are based in part on tax data supplied by Inland Revenue to Stats NZ under the Tax Administration Act 1994 for statistical purposes. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes, and is not related to the data's ability to support Inland Revenue's core operational requirements.

#### **Reliances and limitations**

In undertaking this analysis, we have relied upon the accuracy of information contained in the IDI and described in Appendix 1 – History, Data and methodology. We have used the information without independent verification. It has been reviewed where possible for reasonableness and consistency including with prior reports.

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#### **Executive Summary**

The Ministry of Social Development (MSD) helps New Zealanders to be safe, strong, and independent. To do this, MSD provides a range of services and supports. It is important to MSD that people are well supported while receiving a benefit, and that they have positive outcomes after they leave the benefit system.

#### While data held by MSD enables understanding of who is receiving a benefit, wider data is needed to understand clients' outcomes after exiting the benefit system.

This report considers what happened to the 111,000 people who exited a main benefit during the year to 30 June 2019, by observing them over the 12 months following their exit. It outlines their key employment and benefit outcomes, including income level and whether they remain off-benefit after exit. To observe longer periods, and changes over time, analysis is also made of earlier years.

In the period covered by the analysis, MSD case managers responded to a need for more income support and hardship grants; the result was a general reduction in time on intensive case management and proactive engagements. MSD has undertaken a lot of work since then to improve employment outcomes, such as the expansion of employment services like Mana in Mahi and Oranga Mahi, which provide more people with employment and training opportunities, and has increased its frontline employmentfocused case management capacity.

Given the period covered, COVID-19 has had a limited impact on the results; the full effect will be more visible in future reports.

#### Some outcome trends have changed over time

- The number of people supported by a main benefit has increased.
- The likelihood of exiting a main benefit has been decreasing since at least 2013/14, and people who exit are generally sustaining those exits at lower rates.
- Just under half of all people who leave a benefit exit to employment. Those exits make up a similar proportion of all exits, and are sustained at a similar rate, to previous periods.

### Beneath the high-level figures, and to help guide research, policy, and service design, we can see different outcomes for different parts of the population

- The likelihood and sustainability of exit have fallen over time across all ethnicities.
- While Māori exit benefits at similar rates to the rest of the population, they are more likely to return to a benefit in the year after exit.
- Both exit rates and sustainability of exit are higher for people with higher level of education, and for people who have had shorter periods supported by a benefit.
- Exit rates are higher, but the sustainability of those exits is lower, for young people compared to other age groups, and for men compared to women.

### *Further, the analysis considers outcomes related to different post-exit activity. It shows that outcomes vary between different exit destinations*

• Most clients who exit to employment go to industries where they earn relatively low incomes. The two largest industries that people exit to (Administration and

Support Services, and Manufacturing) have some of the lowest employment sustainability. Exits to Manufacturing have fallen significantly over time, but it still remains the second largest industry people exit to.

- The most popular tertiary education course type that people exit to (Society and Culture) has a high exit sustainability, but the next three main tertiary subjects clients exit to have lower than average exit sustainability.
- Similarly, the most common course type for those who exit to targeted/industry training (Manufacturing) has the lowest rate of off benefit sustainability after 12 months. All other course types tend to have much higher rates of sustainability.

#### Part 1 – Introduction

#### Purpose

The analysis presented in this report, and the appended tables, uses the integrated data infrastructure to examine real-world outcomes for people who leave the benefit system.

It shows employment and exit-related outcomes for different parts of the population and country and, by tracking those outcomes over time, we can identify where outcomes appear to be improving or not.

Understanding what happens to people when they leave a main benefit, and whether and how outcomes have changed over time, helps MSD and the wider social sector improve supports for people leaving the benefit system. This is important because we want people to be supported into sustainable outcomes that improve their own and their whānau's life.

There are three key uses for this analysis:

- 1. Looking at current outcomes helps us understand outcomes for people who leave main benefits, and subpopulations within that. This highlights outcomes and disparities, and so will help guide action.
- 2. Looking at changes in those outcomes between cohorts highlights trends or changes that affect our clients. Doing so guides where additional effort or focusing of resources may be needed.
- 3. Identifying current and changing outcomes related to after-exit destinations shows what after-exit activity correlates with better outcomes. This will help guide frontline decision-making.

The data presented in this report highlights key facets of the analysis. In doing so, it presents only a limited portrayal of the total outputs of the analysis – those outputs are appended to this report as a set of tables for further interrogation.

Further analysis will also be undertaken within the IDI, to identify insights of value for stakeholders.

#### Welfare system

The welfare system provides financial supports to help people with low incomes or not in paid employment and to support people to find or retain employment. The subset of income-tested main benefits that we consider throughout this report and the monthly average number of people receiving those benefits in 2018/19<sup>1</sup> are:

- Jobseeker Support Work Ready and Youth Payment<sup>2</sup> (JS-WR/YP), 82,600
- Jobseeker Support Health Conditions & Disabilities (JS-HCD), 65,600

<sup>&</sup>lt;sup>1</sup> These numbers will differ from those in MSD's official reporting although they are relatively consistent. See Appendix 1 – History, Data and methodology for more details.

<sup>&</sup>lt;sup>2</sup> Note that YP and YPP clients have education, training and work-based learning obligations rather than employment obligations. The number of people receiving YP and YPP benefits and the number of exits from these categories were too small to meaningfully analyse. As a result, we have combined YP with JS-WR, and YPP with SPS.

- Emergency Benefit (EB), 2,300
- Sole Parent Support & Emergency Maintenance Allowance and Young Parent Payment<sup>2</sup> (SPS/YPP), 63,900
- Supported Living Payment Carer (SLP-Carers), 8,900
- Supported Living Payment Health Conditions & Disabilities (SLP-HCD), 83,800

The main benefits are summarised in further detail in Table 5 in the appendix. Note that people on a main benefit but who are aged 65 years or older are excluded from our analysis.

#### Scope of this report

The analysis in this report is a descriptive exploration of trends and patterns observed only. It aims to provide a starting point from which targeted research questions and analysis can be built. Further analysis is required to understand why there are differences in the experiences of different groups and how MSD could respond to these.

This report analyses what happened to a group of about 111,000 people who exited a main benefit during the year ended 30 June 2019. We observed these people over the 12 months following their exit from the benefit. The time lag of the 12-month observation period is why we look back at exits from the 2018/19 year – in order to look at longer observation periods, and to allow analysis of changes over time, analysis is also provided for earlier cohorts.

We first understand:

- How many people were supported by a main benefit in the given time period
- How many of those people exited a main benefit, and therefore what the rate of exit was for the benefit population
- Where people go, after they exit a main benefit, including how much they earn immediately after exit.

By then tracking individuals' employment and income information over the period after leaving a benefit – up to 36 months, depending on the cohort – the analysis can outline how sustainable those exits are, by showing:

- The likelihood that people who exit a main benefit will return to benefit support, and how long their time off benefit will last, on average
- The likelihood that those who exit to employment will maintain that employment, and how long their employment lasts, on average
- The income they earn over the period after leaving a main benefit

By examining these outcomes according to different cuts of the information available, we can understand the different outcomes for different parts of the population, based on their:

- Demographics age, gender, ethnicity;
- Situations region, benefit status and history, education level, and health status (for those supported by HCD);
- Exit destinations the industry, training, or education they exited into.

#### Approach

There is no one methodology to define the study population and assign reasons for exit or people's statuses over time. We have broadly adopted the methodology used in the 2020 MSD report<sup>3</sup>, to enable meaningful comparisons to be made. Exit reasons are defined in Table 6. Changes to the methodology are explained, and their impacts quantified, in the appendix. The Reliances and limitations section below outlines some of the limitations of the data and methodology adopted.

We also examine how long people who have exited from a main benefit have remained off benefit support, or have maintained earnings above a threshold, and how earnings have developed over time. We used a threshold of earnings of \$1,512 per month (indexed to December 2020 dollars). This amount was chosen as it is approximately equivalent to 20 hours per week at minimum wage. Twenty hours per week is the minimum hours of work required for a sole parent to qualify for the In-Work Tax Credit.

#### **Study population**

The main population of people used in this study includes anyone exiting a main benefit during the year 1 July 2018 to 30 June 2019 (2018/19) who were off a main benefit for at least one calendar month immediately after exit.

Note that people may have exited a benefit, re-entered and then exited again within 2018/19 – in this case we only count them on their first exit within our population for 2018/19.

Where comparisons between cohorts are made, we identify people who exited a main benefit in each of the years ended 30 June 2019 (shown as 2018/19), 2018 (2017/18), 2016 (2016/17), and 2014 (2013/14).

Differences in many of the measures in this report between the different observation years could, at least partly, be due to differences in the characteristics and histories of the cohorts. For example, changes could reflect differences in policy changes, strategic focus, labour market and in the economic environment over time. Further work would be needed to control for these factors.

#### **Reliances and limitations**

A calendar-month approach has been used to be consistent between data tables in the IDI, including Inland Revenue's Employer Monthly Schedule table from which earnings information is extracted; see Appendix 1 – History, Data and methodology for more details. Some of the limitations of this approach are:

 A person must have been off benefit for at least a full calendar month before being included in the subject population Depending on when a person leaves a benefit this could exclude people who are off benefit for periods up to almost two months, while including others who have been off benefit for just one full month.

<sup>&</sup>lt;sup>3</sup> <u>https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/research/benefit-system/what-happened-to-people-who-left-benefit-system-during-the-year-ended-30-june-2016.html</u>

- We use earnings exceeding \$1,512 a month (inflated to December 2020) for our analysis on sustained employment. We only have earnings data for calendar months and do not have work hours. Thus, a person who works for one week of the month earning an annual salary of \$60,000 would have monthly earnings for that month the same as someone who worked a full four weeks on annual salary of \$15,000.
- Self-employed earnings are not allowed for. Self-employed earnings declarations in the data relate to years ending 31 March, which we could not reliably allocate across months and which may not be available until a long period after the financial year end. This means that some of those deemed to not be earning or to be earning less than \$1,512 per month may, in fact, have earnings from self-employment of more than \$1,512 per month. However, the proportion of the study population reporting self-employed earnings is small (less than 3% in previous reports), so this is unlikely to materially impact our broad findings.
- There is a need to be cautious in drawing conclusions from the comparative analyses in this report. We have performed comparative analyses between various groups throughout this report. However, we have not controlled for any multivariate factors between any two groups.
- Differences in exit rates between the cohorts could partly be due to differences in the characteristics and histories of the cohorts. No attempt has been made to control for these differences and, for this reason, it is not possible to come to any firm conclusions about the causes of differences in exit rates and other outcomes between the cohorts.
- Due to the way we've defined exit reasons, some people who are designated as having left benefit for reasons other than employment may also have earnings in excess of \$1,512 per month. For example, someone may have left for tertiary education and also have income above \$1,512 per month – they would be classified as leaving for tertiary education rather than employment. It is also possible that some of the people assigned to other earning categories for less than \$1,512 per month may in fact have substantial earnings, for example they may have significant self-employed earnings, as described above.

#### Part 2 – Population-level findings

#### Benefit numbers and exits

The average number of people supported by a main benefit has increased in the most recent year, while the likelihood of exiting has fallen.



Figure 1: Benefit population and exits

Main benefit population (LHS) Number of exits (LHS) —Likelihood of exit (RHS)

The average number of people **supported by a main benefit** has risen by 2.6% in 2018/19 compared to 2017/18. This reverses the previous trend of benefit numbers decreasing year on year since 2013/14. On average, there were 307,100 people supported by a main benefit in  $2018/19^4$ .

Meanwhile, the average number of people **exiting a main benefit** in 2018/19 has fallen, by 8.0% compared to 2017/18. Each month, the average number of people exiting a main benefit was 9,300 in  $2018/19^4$ .

This means that the likelihood<sup>5</sup> of exiting a main benefit in 2018/19 was 30.7%; compared to 33.7% in 2017/18. This continues the trend of decreasing likelihood of exit.

- a) The average number of exits in a month over the 12 months to June, divided by
- b) The average number of people receiving a main benefit in each month in the 12 months to June. This gives us a monthly exit rate.

<sup>&</sup>lt;sup>4</sup> These will not match MSD's official statistics due to data constraints although trends are consistent. See note on following page, and in the Appendix 1 – History, Data and methodology for more details.

<sup>&</sup>lt;sup>5</sup> We calculate the average monthly exit rate over the 12-month period as:

We then express this as a likelihood of a person exiting from benefit over a 12-month period as  $1-(1-\{a\}/\{b\})^{12}$ .

#### People who exit to employment make up almost half of all exits. This makes it by far the largest exit destination, with a similar proportion of all exits as in the past.

	Number of exits	Proportion of exits			Difference 2013/14 to	
	2018/19	2013/14	2015/16	2017/18	2018/19	2018/19
Death	2,637	1.7%	2.0%	2.1%	2.4%	40%
Reached age 65+ years	132	0.1%	0.1%	0.1%	0.1%	13%
Overseas	7,776	7.3%	6.8%	6.6%	7.0%	-5%
In detention	5,262	2.7%	3.7%	4.2%	4.7%	73%
Started a targeted/industry training course	1,614	1.6%	1.6%	1.7%	1.5%	-11%
Started a full-time tertiary course	6,903	7.1%	7.0%	6.4%	6.2%	-12%
Started a part-time tertiary course	1,929	2.1%	2.0%	1.8%	1.7%	-17%
Employment	51,426	43.6%	45.1%	46.6%	46.3%	6%
Other with earnings greater than or equal to \$1,512	5,622	4.4%	4.6%	4.6%	5.1%	15%
Partnered	4,506	5.6%	4.8%	4.3%	4.1%	-28%
Other with earnings greater than or equal to \$100 but less than \$1,512	5,907	6.4%	6.0%	5.9%	5.3%	-17%
Other with earnings less than \$100	17,313	17.3%	16.4%	15.8%	15.6%	-10%
Total	111,027	100%	100%	100%	100%	N/A

#### Table 1: Reasons for exiting main benefits

Using available data, we have defined a set of reasons for exiting main benefits. For more information on this process see Appendix 1 – History, Data and methodology.

The mix of where people go after leaving a benefit hasn't changed significantly when compared to previous years:

- The most notable shift is exits to detention which have increased significantly from 2.7% (3,800) of all exits from main benefit in 2013/14 to 4.7% (5,300) in 2018/19
- The main destination for those leaving a benefit continues to be exiting to employment. This has increased as a share of all exits, from 43.6% in 2013/14 to 46.3% in 2018/19

Note that the exit numbers in this report are research numbers developed specifically for this reporting. The exit numbers presented here are lower than official counts of main benefit cancels for a number of reasons, including:

• To understand the number of people in and exiting the benefit system (rather than the number of interactions with the benefit system), this report only counts

an exit for the first time a person exits during a year; official statistics count multiple exits in the same year as multiple cancels.

- As described above, to draw on different IDI data sources, this analysis requires a person to be off main benefit for at least a full calendar month before being included in as an exit. Official cancel statistics do not have this requirement.
- Some transfers between main benefit types involve cancelling the initial main benefit and are included in the official cancel statistics – these are excluded in our exit definition.
- Cancels from Jobseeker Student Hardship are also excluded from this analysis' exit definition and subsequent analysis (as they are temporary support between planned periods of study), but they are included in the official cancel statistics.

#### Sustainability of all exits from main benefit

# We expect the economic impact of COVID-19 to have had a limited impact on these results for the 2018/19 cohort, although the full effect will be more visible in future reports.

The most recent cohort we looked at is 2018/19. The likelihood of people exiting in that year was not impacted by COVID-19. However, when we track the outcomes of these people for the 12 months *after exit* some may be impacted. For example, for those who exited in June 2019, we track whether they stay off benefit for 12 months until June 2020 – COVID-19 may impact these people in the last few months of this period, and may partially explain the lower sustainability of exits in the 2018/19 cohort. Further analysis could help quantify this effect. Those in the cohort who exited prior to December 2018 will not have been impacted by COVID-19 within our observation period

People who exit are staying off-benefit at lower rates than previously, except for those who exited to targeted/industry training.



Figure 2: Proportion of exits remaining off benefit - all exits, 2018/19 labelled

Overall, for those who left a main benefit in 2018/19, 45% returned to benefit within 12 months of exit, and 55% did not. This 'sustainability' of an exit is lower, and is dropping, relative to previous years.





For those who left to employment in 2018/19, 60% remained off benefit for all 12 months after exit. Again, this is lower than in previous years.





For those who exited to tertiary education, 47% remained off benefit for all 12 months after exit. This is lower than in previous years.





For those who exited to targeted/industry training, 60% remained off benefit for all 12 months after exit – a similar rate to previous years.

#### Sustainability of exits to employment, and income

Those who exit to employment are sustaining their employment at similar rates to previous periods.



Figure 6: Proportion with earnings over \$1,512 after exit to employment, 2018/19 labelled

To measure exits to employment, we include all exits from a main benefit with earnings greater than or equal to \$1,512 per month (i.e. 'Employment' and 'Other with earnings greater than or equal to \$1,512' in Table 1 above). We then look at the proportion of these exits who retain at least \$1,512 of employment earnings in every one of the 12 months after they exit. We call this **sustained employment** or **sustained employment earnings** throughout this report<sup>6</sup>.

42% of people who exit to employment have sustained employment earnings throughout the 12 months after exit. This is consistent with previous years as shown in Figure 6.

While the *sustainability of employment earnings* has remained stable over time for those who exit to employment (Figure 6 above), the rate that people who exit to employment *remain off benefit* has fallen (Figure 3 above). This suggests that, in the most recent cohort, those who do not sustain their employment are more likely to return to a main benefit than they might have been in the past.

<sup>&</sup>lt;sup>6</sup> Note that if a person changes jobs but still maintains earnings above \$1,512 each month this is still counted as sustained employment.

### For those who exit to employment, employment sustainability is higher for people with relatively higher initial incomes.



Figure 7: Sustained employment by initial income - 2018/19

For those who exit to employment, employment sustainability is higher for people with relatively higher initial incomes, but the effect stabilises above an income-level equivalent to full-time work receiving a minimum wage (\$3,000 per month). This means that, on average, the sustainability of employment is considerably better for people who enter full-time work (or part-time work at a commensurately higher wage). Above that level, higher initial incomes still correlate with better sustained employment outcomes.

### For those who sustained employment across the full year, income tended to increase consistently at all income levels.



**Figure 8: Income growth for people who exit to employment and sustain employment earnings for 12 months** 

As well as the sustainability of employment after exit, this analysis considers the income associated with that. For the 2018/19 cohort who exited to employment *and* sustained

employment for 12 months, average monthly income 3 months after exit was \$3,924, increasing over the following months.

People who exit to and sustain employment with low initial incomes tend to experience a higher rate of income growth than those who exit with higher initial incomes. For example, Figure 8 above shows that for those whose initial income is between \$1,512 and \$2,000, their average monthly income grows by 14% between month 3 and month 12. For those whose initial income is \$3,000+, their average income grows by 4 to 5%.

These relatively high income growth rates are likely a result of increases in hours worked and role changes over the period after exiting benefit. Further, this analysis looks only at those who sustained employment for the full period covered (12 months), so this group is likely to be one that has a combination of the skills and experience that are suited to both sustained employment and career progression.

Note – the kink at 3 months is largely a result of the timing of initial pay periods after exiting a main benefit. From 3 months, income growth settles into a fairly consistent trajectory.

### Incomes continue to increase over a longer period, across all income levels.





Looking at a longer time period (which is available for earlier exit cohorts) shows that income progression remains fairly consistent, for those who sustain employment across the entire period. Note that the initial 12 month period in Figure 8 does not exactly match the 12 month period in Figure 9, as these cover different cohorts, and because Figure 8 covered those who sustained exits for 12 months, while Figure 9 shows the smaller number of people who sustained exits for a full 24 months.

#### Part 3 – Population differences

By examining outcomes for different population groups, we can understand more about their outcomes, relative to the whole population of interest.

#### Ethnicity<sup>7</sup>

#### Māori exit rates are similar to the rest of the population, but Māori are, on average, more likely to return to a benefit within 12 months



Figure 10: Exits by ethnicity

Overall, Māori have a slightly higher likelihood of exit (31.5%), than the total benefit population (30.7%). However, on average, they experience the lowest rates of sustained off benefit exit and sustained employment after exit (46.4%% and 34.9%, respectively).

Conversely, NZ European people have the lowest exit rate (29.7%), on average, but the second highest rate of sustaining those exits (58.2%).

On average, Māori and Pacific People have a slightly lower income (\$3,991 and \$4,109 respectively) 12 months after exiting to employment, compared to other ethnicities (\$4,152 for all ethnicities).

<sup>&</sup>lt;sup>7</sup> Note that each person is included separately in all of the ethnic groups that they identify with. This is known as a 'total response' ethnicity view.

#### The likelihood of exit from main benefit, and the proportion who remained off-benefit throughout the 12 months after exit, has fallen over time across all ethnicities.



Figure 11: Likelihood and sustainability of exits over time, by ethnicity

The relative positions of each ethnic group have remained the same over time, with the likelihood of exit for NZ Europeans falling by the most over the years analysed.

Māori have lower and more quickly decreasing sustainability of exits than other groups, down to 46.4% in 2018/19.

## Overall, the likelihood of exit to employment has remained relatively stable over time for all ethnicities, before decreasing for the 2018/19 cohort.



Figure 12: Likelihood and employment sustainability of employment exits over time, by ethnicity

The likelihood of exit to employment for Māori and Pacific Peoples increased between 2014/15 and 2017/18 before falling in 2018/19, whereas it has fallen over the whole period for NZ Europeans.

The sustainability of employment after exit is considerably lower for Māori, and higher for Asian, compared to other ethnic groups (34.9% and 50.5%, respectively, in 2018/19).

#### Gender<sup>8</sup>

### Women exit main benefits at a rate approximately 23% lower than men. However, women sustain those exits at a higher rate.



Figure 13: Exits by gender

Part of this is due to women making up the majority of exits from Sole Parent Support which has a relatively low likelihood of exit but relatively high sustainability of exit, however women have lower exit rates and higher sustainability of exits across all benefit types.

<sup>&</sup>lt;sup>8</sup> The IDI currently uses sex and gender interchangeably to derive this variable. Until recently most IDI data supplies have not contained gender diverse data, but as more datasets start to include expressions of gender diversity these people will be able to be included and represented in the analysis

#### Women have lower average incomes after exit to employment, although their incomes grow at the same rate as men.

Figure 14: Average income growth for people who exit to employment and sustain employment earnings for 12 months, by gender



Income, over the 12 months after exit, rises fairly consistently for both men and women who maintain employment over the entire period. However, the initial income level is almost 12% lower for women, and still 10% lower at the end of the 12 months.

Both the likelihood and sustainability of exits have been decreasing over the entire period covered; the decrease has been greater for men than for women. However, exits to employment, and the sustainability of those employment exits, have held up better than overall exits, particularly for women.



Figure 15: Likelihood and sustainability of exits over time, by gender



Figure 16: Likelihood and employment sustainability of employment exits over time, by gender



When compared to women of other ethnicities, Wāhine Māori have the lowest equal likelihoods of exit and exit to employment, and the lowest sustainability of exits and employment.

When compared to Tāne Māori, Wāhine Māori follow the same pattern described above for all women compared to all men – lower exit rates and exits to employment, but higher sustainability of those exits.

#### Age

### Young people tend to exit at higher rates, but are less likely to sustain those exits.



#### Figure 18: Exits by age group

- Proportion who remained off-benefit throughout the 12 months (RHS)

- Proportion who have earnings over \$1,512 throughout the 12 months (RHS)

### Income progression after exit is similar between age groups, with starting income lower for younger people.

Figure 19: Average income growth for people who exit to employment and sustain employment earnings for 12 months, by age group



Over time the rate at which young people who exit to employment sustain their employment earnings has fallen slightly. Over the same period, older people have been more likely to sustain their employment earnings.



Figure 20: Likelihood and employment sustainability of employment exits over time, by age group



#### Within the youngest age group, we see that exit outcomes for rangatahi are worse, when compared to other young people.

When compared to young people of other ethnicities, Māori young people have the lowest rate of exit, exit to employment, and sustainability of both exits and employment.

When compared to other age groups of the same ethnicity, young people across all ethnicities have higher exit rates and exits to employment, but lower rates of sustained employment. Asian, Pacific and 'other' young people have higher rates of sustained exits than older age groups of the same ethnicity, but Maori and NZ European young people do not.

#### **Benefit type**

Jobseeker-Work Ready recipients make up around one quarter of main benefit clients, and more than half of all exits, but the sustainability rate of those exits is lower than any benefit type other than Emergency Benefit.





Figure 22 shows the benefit type make-up of the benefit population and the people who exit main benefit. The majority of people who exit main benefit do so from JS-WR/YP despite this only making up 27% of all main benefit clients. Other benefit types that support a large number of people, such as SLP-HCD make up relatively few of the exits from main benefits.

People receiving JS-WR/YP and EB had a high likelihood of exiting benefit and exiting to employment (as shown in Figure 23). They also made up the majority of all exits to employment. However, people who exited to employment from other benefits such as SPS were more likely to have sustained employment earnings than those who exited from JS-WR/YP or EB. This is despite JS-WR clients generally having stronger work obligations than people receiving other benefit types.



#### Figure 23: Exits by benefit type

- Proportion who have earnings over \$1,512 throughout the 12 months (RHS)

Clients who sustain employment after exit from SPS/YPP have lower incomes on average than clients who exit from other benefits. This may be due to childcare responsibilities limiting hours they are able to work. However, their average incomes tend to grow at a similar rate to exits from other benefits. The kink in income levels seen for SLP-Carers and Emergency Benefit clients after exit, in Figure 24, is likely a result of the low number of people in these categories (fewer than 300 and 600 people, respectively).

Figure 24: Average income growth for people who exit to employment and sustain employment earnings for 12 months by benefit type



Both likelihood of exit and proportion remaining off benefit have decreased slightly over time, in a relatively consistent pattern for all benefit types.





#### Likelihood of exit to employment by benefit type remained relatively flat for most benefit types with a small decrease in 2018/19.





This decrease is less marked than for all exits though, and is driven by JS-Work Ready, which makes up more than 56% of all exits, and 63% of exits to employment. The

proportion sustaining employment earnings across 12 months has increased for people who exit to employment from SLP-HCD and EB, however exits to employment from these benefit types make up a very small proportion of exits.

#### **Benefit history**

#### People who have had longer spells on benefit<sup>9</sup> generally have a lower likelihood of exiting a benefit in the next 12 months, lower sustainability of those exits, and lower income after exit



Figure 27: Exits, by length of most recent benefit spell

Longer benefit spells generally correlate with lower exit rates. In particular, the likelihood of exiting benefit and exiting to employment both fall as benefit spell length increases – with the exception of those with a benefit spell of 1-3 months.

Sustainability of exits from benefit decreases as prior benefit spell length increases to around 2 years, after which sustainability increases slightly (most dramatically at 4+ years). This increase at 4+ years is caused by a large proportion of these exits being from SLP-HCD and SPS compared to exits with a shorter benefit spell. SLP-HCD and SPS have higher sustainability than other benefit types.

<sup>&</sup>lt;sup>9</sup> Note that if someone moves between different main benefits in consecutive months, we consider this the same main benefit spell.

#### Of those people who sustain their employment for all 12 months after exit, post-exit income tends to be higher, and grow faster, for those who had shorter spells on benefit.



Figure 28: Average income growth for people who exit to employment and sustain employment earnings for 12 months by length of most recent benefit spell

#### **Regional Council**

### Exit rates vary across the country, but sustainability of those exits are generally higher in the main centres than in the regions.



Figure 29: Exits by Region

#### (ordered from highest to lowest proportion remaining off-benefit throughout the 12 months)

There is considerable variation in incomes after exit and subsequent income growth. Of those who sustain employment over the 12 months, highly urban areas like Wellington and Auckland tend to have the highest incomes both initially after exiting and also 12 months later. More rural areas such as Southland and the West Coast tend to have lower income growth over time.

Table 2: Ave	erage monthl	y income	growth fo	r people v	who exit	to employ	yment and	l sustain
employmen	t earnings fo	r 12 mon	ths, by Reg	jion				

Regional council	۲ 3 months	Annualised income growth		
Northland	\$3,750	\$3,884	\$3,914	6%
Auckland	\$4,168	\$4,348	\$4,416	8%
Waikato	\$3,806	\$3,991	\$4,023	8%
Bay of Plenty	\$3,745	\$3,882	\$3,981	8%
Gisborne	\$3,731	\$3,875	\$4,050	12%
Hawke's Bay	\$3,797	\$3,850	\$3,955	6%

Taranaki	\$3 <i>,</i> 699	\$3,833	\$3,901	7%
Manawatu-Wanganui	\$3,651	\$3,789	\$3,839	7%
Wellington	\$4,056	\$4,223	\$4,299	8%
Nelson	\$3 <i>,</i> 798	\$3,755	\$3,849	2%
Tasman	\$3 <i>,</i> 666	\$3,836	\$4,047	14%
Marlborough	\$3 <i>,</i> 548	\$3,633	\$3,819	10%
West Coast	\$3,914	\$4,044	\$3,988	3%
Canterbury	\$3 <i>,</i> 855	\$4,028	\$4,094	8%
Otago	\$3,792	\$4,004	\$4,072	10%
Southland	\$3,969	\$4,140	\$4,121	5%
Total	\$3,924	\$4,085	\$4,152	8%

#### **Education level**

Higher education level<sup>10</sup> correlates to increased likelihood of exit, and improved sustainability of those exits.



Figure 30: Exits, by grouped highest qualification level<sup>10</sup>

Likelihood of exits (LHS)

Likelihood of exits to employment (LHS)

- Proportion who remained off-benefit throughout the 12 months (RHS)

- Proportion who have earnings over \$1,512 throughout the 12 months (RHS)

 $<sup>^{10}</sup>$  These are the New Zealand Qualifications Framework levels. 1 – 4 align with NCEA levels 1 – 4, 5-6 – Diplomas, 7+ – Bachelor's Degrees and Graduate Diplomas and higher.

Incomes after exit grow for all people who maintain employment after exit, but they grow faster and from a higher starting point for those with higher levels of qualifications. However, the number of people with higher (university-level) qualifications is relatively small – making up around 11% of all exits.



Figure 31: Average income growth for people who exit to employment and sustain employment earnings for 12 months by grouped highest qualification level

#### Part 4 – Outcomes for different exit destinations

#### **Exits to employment**

#### Administrative and Support Services, and Manufacturing industries are the largest exit destinations for people exiting to employment.



Figure 32: Exits to employment by industry

Administrative and support services is the largest industry that people exit benefit to, accounting for 16% of all exits. Manufacturing is the next largest industry that people exit to, around half of these Manufacturing exits are to seasonal sub-industries<sup>11</sup>.

<sup>&</sup>lt;sup>11</sup> For more information on how seasonal sub-industries are defined see Appendix 1 – History, Data and methodology. This uses the methodology developed for the 2020 iteration of this report, available here: <u>https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/benefit-system/what-happened-to-peopole-leaving-the-benefit-system-2016.pdf</u>

For those industries with seasonal sub-industries, sustainability of employment is generally higher in the non-seasonal sub-industries. The Accommodation and Food Services industry is the exception to this.

### To identify seasonal subindustries, we have drawn on the findings of the previous iteration of this report<sup>11</sup>.

In that analysis, we looked at patterns in the number of people employed over time in 213 different sub-industries and used this to identify sub-industries with repeating trends.

While there will be some permanent jobs within these sub-industries, because of the method used to select seasonal sub-industries, we would expect a significant proportion of workers in these industries to be seasonally employed.

Key points of note from that analysis, in addition to the findings outlined above, are:

- Of those people who exited to employment in 2015/16, 1 in 4 went into a seasonal subindustry.
- Some regions had higher rates of people leaving benefit for employment in seasonal subindustries e.g. Bay of Plenty, Gisborne and the Hawke's Bay.
- Māori clients were also more likely to exit to seasonal work, in part due to Māori making up more than half of all exits to employment in regions with high levels of seasonal work.
- MSD clients who exited to employment in a seasonal sub-industry had, on average, slightly higher incomes after exit than those who exited to a nonseasonal subindustry, although the difference reduced in the months after their exit.

#### While Administrative and Support Services, and Manufacturing are the two largest industries that people exit to, they also have some of the lowest sustainability of employment earnings of all the industries.

Figure 32 above shows that after exiting to Administrative and Support Services, and Manufacturing industries only around 35% of clients have earnings over \$1,512 over all 12 months after exit. People who exit to seasonal employment in those industries have even lower rates of employment income sustainability.

Healthcare and social assistance, and public administration and safety have the highest rates of employment income sustainability with over 60% of all people who exit to these industries having earnings over \$1,512 throughout the 12 months after exit.

### Most of our clients exit to industries where they earn relatively low incomes.

In this section we look at income levels for those who exit to employment and sustain employment earnings for all 12 months after exit. Of the top 5 industries (by number of exits) that people exit to, construction has the highest an average income at month 12. It ranks as the 8<sup>th</sup> highest industry in terms of average monthly income at month 12, for people who exit benefit to employment.

Of the top 5 industries by average monthly income at month 12 after exit, only Public administration and Safety is in the top 10 industries by number of exits (in 10<sup>th</sup> place). 2,200 people exit to that industry, which makes up 4% of the people who exit into employment.

Table 3: Average monthly income 12 months after exit for those who sustair	1
employment earnings throughout all 12 months after exit - by industry	

		Average emplo income	oyment	
Initial industry after exit	Number of exits	3 months after exit	12 months after exit	Annualised income growth
Administrative and Support Services	9,000	\$3,928	\$4,162	8%
Manufacturing	7,359	\$4,161	\$4,240	3%
Retail Trade	5,280	\$3,260	\$3,533	11%
Agriculture, Forestry and Fishing	4,965	\$3,903	\$4,165	9%
Construction	4,656	\$4,318	\$4,502	6%
Accommodation and Food Services	4,332	\$3,097	\$3,326	10%
Health Care and Social Assistance	4,311	\$3,831	\$4,037	7%
Education and Training	2,946	\$4,054	\$4,221	6%
Transport, Postal and Warehousing	2,451	\$4,248	\$4,443	6%
Public Administration and Safety	2,214	\$4,285	\$4,749	15%
Wholesale Trade	2,139	\$4,043	\$4,250	7%
Professional, Scientific and Technical Services	1,806	\$4,505	\$4,799	9%
Other Services	1,710	\$3,478	\$3,758	11%
Unidentified Industry	885	\$5,041	\$4,995	-1%
Rental, Hiring and Real Estate Services	750	\$4,005	\$4,339	11%
Financial and Insurance Services	708	\$4,557	\$4,961	12%
Arts and Recreation Services	627	\$3,494	\$3,772	11%
Information Media and Telecommunications	426	\$4,574	\$4,678	3%
Electricity, Gas, Water and Waste Services	399	\$4,381	\$4,612	7%
Mining	84	\$5,787	\$5,895	3%

### Exits to primary and secondary industries have fallen over recent years, especially exits to Manufacturing.



Figure 33: Exits to employment over time by top 8 industries by exit rate

30% fewer people exited to employment in manufacturing in 2018/19 than in 2013/14. This is the highest drop in exits of any of the 8 largest industries that people exit to. Accommodation and food services has had the lowest drop in exits to employment of 6% over the same period.

Of the top 8 industries only healthcare and social assistance, and education and training have experienced significant increases in the sustainability of employment over the period from 2013/14 to 2018/19. All other industries have stayed roughly the same or decreased.

#### Exits to tertiary education<sup>12</sup>

People who exit from benefit to tertiary education are less likely to exit to science, technology, engineering, and mathematics (STEM) fields of study.



Figure 34: Exits to tertiary education

People who exit from benefit to tertiary education are most likely to exit to courses in Society and Culture<sup>13</sup>, Management and Commerce, and Mixed Field Programmes<sup>14</sup>. They are least likely to go to courses in Education, Information Technology, and Natural and Physical Sciences which tend to have a higher level of sustainability.

<sup>&</sup>lt;sup>12</sup> Tertiary fields of study are broken down by New Zealand Standard Classification of Education (NZSCED) classifications (<u>www.educationcounts.govt.nz/data-services/code-sets-and-</u> <u>classifications/new zealand standard classification of education nzsced</u>).

<sup>&</sup>lt;sup>13</sup> Society and Culture Programmes include: Political Science and Policy Studies; Studies in Human Society; Human Welfare Studies and Services; Behavioural Science; Law; Justice and Law Enforcement; Librarianship, Information Management and Curatorial Studies; Language and Literature; Philosophy and Religious Studies; Economics and Econometrics; Sport and Recreation; and Other Society and Culture

<sup>&</sup>lt;sup>14</sup> Mixed Field Programmes include basic skills and education: General education; Social Skills; Employment Skills; and Other Mixed Field Programmes

#### People who exit to Education, and Natural and Physical Sciences were most likely to remain off benefit for 12 months after exit compared to other course times. However, these courses had very few people exiting to them.

Society and Culture programmes are the course type that most clients exit to, and results in relatively high off benefit sustainability, ranking third after Education and Natural and Physical Sciences.

#### For those who remain off benefit after exiting to tertiary education, those who studied Architecture and Building, Education, and Engineering and Related Technologies, earned higher incomes.

Many tertiary courses are a lot longer than the 12 months considered in the analysis above. As a result, this section looks at employment income growth for people who exited to tertiary education in 2015/16 and remained off benefit for all 36 months after exit.

As well as having some of the highest sustainability of exit after 12 months (as above), those who exit to Health and Education courses tend of have relatively high incomes after 36 months. Further, as shown in Figure 33, the sustainability of exits to employment in those industries has also been improving over recent years. This may suggest that improved outcomes may be achieved if more clients are guided towards these courses, where appropriate.

		Average emplo		
Tertiary education course type	Number of exits	3 months after exit	36 months after exit	Annual income growth
Society and Culture	2,205	\$1,067	\$2,187	30%
Management and Commerce	1,518	\$1,104	\$2,366	32%
Mixed Field Programmes	1,200	\$979	\$2,180	34%
Health	1,047	\$1,433	\$2,680	26%
Food, Hospitality and Personal Services	1,014	\$501	\$1,968	64%
Engineering and Related Technologies	900	\$850	\$2,693	52%
Information Technology	789	\$816	\$2,135	42%
Creative Arts	723	\$704	\$1,767	40%

### Table 4: Employment income growth for people who exited to tertiary education in 2015/16 and remained off benefit for all 36 months after exit

Agriculture, Environmental and Related Studies	681	\$1,130	\$2,585	35%
Architecture and Building	471	\$1,115	\$2,847	41%
Education	462	\$1,136	\$2,751	38%
Natural and Physical Sciences	255	\$723	\$1,987	44%

#### Exits to targeted/industry training

Manufacturing makes up over a third of all exits to targeted/industry training, but has the lowest rate of off benefit sustainability after 12 months of 41%. All other course types tend to have much higher rates of sustainability.



Figure 35: Exits to targeted/industry training by course type

Note: only includes course types with over 50 exits

Targeted/industry training courses are generally linked to a job (e.g. apprenticeships). Exits to targeted/industry training courses make up only 1,600 exits, a small fraction of all exits (around 1.5%). Given these numbers are relatively small, care should be used when interpreting these results.

#### Public administration and safety, and agriculture industry training courses tend to result in higher incomes for those who sustain their exits to these courses.



Figure 36: Employment income growth for people who exited to targeted/industry training and remained off benefit for all 12 months after exit

Industry training courses are associated with paid employment. As a result, the initial employment income after exit tends to be higher than exits to tertiary education. 12 months after exit, average monthly incomes tend to be relatively flat.

Looking at 2015/16 exits to targeted/industry training who stayed off benefit for all 36 months after exit (as in Figure 37 below) allows us to track how their income has grown over a longer period. This shows that only two course types (Agriculture, Forestry and Fishing, and Manufacturing) have average monthly incomes that decrease across the 3 months and 36 months post-exit period. These industries tended to have an income peak at 3 months after exit however their incomes at 36 months remained similar to other course types. Further analysis is required to understand the reasons for this peak and decrease.

Note: only includes course types with over 50 exits

Note that the initial 12 month period in Figure 37 does not exactly match the 12 month period in Figure 36, as these cover different cohorts, and Figure 36 covers those who sustained exits for 12 months, while Figure 37 shows the smaller number of people who sustained exits for a full 36 months.



Figure 37: Employment income growth for people who exited to targeted/industry training in 2015/16 and remained off benefit for all 36 months after exit

#### Appendix 1 – History, Data and methodology

A full set of data tables titled "What happened to people who left the benefit system – 2019 – Data tables.xlsx" are published along with this report.

The analysis for this report was undertaken using data from Stats NZ's Integrated Data Infrastructure. The IDI integrates together longitudinal data from a variety of government ministries, departments and agencies.

Stats NZ links the data provided and generates unique identifiers which are added to all data tables.

This allows us to link de-identified data for individuals across all datasets. Stats NZ regularly update these datasets with new data provided by agencies to provide longitudinal views of individuals' interactions with multiple government services. When these updates are generated, new matched datasets are created which mean it is difficult to make exact comparisons with prior investigations. To allow for this, we have also analysed 2013/14, 2015/16 and 2017/18 so these could be compared.

We have followed a similar methodology to that outlined in the 2020 MSD report.

This work builds on earlier published analysis:

- In February 2017, the Social Policy Evaluation and Research Unit (Superu) released the first *Off-benefit transitions: Where do people go?* report<sup>15</sup>. The report examined the characteristics of 140,000 people who exited main benefits in the year to 30 June 2011 and their outcomes over the next two years, using linked administrative data in Stats NZ's IDI.
- In August 2018, MSD released the report *What happened to people who left the benefit system during the year ended 30 June 2014*<sup>16</sup>, and in February 2020, MSD released the next iteration of this reporting *What happened to people who left the benefit system during the year ended 30 June 2016*<sup>17</sup> (called the 2020 MSD report throughout this document). These reports expanded the analysis by:
  - including new cohorts,
  - o examining what happened to people's earnings after they exited a main benefit,
  - $\circ\;$  looking at sustainability of exits and employment,
  - looking at how outcomes changed depending on the reason for exit, and for those who exited to employment in a seasonal industry, and
  - investigated how outcomes differed for people who had accessed mental health or addictions service in the past.

We have made some methodology changes since the 2020 MSD report, so recreated the analysis using the revised methodology for the group of people who exited a benefit during 2013/14 and 2015/16. This enables a more accurate comparison of cohorts in this report. These methodology changes have not impacted the outcomes of the analysis

- <sup>16</sup> <u>https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/research/benefit-system/what-happened-to-people-who-left-benefit-system-during-the-year-ended-30-june-2014.html</u>
- <sup>17</sup> <u>https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-</u>

<sup>&</sup>lt;sup>15</sup> <u>https://thehub.sia.govt.nz/resources/off-benefit-transitions/</u>

resources/research/benefit-system/what-happened-to-peopole-leaving-the-benefit-system-2016.pdf

materially, but decreased the size of the study groups for the earlier cohorts (to 139,000 in 2013/14 and 125,000 in 2015/16). For further information on these changes see the section '*Impact of data refresh and code changes on 2015/16 results'* below.

#### Data sources used

IDI datasets used were:

- Benefit Dynamics Datasets: details of benefit receipt such as the type of benefit and start/end dates for all people who receive a benefit from MSD
- Employer Monthly Schedule: earnings and tax details from employers from Inland Revenue
- Deaths data from the Department of Internal Affairs
- Data about departure and arrivals to and from New Zealand from the Ministry of Business, Innovation and Employment
- Major management data from the Department of Corrections
- Tertiary education and targeted training data from the Ministry of Education
- Working for Families partnering information from Inland Revenue.
- Highest qualification data is an amalgamation of data from the Ministry of Education, MSD and the 2013/2018 Census.

We used the October 2020 IDI data refresh.

#### Definitions

#### Subsets of main benefit categories

#### Table 5: Subset of income tested main benefits used in this report

Benefit	Description
Jobseeker Support — Work Ready <b>(JS-WR)</b>	Not in, but available for, full-time employment (formerly Unemployment Benefit or Domestic Purposes Benefit with youngest child aged 14 years or older).
Jobseeker Support — Health Conditions & Disabilities <b>(JS-HCD)</b>	Jobseeker Support beneficiaries having reduced or deferred work obligations due to a health condition or disability (formerly Sickness Benefit).
Emergency Benefit <b>(EB)</b>	Not eligible for another benefit and in hardship.
Sole Parent Support & Emergency Maintenance Allowance <b>(SPS)</b>	Sole parent with youngest child aged under 14 years (formerly Domestic Purposes Benefit with youngest child aged 13 years or younger).
Supported Living Payment — Carer <b>(SLP-Carers)</b>	Payment paid to the carers (excluding partners) that look after those who require full time care and attention (formerly Domestic Purposes Benefit — care of the sick and infirm).
Supported Living Payment — Health Conditions & Disabilities <b>(SLP-HCD)</b>	Permanently and severely restricted in capacity to work due to health condition or disability (formerly Invalids Benefit).

Youth Payment <b>(YP)</b> <sup>18</sup>	Unsupported youth aged 16–17 years (formerly Independent Youth Benefit).					
Young Parent Payment (YPP) <sup>18</sup>	Young parents aged 16–19 years (formerly Domestic Purposes Benefit or Emergency Maintenance Allowance beneficiaries aged 16–19 years with youngest child aged 13 years or younger – also includes 16-19-year-old parents who may have been receiving other types of benefit).					

Note that beneficiary records of those who receive Jobseeker Support — Student Hardship (JSSH), New Zealand Super (NZS), or Veteran's Payments (VP) at any point have been excluded from the scope of the analyses. These are excluded as they are temporary support between planned periods of study (JS-SH) or are permanent payments (NZS and VP). This means that the movement for those who have exited from or returned to these benefits will not be captured in this report.

#### **Exits and Triggers**

Using linked data in Stats NZ's IDI, we have assigned a trigger reason for exiting benefit. These are shown in Table 6

Note:

- The exit triggers assigned in Table 6 below are hierarchical. People are assigned to the first trigger where they meet the criteria. For example, a person whose gross earnings increase to above \$1,512 in the month they exit benefit and who started a part-time tertiary course will be categorised as "Part-time student" and not "Employment".
- Clients may have exited and re-entered benefit prior to 2018/19 and may enter and exit benefit multiple times in 2018/19. We only count the first exit where they remain off benefit for at least one month in 2018/19 in the table below (and in all further analysis).
- Month 0 is the month the person is recorded as exiting a main benefit.
- Except for the partnership trigger, we do not use the MSD exit reason records. To see the trigger for exit used in this report compared to the MSD exit reason code see Table 7

Trigger for exit	Abbreviation	Number of exits	Assigned if a person:
Death	Death	2,637	Dies during months -2 through to 1
Reached age 65+	Age > 65	132	Is aged greater than or equal to 64.917 at the end of month 0

#### Table 6: Triggers for exit from benefit

<sup>&</sup>lt;sup>18</sup> Note that YP and YPP clients have education, training and work-based learning obligations rather than employment obligations.

Trigger for exit	Abbreviation	Number of exits	Assigned if a person:
Overseas	Overseas Overseas		Departs on an overseas trip during months -1 through to 1, and spends at least 14 days overseas during this time
In detention	In detention	5,262	Spends 14 days or more in remand or prison during months -1 through to 1
Started a targeted/indust ry training course	Training course	1,614	Begins a targeted or industry training education course in any month during months -2 through to 1
Started a full- time tertiary course	Full-time student	6,903	Begins a formal tertiary education course for which they are studying full-time in any month during months -2 through to 1
Started a part- time tertiary course	Started a part- ime tertiary course		Begins a formal tertiary education course for which they are studying part-time in any month during months -2 through to 1
Employment	Employment	51,426	Has gross earnings of \$1,512 or more during month 1, and their gross earnings during month 1 is greater than the average gross earnings during months -2 and -1
Other with earnings ≥ \$1,512	Other: Earn ≥ \$1,512	5,622	Has gross earnings of \$1,512 or more during month 1, but do not meet the increase in earnings test for the employment trigger
Partnered	Other: Partner	4,506	Identified as having a change in partnership status from Working for Families tax data during months -1 to 1 or have a Ministry exit reason code of "Not eligible (partner)'
Other with earnings ≥ \$100 but less than \$1,512	Other: Earn \$100 – \$1,512	5,907	Does not fall into any of the above trigger groups, and has gross earnings of \$100 or more during month 1
Other with earnings < \$100	Other: Earn < \$100	17,313	Does not fall into any of the above trigger groups, and has gross earnings of less than \$100 during month 1
Total		111,027	

Calendar months are the base unit of analysis for the work underlying this report. The criteria for being `on benefit' in any particular month is: receipt of any main benefit for

any period during that month. The method adopted has some shortfalls but is consistent with the method adopted for the analysis underlying MSD's 2020 report, enabling comparisons of results to be made. While MSD data would allow for more exact transition dates to be used, many other data tables used are recorded in calendar months which makes an alternate approach unfeasible. For example, earnings data from Inland Revenue's Employer Monthly Schedule is available on a calendar month basis only.

A person is only deemed to have transitioned off benefit in the first calendar month where no benefit is received. This means, on average, a person will have been off benefit for six weeks before being defined as an exit. It also means:

- if a beneficiary spell ends on the first of the month, this beneficiary will not be classed as an exit until eight weeks later (i.e. after a full calendar month off benefit).
- if a beneficiary spell ends on first of the month, and a new spell starts on the last day of the following month, this beneficiary is never classed as an exit, despite being off benefit for almost as long as the person above
- if a beneficiary exits from benefit at the end of the month, say the 29th of the month, they would not be classified as an exit until the following month, assuming they remain off benefit.

For the exit trigger 'employment' we have used a minimum threshold income of \$1,512 per month (in December 2020 dollars). We chose \$1,512 per month as the earnings threshold as it represents 20 hours of work per week at minimum wage for the typical four weekly pay periods in a month; 20 hours' work per week is the requirement for a sole parent to be eligible for In-Work Tax Credits. Note that this threshold is not related to the income cut-out point for any particular main benefit type. It has been chosen to align with previous published analyses.

#### **Comparison with MSD exit reason codes**

Table 7 shows how people would be re-allocated across triggers if the MSD exit reason codes had been used to allocate benefit exits instead of the definitions used for this study.

		Exit reason (trigger) used in this report												
		Age > 65	Death	Overseas	In detention	Full-time study	Part-time study	Training course	Employment	Other: Partner	Other: Earn >= \$1,260	Other: Earn \$100 - \$1,260	Other: Earn < \$100	Total
	Age 65	66	-	9	-	-	-	-	-	-	-	-	129	204
	Death	-	2,526	-	-	-	-	-	-	-	6	-	180	2,712
	Overseas	6	-	5,277	-	12	6	9	186	6	36	63	651	6,252
	Detention	-	-	-	4,203	-	-	-	57	-	21	27	471	4,779
	Education	-	-	78	12	5,193	888	12	99	12	24	153	819	7,290
	Employment	15	-	1,002	213	882	696	1,371	42,963	228	4,005	3,804	5,469	60,648
eason	Not eligible (medical)	-	-	-	-	-	-	-	12	-	-	-	9	21
try exit re	Not eligible (obligations)	9	39	924	648	255	123	108	4,911	144	885	1,050	5,127	14,223
Minis	Not eligible (partner)	-	-	60	15	99	63	12	363	3,927	69	-	-	4,608
	Not eligible (other circumstances)	-	-	9	18	15	6	-	66	-	6	39	279	438
	Not grouped	-	45	108	60	48	24	27	1,101	27	204	336	1,365	3,345
	Transfer	15	-	39	18	282	69	-	132	45	30	72	630	1,332
	Other	15	21	261	69	111	48	63	1,530	111	321	357	2,187	5,094
	Total	126	2,631	7,767	5,256	6,897	1,923	1,602	51,420	4,500	5,607	5,901	17,316	110,946

#### Table 7: Comparison of definition of reason for exit to MSD exit codes

### Impact of data refresh and code changes on 2015/16 results

The IDI refreshes regularly and this can cause small changes to the outcomes of prior analysis due to small differences in the matching algorithm or backdated changes to the datasets provided.

We have made one key change to our population in this report. We have excluded all people aged over 65 at the time of exit. This reflects the key focus of this report on working age benefits. The impact of this is shown in the second line of Table 8 below.

To enable comparison to the 2013/14 and 2015/16 cohorts, we have rerun the analysis for these cohorts on the refreshed datasets and included changes in our definitions. Table 8 below compares the number of off-benefit transitions from the earlier report for the 2015/16 cohort to the results from the refreshed dataset.

	Count	of Exits	Proportion of exits				
Exit reason	2020 MSD report	Refreshed Data and Method	2020 MSD report	Refreshed Data and Method	Change		
Death	2,484	2,475	2%	2%	0.1%		
Reached age 65+ years	5,862	171	4%	0%	-4.3%		
Overseas	8,580	8,556	7%	7%	0.3%		
In detention	4,518	4,584	3%	4%	0.2%		
Started a targeted/industry training course	2,004	2,016	2%	2%	0.1%		
Started a full-time tertiary course	8,787	8,790	7%	7%	0.3%		
Started a part-time tertiary course	2,469	2,475	2%	2%	0.1%		
Employment	57,681	56,547	44%	45%	1.2%		
Other with earnings greater than or equal to \$1,512	6,150	5,715	5%	5%	-0.1%		
Partnered	5,940	5,979	5%	5%	0.2%		
Other with earnings greater than or equal to \$100 but less than \$1,512	5,670	7,494	4%	6%	1.7%		
Other with earnings less than \$100	21,042	20,496	16%	16%	0.3%		
Total	131,187	125,298	100%	100%			

#### Table 8: Impact of data refresh and definition changes on 2015/16 cohort

#### **Ethnicity definition**

We have used Stats NZ's ethnicity variable from the personal details table in the IDI. This captures each ethnicity that a person was ever assigned to across all datasets. For this report we have used a total response ethnicity view. This means that when a person has multiple ethnicities, we've included them within each ethnicity group. This is known as 'total response' ethnicity. This means that the total number of people will not match the sum of the number of people in each ethnicity category.

Previous reports applied a prioritisation so that each person is only in one ethnicity group. The order of prioritisation was Māori, Pacific Peoples, Asian, Other, New Zealand European.

#### **Income definition**

Throughout this report we've used employment income. This is defined as the gross income earned from employment inflated to December 2020. It includes wages and salaries as well as withholding payments (from Inland Revenue's Employee Monthly Schedule).

#### **Excluding self-employment earnings**

We do not include earnings from self-employment filed as part of an annual tax return in the definitions above. We are unable to reliably allocate annual self-employment income by month to align with the other income data (from companies, partnerships, sole traders and rent).

The 2020 MSD report calculated a rough upper limit of exits from the 2015/16 cohort that might have self-employment earnings that are not included

- 10% of people whose exit trigger was 'other with earnings less than \$100'
- 3% of people whose exit trigger was 'employment' or 'other earnings >= \$1,260 per week'
- 3% those who exited benefits with any of the remaining trigger reasons.

#### Seasonal industries definition

This report uses the same seasonal industry definitions as used in the 2020 MSD report. They were identified by looking for patterns of seasonality in the numbers of people employed in each sub-industry over time. Further explanation can be found in the <u>2020</u> report.

Main industry	Sub-industry	Industry code
	Nursery and Floriculture Production	A011
	Mushroom and Vegetable Growing	A012
	Fruit and Tree Nut Growing	A013
	Grain, Sheep and Beef Cattle Farming	A014
Agriculture, Forestry	Other Crop Growing	A015
and Fishing	Dairy Cattle Farming	A016
	Deer Farming	A018
	Other Livestock Farming	A019
	Fishing	A041
	Forestry Support Services	A051

#### Table 9: Sub-industries identified as having a seasonal employment pattern

Main industry	Sub-industry	Industry code
	Agriculture and Fishing Support Services	A052
	Meat and Meat Product Manufacturing	C111
	Seafood Processing	C112
Manufacturing	Fruit and Vegetable Processing	C114
	Beverage Manufacturing	C121
	Leather Tanning and Fur Dressing	C132
Accommodation and Food Services	Accommodation	H440
Transport, Postal and	Water Passenger Transport	I482
Warehousing	Scenic and Sightseeing Transport	I501
Administrative and Support Services	Packaging and Labelling Services	N732
	Preschool Education	P801
	School Education	P802
Education and Training	Tertiary Education	P810
	Adult, Community and Other Education	P821
	Educational Support Services	P822
	Parks and Gardens Operations	R892
Arts and Recreation	Sport and Physical Recreation Activities	R911
Services	Horse and Dog Racing Activities	R912
	Amusement and Other Recreation Activates	R913