



# Telecommunications Expenditure in Australia



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Fact Sheet

Dr Greg Ogle

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Authored by Dr Greg Ogle

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South Australian Council of Social Service

Website: [www.sacoss.org.au](http://www.sacoss.org.au)

Email: [sacoss@sacoss.org.au](mailto:sacoss@sacoss.org.au)

Telephone: 08 8305 4200

Australian Communications Consumer Action Network

Website: [www.accan.org.au](http://www.accan.org.au)

Email: [research@accan.org.au](mailto:research@accan.org.au)

Telephone: +61 2 9288 4000

If you are deaf, or have a hearing or speech impairment, contact us through the National Relay Service: [www.relayservice.gov.au](http://www.relayservice.gov.au).

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# Executive Summary

Unless otherwise stated, the data in this Fact Sheet is drawn from the Australian Bureau of Statistics' (ABS) *2015-16 Household Expenditure Survey*<sup>1</sup> (HES), which was released in September 2017. However, the data here uses a broader definition of telecommunications to include home computer equipment – on the grounds that computers, laptops and tablets are now standard communication devices.<sup>2</sup> It does not include any costs related to content of digital services (such as pay-walled media or entertainment [eg. Netflix]), although the internet data used to download those services is included.

Key points from the data:

- Telecommunications are a significant household expenditure and on average, households spend more on telecommunications than on energy
- Children are a key factor in increasing telecommunications expenditure
- Telecommunications expenditure is significantly regressive, accounting for nearly three times the proportion of household disposable income for the lowest income quintile as for the highest quintile
- Lone person households, pensioners and other social security recipients, and those renting (particularly from state housing authorities):
  - spend proportionately more of their income on telecommunications than other households, but
  - spend significantly less on telecommunications - and are therefore likely to be more digitally excluded.

The net result of massively increased usage but decreasing prices is that for average households telecommunications expenditure has declined in real terms and as a proportion of household income in the last 6 years. However, the same is not true for the lowest income quintile households where telecommunications expenditure has increased in real terms, as has the telecommunications share of household expenditure.

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<sup>1</sup> ABS (2017) *6530.0 Household Expenditure Survey, Australia 2015-16*, Australian Bureau of Statistics, Canberra.

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyReleaseDate/45244540252D2FDDCA25710800769AD8?OpenDocument>

<sup>2</sup> Home computer equipment is included as “recreational and education equipment” in the HES. The telecommunications categorisation here also excludes “postal services” which are included in the “Communications” category in the summary HES.

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# Summary Data

Telecommunications are essential services which enable, and are increasingly required for, access to government services, education, employment, commerce and entertainment. Telecommunications are also vital for communicating with friends and participating in community, and are a significant expenditure item in many household budgets.

**Table 1: Average Weekly Household Telecommunications Expenditure, 2015-16**

<b>Category</b>	<b>Average Weekly Expenditure</b>
Home computer equipment	6.93
Mobile phone purchase	3.00
Other phone equipment*	0.12
Smart watches and wearables	0.02
Computer/equipment repair and maintenance	0.53
<b>Total Communication Equipment</b>	<b>\$10.60</b>
Mobile phone account	17.24
Fixed phone account	14.02
Internet charges (account)	5.97
Mobile phone charges (non-account, incl. pre-paid)	2.24
Other phone and fax charges	2.03
Internet charges (non-account, incl. pre-paid)	0.48
Public telephone calls	0.01
<b>Total Communication Charges</b>	<b>\$42.16</b>
<b>TOTAL TELECOMMUNICATIONS EXPENDITURE</b>	<b>\$52.76</b>
<i>% of Total Goods &amp; Service Expenditure</i>	<i>3.7%</i>
<i>% of Household Disposable Income</i>	<i>3.1%</i>

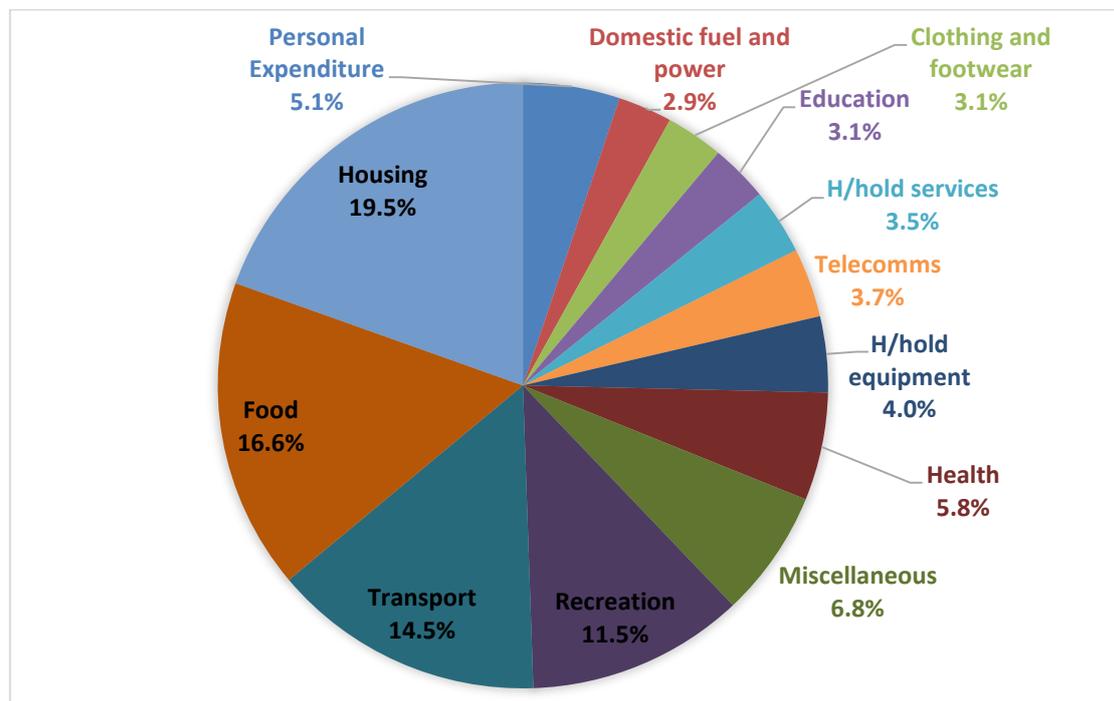
\* Includes telephone handset purchase, answering machines, modems (separately purchased)

As with all HES data, these figures represent the average expenditure of all households. Where some households have little or no expenditure in any category, this brings down the average for all households but underestimates the expenditure for those households with that expenditure. Hence for instance (in the starkest example), the average expenditure on housing is reduced greatly by those who own their own home and have limited weekly costs, while the HES rent expenditure figure of \$105 per week is well below what any renter would actually pay (but the result of averaging the rent paid across all households). For telecommunications, ABS census data shows that 14.1% of households do not have internet access at home (or by mobile). Accordingly, the figures above underestimate the telecommunications expenditure for those households who are connected and do not account for very great differences in usage between households. However, the figures do represent telecommunications expenditure averaged across all households and as such enable a significant analysis and comparisons to be made.

# Relative Importance of Telecommunications Expenditure

Telecommunications is not one of the three big weekly household expenditures (housing, food and transport), but at 3.7% of average household expenditure, it is significant – as evidenced by the comparison with other important household expenditures in Figure 1.

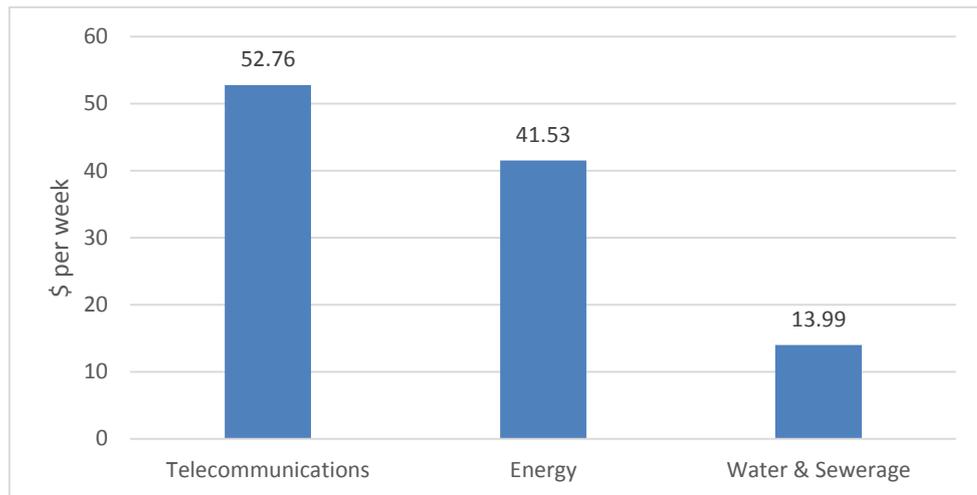
**Figure 1: Share of Household Goods and Services Expenditure**



Note: categories and proportions of expenditure adjusted to definition of telecommunications used herein.

Telecommunications expenditure is also significant compared to other public utilities. Average household expenditure on telecommunications is greater than on either energy (electricity and gas) or water/sewerage. See Figure 2.

**Figure 2: Comparative Expenditure on Utilities**



Note: Energy expenditure includes HES estimate of expenditure on solar panels.

# Telecommunications Expenditure by Income

## Analysis by Income Quintile

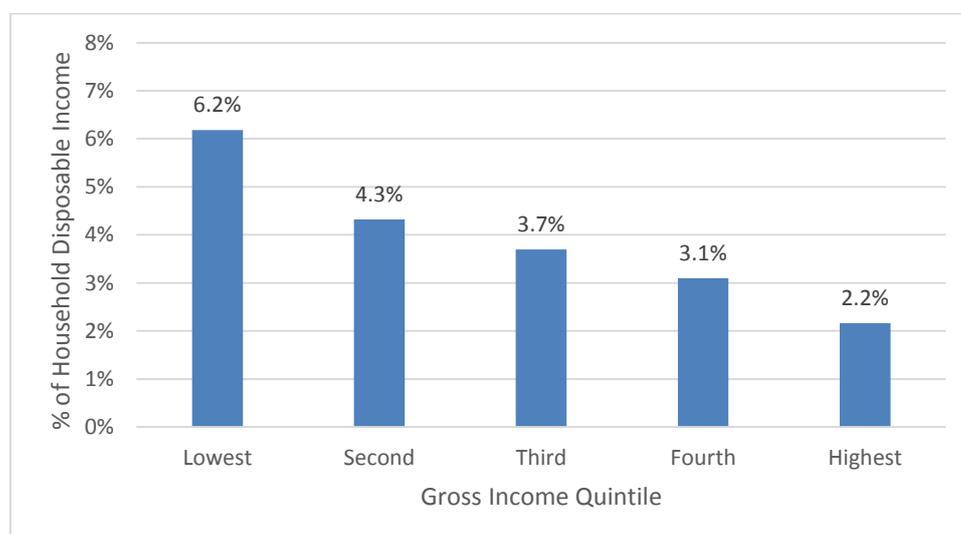
Telecommunication expenditure is regressive: telecommunications make up proportionately more of the expenditure of people on the lowest incomes than those on higher incomes (see Table 2).

**Table 2: Weekly Telecommunications Expenditure by Gross Income Quintile**

	Gross Income Quintile				
	Lowest	Second	Third	Fourth	Highest
Equipment	5.09	7.04	9.09	12.53	19.04
Current Charges	23.40	32.26	42.79	50.79	61.45
<b>Telecommunications Expenditure</b>	<b>\$28.49</b>	<b>\$39.30</b>	<b>\$51.88</b>	<b>\$63.32</b>	<b>\$80.49</b>
<b>% of Total Goods &amp; Services Expenditure</b>	<b>4.5%</b>	<b>4.2%</b>	<b>4.0%</b>	<b>3.8%</b>	<b>3.1%</b>

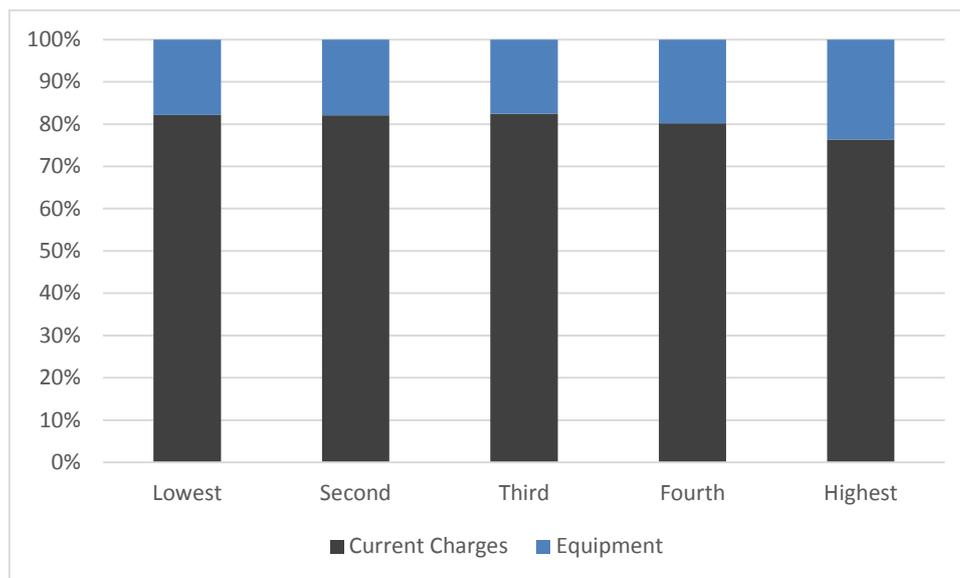
The regressive nature of the expenditure is even clearer when considered relative to income (rather than expenditure), as in Figure 3. The figures differ because those on higher incomes are able to save a proportion of their income, and therefore any expenditure is a smaller proportion of income than expenditure. By contrast, those in the lowest income brackets are often spending more than their income (eg. living on savings or borrowings). While the HES data is usually expressed in terms of percentages of household expenditure, measuring telecommunications expenditure as a per cent of household income better reflects affordability and the impact on the household budget.

**Figure 3: Telecommunications Expenditure by Income Quintile**



Those on low incomes also spend proportionately more on account costs than on equipment. Figure 4 shows that for those on the highest incomes, 76% of telecommunications expenditure goes on current charges, by comparison with 82% for the lowest income quintile. This means that those on the lowest income not only spend proportionately more of their income on telecommunications, but their expenditure is less capital intensive – meaning they are also likely to have fewer and/or cheaper (lower quality) devices.

**Figure 4: Share of Expenditure on Equipment and Current Charges**



Further in relation to current charges, using data from the Australian Digital Inclusion Index<sup>3</sup>, SACOSS has calculated that the value for money obtained by the highest income quintile is more than three times that of the lowest income quintile (1.2GB per \$1 spend for the lowest income quintile versus 3.9GB per \$1 for the highest income quintile).<sup>4</sup>

In summary, those on the lowest incomes spend proportionately more on telecommunications, use fewer or cheaper devices and get worse value for money on services.

## Income Source

There are also major differences in telecommunications expenditure patterns depending on the main source of household income. Those households whose major source of income is private (ie. wages and salaries, owning unincorporated businesses, or other private wealth) spend about twice as much per week on telecommunications as households who are reliant

<sup>3</sup> Thomas J, Barraket J, Wilson J, Ewing S, MacDonald T, Tucker J & Rennie E (2017) *Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2017*, RMIT University, Melbourne, for Telstra. <https://digitalinclusionindex.org.au/>

<sup>4</sup> SACOSS (2017) Anti-Poverty Week Statement 2017, South Australian Council of Social Service, Adelaide. <https://www.sacoss.org.au/reports/anti-poverty-week>

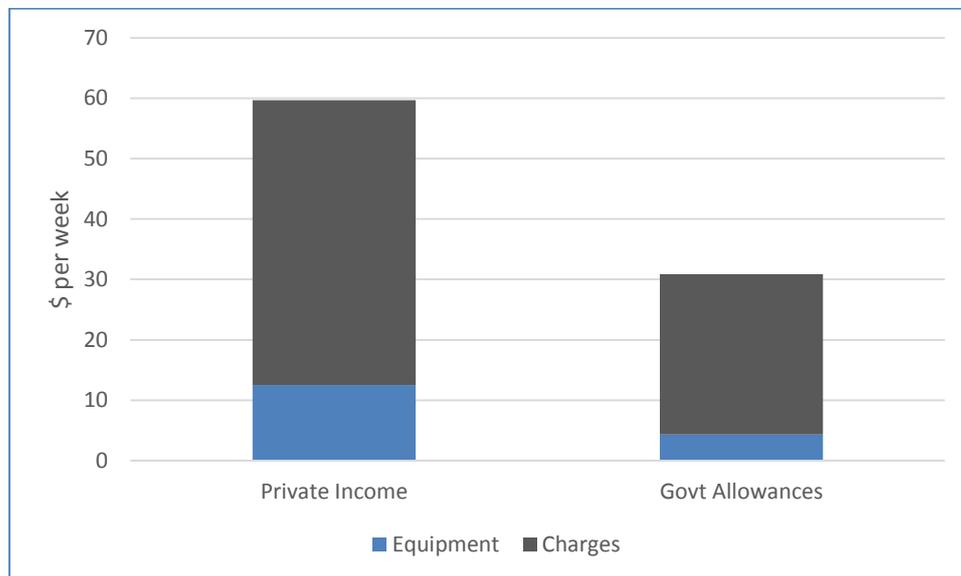
on government pensions and allowances. For the latter, telecommunications is a significantly greater impost on the household budget. This can be seen in Table 3.

**Table 3: Weekly Telecommunications Expenditure by Main Source of Income**

	<b>Private Income</b>	<b>Govt Pension &amp; Allowances</b>
Equipment	12.52	4.36
Current Charges	47.13	26.51
<b>Telecommunications Expenditure</b>	<b>\$59.65</b>	<b>\$30.87</b>
<i>% of H/hold Disposable Income</i>	<i>2.9%</i>	<i>4.4%</i>

Again, those whose main source of income is government pension and allowances spend proportionately less on equipment (14.1% of their telecommunications expenditure is on equipment by comparison with 21% for households with private income), so pensioners and other social security recipients are spending proportionately more of their income on telecommunications but using less or lower standard equipment. Figure 5 shows this in dollar terms.

**Figure 5: Equipment and Current Telecommunication Charges by Main Source of Income**



# Geographic Differences in Telecommunications Expenditure

## State Comparisons

As a percentage of household disposable income there are minimal differences in telecommunications expenditure between the states and territories.

However, in absolute terms, South Australian and Tasmanian households spend 12% and 17% below the national average, respectively, on telecommunications. With the price of many current charges being set nationally, this may suggest of lack of usage in those two states – which is consistent with them also rating lowest on the Australian Digital Inclusion Index.

That said, given that those states are already spending relatively highly as a proportion of household disposable income, there may be a reluctance to spend more to catch up.

**Table 4: Weekly Telecommunications Expenditure by State/Territory**

	<b>NSW</b>	<b>VIC</b>	<b>QLD</b>	<b>SA</b>	<b>WA</b>	<b>TAS</b>	<b>NT</b>	<b>ACT</b>
Equipment	12.60	9.90	8.82	9.40	9.87	8.06	16.89	11.12
Current Charges	41.91	43.49	43.80	37.22	41.37	35.58	48.47	41.78
<b>Telecommunications Expenditure</b>	<b>54.51</b>	<b>53.39</b>	<b>52.62</b>	<b>46.62</b>	<b>51.24</b>	<b>43.46</b>	<b>65.36</b>	<b>52.90</b>
<i>% of H/hold Income</i>	3.0%	3.2%	3.2%	3.2%	2.9%	3.3%	3.2%	2.7%

Note: Several of the equipment expenditure estimates have some degree of statistical unreliability and should be treated with caution, including the NT computer costs – hence the NT figures above being an outlier.

# Household Composition

There are marked differences between telecommunications expenditure depending on the composition of the household. Households with more people spend significantly more on telecommunications, but it is not simply a function of household size. Children are a crucial factor. One adult households with children spend more than couple only households (despite less income), while lone person households spend less than all other households, but telecommunications expenditure constitutes a greater proportion of their income – presumably because they can't achieve the economies of scale of multi-person households.

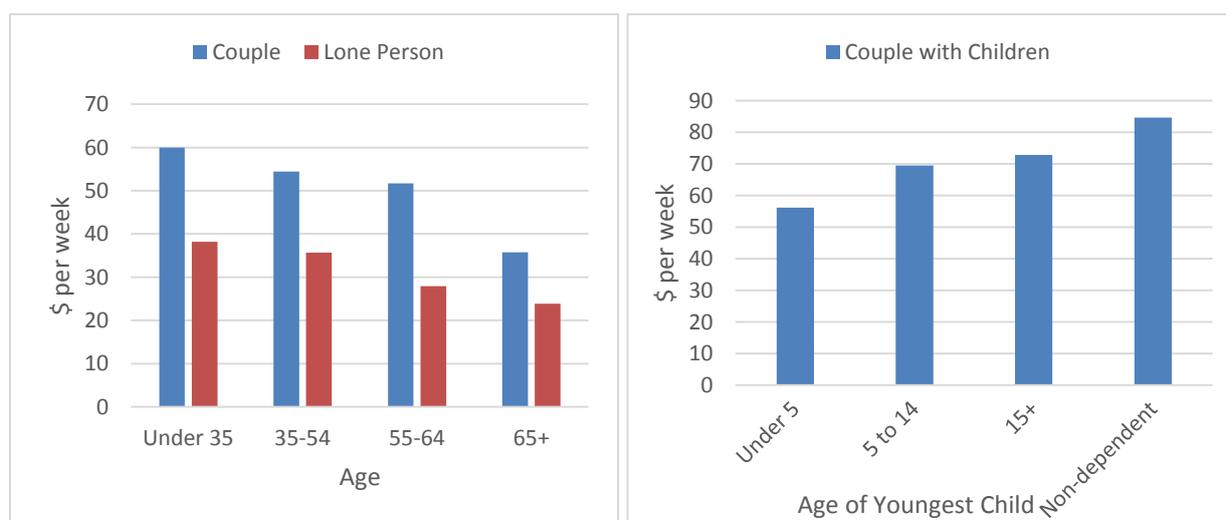
**Table 5: Weekly Telecommunications Expenditure by Household Composition**

	<b>Couple with Children</b>	<b>One Parent with Children</b>	<b>Other One Family H/holds*</b>	<b>Couple Only H/holds</b>	<b>Lone Person</b>
Equipment	14.20	12.88	11.27	8.05	6.51
Current Charges	53.82	39.36	53.60	39.71	23.48
<b>Telecommunications Expenditure</b>	<b>68.02</b>	<b>52.24</b>	<b>64.87</b>	<b>47.76</b>	<b>29.99</b>
<i>% of Household Disposable Income</i>	<i>2.9%</i>	<i>4.2%</i>	<i>3.0%</i>	<i>2.9%</i>	<i>3.7%</i>

\* Mostly families with non-dependent children – hence high expenditure and income.

The age of people in the household is also a crucial factor. Both couple and lone person households spend less on telecommunications as they get older, while families with children spend more as the children get older.

**Figure 6: Age and Telecommunications Expenditure**



# Housing Tenure

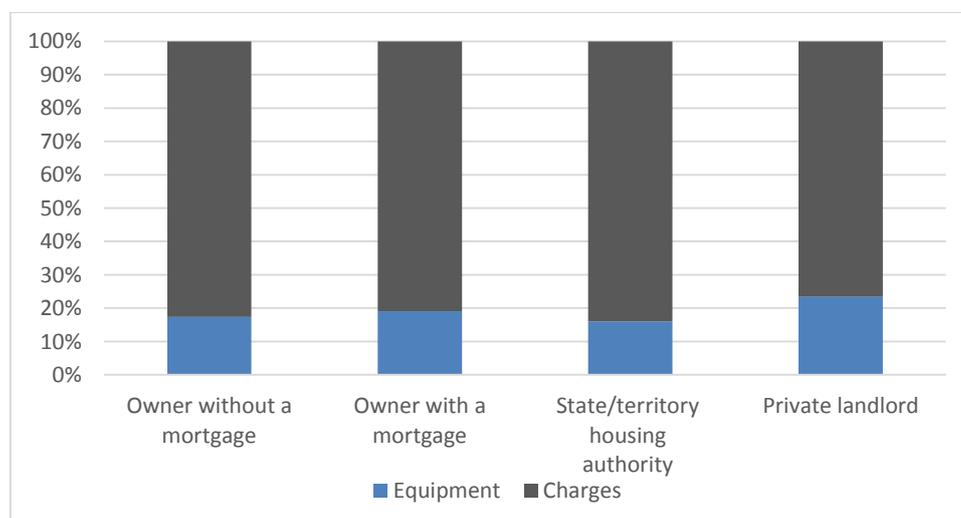
Differences in telecommunications expenditure by housing tenure follow many of the age, income and household composition differences noted above. Renters on average have lower incomes so spend less (absolutely) on telecommunications than home-owners (but slightly more as a proportion of their income). Renters in state housing have the lowest telecommunications expenditure but the highest proportion of income going on telecommunications. Owners without a mortgage tend to be older and in smaller households, hence having less telecommunications expenditure.

**Table 6: Weekly Telecommunications Expenditure by Housing Tenure**

	<b>Owner without mortgage</b>	<b>Owner with mortgage</b>	<b>State Housing Authority Renter</b>	<b>Private Renter</b>
Equipment	7.40	11.99	4.52	12.48
Current Charges	35.34	50.85	23.66	40.89
<b>Telecommunications Expenditure</b>	<b>\$42.71</b>	<b>\$62.84</b>	<b>\$28.18</b>	<b>\$53.57</b>
<i>% of Household Disposable Income</i>	<i>3.0%</i>	<i>2.9%</i>	<i>3.8%</i>	<i>3.5%</i>

Again, state housing authority renters spend less absolutely, but proportionately more of that spend goes to current charges – meaning that they are likely to have fewer and/or cheaper devices. They also have the highest average level of expenditure on non-account (pre-paid) mobile phones reflecting far greater use of pre-paid phones. By contrast, private renters have the most capital intensive spend of any category – spending more on average on mobile phones, and the second highest spend on home computer equipment. Private renters also have a much lower average spend on fixed landlines – because fewer renters have them, presumably in part because of limited housing tenure.

**Figure 7: Share of Telecommunications Expenditure on Equipment and Charges**



# Changes Over Time

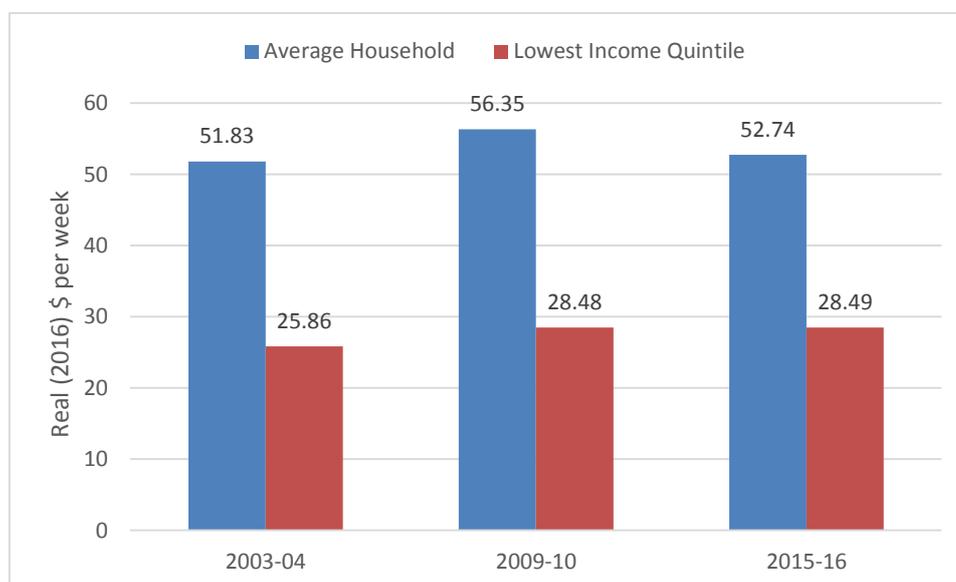
The last decade has seen huge increases in internet and telecommunications usage as more services go online and more platforms are integrated into lifestyles, but it has also seen significant decreases in prices for telecommunications products – including data. The net result has been a slight increase in expenditure, but a gradual decrease in its share of household expenditure over the last 12 years (due to category changes, the HES data categories prior to 2003-04 are not comparable).

**Table 7: Weekly Telecommunications Expenditure 2003 - 2016**

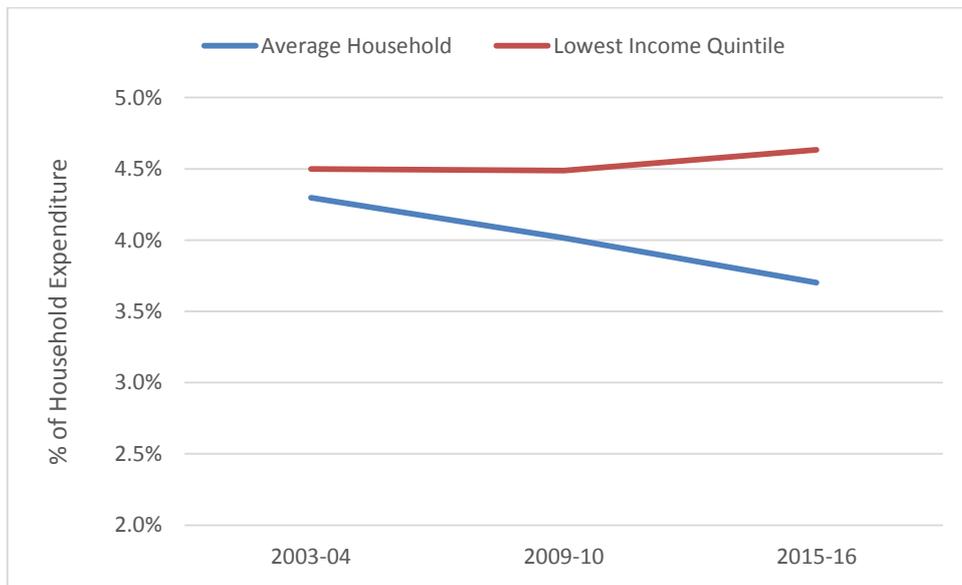
	2003-04	2009-10	2015-16
Equipment	8.46	9.90	10.60
Current Charges	29.91	39.73	42.16
<b>Telecommunications Expenditure</b>	<b>38.37</b>	<b>49.63</b>	<b>52.74</b>
<i>% of Total Goods &amp; Services Expenditure</i>	4.3%	4.0%	3.7%

The figures in Table 7 above are not adjusted for inflation. When the real value of expenditure is calculated, the average telecommunications expenditure per household increases from 2003-04 to 2009-10, but declines slightly over the last 6 years. However, the situation is different for low income earners as real expenditure on telecommunications did not fall from 2009-10 to 2015-16 and has remained about the same or slightly increased as a proportion of household expenditure. This is illustrated in Figure 8 and Figure 9.

**Figure 8: Real Value of Telecommunications Expenditure 2003-2016**



**Figure 9: Telecommunications as Share of Household Expenditure, 2003-16**



# Further Research

The data in this report is simply a snapshot of telecommunications expenditure based on the statistics published in the *ABS Household Expenditure Survey* (as at 10 November 2017). As such it is only a summary level analysis and there are several obvious gaps. The HES data on households with people with disability has not been published, and the state and territory data can't be disaggregated by income, household composition or housing tenure. Analysis of these areas, and a more nuanced investigation of telecommunications expenditure, awaits the publication of further data and detailed analysis of the HES microdata.

However, even with this summary data there are obvious trends which support the basic hypothesis that telecommunications expenditure is essential, significant and regressive. As such, the data continues to raise concerns about telecommunications affordability, particularly for those on low incomes.

# Author

## **Greg Ogle**

Dr Greg Ogle is the Senior Policy and Research Analyst at the South Australian Council of Social Service. He has authored the two SACOSS *Cost of Living Updates* on telecommunications (2013, 2015), as well as co-authoring (with Vanessa Musolino) the ACCAN-SACOSS report *Connectivity Costs: Telecommunications Affordability for Low Income Australians* (2016). He has a PhD in political economy from the University of Adelaide.



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