



The Hidden Economy: Addressing Australia's Domestic Work and Care Divide

JULY 2026

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Executive summary	3	This document is intended for general informational purposes only. The analysis in this report was commissioned by DoorDash and prepared by Mandala and is accurate as of July 2026. DoorDash commissioned this independent research to contribute evidence to a broader discussion about domestic labour and care, productivity and workforce participation. The findings and recommendations are intended to inform public debate and highlight the challenge, rather than promote any single commercial solution.
Australians average 26 hours of unpaid household labour per week, adding to household pressure and reduced wellbeing	4	
Disparities in care and domestic work can reinforce inequalities across demographic groups	12	Mandala is an economics research and advisory firm. Mandala specialises in combining cutting-edge data and advanced analytical techniques to generate new insights and fresh perspectives on the challenges facing businesses and governments.
Ongoing technological improvements could save individuals up to 8 hours per week on domestic tasks by 2036	21	Views and opinions expressed in this document are prepared in good faith and based on Mandala's knowledge and understanding of its area of business, markets and technology. Opinions expressed herein are subject to change without notice. No part of this document may be reproduced in any manner without the written permission of Mandala.
Government can help address the structural causes of inequalities in care and domestic work and support the equitable adoption of time-saving technologies	28	This report uses unit record data from the Household, Income and Labour Dynamics in Australia Survey (HILDA) conducted by the Australian Government Department of Social Services (DSS). The findings and views reported in this paper, however, are those of the author[s] and should not be attributed to the Australian Government, DSS, or any of DSS' contractors or partners.
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Executive summary

Australians typically spend 26 hours per week on unpaid household labour, equal to the time spent on paid employment. This time is spent on a wide range of activities that underpin the essential functioning of families and communities, including meal preparation, household management, shopping, child care, and care for older adults or dependents.

Despite this, unpaid household labour is absent from conventional economic statistics. Unpaid labour would be worth \$1 trillion (37% of GDP) if it was valued at the market wage for each activity. This omission has real consequences: without reliable data on its scale and distribution, policymakers risk overlooking unpaid labour when designing policies aimed at overcoming disadvantage, supporting workforce participation, or strengthening the care economy.

High levels of care and domestic work carry real costs for individuals. 42% of Australians report balancing work and family as the primary cause of feeling time-pressed. Heavy unpaid labour burdens are also linked to poorer mental and physical health outcomes, as well as reduced workforce participation and lifetime earnings.

The financial burden of care and domestic work is not shared equally. Women, low-income households, parents, and primary carers perform up to 22 hours more unpaid labour per week than the population average. Women with young children in low-income households sit at the intersection of these groups and can face

compounding pressures and even higher levels of unpaid labour. The financial consequences for women are particularly significant: their average earnings are 27% below men's, a gap driven in part by their disproportionate share of unpaid labour. Accounting for unpaid labour would narrow this gap to 8% and would reduce the lifetime earnings gap between men and women by approximately \$800,000 (around 42%). Parenthood compounds these pressures, as caring responsibilities can reduce employment hours and limit workforce participation. Low-income households are also less able to outsource domestic tasks, where the cost of paid services remains a persistent barrier.

Emerging technologies offer a growing set of tools to reduce the time spent on domestic tasks. Smart-home systems, AI meal planners, robotic devices, and online platforms can reduce or eliminate the time spent on household activities. For example, online food and grocery delivery services can save households time otherwise spent travelling, grocery shopping and preparing meals. Analysis of DoorDash data suggests this could save the average person 30 hours per year.

Expanding automation could reduce the time spent on domestic tasks by up to 8 hours per week by 2036, unlocking \$2.5 billion in economic output. If these gains are realised, individuals could redirect time to paid work, leisure, care, or supporting their mental and physical health. Older Australians, women, and parents, who currently perform the highest volumes of domestic

labour, stand to benefit most. For the 153,000 Australians who cite home and caring duties as their primary barrier to paid work, these time savings could support take-up of additional employment. While technology can help reduce the time required for routine domestic tasks, it is only one part of the solution. This report does not suggest technology alone can resolve inequalities in unpaid labour.

Realising the potential of technology, and ensuring the gains are equitably shared, is not guaranteed. Historical trends show that time-saving technologies alone do not automatically reduce domestic workloads, as persistent gender norms and changing cultural standards can offset efficiency gains. Furthermore, the accessibility and affordability of these technologies must be addressed so that those who need them most, such as low-income households, can benefit from them.

Government can help address the structural causes of inequalities in care and domestic work through five priority reform areas: improving economic measurement through more frequent time use surveys and household satellite accounts, enabling equitable adoption of time-saving technologies, strengthening care services including early childhood education and aged care, encouraging parental leave and flexible work to share caring responsibilities more equitably, and improving income and tax incentives including superannuation credits for primary carers.



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Government can help address the structural causes of inequalities in care and domestic work and support the equitable adoption of time-saving technologies

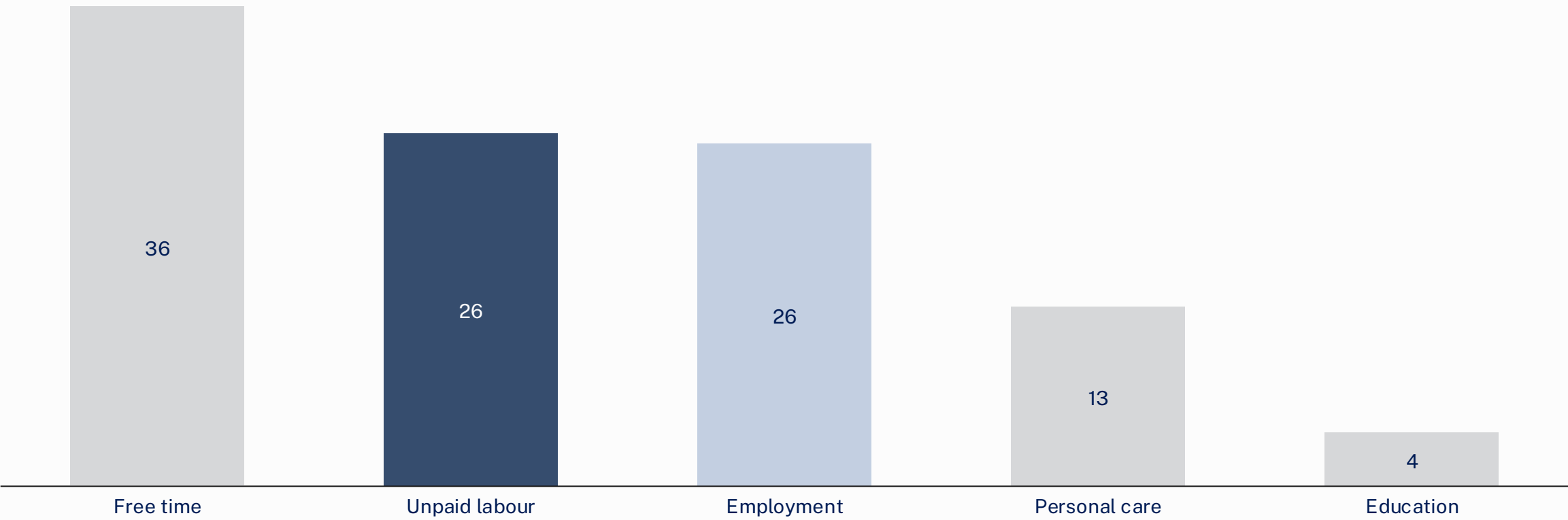
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Appendix

Australians typically spend 26 hours on unpaid household labour per week - the same amount of time they spend on paid employment

Overview of Australians' time use, by activity

Hours per week, 2024



Note: Personal care refers to time spent on eating, healthcare, and hygiene. Free time refers to time devoted to personal recreation and social interaction. Travel time is included in each category e.g. travel for employment is counted under employment. Data shown is based on a sample of Australians aged 15+, and excludes time spent sleeping. Data has been collected via a self-reported diary. Source: ABS (2025) *How Australians Use their Time*; Mandala analysis.

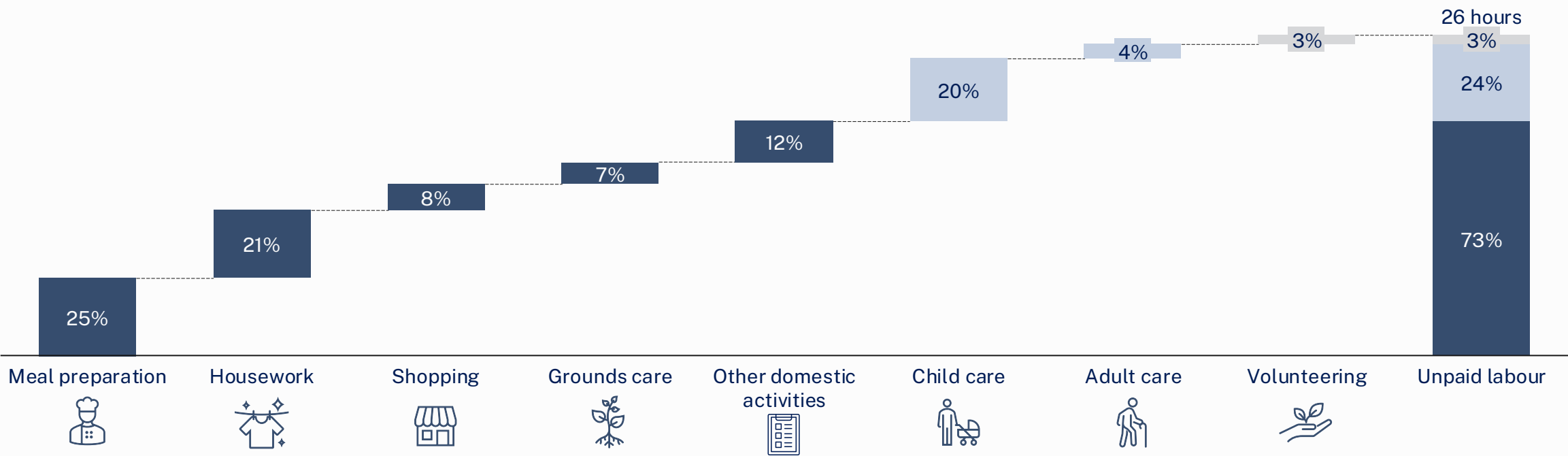
Unpaid household labour includes a diverse range of domestic, care and volunteering activities that are essential to everyday life

Unpaid labour, by activity

% of unpaid labour per week, 2024

Domestic activities Care Volunteering

Unpaid labour is predominantly spent on domestic activities (73%), care (24%), and to a lesser extent volunteering (3%). These activities underpin the essential functioning of families and communities, enabling individuals to participate in work and daily life. When this work goes undone, there are consequences for workforce participation, physical and mental health, and social connection, as well as direct impacts on the wellbeing of families and children who rely on this care.



Note: 'Other domestic activities' includes home and vehicle maintenance, pet care, and travel for unpaid domestic labour. Source: ABS (2025) *How Australians Use their Time*; Ervin et al. (2023) *Trajectories of Unpaid Labour and the Probability of Employment Precarity and Labour Force Detachment Among Prime Working-Age Australian Women*; ILO (2024) *Unpaid care work prevents 708 million women from participating in the labour market*; NLM (2022) *Social connectedness of carers: An Australian national survey of carers*; Mandala analysis.

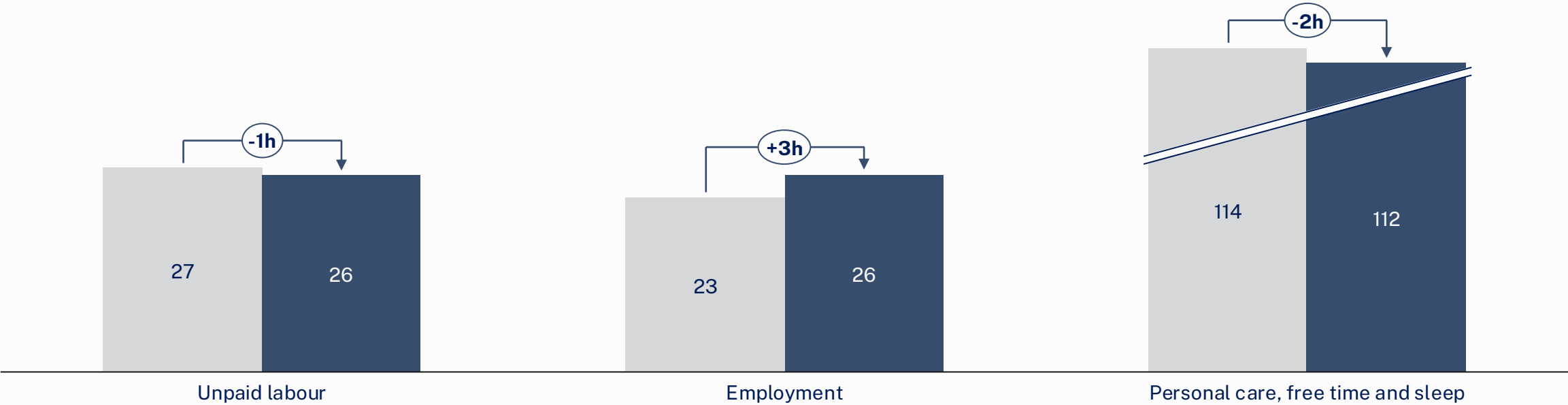
While unpaid household labour has decreased slightly, longer working hours mean that Australians have less discretionary time than 30 years ago

Trends in Australians' time use, by activity

Hours per week, 1992 and 2024

1992 2024

Discretionary time (including personal care, free time and sleep) has decreased by two hours per week over the last 30 years, largely due to increased working hours. Women's increased participation in the labour market has primarily driven this shift – participation rates rose 11% and hours worked rose 12% over the same period.¹ While this has supported improvements in gender equality and economic growth, it has directly contributed to the time pressures experienced by households.



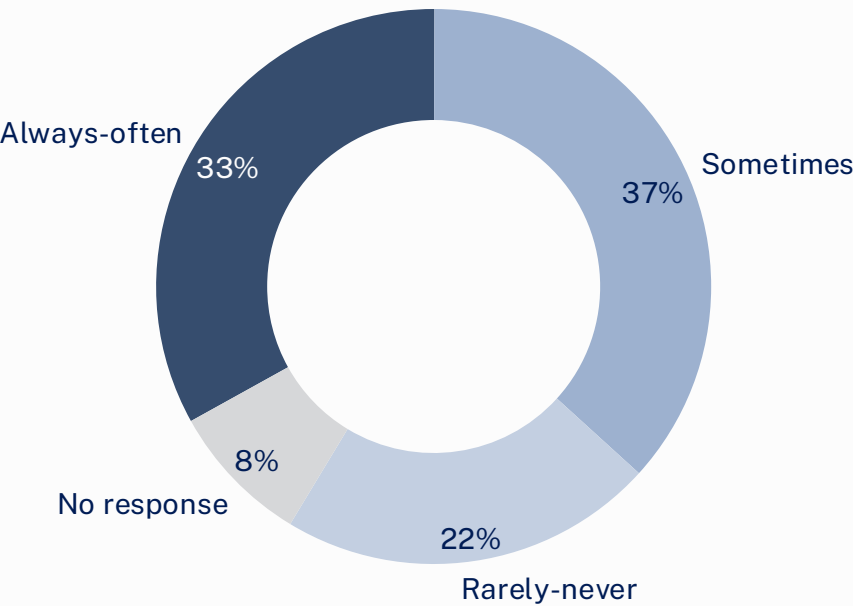
1. From ABS Labour Force Survey (2026).
Source: ABS (2025) How Australians Use their Time; WGEA (2018) Workplace gender equality: the business case; Folbre (2007) Measuring care: gender, empowerment, and the care economy; Mandala analysis.

A third of Australians report ‘time poverty’, being always or often pressed for time

Population reporting feeling pressed for time

% of Australians, 2024

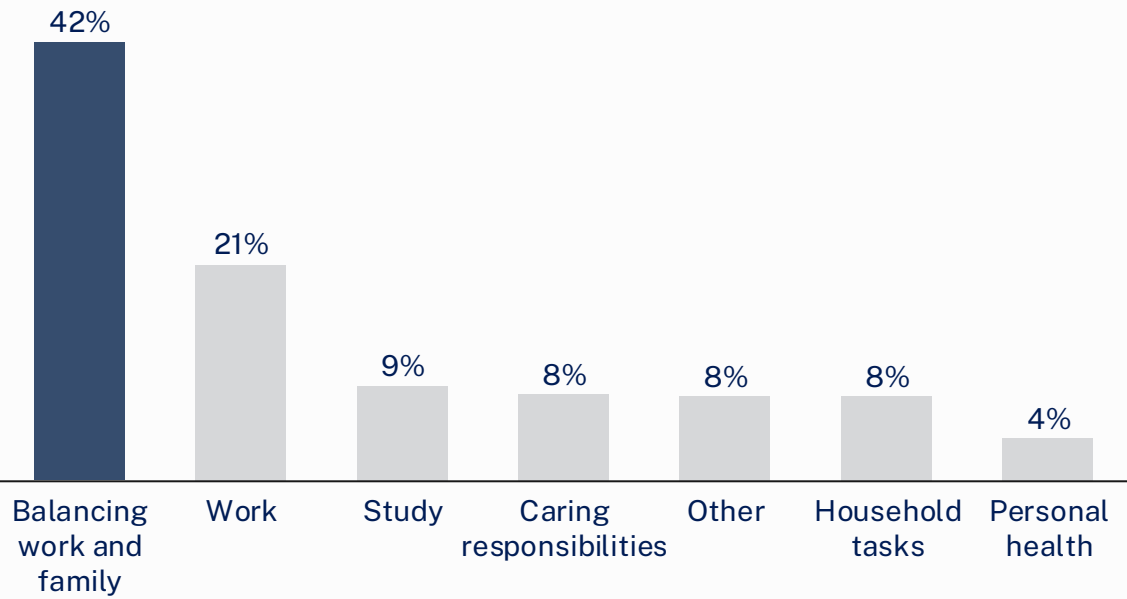
A third of Australians (33%) report being always or often pressed for time, with a further 37% sometimes reporting time pressure. This pressure contributes to tangible impacts on wellbeing – high time stress is associated with worse mental health and life satisfaction outcomes.



Main reason for reporting feeling pressed for time

% of Australians feeling always-often pressed for time, 2024

Balancing work and family commitments is the most common source of time pressure. This was identified by 42% of respondents as the key reason for their time pressure, highlighting the competing commitments of paid and unpaid work.



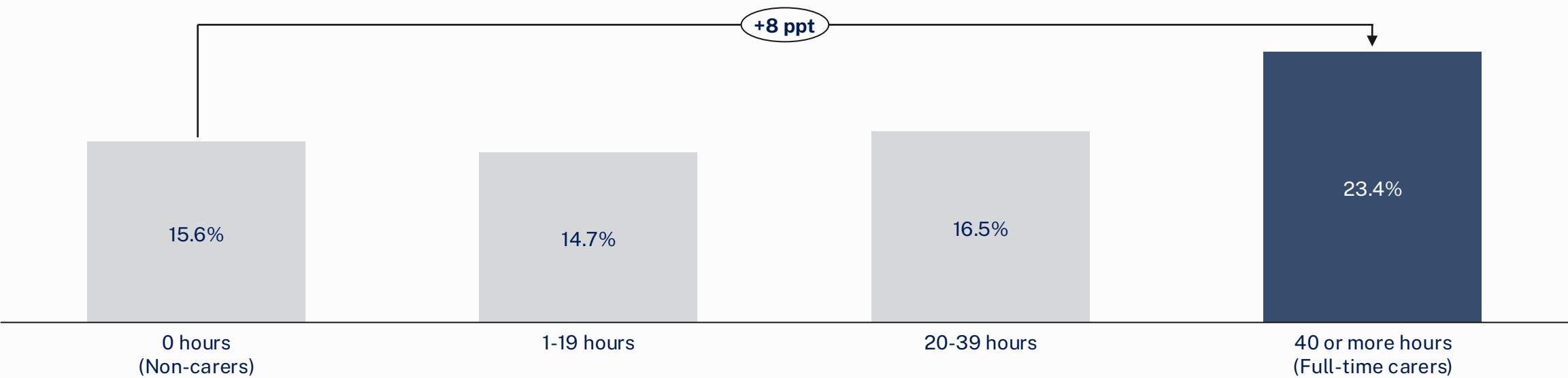
Source: ABS (2025) *How Australians Use their Time*; Botha (2021) *A third of Australians under chronic time stress*; Melbourne Institute (2025) *The 20th Annual Statistical Report of the HILDA Survey*; Strazdins et al. (2016) *Not all hours are equal: could time be a social determinant of health?*; Mandala analysis.

Unpaid household labour, particularly intensive caring duties, is associated with reduced mental wellbeing

Mental health diagnoses, by weekly caring hours

% of respondents diagnosed with depression or anxiety, caring hours per week, 2024

Unpaid caring hours are negatively associated with mental health, as rates of depression and anxiety are 8 percentage points higher for full-time carers compared to non-carers. Broader wellbeing measures show the same trend, with only 17% of carers reporting good or excellent health compared to other Australians (46%) in the 2024 Carer Wellbeing Survey.¹



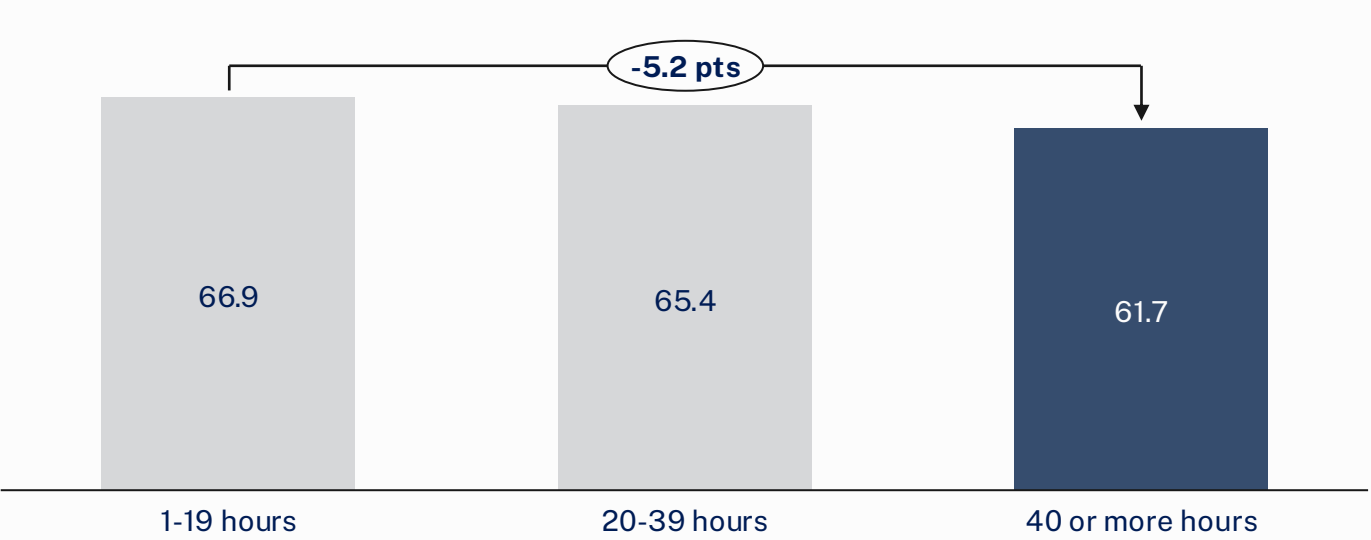
1. Carer Wellbeing Survey 2024, cited in AIHW (2025) *Informal carers*.
Note: Results do not imply causation. Rows with missing values for mental health status or unpaid domestic labour hours are excluded (n=14,503). The Household, Income and Labour Dynamics in Australia (HILDA) Survey data uses a different time use collection methodology to the ABS Time Use Survey; estimates may not be directly comparable.
Source: HILDA Survey (2024) Wave 24; Ervin et al. (2023) *The association between unpaid labour and mental health in working-age adults in Australia from 2002 to 2020*; Mandala analysis.

High domestic workloads are linked to worse physical health, particularly among those performing 40 or more hours of housework a week

General health for individuals under 65 years old, by weekly housework hours¹

General health score (0-100), hours per week, 2024

The physical demands of heavy domestic workloads likely contribute to worse general health. Individuals aged 15-64 years old who complete 40 or more hours of housework have a lower health score (-5.2 points) than those completing 1-19 hours a week. The relationship is less clear for older Australians (65 and above), as some evidence suggests housework supports physical routine and function.²



General health scores in the Household, Income and Labour Dynamics in Australia (HILDA) Survey are reported on a 0-100 scale

- This is a self-assessed measure, with the average Australian aged 15-64 reporting health score of 65.9.³
- High levels of unpaid labour can reduce general health scores and physical wellbeing. Intensive domestic workloads are also associated with physical strain and musculoskeletal pain.⁴

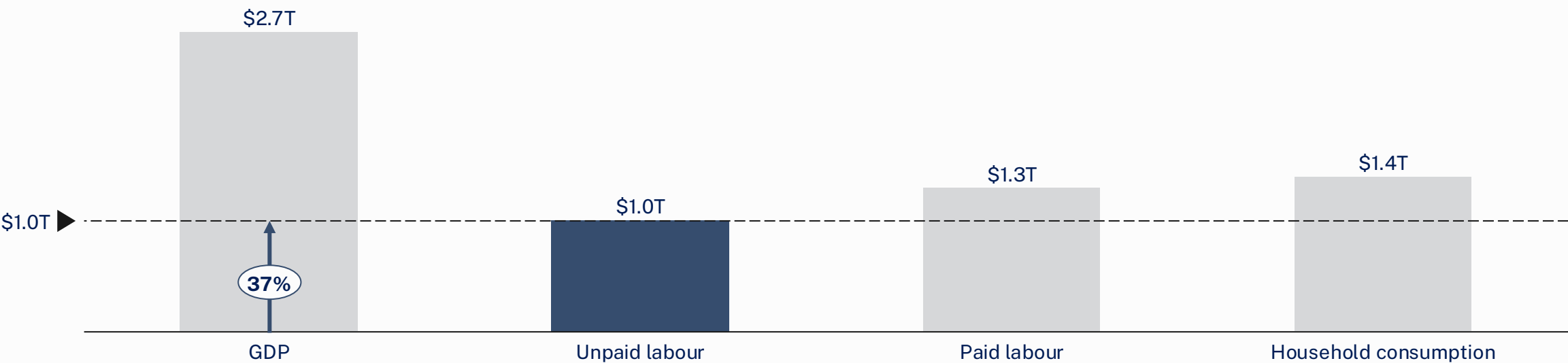
1. Includes housework, household errands, and outdoor tasks; 2. World Economic Forum (2021) *How housework can improve our mental and physical health*; 3. Melbourne Institute (2025) *The 20th Annual HILDA Statistical Report*; 4. Habib et al. (2012) *Hard work at home: musculoskeletal pain among female homemakers*.
Note: Results do not imply causation. Only includes individuals aged 15-64. Rows with missing values for general health scores or unpaid domestic labour hours are excluded (n=11,109). The HILDA Survey data uses a different time use collection methodology to the ABS Time Use Survey; estimates may not be directly comparable. Source: HILDA Survey (2024) Wave 24; Seedat, S. & Rondon, M. (2021) *Women's wellbeing and the burden of unpaid work*; Mandala analysis.

Unpaid household labour is valued at ~\$1 trillion, the equivalent of one third of Australia’s GDP, but it is not captured in traditional economic statistics

Value of unpaid labour against key economic statistics

AUD, 2024

Unpaid labour is estimated to be worth around 37% of GDP in Australia, comparable in scale to household consumption or paid labour. Despite this, it is absent from conventional economic statistics like GDP which only consider activity in formal economic markets. This omission has tangible consequences: without reliable data on its scale and distribution, policymakers risk overlooking unpaid labour when designing policies in areas such as child care, aged care and services.



The value of unpaid labour has been conservatively estimated using a replacement cost approach – the cost of hiring professionals to perform the equivalent household tasks. An alternative method is to value unpaid labour based on individuals' wage rates, reflecting the income foregone by devoting time to unpaid work instead of paid employment; this approach yields a higher estimate. The replacement cost method is generally considered to be the preferred approach.

Note: See Appendix A for a full overview of the method to estimate the value of unpaid labour.
Source: ABS (2026) Australian National Accounts: National Income, Expenditure and Product; ILO (2021) Measuring unpaid domestic and care work; OECD (2014) Unpaid Care Work: The missing link in the analysis of gender gaps in labour outcomes; Seiferling (2025) What we value and why it matters: a historical overview of GDP, the production boundary and unpaid household labour; Mandala analysis.



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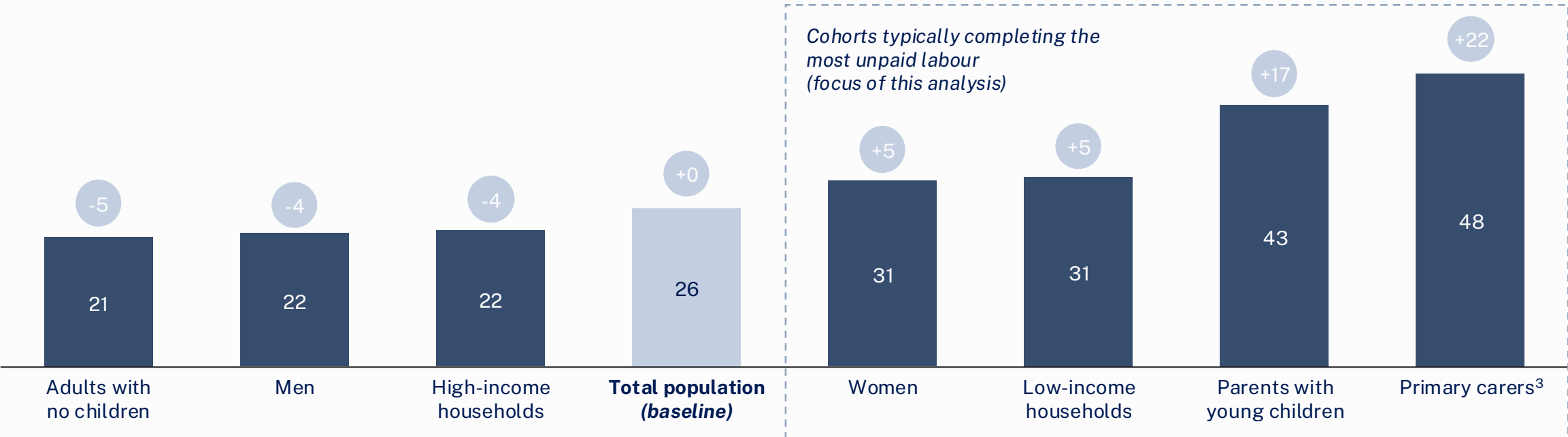
Appendix

Care and domestic work is not shared equally across society, with certain cohorts completing disproportionately large shares

Unpaid labour, by select demographic cohorts¹

Hours per week, 2024 ● Difference in hours compared to total population

Women, low-income households,² parents, and carers perform a disproportionate share of unpaid labour – completing 5 to 22 more hours of unpaid labour per week. Gender is a large driver of these disparities with societal expectations contributing to an uneven distribution of unpaid labour within households. Financial constraints can further widen the gap.



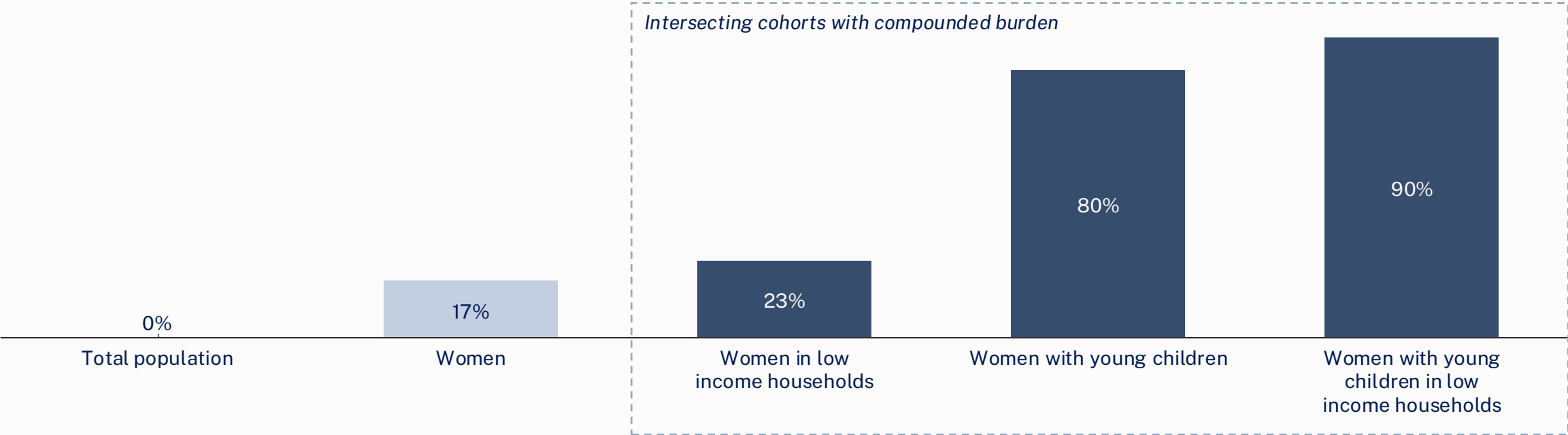
1. Cohorts overlap. Each bar represents a different demographic cut of the population, not a distinct group. 2. High and low-income households are defined as those in the highest and lowest quintile of household income across Australia. 3. Estimated unpaid labour hours using data from ABS SDAC (2024) for primary aged and disability carers – defined as the carer with the main caregiving responsibility. All other cohorts are reported directly from the ABS Time Use Survey. Source: ABS (2025) *How Australians Use their Time*; Craig & Mullan (2010) *Parenthood, Gender and Work-Family Time in the United States, Australia, Italy, France, and Denmark*; Risse (2025) *By How Much Is 'Women's Work' Undervalued in the Economy*; Mandala analysis.

Care and domestic work compounds across gender, income, and parental status, with the highest burden on women with young children in low-income households

Unpaid labour relative to the population average, by intersecting cohorts

% difference from population average, 2024

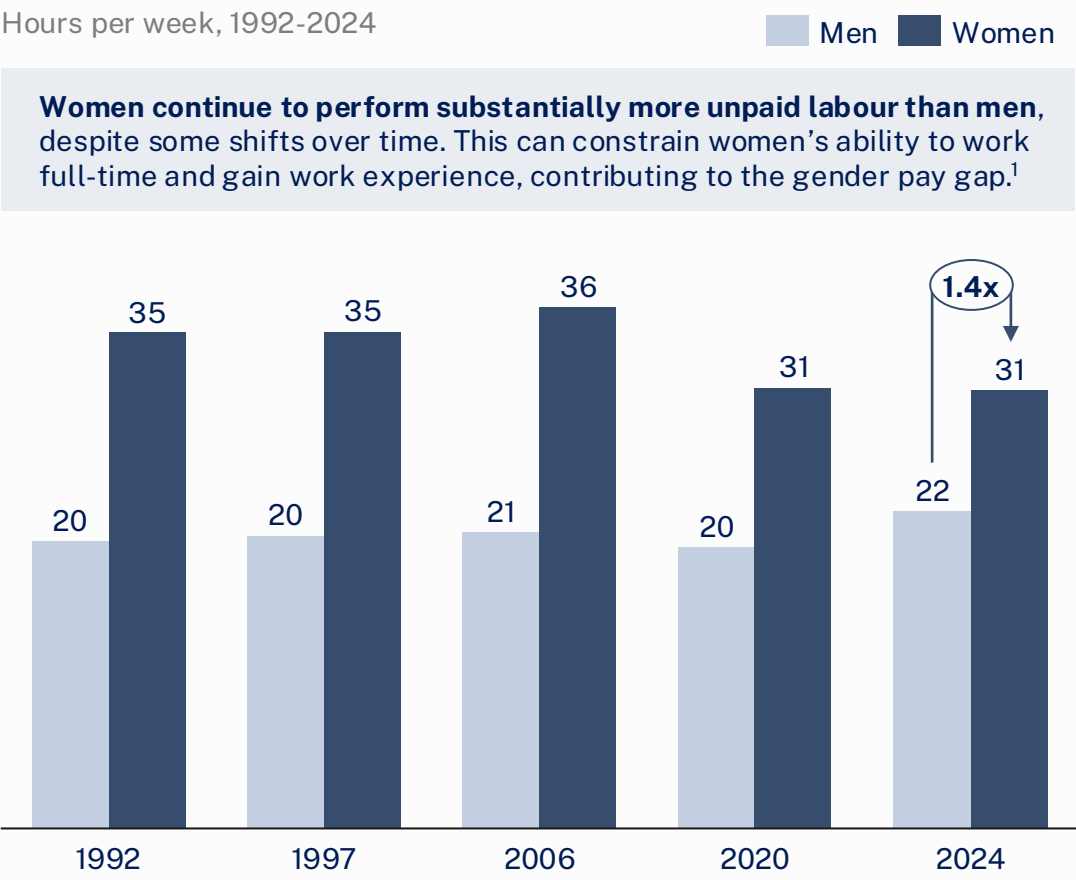
Women with young children in low-income households perform almost double the unpaid labour of the population average (+90%). The effects of gender, income and parental status are not discrete, and the intersection of multiple cohorts faces overlapping and compounded disadvantage.¹ Women in this cohort are also more likely to experience time poverty, linked with poorer mental health, wellbeing, and physical health.²



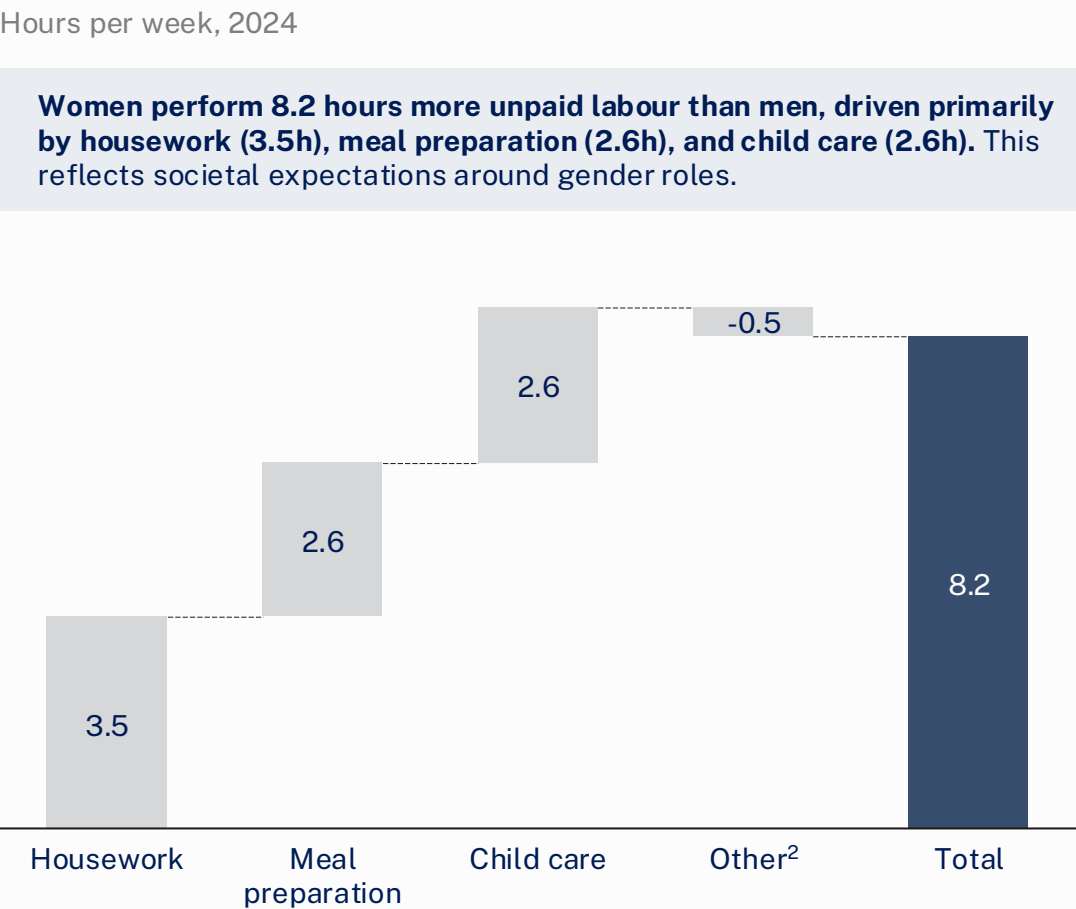
1. The WGEA (2026) emphasises the overlapping systems of discrimination for individuals at the intersection of disadvantaged groups. 2. Ervin et al. (2023) *The association between unpaid labour and mental health in working-age adults in Australia from 2002 to 2020*; Melbourne Institute (2022) *Double burden of paid and unpaid labour leading to poorer mental health in women, review finds*. Notes: The HILDA Survey data uses a different time use collection methodology to the ABS Time Use Survey; estimates may not be directly comparable. Source: HILDA Survey (2024) Wave 24; Mandala analysis.

Women complete 1.4 times more unpaid household labour than men, primarily on housework, meal preparation and child care

Unpaid labour hours, by gender



Additional unpaid labour performed by women over men, by activity

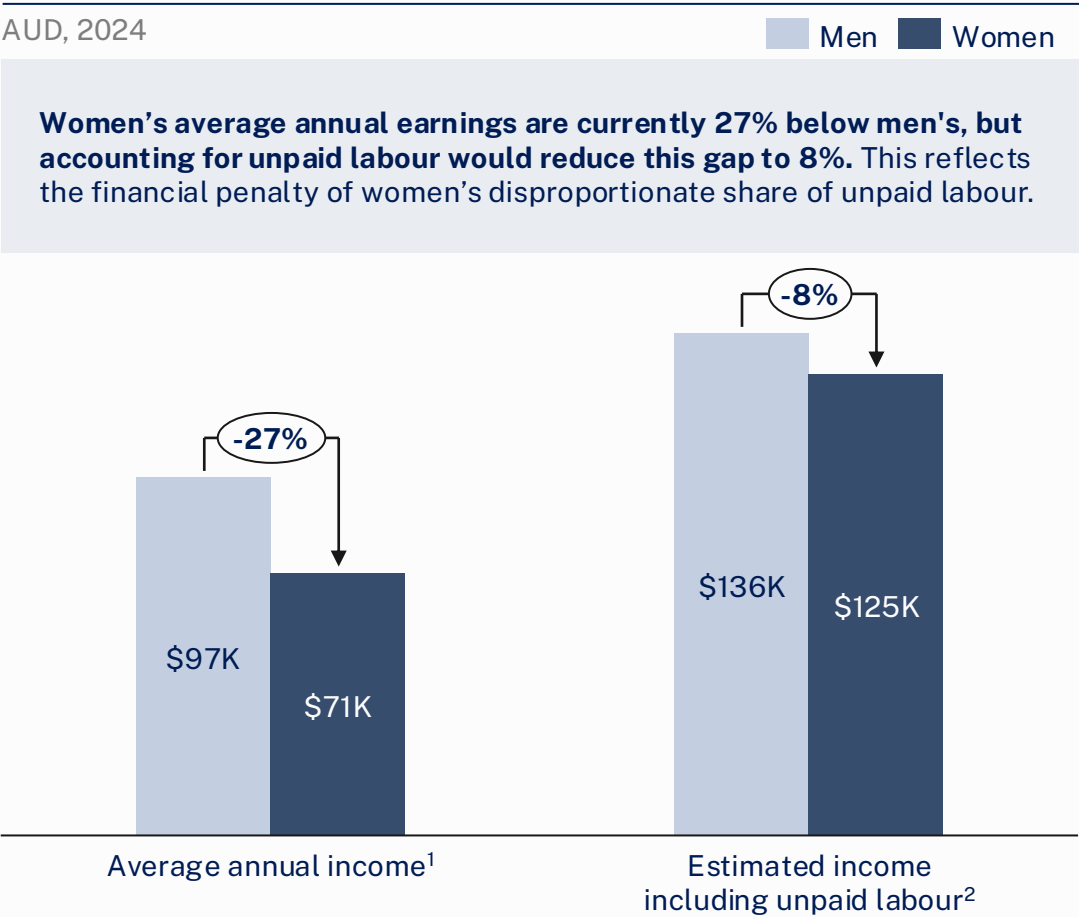


1. As discussed in Thebaud & Kornrich (2019). 2. “Other” category includes travel, shopping, grounds care, pet care, home and vehicle maintenance, adult care, and volunteering.
Source: ABS (2025) How Australians Use their Time; WGEA (2026) What is the gender pay gap; Mandala analysis.

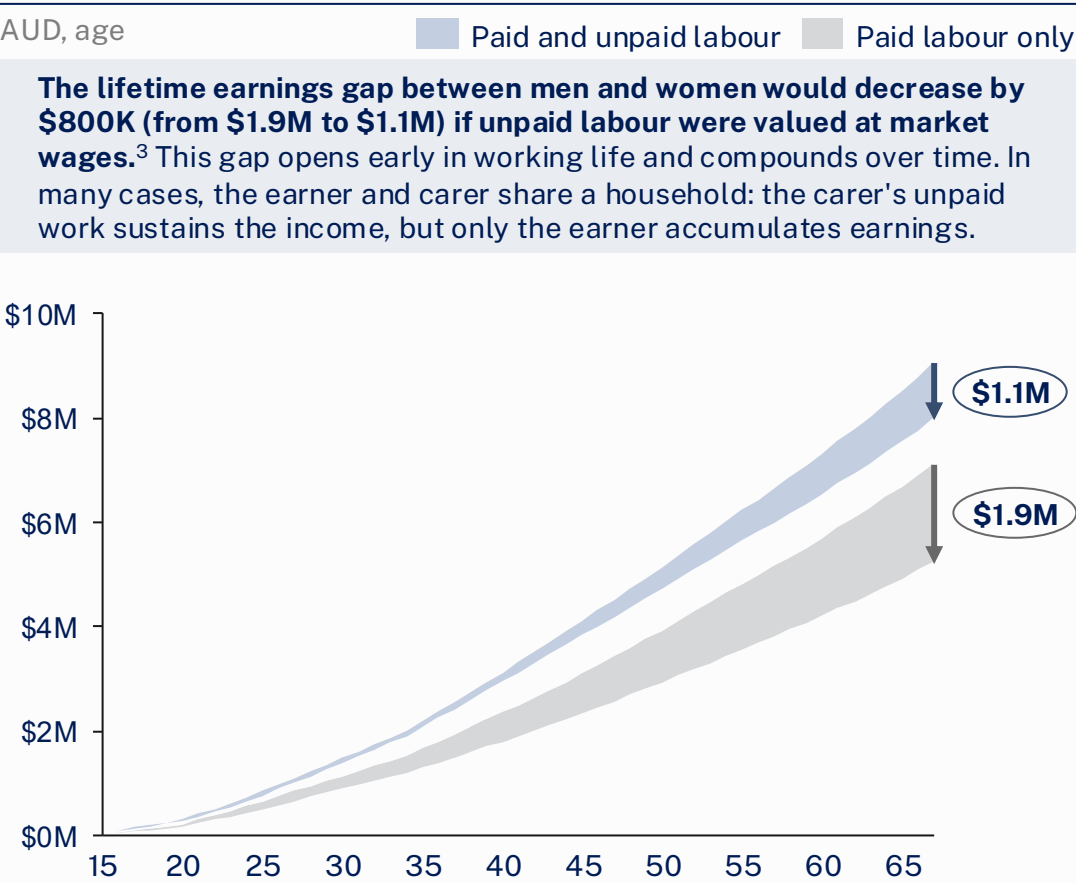
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The gender pay and lifetime earnings gaps between men and women are exacerbated by disparities in unpaid household labour

Average annual income, by gender



Estimated earnings gap of men over women, by age



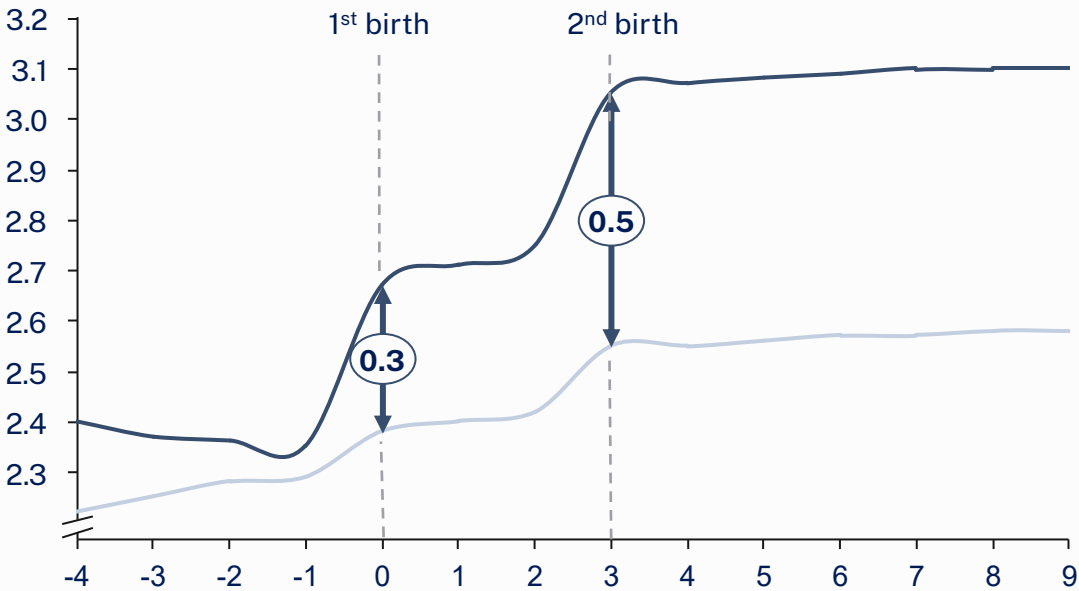
1. Average annual income for all employed persons. 2. Estimated using a similar methodology to Risse (2025), assuming a market wage is used for unpaid labour. 3. Lifetime earnings is inclusive of superannuation – assumed to be 12% of income with a real rate of return of 5%. Earnings has been estimated for ages 15 to 67 (retirement age) assuming average annual income for each age group. Source: ABS (2026) Employee Earnings and Hours, Australia; ABS (2026) Wage Price Index, Australia; WGEA (2025) Ages and wages; Mandala analysis.

Parenthood can increase time pressure and barriers to work, particularly for women

Reported time pressure, by gender

Time pressure (1-4)¹, years around first childbirth — Men — Women

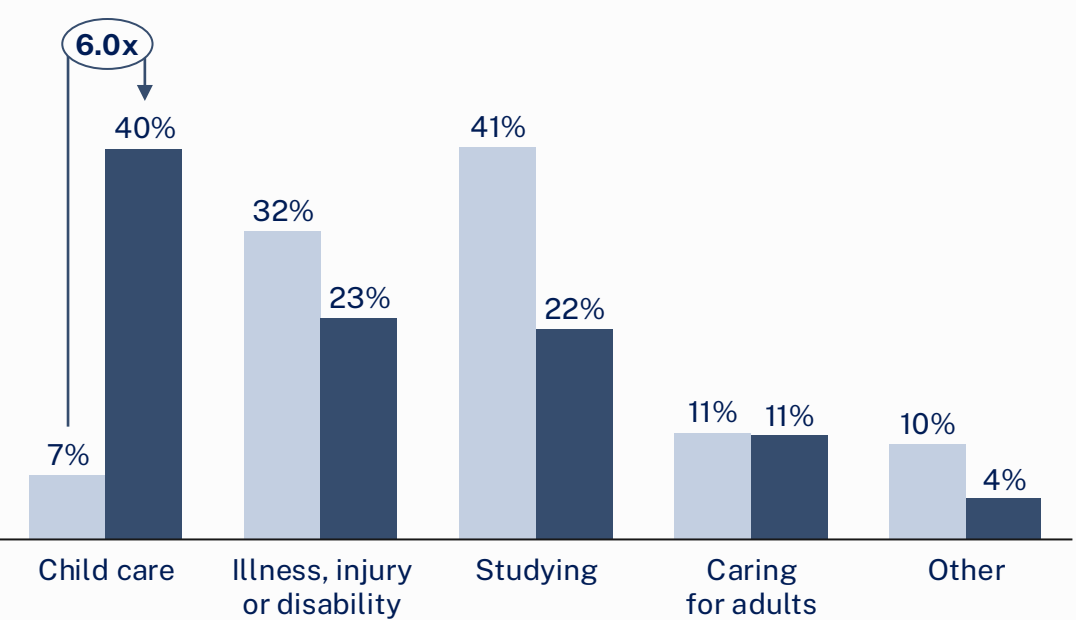
Having children creates significant and lasting time pressures for women. The gap in reported time pressure between women and men widens with each birth. After a second birth, women score 0.5 points higher on the scale, reflecting their higher share of unpaid labour.



Barriers to workforce participation, by gender

Proportion of Australians citing barriers, 2025 — Men — Women

Child care is the main barrier for 40% of women facing participation constraints – six times the rate of men. This disparity reflects the imbalance of gendered expectations within families, which limits women’s career progression and contributes to the gender pay gap.²



1. As modelled by Ruppanner et al. (2019) which examines HILDA data from 2001 to 2016. 2. From Torres et al (2024). A larger number indicates more time pressure.
Source: ABS (2026) Barriers and Incentives to Labour Force Participation, Australia; ABS (2025) How Australians Use their Time; ABS TableBuilder (2022) Disability, Ageing and Carers; Mandala analysis.

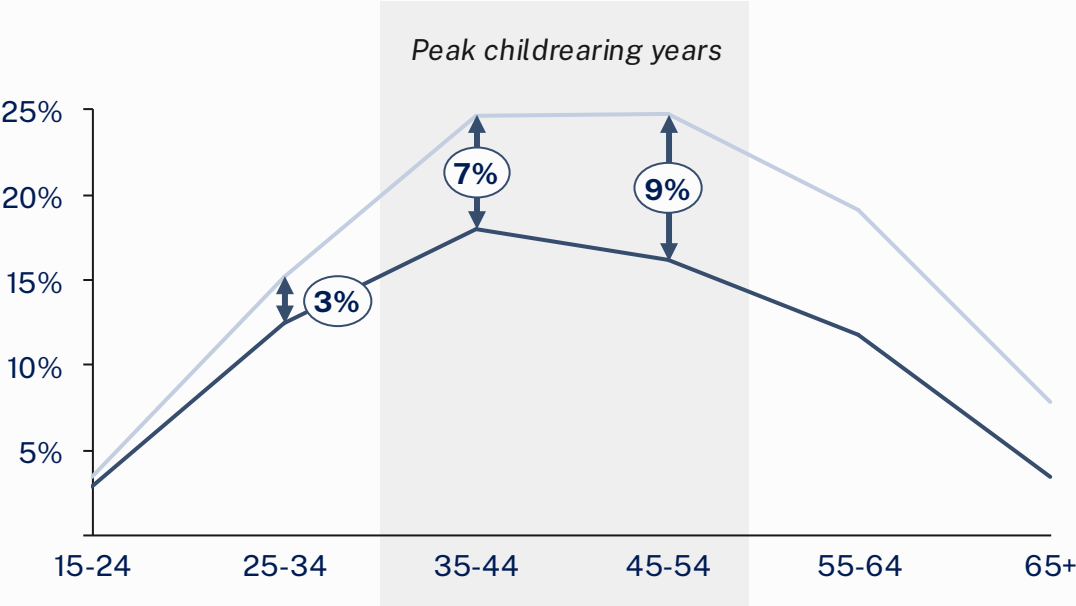
Care and domestic responsibilities can reduce women’s representation in management and full-time roles, further compounding financial inequalities

Australians in management roles, by age and gender

% of total employed, 2025

Men Women

Women’s representation in management compared to men widens between ages 35-54, during peak childrearing years when child care falls disproportionately on women. Since management roles pay nearly double that of non-management, this is also a driver of the wage gap.¹

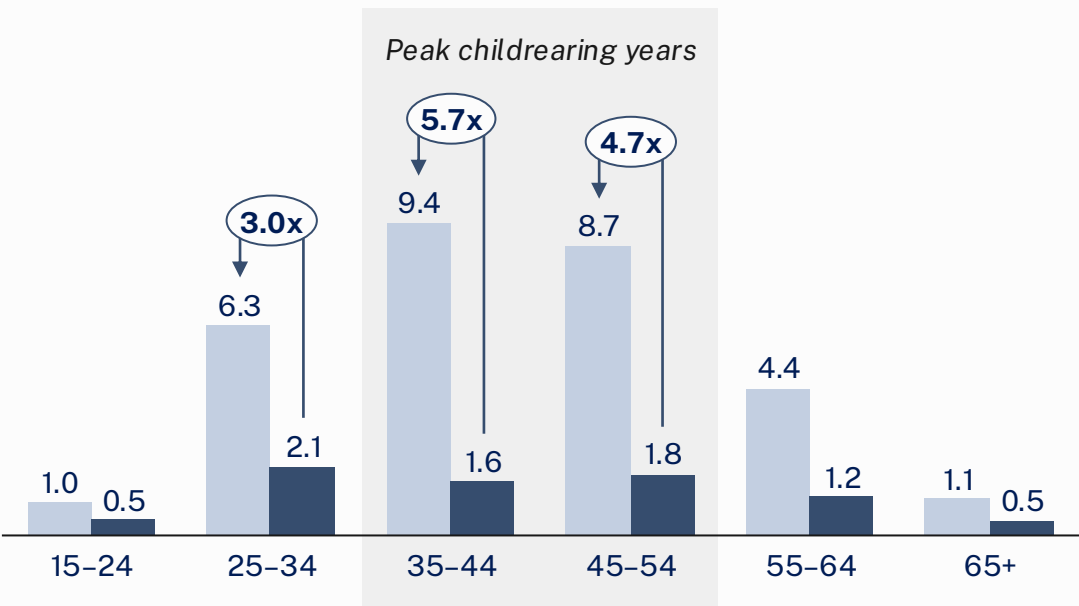


Ratio of full to part-time workers, by gender

Ratio, 2025

Men Women

The gap between men and women’s full to part-time work ratio widens sharply during peak childrearing years, reaching 5.7x between ages 35-44. This reflects a trend where men focus on paid work while unpaid labour falls disproportionately on women.



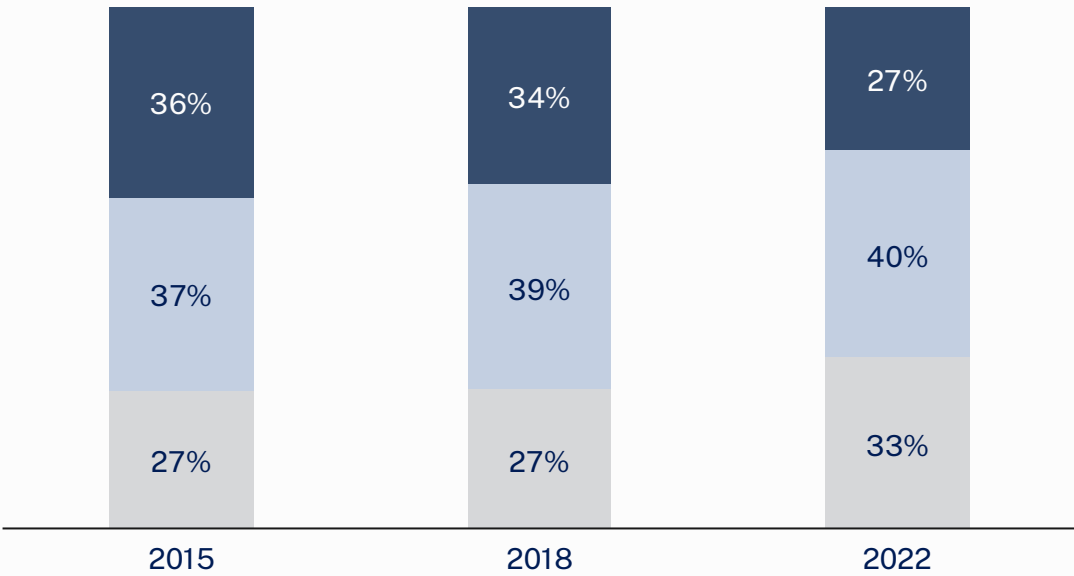
1. From ABS Survey of Employee Earnings and Hours (2026). Management roles are defined using ANZSCO classifications. Source: ABS (2026) Labour Force, Australia, Detailed; AIFS (2023) Employment of men and women across the life course; WGEA (2025) Ages and wages; Mandala analysis.

Caring responsibilities can reduce employment hours for primary carers, although the volume of care has fallen over time

Weekly care hours of primary carers, over time¹

Proportion of carers, 2015-2022 1-9 hrs 10-39 hrs 40+ hrs

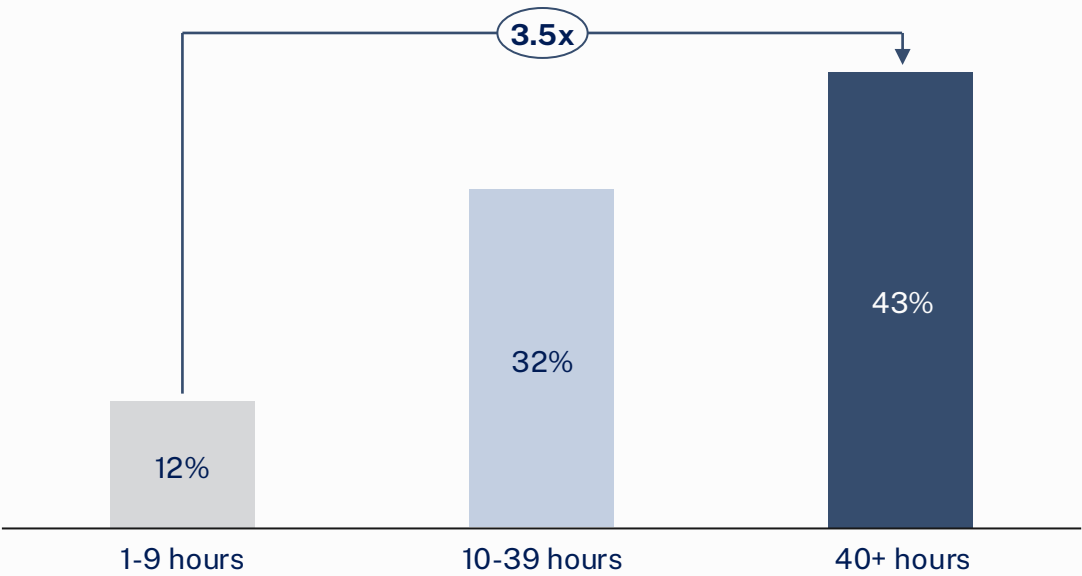
Roughly a quarter of primary carers perform over 40 hours a week of care, down from 36%. The NDIS has contributed to this decline by transitioning care to the formal economy. 7 in 10 primary carers are women, reflecting systemic gender inequalities in the distribution of care.²



Primary carers experiencing a reduction in employment, by care hours

Proportion of carers, weekly care hours, 2022

43% of primary carers performing 40+ hours per week of care experienced lower employment hours. Heavy caring responsibilities can push Australians out of paid work. This reduces career progression and compounds financial inequalities.³



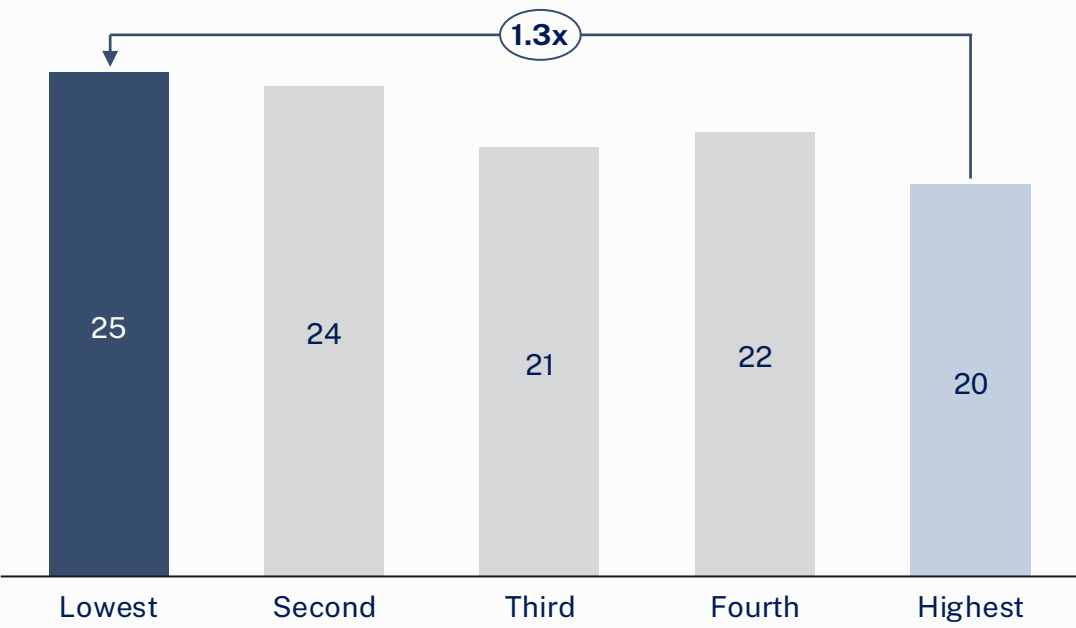
1. Primary carers are people aged 15 years or over who provide the most informal assistance to people with disability or older people. 2. From WGEA (2026). 3. From Greenfield et al. (2018). Source: ABS (2026) Barriers and Incentives to Labour Force Participation, Australia; ABS (2025) How Australians Use their Time; ABS TableBuilder (2022) Disability, Ageing and Carers; Mandala analysis.

Lower income households typically complete higher amounts of unpaid household labour, as they are less able to afford paid services to outsource these tasks

Unpaid labour, by income quintile¹

Hours per week, 2024

Low-income households perform 1.3x more unpaid labour than high-income households.² This likely reflects their lower ability to afford outsourcing these tasks compared to higher-income households.³

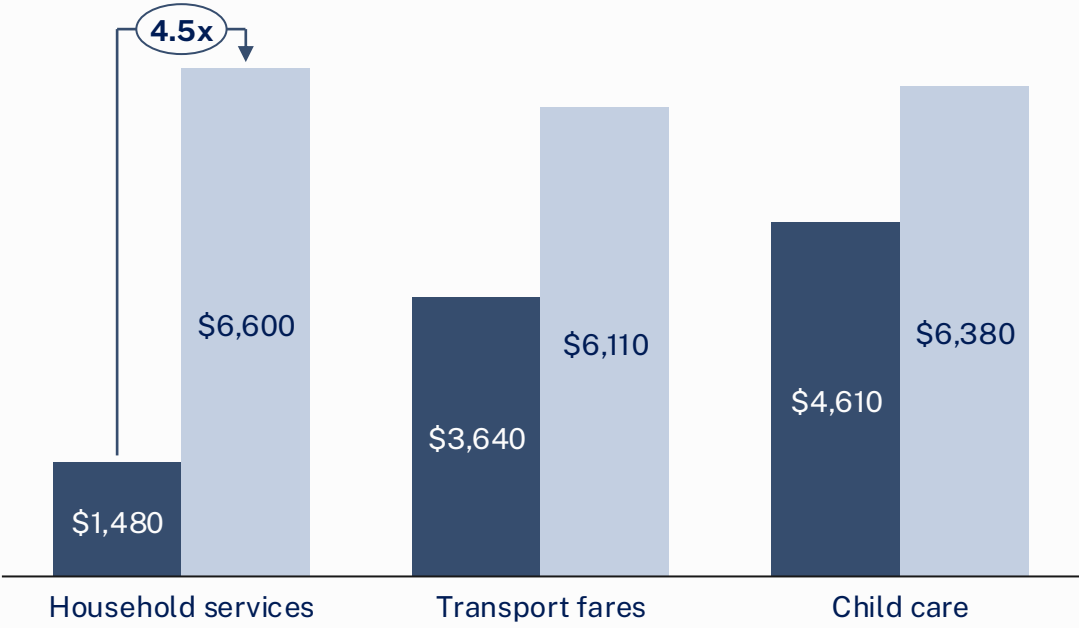


Household spending, by income quintile³

AUD, 2015-16, annual

Lowest Highest

Households in the highest income quintile spend 4.5x more on household services than those in the lowest. This difference is primarily driven by the outsourcing of housework considered less enjoyable such as cleaning.⁴



1. Income quintile based upon weekly household income, adjusted for the size and composition of the household as per the ABS Time Use Survey. 2. Limited time from unpaid labour reduces opportunities for education and employment, compounding inequality. From Hyde et al (2020). From OECD (2021). 3. From ABS (2017) – the most recent ABS household expenditure survey. Examples of household services include gardening, housekeeping, and cleaning. 4. From Lightman & Kevins (2021). Source: ABS (2025) How Australians Use their Time; Mandala analysis.



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Appendix

Innovative technologies and new business models can help automate, augment, or outsource the time spent on certain domestic activities

Overview of how businesses and technologies can reduce unpaid labour

Technological improvements and innovation can help reduce the time households spend on domestic tasks or outsource them to support tools. As these tools become more affordable and widely adopted, they have the potential to materially reduce the burden of unpaid domestic activities. This frees up time for paid work and discretionary activities.¹

	 Task automation	 Task augmentation	 Task outsourcing
Description	Technologies that autonomously complete household tasks, replacing the need for human involvement	Technologies that reduce the time required for household tasks, but still require human involvement	Innovative services and platforms that allow households to easily access support services, reducing unpaid labour
Examples	Automatic vacuum cleaners, lawn-watering systems, bill-payment systems, pool cleaners	Smart-home systems, air fryers, AI meal and scheduling planners, AI voice assistants, robot lawnmowers	Grocery and meal delivery apps, household concierge services, AI managed schedules, aged-care marketplace platforms

1. IMF (2019) predicts that further productivity growth and marketisation of household production encourages higher female labour force participation. Source: Babar et al (2025) *Cooking or Clicking: The Impact of Online Food Delivery Platforms on Domestic Food Preparation*; Vrain et al. (2026) *How home automation reshapes household time use and energy demand: Evidence from a mixed-methods longitudinal study*; Mandala analysis.

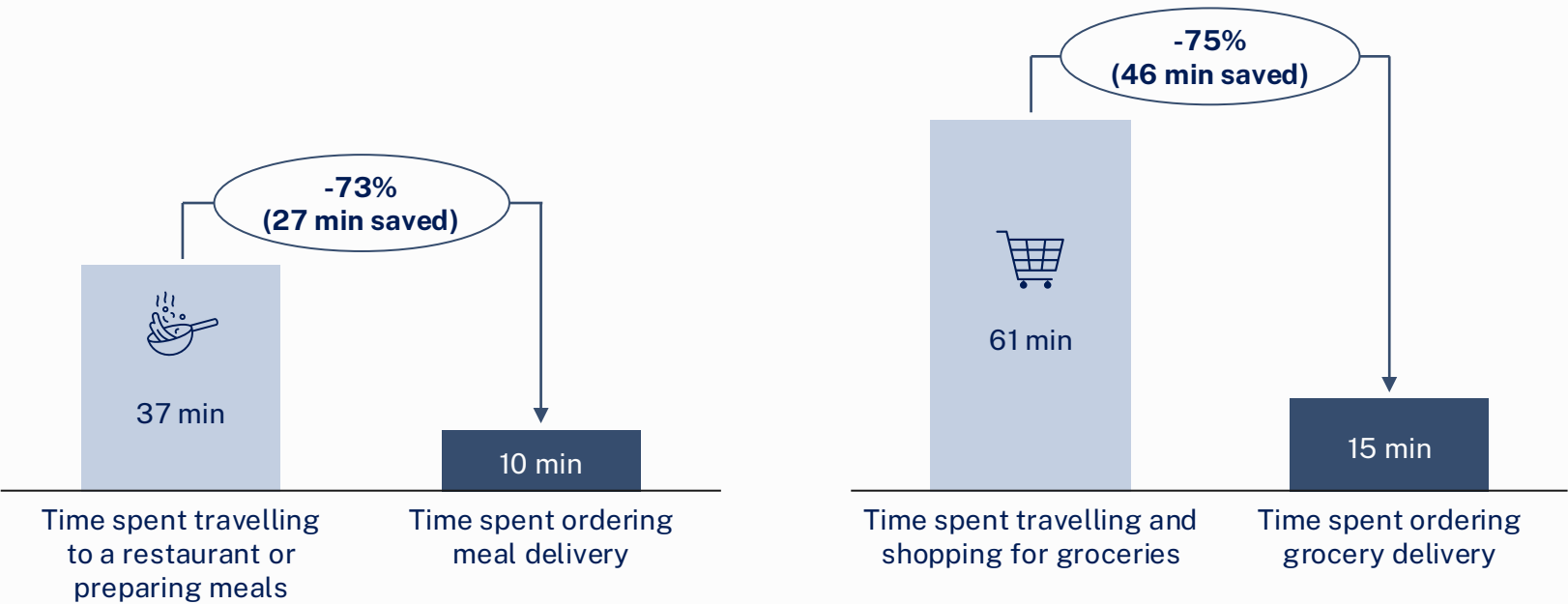
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For example, online food and grocery delivery services could reduce time spent on travel, meal preparation, and grocery shopping for users by over 73%

Time savings for persons using online food and grocery delivery services in Australia

Minutes per person, AUD, 2025

Users can save around 27 minutes per meal, and 46 minutes per grocery trip by ordering via an online platform. This is equivalent to a 73% and 75% reduction in time spent on each activity that can be outsourced to online delivery. The average user could save 30 hours in a year, equivalent to \$970 in time value.¹



Over 200 million online food and grocery delivery orders were placed across all Australian platforms in 2025, enabling additional flexibility through...


152M hours saved
across all food and grocery delivery orders


equivalent to \$2.9B
value of time saved

Note: See Appendix for real-life case studies of how food and grocery delivery services can help consumers.
1. Assumes the average user orders 2-4 restaurant meals per month, and groceries once every 2-3 weeks. Monetary value of time is calculated using the opportunity cost method, assuming an average hourly wage of \$42.90 and leisure time valued at 50% of market wage (\$21.45). See Appendix B for full methodology.
Note: Online food delivery refers to platforms facilitating on-demand delivery of restaurant meals (e.g. DoorDash, Uber Eats); Online grocery delivery refers to home delivery of grocery items (e.g. DoorDash, Uber Eats, Coles Online, Woolworths Online). Source: Mandala analysis; See Appendix B for full list of sources.

Delivery platforms are developing innovative technologies that could save users more time

Delivery platforms are increasingly exploring innovative ways to incorporate emerging technologies into their service offerings. For example, since the second half of 2025 DoorDash has launched innovations including ChatGPT integration and Ask DoorDash.

These technologies have the potential to provide users with additional time savings and benefits – beyond those already captured in this chapter. They also illustrate how emerging technologies such as AI have the potential to transform delivery services.

While currently limited to the United States, these innovations could expand into the Australian market once proven effective and regulatory or operational barriers are addressed.

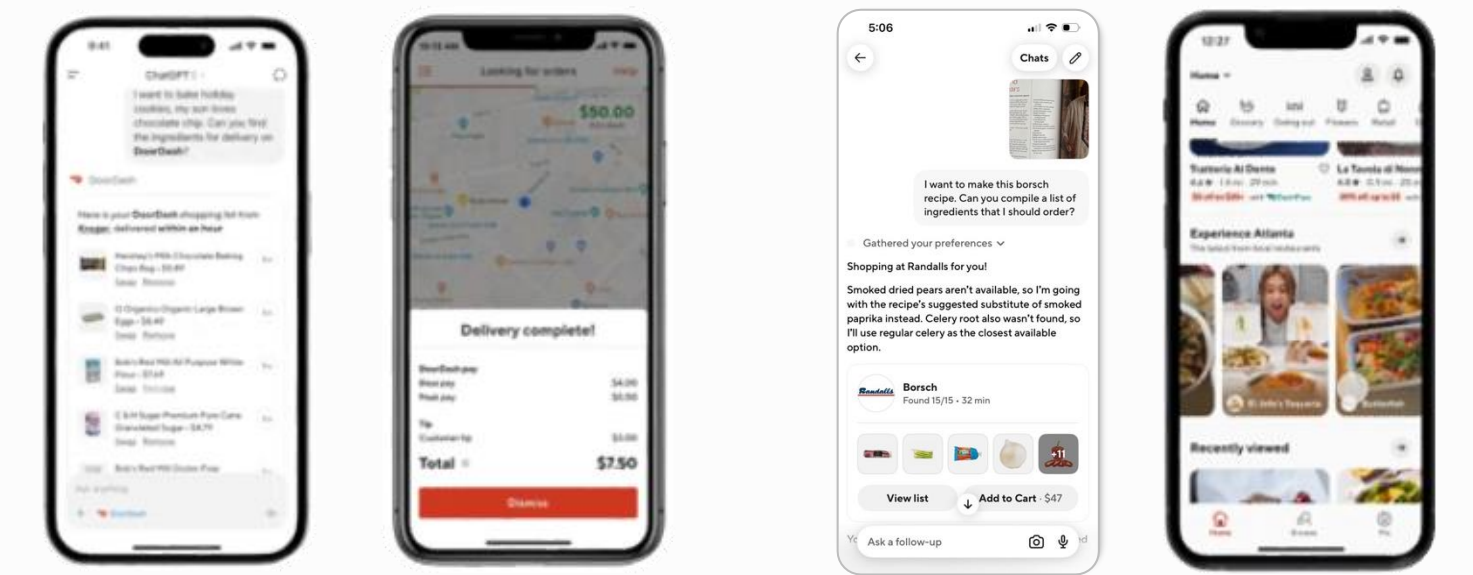
Examples of innovative AI applications DoorDash has deployed in the United States

ChatGPT Integration

Allows users to turn meal ideas from a ChatGPT conversation into a grocery delivery order. This reduces the time spent on grocery logistics.

Ask DoorDash

Allows users to search the DoorDash app in their own words or by uploading a photo. This decreases the time spent browsing reviews and planning meals.



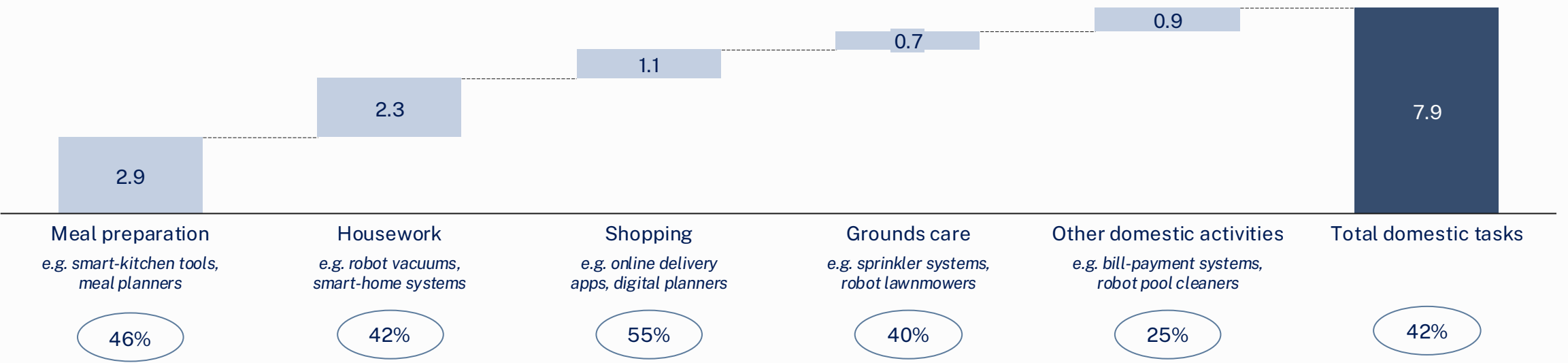
Source: DoorDash (2025) DoorDash Launches Grocery Shopping App Within ChatGPT; DoorDash (2026) Stop Scrolling, Just Ask: A New Conversational Way To Search on DoorDash; Mandala analysis.

Technological improvements over the next decade could reduce the time spent on domestic tasks by nearly 8 hours a week, if applied to their full potential

Time savings from task automation for the average Australian

Hours per week, percent automation score, 2026-2036 (projected) ■ Time saved ○ Automation score¹

Most potential time savings are attributable to automation in meal preparation and housework, at up to 2.9 hours and 2.3 hours per week respectively (37% and 29% of total potential savings). Shopping has the highest proportion of automatable tasks at 55%, with online platforms already enabling significant savings. In other areas, technologies like robot vacuums, smart-home systems, emerging automation technologies, and AI-augmented tools can reduce time spent on routine domestic tasks. However, it is important to note that these technologies will need to become more affordable and accessible to help certain groups access them, such as lower income households.



1. Automation scores show the maximum potential share of time saved through task automation; scores are an average for all tasks in each category, from Lehdonvirta et al. (2023).
Note: Individual components may not sum to totals due to rounding. Estimated savings per person aged 15 and above. 'Other domestic activities' includes home and vehicle maintenance, pet care, administration, and travel. See Appendix C for full methodology.
Source: ABS (2025) *How Australians use their time, 2024*; Lehdonvirta et al. (2023) *The future(s) of unpaid work: How susceptible do experts from different backgrounds think the domestic sphere is to automation?*; Schneiders et al. (2021) *Domestic Robots and the Dream of Automation: Understanding Human Interaction and Intervention*; Mandala analysis.

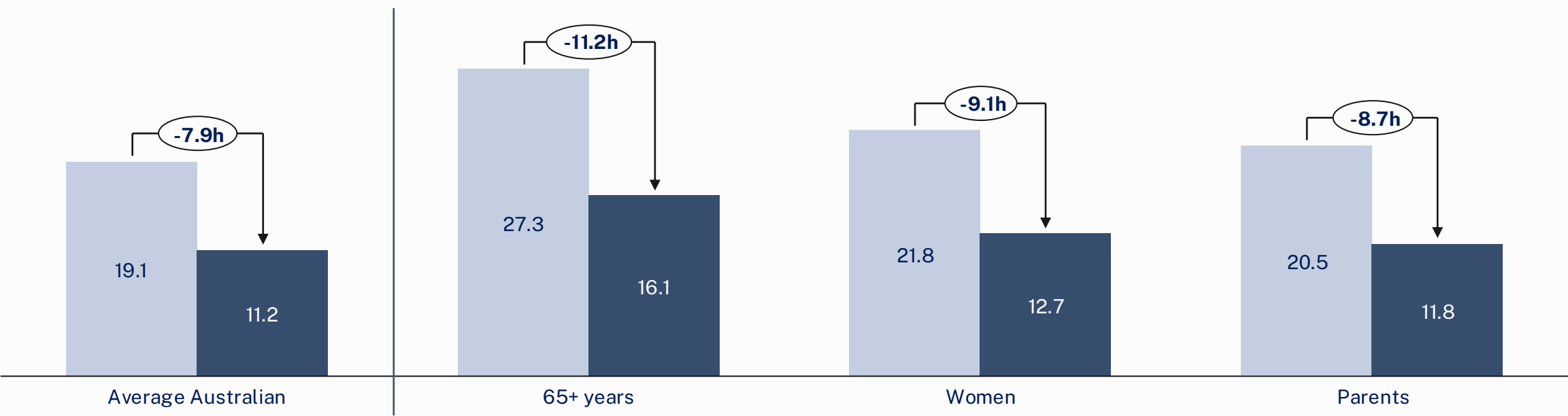
This could reduce the time spent on domestic tasks by 11 hours per week for older Australians, and 9 hours for women and parents

Time savings from task automation for specified cohorts

Hours per week, 2026-2036 (projected)

Current time spent Time spent after automation

Potential time savings are not distributed evenly, as those currently performing the most unpaid domestic labour stand to gain the most. If these gains are realised, individuals could have additional choice to reallocate time towards activities that matter the most to them such as paid work, leisure, caring or other activities.



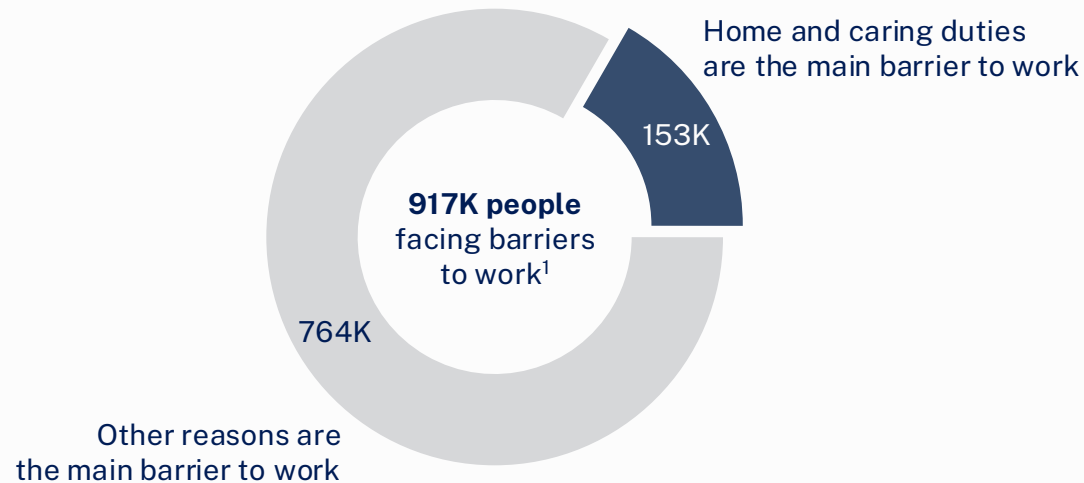
Note: Estimated savings per person aged 15 and above. 'Parents' only includes those with children aged 14 and under. See Appendix C for full methodology.
Source: ABS (2025) *How Australians use their time, 2024*; Mandala analysis.

Time savings on domestic tasks could alleviate barriers for 153,000 Australians who want to work more, adding up to \$2.5B in additional economic output

Barriers to work for unemployed or underemployed individuals

Number of people aged 15-64, 2025

153,000 unemployed or underemployed individuals cited home and caring duties as the main reason they were unavailable to work. For these groups, time saved from domestic task automation could be redirected to taking up a job or working more hours.

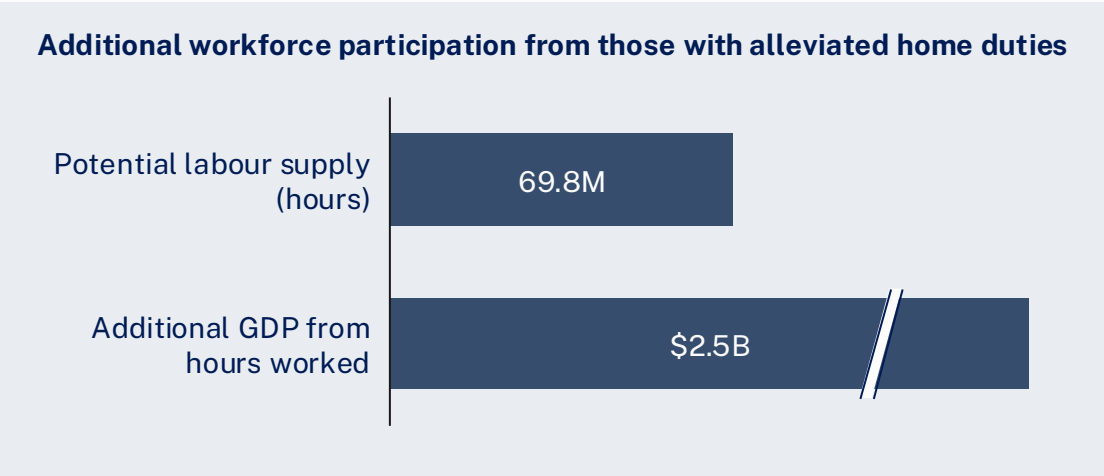


1. Includes unemployed individuals or part-time workers who wanted to work more hours, who were not available to start work or not looking for work due to specific barriers.
Note: Assumes all time savings are reallocated to paid work. GDP impacts only include additional output from 153,000 individuals citing home and caring duties as a barrier to paid employment; this assumes that all hours that would be freed can be employed at median part-time earnings (\$35.7/hr from ABS (2026)), and excludes the multiplier effects on economic activity from households purchasing goods and services for automation. Source: ABS (2025) *Barriers and Incentives to Labour Force Participation, Australia, December 2025*; Hertog et al. (2023) *The future of unpaid work: Estimating the effects of automation on time spent on housework and care work in Japan and the UK*; Mandala analysis.

Potential hours of work and additional GDP

Hours per year, AUD, 2036

Saving time on domestic tasks can enable these individuals to take up a job or work longer hours. For the rest of the population – either in full-time work, not in the labour force, or have other barriers to work – time savings are likely to be redirected to other preferred activities.





1

Australians average 26 hours of unpaid household labour per week, adding to household pressure and reduced wellbeing

2

Disparities in care and domestic work can reinforce inequalities across demographic groups

3

Ongoing technological improvements could save individuals up to 8 hours per week on domestic tasks by 2036

4

Government can help address the structural causes of inequalities in care and domestic work and support the equitable adoption of time-saving technologies

5

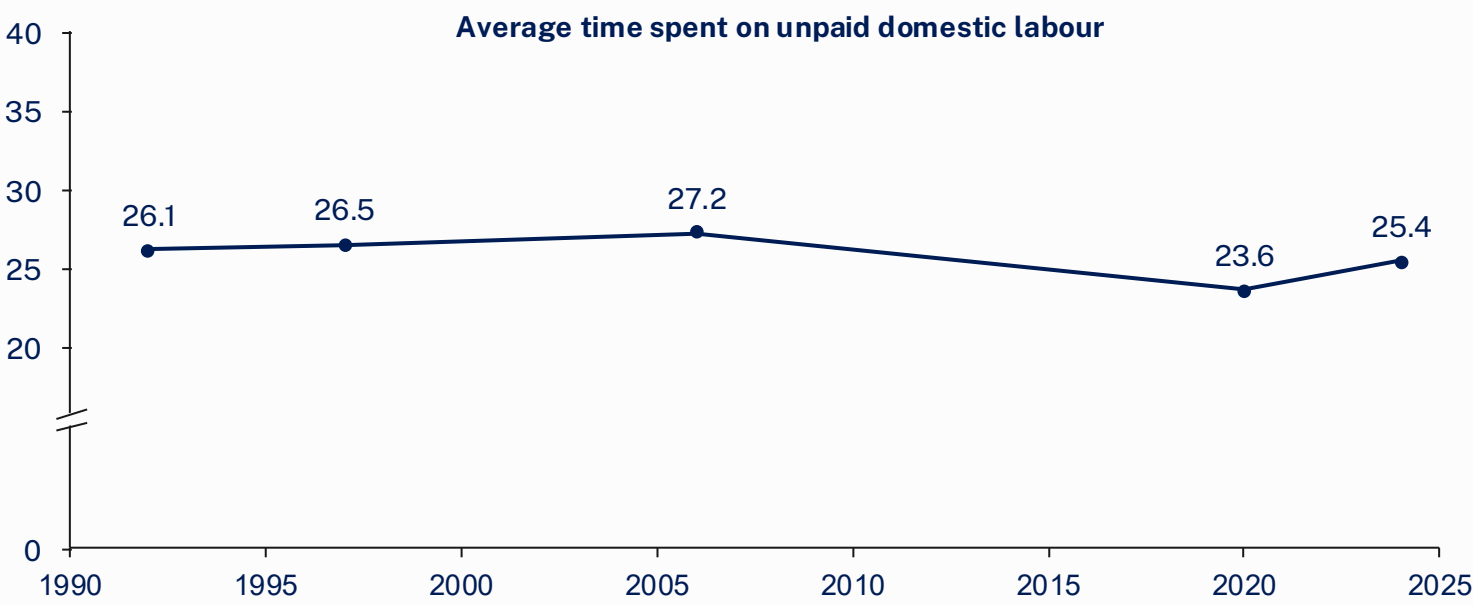
Appendix

While technology can create opportunities for automation and time savings, evidence suggests that it is insufficient to drive widespread change by itself

Historical trend in unpaid domestic labour

Hours per week, 1992-2024

Unpaid domestic labour has decreased only marginally over the last 30 years, despite significant technological advances over this period, including advanced automation applications, digital platforms, and smart home devices. Although technology has altered the composition of tasks and how they are performed, evidence is divided on whether it has meaningfully reduced the total time households spend on unpaid domestic work and care.





Technology alone is unlikely to reduce unpaid labour without accompanying structural change

- Rising quality expectations can offset time savings from technology, as seen in increasing standards of cleanliness and meal preparation
- Time savings from one type of unpaid labour (e.g. meal preparation) can be re-allocated towards other types (e.g. child care)
- Furthermore, the accessibility and affordability of time savings technologies must be addressed so that those who need them most, such as low-income households, can benefit from them.

Note: Unpaid domestic labour in this chart excludes volunteering activities. The 2020-21 Time Use Survey was collected during the COVID-19 pandemic, thus estimates are not fully comparable with previous collections due to changes in methodology.
Source: ABS (2025) *How Australians use their time, 2024*; Huws, U. (2019) *The Hassle of Housework: Digitalisation and the Commodification of Domestic Labour*; Bittman et al. (2004) *Appliances and their impact: the ownership of domestic technology and time spent on household work*; Mandala analysis.

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Policymakers have levers in 5 priority reform areas to address the structural causes of inequalities in care and domestic work

Overview of key recommendations for how policy can overcome inequalities in care and domestic work

Reform areas			Description
 Recognise	1	Improve economic measurement	 Incorporate unpaid labour into economic statistics to support more accurate, equity-informed policy design
	2	Enable equitable adoption of time-saving technologies	 Drive the equitable adoption of innovative time-saving technologies through targeted programs and incentives
 Reduce	3	Strengthen care services and support	 Shift care responsibilities from the non-market to the market economy through funding, subsidies and insurance schemes
	4	Encourage parental leave and flexible work	 Distribute paid and unpaid labour more equitably through carer entitlements, flexible work, and working-hour limits
 Redistribute			
 Reward	5	Improve income and tax incentives	 Support caregivers' incomes and encourage workforce re-entry through financial incentives

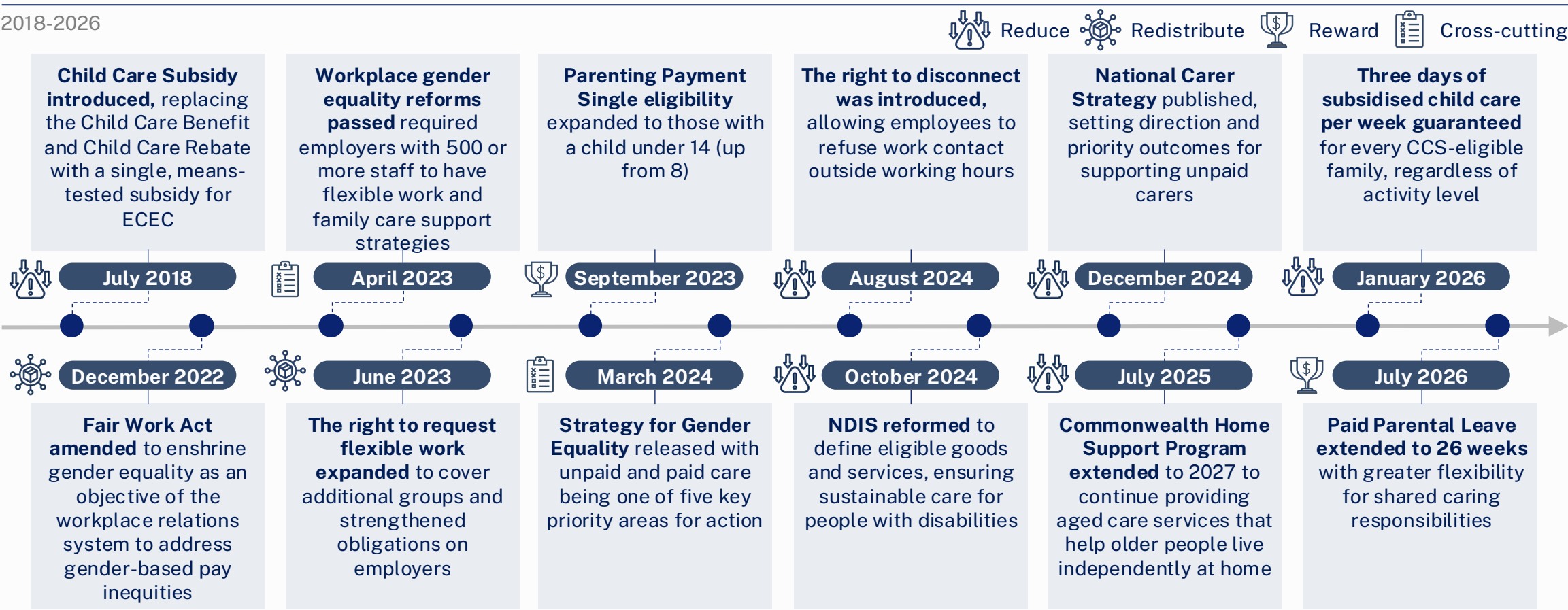
Governments, employers, and communities all play a role in reducing the domestic labour and care burden, while recognising that it remains a fundamental part of Australian society. The recommendations above focus primarily on public policy where many of the underlying drivers of unpaid labour are structural.

Note: Framework has been adapted from ILO (2022). Policy areas listed are not comprehensive but capture the most consequential domains. Source: Bridgman et al. (2017) *Structural transformation, marketization, and household production around the world*; Economics References Committee (2016) *Achieving economic security for women in retirement*; Productivity Commission (2024) *A path to universal early childhood education and care*; Stratton (2020) *The determinants of housework time*; WGEA (2025) *Gender equity insights 2025: The power of balance*; Mandala analysis.

The Australian Government has taken positive steps in these policy areas in recent years, but more progress can be made

Major Australian Government policies that can reduce inequalities in unpaid labour

2018-2026



Note: Timeline is not exhaustive but instead captures a selection of major policies. Source: Australian Government (2022) Fair Work Legislation Amendment (Secure Jobs, Better Pay) Act 2022; Department of Education and Training (2018) New Child Care Package; Department of Health, Disability and Ageing (2026) Commonwealth Home Support Program (CHSP) reforms; Department of Health, Disability and Ageing (2024) National Carer Strategy 2024-2034; Department of Prime Minister and Cabinet (2024) Working for Women: A Strategy for Gender Equality; Department of Social Services (2024) Additional support for single parents; Fair Work Ombudsman (2026) Requests for flexible working arrangements fact sheet; Ministers for the Department of Social Services (2023) Delivering a historic expansion of Paid Parental Leave; NDIS (2025) Changes to NDIS legislation; WGEA (2023) Get future ready: A guide to understanding changes to WGEA's legislation; Mandala analysis.

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Policymakers should consider 5 priority reform areas, drawing on proven international levers, to address inequalities in care and domestic work in Australia

Reform area	Lever	Country examples ¹
1 Improve economic measurement	Publish a household satellite account: measure household production to strengthen policies on non-market care and domestic activities	 
	Conduct frequent time use surveys: run regular, consistent surveys so trends in unpaid labour can be tracked over time	   ²
2 Enable equitable adoption of time-saving technologies	Support adoption of time-saving technologies: turn their potential into real time savings through enabling regulation, digital skills and digitised public services	 
	Promote equitable access to time-saving technologies: close digital access and skill gaps so time savings do not flow mainly to wealthier, connected households	 
3 Strengthen care services and support	Expand early childhood education and care (ECEC): increase affordability to shift care from the informal to the formal economy	   ²
	Expand support for aged care: reduce reliance on informal carers, who perform a large share of unpaid domestic labour	 
4 Encourage parental leave and flexible work	Reform parental leave: redistribute caring responsibilities and encourage greater paternal participation through higher entitlements and payment rates	 
	Broaden flexible work entitlements: support practical access to flexible work arrangements, recognising that organisations may implement these through a range of policies	 
5 Improve income and tax incentives	Fund superannuation for primary carers: reduce primary carers' retirement savings gap and lower reliance on the Age Pension	 
	Provide tax credits: reward caring responsibilities through the tax system, while supporting those who take up paid work with tax credits to support workforce re-entry.	 

1 For further detail on country examples, see following pages, 2 Case studies are also available for selected countries
Notes: Levers listed are not comprehensive. Country examples are drawn from a targeted literature review focused on well-evidenced examples of international best practice.
Source: Mandala analysis.

1 Changing how unpaid household labour is captured in economic statistics can help inform better designed policies

Overview of potential reforms for economic measurement

Outcome	Increase visibility on the scale and distribution of unpaid labour to design evidence-based policies that effectively address inequalities ¹	
Lever	 Publish a household satellite account ²	 Conduct frequent time use surveys
Rationale	Australia does not regularly publish a household satellite account — which is a measure of household non-market production. Regularly publishing this account could strengthen policies relating to unpaid labour such as on care and domestic activities.	Australia's time use surveys are infrequent. Methodological changes between waves complicate trend analysis. More frequent, consistent surveys would help policymakers to track changes in unpaid labour and assess whether interventions are effective.
Example policies	 The UK maintains an annual household satellite account that estimates the value of unpaid labour. This makes its scale and distribution visible to policymakers and has informed policy discussions.  Finland periodically values unpaid household labour and investigates its impact on national accounts. This has been used to evaluate the impact of family policies and potential improvements.	 Canada runs its time-use survey every five years, ensuring comparability across waves and capturing a sample large enough for provincial-level analysis. The data informs funding decisions and policy priorities across all levels of government.  The American Time Use Survey has been conducted annually since 2003. It is designed explicitly for comparability across years. This helps to track shifts in unpaid labour by detailed demographic and activity group.

1. Unpaid labour is often left out of traditional economic statistics with a belief that it is difficult to measure and less relevant for policies. This may lead to incorrect inferences about how unpaid labour is distributed which can limit policy effectiveness. 2. Household satellite accounts are intended to be used alongside traditional economic measurements, not replace them. Source: BLS (2026) American Time Use Survey; Data2x (2025) Role of Time Use Data in Policymaking in South Korea; Data2x (2019) Using Data to Address the Unpaid Work Burden: A Case Study of Finland; Government of Canada (2024) Time Use Survey; OECD (2014) Unpaid Care Work: The missing link in the analysis of gender gaps in labour outcomes; Statistics Finland (2024) The Value of household production fell in 2022; UN (2018) How to strengthen the usefulness of time use surveys for policymaking; UK Government (2025) Household Satellite Account, UK; Mandala analysis.

South Korea’s Time Use Survey informs policy in care, household labour, and gender equality

The Korean Time Use Survey (KTUS) collects household and individual-level data on how people spend their time across paid work, unpaid domestic and care work, and leisure. The survey has been conducted every five years since 1999, accumulating over 270,000 diaries by 2019.

The KTUS aligns with international best practice for depth and consistency of its data. Each survey response and diary captures detailed activities and context, including:

- **Activity data:** type of activity, duration of time spent, location, ICT device use, moods and feelings about time use
- **Individual context:** time pressure, satisfaction, fatigue
- **Demographic data:** age, employment status, parental status, household demographics

Consistent methodology across waves makes it possible to track changes over time. The data reveals persistent disparities in unpaid work burdens and directly informs policy across gender equality, care, education, labour and infrastructure.



Major policy developments in South Korea informed or influenced by Time Use Survey insights



Care and labour allowances

- **Seoul introduced a grandparent care allowance** for those providing more than 40 hours of child care per month. KTUS data established the rationale, eligibility criteria, and allowance rates under this scheme.
- **Gwangju Metropolitan City introduced a household labour allowance** targeting adults aged 40-59, typically excluded from other subsidies. KTUS findings on unpaid work burdens were prominent in this proposal.



Gender equality and work-family balance

- **Parental leave for fathers doubled** from 10 to 20 days in 2025. KTUS findings on gender imbalances in child care time provided the evidence base for this reform.
- **South Korea is expanding work-family policy objectives** to promote fairer sharing of care work, beyond monetary transfers. KTUS data highlights persistent gender inequalities in the home and difficulty in work-family balance, informing policy that aims to address low fertility.

Source: ILO (2018) *Time Use Surveys and Statistics in Asia and the Pacific*; Open Data Watch (2025) *Time Use Data Shape Better Policies*; Jun, J. & Eun, K-S. (2025) *Role of Time Use Data in Policymaking in South Korea*; OECD (2024) *Women’s employment and fertility in Korea*; Statistics Korea (2026) *National Transfer Accounts*; Statistics Korea (2026) *Household Production Satellite Account*.

2 Expanding access to time-saving technologies can reduce the time spent on domestic tasks and distribute its benefits more equitably

Overview of potential reforms to accelerate the adoption of time-saving technologies

Outcome	Equitably increase the adoption of innovative time-saving technologies	
Lever	 Support adoption of innovative time-saving technologies	 Promote equitable access to innovative time-saving technologies
Rationale	Technological improvements could reduce the time spent on domestic tasks by almost 8 hours a week over the next decade,¹ but realising this depends on adoption. Enabling regulation, digital skills and digitised public services would convert this potential into real time savings.	Around one in five Australians are digitally excluded, with low-income, older and First Nations households facing the steepest barriers to affording, reaching or using digital tools. Without targeted support, technology's time savings could flow to higher-income, well-connected households, further widening gaps.
Example policies	 Finland mandates electronic prescriptions through legislation phased in from 2010. Scripts can now be filled at any pharmacy and renewed online, easing the load on people managing repeat medicines for children, elderly parents or chronic conditions.  Estonia delivers almost all public services online, with a 'once-only' data rule and pre-filled forms. The shift is estimated to save citizens and the state 820 years of working time a year, around 2% of GDP.	 Singapore's DigitalAccess@Home programme gives 60,000 low-income households subsidised broadband and a laptop or tablet, while Mobile Access for Seniors provides subsidised smartphones and mobile plans to low-income people aged over 60. Both pair access with free skills training.  The UK's Digital Inclusion Action Plan helps low-income, older and disabled people get online. In its first year it donated around 22,200 refurbished devices and connected over 1M people to cheaper internet.

¹ See analysis on page 27
Source: Aarnio et al. (2020) First insight to the Finnish nationwide electronic prescription database as a data source for pharmacoepidemiology research; Kanta.fi (2026) Prescriptions and medicines; Centre for Public Impact (2019) e-Estonia The Information Society since 1997; Australian Digital Inclusion Index (2025) Measuring Australia's digital divide; Infocomm Media Development Authority (2024) About IMDA Digital Access Programme; The Ministry of Digital Development and Information (2023) Empowering Singaporeans: New DigitalAccess@Home Scheme to Strengthen Digital Inclusion; UK Government (2026) Digital Inclusion Action Plan: One Year On; Mandala analysis.

3 Expanding formal care can give households greater flexibility, allowing them to more easily reduce the time spent on unpaid labour (where desired)

Overview of potential reforms for care services and support

Outcome	Shift care from the informal to the formal economy where appropriate by reducing the cost of formal services	
Lever	 Expand early childhood education and care (ECEC)	 Expand support for aged care
Rationale	Parents in Australia spend nearly double the OECD average proportion of income on ECEC as of 2022. Increasing the affordability of ECEC would help shift care from the informal to the formal economy.	Primary carers currently perform a disproportionate share of unpaid care. With an ageing population in Australia, this load could increase without policy intervention. Expanding formal care would reduce reliance on informal care by making formal services more affordable.
Example policies	 Sweden's ECEC system caps fees at a maximum of 3% of household income. This model ranks Sweden among the top OECD countries for ECEC affordability.  Quebec provides universal \$9.65 per day ECEC to all households regardless of income. This model has increased ECEC enrolment and supported workforce participation among mothers.	 Japan's long-term care insurance program mandates insurance payments for everyone aged 40+. This has improved workforce participation for primary carers, particularly for women.  Denmark provides universal aged care, with access to care based on a needs assessment. Danish unpaid carers report fewer difficulties balancing work with care compared with EU average.

Source: Bray (2023) OECD Estimates of relative affordability of childcare; Danish Government (2024) Denmark's National Action Plan for Long Term Care; Fortin et al (2013) L'impact des services de garde à contribution réduite du Québec sur le taux d'activité féminin, le revenu intérieur et les budgets gouvernementaux; Fortin (2017) What Have Been the Effects of Quebec's Universal Childcare System on Women's Economic Security?; Productivity Commission (2024) A path to universal early childhood education and care; Productivity Commission. (2022) Early Childcare Costs and Labour Force Participation; Rodrigues et al. (2013) The indirect costs of long term care; Shimizutani (2013) The Future of Long-term Care in Japan; UNICEF (2019) Sweden, Norway, Iceland, Estonia and Portugal rank highest for family-friendly policies in OECD and EU countries; Mandala analysis.

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The Bogotá Care Block model provides centralised public services to parents and carers, improving equity of access

Bogotá Care Block model



Care Blocks serve as central neighbourhood hubs with accessible services, including:

- Professional skills development, literacy and educational training
- Legal aid and health assistance (e.g. psychological counselling)
- Caregiving support, daycare and disability support
- Domestic task assistance, laundry services, administrative support
- Self-care and personal fulfilment (e.g. music, dance, recreational activities)

This reduces unpaid domestic labour burdens for individuals by redistributing care and domestic responsibility to broader support networks, on a system-wide level

Key outcomes



Over 200,000 services delivered across Care Blocks, Care Buses, and home delivery in 2022. Recipients are predominantly women at the intersection of multiple challenges, such as low-income primary caregivers with limited access to services.



Centralised access to professional development, personal well-being, and care services. This helps address the “care crisis” that limits caregiver time and resources to engage in education, employment, and self-care.



All services accessible within a 15 to 20-minute walk with free Care Buses in rural and peripheral areas. This alleviates constraints for time-poor individuals who do not have flexible transport options, especially women in lower-income communities.

Source: Sistema de Cuidado (2026) *Conoce las Manzanas del Cuidado (Care System - Care Blocks)*; NPR (2023) *A unique program in Bogota aims to lift up unpaid family caregivers*; The Institutional Architecture Lab (2025) *New institutions for care: Rethinking systems for those who sustain society*; Mandala analysis.

4 Flexible work and paid parental leave can distribute care and domestic work more equitably and support workforce participation

Overview of potential reforms for parental leave and flexible work

Outcome	Promote a more equitable distribution of unpaid labour and support workforce participation	
Lever	 Reform parental leave	 Broaden flexible work entitlements
Rationale	Australia reserves two weeks of government-funded paid parental leave for fathers, paid at the minimum wage. Take-up among fathers remains low. Expanding entitlements would encourage greater paternal participation and distribute caring responsibilities more evenly.	Broadening access to flexible work could encourage more fathers to take on caring roles and support mothers in returning to paid work.
Example policies ¹	 Germany replaced a means-tested parental leave program with an earnings-related transfer paying 67% of prior income. This reform increased the likelihood of mothers returning to work.  Sweden reserves three non-transferable months of parental leave for each parent paid at 78% of earnings. This has contributed to fathers' share of parental leave days rising from around 12% in 2002 to around 30% today.	 German employees have the right to request reduced or flexible hours after six months of service. Evidence has found that access to flexible work arrangements supports women's workforce participation.  UK employees have the right to request flexible work from their first day of employment. Evidence suggests that access to flexible work has supported British mothers in staying in and returning to the workforce.

1. Parental payments in Germany and Sweden have fixed minimum and maximum amounts.
Source: AIFS (2025) Take-up of Parental Leave Pay and Dad and Partner Pay among Australian parents; Duvander & Lofgren (2022) Sweden; Bergemann & Riphahn (2023) Maternal employment effects of paid parental leave; Chung & van der Horst (2017) Women's employment patterns after childbirth and the perceived access to and use of flexitime and teleworking; Chung & van der Lippe (2018) Flexible Working, Work-Life Balance, and Gender Equality; Fair Work Ombudsman (2026) Flexible working arrangements; German Government (n.d.) Terms and conditions of employment; Kuang et al (2025) How Do Parents Share Childcare That Interferes With Paid Work?; Maraziotis (2024) Flexibility for equality: Examining the impact of flexible working time arrangements on women's convergence in working hours; Mandala analysis.

5 Supplementary pension payments and tax credits can provide financial compensation for care and domestic work and encourage workforce re-entry

Overview of potential reforms for income and tax incentives

Outcome	Support income for unpaid carers and incentivise workforce re-entry	
Lever	 Fund superannuation for primary carers	 Provide a tax credit for parents and carers
Rationale	Superannuation is not currently paid on the government-funded Carer Payment. Primary carers lose an average \$175K in retirement savings by age 67. Extending superannuation contributions to carers would help to reduce this gap, lowering reliance on the Age Pension.	Means-tested carer payments are withdrawn as income rises. Combined with income tax, carers in Australia earn little per additional hour worked. Income tax credits could reduce this disincentive, making workforce re-entry more financially viable.
Example policies	 The UK protects State Pension entitlements for carers performing over 20 hours of care per week. Previously, carers did not accumulate 'qualifying years' towards their State Pension.  Germany's long-term care insurance pays mandatory pension contributions for recognised caregivers. Without these credits, caregiving reduces lifetime earnings and future pension benefits.	 The UK's WFTC supplemented wages for low-income working parents, reducing the disincentive rates of entering employment. This supported workforce re-entry and labour market outcomes, particularly for mothers.  The US offers low-income working parents an earned income tax credit that increases with earnings, creating a direct incentive to work more. This has been shown to significantly increase workforce participation among single mothers.

Source: Brewer et al. (2006) Did working families' tax credit work?; Carers Australia (2022) Caring Costs Us: The economic impact on lifetime income and retirement savings of informal carers; German Federal Government (2026) Social security for family carers; Korfhage & Weckemann (2024) Long-run consequences of informal elderly care and implications of public long-term care insurance; KPMG (2024) Addressing the cost of parents coming back to work; Meyer & Rosenbaum (2001) Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers; Phillips (2024) Work incentives in Australia; UK Government (2026) Carers Credit; UK Government (2010) National Insurance credits and the single-tier pension; Mandala analysis.

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5

Appendix



Mary uses DoorDash for all her grocery needs to save time throughout the week

Mary is a single mother of two, ordering groceries on DoorDash up to five times a week.

Mary relies on ALDI through DoorDash as a full replacement for her grocery shopping. With a 7-year-old with level 3 autism and an energetic 5-year-old, shopping in person is rarely a realistic option. DoorDash fills that gap.

The value proposition is straightforward for Mary – ALDI’s prices plus just a few dollars more. She loved the deal as it encouraged her to use the platform more deeply and has recommended DoorDash to many of her friends. She often cites the usefulness of the live chat as a reason to use the platform.

“DoorDash has been a major relief for me, especially when my children are sick and I can’t leave the house. The **convenience of having my ALDI grocery shop delivered for just a few dollars more is life-changing.**”
— Mary, single mother of two young children

Source: DoorDash external stakeholder consultation (2026);
Mandala analysis.



John uses DoorDash for all his grocery needs when he cannot get to the supermarket himself

John is a mobility-limited 79-year-old who uses DoorDash to do his weekly ALDI grocery shop.

John has always taken pride in doing the grocery shopping and cooking for his family. When illness brought him in and out of the hospital between 2023 and 2024, this became more difficult. As he is unable to get to the supermarket himself, he now does his weekly grocery shop through the platform. He does not mind the surcharge, given how great the service is for people like him in this position.

To John, DoorDash has offered more than just convenience – it has restored autonomy over his role within his household and allows him to continue doing what he loves for his family. He loves shopping through the platform and ALDI as it is great value and allows him to save money.

“It’s important that we have a service like this for people in my position. **The service is great, and I love chatting with the friendly Dashers.**”
— John, mobility-limited 79-year-old

Source: DoorDash external stakeholder consultation (2026); Mandala analysis.

Appendix A: Methodologies to value unpaid labour in the economy (1 of 2)

Overview of valuation methodologies to quantify unpaid labour

The replacement cost method is preferred over the opportunity cost method in literature		
Method	Replacement cost method	Opportunity cost method
Description	Values unpaid labour at the cost to hire a replacement service, typically applying the wage rate of the most comparable occupation	Values unpaid labour at the cost of forgone employment time, typically applying the wage rate of the usual occupation of the individual
Examples	▪ If the activity is minding children, labour is valued at a child carer’s wage ▪ If the activity is food preparation, labour is valued at a kitchen assistant’s wage	▪ If an unpaid carer is an electrician, labour is valued at an electrician’s wage ▪ If a lawyer is cooking, cooking time is valued at a lawyer’s wage
Benefits and drawbacks	▪ Preferred approach in literature, representing the best market-equivalent price for the value of unpaid labour being produced ▪ Produces more conservative estimates than the opportunity cost method ▪ Sensitive to the choice of wage rates used for valuation	▪ Estimates are skewed higher by individuals in higher-paying or specialised occupations, who raise the economy-wide average wage ▪ Assumes all time spent on unpaid work could be redirected to paid employment

Source: ABS (2024) *Measuring the labour contribution of unpaid care in the Labour Account*; OECD (2018) *Including unpaid household activities: An estimate of its impact on macro-economic indicators in the G7 economies and the way forward*; Mandala analysis.

Appendix A: Inputs and assumptions to quantify unpaid labour (2 of 2)

Inputs, assumptions, and data sources to quantify unpaid labour

Component	Input	Assumption / note	Source
1 Total time spent on activity	Average time spent per unpaid labour activity for population aged 15 and above	▪ The ABS Time Use Survey records average daily time spent per person on each unpaid activity category ▪ Multiplied by the Australian population aged 15 and above (21.9 million) to produce aggregate daily hours ▪ Population aged 15 and above used as the relevant base, consistent with ABS labour force definitions	ABS (2025) <i>How Australians Use their Time</i> .
2 Wage rate per hour	Average wage across all unpaid labour categories	▪ Each unpaid labour category is matched to the most closely equivalent paid occupation using ANZSCO skill level 3 classifications (e.g. food preparation assistant as the proxy for cooking) ▪ Wage rates reflect the median hourly earnings for each matched occupation ▪ Rates drawn from the 2025 Survey of Employee Earnings and indexed forward using the 2024–25 Wage Price Index	ABS (2025) <i>Employee Earnings and Hours, Australia</i> ; ABS (2025) <i>Wage Price Index, Australia</i> .
3 Economic contribution of the unpaid labour economy in Australia	Total annual economic contribution = \$980 billion	▪ For each activity <i>i</i>, contribution is calculated as: population × average time spent_{<i>i</i>} × wage rate_{<i>i</i>} ▪ Contributions are summed across all unpaid labour categories to produce the total annual estimate ▪ A replacement cost approach is applied throughout: estimates reflect the market value of replacing unpaid labour with equivalent paid workers ▪ This is consistent with Risse (2025), which estimates the 2021 economic contribution of unpaid labour	Risse (2025) <i>By How Much Is ‘Women’s Work’ Undervalued in the Economy?</i>

Appendix B: Inputs and assumptions to estimate time savings from online food and grocery delivery services (1 of 2)

Inputs, assumptions, and data sources for time savings from online food and grocery delivery services (1 of 2)

Component	Input	Assumption / note	Source
1Value of time (\$)	Value of travel time = \$21.01/hr	Based on TfNSW value of \$20.62/hr in 2024, adjusted for inflation	Transport for NSW (2025) Economic Parameter Values; ABS (2026) Consumer Price Index, Australia.
	Value of time for all other activities = \$33.25/hr	- Based on opportunity cost method from Hensher et al. and TfNSW - Weighted average hourly wage (\$42.90/hr) and value of leisure time (\$21.45/hr assumed at 50% of wage)	Hensher et al. (2022) Time Allocation of Reduced Commuting Time During COVID-19 Under Working from Home; Transport for NSW (2022) Working from Home – Final Report.
2Time saved from commuting to a restaurant (minutes)	Commute time for a round trip to/from a restaurant = 35.6 minutes	- Based on DoorDash administrative data, the average distance from restaurant to consumer delivery destination was 3.56km - We assumed the typical consumer travels with a speed of 12km/hr, from TfNSW	Transport for NSW (2025) Economic Parameter Values; DoorDash administrative data (2025).
3Time saved from cooking and cleaning per meal	Time taken to prepare an average household meal = 38 minutes	- Based on the ABS reported 76 minutes in a day spent on cooking and food/drink preparation - We assumed 2 daily meals prepared on average	ABS (2025) How Australians use their time, 2024.
4Time spent ordering food on a delivery platform (minutes)	Time taken to order food on the DoorDash platform = 10 minutes	We assumed this was the average time taken from login until a food order is placed	Desktop research.
5Total food delivery orders replacing restaurant meals	Total food delivery orders to people who would otherwise dine-in at a restaurant = 103.1M	- We estimated total food delivery orders across Australia to be 206.2M in 2025 - Based on DoorDash administrative data, scaled up using market share data from IBISWorld - Out of all food delivery orders, 50% are attributed to each counterfactual	IBISWorld (2025) Online Food Ordering and Delivery Platforms in Australia Industry Analysis; DoorDash administrative data (2025).
6Total food delivery orders replacing self-prepared meals	Total food delivery orders to people who would otherwise prepare/cook a meal = 103.1M		

Appendix B: Inputs and assumptions to estimate time savings from online food and grocery delivery services (2 of 2)

Inputs, assumptions, and data sources for time savings model from online food and grocery delivery services (2 of 2)

Component	Input	Assumption / note	Source
7 Time saved from commuting to and from a grocery store	Commute time for a round trip to/from a grocery store = 28 minutes	- Based on DoorDash administrative data, the average distance from the grocery store to the consumer's delivery destination was 3km - We assumed the typical consumer travels with a speed of 13km/hr, from TfNSW	Transport for NSW (2025) <i>Economic Parameter Values</i> ; DoorDash administrative data (2025).
8 Time saved from in-person grocery shopping	Time spent shopping and purchasing groceries = 33 minutes	Based on Bjørgen et al. reported value of 25.05 minutes, and FMI reported value of 41 minutes for grocery shopping	Bjørgen et al. (2021) <i>E-groceries: Sustainable last mile distribution in city planning</i> ; The Food Industry Association (FMI) (2025) <i>U.S. Grocery Shopper Trends</i> .
9 Time spent ordering groceries on a delivery platform	Time taken to order groceries on the DoorDash platform = 15 minutes	We assumed this was the average time taken from login until a grocery order is placed	Desktop research.
10 Total grocery delivery orders replacing in-person trips	Total grocery delivery orders = 73.8M	Based on DoorDash administrative data, scaled up using market share data from IBISWorld	IBISWorld (2025) <i>Online Food Ordering and Delivery Platforms in Australia Industry Analysis</i> ; DoorDash administrative data (2025).

Appendix C: Inputs and assumptions to estimate time savings from domestic automation technologies

Methodology to estimate time savings from domestic automation technologies

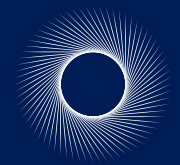
Component	Input	Assumption / note	Source
1 Time spent on domestic tasks by age, sex, parental status, and employment status	Average hours per day spent on domestic tasks including: - Cooking and food/drink preparation (including cooking for child and cooking for adult care) - Housework - Shopping and purchasing goods - Gardening, watering and grounds care - Other domestic activities (Pet care, Administration, Home and vehicle maintenance, Travel for domestic activities)	Based on the ABS Time Use Survey, 2024	ABS (2025) <i>How Australians use their time, 2024.</i>
2 Automation scores	Maximum share of time spent on a domestic task that will be automatable in the next ten years: - Cooking = 46% - Housework = 42% - Gardening, watering and grounds care = 40% - Pet care = 32% - Administration (banking, bills, mail, planning) = 52% - Home and vehicle maintenance = 36%	- Automation scores reflect the % of tasks that are automatable, assumed to be the maximum % of time saved - Gardening, pet care, administration, and home and vehicle maintenance were aggregated into 'Other domestic activities'	Lehdonvirta et al. (2023) <i>The future(s) of unpaid work: How susceptible do experts from different backgrounds think the domestic sphere is to automation?</i>
3 Time savings from automation	Calculated using the weekly time spent on domestic tasks, multiplied by automation scores (%)	- Based on methodology from Hertog et al. (2023) - Note: time savings vary by age, sex, parental status, and employment status	Hertog et al. (2023) <i>The future of unpaid work: Estimating the effects of automation on time spent on housework and care work in Japan and the UK</i> ; Schneiders et al. (2021) <i>Domestic Robots and the Dream of Automation: Understanding Human Interaction and Intervention.</i>

Appendix C: Inputs and assumptions to estimate effects on workforce participation from reduced unpaid labour

Methodology to estimate the effects on workforce participation from reduced unpaid labour

Component	Input	Assumption / note	Source
1 Total people with home and caring duties as the main barrier to work	153,000 individuals with home and caring duties as the main barrier 764,000 individuals with other reasons as the main barrier	- Scope of interest: ‘Persons not in labour force (PNILF) who wanted a paid job’ or ‘Part-time workers who preferred more hours’ - Only focused on individuals who had ‘Home duties’ or ‘Caring for children’ as the main reason they were not available to start work or not looking for work	ABS (2025) <i>Barriers and Incentives to Labour Force Participation, Australia, December 2025.</i>
2 Additional work hours available per person	10.4 hours per week per person not currently employed 7.2 hours per week per person employed part-time	- Time savings analysis was split by employment status: full-time, part-time, not currently employed (unemployed or not in labour force) - Assumes all time savings are reallocated to paid work, only for individuals limited by home and caring duties	ABS (2025) <i>How Australians use their time, 2024</i> ; Lehdonvirta et al. (2023) <i>The future(s) of unpaid work: How susceptible do experts from different backgrounds think the domestic sphere is to automation?</i>
3 Median hourly earnings per part-time worker	\$35.71 per hour	Assumes earnings from additional work hours from (2) are valued at the average part-time earnings; total additional hours are lower than typical full-time working hours (40 hours per week)	ABS (2026) <i>Average Weekly Earnings, Australia.</i>
4 GDP impacts	\$2.5B additional output	- Note: GDP impacts are only valued from 153,000 individuals limited by home and caring duties - This assumes that all hours that would be freed can be employed at median part-time earnings, and excludes the multiplier effects on economic activity from households purchasing automation goods and services	





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