

Business of ageing

2023 update

NZIER report to the Office for Seniors

July 2024



Te Tari Kaumātua
Office for Seniors



Te Kāwanatanga o Aotearoa
New Zealand Government



About NZIER

NZIER is a specialist consulting firm that uses applied economic research and analysis to provide a wide range of strategic advice.

We undertake and make freely available economic research aimed at promoting a better understanding of New Zealand's important economic challenges.

Our long-established Quarterly Survey of Business Opinion and Quarterly Predictions are available to members of NZIER.

We pride ourselves on our reputation for independence and delivering quality analysis in the right form and at the right time. We ensure quality through teamwork on individual projects, critical review at internal seminars, and by peer review.

NZIER was established in 1958.

Authorship

This report was prepared at NZIER by Tom Dunn.

It was quality approved by Todd Kriebler.

The assistance of Sarah Spring is gratefully acknowledged.

How to cite this document:

NZIER. 2024. Business of Ageing, 2023 update. A report for the Office for Seniors.

Commissioned by: The Office for Seniors

Copyright: This work is licensed under the Creative Commons Attribution 4.0 New Zealand licence. In essence, you are free to copy, distribute and adapt the work, if you attribute the work to the Crown and abide by the other licence terms.

To view a copy of this licence, visit <https://creativecommons.org/version4/>

Please note that no departmental or governmental emblem, logo or Coat of Arms may be used in any way which infringes any provision of the Flags, Emblems, and Names Protection Act 1981. Attribution to the Crown should be in written form and not by reproduction of any such emblem, logo or Coat of Arms.

Published: August 2024

Office for Seniors.
PO Box 1556
Wellington 6140
New Zealand

Email: ofs@msd.govt.nz

Web: www.officeforseniors.govt.nz

ISBN Number: 978-1-99-110562-2

Contents

Key points.....	4
1. Building on existing work	5
2. Key findings from the model update	5
2.1 Our older population is expected to increase rapidly	5
2.2 More and more older people are part of our workforce	7
2.3 Our overall participation rates are declining.....	10
2.4 Remunerated work and other income are expected to quintuple	13
2.5 Value of tax paid by older people.....	14
2.6 Reviewing the proxy wage for the value of unpaid work.....	15
2.7 Estimating the average annual expenditure of older people	15
3. Contributions of older people beyond model projections	19
4. What we conclude.....	20
5. References	21
Appendix A Additional data tables	22

Key points

The current report updates the Business of Ageing framework set in the original 2011 report. Key findings are listed below. All dollar values are in 2021 dollars.

- More and more older people are part of our workforce. Currently, we have 208,300 older people in the workforce, and this is expected to almost double to 392,400 by 2071. The 65–69 age band continues to account for the majority of our older workforce. This workforce is projected to continue to be predominately male.
- The percentage of older people in the national labour force is projected to increase from 6.7% in 2021 to 10.6% by 2071. This means that in the over the next five decades employers can expect an increasing number of older employees, who may require more flexibility to ensure that they remain in the workforce and their skills and experience are captured.
- Even though our older workforce is increasing, the overall participation rates based on the ratio of workforce to population increase are expected to decrease from 23.8% in 2021 to 21.7% in 2071. This is because more older people will age into the older age brackets, who are less likely to be participating in work.
- Earnings from remunerated work for older people is currently at \$5.9 billion in 2021 and is projected to rise to around \$30.7 billion in 2071.
- Self-employment income is likely to increase from \$4.7 billion in 2021 to \$24.3 billion by 2071.
- The largest contribution of income to older people is government transfers, the value of which is projected to increase significantly from 2021 to 2071 – from \$17 billion to around \$97 billion.
- The value of all taxes paid by older people could rise from \$10.1 billion in 2021 to \$54.6 billion by 2071, based on the calculations and assumptions stated within the report. This assumes GST is collected on all currency and deposits held upon reaching 65.
- The value of the unpaid work of older people is estimated to rise between \$83 and \$94 billion in the next 50 years. That is an increase from between \$15.4 and \$19.7 billion per year in 2021 to between \$98.6 and \$113.9 billion per year by 2071.
- With the increase in numbers of older people working, there are likely to be more older people in employment who are also doing unpaid work. It is also important to note that some of the unpaid work undertaken by older people might otherwise end up publicly funded.
- The total value of expenditures by older people is projected to increase from \$31 billion per year in 2021 to \$176 billion per year in 2071. Aside from housing and household utilities groups presenting as outliers due to data limitations, the current spending patterns suggest that foodstuffs, transport, and recreation are the next highest contributors to older people's expenditure.

1. Building on existing work

This report presents the results of the Business of Ageing 2023 update. This is the sixth update since 2010, which attempts to value the economic contribution of New Zealand's increasing older population.

The sixth entry in the series builds on the framework set in the 2011 report. This report needs to be read in conjunction with the 2015, 2017 and 2021 reports (Te Tari Kaumātua – Office for Seniors, 2021). These reports cover the technical aspects of model design, sensitivity, and probability issues. More details on this research can be found on the Office for Seniors website.

The data update to the existing model includes:

- Population projections
- Calculation of labour force participation
- Value of remunerated work and other income
- Re-calculation of the value of unpaid work
- Re-base of the model to 2021 and 2023 dollars.

To be consistent across each report in the series, we use the same model framework for the projections. Additionally, we took extra care to ensure the input data series was as close to prior data as possible for this update. We have noted in later sections where this was not practicable due to series discontinuation or alteration of series definitions.

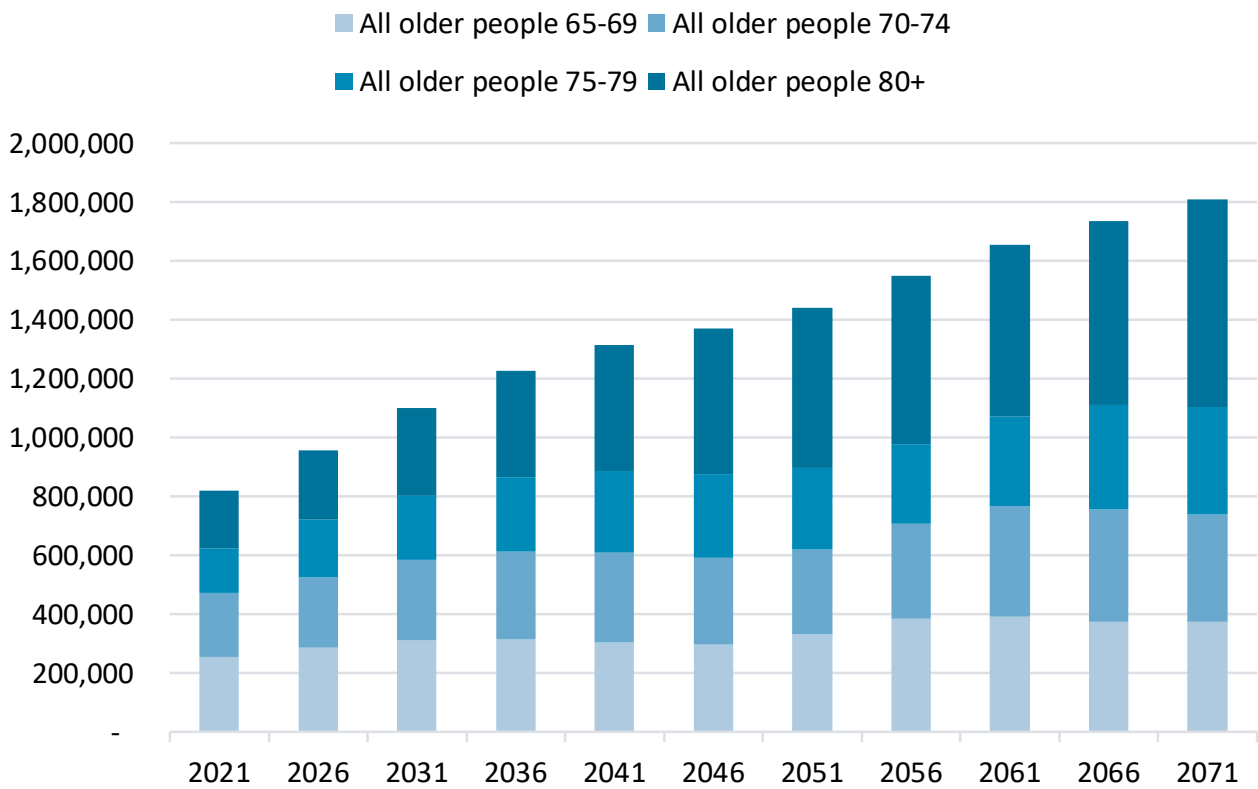
2. Key findings from the model update

2.1 Our older population is expected to increase rapidly

New Zealand's older population (aged 65+) is projected to increase from 868,800 to 1,809,400 over 50 years. The 80+ age band is expected to become the largest age band for people over the age of 65 by 2036 and is projected to remain the largest age band until after 2071. The base 30 June 2022 median population projections have been used for all population projections from 2022 onwards. As a 2021 population projection is not available using the 30 June 2022 base median population projection, the 30 June 2020 base median population projection has been used for 2021 only.

An interesting feature of the median population projections is the changes for the under-80 age bands. The 65 to 69 year age group is projected to decrease between 2036 and 2046; the 70 to 74 year age group is expected to decrease between 2041 and 2051, and the 75 to 79 year age group is projected to decrease from 2046 to 2056. This is followed by an increase of 11% to 12% in each age group after this decrease.

Figure 1 Median population projection for all older people (aged 65+)



Source: Stats NZ

The age-gender distribution for people aged 80+ is projected to shift from a male-to-female ratio of ~40:60, closer to a 45:50 ratio by 2071. The remaining age groups have similar 50:50 age-gender distributions and have less of a distribution shift from 2021 to 2071.

Table 1 Summary of population projections for older people (aged 65+)

Median population projection (base 30 June 2020 (for 2021) and 30 June 2022)

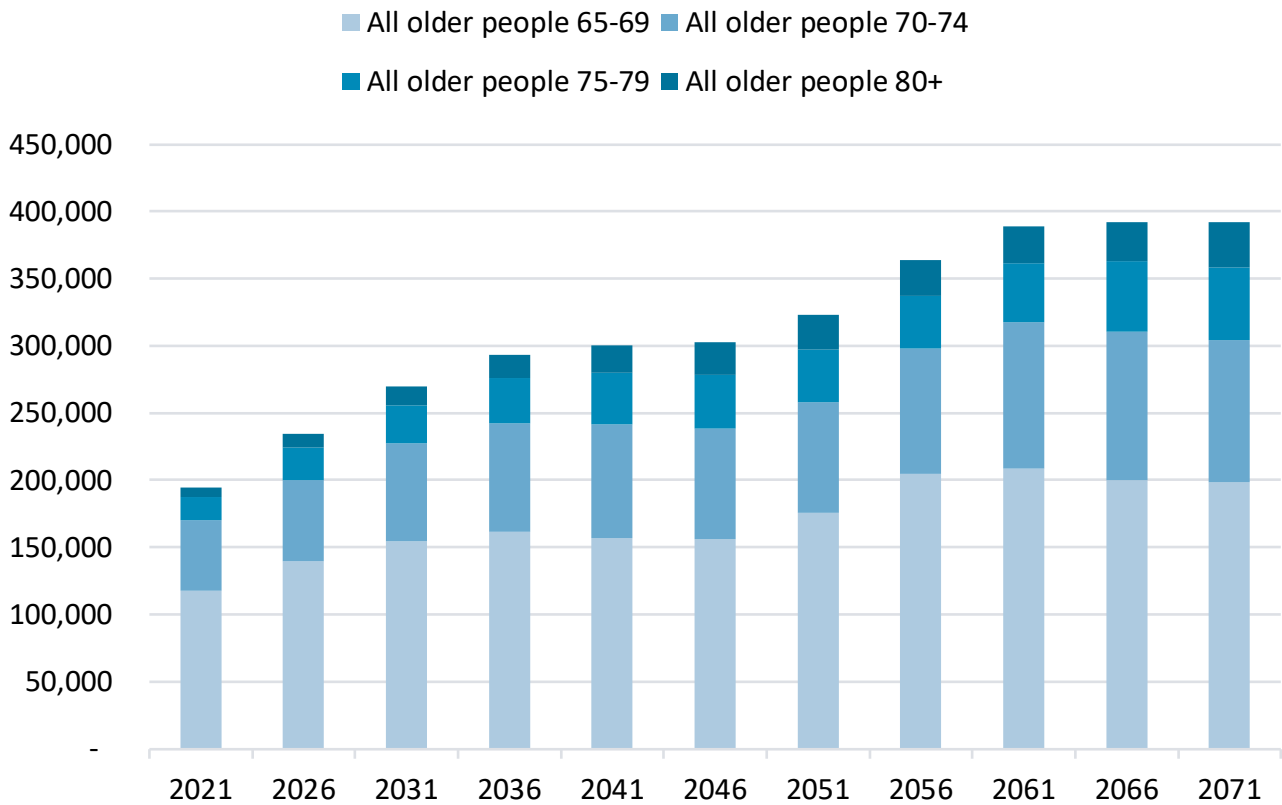
Gender	Age group	2021	2023	2051	2071
Older males	65–69	123,100	127,700	162,300	184,500
	70–74	106,800	107,800	139,800	179,100
	75–79	71,700	82,400	130,500	179,400
	80+	81,900	88,800	235,100	316,300
Total males		383,500	406,700	667,700	859,300
Older females	65–69	131,100	137,000	169,300	189,200
	70–74	113,100	114,700	148,600	186,400
	75–79	79,600	90,800	146,200	186,000
	80+	112,300	119,500	311,000	388,500
Total females		436,100	462,000	775,100	950,100
All older people	65–69	254,200	264,700	331,600	373,700
	70–74	219,900	222,500	288,400	365,500
	75–79	151,300	173,300	276,700	365,400
	80+	194,100	112,200	546,000	704,800
Total older people		819,500	868,800	1,442,700	1,809,400

Source: Stats NZ

2.2 More and more older people are part of our workforce

According to this latest set of median labour force projections, we are expected to observe more people aged 65+ remaining in our workforce. Currently, we have 208,300 older people in our workforce, and this is projected to nearly double (increase to 392,400) by 2071. Unsurprisingly, the 65–69 age band will continue to account for much of the overall older workforce through to 2071.

Figure 2 Median labour force projection for all older people (aged 65+)



Source: Stats NZ

We are still expecting more males than females to make up our older workforce. The gender distribution of the labour force projections reports the 126,700 older male workforce in 2023 is likely to increase to 236,800 by 2071, and the same proportional increase is seen for females, with 76,400 in 2021 rising to 155,400 by 2071.

Table 2 Summary of labour force projections for older people (aged 65+)

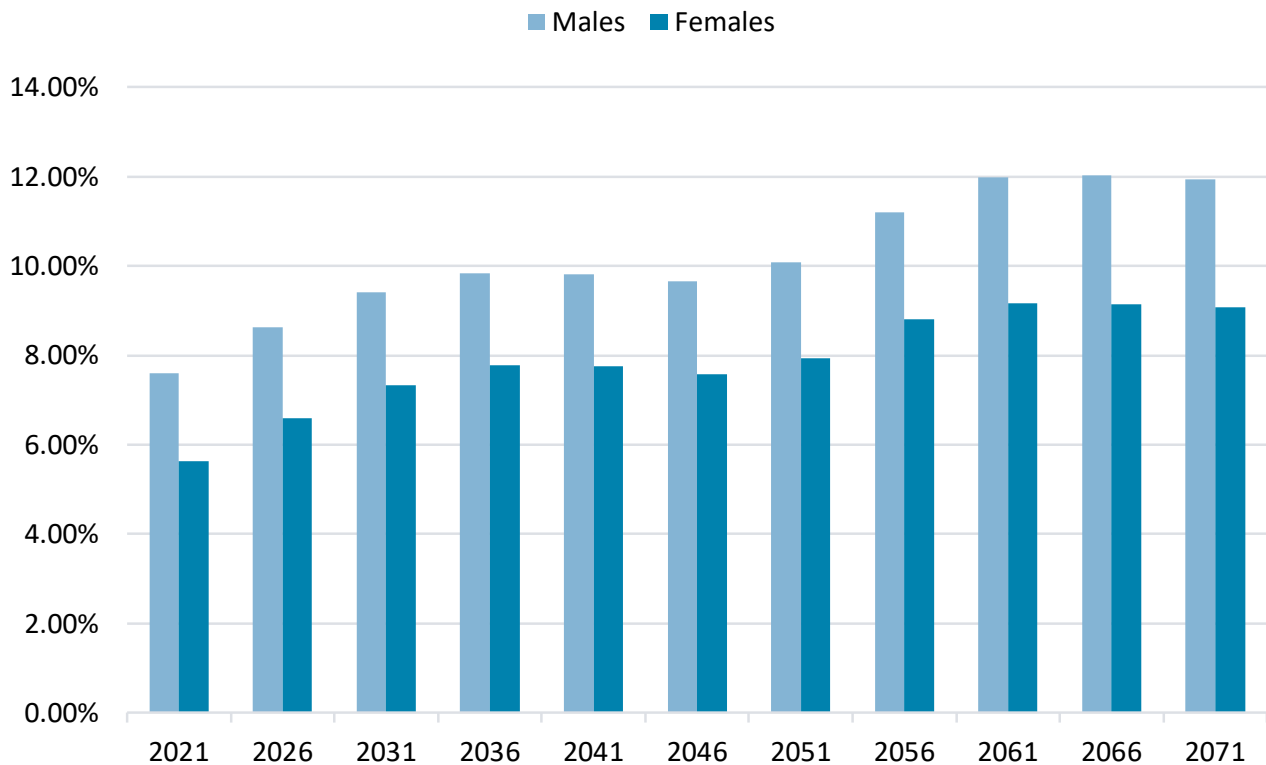
Median labour force projection (base 30 June 2020)

Gender	Age group	2021	2023	2051	2071
Older males	65–69	68,300	72,600	99,700	113,700
	70–74	33,600	34,900	51,000	66,500
	75–79	11,800	14,100	25,400	35,700
	80+	4,600	5,100	15,300	20,900
Total males		118,300	126,700	191,400	236,800
Older females	65–69	49,100	52,300	75,900	84,500
	70–74	19,000	19,800	31,400	39,700
	75–79	5,600	6,700	13,700	17,700
	80+	2,700	2,900	10,700	13,500
Total females		76,400	81,700	131,700	155,400
All older people	65–69	117,400	124,800	175,500	198,200
	70–74	52,600	54,700	82,500	106,300
	75–79	17,400	20,800	39,100	53,500
	80+	7,300	8,000	26,000	34,400
Total older people		194,700	208,300	323,100	392,400

Source: Stats NZ

The percentage of older people in the national labour force is projected to increase from 6.7% in 2021 to 10.6% by 2071. This measure follows similar gender trends, with more older males than older females as a proportion of our national workforce (7.6% and 5.6% in 2021, increasing to 11.9% and 9.1% in 2071, respectively).

Figure 3 Older workforce (aged 65+) as a proportion of the national workforce, by gender

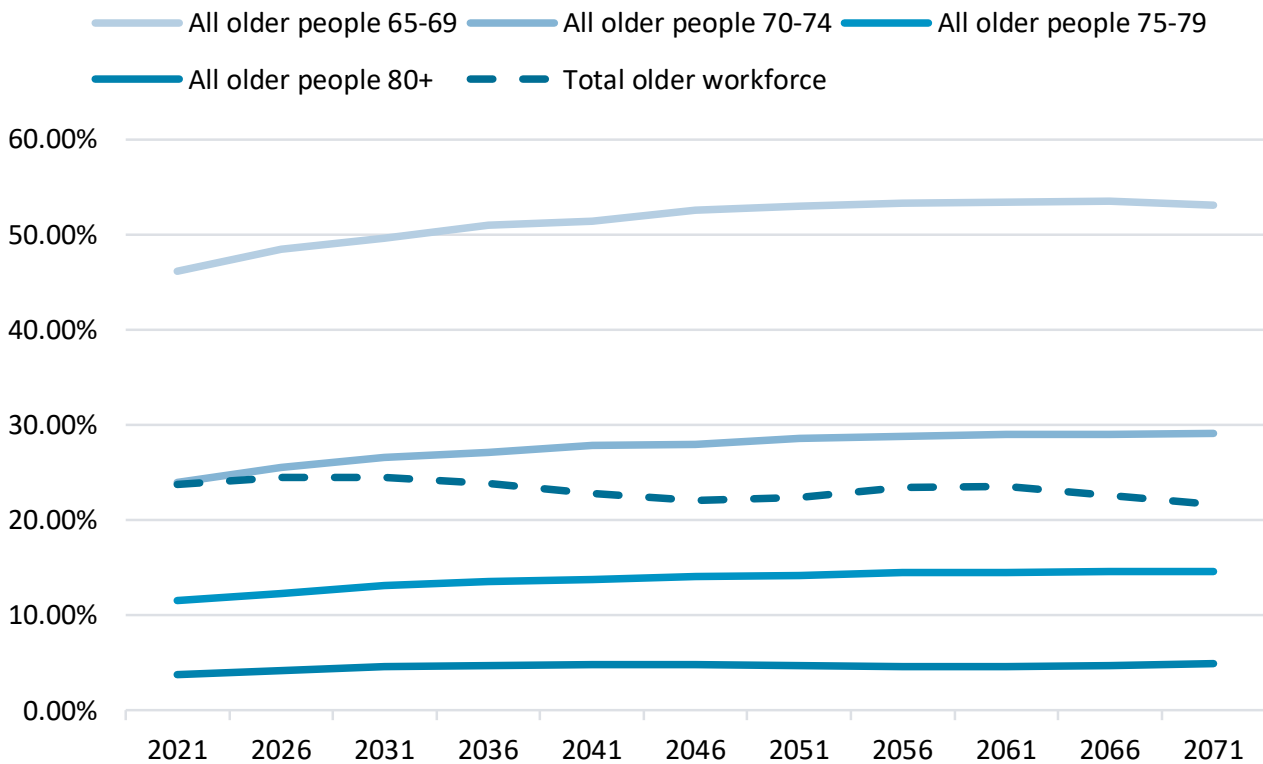


Source: NZIER

2.3 Our overall participation rates are declining

Based on the median projections for both the labour force and older population, the overall labour force participation rates for older people are steadily declining. This initially seems counter-intuitive since the age-specific participation rates are increasing over time. The denominator of the participation rates (projected population increase) grows more rapidly for the 80+ age band over the projected 50 years. This is expected to outgrow the increase in 65–69 year olds in the workforce relative to their smaller increase in population. As a result, the overall labour force participation rates drop over this period.

Figure 4 Age-specific projected labour force participation rates for older people (aged 65+)



Source: NZIER

The age-gender-specific participation distribution changes between age bands. The male and female participation rates are comparable for the 65–69 year old age band but become more disparate for older age bands. This is most clearly seen in the doubling in the difference of the measure for the 75–79 and 80+ year old age bands (consistent across the projection period).

Table 3 Summary of labour force participation rates for older people (aged 65+)

Calculated age-specific rates

Gender	Age group	2021	2023	2051	2071
Older males	65–69	55.48%	56.85%	61.43%	61.63%
	70–74	31.46%	32.37%	36.48%	37.13%
	75–79	16.46%	17.11%	19.46%	19.90%
	80+	5.62%	5.74%	6.51%	6.61%
Total males		30.85%	31.15%	28.67%	27.56%
Older females	65–69	37.45%	38.18%	44.83%	44.66%
	70–74	16.80%	17.26%	21.13%	21.30%
	75–79	7.04%	7.38%	9.37%	9.52%
	80+	2.40%	2.43%	3.44%	3.47%
Total females		17.52%	17.68%	16.99%	16.36%
All older people	65–69	46.18%	47.15%	52.93%	53.04%
	70–74	23.92%	24.58%	28.61%	29.08%
	75–79	11.50%	12.00%	14.13%	14.64%
	80+	3.76%	3.84%	4.76%	4.88%
Total older people		23.76%	23.92%	22.40%	21.69%

Source: NZIER

2.4 Remunerated work and other income are expected to quintuple

We have updated the real wage increase multiplier using basic projections from the Salary and Wage Rates series (LCI001AA) released in 2023Q2 on Stats NZ’s Infoshare website. This is an extension of the change made in the previous model update in 2021. Please note that relative values are given in relation to total older population projections.

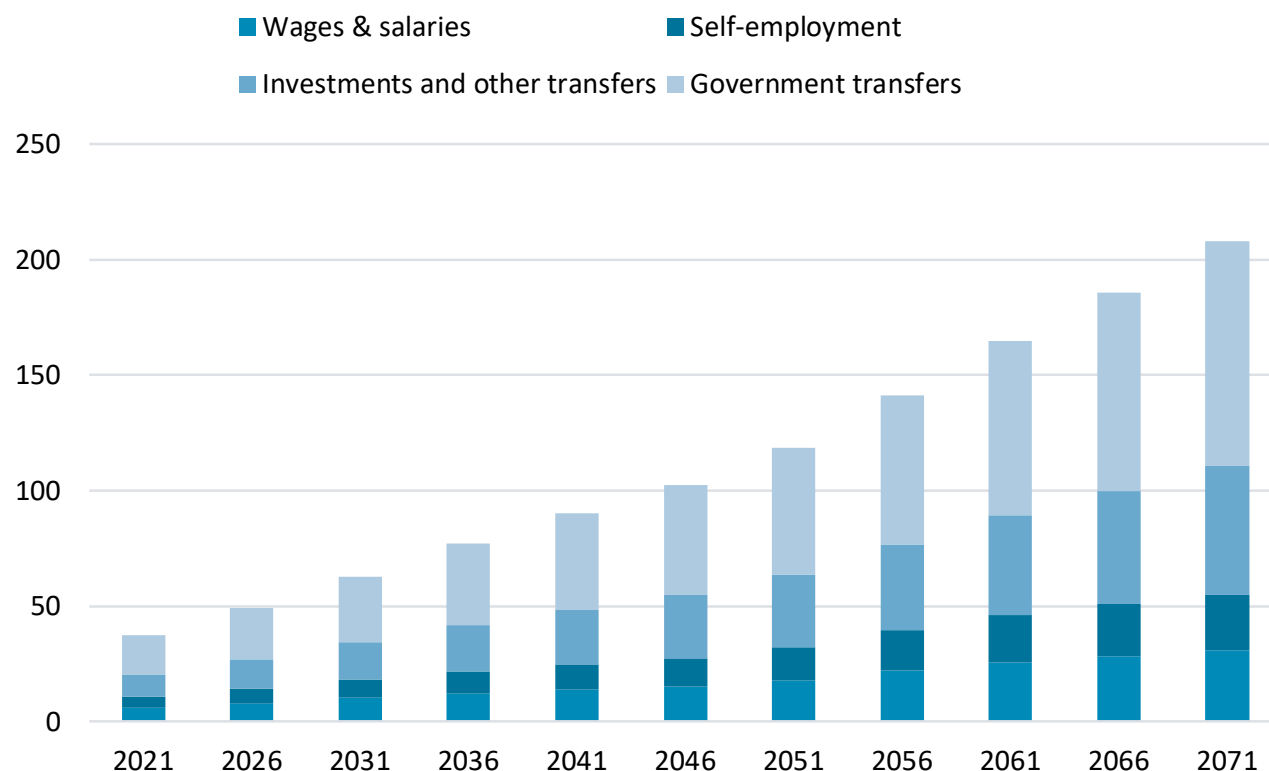
According to the model output, using the updated real wage increase multiplier, wage and salary (remunerated work) earnings by people aged 65+ are expected to rise from \$5.9 billion in 2021 to around \$30.7 billion in 2071 (2021\$). In relative terms, that is an increase from \$7,200 per older person in 2021 to \$16,900 per older person in 2071.

Self-employment income is likely to increase from \$4.7 billion in 2021 to \$24.3 billion by 2071 (2021\$). In relative terms, that is an increase from \$5,700 per older person in 2021 to \$13,400 per older person in 2071.

The largest contribution of income to older people is government transfers, the value of which is projected to increase significantly from 2021 to 2071 – from \$17 billion to around \$97 billion (2021\$). In relative terms, that is an increase from \$20,800 per older person in 2021 to \$53,800 per older person in 2071. Similarly, the value of income from investment and other transfers will increase from \$9.7 billion to \$55.5 billion (2021\$) across the same period. In relative terms, that is an increase from \$11,900 per older person in 2021 to \$30,700 per older person in 2071.

Figure 5 Projected income by source for older people (aged 65+)

2021\$ Bn



Source: NZIER

2.5 Value of tax paid by older people

Tax paid by older people was calculated based on the average weekly earnings of people aged 65+ for remunerated work (wages and salaries, and self-employment), government transfers, investments and other income. A weighted average for wages and salaries and self-employment was taken into account for the different tax brackets these come under (Inland Revenue, 2024). The GST calculations assume that all remaining income is spent after income tax is deducted from the total earnings and that all currency and deposits held at 65 are spent. The model has been adjusted to use the new tax rates that come into effect after July 2024 for all years after 2021 while still using the tax rates in 2021 for 2021 only.

The value of all tax paid could rise from \$15 billion in 2021 to \$69 billion by 2071 (2021\$) based on the calculations and assumptions above. In relative terms, based on the projected older population, that is an increase from \$18,300 per older person in 2021 to \$38,100 per older person in 2071.

For comparison to previous reports, when the value of tax paid by older people has the GST revenue from assuming all currency and deposits held at 65 are spent is excluded, the value of all tax paid could rise from \$10.1 billion in 2021 to \$54.6 billion by 2071 (2021\$). In relative terms, based on the projected older population, that is an increase from \$12,300 per older person in 2021 to \$30,200 per older person in 2071.

Table 4 Projected tax paid by older people (aged 65+)

2021\$ Bn

	2021	2051	2071
Tax on earnings from remunerated work	2.02	5.10	8.72
Tax on government transfers	2.98	9.64	17.03
Tax on investments and other income	1.02	3.30	5.82
GST (assumed all income spent)	4.08	13.12	22.98
GST (assumed all currency and deposits spent)	4.89	9.31	14.31
All tax, including GST	14.99	40.47	68.87

Source: NZIER

2.6 Reviewing the proxy wage for the value of unpaid work

Previous reports have projected the value of unpaid work based on the 2013 carer wage of \$16.10 per hour, which was re-based in the 2021 update into 2017\$ or 2021\$. For this update, we have used the 2022 carer wage of \$26.16 (Infometrics, 2022), which is \$25.59 2021\$, as well as the minimum wages in 2021 and 2024 of \$20.00 and \$23.15 (\$22.15 2021\$), respectively. The 2022 carer wage is the wage paid for a level 3 role or 8 years of service and is the middle hourly wage tier for carers.

Table 5 Projected value of unpaid work for older people (aged 65+)

Calculated values, 2021\$ Bn

Wage type	2021	2051	2071
Carer wage (2022)	22.41	72.46	127.77
Minimum wage (2021 and 2024)	17.51	62.73	110.61

Source: NZIER

The value of the unpaid work of older people is estimated to rise between \$83 and \$94 billion in the next 50 years. That is an increase from between \$15 and \$20 billion per year in 2021 to between \$99 and \$114 billion per year by 2071.

The base data used for the projections of gender participation in unpaid work are from the Time Use Survey of 2009–2010, which places the unpaid work hours disproportionately at 4.3 hours per day for males and 4.9 hours per day for females.

Additionally, the type of unpaid activities undertaken by older people is not reflected in the model projections. According to the 2018 Census, 79.3% of unpaid activities include household work and gardening. Voluntary work accounted for less than 20%, and caring for someone else (including ill persons and childcare) accounted for 35%.

2.7 Estimating the average annual expenditure of older people

Series updates for the Household Expenditure Survey meant that age-specific cuts were no longer available. Proxy values were obtained using a weighted average of spending by people aged 65+ by household type (couple-only and single-person).

It should be noted that the spending patterns may differ from the actual cohort of people aged 65+, especially regarding housing and household utilities expenditures. Caution is advised when using these proxy values, which are primarily indicative of spending growth but not necessarily spending distribution.

Table 6 Average weekly expenditure by household type of older people (aged 65+)

Household Expenditure Survey, 2019\$

Expenditure category	Couple-only household	Single-person household
Food	219.10	94.70
Alcoholic beverages and tobacco	30.80	17.30
Clothing and footwear	37.00	12.40
Housing and household utilities	313.90	212.30
Household contents and services	61.30	28.10
Health	49.70	24.10
Transport	239.40	93.80
Communication	34.70	22.80
Recreation and culture	163.60	63.40
Education	7.10	0.90
Miscellaneous goods and services	130.90	55.00
Interest payments	62.20	31.50

Source: Stats NZ

Table 7 Weighted average annual expenditure of older people (aged 65+)

Weighted average based on the proportion of people aged 65+ in couple-only and single-person households, 2021\$

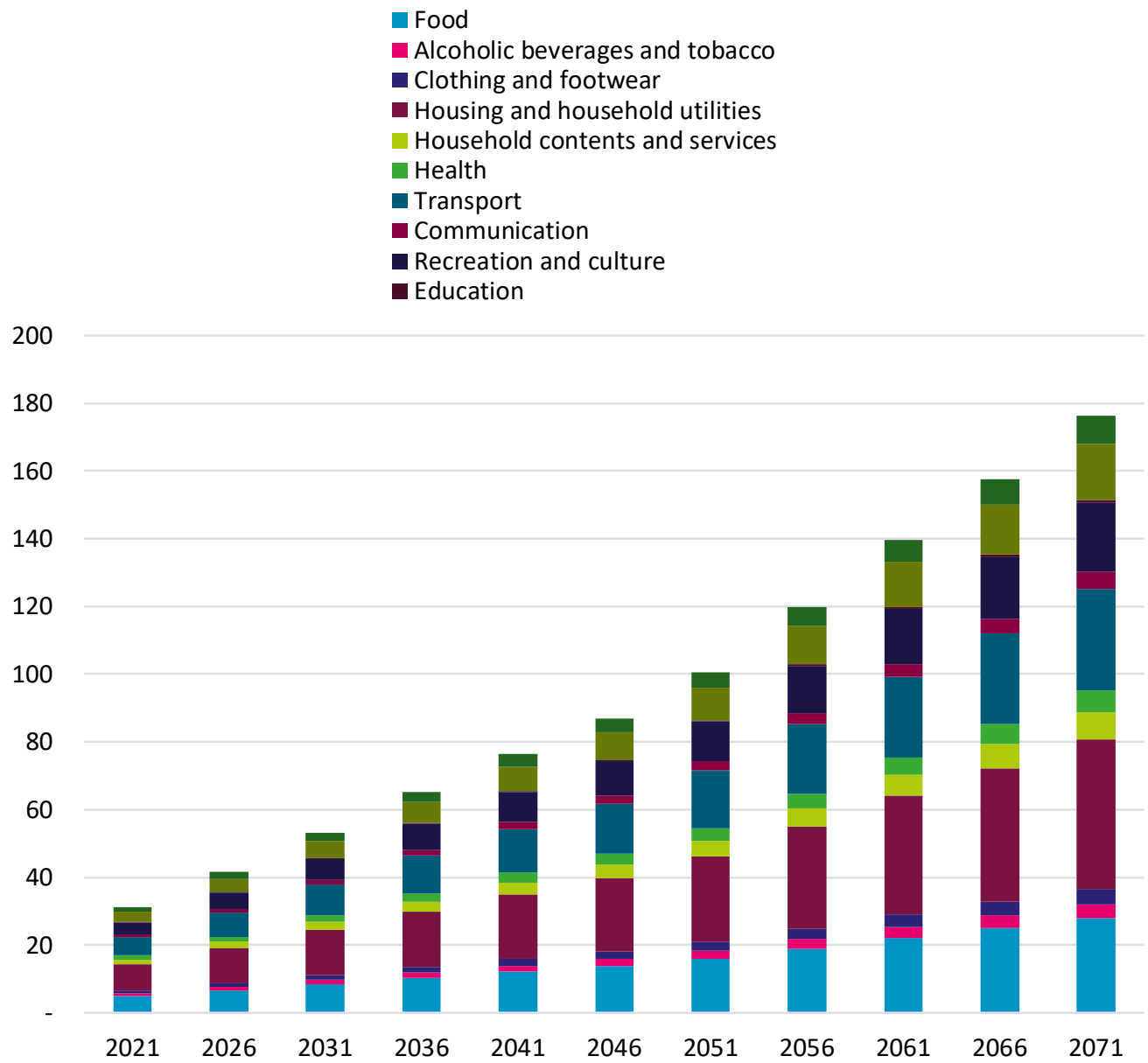
Expenditure category	Annual average expenditure
Food	4,044.63
Alcoholic beverages and tobacco	600.12
Clothing and footwear	654.61
Housing and household utilities	6,400.93
Household contents and services	1,144.31
Health	938.19
Transport	4,342.83
Communication	702.30
Recreation and culture	2,962.24
Education	113.91
Miscellaneous goods and services	2,403.96
Interest payments	1,184.75

Source: NZIER

The total value of expenditures by older people is projected to increase from \$31 billion per year in 2021 to \$176 billion per year in 2071 in 2021\$. Aside from the housing and household utilities outlier, the current spending patterns suggest that foodstuffs, transport, and recreation are the next highest contributors to expenditure.

Figure 6 Projected annual expenditure of older people (aged 65+)

2021\$ Bn



Source: NZIER

3. Contributions of older people beyond model projections

The contributions of older people are not fully expressed within the constraints of the model, some of which do impact the interpretations of the model output. For example, this model seeks to value the income of the older workforce but does not address issues affecting the potential and performance of our ageing workforce.

A study done by Keeling et al. (2020) outlined the different opportunities and challenges older New Zealanders face as part of the workforce. They present the physical and mental wellbeing aspects as well as other lifestyle factors to be of significance when managing older employees. Other issues around succession, retirement and ageism were also tackled as part of this case study. This depth of investigation furthers the discussion beyond labour force participation and remuneration contributions of older New Zealanders.

The growing number of senior entrepreneurs will also likely shift the value of remuneration for the self-employed. Since the COVID-19 pandemic, there has been an increase in older people starting their own businesses, and they face different barriers than their younger counterparts (“The Older Entrepreneur”, 2021). These barriers are still being explored, but feedback from the Senior Enterprise Pilot funded by the Office for Seniors highlights expanding facilities, the right price for services, where to set up businesses, ability to scale, and capacity and capability as challenges that participants faced when setting up new businesses (Pearman, 2024).

The current model update highlights the age-gender distributions of workforce participation, earnings (paid and unpaid), and tax. However, an extensive cohort analysis was performed by Curtin (2019), who investigated the factors driving the age-gender gaps. This affords better resolution data (due to disaggregation of age-gender groups) than the value of government transfers and other income presented in the model update.

To retain a consistent series, such studies were considered but not integrated into this model update. Further extensions to the current model design, such as the attribution of retirement savings schemes, could also be considered in the future. Although the model in its current form is fit for purpose, retaining a consistent series, it is clear that context is still key to supporting the discussion of the value of the economic contribution of New Zealand’s increasing older population.

4. What we conclude

Older people's contribution to the economy takes the form of employment, business ownership, taxes and unpaid work that supports social and whānau outcomes.

While the labour market participation rate for older people is projected to decline slightly between 2021 and 2071, this is mainly due to the population of older people increasing at a faster rate compared to the labour force projection for older people, rather than older people leaving the workforce. The number of older people participating in the labour force is projected to double from 194,700 in 2021 to 392,400 in 2071 and their proportion of the national workforce is projected to increase from 6.7% to 10.6% over the same time.

The value of all taxes paid by older people could rise from \$10.1 billion in 2021 to \$54.6 billion by 2071 (2021\$), based on the calculations and assumptions stated within the report.

The amount and value of unpaid work undertaken by older people is projected to increase significantly between 2021 and 2071 and with the increase in population for older people and older workers, it is likely to include more people who are still in employment. It is important to note that some of the unpaid work might otherwise end up publicly funded.

This report reinforces the need to stay on top of trends for older people as they are dynamic and subject to change over time and are making up a growing proportion of the client base across many industries.

5. References

Curtin, J. (2019). A Review of Gender Differences in Retirement Income (Version 1). The University of Auckland. <https://doi.org/10.17608/k6.auckland.9699443.v1>

Heyes, R. (2022). The economic contribution and sacrifices of unpaid family, whānau and aiga carers in New Zealand. *Infometrics*. <https://carers.net.nz/wp-content/uploads/2022/12/Infometrics-Economic-Contribution-of-Caregiving-November-2022-FINAL.pdf>

Inland Revenue. (2024). Tax rates for individuals. Retrieved 18 June 2024 from <http://www.ird.govt.nz/income-tax/income-tax-for-individuals/tax-codes-and-tax-rates-for-individuals/tax-rates-for-individuals>

Keeling, S., Davey, J., & Alpass, F. (2020). Maximising workforce participation for older New Zealanders – Opportunities, challenges and prospects. Case study 2: Employer needs and practices. https://www.massey.ac.nz/massey/fms/Colleges/College%20of%20Humanities%20and%20Social%20Sciences/Psychology/HART/publications/reports/HART_Case_Study_2_Report.pdf

Ministry of Business, Innovation and Employment. (2024). Minimum wage and fair pay. Retrieved 18 June 2024 from <https://www.business.govt.nz/hiring-and-managing/hiring-people/minimum-wage-and-fair-pay/>

Pearman, G R (2024). Senior Enterprise Pilot Evaluation Report. Office for Seniors, New Zealand Government.

Te Tari Kaumātua – Office for Seniors. (2021.) Ageing research: Business of ageing. <https://officeforseniors.govt.nz/our-work/ageing-research/>

The older entrepreneur – making life better. (2021, 13 October). RNZ. <https://www.rnz.co.nz/programmes/the-detail/story/2018815583/the-older-entrepreneur-making-life-better>

Appendix A Additional data tables

Table 8 Summary of model outputs in 2021\$ for older people (aged 65+)

	2021	2026	2031	2036	2041	2046	2051	2056	2061	2066	2071
Population and workforce											
Number of older people	819,500	957,100	1,102,400	1,227,600	1,316,300	1,372,500	1,442,700	1,550,600	1,654,700	1,735,000	1,809,400
Participating males	118,300	140,700	160,100	173,200	177,500	179,400	191,400	215,900	233,600	236,800	236,800
Participating females	76,400	93,700	109,400	120,100	123,100	123,200	131,700	147,800	155,100	155,700	155,400
Total older workforce	194,700	234,300	269,500	293,300	300,600	302,600	323,100	363,600	388,800	392,400	392,400
Participation rate – males	0.31	0.31	0.31	0.30	0.29	0.28	0.29	0.30	0.30	0.29	0.28
Participation rate – females	0.18	0.18	0.19	0.18	0.17	0.17	0.17	0.18	0.18	0.17	0.16
Overall participation rate	0.24	0.24	0.24	0.24	0.23	0.22	0.22	0.23	0.23	0.23	0.22
Value of remunerated work (\$ Bn)											
Paid work	5.88	7.90	10.10	12.19	13.80	15.30	17.93	22.08	25.75	28.27	30.66
Self-employment	4.67	6.26	8.01	9.66	10.94	12.13	14.22	17.51	20.42	22.42	24.32
Total value of remunerated work	10.55	14.16	18.11	21.85	24.74	27.43	32.15	39.58	46.48	50.69	54.98
Value of paid tax (\$ Bn)											
Tax on earnings from remunerated work	2.02	2.25	2.87	3.47	3.93	4.35	5.10	6.28	7.33	8.04	8.72
Tax on government transfers	2.98	3.89	4.98	6.14	7.28	8.36	9.64	11.34	13.20	15.05	17.03
Tax on investments and other income	1.02	1.33	1.70	2.10	2.49	2.86	3.30	3.88	4.51	5.15	5.82
GST (assumed all income spent)	4.08	5.42	6.94	8.51	9.96	11.33	13.12	15.63	18.20	20.54	22.98
GST (assumed all currency and deposits spent)	4.79	5.44	6.06	6.74	7.51	8.36	9.31	10.37	11.54	12.85	14.31
All tax, including GST	14.99	18.32	22.55	26.97	31.16	35.25	40.47	47.49	54.79	61.64	68.87

	2021	2026	2031	2036	2041	2046	2051	2056	2061	2066	2071
Value of unpaid work (\$ Bn)											
Based on 2022 carer wage	19.74	25.61	32.82	40.65	48.45	55.88	64.35	75.19	87.46	100.21	113.91
Based on 2021 and 2024 minimum wages	15.43	22.17	28.42	35.19	41.95	48.38	55.71	65.09	75.72	86.76	65.62
Total income (\$ Bn)											
Remunerated work	10.55	14.16	18.11	21.85	24.74	27.43	32.15	39.58	46.18	50.69	54.98
Government transfers	17.05	22.20	28.44	35.10	41.59	47.75	55.09	64.79	75.43	86.02	97.31
Investments and other	9.72	12.66	16.21	20.01	23.70	27.22	31.40	36.93	42.99	49.03	55.46
Total value	37.31	49.02	62.76	76.96	90.03	102.40	118.65	141.31	164.59	185.74	207.75
Expenditure (\$ Bn)											
Groceries, clothing, alcohol and tobacco	6.50	8.64	11.06	13.56	15.87	18.05	20.91	24.91	29.01	32.74	36.62
Housing and household utilities	9.26	12.30	15.75	19.31	22.59	25.70	29.78	35.46	41.30	46.62	52.14
Health	1.15	1.53	1.96	2.40	2.81	3.20	3.70	4.41	5.14	5.80	6.48
Transport and communication	6.19	8.22	10.53	12.91	15.11	17.18	19.91	23.71	27.62	31.17	34.87
Recreation, culture and education	3.78	5.01	6.42	7.87	9.21	10.48	12.14	14.46	16.84	19.00	21.26
Miscellaneous	2.95	3.92	5.02	6.15	7.20	8.19	9.49	11.30	13.16	14.85	16.61
Interest	1.45	1.93	2.47	3.03	3.55	4.04	4.68	5.57	6.49	7.32	8.19
Total expenditure	31.29	41.56	53.21	65.25	76.34	86.83	100.61	119.81	139.55	157.50	176.17

Source: NZIER

Table 9 Summary of model outputs in 2023\$ for older people (aged 65+)

	2021	2026	2031	2036	2041	2046	2051	2056	2061	2066	2071
Population and workforce											
Number of older people	819,500	957,100	1,102,400	1,227,600	1,316,300	1,372,500	1,442,700	1,550,600	1,654,700	1,735,000	1,809,400
Participating males	118,300	140,700	160,100	173,200	177,500	179,400	191,400	215,900	233,600	236,800	236,800
Participating females	76,400	93,700	109,400	120,100	123,100	123,200	131,700	147,800	155,100	155,700	155,400
Total older workforce	194,700	234,300	269,500	293,300	300,600	302,600	323,100	363,600	388,800	392,400	392,400
Participation rate – males	0.31	0.31	0.31	0.30	0.29	0.28	0.29	0.30	0.30	0.29	0.28
Participation rate – females	0.18	0.18	0.19	0.18	0.17	0.17	0.17	0.18	0.18	0.17	0.16
Overall participation rate	0.24	0.24	0.24	0.24	0.23	0.22	0.22	0.23	0.23	0.23	0.22
Value of remunerated work (\$ Bn)											
Paid work	6.69	8.99	11.49	13.86	15.70	17.40	20.40	25.12	29.30	32.16	34.89
Self-employment	5.31	7.13	9.11	11.00	12.45	13.80	16.18	19.92	23.24	25.51	27.67
Total value of remunerated work	12.00	16.11	20.61	24.86	28.15	31.21	36.57	45.04	52.53	57.67	62.55
Value of paid tax (\$ Bn)											
Tax on earnings from remunerated work	2.30	2.56	3.27	3.94	4.47	4.95	5.80	7.15	8.34	9.15	9.93
Tax on government transfers	3.39	4.42	5.66	6.99	8.28	9.51	10.97	12.90	15.02	17.13	19.37
Tax on investments and other income	1.16	1.51	1.94	2.39	2.83	3.25	3.75	4.41	5.14	5.86	6.63
GST (assumed all income spent)	4.64	6.17	7.90	9.68	11.33	12.89	14.93	17.78	20.71	23.37	26.14
GST (assumed all currency and deposits spent)	5.56	6.19	6.89	7.67	8.54	9.51	10.59	11.80	13.13	14.62	16.28
All tax, including GST	17.05	20.84	25.66	30.68	35.45	40.11	46.05	54.03	62.33	70.13	78.35

	2021	2026	2031	2036	2041	2046	2051	2056	2061	2066	2071
Value of unpaid work (\$ Bn)											
Based on 2022 carer wage	22.46	29.14	37.34	46.25	55.13	63.58	73.21	85.54	99.50	114.01	129.60
Based on 2021 and 2024 minimum wages	17.56	25.23	32.33	40.04	47.73	55.04	63.38	74.06	86.14	98.70	112.20
Total income (\$ Bn)											
Remunerated work	12.00	16.11	20.61	24.86	28.15	31.21	36.57	45.04	52.53	57.67	62.55
Government transfers	19.39	25.26	32.35	39.94	47.31	54.33	62.68	73.72	85.81	97.87	110.71
Investments and other	11.05	14.40	18.44	22.76	26.97	30.97	35.73	42.02	48.91	55.78	63.10
Total value	42.45	55.77	71.40	87.56	102.43	116.50	134.98	160.77	187.26	211.32	236.36
Expenditure (\$ Bn)											
Groceries, clothing, alcohol and tobacco	7.40	9.83	12.58	15.43	18.05	20.54	23.79	28.34	33.00	37.25	41.67
Housing and household utilities	10.54	13.99	17.92	21.97	25.71	29.24	33.88	40.34	46.99	53.04	59.32
Health	1.31	1.74	2.23	2.73	3.20	3.64	4.21	5.02	5.84	6.59	7.38
Transport and communication	7.05	9.36	11.98	14.69	17.19	19.55	22.65	26.98	31.42	35.46	39.67
Recreation, culture and education	4.30	5.71	7.30	8.96	10.48	11.92	13.81	16.45	19.16	21.62	24.19
Miscellaneous	3.36	4.46	5.71	7.00	8.19	9.32	10.79	12.85	14.97	16.90	18.90
Interest	1.65	2.20	2.81	3.45	4.04	4.59	5.32	6.33	7.38	8.33	9.31
Total expenditure	35.60	47.28	60.54	74.24	86.85	98.79	114.46	136.31	158.77	179.19	200.43

Source: NZIER



Te Tari Kaumātua
Office for Seniors



Te Kāwanatanga o Aotearoa
New Zealand Government