



Total Incomes technical documentation

June 2023



Introduction

The need for a detailed and regular view of beneficiary incomes, including changes over time and for different family types, was highlighted in the 2019 Welfare Expert Advisory Group (WEAG) report. Recommendation 5 of the WEAG report¹ stated the Ministry of Social Development (MSD) should begin annually reporting on key outcomes for those interacting with the welfare system, including information on after-tax and abatement earnings.

It noted a range of possible measures including that MSD should report a measure of:

“...after-tax and abatement earnings for those receiving financial support from Inland Revenue or the Ministry of Social Development by ethnicity, gender, location, health conditions and disabilities, and number and age of dependent children (0–17 years).”

In line with this recommendation, MSD has developed a new dataset that outlines the full range of financial support main benefit clients receive, including their base benefit payment, supplementary assistance and other ad hoc grants, financial support from Inland Revenue, and any reported earnings. The dataset also accounts for housing costs and other deductions, like debt repayments to MSD and child support.

An annual report, called the Total Incomes annual report, has been created to produce annual reporting based on the dataset. This document provides technical documentation for the Total Incomes annual report published here.

Glossary

Term	Definition
First-tier main benefits	
Jobseeker Support Work-Ready (JS - WR)	A weekly benefit paid while clients look for work or are in training for work.
Jobseeker Support - Health Condition or Disability (JS - HCD)	A weekly benefit paid for clients who are unable to work due to a health condition, injury or disability.
Sole Parent Support (SPS)	A person is entitled to this benefit if they do not have a partner and have at least one dependent child aged under 14 years. In the case of shared custody, only the parent with the greater parenting responsibilities can be paid SPS.
Supported Living Payment (SLP)	A weekly payment to support people who have, or are caring for someone with, a health condition, injury or disability that severely restricts their capacity to work in the long term.

¹ WEAG report found here: <http://www.weag.govt.nz/assets/documents/WEAG-report/aed960c3ce/WEAG-Report.pdf>



Youth Payment (YP)	This is a benefit to support young people (16-17 years) without children, who can't live with their parents or guardians and are not supported by them or anyone else.
Young Parent Payment (YPP)	People are entitled to this benefit if they are aged 16-19 years and have dependent children, whether they are single or partnered. People may still be supported by their parents if they are receiving this payment and are under 18; however, there is a parental income test in this case.
Second-tier supplementary benefits	
Accommodation Supplement (AS)	An income and asset tested weekly payment that assists with a client's accommodation costs. It is available to both people receiving main benefits and those working on low and middle incomes, to help with costs from the private housing market. It is regulated as a partial contribution to families' housing costs, and calculated according to accommodation costs, income, assets, type of tenancy, family status, and residential region.
Income-Related Rent Subsidy (IRRS)	An income and asset tested subsidy available to people in public housing (which includes properties provided by both Housing New Zealand and community housing providers). The subsidy (paid to housing providers) means that these tenants pay an Income-Related Rent, which limits the amount of rent they pay to generally no more than 25 percent of their net (after-tax) income.
Winter Energy Payment (WEP)	A benefit paid with the client's main benefit, to support eligible clients to meet their household heating costs during from May until October. The rate paid depends on whether clients are single, married, or in a civil union or de facto relationship, or have children.
Temporary Additional Support (TAS)	Extra help paid for a maximum of 13 weeks. It is paid as a last resort to help clients with their regular essential living costs that cannot be met from their chargeable income and other resources. A client does not have to be getting a main benefit to qualify for TAS.
Third-tier hardship benefits	
Special Needs Grant (SNG)	One-off recoverable or non-recoverable financial assistance to clients to meet immediate needs or emergency costs if they are unable to pay for it through other means. A client does not have to be getting a benefit to qualify for SNG. Civil Defence Payments are included as part of this payment for the purposes of the Total Incomes report.
Other terms	



Family Tax Credit (FTC)	Income-tested tax credits to provide ongoing financial support for families with children, including those receiving main benefits. People receiving main benefits can choose to receive their FTC through MSD (along with their benefits and any other payments) or from IR. Although it is paid regardless of income source, the amount a client receives depends on family situation.
Best Start Tax Credit (BSTC)	A universal payment to support families with children in the first year of children's lives. For the second and third years of children's lives the payment is targeted to low- and middle-income families. BSTC starts after any paid parental leave payments from IR and is also available to carers of children receiving OB, UCB or FCA. People receiving main benefits can choose to receive their BSTC through MSD or from IR.
Orphans Benefit and Unsupported Childs Benefit (OB/UCB)	This payment provides income support to the caregiver of a child whose parents can't support them.
Housing terms	
Emergency Housing	An emergency housing grant of last resort to provide assistance for clients with an immediate emergency housing need.
Residential Support Subsidy	Payment made by the Ministry of Health for people with physical, sensory, intellectual, psychiatric disabilities or disabling chronic health conditions who are receiving residential support services.
Public Housing/ Public Housing Register	Public Housing is a subsidised rent scheme for clients with low incomes. Clients pay a proportion of their incomes towards rent and the rest is covered by a subsidy. Public Housing Register is a waitlist for a public housing tenancy.

The dataset

The dataset is built using MSD administrative data and covers families receiving an income-tested main benefit from 2006 onwards. Some values are estimated, such as tax credits paid by IRD, and tax. Extract dates are end of quarter from 2006 to 2017, and end of month from January 2018 onwards. Note that since some datasets don't go back as far as 2006, care needs to be taken with analysis over time. For example, the earliest date in the public housing data is in August 2015, and for emergency housing the earliest date is only 2016. The numbers may be retroactively adjusted if there are changes around methodology. Changes will be outlined as part of this documentation.



The data includes families where at least one person is receiving an income-tested main benefit. For post-welfare reform these benefits include:

- Jobseeker Support (JS)
- Sole Parent Support (SPS)
- Supporting Living Payment (SLP)
- Youth and Young Person Payment (YPP)
- Emergency Benefit (EB)
- Emergency Maintenance Allowance (EMA)
- Other²

Clients not receiving a main benefit or on New Zealand Superannuation / Veteran's Pension could be included in the data if they are the partner of a client receiving main benefit.

Each record on the dataset corresponds to an individual. A family that includes two people known to MSD will have two records on the dataset regardless of their apportionment³ indicator. By including both members of the couple, we ensure that analysis by ethnicity, gender, or some other characteristic isn't biased towards the primary client. People have a client weight of 1, as they represent themselves as a single person. Each person also has a family weight, where they represent a part of the family, their family weight will sum to 1 across all members.

Family composition

A family includes the client, their partner and any dependent children. This also includes orphans and unsupported children for the client or the partner, where the service status for OB/UCB is current. These figures differ from official statistics, as the total incomes dataset is based on the number of families supported by a main benefit rather than the number of individual clients.

The total incomes dataset is based on MSD's administrative definition of families, which considers a main client, their partner, and any dependent children. There may be multiple families included within one household – for example multi-generational households with more than one main benefit recipient. This reporting approach is also different to the child poverty measurement⁴, which is based on households rather than families.

Equivalence scale

Since larger families will tend to have higher income, we need to scale their income down so we can compare their income against smaller families. Income should be divided by the appropriate value from an equivalence scale to get equivalised income.

² The 'other' category includes SLP Australia Social Security Agreement, Widows Benefit Overseas, SPS Overseas, Emergency Maintenance Allowance, and Jobseeker Support Student Hardship.

³ Term used by MSD to identify how a client's main benefit is split with their partner; benefit could either be paid to the client or split equally with their partner.

⁴ Find information on the child poverty measure here: <https://www.stats.govt.nz/infographics/how-we-measure-child-poverty/>

There are many equivalence scales available. We have used the OECD modified scale for equivalising income before housing costs between different sized families. Note that the scale would normally apply to households and not families. The scale is calculated as follows:

- 1.0 for first adult
- 0.5 for subsequent family members aged 14 and over
- 0.3 for every child aged under 14

This report uses the single person family as the reference family, i.e., a single person unit has an equivalence scale value of 1.0. The choice of reference affects the numerical value of equivalised income but makes no difference to any of the distributional, inequality and low-income analysis that follows.

For example, a single person on JS might get \$443.50 in main benefit and AS and a couple with one child aged 4 on JS might get \$899.34 in main benefit, FTC and AS. Since the equivalence scale value for the couple and their child is 1.8, their equivalised income is calculated as $\$899.34 / 1.8 = \499.64 .

We use an alternative scale⁵ for comparing income After Housing Costs (see below for more detail). This is because for each additional person being added to a family the costs of housing an additional person is not expected to be as large as group expenditure on things such as food or utilities. The scale is used in the UK's Households Below Average Income reports and reflects the more limited scope for economies of scale for adults in non-accommodation costs. The scale is calculated as follows:

- 1.0 for first adult
- 0.72 for subsequent family members aged 14 and over
- 0.34 for every child aged under 14

For the above example, if the family had rent of \$300 per week, then their after-housing cost income would be \$599.34, and their equivalence scale value is 2.06, and hence their equivalised income AHC is calculated as $\$599.34 / 2.06 = \290.94 .

Reliability

Administrative data on client details is subject to a level of error, as it can be reliant on self-reported information. A data validation exercise of the Total Incomes dataset within the Stats NZ Integrated Data Infrastructure confirmed most outputs can be similarly reproduced, with the exception of client's reported income and partnership status, which may be undercounted in our data.

⁵ Find the alternative scale here: <https://www.stats.govt.nz/methods/measuring-child-poverty-equivalence-scale>

Income

Results presented in this paper are based on data up to the end of April 2023 and show a snapshot of weekly income.⁶

Before and after housing costs income

Income before housing costs is the sum of:

- Reported Client Earnings (after tax and ACC earners levy)
- MSD Income (main benefit and supplementary assistance)
- IRD Income (tax credits)

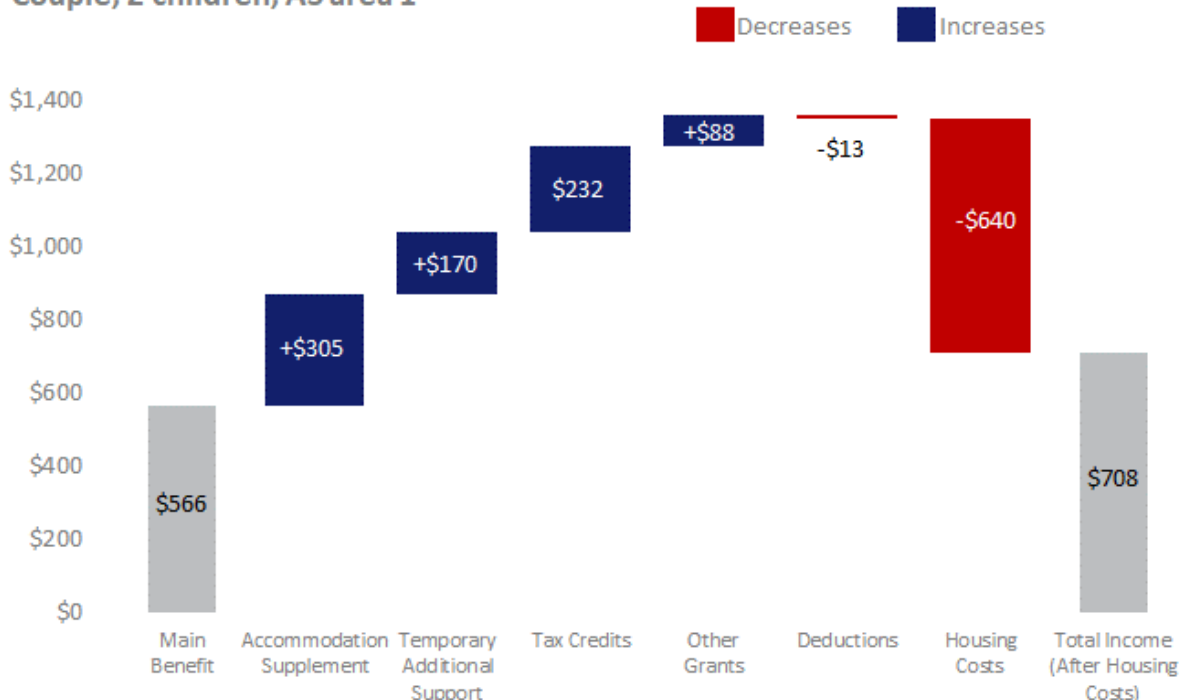
Less:

- Child support payments
- MSD debt recovery
- MSD collections
- Payments to residential care provider

Figure 1: Example of an after-housing costs 'total income' calculation for a family

Jobseeker Support

Couple, 2 children, AS area 1



⁶ Except for Special Needs Grants (SNGs), Recoverable Assistance Payments, and Advance Payment of Benefit, for which we use the average of the prior 12 weeks to account for the more ad hoc nature of these payments. In some cases, this could result in total incomes being higher than what they would be across a different time-period, if the number of SNGs received within that 12-week period was particularly high. We include recoverable payments, because we also include offsets to income in the form of debt repayments to MSD.



The 'total income' is representative of the entire family's income. Income after housing costs is equal to income before housing costs but with housing costs deducted. If housing costs are unknown, then we use the accommodation supplement entry threshold as a proxy, which may result in a potential underestimation of housing costs for these clients.

The emergency housing contribution is counted as a housing cost, although in practice the client does not pay in the same way as income related rent for public housing; a recoverable grant is raised by MSD for the contribution, and then a payment is deducted from the client's benefit to pay off the debt.

Income from MSD also includes recoverable and non-recoverable grants. To smooth out the data, we've used the average weekly amount for the last 12 weeks. Note that we've excluded emergency housing grants since repayment occurs as a deduction from benefit soon after the grant is raised.

Income is included for the partner, regardless of their benefit type and whether they are current, suspended or expired. Personal incomes of children are not included in this data.

The public housing data includes details of some board payments, but this is not counted as income for the family. This is done for consistency with AS clients, where we don't know about any board they might receive. The Income Related Rent could be offset by the board payments, but again this wouldn't be consistent with AS.

Parents estate income has been excluded since is not counted towards income.

Income tax and ACC earners' levy

Subtracted from client income are estimates for income tax and ACC earners' levy. Income tax is calculated on all sources of client income, but ACC earners' levy is only calculated on earnings.

Income tax and ACC earners levy are calculated individually for each client. If a client is on benefit, we calculate tax at the secondary rate.

MSD assistance

MSD payments for main benefits and supplementary assistance are all given on a weekly basis⁷. Note that the rule only includes payments for current clients, and when the payment is effective. Includes payments made to the client and their partner.

MSD supplementary assistance⁸ includes:

- Accommodation Supplement
- Temporary Additional Support
- Special Benefit
- Winter Energy Payment

⁷ Except for New Zealand Superannuation (NZS) payments and Veteran Payments (VP), which are paid fortnightly.

⁸ Includes grants made to the client and their partner.



- Hardship grants:
 - Recoverable grants
 - Non-recoverable grants
- Other Assistance (some of these payments may be historical):
 - Away From Home Allowance
 - Miscellaneous Subsidy
 - Training Incentive Allowance
 - Orphans and Unsupported Childs Benefit
 - Special Disability Allowance
 - Special Transfer Allowance
 - Blind Subsidy
 - Work Bonus
 - TIA Pre-enrolment Fee
 - Clothing Allowance
 - Special Transfer Allowance

Note that miscellaneous subsidy includes many different payments, including Covid Income Relief Payment and Early Learning Payment. We've not attempted to distinguish these payments from one another.

Also included is Orphans and Unsupported Childs Benefit as well as supplementary assistance on behalf of the children. Hardship grants are added up for the previous 12 weeks based on the date of the grant, and average for the 12 weeks is calculated. This includes grants made to the client and their partner.

MSD supplementary assistance not included in 'total income':

- Child Disability Allowance
- Disability Allowance
- Childcare Assistance

Some forms of assistance are excluded from the 'total income' definition, including Disability Allowance, Child Disability Allowance and Childcare Assistance. This is because these payments are provided for a specific purpose on an ongoing basis, but we do not account for associated costs in our definition of total incomes, so including them could artificially inflate total incomes for recipients.

Tax credits

The following tax credits are included as income:

- Family Tax Credit (FTC) - Where MSD pays FTC to clients, we've used the rate recorded. Otherwise, if the client has children but are not receiving FTC from MSD, then we've estimated based on the ages of the children. Note that this estimate doesn't account for share care, and thus over-estimates FTC for some families. For non-beneficiaries, FTC could be subject to abatement if their income is high enough; again, the abatement is estimated. Note that we've not estimated FTC for OB/UCB children. If a client is paid FTC by MSD for OB/UCB children, then it will be included in our data.



- Best Start Tax Credit (BSTC) - Where MSD pays BSTC to clients, we've used the rate recorded, otherwise if the client has children but are not receiving BSTC from MSD, then we've estimated based on the ages of the children. Note that this estimate doesn't account for share care, and thus over-estimates BSTC for some families. It also doesn't account for some children born prior to 1st July 2018 but eligible because of their due date.

Income in real terms

To enable us to compare income over time we need to account for either inflation or earnings growth. This dataset re-weights income to be in real terms using the Consumer price index (CPI) excluding housing, with a base of March 2023. Information on CPI is made publicly available on the Stats NZ website⁹, under Non-Standard All Groups Less/Plus Selected Groupings, named "All groups less housing".

We have used this approach, rather than indexing to the Stats NZ Household Living-costs Price Index (HLPI) Beneficiary index, as this is consistent with the Household Income Report¹⁰ and because the HLPI Beneficiary index is not available before 2008.

Outgoings

Outgoings that are included in the data are:

- Sanctions
- Housing costs
- MSD debt recovery
- MSD collections
- Child support payments (multiple payments for the same period are combined and will include payments made by the client and their partner)
- Payments to service provider for the cost of care

Other outgoings that are not included are:

- Ministry of Justice fines
- Private debt recovery
- Arrears / damages payments to Kāinga Ora
- Student loan payments
- Inland Revenue payments
- Utility payments

Child support deductions are treated as a reduced income support payment because they are like statutory reductions in benefit payments. Other direct deductions such as Ministry of Justice fines not counted because they are more like other expenses that people might pay out of their income. Some people might go into overdraft and pay off a fine or debt, rather than having it direct deducted.

⁹ CPI information can be found on the Stats NZ website here: <https://infoshare.stats.govt.nz/>

¹⁰ Find household income reports here: <https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/monitoring/index.html>

Debt offset

Debt to MSD can be recovered by offsetting against main benefit and Accommodation Supplement. With client permission, debt can also be recovered against Disability Allowance, Special Benefit, Temporary Assistance and Winter Energy Payment.

The rates of main benefit and supplementary assistance paid to the client used in this data are calculated from MSD data. These rates are before any offset of debt, and hence we must identify the debt offset separately. Within a family it will include MSD debt collection for primary and partner.

Note that while the recommended maximum recovery rate for clients currently receiving income support is set at no more than \$40.00 a week, the client can volunteer to pay more.

Housing

Sources of housing data

We need a housing type indicator and a housing cost for each family. We've used data from multiple administrative sources to minimise the number of families where housing is unknown.

Sources of housing data include:

- Accommodation Supplement
- Emergency Housing
- Public Housing
- Residential Support Subsidy
- Public Housing Register
- Hospital Rate and Living at Home
- Living Overseas

We don't have access to data on transitional housing at this stage. Families and individuals stay in transitional housing for an average of 12 weeks or more while they are helped to find more permanent housing.

More than one housing type

A consequence of using multiple sources of housing data is that some families appear to be in multiple different housing types. The main reasons for this include:

- Family violence causing the client to seek emergency housing whilst in Public Housing or in receipt of Accommodation Supplement
- Data sources are independent from one another and can lead to some inconsistencies
- Timing issues can also cause this, such as emergency housing grant for 21 days, but then they get public housing 7 days into their tenancy.

To overcome this, we've developed a set of rules that prioritise some housing types above others. Note that this could cause some valid reasons for certain housing types to be ignored. Housing type is first identified on an individual basis, and then this data is combined on a family basis.

When someone is in more than one household, their role in the household prioritises the household type they are assigned, with priority given to signatory statuses.

Priority rules on individual basis

Since some sources are more robust than others, certain sources are prioritised. Where there is more than one possible housing type for a person, we keep the housing type with the highest priority.

Priority	Housing
1 (Highest)	Accommodation Supplement (Current)
2	Public Housing Signatory
3	Emergency Housing Non-Contracted
4	Residential Care
5	Public Housing Boarder
6	Public Housing Other
7	Living Overseas
8	Emergency Housing Contracted (identified via Public Housing Register)
9	Accommodation Supplement (Suspended)
10	Accommodation Supplement (Expired)
11	Hospital Rate
12	Living at Home
13	Public Housing Register
14 (Lowest)	Accommodation Supplement (Declined)

When couples have a mixture of housing

For couples, we first identify housing type for both people:

- If housing is known for only one person in the couple, then we assume that it applies for the couple.
- If housing is the same for both people in the couple, then we add up the housing costs for both.
- If housing is different, then a set of rules apply which applies and what housing costs should be used.

Where housing type differs then:



1. If one person is a Public Housing Signatory, and the other is in Public Housing, then classify as Public Housing Signatory and sum both of their housing costs.
2. If one person is a current AS client and the other is not, then classify as current AS client, and only include the housing costs of the AS client.
3. If one person is a Public Housing Boarder, and the other is a Public Housing non-signatory tenants, then classify as Public Housing boarder, and only include the housing costs of the boarder (note the other tenant shouldn't have any housing costs recorded).
4. Classify family as in mixed housing and sum their costs.

When housing is unknown

If a family is not receiving any form of housing assistance it could be for many reasons:

- Ineligible due to something like cash assets
- Homeless
- Unaware that eligible
- Housing costs are too low

For this analysis, in cases where costs are unknown (around 15 percent of clients of beneficiary families as at end of April 2023), Accommodation Supplement entry thresholds are used as a proxy for their potential housing costs. This approach reflects our best estimate of housing costs but will not be accurate in all cases and may understate actual costs. This is because at the AS entry threshold the client would not be eligible for the accommodation supplement.

Accommodation cost

Accommodation costs can include rent, board or home ownership costs. Home ownership costs generally include mortgage repayments (interest and principal), body corporate fees, water rates, local authority rates, house insurances; there are other costs as well that can be claimed for.

Housing costs can vary substantially depending on people's living situation.

- Low-income people living in private rentals can access the Accommodation Supplement, which provides a partial contribution to housing costs based on factors like where they live and how much their rental costs are.
- People living in Public Housing are supported by the Income-Related Rent Subsidy (IRRS), which generally limits the amount of rent they pay to no more than 25 percent of their income.¹¹
- Similarly, from 2020, people living in Emergency/ Transitional Housing have generally been required to pay a contribution of 25 percent of their income.

Accommodation costs are adjusted for boarders who are our clients, guidance states that boarders are eligible for the 70% subsidy on the portion of their board that is considered accommodation costs (62%) but not their total board costs. However, we don't know

¹¹ Some IRRS clients with high incomes (above NZ Superannuation) pay 50 percent per dollar after that point.



what percentage of their board cost is for accommodation, the rate of 62% doesn't account for individual circumstances, and the rate hasn't changed since July 1997.

The Income Related Rent Subsidy (IRRS) is available at household level. However, this work is based on families and individuals, rather than households; so, it's necessary to split across the signatories. Tenants in a public housing property are grouped into household units. The rent is divided amongst the signatories equally, everyone else (excluding boarders) are assumed to pay no rent. If a tenant is a boarder in the household, then we can use the recorded amount paid for that individual. The data does not adjust for the number of signatories in households to account for records removed when someone is in more than one household.

Clients in hospital are assumed to have no accommodation costs, except in the circumstance where they are known through Accommodation Supplement, Public Housing signatory, or Public Housing board payments.

Client details

Additional client details are available for analysis such as: family type, benefit, ethnicity, gender, age, location, housing type, age of youngest child.

Ethnicity

For this report we have used a total response¹² ethnicity view. This means that when a person has more than one ethnicity they are counted once within each ethnicity group (e.g., a person may be counted as both European and Māori). As some people have multiple recorded ethnicities this will result in the sum of ethnicities being greater than the total number of people within each cohort.

Location

Information on client location is provided at the regional council level. Location information can be converted to different location measures, as areas have been grouped from the meshblock level. Not all clients have data on their location, so additional processing was done to add meshblock data based on available information. There are still some clients that do not have any information available for their location.

Changes since the previous report

Last year only the equivalence scale for before housing costs was applied. This year an alternative scale has been used for comparing income After Housing Costs. The scale is used in the UK's Households Below Average Income reports and reflects the more limited scope for economies of scale for adults in non-accommodation costs.

¹² Find information on MSD's total response ethnicity approach here: <https://www.msd.govt.nz/about-msd-and-our-work/tools/how-we-report-ethnicity.html>



Special Needs Grants calculations were adjusted, resulting in a reduction in average payment. This primarily affected couples and couples with children.

CPI index excluding housing has been changed to a different series. Original set was using "All Groups less housing and household utilities", it is now "All Groups less housing".

General information

Random rounding

All counts provided in the additional fact sheets have been randomly rounded to base 3, in alignment with MSD guidelines¹³. Information has been rounded independently, which may result in small differences in numbers between 'total incomes' reports. Procedures such as this allows additional protection of client information, while making more data available.

¹³ Find and explanation of MSD's rounding practices here: <https://www.msd.govt.nz/about-msd-and-our-work/tools/how-we-keep-data-private.html>