



HOUSEHOLD CHOICES RELATED TO WATER AND ENERGY

WESTERN
AUSTRALIA

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INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070.

NOTES

ABOUT THIS PUBLICATION

This publication contains results from the State Supplementary Survey conducted in Western Australia (WA) in October 2009. It presents information on Household Choices Related to Water and Energy in WA and includes statistics on topics such as types of water and energy consumption in the home, sources of heating and cooling, domestic electrical appliances, watering of gardens and lawns and public transport use.

Data items were collected from Any Responsible Adult (ARA) on behalf of the household. A full data item list is available in the Appendix.

ABOUT THE SURVEY

The survey was conducted as a supplement to the ABS Monthly Population Survey. Please refer to the Explanatory Notes at the back of this publication for further details about this survey.



ABBREVIATIONS

ABS	Australian Bureau of Statistics
ARA	any responsible adult
ASGC	Australian Standard Geographical Classification
MPS	Monthly Population Survey
RSE	relative standard error
SE	standard error
SR	statistical region
WA	Western Australia

Michael Tindall
Regional Director

SUMMARY OF FINDINGS

INTRODUCTION

This publication presents the results of the *Household Choices related to Water and Energy Survey* conducted in October 2009. The survey collected data on dwelling access to water and energy, water usage, space cooling and heating and water heating. The survey also collected information on white goods, the type, number and reasons for purchase as well as information on high energy using electrical appliances. Where applicable, data from the 2009 WA survey has been compared with data from the 2006 *WA Domestic Use of Water and Energy Survey*. However, due to slight methodological differences between the surveys, any differences in the results should be treated as indicative only.

Another environmental component of the survey was public transport use, whether regular use of public transport had increased or decreased and, if so, the reasons for those changes in usage patterns.

WATER AND ENERGY OVERVIEW

The *Household Choices Related to Water and Energy Survey* estimated that, at the time of the survey, there were 862,000 private dwellings in WA. Water and energy attributes of those dwellings, at the time of the survey include:

Energy supply

Almost all dwellings in WA had access to electricity. Other sources of energy include:

- Mains gas – connected to 83% of dwellings in Perth and 32% in the remainder of WA
- Solar energy – used in 16% of Perth dwellings and 28% in the remainder of WA
- LPG/bottled gas – used by 50% of dwellings outside the metropolitan area.

Water supply

As well as the mains water supply, 8% of Perth dwellings had rainwater tanks and 25% had access to a garden bore.

Water using facilities

- 505,400 WA dwellings had two or more toilets and 456,700 had two or more showers.
- In 749,700 (87%) dwellings, all toilets were dual flush.
- In 442,000 (51%) dwellings, all showers had low flow shower heads.

Watering gardens and lawns

- An estimated 747,500 dwellings in WA had gardens and/or lawns, with the majority (85%) having a mix of both.
- Water from garden bores was used by 22% of dwellings for watering gardens and/or lawns.
- Reticulation systems were used by 71% of dwellings for watering and, for 29% of these systems, the water was sourced from a garden bore.

Insulation

- Insulation was installed in 618,200 (72%) dwellings.
- Rental accommodation had the lowest level of insulation installed (38%) compared with other tenure types.
- Separate houses had the highest rate of insulation installed (77%) compared with 58% of semi-detached, row or terrace houses, townhouses etc. and 39% of flats, units or apartments and other dwelling types.

Space cooling and heating

- 680,900 (79%) dwellings had some form of air cooling system.

SUMMARY OF FINDINGS *continued*

Space cooling and heating continued

- Reverse cycle split systems and evaporative ducted air conditioning systems accounted for 60% of all main air conditioners – used in 218,700 and 188,100 dwellings respectively.
- 778,200 (90%) dwellings had space heating.
- Non-ducted unflued gas heaters and non-ducted reverse cycle air conditioners were the most common forms of heating – used in 247,600 and 141,200 dwellings respectively.

Water heating

- 19% of WA dwellings used electricity and 18% used solar energy for water heating.
- In the Perth metropolitan area, mains gas was used for water heating in 67% of dwellings.
- 59% of WA hot water systems were storage tanks, while 37% were instantaneous water heaters.

White goods

- 366,300 (43%) dwellings had dishwashers.
- 570,700 (66%) WA dwellings had top loading washing machines.
- Energy star ratings were considered by 61% of people who purchased white goods.
- Water ratings were considered by 34%.

Other electrical appliances

- Almost all households had at least one television and 90% had DVD players.
- 59% of Perth dwellings had more than one television.
- Cathode ray tube (CRT) televisions were still the most common with 67% of Perth dwellings having at least one.
- LCD or plasma televisions were reported in 60% of Perth dwellings.
- 60% of Perth dwellings were reported to have a Desktop computer while 55% had a laptop/notebook computer.

Perth public transport use

- An estimated 232,500 (18%) Perth residents aged 18 years and over usually used public transport for their regular activities.
- In the two year period before the survey, 13% of Perth residents (aged 18 years and over) indicated that they had increased their use of public transport, while 9% reported a decline.

SUMMARY OF FINDINGS *continued*

DWELLING CHARACTERISTICS

In 2009, 81% of WA dwellings were separate houses, 10% were flats, units or apartments and other dwelling types, while 9% were semi-detached, row or terrace houses, townhouses etc.

More than two thirds (69%) of these dwellings were either fully owned or being paid off. Almost one in four (24%) were private rental properties.

Six in ten dwellings housed fewer than three people (26% one person households and 34% two person households). A further 37% of dwellings contained three to five person households and the remaining 3% contained six or more person households.

WATER SUPPLY

The survey obtained information about sources of water to WA's 862,000 private dwellings. As well as access to the mains water supply, information was sought about the number of dwellings with rainwater tanks installed or with access to garden bores.

Water use within the home, including measures taken to reduce water use in showers and toilets, was also obtained.

Mains Water Supply

At the time of the 2009 survey, 825,700 (96%) WA dwellings were connected to the mains or town water supply. In the Perth region, only 2% of dwellings were not connected, compared to 11% for the Balance of WA (Table 4).

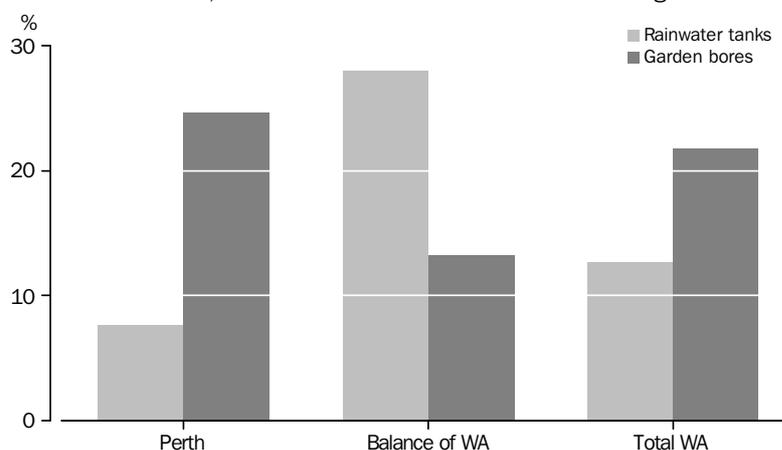
Rainwater Tanks

Using water tanks to capture storm water run off is one way of reducing the use of water sourced directly from the mains water supply. Water collected in rain water tanks can be used in the garden and/or plumbed into dwellings.

Rainwater tanks were found in 109,700 (13%) WA dwellings with almost half (43% or 47,100) plumbed into the dwelling. Outside the Perth metropolitan area, 28% of dwellings had rainwater tanks, a level more than three times greater than that of the Perth metropolitan region (8%) (Table 4).

Rainwater tank ownership was highest in separate dwellings (15%) compared with other types of dwellings (3%) (Table 5) and more common in dwellings that were either fully owned or being paid off (15%) than other tenure types (including rental and other tenure) (7%) (Table 6).

ALL DWELLINGS, Alternative sources of water—Region



SUMMARY OF FINDINGS *continued*

Garden Bores

An estimated 187,300 (22%) WA dwellings had access to a garden bore (either from a single household bore or a bore shared with other households)(Table 6).

While many dwellings had access to garden bores, not all were used. Garden bores were used, either within the dwelling or outside in the garden, by 92% of dwellings with access to a garden bore (Table 4).

WATER FACILITIES

The WA Water Corporation estimates that 43% of total household water use is inside the home. Modifications to available water facilities can make a big difference to water consumption (Water Corp.). Two areas accounting for much of a dwelling's water use are toilets and showers. Improved water consumption can be obtained in these facilities with dual flush toilets (see glossary) and installation of low flow shower heads (see glossary).

As an indicator of the effect on water consumption of water efficient toilets and showers, the Department of Water estimates that retrofitting low flow shower heads and water efficient toilet suites would save 1.5 GL and 2 GL of water respectively per year (Dept. of Water 2009).

Toilets

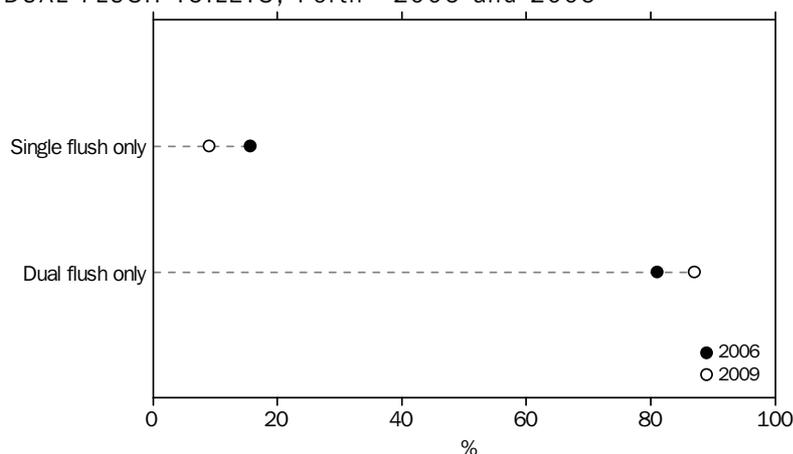
In 2009, more than half (59%) of all dwellings in WA had more than one toilet; 9% had three or more toilets, and 50% had two. The remaining 41% of dwellings had one toilet. This pattern was reflected in the Perth metropolitan area where the proportions were 10%, 50% and 40% respectively (Table 9).

Dual Flush Toilets

In a large proportion of WA dwellings (87%), all the toilets were dual flush. A further 9% had no dual flush toilets while in 4% some toilets were dual flush (Table 9).

In 2009, at least one dual flush toilet was reported in 91% of Perth dwellings. In 2006, 84% of dwellings were reported to have at least one dual flush toilet (ABS 2006)(Table 9).

DUAL FLUSH TOILETS, Perth—2006 and 2009



Dual Flush Toilets and Household Income

Households in the lowest household income bracket (less than \$25,000 per year) had the highest proportion of single toilet dwellings without dual flush (12%) compared with 2% of dwellings with a gross annual household income of \$110,000 or more per year (Table 13).

SUMMARY OF FINDINGS *continued*

Dual Flush Toilets and Household Income continued

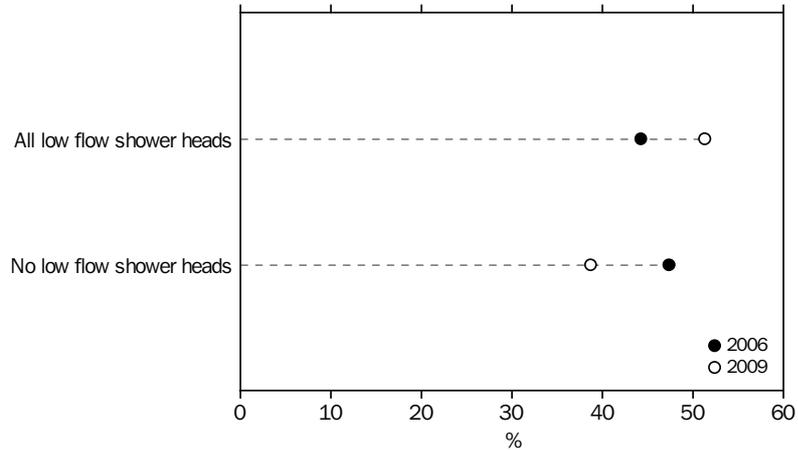
Conversely, in dwellings with two toilets, both dual flush, the proportion increased with household income, from 29% of dwellings with a household income of less than \$25,000 per year, to 59% of dwellings with a gross annual household income of \$110,000 or more per year (Table 13).

Showers

Almost a third of water use in a dwelling is for showering. Older conventional style showers use on average 12 litres of water per minute. To reduce the amount of water used, householders have been advised to install low flow shower heads (see glossary), reducing water use by one third (Water Corp.).

In 2006, 51% of dwellings in Perth had at least one low flow shower head installed (ABS 2006). In 2009, this had increased to 60%, comprising 51% with low flow shower heads connected to all their showers and 9% with some low flow showers. In 39% of dwellings, no showers had low flow shower heads (Table 13).

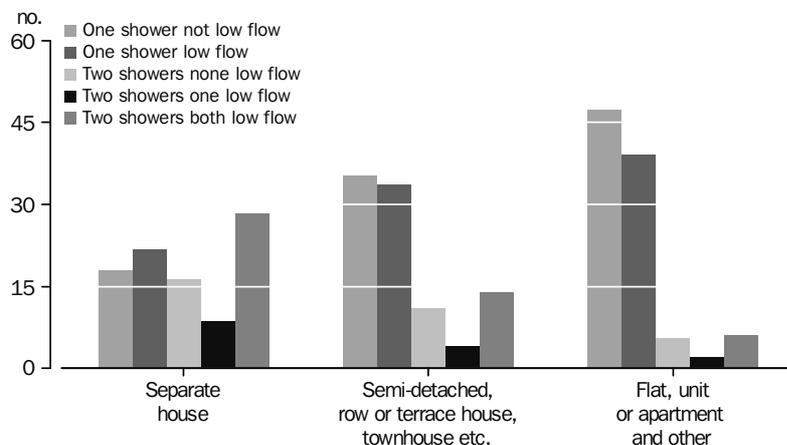
LOW FLOW SHOWER HEADS, Perth—2006 and 2009



Showers and dwelling type

More than half (53%) of WA flats, units and apartments had no low flow shower heads, compared with 47% of semi-detached, row or terrace houses and townhouses etc. and 36% of separate houses (Table 10).

ALL DWELLINGS, Low flow shower heads—Dwelling type



SUMMARY OF FINDINGS *continued*

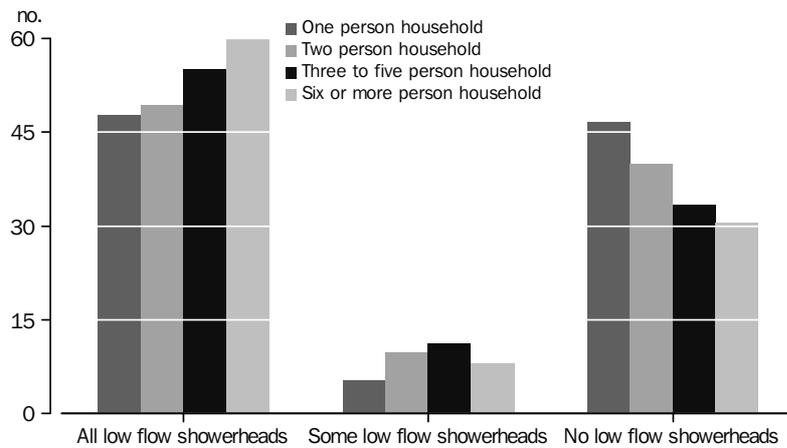
Showers and dwelling tenure

The absence of low flow shower heads was more common in rental dwellings. Over half (52%) of all rental dwellings (both public and privately rented) were without low flow shower heads compared with one in three (33%) dwellings that were either owned outright or being paid off (Table 11).

Showers and household size

There was an association between the number of low flow shower heads and the number of people in the dwelling. For example, the proportion of dwellings with all their showers being low flow increased with household size, from 48% of one person dwellings to 60% of dwellings with six or more persons (Table 12).

ALL DWELLINGS, Low flow shower heads—Household size



GARDEN WATER USE

Just over half of all household water use is outside the home. With climate change and an increasing demand for water, efficient water use is more important than ever (Water Corp).

The survey asked householders (excluding those in flats, units and apartments) whether their dwelling had lawns and gardens and the sources of water used for watering them. It also asked whether the gardens and lawns were watered by reticulated watering systems, whether these systems were sourced from the mains water supply or from garden bores or any other source, and whether the reticulation systems were automatically or manually operated.

Gardens and Lawns

An estimated 747,500 dwellings (excluding flats, units and apartments) had gardens and/or lawns, including 651,900 (87%) with lawns and 729,100 (98%) with gardens.

The majority of dwellings (85% or 633,400) had a combination of both gardens and lawns, 13% had gardens only and 2% had lawns only (Table 14).

Of the 651,900 dwellings with lawns, 69% had lawn in both the front (including front and side verges) and back yards, 20% had lawn in the front yard only and 11% had it in the back yard only (Table 14).

Garden Water Source

A number of water sources were used for watering gardens and lawns with some dwellings having used a combination of sources. The mains water supply was the source of water for 72% of dwellings with gardens and lawns, while a garden bore was the source for 22%. Recycled water or grey water was also used by 4% of dwellings and water

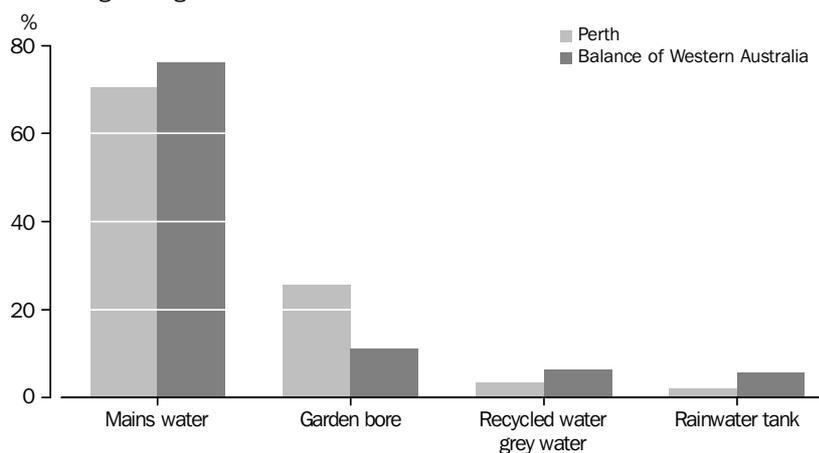
SUMMARY OF FINDINGS *continued*

Garden Water Source continued

from a rainwater tank used by 3%. For 5% of dwellings, the gardens and/or lawns were not watered, relying solely on rainfall (Table 14).

There were some differences between Perth and the Balance of WA. Within the Perth region, the mains water supply was a source of water for 70% of dwellings, while 26% used bore water. Outside of Perth, 76% used mains water and 11% used bore water (Table 14).

DWELLINGS WITH GARDENS AND/OR LAWNS, Sources of water for watering—Region



Use of the mains water supply for watering was more common in semi-detached, row or terrace houses, townhouses etc. (87%) than in separate houses (70%) where access to a garden bore was more common (24%) than in other dwelling types (6%) (Table 15).

Reticulated watering systems

Of the 747,500 dwellings (excluding flats, units and apartments) with gardens and/or lawns, 527,100 (71%) used reticulated watering systems. Two thirds (69%) of these reticulated watering systems were connected to the mains water supply and 29% were connected to garden bores (Table 14).

Almost three quarters (71%) of WA's 527,100 reticulated watering systems were automatic and of these, 72% were connected to the mains water supply and 28% connected to garden bores (Table 14).

Reticulated watering systems were used at 71% of separate house dwellings (481,700) compared with 64% (45,300) of semi-detached, row or terrace houses, townhouses etc. (Table 15).

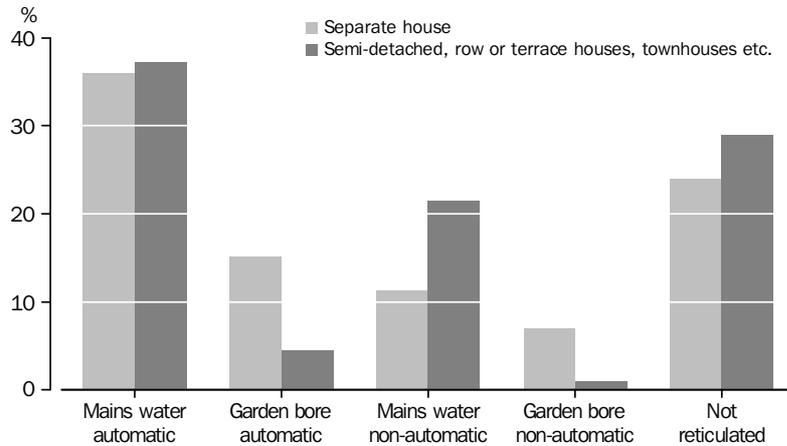
The mains water supply was the source of water for 67% of reticulated watering systems at separate houses, compared with 92% of reticulation systems at semi-detached, row or terrace house, townhouses and other etc. (Table 15).

Whether mains water reticulation systems were automatic or manually operated also varied according to dwelling type. More than three quarters (76%) of mains reticulated systems at separate house dwellings were automatic, compared with 63% at semi-detached, row or terrace houses, townhouses etc. (Table 15).

SUMMARY OF FINDINGS *continued*

Reticulated watering systems *continued*

ALL DWELLINGS WITH GARDENS AND/OR LAWNS, Type of reticulation system— Dwelling type



SOURCES OF ENERGY

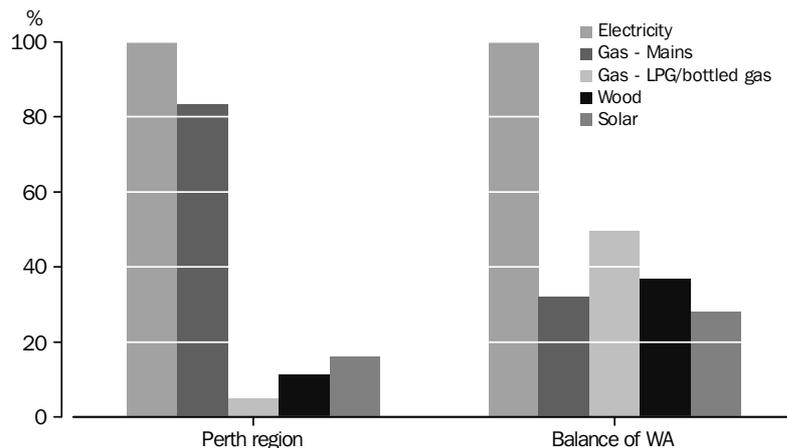
Of the 862,000 dwellings in WA, 861,600 were connected to mains electricity, 71% had mains gas and 19% made use of solar energy (Table 4).

In Perth, where all dwellings were connected to mains electricity, 83% were also connected to mains gas. Outside the Perth metropolitan area, mains gas was connected to 32% of dwellings (Table 4).

LPG/bottled gas was more commonly used outside the Perth metropolitan area and was used by half (50%) of all regional dwellings. In the Perth metropolitan area, 5% of dwellings used LPG/bottled gas (Table 4).

Similarly, the proportions of dwellings using wood and solar energy were higher outside the metropolitan area, with 37% burning wood and 28% using solar energy compared with 11% and 16% respectively in Perth (Table 4).

ALL DWELLINGS, Sources of energy—Region



SUMMARY OF FINDINGS *continued*

SPACE COOLING AND HEATING

Space cooling and heating are high energy users. Whether a dwelling has insulation installed and the type of air conditioner or heater used will influence the amount of energy used.

Insulation

Ceiling insulation is one of the most effective ways to improve energy efficiency in a dwelling by making a significant difference to the cost of running air conditioning units. Ceiling insulation helps to keep a dwelling cooler in summer by reducing the amount of heat entering, and in winter, helps keep it warmer by keeping warm air inside. As a consequence, running costs of cooling and heating appliances are reduced, either by needing to use the appliances less often, or when they are used, the appliances are not required to work as hard (DCCEE 2010).

In 2009, almost three quarters (72% or 618,200) of WA dwellings had insulation installed, while 16% had no insulation. A further 13% of respondents were uncertain about whether insulation was installed (Table 16).

Insulation was more commonly installed in separate houses (77%) than in semi-detached, row or terrace houses, town houses etc. (58%) or flats, units or apartments and other types of dwellings (39%) (Table 16).

Installation of insulation was reported in 38% of rental accommodation (both public and other), less than half the rate for dwellings that were either fully owned or being paid off (84% and 87% respectively) (Table 16). However, it should be noted that for 33% of rental dwellings it was not known whether insulation was installed. This was in contrast with dwellings that were owned outright or being paid off where 4% did not know whether insulation was installed.

Householders in the 66,200 WA dwellings that were not insulated and not rented (i.e. fully owned or being paid off, or other) were asked for the main reason they had not had insulation installed. The most common reasons given were: had not got around to it (26%), cost (21%) and had not considered it a priority (14%) (Table 17).

Space cooling

Space cooling accounts for a small share of total household energy use. However, the most significant issue is spikes in usage. On a hot day, average residential domestic air conditioner use can cause large spikes in electrical demand resulting in blackouts and damage to household goods (DEWHA 2008).

Over the last two decades, WA's space cooling energy consumption has increased steadily from 0.4 petajoules in 1990 to 1.3 petajoules in 2009 (DEWHA 2008). Air conditioner ownership and use has increased, partly because it has become more affordable and partly because of recent housing designs that have tended to minimise or eliminate shading to walls and windows (DEWHA 2008).

In 2009, 79% (680,900) of WA dwellings used some form of air conditioning for cooling (Table 18). Three years earlier, 71% of WA dwellings were reported to use an air conditioner or evaporative cooler (ABS 2006).

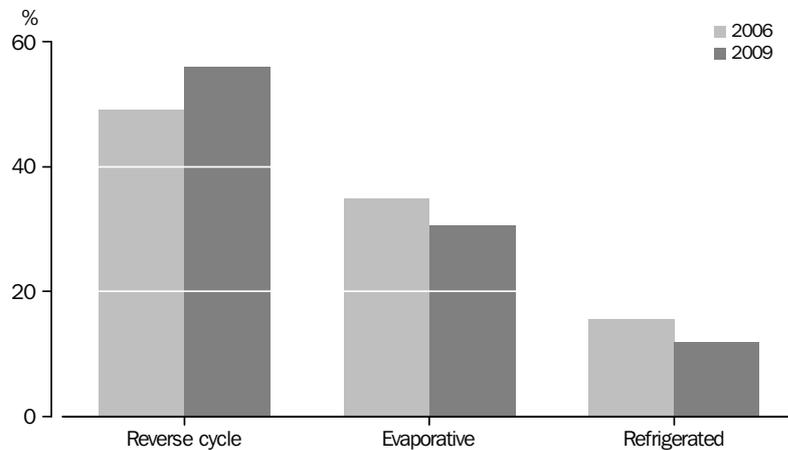
SUMMARY OF FINDINGS *continued*

Space cooling *continued*

Householders were asked about their main air conditioner used for cooling, i.e. the one used most often. One quarter (25%) of WA dwellings had a reverse cycle split system air conditioner which they used as their main cooling device. Ducted evaporative systems were used in 22% of dwellings and ducted reverse cycle systems were used in 10% of WA dwellings (Table 18).

Since 2006, the proportion of reverse cycle systems used as the main cooling system has increased. In 2006, 49% of all cooling systems were reverse cycle systems. By 2009, this proportion had increased to 56%. As a consequence, the representation of evaporative and refrigerated systems has declined. Evaporative systems declined from 35% of main air conditioners used in 2006 to 31% in 2009 while refrigerated air conditioners declined from 16% to 12% (ABS 2006) (Table 18).

DWELLINGS WITH AIR CONDITIONERS, Main conditioner type, 2006 and 2009



Space Heating

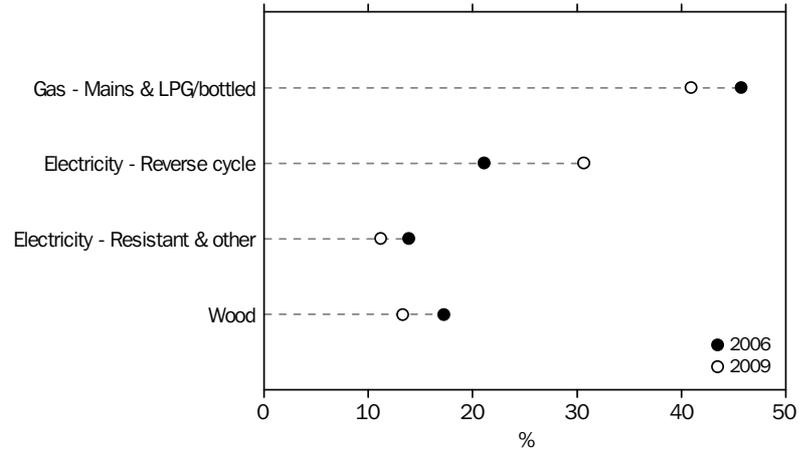
Space heating is one of the largest single end uses of power in the residential sector in Australia and currently accounts for 38% of total energy consumption. However, unlike the trends in space cooling, WA space heating energy consumption trends from 1990 to 2010 have shown little variation (DEWHA 2008).

An estimated 778,200 (90%) WA households reported having some form of heating. Of these, 41% used gas (mains or LPG/bottled) and 42% used electricity as the heating energy source. In 2006, gas and electricity, as the main form of heating, were used in 46% and 35% of dwellings respectively (Table 18) (ABS 2006). These changes in heating sources may be attributed to increased use of reverse cycle air conditioners. In 2006, reverse cycle air conditioners accounted for 21% of all heaters. By 2009, they represented 31% of main heaters used (Table 18).

SUMMARY OF FINDINGS *continued*

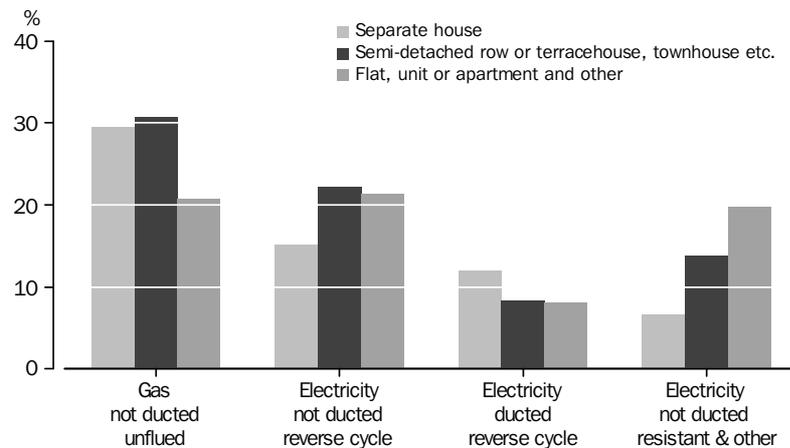
Space Heating *continued*

DWELLINGS WITH HEATING, Energy Source—2006 and 2009



Of the 778,200 dwellings in WA with heating the most common heater types used were non-ducted unflued gas heaters (32%) and reverse cycle heaters (both ducted and not-ducted) (31%). Wood burning heaters were the main heater type for 15% of dwellings with heating while electric resistant/radiators etc. represented 10% of main heaters used (Table 18).

DWELLINGS WITH HEATING, Selected heating types—Dwelling type

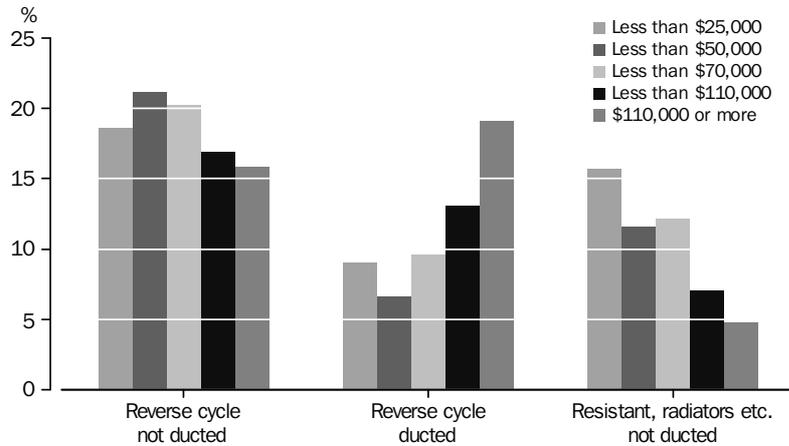


While there was little difference across income groups in the sources of energy used for space heating, there was some variation in the type of heating used. For example, electric resistant, radiators etc. heaters (which are usually cheap to buy but expensive to operate) were more commonly used as the main heating source in lower income groups. This type of heater represented 16% of heaters in dwellings with a gross annual household income of less than \$25,000 and decreased to 5% of heaters in dwellings with a household income of \$110,000 or more. Similarly, the proportion of not-ducted reverse cycle heating tended to decrease with increasing income. In contrast, ducted reverse cycle systems increased with income (Table 20).

SUMMARY OF FINDINGS *continued*

Space Heating *continued*

DWELLINGS WITH HEATING, Selected electric heating types—Gross annual household income



WATER HEATING

Water heating has been a significant contributor to household energy consumption.

However, it is anticipated that there will be an overall downward trend in energy consumption for water heaters from 2002 to 2020 due, in part, to the uptake of natural gas for water heating and the increased use of solar energy. Solar water heating has had an increased uptake due to government initiatives and rebate schemes (DEWHA 2008).

Water heating energy source

In 2009, over half (56%) of all WA dwellings used mains gas as the main source of energy for heating water, 19% used electricity and 18% used solar energy (Table 21). Three years earlier, the corresponding proportions were mains gas (56%), electricity (21%) and solar energy (15%) (ABS 2006).

In the Perth metropolitan area, water heating energy sources were mains gas (67%), electricity (16%) and solar (14%). For the remainder of the state, use of these three water heating energy sources were more evenly distributed – 23%, 29% and 28% respectively. In the non-metropolitan area, because of the lack of access to mains gas, LPG bottled gas was used by 19% of dwellings for water heating compared with 2% in Perth (Table 21).

The use of mains gas as the energy source for water heating was highest in semi-detached, row or terrace houses, townhouses etc. (64%) followed by separate dwellings (55%) and flats, units, apartments or other dwellings (50%). The use of electricity for water heating was more variable and ranged from 15% for separate house dwellings to 42% for flats, units, apartments and other dwellings. Solar water heating was mostly confined to separate houses and accounted for 147,800 of these dwellings (21%) (Table 22).

Hot water system type

The 2009 survey found that 59% of water heaters in WA were storage type while 37% were instantaneous (Table 21).

In the Perth metropolitan area, 56% of hot water systems were storage type and 39% were instantaneous. Outside the metropolitan area, the gap was greater with storage type water heaters representing 68% of heaters and instantaneous representing 30% (Table 21).

SUMMARY OF FINDINGS *continued*

*Hot water system type
continued*

Storage hot water systems were more common in separate houses (63%) than in other dwelling types (42%) (Table 22).

ELECTRICAL APPLIANCES—WHITE GOODS

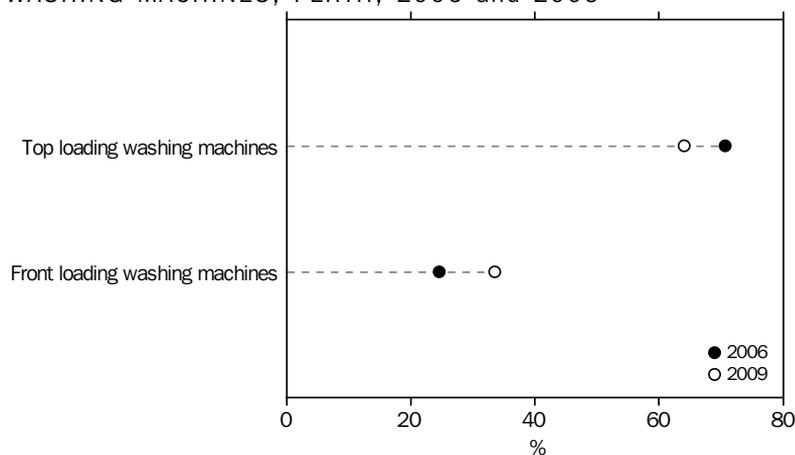
In the last few years, a lot of work has been done to improve the energy efficiency of new white goods. While improvements continue to be made, the increased efficiencies are offset by increased ownership of a variety of high energy using electrical appliances. It is anticipated that energy consumption by household appliances is likely to grow rapidly due to increased availability of plasma and LCD televisions, standby-ready for use electronics, DVD players, entertainment systems, computers and associated products, dishwashers and clothes dryers (DEWHA 2008).

Washing machines

There has been a shift to more water and energy efficient front-loading clothes washers since 2006, possibly due to mandatory water labelling (WELS-Water Efficiency Labelling Scheme) introduced in 2006, state subsidies from water authorities for more water-efficient washers and growing concerns about water shortages.

In 2006, 71% of washing machines in Perth dwellings were top loading and 25% were front loading. In 2009, 64% of Perth dwellings had top loading washing machines and 34% had front loading washing machines. Outside the metropolitan areas, 73% had top loading washing machines and 25% had front loading washing machines (Table 25) (ABS 2006).

WASHING MACHINES, PERTH, 2006 and 2009

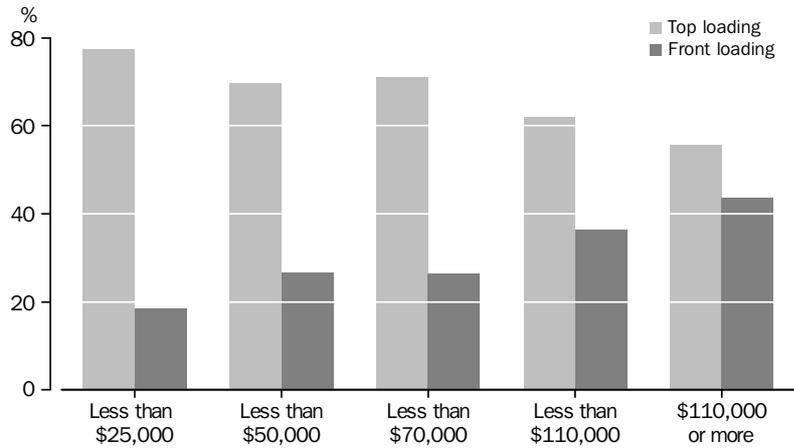


There was an association between gross annual household income and choice of washing machine. Among those in the lower income group (less than \$25,000) the gap between ownership of top loading and front loading washing machines was almost 60 percentage points. This gap decreased with increasing household income. In the highest income group (\$110,000 or more) the gap was reduced to 12 percentage points (Table 28).

SUMMARY OF FINDINGS *continued*

*Washing machines
continued*

ALL DWELLINGS, Washing machine type—Gross annual household income



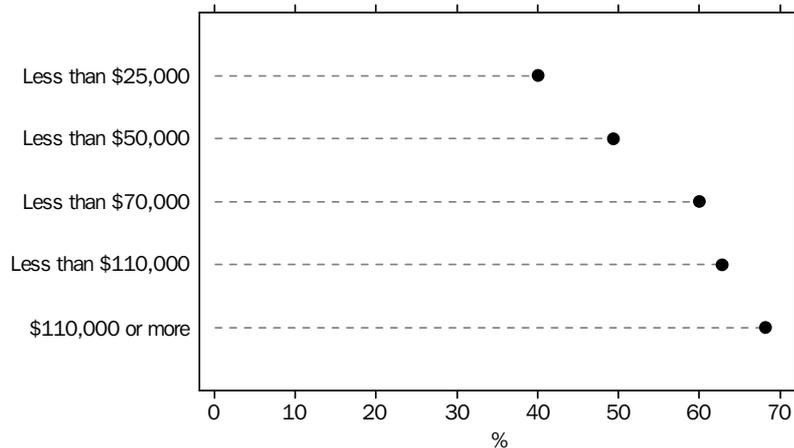
Clothes Dryers

In 2009, over half of WA dwellings (56% or 486,000) had a clothes dryer (Table 25). Ownership of a clothes dryer varied according to dwelling type. They were reported in 60% of separate dwellings, 48% of semi-detached, row or terrace houses, townhouses etc. and 34% of flats, units or apartments and other dwellings (Table 26).

Ownership of clothes dryers increased with household size from 42% of one person households to 73% of six or more person households (Table 7).

Ownership of clothes dryers increased with gross annual household income, from 40% of dwellings with a household income of less than \$25,000 to 68% of dwellings with a gross annual household income of \$110,000 or more (Table 28).

ALL DWELLINGS, Clothes dryer ownership—Gross annual household income



The use of 54% of WA's 486,000 clothes dryers was dependent on the weather and/or the season, while 24% were used at least once a week. Almost one in ten (9%) clothes dryers were never used (Table 25).

SUMMARY OF FINDINGS *continued*

Dishwashers

Since the early 1990s, new dishwashers have become more energy and water efficient. However, this increased efficiency has been offset by the increased ownership of dishwashers. It is expected that despite further efficiency gains over the coming years, these gains will be modest and therefore energy use will continue to grow (DEWHA 2008).

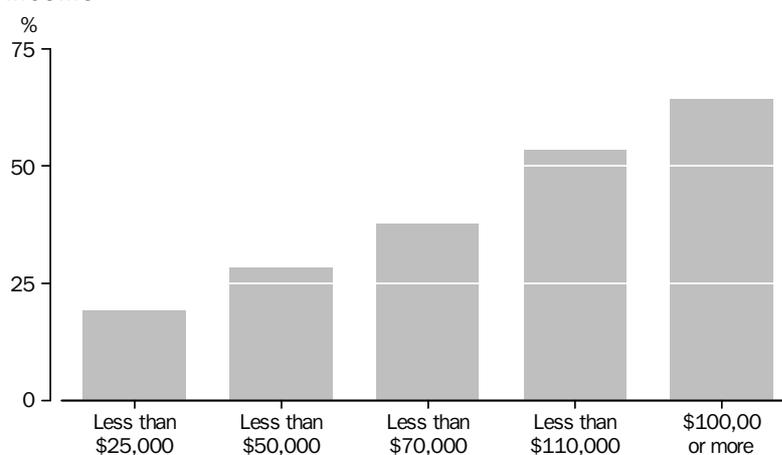
In Perth, 44% of dwellings had a dishwasher. In 2006, 38% of Perth dwellings were reported to have a dishwasher (Table 25) (ABS 2006).

There were differences in ownership of dishwashers according to dwelling type. Almost half (48%) of all separate houses in WA had a dishwasher, compared with 28% of semi-detached, row or terrace houses, townhouses and 16% of flats, units or apartments and other dwellings.

Ownership of dishwashers increased with household size, ranging from 22% of one person households to 55% of six or more person households (Table 27).

Household income was a significant factor associated with dishwasher ownership, ranging from 19% of dwellings with a gross annual household income of less than \$25,000 to 64% of dwellings with a gross annual household income of \$110,000 or more (Table 28).

ALL DWELLINGS, Dishwasher ownership—Gross annual household income



Dishwasher use

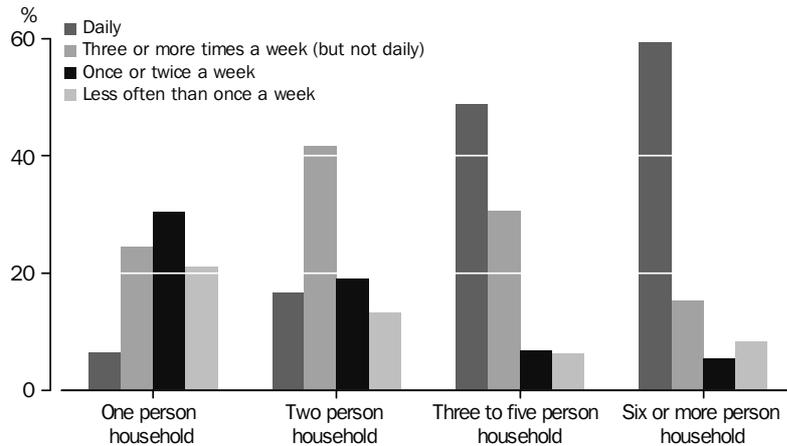
Dishwashers were used either on a daily basis or three times or more each week in almost two thirds (65%) of the 366,300 dwellings in WA with dishwashers (Table 25).

Frequency of use tended to be associated with the number of people in the dwelling, with larger households having made the most use of their dishwashers. Dishwashers were used on a daily basis in 6% of single person households with dishwashers. This increased to 59% in six or more person households, with 8,600 of the 14,500 dishwashers used on a daily basis (Table 27).

SUMMARY OF FINDINGS *continued*

Dishwasher use *continued*

DWELLINGS WITH DISHWASHERS, Frequency of use—Household size

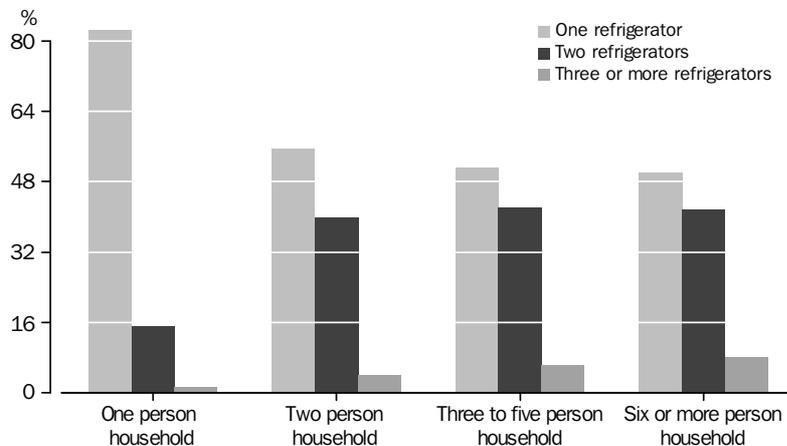


Refrigerators

Virtually all dwellings (99%) in WA had at least one refrigerator, with 61% having one and 34% having two. A further 4% of dwellings had three or more refrigerators (Table 25).

The number of refrigerators in a dwelling was related to the number of people living in the dwelling. Of the 223,900 single person dwellings in WA, 82% had one refrigerator compared with 50% of dwellings with six or more persons. Conversely, two refrigerators were found in 15% of one person dwellings and 41% of all other household sizes (Table 27).

ALL DWELLINGS, Number of refrigerators—Household size



The age of a refrigerator has some impact on the amount of energy used. The energy efficiency of newer refrigerators has increased significantly over the years. However, many dwellings are still using older refrigerators. In 2009, refrigerators that were at least ten years old were being used as the main refrigerator in almost one in four (23%) WA dwellings (Table 25).

Separate Freezers

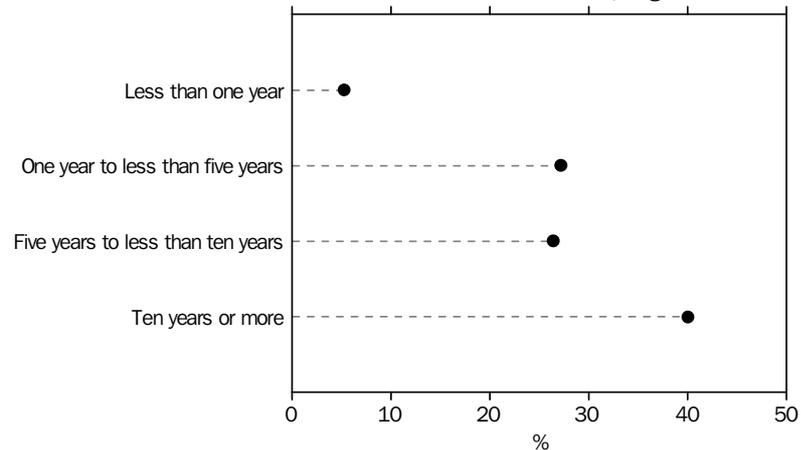
In 2009, almost four in ten (39% or 334,100) WA dwellings had at least one separate freezer. In 332,600 of these dwellings, at least one freezer was in use at the time of the survey (Table 25).

SUMMARY OF FINDINGS *continued*

Separate Freezers continued

Since the early 1990s, the energy efficiency of freezers has improved, partly due to more stringent energy efficient requirements. However many freezers currently in use may not meet energy efficiency standards. Of the 329,600 main freezers in use at the time of the survey, 133,500 (41%) were at least ten years old. These freezers are potentially inefficient energy users (Table 25).

DWELLINGS WITH SEPARATE FREEZERS IN USE, Age of main freezer



Microwave Ovens

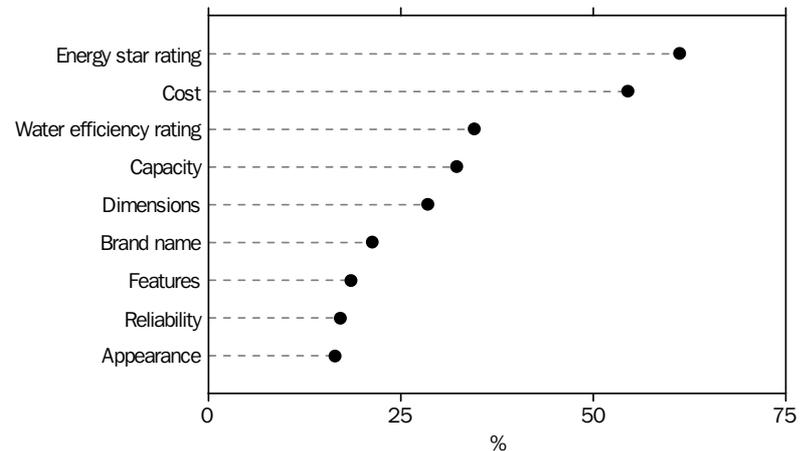
Since 1986, when less than one third (30%) of dwellings had a microwave oven, there has been a steady increase in microwave ownership (DEWHA 2008). At the time of the 2009 survey, 93% (804,600) of households reported having a microwave oven (Table 25).

The proportion of dwellings with microwave ovens increased with gross annual household income, ranging from 87% of dwellings with an income of less than \$25,000 to 96% of dwellings with an income of \$110,000 or more (Tables 26, 28).

Influencing factors when buying white goods

In the 12 months prior to the survey, white-goods purchases were made by householders in 232,900 dwellings. Householders were asked for the factors that influenced their choice of product. The most commonly considered factors were energy star ratings (61%), cost (55%) and water efficiency ratings (34%). Capacity and dimensions were also common factors considered, accounting for 32% and 28% of purchases respectively (Table 29).

WHITE GOODS PURCHASED IN LAST 12 MONTHS, Main factors considered

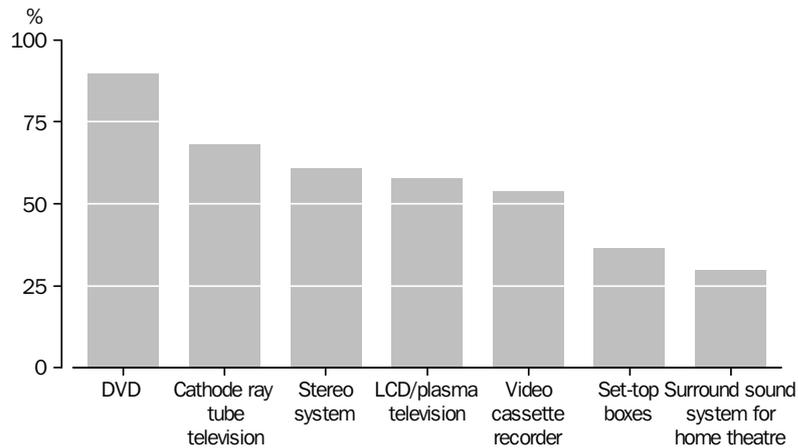


SUMMARY OF FINDINGS *continued*

ELECTRICAL APPLIANCES—HOME ENTERTAINMENT EQUIPMENT

Householders were asked whether they owned a range of home entertainment equipment including televisions, DVD player/recorders, set top boxes (see glossary), surround sound systems for home theatres (see glossary) and stereo systems. These devices are potentially high energy users, depending on how often used and whether left on stand-by between use.

ALL DWELLINGS, Selected home entertainment equipment



Televisions

Television energy use has increased steadily over the last 20 years, but is projected to increase more rapidly over the next few years. Three drivers of this increase are a projected increase in the average number of televisions per household, an increase in the hours of operation and the introduction of new technologies. These new technologies, including LCD, plasma and projection (see glossary), have contributed to a rapid increase in screen size resulting in a rapid rise in energy consumption (DEWHA 2008). These new high energy using technologies have been overtaking the traditional cathode ray tube (CRT) television.

Of the 862,000 dwellings in WA, 99% had at least one television, comprising 40% with one television, 37% with two televisions and 22% with three or more televisions (Table 30).

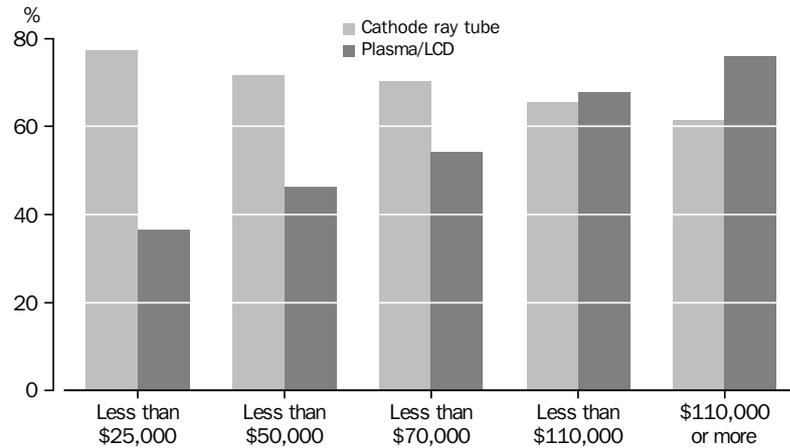
While CRT televisions were still being used in 68% of WA dwellings, LCD/Plasma televisions, at the time of the survey, were approaching the same level of penetration, found in 58% (499,500) of WA dwellings (Table 30).

The proportion of dwellings with LCD/plasma televisions increased with household income, ranging from 37% of dwellings with a gross annual household income of less than \$25,000 to 76% of those with a gross annual household income of \$110,000 or more.

SUMMARY OF FINDINGS *continued*

Televisions continued

ALL DWELLINGS, Television type—Gross annual household income



Set top boxes

Since the introduction of set-top boxes (see glossary) in the mid 1990s, set-top box energy use has shown rapid growth. Again, the key driver of this increased use is the rapid uptake of new technologies. It is anticipated that there will be a peak in ownership of set-top boxes when analogue broadcasting is phased out in 2012 (DEWHA 2008).

In 2009, set-top boxes were found in 36% of WA households.

There was some relationship between set-top box ownership and household income. Set-top boxes were reported in 23% of dwellings with a gross annual household income of less than \$25,000, rising to 44% of those with a gross annual household income of \$110,000 or more (Table 33).

Other home entertainment equipment

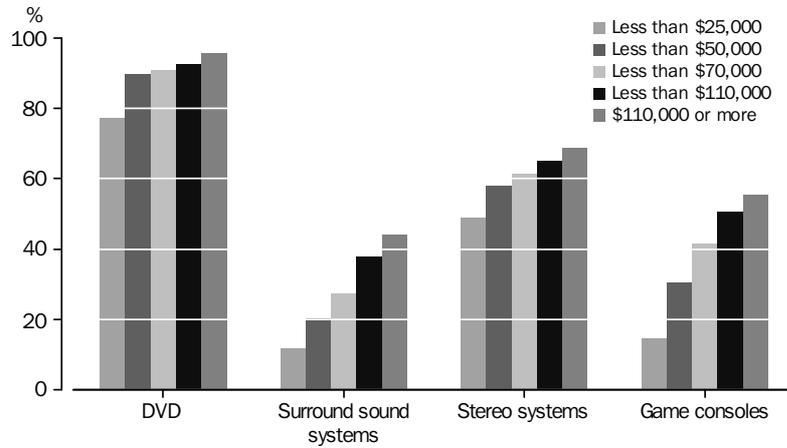
Other home entertainment equipment in WA households included DVDs (in 90% of dwellings), surround sound systems for home theatres (30%), video cassette players (54%), surround sound systems for home theatres (30%), stereo systems (61%) and game consoles (40%).

As expected, household income was a factor associated with ownership of DVDs, surround sound systems, stereo systems and game consoles (Table 33). For example, surround sound systems were found in 12% of dwellings with a gross annual household income of less than \$25,000, increasing to 44% of dwellings with a gross annual household income of \$110,000 or more (Table 33).

SUMMARY OF FINDINGS *continued*

Other home entertainment equipment continued

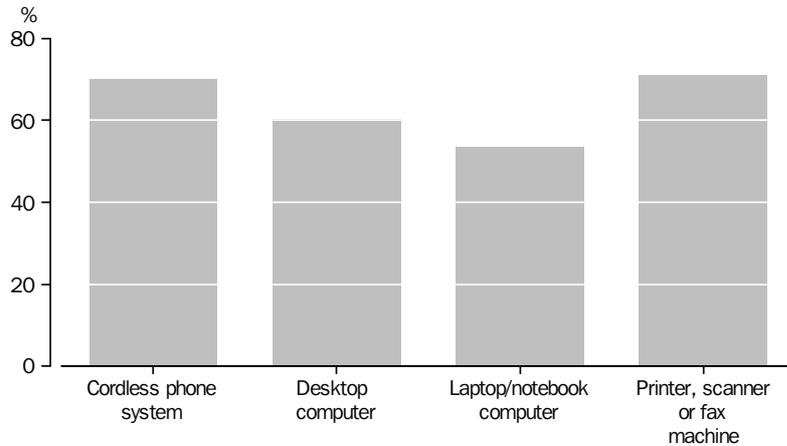
ALL DWELLINGS, Selected home entertainment equipment—Gross annual household income



ELECTRICAL
APPLIANCES—INFORMATIO
N TECHNOLOGY
PRODUCTS

The survey also asked about the types of information technology products in households. Most common were chargers for mobile phones and batteries which were found in 91% of dwellings. Next in frequency were printers, scanners and fax machines (71%) and cordless phones (70%). Desktop computers and laptop/notebook computers were found in 60% and 53% respectively of dwellings (Table 30).

ALL DWELLINGS, Selected Information technology products

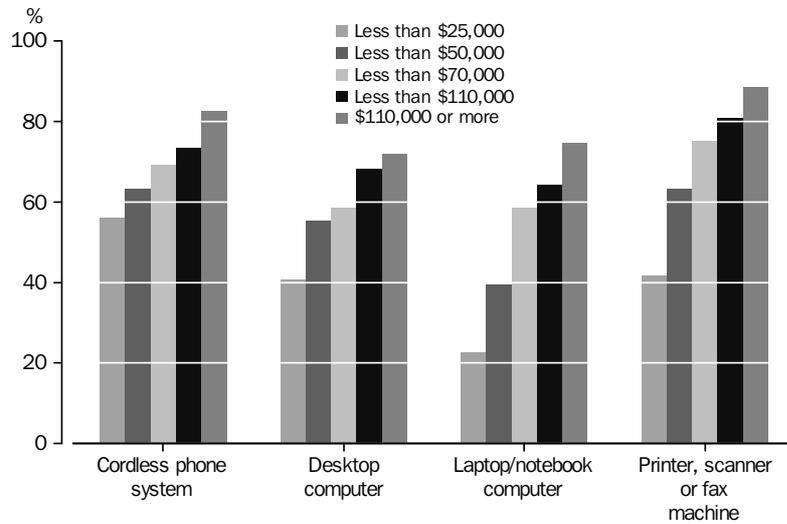


Ownership of information technology products was related to income. For example, laptop/notebook computers were found in 23% of dwellings with a gross annual household income of less than \$25,000 compared with 75% of dwellings with a gross household income of \$110,000 or per year (Table 33).

SUMMARY OF FINDINGS *continued*

ELECTRICAL APPLIANCES–INFORMATIO N TECHNOLOGY PRODUCTS *continued*

ALL DWELLINGS, Selected information technology products—Gross annual household income



PUBLIC TRANSPORT

The survey also collected information on public transport use. People aged 18 years and over who were living in the Perth metropolitan area were asked about their use of public transport (see explanatory notes), whether their usage patterns had changed in the two years prior to the survey, and if so, what were the reasons for those changes.

At the time of the survey it was estimated that 1,257,200 people aged 18 years and over lived in the Perth metropolitan region. In the week prior to the survey, almost one in five (18%) used public transport for regular activities such as travel to work and school. Most of the commuters resided in the North Metropolitan region (86,300) and the South East Metropolitan region (55,300). The Central Metropolitan region had the smallest number of regular public transport users (25,000) (Table 34).

In percentage terms, the South East Metropolitan and Central Metropolitan regions had the highest proportion of public transport users (23% each). For the East, South West and North Metropolitan regions the corresponding proportions were 14%, 15% and 19% respectively (Table 34).

Sex and age

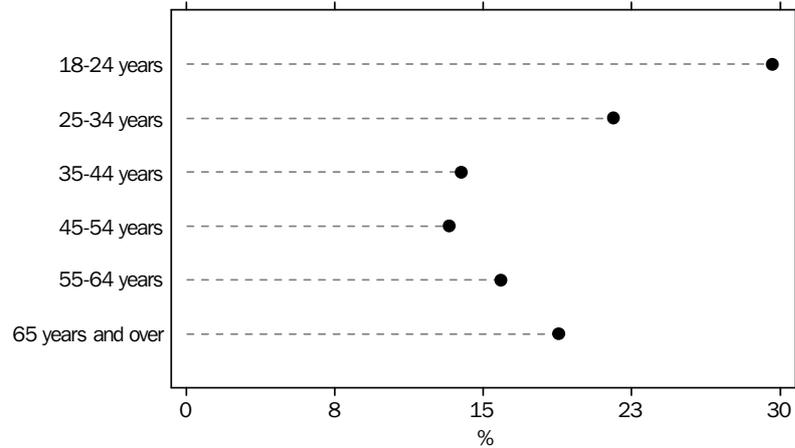
Regular use of public transport was equally divided among males and females (116,300 and 116,200 respectively) (Table 34).

While there was little difference between males and females in regular public transport use, there were some differences according to age. In general, the proportion of each age group using public transport for regular activities decreased with increasing age from 30% of 18–24 year-olds to 13% of people aged 45–54 years. For older groups (55 years and over), the proportion regularly using public transport tended to increase with age (Table 35).

SUMMARY OF FINDINGS *continued*

Sex and age continued

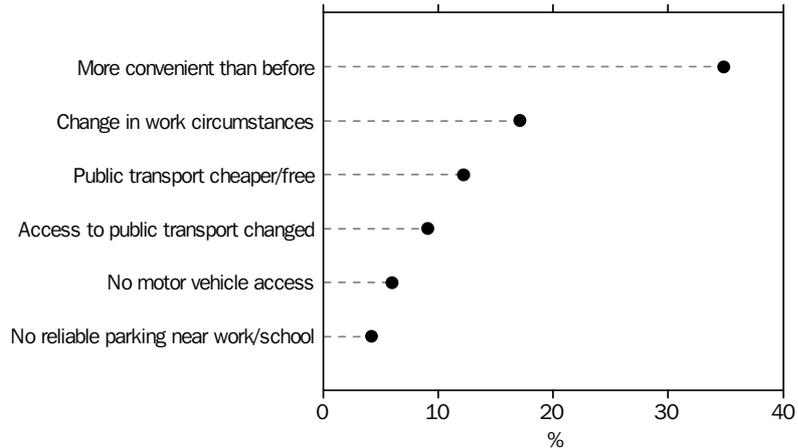
PUBLIC TRANSPORT USERS, Age groups



Increased public transport use

An estimated 161,700 (13%) people aged 18 years and over reported that, in the previous two years, their use of public transport had increased. The most common reasons given for this increase were: public transport was more convenient than before (35%), changes in work circumstances (17%), public transport cheaper or free (12%) and access to public transport changed e.g. moved house or work location (9%) (Table 36).

INCREASED PUBLIC TRANSPORT USE, Reasons for increase



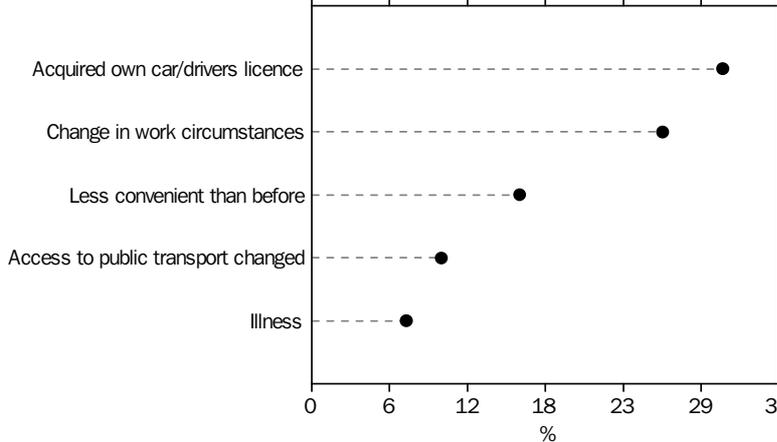
Decreased public transport use

Approximately 107,800 (8%) people indicated that their use of public transport had decreased in the past two years. The main reasons given were: having obtained a motor vehicle or driver licence (31%), change in work circumstances (26%), public transport less convenient than before (16%) and access to public transport changed (10%) (Table 36).

SUMMARY OF FINDINGS *continued*

Decreased public transport use continued

DECREASED PUBLIC TRANSPORT USE, Reasons for decrease



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PERTH METROPOLITAN REGION

	Central Metro.	East Metro.	North Metro.	South West Metro.	South East Metro.	Perth	Balance of Western Australia	Western Australia
DWELLINGS ('000)								
Dwelling type								
Separate house	35.5	87.7	180.9	109.1	92.7	505.9	189.9	695.9
Semi-detached, row or terrace house, townhouse etc.	6.1	*4.8	31.1	11.5	11.1	64.6	13.5	78.0
Flat, unit or apartment and other(a)	*19.5	*9.2	16.7	12.1	18.4	76.0	12.1	88.1
Tenure type								
Fully owned	16.1	32.0	59.3	39.7	34.4	181.5	66.0	247.5
Being paid off	17.7	45.7	106.4	58.8	44.4	273.1	73.4	346.5
Renting (publicly)	np	np	*8.2	*4.2	*6.9	24.3	12.2	36.5
Renting (other)	23.8	17.6	50.8	26.0	31.9	150.2	55.3	205.5
Other	np	np	*4.0	*3.9	*4.7	17.4	*8.5	25.9
Persons in household								
One person	21.1	23.6	52.2	37.6	34.7	169.2	54.7	223.9
Two persons	22.5	35.8	75.1	38.6	40.9	212.9	81.0	293.9
Three to five persons	16.1	38.3	94.6	54.4	40.4	243.7	74.2	318.0
Six or more persons	*1.4	*4.1	6.8	*2.1	*6.3	20.7	*5.5	26.2
Gross annual household income								
Less than \$25,000	10.7	17.4	35.1	21.8	27.7	112.7	42.2	154.9
Less than \$50,000	10.0	20.1	35.8	26.5	21.1	113.5	41.3	154.8
Less than \$70,000	7.1	13.4	35.6	18.3	20.6	95.0	32.7	127.7
Less than \$110,000	8.2	22.5	52.3	24.1	19.4	126.6	51.3	177.8
\$110,000 or more	21.2	25.3	59.9	37.9	25.5	169.9	43.2	213.1
Don't know	*4.0	*2.9	10.0	*4.0	7.9	28.8	*4.9	33.7
Concession card use								
Discount on energy and water bills	16.9	31.0	59.4	38.2	34.3	179.8	52.1	231.9
Other discounts	*5.5	8.2	27.2	11.6	13.5	66.0	17.4	83.4
Total dwellings	61.2	101.7	228.7	132.6	122.3	646.5	215.5	862.0

PROPORTION (%)

Dwelling type								
Separate house	58.1	86.2	79.1	82.2	75.8	78.3	88.1	80.7
Semi-detached, row or terrace house, townhouse etc.	10.0	*4.7	13.6	8.6	9.1	10.0	6.2	9.1
Flat, unit or apartment and other(a)	31.9	*9.1	7.3	9.1	15.1	11.8	5.6	10.2
Tenure type								
Fully owned	26.3	31.4	25.9	29.9	28.1	28.1	30.6	28.7
Being paid off	29.0	45.0	46.5	44.4	36.3	42.2	34.1	40.2
Renting (publicly)	np	np	*3.6	*3.2	*5.6	3.8	5.7	4.2
Renting (other)	39.0	17.3	22.2	19.6	26.1	23.2	25.6	23.8
Other	np	np	*1.7	*2.9	*3.8	2.7	*3.9	3.0
Persons in household								
One person	34.5	23.2	22.8	28.3	28.4	26.2	25.4	26.0
Two persons	36.8	35.1	32.8	29.1	33.4	32.9	37.6	34.1
Three to five persons	26.4	37.7	41.3	41.0	33.0	37.7	34.4	36.9
Six or more persons	*2.3	*4.0	3.0	*1.6	5.2	3.2	*2.6	3.0
Gross annual household income								
Less than \$25,000	17.5	17.1	15.4	16.4	22.7	17.4	19.6	18.0
Less than \$50,000	16.3	19.8	15.7	20.0	17.3	17.6	19.2	18.0
Less than \$70,000	11.7	13.2	15.6	13.8	16.9	14.7	15.2	14.8
Less than \$110,000	13.4	22.2	22.9	18.2	15.9	19.6	23.8	20.6
\$110,000 or more	34.7	24.9	26.2	28.6	20.9	26.3	20.0	24.7
Don't know	*6.5	*2.9	4.4	*3.0	6.4	4.5	*2.3	3.9
Concession card use								
Discount on energy and water bills	27.6	30.5	26.0	28.8	28.1	27.8	24.2	26.9
Other discounts	*8.9	8.0	11.9	8.8	11.0	10.2	8.1	9.7
Total dwellings	100.0							

* estimate has a relative standard error of 25% to 50% and should be used with caution

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Includes caravans, houseboats and other improvised dwellings

DWELLING PROFILE, Dwelling type

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
DWELLINGS ('000)				
Tenure type				
Fully owned	219.6	14.2	13.6	247.5
Being paid off	309.0	21.1	16.5	346.5
Renting (publicly)	16.3	*8.2	*12.0	36.5
Renting (other)	130.3	32.1	43.1	205.5
Other	20.7	*2.4	*2.9	25.9
Persons in household				
One person	138.8	36.8	48.2	223.9
Two persons	238.8	27.3	27.8	293.9
Three to five persons	292.0	13.9	12.1	318.0
Six or more persons	26.2	—	—	26.2
Gross annual household income				
Less than \$25,000	111.7	18.9	24.4	154.9
Less than \$50,000	117.1	15.5	22.2	154.8
Less than \$70,000	95.2	16.5	16.1	127.7
Less than \$110,000	156.4	10.3	11.2	177.8
\$110,000 or more	190.3	13.4	9.4	213.1
Don't know	25.2	*3.5	*4.9	33.7
Concession card use				
Discount on energy and water bills	184.3	20.4	27.1	231.9
Other discounts	66.6	9.0	7.8	83.4
Total dwellings	695.9	78.0	88.1	862.0

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
PROPORTION (%)				
Tenure type				
Fully owned	31.6	18.2	15.5	28.7
Being paid off	44.4	27.0	18.7	40.2
Renting (publicly)	2.3	10.5	*13.7	4.2
Renting (other)	18.7	41.1	48.9	23.8
Other	3.0	*3.1	*3.2	3.0
Persons in household				
One person	20.0	47.2	54.8	26.0
Two persons	34.3	35.0	31.6	34.1
Three to five persons	42.0	17.8	13.7	36.9
Six or more persons	3.8	—	—	3.0
Gross annual household income				
Less than \$25,000	16.0	24.2	27.7	18.0
Less than \$50,000	16.8	19.8	25.2	18.0
Less than \$70,000	13.7	21.1	18.2	14.8
Less than \$110,000	22.5	13.2	12.7	20.6
\$110,000 or more	27.3	17.2	10.6	24.7
Don't know	3.6	*4.5	5.6	3.9
Concession card use				
Discount on energy and water bills	26.5	26.2	30.8	26.9
Other discounts	9.6	11.5	8.9	9.7
Total dwellings	100.0	100.0	100.0	100.0

* estimate has a relative standard error of 25% to 50% and should be used with caution

— nil or rounded to zero (including null cells)

(a) Includes caravans, houseboats and other improvised dwellings

DWELLING PROFILE, Gross annual household income

	Less than \$25,000	Less than \$50,000	Less than \$70,000	Less than \$110,000	\$110,000 or more	Don't know	Total
DWELLINGS ('000)							
Dwelling type							
Separate house	111.7	117.1	95.2	156.4	190.3	25.2	695.9
Semi-detached, row or terrace house, townhouse etc.	18.9	15.5	16.5	10.3	13.4	*3.5	78.0
Flat, unit apartment and other(a)	24.4	22.2	16.1	11.2	9.4	*4.9	88.1
Tenure type							
Fully owned	71.5	55.6	30.0	37.3	46.0	7.2	247.5
Being paid off	19.7	40.2	48.9	97.5	127.4	12.8	346.5
Renting (publicly)	22.9	5.9	*4.3	*1.5	np	np	36.5
Renting (other)	34.7	47.5	41.6	37.0	33.9	10.8	205.5
Other	6.2	*5.5	*2.8	4.6	np	np	25.9
Persons in household							
One person	83.9	54.6	34.6	27.8	13.2	9.6	223.9
Two persons	51.7	60.0	42.9	59.4	69.7	10.1	293.9
Three to five persons	16.9	38.0	46.0	83.7	120.5	12.8	318.0
Six or more persons	*2.5	*2.0	*4.1	6.9	9.6	**1.2	26.2
Concession card use							
Discount on energy and water bills	112.6	64.3	20.9	15.4	12.5	6.1	231.9
Other discounts	18.9	17.9	13.1	12.6	15.3	*5.6	83.4
Total dwellings	154.9	154.8	127.7	177.8	213.1	33.7	862.0

	PROPORTION (%)						
Dwelling type							
Separate house	72.1	75.7	74.5	87.9	89.3	74.9	80.7
Semi-detached, row or terrace house, townhouse etc.	12.2	10.0	12.9	5.8	6.3	10.5	9.1
Flat, unit apartment and other(a)	15.7	14.3	12.6	6.3	4.4	14.6	10.2
Tenure type							
Fully owned	46.1	35.9	23.5	21.0	21.6	21.3	28.7
Being paid off	12.7	26.0	38.3	54.8	59.8	38.1	40.2
Renting (publicly)	14.8	3.8	*3.4	*0.8	np	np	4.2
Renting (other)	22.4	30.7	32.6	20.8	15.9	32.0	23.8
Other	4.0	*3.6	*2.2	2.6	np	np	3.0
Persons in household							
One person	54.2	35.3	27.1	15.7	6.2	28.6	26.0
Two persons	33.4	38.8	33.6	33.4	32.7	30.0	34.1
Three to five persons	10.9	24.6	36.0	47.1	56.6	37.9	36.9
Six or more persons	*1.6	*1.3	*3.2	3.9	4.5	**3.5	3.0
Concession card use							
Discount on energy and water bills	72.7	41.5	16.4	8.7	5.9	18.0	26.9
Other discounts	12.2	11.6	10.3	7.1	7.2	16.6	9.7
Total dwellings	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Includes caravans, houseboats and other improvised dwellings

PERTH METROPOLITAN REGION

	Central Metro.	East Metro.	North Metro.	South West Metro.	South East Metro.	Perth	Balance of Western Australia	Western Australia
Dwellings ('000)								
Connected to mains water	61.2	99.9	227.3	127.1	118.7	634.2	191.5	825.7
Rainwater tank								
Dwelling has rainwater tank	*2.5	12.8	11.8	*12.5	*10.0	49.5	60.3	109.7
Rainwater tank plumbed into dwelling	**0.4	**1.8	**1.9	**6.7	**4.2	*15.0	32.1	47.1
Rainwater tank not plumbed into dwelling	*2.1	10.9	9.9	5.7	5.7	34.5	28.1	62.6
Bore access								
One dwelling only	np	np	37.8	45.4	31.4	152.4	*27.5	179.9
Shared between two or more dwellings	np	np	*2.8	*2.9	—	6.7	0.8	7.4
Whether bore in use								
Bore in use	*6.9	28.5	36.8	46.3	27.9	146.3	*25.6	171.9
Bore not in use	*1.4	*2.1	3.8	*2.0	*3.5	12.8	*2.6	15.4
Energy source(a)								
Electricity	61.2	101.7	228.7	132.6	122.3	646.5	215.1	861.6
Gas – Mains	51.5	66.4	204.3	115.7	101.3	539.2	69.2	608.4
Gas – LPG/bottled gas	—	*15.6	*2.8	*9.8	**2.5	30.7	107.0	137.7
Solar energy	*4.2	24.3	33.0	24.5	18.3	104.3	61.0	165.3
Wood	*4.3	24.7	15.4	*13.1	*16.6	74.0	79.5	153.5
<i>Total dwellings</i>	<i>61.2</i>	<i>101.7</i>	<i>228.7</i>	<i>132.6</i>	<i>122.3</i>	<i>646.5</i>	<i>215.5</i>	<i>862.0</i>

PROPORTION (%)

Connected to mains water	100.0	98.2	99.4	95.8	97.1	98.1	88.9	95.8
Rainwater tank								
Dwelling has rainwater tank	*4.1	12.5	5.1	*9.4	*8.1	7.6	28.0	12.7
Rainwater tank plumbed into dwelling	**0.6	**1.8	**0.8	**5.1	**3.5	*2.3	14.9	5.5
Rainwater tank not plumbed into dwelling	*3.5	10.8	4.3	4.3	4.7	5.3	13.1	7.3
Bore access								
One dwelling only	np	np	16.5	34.2	25.7	23.6	*12.8	20.9
Shared between two or more dwellings	np	np	*1.2	*2.2	—	1.0	0.4	0.9
Whether bore in use								
Bore in use	*11.2	28.0	16.1	34.9	22.8	22.6	*11.9	19.9
Bore not in use	*2.3	*2.0	1.6	*1.5	*2.9	2.0	*1.2	1.8
Energy source(a)								
Electricity	100.0	100.0	100.0	100.0	100.0	100.0	99.8	100.0
Gas – Mains	84.2	65.2	89.3	87.3	82.8	83.4	32.1	70.6
Gas – LPG/bottled gas	—	15.3	*1.2	*7.4	**2.0	4.8	49.7	16.0
Solar energy	*6.9	23.9	14.4	18.5	15.0	16.1	28.3	19.2
Wood	*7.0	24.3	6.7	*9.9	*13.6	11.5	36.9	17.8
<i>Total dwellings</i>	<i>100.0</i>							

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— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable,

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

unless otherwise indicated

(a) Excludes other

SOURCES OF WATER AND ENERGY, Dwelling type

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
Dwellings ('000)				
Connected to mains water	659.6	78.0	88.1	825.7
Rainwater tank				
Dwelling has rainwater tank	104.4	*3.6	*1.8	109.7
Rainwater tank plumbed into dwelling	46.0	**1.1	—	47.1
Rainwater tank not plumbed into dwelling	58.4	*2.5	*1.8	62.6
Bore access				
One dwelling only	174.1	5.8	—	179.9
Shared between two or more dwellings	6.7	**0.7	—	7.4
Whether bore in use				
Bore in use	166.2	5.8	—	171.9
Bore not in use	14.7	**0.7	—	15.4
Energy source(b)				
Electricity	695.5	78.0	88.1	861.6
Gas – Mains	491.3	58.2	58.8	608.4
Gas – LPG/bottled gas	129.7	*3.6	*4.5	137.7
Solar energy	161.1	np	np	165.3
Wood	151.0	np	np	153.5
<i>Total dwellings</i>	695.9	78.0	88.1	862.0
Proportion (%)				
Connected to mains water	94.8	100.0	100.0	95.8
Rainwater tank				
Dwelling has rainwater tank	15.0	*4.6	*2.0	12.7
Rainwater tank plumbed into dwelling	6.6	**1.4	—	5.5
Rainwater tank not plumbed into dwelling	8.4	*3.2	*2.0	7.3
Bore access				
One dwelling only	25.0	7.4	—	20.9
Shared between two or more dwellings	1.0	**0.9	—	0.9
Whether bore in use				
Bore in use	23.9	7.4	—	19.9
Bore not in use	2.1	**0.9	—	1.8
Energy source(b)				
Electricity	99.9	100.0	100.0	100.0
Gas – Mains	70.6	74.6	66.8	70.6
Gas – LPG/bottled gas	18.6	*4.6	*5.1	16.0
Solar energy	23.1	np	np	19.2
Wood	21.7	np	np	17.8
<i>Total dwellings</i>	100.0	100.0	100.0	100.0
* estimate has a relative standard error of 25% to 50% and should be used with caution	np	not available for publication but included in totals where applicable, unless otherwise indicated		
** estimate has a relative standard error greater than 50% and is considered too unreliable for general use	(a)	Includes caravans, houseboats and other improvised dwellings		
— nil or rounded to zero (including null cells)	(b)	Excludes other		

SOURCES OF WATER AND ENERGY, Tenure type

	<i>Fully owned</i>	<i>Being paid off</i>	<i>Renting (publicly)</i>	<i>Renting (other)</i>	<i>Other</i>	<i>Total</i>
Dwellings ('000)						
Connected to mains water	231.2	333.8	36.5	199.7	24.5	825.7
Rainwater tank						
Dwelling has rainwater tank	50.4	39.7	np	15.1	np	109.7
Rainwater tank plumbed into dwelling	23.3	*16.3	np	*5.2	np	47.1
Rainwater tank not plumbed into dwelling	27.1	23.4	np	9.9	np	62.6
Bore access						
One dwelling only	73.4	72.2	**1.1	28.6	*4.6	179.9
Shared between two or more dwellings	*2.8	*2.8	**0.4	**1.1	**0.3	7.4
Whether bore in use						
Bore in use	72.3	68.4	**1.1	25.5	*4.6	171.9
Bore not in use	*3.9	*6.6	**0.4	*4.2	**0.3	15.4
Energy source(a)						
Electricity	247.1	346.5	36.5	205.5	25.9	861.6
Gas – Mains	163.9	269.3	26.9	134.6	13.8	608.4
Gas – LPG/bottled gas	50.2	48.5	*6.4	26.7	*5.9	137.7
Solar energy	68.3	69.1	**1.8	21.7	*4.5	165.3
Wood	54.8	64.0	**1.4	26.2	7.1	153.5
<i>Total dwellings</i>	<i>247.5</i>	<i>346.5</i>	<i>36.5</i>	<i>205.5</i>	<i>25.9</i>	<i>862.0</i>
Proportion (%)						
Connected to mains water	93.4	96.3	100.0	97.2	94.5	95.8
Rainwater tank						
Dwelling has rainwater tank	20.4	11.4	np	7.4	np	12.7
Rainwater tank plumbed into dwelling	9.4	*4.7	np	*2.5	np	5.5
Rainwater tank not plumbed into dwelling	10.9	6.7	np	4.8	np	7.3
Bore access						
One dwelling only	29.7	20.8	**3.0	13.9	17.8	20.9
Shared between two or more dwellings	*1.1	*0.8	**1.0	**0.6	**1.2	0.9
Whether bore in use						
Bore in use	29.2	19.7	**2.9	12.4	17.8	19.9
Bore not in use	*1.6	*1.9	**1.0	*2.0	**1.2	1.8
Energy source(a)						
Electricity	99.9	100.0	100.0	100.0	100.0	100.0
Gas – Mains	66.2	77.7	73.6	65.5	53.2	70.6
Gas – LPG/bottled gas	20.3	14.0	*17.6	13.0	*22.8	16.0
Solar energy	27.6	19.9	**4.8	10.6	17.2	19.2
Wood	22.2	18.5	**3.8	12.7	27.4	17.8
<i>Total dwellings</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

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(a) Excludes other

SOURCES OF WATER AND ENERGY, Household size

	One person household(a)	Two person household(a)	Three to five person household(a)	Six or more person household(a)	Total(a)
Dwellings ('000)					
Connected to mains water	216.7	281.1	303.4	24.5	825.7
Rainwater tank					
Dwelling has rainwater tank	24.9	42.8	39.1	*2.9	109.7
Rainwater tank plumbed into dwelling	8.9	*16.5	*19.5	*2.2	47.1
Rainwater tank not plumbed into dwelling	16.0	26.4	19.5	**0.7	62.6
Borer access					
One dwelling only	35.0	62.3	75.3	7.2	179.9
Shared between two or more dwellings	*2.9	*2.2	*2.4	—	7.4
Whether bore in use					
Bore in use	34.3	59.7	70.7	7.2	171.9
Bore not in use	*3.6	*4.8	7.0	—	15.4
Energy source(b)					
Electricity	223.5	293.9	318.0	26.2	861.6
Gas – Mains	149.7	205.1	234.8	18.8	608.4
Gas – LPG/bottled gas	30.9	49.7	51.3	*5.9	137.7
Solar energy	31.1	60.3	66.0	7.9	165.3
Wood	31.0	53.4	62.9	6.2	153.5
<i>Total dwellings</i>	<i>223.9</i>	<i>293.9</i>	<i>318.0</i>	<i>26.2</i>	<i>862.0</i>
Proportion (%)					
Connected to mains water	96.8	95.6	95.4	93.4	95.8
Rainwater tank					
Dwelling has rainwater tank	11.1	14.6	12.3	*11.0	12.7
Rainwater tank plumbed into dwelling	4.0	*5.6	*6.1	*8.2	5.5
Rainwater tank not plumbed into dwelling	7.2	9.0	6.1	**2.7	7.3
Borer access					
One dwelling only	15.6	21.2	23.7	27.6	20.9
Shared between two or more dwellings	*1.3	*0.7	*0.8	—	0.9
Whether bore in use					
Bore in use	15.3	20.3	22.2	27.6	19.9
Bore not in use	*1.6	*1.6	2.2	—	1.8
Energy source(b)					
Electricity	99.8	100.0	100.0	100.0	100.0
Gas – Mains	66.9	69.8	73.8	71.5	70.6
Gas – LPG/bottled gas	13.8	16.9	16.1	22.3	16.0
Solar energy	13.9	20.5	20.8	30.2	19.2
Wood	13.8	18.2	19.8	23.5	17.8
<i>Total dwellings</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
* estimate has a relative standard error of 25% to 50% and should be used with caution	— nil or rounded to zero (including null cells)				
** estimate has a relative standard error greater than 50% and is considered too unreliable for general use	(a) Excludes people living in the dwelling who are out of scope (see explanatory notes)				
	(b) Excludes other				

SOURCES OF WATER AND ENERGY, Gross annual household income

	<i>Less than \$25,000</i>	<i>Less than \$50,000</i>	<i>Less than \$70,000</i>	<i>Less than \$110,000</i>	<i>\$110,000 or more</i>	<i>Don't know</i>	<i>Total</i>
DWELLINGS ('000)							
Connected to mains water	148.9	146.7	123.3	169.5	205.9	31.4	825.7
Rainwater tank							
Dwelling has rainwater tank	22.3	19.9	15.1	20.9	26.6	*4.8	109.7
Rainwater tank plumbed into dwelling	*7.8	*8.7	*5.6	*9.9	12.4	*2.6	47.1
Rainwater tank not plumbed into dwelling	14.5	11.2	9.5	11.1	14.2	*2.2	62.6
Bore access							
One dwelling only	32.4	29.9	22.8	36.2	51.0	7.7	179.9
Shared between two or more dwellings	*1.8	**1.7	**0.7	**1.1	*1.8	**0.4	7.4
Whether bore in use							
Bore in use	31.6	28.9	22.5	33.6	48.8	6.6	171.9
Bore not in use	*2.6	*2.7	**1.0	*3.7	*4.0	**1.5	15.4
Energy source(a)							
Electricity	154.9	154.4	127.7	177.8	213.1	33.7	861.6
Gas – Mains	103.8	102.1	87.1	123.0	167.4	25.0	608.4
Gas – LPG/bottled gas	23.0	28.2	21.1	33.7	27.7	*4.1	137.7
Solar energy	25.8	33.3	18.6	37.6	43.8	*6.4	165.3
Wood	20.0	32.5	17.5	37.6	39.2	*6.6	153.5
<i>Total dwellings</i>	<i>154.9</i>	<i>154.8</i>	<i>127.7</i>	<i>177.8</i>	<i>213.1</i>	<i>33.7</i>	<i>862.0</i>
PROPORTION (%)							
Connected to mains water	96.1	94.8	96.5	95.3	96.7	93.2	95.8
Rainwater tank							
Dwelling has rainwater tank	14.4	12.9	11.8	11.8	12.5	14.3	12.7
Rainwater tank plumbed into dwelling	*5.0	*5.6	*4.4	*5.5	5.8	*7.8	5.5
Rainwater tank not plumbed into dwelling	9.4	7.2	7.4	6.2	6.7	*6.5	7.3
Bore access							
One dwelling only	20.9	19.3	17.8	20.4	23.9	22.8	20.9
Shared between two or more dwellings	*1.2	**1.1	**0.6	**0.6	*0.8	**1.1	0.9
Whether bore in use							
Bore in use	20.4	18.7	17.6	18.9	22.9	19.5	19.9
Bore not in use	*1.6	*1.7	**0.8	*2.1	*1.9	**4.3	1.8
Energy source(a)							
Electricity	100.0	99.8	100.0	100.0	100.0	100.0	100.0
Gas – Mains	67.0	66.0	68.2	69.2	78.6	74.3	70.6
Gas – LPG/bottled gas	14.8	18.2	16.5	19.0	13.0	*12.3	16.0
Solar energy	16.6	21.5	14.5	21.1	20.5	18.8	19.2
Wood	12.9	21.0	13.7	21.2	18.4	*19.6	17.8
<i>Total dwellings</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

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(a) Excludes other

	DWELLINGS			PROPORTION		
	Perth	Balance of Western Australia	Western Australia	Perth	Balance of Western Australia	Western Australia
	'000	'000	'000	%	%	%
Number of toilets						
One	260.9	95.7	356.6	40.4	44.4	41.4
Two	322.3	107.2	429.5	49.9	49.8	49.8
Three or more	63.3	12.5	75.9	9.8	5.8	8.8
Toilet type						
None dual flush	59.5	17.7	77.2	9.2	8.2	9.0
Some dual flush	25.8	9.3	35.1	4.0	4.3	4.1
All dual flush	561.2	188.5	749.7	86.8	87.5	87.0
One toilet						
Not dual flush	42.4	13.1	55.5	6.6	6.1	6.4
Dual flush	218.5	82.6	301.1	33.8	38.3	34.9
Two toilets						
None dual flush	15.7	*4.2	19.9	2.4	*2.0	2.3
One dual flush	19.0	*7.1	26.1	2.9	*3.3	3.0
Both dual flush	287.6	95.9	383.5	44.5	44.5	44.5
Three or more toilets						
None dual flush	np	np	**1.7	np	np	**0.2
Some dual flush	np	np	9.1	np	np	1.1
All dual flush	55.1	9.9	65.1	8.5	4.6	7.5
Number of showers(a)						
One	299.6	105.2	404.9	46.3	48.8	47.0
Two	311.0	99.2	410.2	48.1	46.1	47.6
Three or more	35.5	*11.0	46.5	5.5	*5.1	5.4
Shower type(a) (b)						
No low flow shower heads	250.5	85.1	335.6	38.7	39.5	38.9
Some low flow shower heads	59.0	19.5	78.5	9.1	9.1	9.1
All low flow shower heads	331.6	110.4	442.0	51.3	51.2	51.3
One shower						
Not low flow	140.2	53.5	193.7	21.7	24.8	22.5
Low flow	159.4	51.7	211.2	24.7	24.0	24.5
Two showers						
None low flow	100.8	26.3	127.1	15.6	12.2	14.7
One low flow	47.9	17.1	65.0	7.4	7.9	7.5
Both low flow	157.2	55.5	212.7	24.3	25.8	24.7
Three or more showers						
None low flow	9.1	*5.4	14.5	1.4	*2.5	1.7
Some low flow	11.1	*2.5	13.6	1.7	*1.1	1.6
All low flow	15.0	*3.2	18.1	2.3	*1.5	2.1
<i>Total dwellings</i>	<i>646.5</i>	<i>215.5</i>	<i>862.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

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(a) Excludes dwellings with no shower

(b) Excludes don't know

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
Dwellings ('000)				
Number of toilets				
One	239.9	44.8	71.9	356.6
Two	390.8	22.9	15.8	429.5
Three or more	65.2	10.3	**0.4	75.9
Toilet type				
None dual flush	57.5	np	np	77.2
Some dual flush	33.3	np	np	35.1
All dual flush	605.0	69.8	74.9	749.7
One toilet				
Not dual flush	37.0	7.1	11.4	55.5
Dual flush	202.9	37.7	60.5	301.1
Two toilets				
None dual flush	18.8	np	np	19.9
One dual flush	24.3	np	np	26.1
Both dual flush	347.7	21.8	14.0	383.5
Three or more toilets				
None dual flush	**1.7	—	—	**1.7
Some dual flush	9.1	—	—	9.1
All dual flush	54.4	10.3	**0.4	65.1
Number of showers(b)				
One	275.3	53.8	75.8	404.9
Two	375.1	23.2	*11.9	410.2
Three or more	45.1	**1.0	**0.4	46.5
Shower type(b)(c)				
No low flow shower heads	252.7	36.4	46.5	335.6
Some low flow shower heads	73.3	*3.5	**1.7	78.5
All low flow shower heads	364.8	37.4	39.9	442.0
One shower				
Not low flow	124.6	27.6	41.5	193.7
Low flow	150.7	26.2	34.3	211.2
Two showers				
None low flow	113.6	8.6	*4.9	127.1
One low flow	60.0	*3.2	**1.7	65.0
Both low flow	196.7	10.8	*5.3	212.7
Three or more showers				
None low flow	14.2	np	np	14.5
Some low flow	13.2	np	np	13.6
All low flow	17.4	np	np	18.1
Don't know	*5.1	np	—	*5.8
Total dwellings	695.9	78.0	88.1	862.0

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— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Includes caravans, houseboats and other improvised dwellings

(b) Excludes dwellings with no shower

(c) Excludes don't know

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
PROPORTION (%)				
Number of toilets				
One	34.5	57.5	81.6	41.4
Two	56.2	29.4	17.9	49.8
Three or more	9.4	13.2	**0.4	8.8
Toilet type				
None dual flush	8.3	np	np	9.0
Some dual flush	4.8	np	np	4.1
All dual flush	86.9	89.5	85.0	87.0
One toilet				
Not dual flush	5.3	9.1	13.0	6.4
Dual flush	29.2	48.3	68.6	34.9
Two toilets				
None dual flush	2.7	np	np	2.3
One dual flush	3.5	np	np	3.0
Both dual flush	50.0	28.0	15.9	44.5
Three or more toilets				
None dual flush	*0.2	—	—	**0.2
Some dual flush	1.3	—	—	1.1
All dual flush	7.8	13.2	**0.4	7.5
Number of showers(b)				
One	39.6	68.9	86.1	47.0
Two	53.9	29.8	*13.5	47.6
Three or more	6.5	**1.3	**0.4	5.4
Shower type(b)(c)				
No low flow shower heads	36.3	46.7	52.7	38.9
Some low flow shower heads	10.5	*4.5	**2.0	9.1
All low flow shower heads	52.4	47.9	45.3	51.3
One shower				
Not low flow	17.9	35.3	47.2	22.5
Low flow	21.7	33.6	38.9	24.5
Two showers				
None low flow	16.3	11.0	*5.6	14.7
One low flow	8.6	*4.1	**2.0	7.5
Both low flow	28.3	13.8	*6.0	24.7
Three or more showers				
None low flow	2.0	np	np	1.7
Some low flow	1.9	np	np	1.6
All low flow	2.5	np	np	2.1
Don't know	*0.7	np	—	*0.7
Total dwellings	100.0	100.0	100.0	100.0

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— nil or rounded to zero (including null cells)

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(a) Includes caravans, houseboats and other improvised dwellings

(b) Excludes dwellings with no shower

(c) Excludes don't know

	Fully owned	Being paid off	Renting (publicly)	Renting (other)	Other	Total
DWELLINGS ('000)						
Number of toilets						
One	93.0	105.7	31.9	114.0	12.0	356.6
Two	125.8	205.5	*4.6	81.4	12.1	429.5
Three or more	28.6	35.3	—	10.1	**1.8	75.9
Toilet type						
None dual flush	24.6	18.5	*2.2	28.7	*3.1	77.2
Some dual flush	14.0	12.9	—	6.7	*1.5	35.1
All dual flush	208.9	315.1	34.3	170.1	21.3	749.7
One toilet						
Not dual flush	16.7	11.0	*2.2	23.9	*1.7	55.5
Dual flush	76.4	94.7	29.7	90.0	10.3	301.1
Two toilets						
None dual flush	7.6	*6.9	—	*4.4	**1.0	19.9
One dual flush	9.3	9.6	—	6.0	**1.2	26.1
Both dual flush	109.0	189.1	*4.6	71.0	*9.9	383.5
Three or more toilets						
None dual flush	np	np	—	np	np	**1.7
Some dual flush	np	np	—	np	np	9.1
All dual flush	23.5	31.3	—	9.1	**1.1	65.1
Number of showers(a)						
One	107.5	123.5	34.7	126.5	12.7	404.9
Two	124.0	196.0	*1.8	76.4	12.1	410.2
Three or more	15.7	27.1	—	*2.7	**1.1	46.5
Shower type(a)(b)						
No low flow shower heads	94.4	104.3	19.9	106.8	10.2	335.6
Some low flow shower heads	26.3	37.0	**0.4	11.9	*3.0	78.5
All low flow shower heads	125.4	203.8	16.2	83.8	12.7	442.0
One shower						
Not low flow	49.2	44.8	19.9	73.3	6.5	193.7
Low flow	58.3	78.6	14.8	53.2	6.2	211.2
Two showers						
None low flow	41.6	48.9	np	32.9	np	127.1
One low flow	22.0	29.5	np	10.9	np	65.0
Both low flow	59.3	116.2	*1.4	29.6	*6.1	212.7
Three or more showers						
None low flow	*3.3	10.5	—	**0.6	—	14.5
Some low flow	*4.3	7.6	np	**1.0	np	13.6
All low flow	*7.8	9.0	np	**1.0	np	18.1
Total dwellings	247.5	346.5	36.5	205.5	25.9	862.0

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(a) Excludes dwellings with no shower

(b) Excludes don't know

	Fully owned	Being paid off	Renting (publicly)	Renting (other)	Other	Total
PROPORTION (%)						
Number of toilets						
One	37.6	30.5	87.3	55.5	46.3	41.4
Two	50.8	59.3	*12.7	39.6	46.6	49.8
Three or more	11.6	10.2	—	4.9	**7.1	8.8
Toilet type						
None dual flush	10.0	5.4	*6.0	14.0	*12.0	9.0
Some dual flush	5.7	3.7	—	3.3	*6.0	4.1
All dual flush	84.4	90.9	94.0	82.8	82.1	87.0
One toilet						
Not dual flush	6.7	3.2	*6.0	11.7	*6.6	6.4
Dual flush	30.9	27.3	81.3	43.8	39.7	34.9
Two toilets						
None dual flush	3.1	*2.0	—	*2.1	**4.0	2.3
One dual flush	3.8	2.8	—	*2.9	**4.6	3.0
Both dual flush	44.0	54.6	*12.7	34.5	38.1	44.5
Three or more toilets						
None dual flush	np	np	—	np	np	**0.2
Some dual flush	np	np	—	np	np	1.1
All dual flush	9.5	9.0	—	4.4	**4.3	7.5
Number of showers(a)						
One	43.4	35.6	95.1	61.5	49.0	47.0
Two	50.1	56.6	*4.9	37.2	46.8	47.6
Three or more	6.3	7.8	—	*1.3	**4.2	5.4
Shower type(a) (b)						
No low flow shower heads	38.1	30.1	54.5	52.0	39.5	38.9
Some low flow shower heads	10.6	10.7	**1.1	5.8	*11.4	9.1
All low flow shower heads	50.7	58.8	44.4	40.8	49.1	51.3
One shower						
Not low flow	19.9	12.9	54.5	35.7	25.1	22.5
Low flow	23.6	22.7	40.6	25.9	24.0	24.5
Two showers						
None low flow	16.8	14.1	np	16.0	np	14.7
One low flow	8.9	8.5	np	5.3	np	7.5
Both low flow	24.0	33.5	**3.8	14.4	23.7	24.7
Three or more showers						
None low flow	*1.3	3.0	—	**0.3	—	1.7
Some low flow	*1.7	2.2	np	**0.5	np	1.6
All low flow	*3.1	2.6	np	**0.5	np	2.1
Total dwellings	100.0	100.0	100.0	100.0	100.0	100.0

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(a) Excludes dwellings with no shower

(b) Excludes don't know

	One person household(a)	Two person household(a)	Three to five person household(a)	Six or more person household(a)	Total(a)
DWELLINGS ('000)					
Number of toilets					
One	138.5	122.4	89.9	5.7	356.6
Two	75.3	147.7	189.4	17.1	429.5
Three or more	10.0	23.8	38.7	*3.4	75.9
Toilet type					
None dual flush	31.4	26.3	18.3	**1.1	77.2
Some dual flush	7.8	12.8	13.4	**1.1	35.1
All dual flush	184.6	254.8	286.3	24.0	749.7
One toilet					
Not dual flush	25.4	17.6	11.9	**0.7	55.5
Dual flush	113.2	104.8	78.0	*5.0	301.1
Two toilets					
None dual flush	*5.7	7.7	np	np	19.9
One dual flush	6.8	9.6	np	np	26.1
Both dual flush	62.8	130.4	173.9	16.4	383.5
Three or more toilets					
None dual flush	**0.4	**1.1	np	np	**1.7
Some dual flush	**1.1	*3.2	np	np	9.1
All dual flush	8.6	19.5	34.3	*2.6	65.1
Number of showers(b)					
One	151.8	139.6	104.6	9.0	404.9
Two	67.1	140.9	187.5	14.8	410.2
Three or more	*4.6	13.5	25.9	*2.5	46.5
Shower type(b)(c)					
No low flow shower heads	104.3	117.3	106.0	8.0	335.6
Some low flow shower heads	11.8	28.6	36.1	*2.1	78.5
All low flow shower heads	106.8	144.7	174.8	15.7	442.0
One shower					
Not low flow	79.3	70.0	41.2	*3.2	193.7
Low flow	72.5	69.6	63.3	5.8	211.2
Two showers					
None low flow	23.2	41.8	58.8	*3.4	127.1
One low flow	10.4	24.6	27.9	*2.1	65.0
Both low flow	32.5	71.6	99.7	8.9	212.7
Three or more showers					
None low flow	*1.4	*5.6	6.1	*1.4	14.5
Some low flow	**1.4	*4.0	8.2	—	13.6
All low flow	*1.8	*3.6	11.7	**1.1	18.1
<i>Total dwellings</i>	223.9	293.9	318.0	26.2	862.0

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(a) Excludes people living in the dwelling who are out of scope (see explanatory notes)

(b) Excludes dwellings with no shower

(c) Excludes don't know

	One person household(a)	Two person household(a)	Three to five person household(a)	Six or more person household(a)	Total(a)
PROPORTION (%)					
Number of toilets					
One	61.9	41.7	28.3	21.8	41.4
Two	33.7	50.2	59.6	65.2	49.8
Three or more	4.5	8.1	12.2	*13.0	8.8
Toilet type					
None dual flush	14.0	9.0	5.8	**4.2	9.0
Some dual flush	3.5	4.4	4.2	**4.3	4.1
All dual flush	82.5	86.7	90.0	91.6	87.0
One toilet					
Not dual flush	11.3	6.0	3.7	**2.7	6.4
Dual flush	50.6	35.7	24.5	19.1	34.9
Two toilets					
None dual flush	*2.6	2.6	np	np	2.3
One dual flush	3.0	3.3	np	np	3.0
Both dual flush	28.1	44.4	54.7	62.5	44.5
Three or more toilets					
None dual flush	**0.2	**0.4	np	np	**0.2
Some dual flush	**0.5	*1.1	np	np	1.1
All dual flush	3.8	6.6	10.8	*10.0	7.5
Number of showers(b)					
One	67.8	47.5	32.9	34.1	47.0
Two	30.0	47.9	59.0	56.3	47.6
Three or more	*2.1	4.6	8.1	*9.6	5.4
Shower type(b)(c)					
No low flow shower heads	46.6	39.9	33.3	30.5	38.9
Some low flow shower heads	5.3	9.7	11.3	*8.0	9.1
All low flow shower heads	47.7	49.2	55.0	60.0	51.3
One shower					
Not low flow	35.4	23.8	13.0	*12.2	22.5
Low flow	32.4	23.7	19.9	21.9	24.5
Two showers					
None low flow	10.4	14.2	18.5	*12.8	14.7
One low flow	4.6	8.4	8.8	*8.0	7.5
Both low flow	14.5	24.4	31.4	33.9	24.7
Three or more showers					
None low flow	*0.6	*1.9	1.9	*5.4	1.7
Some low flow	**0.6	*1.4	2.6	—	1.6
All low flow	*0.8	*1.2	3.7	**4.2	2.1
<i>Total dwellings</i>	100.0	100.0	100.0	100.0	100.0

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(a) Excludes people living in the dwelling who are out of scope (see explanatory notes)

(b) Excludes dwellings with no shower

(c) Excludes don't know

	Less than \$25,000	Less than \$50,000	Less than \$70,000	Less than \$110,000	\$110,000 or more	Total(a)
DWELLINGS ('000)						
Number of toilets						
One	94.3	85.4	60.9	60.9	41.4	356.6
Two	54.8	62.8	57.2	101.6	135.3	429.5
Three or more	5.8	*6.6	9.6	15.3	36.4	75.9
Toilet type						
None dual flush	25.0	15.9	11.1	10.9	10.9	77.2
Some dual flush	4.9	5.9	5.1	9.5	8.0	35.1
All dual flush	124.9	133.0	111.5	157.5	194.1	749.7
One toilet						
Not dual flush	19.3	13.1	7.5	8.7	5.1	55.5
Dual flush	75.0	72.3	53.3	52.2	36.3	301.1
Two toilets						
None dual flush	*5.4	*2.8	*3.3	*2.1	*4.7	19.9
One dual flush	3.9	5.1	*3.2	7.3	*4.9	26.1
Both dual flush	45.5	54.8	50.8	92.2	125.6	383.5
Three or more toilets						
None dual flush	np	np	**0.3	—	**1.1	**1.7
Some dual flush	np	np	**1.9	*2.2	*3.2	9.1
All dual flush	4.4	*5.9	7.4	13.1	32.2	65.1
Number of showers(b)						
One	103.0	95.5	70.1	70.2	50.0	404.9
Two	48.0	56.0	51.4	98.0	141.5	410.2
Three or more	*3.6	*3.3	6.2	9.7	21.6	46.5
Shower type(b)(c)						
No low flow shower heads	70.9	63.5	60.4	65.3	61.0	335.6
Some low flow shower heads	9.2	12.1	11.0	14.4	30.5	78.5
All low flow shower heads	73.7	78.9	55.6	96.3	120.5	442.0
One shower						
Not low flow	52.1	46.9	40.1	30.5	16.6	193.7
Low flow	50.9	48.6	30.0	39.6	33.3	211.2
Two showers						
None low flow	16.7	15.5	18.6	31.2	38.8	127.1
One low flow	8.2	11.4	8.9	12.5	23.3	65.0
Both low flow	22.1	28.8	23.2	52.7	78.3	212.7
Three or more showers						
None low flow	*1.8	**1.1	*1.8	*3.5	5.5	14.5
Some low flow	np	np	*2.1	*1.8	*7.2	13.6
All low flow	np	np	*2.3	*4.0	8.9	18.1
Total dwellings	154.9	154.8	127.7	177.8	213.1	862.0

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(a) Includes don't know

(b) Excludes dwellings with no shower

(c) Excludes don't know

	Less than \$25,000	Less than \$50,000	Less than \$70,000	Less than \$110,000	\$110,000 or more	Total(a)
PROPORTION (%)						
Number of toilets						
One	60.9	55.2	47.7	34.2	19.4	41.4
Two	35.4	40.6	44.8	57.1	63.5	49.8
Three or more	3.7	*4.3	7.5	8.6	17.1	8.8
Toilet type						
None dual flush	16.2	10.3	8.7	6.1	5.1	9.0
Some dual flush	3.2	3.8	4.0	5.3	3.8	4.1
All dual flush	80.6	85.9	87.3	88.6	91.1	87.0
One toilet						
Not dual flush	12.5	8.4	5.9	4.9	2.4	6.4
Dual flush	48.4	46.7	41.8	29.3	17.0	34.9
Two toilets						
None dual flush	*3.5	*1.8	*2.6	*1.2	*2.2	2.3
One dual flush	2.5	3.3	*2.5	4.1	*2.3	3.0
Both dual flush	29.4	35.4	39.7	51.9	59.0	44.5
Three or more toilets						
None dual flush	np	np	**0.2	—	**0.5	**0.2
Some dual flush	np	np	**1.5	*1.2	*1.5	1.1
All dual flush	2.8	*3.8	5.8	7.4	15.1	7.5
Number of showers(b)						
One	66.5	61.7	54.9	39.5	23.4	47.0
Two	31.0	36.2	40.2	55.1	66.4	47.6
Three or more	*2.3	*2.1	4.9	5.4	10.2	5.4
Shower type(b)(c)						
No low flow shower heads	45.7	41.0	47.3	36.7	28.6	38.9
Some low flow shower heads	6.0	7.8	8.6	8.1	14.3	9.1
All low flow shower heads	47.6	51.0	43.5	54.2	56.6	51.3
One shower						
Not low flow	33.6	30.3	31.4	17.2	7.8	22.5
Low flow	32.9	31.4	23.5	22.3	15.6	24.5
Two showers						
None low flow	10.8	10.0	14.5	17.6	18.2	14.7
One low flow	5.3	7.4	7.0	7.0	10.9	7.5
Both low flow	14.3	18.6	18.2	29.6	36.7	24.7
Three or more showers						
None low flow	*1.1	**0.7	*1.4	*2.0	2.6	1.7
Some low flow	np	np	*1.6	*1.0	*3.4	1.6
All low flow	np	np	*1.8	*2.2	4.2	2.1
<i>Total dwellings</i>	100.0	100.0	100.0	100.0	100.0	100.0

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(a) Includes don't know

(b) Excludes dwellings with no shower

(c) Excludes don't know

	DWELLINGS(a)			PROPORTION(a)		
	Perth	Western Australia	Western Australia	Perth	Western Australia	Western Australia
	'000	'000	'000	%	%	%
.....						
Gardens and lawns						
Garden only	74.5	21.1	95.6	13.5	10.8	12.8
Lawns only	11.1	7.3	18.4	2.0	3.7	2.5
Both garden and lawn	466.6	166.9	633.5	84.5	85.5	84.7
Location of lawn(b)						
Front only	111.5	17.2	128.7	20.2	8.8	17.2
Back only	44.2	26.1	70.3	8.0	13.4	9.4
Both front and back	320.6	130.5	451.1	58.1	66.8	60.3
Water source for garden and lawn(c)						
Mains water	388.0	148.5	536.5	70.3	76.0	71.8
Garden bore	141.6	*21.6	163.2	25.6	*11.0	21.8
Rainwater tank	10.4	11.1	21.5	1.9	5.7	2.9
Recycled water/grey water	18.1	12.3	30.4	3.3	6.3	4.1
Other	**0.3	*7.9	*8.2	**0.1	*4.0	*1.1
Does not water garden/lawn	28.3	8.9	37.2	5.1	4.5	5.0
Watering method						
Reticulated watering system	402.7	124.3	527.1	72.9	63.7	70.5
Watered but not reticulated	121.2	62.1	183.2	21.9	31.8	24.5
Type of reticulation						
Mains water – automatic	198.0	72.2	270.2	35.9	37.0	36.1
Mains water – non automatic	66.8	25.2	92.0	12.1	12.9	12.3
Garden bore – automatic	93.5	*12.0	105.5	16.9	*6.2	14.1
Garden bore – non automatic	41.7	*5.8	47.5	7.5	*3.0	6.3
Other	*2.7	*9.2	11.9	*0.5	*4.7	1.6
Total dwellings	552.2	195.3	747.5	100.0	100.0	100.0

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(a) Excludes flats, units, apartments etc.

(b) Excludes other

(c) More than one response possible

	DWELLINGS(a)			PROPORTION(a)		
	Separate house	Semi-detached, row or terrace house, townhouse etc. and other(b)	Total	Separate house	Semi-detached, row or terrace house, townhouse etc. and other(b)	Total
	'000	'000	'000	%	%	%
Gardens and lawns						
Garden only	69.9	25.7	95.6	10.3	36.2	12.8
Lawns only	16.5	**1.8	18.4	2.4	**2.6	2.5
Both garden and lawn	590.0	43.5	633.5	87.2	61.2	84.7
Location of lawn(c)						
Front only	112.8	15.9	128.7	16.7	22.4	17.2
Back only	58.6	11.8	70.3	8.7	16.6	9.4
Both front and back	433.8	17.3	451.1	64.1	24.4	60.3
Water source for garden and lawn(d)						
Mains water	474.5	62.0	536.5	70.1	87.3	71.8
Garden bore	158.9	4.3	163.2	23.5	6.0	21.8
Rainwater tank	21.2	**0.4	21.5	3.1	**0.5	2.9
Recycled water/grey water	29.3	**1.1	30.4	4.3	**1.5	4.1
Other	*8.2	—	*8.2	*1.2	—	*1.1
Does not water garden/lawn	32.1	*5.1	37.2	4.7	*7.2	5.0
Watering method						
Reticulated watering system	481.7	45.3	527.1	71.2	63.8	70.5
Watered but not reticulated	162.6	20.6	183.2	24.0	29.0	24.5
Type of reticulation						
Mains water – automatic	243.8	26.5	270.2	36.0	37.2	36.1
Mains water – non automatic	76.7	15.3	92.0	11.3	21.5	12.3
Garden bore – automatic	102.3	*3.2	105.5	15.1	*4.5	14.1
Garden bore – non automatic	47.1	**0.4	47.5	7.0	**0.5	6.3
Other	11.9	—	11.9	1.8	—	1.6
Total dwellings	676.4	71.1	747.5	100.0	100.0	100.0

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Excludes flats, units, apartments etc.

(b) Includes caravans, houseboats and other improvised dwellings

(c) Excludes other

(d) More than one response possible

	DWELLINGS				PROPORTIONS			
	<i>Has insulation</i>	<i>No insulation</i>	<i>Don't know</i>	<i>Total</i>	<i>Has insulation</i>	<i>No insulation</i>	<i>Don't know</i>	<i>Total</i>
	'000	'000	'000	'000	%	%	%	%
Region								
Perth	468.4	95.7	82.4	646.5	72.4	14.8	12.7	100.0
Balance of Western Australia	149.8	38.9	26.8	215.5	69.5	18.1	12.4	100.0
Dwelling type								
Separate house	538.7	92.1	65.1	695.9	77.4	13.2	9.4	100.0
Semi-detached, row or terrace house, townhouse etc.	45.0	14.4	18.6	78.0	57.7	18.5	23.8	100.0
Flat, unit or apartment and other	34.4	28.2	25.5	88.1	39.1	32.0	28.9	100.0
Tenure type								
Fully owned	207.7	30.8	9.0	247.5	83.9	12.4	3.6	100.0
Being paid off	302.1	28.5	15.9	346.5	87.2	8.2	4.6	100.0
Renting (publicly)	13.7	13.8	*9.0	36.5	37.6	37.8	*24.6	100.0
Renting (other)	79.2	54.6	71.7	205.5	38.5	26.6	34.9	100.0
Other	15.5	7.0	*3.5	25.9	59.6	26.9	*13.5	100.0
Gross annual household income								
Less than \$25,000	95.4	35.2	24.4	154.9	61.6	22.7	15.7	100.0
Less than \$50,000	107.8	28.3	18.7	154.8	69.7	18.3	12.1	100.0
Less than \$70,000	83.3	22.3	22.1	127.7	65.2	17.5	17.3	100.0
Less than \$110,000	138.3	20.7	18.9	177.8	77.8	11.6	10.6	100.0
\$110,000 or more	172.6	23.8	16.6	213.1	81.0	11.2	7.8	100.0
Don't know	20.8	*4.4	8.5	33.7	61.8	*13.1	25.2	100.0
Total dwellings	618.2	134.6	109.2	862.0	71.7	15.6	12.7	100.0

* estimate has a relative standard error of 25% to 50% and should be used with caution

	DWELLINGS (a)			PROPORTION (a)		
	<i>Balance of</i>			<i>Balance of</i>		
	<i>Perth</i>	<i>Western Australia</i>	<i>Western Australia</i>	<i>Perth</i>	<i>Western Australia</i>	<i>Western Australia</i>
	'000	'000	'000	%	%	%
Haven't got around to it	12.1	*5.3	17.4	25.9	*27.3	26.3
Cost	10.5	*3.3	13.8	22.3	*17.1	20.8
Have not considered/not a priority	6.9	*2.6	9.4	14.6	*13.3	14.3
Not possible due to dwelling structure	*6.3	**2.6	*8.9	*13.5	**13.3	*13.4
Not interested	*5.0	**0.5	*5.5	*10.7	**2.5	*8.3
Don't know	*3.4	*1.6	*5.0	*7.2	*8.3	*7.5
Not needed because of climate	*2.0	*1.6	*3.6	*4.4	*8.1	*5.4
Not home owner/Not responsible	np	np	*1.9	np	np	*2.8
Other	np	np	**0.8	np	np	**1.2
<i>Total dwellings without insulation</i>	46.9	19.3	66.2	100.0	100.0	100.0

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(a) Excludes rental dwellings

	DWELLINGS			PROPORTION		
	Perth	Balance of Western Australia	Western Australia	Perth	Balance of Western Australia	Western Australia
	'000	'000	'000	%	%	%
Dwellings using airconditioners for cooling	533.3	147.6	680.9	82.5	68.5	79.0
Number of air conditioners used for cooling						
One	408.2	109.3	517.5	63.1	50.7	60.0
Two	89.8	22.4	112.2	13.9	10.4	13.0
Three or more	35.4	*15.8	51.2	5.5	*7.3	5.9
Main air conditioner type used for cooling(a)						
Reverse cycle(b)						
Split system	168.5	50.2	218.7	26.1	23.3	25.4
Set in wall or window	60.9	15.3	76.2	9.4	7.1	8.8
Ducted	76.3	9.8	86.1	11.8	4.6	10.0
Refrigerated(b)						
Split system	*8.7	*6.8	*15.5	*1.3	*3.2	*1.8
Set in wall or window	32.1	*8.9	41.1	5.0	*4.1	4.8
Ducted	14.0	*4.7	18.7	2.2	*2.2	2.2
Portable	*5.6	**1.1	*6.7	*0.9	**0.5	*0.8
Evaporative(b)						
Ducted	145.6	42.6	188.1	22.5	19.8	21.8
Set in wall or window	8.9	*6.1	15.0	1.4	*2.8	1.7
Portable	*4.2	**1.2	5.3	*0.6	**0.5	0.6
Dwellings with space heating	583.4	194.8	778.2	90.2	90.4	90.3
Main heating type used						
Electric(b)						
Ducted	*8.6	*3.7	*12.3	*1.3	*1.7	*1.4
Not ducted (resistant, radiators etc.)	54.7	20.1	74.8	8.5	9.3	8.7
Gas (b)						
Ducted	11.4	*1.8	13.2	1.8	*0.8	1.5
Not ducted – flued	53.1	*4.5	57.6	8.2	*2.1	6.7
Not ducted – unflued	203.1	44.5	247.6	31.4	20.7	28.7
Electric – Reverse cycle						
Ducted	79.0	17.8	96.8	12.2	8.3	11.2
Not ducted	111.1	30.1	141.2	17.2	14.0	16.4
Wood	48.2	66.3	114.6	7.5	30.8	13.3
Other heating (incl. Not In Use)	12.3	*3.6	15.9	1.9	*1.7	1.8
<i>Total dwellings</i>	646.5	215.5	862.0	100.0	100.0	100.0

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** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Excludes don't know

(b) Excludes other

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
Dwellings ('000)				
Dwellings using air conditioners for cooling	567.0	58.2	55.7	680.9
Number of air conditioners used for cooling				
One	425.1	43.9	48.5	517.5
Two	94.7	10.7	*6.8	112.2
Three or more	47.3	*3.6	**0.4	51.2
Main air conditioner used for cooling(b)				
Reverse cycle(c)				
Split system	172.7	23.3	22.7	218.7
Set in wall or window	58.9	7.0	10.3	76.2
Ducted	75.4	7.5	*3.2	86.1
Refrigerated(c)				
Split system	*11.6	**2.8	**1.1	*15.5
Set in wall or window	32.4	4.3	*4.3	41.1
Ducted	16.2	**1.4	**1.1	18.7
Portable	*3.2	*1.4	*2.1	*6.7
Evaporative(c)				
Ducted	173.7	7.9	6.6	188.1
Set in wall or window	11.7	**1.1	*2.3	15.0
Portable	*3.6	np	np	5.3
Dwellings with space heating	638.3	68.7	71.2	778.2
Main heating type used				
Electric(c)				
Ducted	*9.8	*1.4	**1.1	*12.3
Not ducted (resistant, radiators etc.)	46.7	10.8	17.3	74.8
Gas(c)				
Ducted	11.4	np	np	13.2
Not ducted – flued	49.4	*4.3	*3.9	57.6
Not ducted – unflued	205.3	24.0	18.3	247.6
Electric – Reverse cycle				
Ducted	83.2	6.4	7.2	96.8
Not ducted	105.2	17.3	18.7	141.2
Wood	113.4	np	np	114.6
Other heating (incl. Not In Use)	10.8	*3.0	*2.1	15.9
Total dwellings	695.9	78.0	88.1	862.0

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(a) Includes caravans, houseboats and other improvised dwellings

(b) Excludes don't know

(c) Excludes other

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
PROPORTION (%)				
Dwellings using air conditioners for cooling	81.5	74.6	63.2	79.0
Number of air conditioners used for cooling				
One	61.1	56.3	55.0	60.0
Two	13.6	13.7	7.7	13.0
Three or more	6.8	*4.6	**0.4	5.9
Main air conditioner used for cooling(b)				
Reverse cycle(c)				
Split system	24.8	29.9	25.7	25.4
Set in wall or window	8.5	8.9	11.7	8.8
Ducted	10.8	9.7	*3.6	10.0
Refrigerated(c)				
Split system	*1.7	**3.6	**1.2	*1.8
Set in wall or window	4.7	5.5	*4.9	4.8
Ducted	2.3	**1.8	**1.3	2.2
Portable	*0.5	*1.8	*2.4	*0.8
Evaporative(c)				
Ducted	25.0	10.1	7.4	21.8
Set in wall or window	1.7	**1.4	*2.6	1.7
Portable	*0.5	np	np	0.6
Dwellings with space heating	91.7	88.1	80.8	90.3
Main heating type used				
Electric(c)				
Ducted	*1.4	*1.8	**1.2	*1.4
Not ducted (resistant, radiators etc.)	6.7	13.8	19.7	8.7
Gas(c)				
Ducted	1.6	np	np	1.5
Not ducted – flued	7.1	*5.5	*4.5	6.7
Not ducted – unflued	29.5	30.8	20.7	28.7
Electric – Reverse cycle				
Ducted	12.0	8.3	8.1	11.2
Not ducted	15.1	22.2	21.3	16.4
Wood	16.3	np	np	13.3
Other heating (incl. Not In Use)	1.5	*3.8	*2.4	1.8
Total dwellings	100.0	100.0	100.0	100.0

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(a) Includes caravans, houseboats and other improvised dwellings

(b) Excludes don't know

(c) Excludes other

	Less than \$25,000	Less than \$50,000	Less than \$70,000	Less than \$110,000	\$110,000 or more	Total(a)
DWELLINGS ('000)						
Dwellings using air conditioners for cooling	111.0	116.4	96.8	145.9	185.6	680.9
Number of air conditioners used for cooling						
One	92.5	92.5	73.9	107.8	131.6	517.5
Two	14.6	16.1	17.5	27.4	32.1	112.2
Three or more	*4.0	7.8	5.4	10.6	21.9	51.2
Main air conditioner used for cooling(b)						
Reverse cycle(c)						
Split system	35.9	38.2	33.3	48.6	54.4	218.7
Set in wall or window	17.3	15.5	13.1	12.0	14.8	76.2
Ducted	7.7	9.8	9.6	20.1	36.8	86.1
Refrigerated(c)						
Split system	*1.4	*1.7	**1.7	*2.9	*7.3	*15.5
Set in wall or window	11.5	6.7	8.2	9.0	*4.2	41.1
Ducted	*1.4	*2.5	*2.4	5.7	5.6	18.7
Portable	*2.5	**1.1	*2.1	np	np	*6.7
Evaporative(c)						
Ducted	22.9	33.4	24.2	42.0	59.0	188.1
Set in wall or window	4.7	*4.7	**1.0	*1.9	*2.3	15.0
Portable	**1.8	np	np	*1.7	np	5.3
Dwellings with space heating	135.7	138.6	114.3	163.1	198.1	778.2
Electric(c)						
Ducted	*1.9	*2.2	*2.1	**2.1	*3.6	*12.3
Not ducted (resistant, radiators etc.)	21.3	16.1	13.8	11.5	9.6	74.8
Gas(c)						
Ducted	**1.1	*2.5	*1.4	*4.2	*3.6	13.2
Not ducted – flued	11.5	11.1	*5.4	10.2	18.3	57.6
Not ducted – unflued	45.0	37.3	40.6	54.8	62.0	247.6
Electric – Reverse cycle						
Ducted	12.2	9.2	11.0	21.4	37.9	96.8
Not ducted	25.2	29.2	23.1	27.6	31.3	141.2
Wood	14.6	26.0	13.9	29.1	26.1	114.6
Other heating (incl. Not In Use)	*3.0	*3.4	*2.0	*2.2	*4.4	15.9
<i>Total dwellings</i>	154.9	154.8	127.7	177.8	213.1	862.0

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(a) Includes don't know

(b) Excludes don't know

(c) Excludes other

	Less than \$25,000	Less than \$50,000	Less than \$70,000	Less than \$110,000	\$110,000 or more	Total(a)
PROPORTION (%)						
Dwellings using air conditioners for cooling	71.7	75.2	75.8	82.0	87.1	79.0
Number of air conditioners used for cooling						
One	59.7	59.8	57.8	60.6	61.8	60.0
Two	9.4	10.4	13.7	15.4	15.0	13.0
Three or more	*2.6	5.0	4.2	6.0	10.3	5.9
Main air conditioner used for cooling(b)						
Reverse cycle(c)						
Split system	23.2	24.7	26.1	27.3	25.5	25.4
Set in wall or window	11.2	10.0	10.3	6.7	6.9	8.8
Ducted	5.0	6.3	7.5	11.3	17.3	10.0
Refrigerated(c)						
Split system	*0.9	*1.1	**1.3	*1.6	*3.4	*1.8
Set in wall or window	7.4	4.3	6.4	5.1	*2.0	4.8
Ducted	*0.9	*1.6	*1.9	3.2	2.6	2.2
Portable	*1.6	**0.7	*1.6	np	np	*0.8
Evaporative(c)						
Ducted	14.8	21.6	18.9	23.6	27.7	21.8
Set in wall or window	3.0	*3.1	**0.8	*1.1	*1.1	1.7
Portable	*1.2	np	np	*1.0	np	0.6
Dwellings with space heating	87.6	89.6	89.5	91.7	93.0	90.3
Electric(c)						
Ducted	*1.2	*1.4	*1.6	*1.2	*1.7	*1.4
Not ducted (resistant, radiators etc.)	13.8	10.4	10.8	6.5	4.5	8.7
Gas(c)						
Ducted	**0.7	*1.6	*1.1	*2.4	*1.7	1.5
Not ducted – flued	7.4	7.2	*4.2	5.7	8.6	6.7
Not ducted – unflued	29.1	24.1	31.8	30.8	29.1	28.7
Electric – Reverse cycle						
Ducted	7.9	5.9	8.6	12.0	17.8	11.2
Not ducted	16.2	18.9	18.1	15.5	14.7	16.4
Wood	9.4	16.8	10.9	16.3	12.3	13.3
Other heating (incl. Not In Use)	*1.9	*2.2	*1.6	*1.2	*2.1	1.8
<i>Total dwellings</i>	100.0	100.0	100.0	100.0	100.0	100.0

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(a) Includes don't know

(b) Excludes don't know

(c) Excludes other

	DWELLINGS			PROPORTION		
		Balance of			Balance of	
	Perth	Western Australia	Western Australia	Perth	Western Australia	Western Australia
	'000	'000	'000	%	%	%
Electricity						
Storage	53.8	56.5	110.3	8.3	26.2	12.8
Instantaneous	42.1	*5.0	47.1	6.5	*2.3	5.5
Total(a)(b)	101.4	61.8	163.3	15.7	28.7	18.9
Mains gas						
Storage	211.7	16.9	228.6	32.7	7.9	26.5
Instantaneous	203.8	30.7	234.5	31.5	14.2	27.2
Total(a)(b)	430.3	48.5	478.8	66.6	22.5	55.5
LPG/bottled gas						
Storage	*5.3	12.4	17.8	*0.8	5.8	2.1
Instantaneous	*4.3	28.9	33.2	*0.7	13.4	3.9
Total(a)(b)	*9.7	41.8	51.4	*1.5	19.4	6.0
Solar						
Electric booster	78.0	51.9	129.9	12.1	24.1	15.1
Mains gas booster	np	np	10.2	np	np	1.2
LPG/bottled gas booster	**1.0	**1.1	**2.1	**0.2	**0.5	**0.2
Other booster(c)	*2.6	*4.7	7.3	*0.4	*2.2	0.8
Not boosted	np	np	*2.2	np	np	*0.3
Total	92.1	59.6	151.7	14.2	27.6	17.6
Other	13.0	*3.8	16.8	2.0	*1.8	1.9
Water heater type						
Storage	363.3	147.3	510.6	56.2	68.3	59.2
Instantaneous	250.6	64.5	315.1	38.8	29.9	36.6
Don't know	32.6	*3.7	36.3	5.0	*1.7	4.2
Total dwellings	646.5	215.5	862.0	100.0	100.0	100.0

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(a) Includes other

(b) Includes don't know

(c) Includes booster unknown

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
Dwellings ('000)				
Electricity				
Storage	78.5	11.2	20.6	110.3
Instantaneous	21.9	9.7	15.5	47.1
Total(b)(c)	104.9	21.2	37.2	163.3
Mains gas				
Storage	196.0	18.0	14.6	228.6
Instantaneous	178.4	29.3	26.8	234.5
Total(b)(c)	385.6	49.6	43.6	478.8
LPG/bottled gas				
Storage	16.7	np	np	17.8
Instantaneous	30.7	**1.5	**1.0	33.2
Total(b)(c)	47.9	**1.8	*1.7	51.4
Solar				
Electric booster	126.4	np	np	129.9
Mains gas booster	9.8	np	np	10.2
LPG/bottled gas booster	**2.1	—	—	**2.1
Other booster(d)	7.3	—	—	7.3
Not boosted	*2.2	—	—	*2.2
Total	147.8	np	np	151.7
Other	9.7	*2.2	*4.9	16.8
Water heater type				
Storage	441.2	32.7	36.6	510.6
Instantaneous	231.5	40.4	43.3	315.1
Don't know	23.2	4.9	*8.2	36.3
Total dwellings	695.9	78.0	88.1	862.0

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— nil or rounded to zero (including null cells)

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(a) Includes caravans, houseboats and other improvised dwellings

(b) Includes other

(c) Includes don't know

(d) Includes booster unknown

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
PROPORTION (%)				
Electricity				
Storage	11.3	14.4	23.4	12.8
Instantaneous	3.2	12.4	17.6	5.5
Total(b)(c)	15.1	27.2	42.2	18.9
Mains gas				
Storage	28.2	23.0	16.6	26.5
Instantaneous	25.6	37.5	30.4	27.2
Total(b)(c)	55.4	63.6	49.5	55.5
LPG/bottled gas				
Storage	2.4	np	np	2.1
Instantaneous	4.4	**1.9	**1.2	3.9
Total(b)(c)	6.9	**2.3	*2.0	6.0
Solar				
Electric booster	18.2	np	np	15.1
Mains gas booster	1.4	np	np	1.2
LPG/bottled gas booster	**0.3	—	—	**0.2
Other booster(d)	1.0	—	—	0.8
Not boosted	*0.3	—	—	*0.3
Total	21.2	np	np	17.6
Other	1.4	*2.8	*5.6	1.9
Water heater type				
Storage	63.4	41.9	41.6	59.2
Instantaneous	33.3	51.8	49.1	36.6
Don't know	3.3	6.3	*9.3	4.2
Total dwellings	100.0	100.0	100.0	100.0

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(a) Includes caravans, houseboats and other improvised dwellings

(b) Includes other

(c) Includes don't know

(d) Includes booster unknown

	Fully owned	Being paid off	Renting (publicly)	Renting (other)	Other	Total
Dwellings ('000)						
Electricity						
Storage	29.9	30.2	*3.2	41.5	*5.5	110.3
Instantaneous	8.2	14.3	*4.3	18.2	*2.1	47.1
Total(a)	38.8	45.9	*7.5	63.1	*7.9	163.3
Mains gas						
Storage	71.8	107.1	*4.0	41.1	*4.6	228.6
Instantaneous	52.2	107.4	16.1	53.6	*5.2	234.5
Total(a)(b)	125.1	218.5	21.2	103.1	10.9	478.8
LPG/bottled gas						
Storage	7.2	*6.1	np	*4.1	np	17.8
Instantaneous	8.6	*10.0	*4.9	7.4	*2.3	33.2
Total(a)(b)	15.8	16.1	*5.4	11.6	*2.6	51.4
Solar						
Electric booster	56.6	51.8	**1.8	16.4	*3.4	129.9
Mains gas booster	*1.8	6.7	—	*1.7	—	10.2
LPG/bottled gas booster	**0.8	**1.3	—	—	—	**2.1
Other booster	*3.4	*2.4	—	**1.5	—	7.3
Not boosted	**1.2	**0.3	—	**0.7	—	*2.2
Total	63.7	62.5	**1.8	20.4	*3.4	151.7
Other	*4.1	*3.5	**0.7	7.4	**1.1	16.8
Water heater type						
Storage	174.0	206.2	8.9	107.2	14.2	510.6
Instantaneous	69.5	131.6	25.3	79.2	9.6	315.1
Don't know	4.0	8.7	**2.3	19.2	*2.1	36.3
Total dwellings	247.5	346.5	36.5	205.5	25.9	862.0

Proportion (%)						
Electricity						
Storage	12.1	8.7	*8.8	20.2	21.2	12.8
Instantaneous	3.3	4.1	*11.8	8.8	*8.2	5.5
Total(a)	15.7	13.3	20.6	30.7	30.7	18.9
Mains gas						
Storage	29.0	30.9	*10.9	20.0	*17.9	26.5
Instantaneous	21.1	31.0	44.1	26.1	*20.1	27.2
Total(a)(b)	50.5	63.1	57.9	50.2	42.2	55.5
LPG/bottled gas						
Storage	2.9	*1.8	np	*2.0	np	2.1
Instantaneous	3.5	*2.9	*13.4	3.6	*8.7	3.9
Total(a)(b)	6.4	4.6	*14.7	5.6	*10.0	6.0
Solar						
Electric booster	22.8	14.9	**4.8	8.0	*13.0	15.1
Mains gas booster	*0.7	1.9	—	*0.8	—	1.2
LPG/bottled gas booster	**0.3	**0.4	—	—	—	**0.2
Other booster	*1.4	*0.7	—	**0.7	—	0.8
Not boosted	**0.5	**0.1	—	**0.4	—	*0.3
Total	25.7	18.0	**4.8	9.9	*13.0	17.6
Other	*1.7	*1.0	**2.0	3.6	**4.1	1.9
Water heater type						
Storage	70.3	59.5	24.4	52.1	54.9	59.2
Instantaneous	28.1	38.0	69.4	38.5	37.0	36.6
Don't know	1.6	2.5	**6.2	9.3	*8.1	4.2
Total dwellings	100.0	100.0	100.0	100.0	100.0	100.0

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(a) Includes other

(b) Includes booster unknown

	One person household(a)	Two person household(a)	Three to five person household(a)	Six or more person household(a)	Total(a)
DWELLINGS ('000)					
Electricity					
Storage	37.1	41.2	30.6	*1.4	110.3
Instantaneous	23.2	13.3	9.1	*1.5	47.1
Total(b)(c)	61.0	56.3	42.7	*3.3	163.3
Mains gas					
Storage	49.0	77.5	95.5	*6.6	228.6
Instantaneous	62.2	79.2	85.8	*7.3	234.5
Total(b)(c)	114.7	162.0	188.1	14.0	478.8
LPG/bottled gas					
Storage	5.0	*4.7	8.1	—	17.8
Instantaneous	8.9	10.5	12.8	**1.0	33.2
Total(b)(c)	13.9	15.2	21.4	**1.0	51.4
Solar					
Electric booster	26.0	48.8	48.6	6.5	129.9
Mains gas booster	np	*2.9	*6.6	np	10.2
LPG/bottled gas booster	—	np	np	—	**2.1
Other Booster(d)	**1.1	*3.1	*2.4	**0.7	7.3
Not boosted	np	np	np	np	*2.2
Total	28.2	55.9	59.9	7.6	151.7
Other	6.1	*4.5	*5.9	**0.3	16.8
Water heater type					
Storage	120.6	180.1	194.2	15.7	510.6
Instantaneous	94.3	103.0	108.0	9.8	315.1
Don't know	8.9	10.8	15.8	**0.7	36.3
Total dwellings	223.9	293.9	318.0	26.2	862.0

	PROPORTION (%)				
Electricity					
Storage	16.6	14.0	9.6	*5.5	12.8
Instantaneous	10.4	4.5	2.9	*5.7	5.5
Total(b)(c)	27.3	19.1	13.4	*12.7	18.9
Mains gas					
Storage	21.9	26.4	30.0	*25.3	26.5
Instantaneous	27.8	26.9	27.0	27.9	27.2
Total(b)(c)	51.2	55.1	59.2	53.3	55.5
LPG/bottled gas					
Storage	2.2	*1.6	2.5	—	2.1
Instantaneous	4.0	3.6	4.0	**3.9	3.9
Total(b)(c)	6.2	5.2	6.7	**3.9	6.0
Solar					
Electric booster	11.6	16.6	15.3	24.7	15.1
Mains gas booster	np	*1.0	*2.1	np	1.2
LPG/bottled gas booster	—	np	np	—	**0.2
Other Booster(d)	**0.5	*1.1	*0.7	**2.8	0.8
Not boosted	np	np	np	np	*0.3
Total	12.6	19.0	18.8	29.0	17.6
Other	2.7	*1.5	*1.8	**1.2	1.9
Water heater type					
Storage	53.9	61.3	61.1	59.8	59.2
Instantaneous	42.1	35.0	34.0	37.5	36.6
Don't know	4.0	3.7	5.0	**2.7	4.2
Total dwellings	100.0	100.0	100.0	100.0	100.0

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(a) Excludes people living in the dwelling who are out of scope (see explanatory notes)

(b) Includes other

(c) Includes don't know

(d) Includes booster unknown

	DWELLINGS			PROPORTION		
	Balance of		Western Australia	Balance of		Western Australia
	Perth	Western Australia		Perth	Western Australia	
'000	'000	'000	%	%	%	
White goods						
Washing machines	631.4	213.7	845.1	97.7	99.2	98.0
Clothes dryers	359.7	126.4	486.0	55.6	58.6	56.4
Dishwashers	283.5	82.8	366.3	43.9	38.4	42.5
Refrigerators	642.9	213.3	856.2	99.4	99.0	99.3
Separate freezers	217.8	116.4	334.1	33.7	54.0	38.8
Microwave ovens	603.0	201.6	804.6	93.3	93.6	93.3
Washing machine type						
Top loading	414.0	156.7	570.7	64.0	72.7	66.2
Front loading	216.4	54.4	270.8	33.5	25.3	31.4
Other	**1.1	*2.5	*3.6	**0.2	*1.2	*0.4
Washing machine use – loads per week(a)						
Less than three loads	210.7	48.3	259.1	32.6	22.4	30.1
Three to five loads	262.1	98.6	360.7	40.5	45.8	41.8
Six to ten loads	129.8	56.4	186.2	20.1	26.2	21.6
Eleven loads or more	27.2	10.1	37.3	4.2	4.7	4.3
Clothes dryer use						
At least once a week	90.7	28.2	119.0	14.0	13.1	13.8
At least once a fortnight	11.9	*3.5	15.4	1.8	*1.6	1.8
At least once a month	11.1	*5.1	16.2	1.7	*2.4	1.9
Less than once a month	19.0	11.0	30.1	2.9	5.1	3.5
Depends on weather/season	194.0	69.5	263.5	30.0	32.2	30.6
Never	32.9	9.1	42.0	5.1	4.2	4.9
Dishwasher use(a)						
Daily	91.8	26.3	118.0	14.2	12.2	13.7
Three or more times a week	89.7	31.4	121.1	13.9	14.6	14.0
Once or twice a week	44.3	*7.6	51.9	6.9	*3.5	6.0
Less often than once a week	30.9	8.5	39.4	4.8	3.9	4.6
Never	26.4	9.0	35.5	4.1	4.2	4.1
Refrigerators in use						
One	400.9	122.6	523.5	62.0	56.9	60.7
Two	212.9	82.8	295.7	32.9	38.4	34.3
Three or more	29.2	7.8	37.0	4.5	3.6	4.3
None	*3.6	*2.2	*5.8	*0.6	*1.0	*0.7
Age of main refrigerator(a)						
Less than one year	51.1	21.6	72.7	7.9	10.0	8.4
One year to less than five years	246.3	78.6	324.9	38.1	36.5	37.7
Five years to less than ten years	189.7	62.8	252.6	29.3	29.2	29.3
Ten years or more	149.4	49.1	198.4	23.1	22.8	23.0
Separate freezers in use						
One	202.7	97.6	300.3	31.4	45.3	34.8
Two	13.0	16.9	29.8	2.0	7.8	3.5
Three or more	**1.4	**1.1	*2.5	**0.2	**0.5	*0.3
Age of main separate freezer(a)						
Less than one year	11.9	*5.8	17.7	1.8	*2.7	2.1
One year to less than five years	54.7	35.9	90.6	8.5	16.7	10.5
Five years to less than ten years	61.2	26.7	87.8	9.5	12.4	10.2
Ten years or more	87.6	45.9	133.5	13.6	21.3	15.5
Total dwellings	646.5	215.5	862.0	100.0	100.0	100.0

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(a) Excludes don't know

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
DWELLINGS ('000)				
White goods				
Washing machines	689.0	76.6	79.5	845.1
Clothes dryers	417.9	37.8	30.3	486.0
Dishwashers	330.7	21.6	14.0	366.3
Refrigerators	692.6	77.0	86.7	856.2
Separate freezers	306.4	15.9	11.8	334.1
Microwave ovens	655.2	72.4	77.1	804.6
Washing machine type				
Top loading	464.1	51.8	54.7	570.7
Front loading	221.3	24.7	24.8	270.8
Other	*3.6	—	—	*3.6
Washing machine use – loads per week(b)				
Less than three loads	180.4	34.8	43.9	259.1
Three to five loads	302.6	31.5	26.6	360.7
Six to ten loads	169.1	9.0	*8.1	186.2
Eleven loads or more	35.0	*1.3	**0.9	37.3
Clothes dryer use				
At least once a week	94.7	13.1	11.1	119.0
At least once a fortnight	13.2	np	np	15.4
At least once a month	14.0	np	np	16.2
Less than once a month	27.6	*1.4	**1.1	30.1
Depends on weather/season	231.9	20.1	11.5	263.5
Never	36.5	**1.1	*4.4	42.0
Dishwasher use(b)				
Daily	110.3	*5.0	**2.8	118.0
Three or more times a week	112.0	5.8	*3.3	121.1
Once or twice a week	43.3	5.8	*2.9	51.9
Less often than once a week	32.5	*4.0	*2.9	39.4
Never	32.2	**1.1	*2.2	35.5
Refrigerators in use				
One	381.4	64.2	78.0	523.5
Two	275.6	12.1	7.9	295.7
Three or more	35.6	np	np	37.0
Age of main refrigerator(b)				
Less than one year	55.3	9.4	7.9	72.7
One year to less than five years	266.8	27.6	30.6	324.9
Five years to less than ten years	200.2	23.6	28.7	252.6
Ten years or more	167.2	15.3	16.0	198.4
Separate freezers in use				
One	273.7	15.5	11.1	300.3
Two	28.7	**0.4	**0.8	29.8
Three or more	*2.5	—	—	*2.5
Age of main separate freezer(b)				
Less than one year	15.5	np	np	17.7
One year to less than five years	79.3	*5.0	6.4	90.6
Five years to less than ten years	82.2	*3.1	*2.5	87.8
Ten years or more	125.3	6.3	**1.9	133.5
Total dwellings	695.9	78.0	88.1	862.0

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(a) Includes caravans, houseboats and other improvised dwellings

(b) Excludes don't know

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
PROPORTION (%)				
White goods				
Washing machines	99.0	98.1	90.3	98.0
Clothes dryers	60.1	48.5	34.4	56.4
Dishwashers	47.5	27.7	15.9	42.5
Refrigerators	99.5	98.7	98.4	99.3
Separate freezers	44.0	20.3	13.4	38.8
Microwave ovens	94.1	92.8	87.5	93.3
Washing machine type				
Top loading	66.7	66.4	62.1	66.2
Front loading	31.8	31.7	28.1	31.4
Other	*0.5	—	—	*0.4
Washing machine use – loads per week(b)				
Less than three loads	25.9	44.6	49.8	30.1
Three to five loads	43.5	40.3	30.2	41.8
Six to ten loads	24.3	11.5	*9.2	21.6
Eleven loads or more	5.0	*1.7	**1.1	4.3
Clothes dryer use				
At least once a week	13.6	16.8	12.6	13.8
At least once a fortnight	1.9	np	np	1.8
At least once a month	2.0	np	np	1.9
Less than once a month	4.0	*1.8	**1.2	3.5
Depends on weather/season	33.3	25.7	13.1	30.6
Never	5.3	**1.4	*5.0	4.9
Dishwasher use(b)				
Daily	15.8	*6.4	**3.2	13.7
Three or more times a week	16.1	7.4	*3.7	14.0
Once or twice a week	6.2	7.4	*3.3	6.0
Less often than once a week	4.7	*5.2	*3.3	4.6
Never	4.6	**1.4	*2.5	4.1
Refrigerators in use				
One	54.8	82.2	88.5	60.7
Two	39.6	15.5	9.0	34.3
Three or more	5.1	np	np	4.3
Age of main refrigerator(b)				
Less than one year	8.0	12.1	9.0	8.4
One year to less than five years	38.3	35.3	34.7	37.7
Five years to less than ten years	28.8	30.3	32.6	29.3
Ten years or more	24.0	19.6	18.1	23.0
Separate freezers in use				
One	39.3	19.9	12.6	34.8
Two	4.1	**0.5	**0.9	3.5
Three or more	*0.4	—	—	*0.3
Age of main separate freezer(b)				
Less than one year	2.2	np	np	2.1
One year to less than five years	11.4	*6.4	7.2	10.5
Five years to less than ten years	11.8	*3.9	*2.9	10.2
Ten years or more	18.0	8.1	**2.1	15.5
<i>Total dwellings</i>	100.0	100.0	100.0	100.0

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(a) Includes caravans, houseboats and other improvised dwellings

(b) Excludes don't know

	One person household(a)	Two person household(a)	Three to five person household(a)	Six or more person household(a)	Total(a)
DWELLINGS ('000)					
White goods					
Washing machines	213.5	289.6	316.2	25.9	845.1
Clothes dryers	93.2	152.7	220.9	19.2	486.0
Dishwashers	49.3	127.7	174.8	14.5	366.3
Refrigerators	221.4	292.0	316.6	26.2	856.2
Separate freezers	52.4	116.0	152.6	13.0	334.1
Microwave ovens	202.8	273.7	303.8	24.4	804.6
Washing machine type					
Top loading	164.6	194.2	193.6	18.3	570.7
Front loading	48.2	93.8	121.2	7.5	270.8
Other	**0.7	**1.6	**1.3	—	*3.6
Washing machine use – loads per week(b)					
Less than three loads	146.4	85.9	25.5	**1.2	259.1
Three to five loads	59.2	165.9	131.9	*3.7	360.7
Six to ten loads	*6.1	35.9	132.9	11.3	186.2
Eleven loads or more	np	**1.8	25.8	np	37.3
Clothes dryer use					
At least once a week	20.7	29.4	61.9	*6.9	119.0
At least once a fortnight	*2.5	*5.2	6.9	**0.7	15.4
At least once a month	*3.6	*3.4	9.2	—	16.2
Less than once a month	*5.7	11.6	12.1	**0.7	30.1
Depends on weather/season	50.0	85.9	118.2	9.3	263.5
Never	10.7	17.2	12.5	*1.5	42.0
Dishwasher use(b)					
Daily	*3.2	21.2	85.1	8.6	118.0
Three or more times a week	12.1	53.2	53.6	*2.2	121.1
Once or twice a week	15.0	24.1	12.1	**0.8	51.9
Less often than once a week	10.4	17.0	10.9	**1.2	39.4
Never	8.6	11.9	13.2	*1.8	35.5
Refrigerators in use					
One	184.6	163.0	162.8	13.2	523.5
Two	33.9	117.2	133.6	11.0	295.7
Three or more	*2.9	11.8	20.2	*2.1	37.0
Age of main refrigerator (b)					
Less than one year	12.1	32.1	26.1	*2.4	72.7
One year to less than five years	72.1	107.1	133.2	12.4	324.9
Five years to less than ten years	67.8	82.7	94.8	7.3	252.6
Ten years or more	66.8	68.0	59.9	*3.7	198.4
Separate freezers in use					
One	49.2	101.7	139.2	10.1	300.3
Two	*2.9	12.8	12.0	*2.1	29.8
Three or more	—	**0.8	**1.0	**0.7	*2.5
Age of main separate freezer(b)					
Less than one year	*1.8	*6.7	9.2	—	17.7
One year to less than five years	15.0	29.8	41.9	*4.0	90.6
Five years to less than ten years	11.4	30.8	42.5	*3.1	87.8
Ten years or more	23.5	47.5	56.9	5.6	133.5
Total dwellings	223.9	293.9	318.0	26.2	862.0

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(a) Excludes people living in the dwelling who are out of scope (see explanatory notes)

(b) Excludes don't know

	One person household(a)	Two person household(a)	Three to five person household(a)	Six or more person household(a)	Total(a)
PROPORTION (%)					
White goods					
Washing machines	95.4	98.5	99.4	98.5	98.0
Clothes dryers	41.6	52.0	69.5	73.1	56.4
Dishwashers	22.0	43.4	55.0	55.1	42.5
Refrigerators	98.9	99.4	99.6	100.0	99.3
Separate freezers	23.4	39.5	48.0	49.5	38.8
Microwave ovens	90.6	93.1	95.5	92.8	93.3
Washing machine type					
Top loading	73.5	66.1	60.9	69.9	66.2
Front loading	21.5	31.9	38.1	28.6	31.4
Other	**0.3	**0.5	**0.4	—	*0.4
Washing machine use – loads per week(b)					
Less than three loads	65.4	29.2	8.0	**4.5	30.1
Three to five loads	26.5	56.4	41.5	*13.9	41.8
Six to ten loads	*2.7	12.2	41.8	42.9	21.6
Eleven loads or more	np	**0.6	8.1	np	4.3
Clothes dryer use					
At least once a week	9.3	10.0	19.5	26.4	13.8
At least once a fortnight	*1.1	*1.8	2.2	**2.7	1.8
At least once a month	*1.6	*1.2	2.9	—	1.9
Less than once a month	*2.6	3.9	3.8	**2.7	3.5
Depends on weather/season	22.3	29.2	37.2	35.6	30.6
Never	4.8	5.9	3.9	*5.9	4.9
Dishwasher use(b)					
Daily	*1.4	7.2	26.8	32.6	13.7
Three or more times a week	5.4	18.1	16.8	*8.3	14.0
Once or twice a week	6.7	8.2	3.8	**2.9	6.0
Less often than once a week	4.6	5.8	3.4	**4.5	4.6
Never	3.8	4.0	4.2	*6.8	4.1
Refrigerators in use					
One	82.5	55.5	51.2	50.1	60.7
Two	15.1	39.9	42.0	41.8	34.3
Three or more	*1.3	4.0	6.3	*8.1	4.3
Age of main refrigerator (b)					
Less than one year	5.4	10.9	8.2	*9.2	8.4
One year to less than five years	32.2	36.5	41.9	47.3	37.7
Five years to less than ten years	30.3	28.1	29.8	27.8	29.3
Ten years or more	29.8	23.1	18.9	*14.2	23.0
Separate freezers in use					
One	22.0	34.6	43.8	38.7	34.8
Two	*1.3	4.4	3.8	*8.1	3.5
Three or more	—	**0.3	**0.3	**2.8	*0.3
Age of main separate freezer(b)					
Less than one year	*0.8	*2.3	2.9	—	2.1
One year to less than five years	6.7	10.1	13.2	*15.3	10.5
Five years to less than ten years	5.1	10.5	13.4	*11.9	10.2
Ten years or more	10.5	16.2	17.9	21.2	15.5
<i>Total dwellings</i>	100.0	100.0	100.0	100.0	100.0

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** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Excludes people living in the dwelling who are out of scope (see explanatory notes)

(b) Excludes don't know

	Less than \$25,000	Less than \$50,000	Less than \$70,000	Less than \$110,000	\$110,000 or more	Total(a)
DWELLINGS ('000)						
White goods						
Washing machines	149.9	149.4	125.1	176.0	212.0	845.1
Clothes dryers	62.2	76.5	76.6	111.7	145.4	486.0
Dishwashers	30.0	43.8	48.1	95.0	136.9	366.3
Refrigerators	152.4	152.6	127.7	177.5	212.3	856.2
Separate freezers	56.2	59.1	44.9	79.2	82.9	334.1
Microwave ovens	135.1	144.7	119.4	169.2	204.9	804.6
Washing machine type						
Top loading	120.0	107.7	90.9	110.4	118.5	570.7
Front loading	28.9	41.3	33.9	64.8	93.0	270.8
Other	**1.1	0.4	0.4	0.8	0.5	*3.6
Washing machine use – loads per week(b)						
Less than three loads	87.0	57.1	37.2	34.9	29.3	259.1
Three to five loads	48.1	68.3	51.5	82.2	99.8	360.7
Six to ten loads	11.1	19.5	31.4	49.6	68.0	186.2
Eleven loads or more	*3.3	4.2	*4.9	8.6	15.0	37.3
Clothes dryer use						
At least once a week	15.8	14.8	17.8	25.6	41.6	119.0
At least once a fortnight	*1.4	**0.6	*3.2	*3.6	6.5	15.4
At least once a month	**1.1	*1.9	*2.3	6.2	*4.0	16.2
Less than once a month	*5.1	4.7	*4.2	7.5	8.6	30.1
Depends on weather/season	33.1	44.5	41.2	61.4	75.3	263.5
Never	5.8	9.8	7.9	7.4	9.4	42.0
Dishwasher use(b)						
Daily	*3.9	9.5	13.5	36.3	51.8	118.0
Three or more times a week	7.6	11.3	16.8	28.6	51.9	121.1
Once or twice a week	*5.5	9.2	6.5	14.4	15.3	51.9
Less often than once a week	5.8	8.7	*6.0	9.4	9.2	39.4
Never	7.2	*5.2	*5.2	6.3	8.7	35.5
Refrigerators in use						
One	120.0	103.3	84.5	98.7	95.7	523.5
Two	31.0	45.0	39.1	70.7	98.4	295.7
Three or more	*1.4	*4.3	*4.1	8.2	18.2	37.0
Age of main refrigerator(b)						
Less than one year	9.9	12.7	9.3	19.8	19.1	72.7
One year to less than five years	44.8	49.2	48.9	75.0	94.0	324.9
Five years to less than ten years	47.1	43.9	37.6	51.3	62.1	252.6
Ten years or more	49.0	45.3	30.8	30.0	36.3	198.4
Separate freezers in use						
One	51.6	53.4	39.2	73.9	71.8	300.3
Two	*4.1	*4.9	5.0	*5.0	9.3	29.8
Three or more	—	—	**0.7	**0.4	**1.5	*2.5
Age of main separate freezer(b)						
Less than one year	*3.0	*4.8	*1.3	*3.2	*5.1	17.7
One year to less than five years	14.1	16.8	*7.9	22.1	27.8	90.6
Five years to less than ten years	9.9	16.5	10.0	25.5	23.1	87.8
Ten years or more	28.3	19.1	25.7	27.8	26.3	133.5
Total dwellings	154.9	154.8	127.7	177.8	213.1	862.0

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- nil or rounded to zero (including null cells)
- (a) Includes don't know
- (b) Excludes don't know

	Less than \$25,000	Less than \$50,000	Less than \$70,000	Less than \$110,000	\$110,000 or more	Total(a)
PROPORTION (%)						
White goods						
Washing machines	96.8	96.5	98.0	99.0	99.5	98.0
Clothes dryers	40.1	49.4	60.0	62.8	68.2	56.4
Dishwashers	19.3	28.3	37.6	53.4	64.3	42.5
Refrigerators	98.4	98.6	100.0	99.8	99.6	99.3
Separate freezers	36.3	38.2	35.2	44.6	38.9	38.8
Microwave ovens	87.2	93.5	93.5	95.1	96.2	93.3
Washing machine type						
Top loading	77.4	69.6	71.2	62.1	55.6	66.2
Front loading	18.6	26.7	26.5	36.4	43.7	31.4
Other	**0.7	0.2	0.3	0.4	0.2	*0.4
Washing machine use – loads per week(b)						
Less than three loads	56.2	36.9	29.1	19.6	13.7	30.1
Three to five loads	31.1	44.2	40.4	46.2	46.8	41.8
Six to ten loads	7.2	12.6	24.6	27.9	31.9	21.6
Eleven loads or more	*2.1	2.7	*3.9	4.8	7.0	4.3
Clothes dryer use						
At least once a week	10.2	9.6	14.0	14.4	19.5	13.8
At least once a fortnight	*0.9	**0.4	*2.5	*2.0	3.0	1.8
At least once a month	**0.7	*1.2	*1.8	3.5	*1.9	1.9
Less than once a month	*3.3	3.1	*3.3	4.2	4.0	3.5
Depends on weather/season	21.3	28.8	32.2	34.5	35.3	30.6
Never	3.7	6.3	6.2	4.1	4.4	4.9
Dishwasher use(b)						
Daily	*2.5	6.1	10.6	20.4	24.3	13.7
Three or more times a week	4.9	7.3	13.2	16.1	24.4	14.0
Once or twice a week	*3.5	5.9	5.1	8.1	7.2	6.0
Less often than once a week	3.7	5.6	*4.7	5.3	4.3	4.6
Never	4.7	*3.4	*4.1	3.5	4.1	4.1
Refrigerators in use						
One	77.5	66.7	66.2	55.5	44.9	60.7
Two	20.0	29.0	30.6	39.8	46.2	34.3
Three or more	*0.9	*2.8	*3.2	4.6	8.6	4.3
Age of main refrigerator(b)						
Less than one year	6.4	8.2	7.3	11.1	8.9	8.4
One year to less than five years	28.9	31.8	38.3	42.2	44.1	37.7
Five years to less than ten years	30.4	28.4	29.5	28.9	29.2	29.3
Ten years or more	31.6	29.3	24.1	16.9	17.1	23.0
Separate freezers in use						
One	33.3	34.5	30.7	41.5	33.7	34.8
Two	*2.7	*3.2	3.9	*2.8	4.3	3.5
Three or more	—	—	**0.5	**0.2	**0.7	*0.3
Age of main separate freezer(b)						
Less than one year	*1.9	*3.1	*1.0	*1.8	2.4	2.1
One year to less than five years	9.1	10.9	6.2	12.4	13.0	10.5
Five years to less than ten years	6.4	10.7	7.8	14.3	10.8	10.2
Ten years or more	18.3	12.3	20.1	15.6	12.3	15.5
<i>Total dwellings</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

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	DWELLINGS			PROPORTION		
	Perth	Western Australia	Western Australia	Perth	Western Australia	Western Australia
	'000	'000	'000	%	%	%
Energy star rating	106.9	35.7	142.6	61.3	60.9	61.2
Cost	95.2	31.8	127.0	54.6	54.3	54.5
Water efficiency rating	58.7	21.5	80.2	33.7	36.8	34.5
Capacity	54.7	20.3	75.0	31.4	34.6	32.2
Dimensions	53.3	13.0	66.3	30.6	22.2	28.5
Brand name	42.9	*6.8	49.7	24.6	*11.6	21.3
Features	33.4	9.6	43.1	19.2	16.5	18.5
Reliability	34.1	*6.0	40.1	19.5	*10.3	17.2
Appearance	34.1	*4.4	38.5	19.6	7.6	16.5
Environmental considerations	18.1	*3.9	22.0	10.4	*6.6	9.4
Availability	12.5	*2.6	15.1	7.1	*4.5	6.5
Recommended by friend/expert	11.5	*1.9	13.3	6.6	*3.2	5.7
Other	9.5	*1.4	10.9	5.5	*2.3	4.7
<i>Total white goods purchased(a)</i>	<i>174.3</i>	<i>58.5</i>	<i>232.9</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

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(a) Multiple reasons are possible for each purchase

	DWELLINGS			PROPORTION		
	Perth	Balance of Western Australia	Western Australia	Perth	Balance of Western Australia	Western Australia
	'000	'000	'000	%	%	%
Home entertainment equipment						
Dwellings with television	640.3	213.0	853.2	99.0	98.8	99.0
Number of televisions						
One	255.8	90.9	346.7	39.6	42.2	40.2
Two	231.9	84.7	316.6	35.9	39.3	36.7
Three	95.4	24.3	119.7	14.8	11.3	13.9
Four	33.9	10.1	44.0	5.2	4.7	5.1
Five or more	23.3	*2.9	26.2	3.6	*1.4	3.0
None	6.3	*2.5	8.8	1.0	*1.2	1.0
Television types(a)						
Cathode ray tube	430.3	158.0	588.2	66.6	73.3	68.2
LCD or Plasma	389.2	110.2	499.5	60.2	51.2	57.9
Projector	16.9	*2.6	19.4	2.6	*1.2	2.3
Other	*2.5	**0.3	*2.9	*0.4	**0.2	*0.3
Don't know	*2.1	**0.4	*2.5	*0.3	**0.2	*0.3
DVD players	578.4	193.9	772.3	89.5	90.0	89.6
Set top boxes	249.2	64.9	314.0	38.5	30.1	36.4
Video cassette recorders	352.7	111.9	464.6	54.6	51.9	53.9
Surround sound systems for home theatre	194.1	61.5	255.6	30.0	28.5	29.7
Stereo systems	402.5	121.3	523.8	62.3	56.3	60.8
Game consoles	260.3	82.7	342.9	40.3	38.4	39.8
Information technology products						
Desktop computers	388.5	131.2	519.8	60.1	60.9	60.3
Laptop/notebook computers	358.5	101.4	459.9	55.4	47.1	53.4
Printers, scanners or fax machines	460.1	152.9	613.0	71.2	70.9	71.1
Cordless phone systems	452.5	151.0	603.5	70.0	70.1	70.0
Mobile phone/battery or other chargers	590.5	196.4	786.9	91.3	91.1	91.3
<i>Total dwellings</i>	<i>646.5</i>	<i>215.5</i>	<i>862.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

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** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) More than one response possible

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
DWELLINGS ('000)				
Home entertainment equipment				
Dwellings with television	689.9	77.7	85.6	853.2
Number of televisions				
One	244.8	41.1	60.8	346.7
Two	267.6	28.9	20.1	316.6
Three	108.8	np	np	119.7
Four	42.6	np	np	44.0
Five or more	26.2	—	—	26.2
None	5.9	**0.4	*2.5	8.8
Television types(b)				
Cathode ray tube	484.4	48.2	55.6	588.2
LCD or Plasma	417.4	42.8	39.2	499.5
Projector	18.0	np	np	19.4
Other	*2.9	—	—	*2.9
Don't know	*1.8	np	np	*2.5
DVD players	629.4	69.4	73.5	772.3
Set top boxes	268.3	25.7	20.1	314.0
Video cassette recorders	395.8	33.7	35.0	464.6
Surround sound systems for home theatre	225.6	15.6	14.4	255.6
Stereo systems	434.1	43.7	46.0	523.8
Game consoles	301.7	22.8	18.4	342.9
Information technology products				
Desktop computers	452.9	36.5	30.3	519.8
Laptop/notebook computers	372.9	40.8	46.2	459.9
Printers, scanners or fax machines	522.2	45.8	45.0	613.0
Cordless phone systems	516.0	43.1	44.3	603.5
Mobile phone/battery or other chargers	644.6	66.8	75.5	786.9
<i>Total dwellings</i>	695.9	78.0	88.1	862.0

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- nil or rounded to zero (including null cells) (b) More than one response possible

	Separate house	Semi-detached, row or terrace house, townhouse etc.	Flat, unit or apartment and other(a)	Total
.....				
PROPORTION (%)				
.....				
Home entertainment equipment				
Dwellings with television	99.1	99.5	97.2	99.0
Number of televisions				
One	35.2	52.7	69.0	40.2
Two	38.5	37.1	22.8	36.7
Three	15.6	np	np	13.9
Four	6.1	np	np	5.1
Five or more	3.8	—	—	3.0
None	0.9	**0.5	*2.8	1.0
Television types(b)				
Cathode ray tube	69.6	61.8	63.1	68.2
LCD or Plasma	60.0	54.9	44.5	57.9
Projector	2.6	np	np	2.3
Other	*0.4	—	—	*0.3
Don't know	*0.3	np	np	*0.3
DVD players	90.4	89.0	83.5	89.6
Set top boxes	38.6	32.9	22.8	36.4
Video cassette recorders	56.9	43.2	39.8	53.9
Surround sound systems for home theatre	32.4	20.0	16.4	29.7
Stereo systems	62.4	56.0	52.2	60.8
Game consoles	43.4	29.2	20.9	39.8
Information technology products				
Desktop computers	65.1	46.8	34.4	60.3
Laptop/notebook computers	53.6	52.3	52.4	53.4
Printers, scanners or fax machines	75.0	58.7	51.1	71.1
Cordless phone systems	74.2	55.3	50.3	70.0
Mobile phone/battery or other chargers	92.6	85.6	85.7	91.3
<i>Total dwellings</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

-
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- nil or rounded to zero (including null cells) (b) More than one response possible

	One person household(a)	Two person household(a)	Three to five person household(a)	Six or more person household(a)	Total(a)
DWELLINGS ('000)					
Home entertainment equipment					
Dwellings with television	219.2	291.7	316.0	26.2	853.2
Number of televisions					
One	151.8	121.9	68.6	4.5	346.7
Two	58.9	125.4	124.9	7.4	316.6
Three	*6.1	33.2	73.4	7.1	119.7
Four	**2.5	9.5	29.4	*2.6	44.0
Five or more	—	**1.8	19.7	*4.7	26.2
None	*4.6	*2.2	*2.0	—	8.8
Television types(b)					
Cathode ray tube	147.4	190.3	228.5	22.0	588.2
LCD or Plasma	91.8	179.7	211.1	16.9	499.5
Projector	*2.5	6.2	10.4	**0.4	19.4
Other	—	*1.4	**1.4	—	*2.9
Don't know	*1.4	**1.1	—	—	*2.5
DVD	181.4	266.2	300.0	24.7	772.3
Set top boxes	55.7	108.1	139.3	10.9	314.0
Video cassette recorders	107.1	158.7	185.0	13.7	464.6
Surround sound systems for home theatre	43.2	80.4	123.9	8.1	255.6
Stereo systems	121.0	182.2	204.5	16.1	523.8
Game consoles	35.7	81.3	206.1	19.8	342.9
Information technology products					
Desktop computers	91.1	169.1	238.5	21.1	519.8
Laptop/notebook computers	81.1	149.8	212.7	16.3	459.9
Printers, scanner sor fax machines	110.3	209.5	270.9	22.2	613.0
Cordless phone systems	128.2	201.4	254.7	19.2	603.5
Mobile phone/battery or other chargers	180.0	270.6	311.2	25.2	786.9
<i>Total dwellings</i>	223.9	293.9	318.0	26.2	862.0

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— nil or rounded to zero (including null cells)

(a) Excludes people living in the dwelling who are out of scope (see explanatory notes)

(b) More than one response possible

	One person household(a)	Two person household(a)	Three to five person household(a)	Six or more person household(a)	Total(a)
PROPORTION (%)					
Home entertainment equipment					
Dwellings with television	97.9	99.3	99.4	100.0	99.0
Number of televisions					
One	67.8	41.5	21.6	17.3	40.2
Two	26.3	42.7	39.3	28.1	36.7
Three	*2.7	11.3	23.1	26.9	13.9
Four	**1.1	3.2	9.3	*9.9	5.1
Five or more	—	**0.6	6.2	*17.8	3.0
None	*2.1	*0.7	*0.6	—	1.0
Television types(b)					
Cathode ray tube	65.9	64.8	71.9	83.7	68.2
LCD or Plasma	41.0	61.1	66.4	64.3	57.9
Projector	*1.1	2.1	3.3	**1.5	2.3
Other	—	*0.5	**0.5	—	*0.3
Don't know	*0.6	**0.4	—	—	*0.3
DVD	81.0	90.6	94.4	94.2	89.6
Set top boxes	24.9	36.8	43.8	41.7	36.4
Video cassette recorders	47.9	54.0	58.2	52.3	53.9
Surround sound systems for home theatre	19.3	27.4	39.0	31.0	29.7
Stereo systems	54.1	62.0	64.3	61.2	60.8
Game consoles	16.0	27.7	64.8	75.4	39.8
Information technology products					
Desktop computers	40.7	57.5	75.0	80.4	60.3
Laptop/notebook computers	36.2	51.0	66.9	62.1	53.4
Printers, scanner or fax machines	49.3	71.3	85.2	84.7	71.1
Cordless phone systems	57.3	68.5	80.1	73.1	70.0
Mobile phone/battery or other chargers	80.4	92.1	97.9	95.9	91.3
<i>Total dwellings</i>	100.0	100.0	100.0	100.0	100.0

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— nil or rounded to zero (including null cells)

(a) Excludes people living in the dwelling who are out of scope (see explanatory notes)

(b) More than one response possible

OTHER ELECTRICAL APPLIANCES, Gross annual household income

	Less than \$25,000	Less than \$50,000	Less than \$70,000	Less than \$110,000	\$110,000 or more	Total(a)
Dwellings ('000)						
Home entertainment equipment						
Dwellings with television	150.9	153.0	126.7	177.2	212.1	853.2
Number of televisions						
One	81.6	72.2	54.1	66.7	59.6	346.7
Two	53.4	57.6	45.8	67.7	79.4	316.6
Three	12.4	15.9	18.9	27.9	40.2	119.7
Four	*2.9	5.9	*4.0	10.2	18.8	44.0
Five or more	**0.7	*1.3	3.9	*4.7	14.0	26.2
None	*4.0	*1.8	**1.0	**0.7	**1.0	8.8
Television types(b)						
Cathode ray tube	120.0	110.7	89.6	116.1	130.8	588.2
LCD or Plasma	56.8	71.6	69.0	120.6	161.5	499.5
Projector	*1.4	*1.4	*2.1	5.6	8.5	19.4
Other	np	np	np	np	np	*2.9
Don't know	np	np	np	np	np	*2.5
DVD players	119.7	139.1	116.1	164.9	203.8	772.3
Set top boxes	35.4	56.4	44.9	71.9	93.7	314.0
Video cassette recorders	80.3	88.6	67.9	96.0	114.9	464.6
Surround sound systems for home theatre	18.3	31.5	34.9	67.1	93.5	255.6
Stereo systems	75.8	89.8	78.2	115.5	146.1	523.8
Game consoles	22.7	47.0	52.9	90.1	117.9	342.9
Information technology products						
Desktop computers	63.2	86.0	74.7	121.4	153.3	519.8
Laptop/notebook computers	35.3	60.9	74.8	114.2	159.2	459.9
Printers, scanners or fax machines	64.4	97.9	96.1	144.0	188.7	613.0
Cordless phone systems	87.0	98.3	88.7	130.6	176.1	603.5
Mobile phone/battery or other charger	111.1	138.5	124.7	172.7	209.7	786.9
Total dwellings	154.9	154.8	127.7	177.8	213.1	862.0

PROPORTION (%)						
Home entertainment equipment						
Dwellings with television	97.4	98.8	99.2	99.6	99.5	99.0
Number of televisions						
One	52.7	46.6	42.4	37.5	28.0	40.2
Two	34.5	37.2	35.9	38.1	37.3	36.7
Three	8.0	10.3	14.8	15.7	18.9	13.9
Four	*1.8	3.8	*3.1	5.7	8.8	5.1
Five or more	**0.5	*0.9	*3.0	2.7	6.6	3.0
None	*2.6	*1.2	**0.8	**0.4	**0.5	1.0
Television types(b)						
Cathode ray tube	77.4	71.5	70.2	65.3	61.4	68.2
LCD or Plasma	36.6	46.2	54.0	67.8	75.8	57.9
Projector	*0.9	*0.9	*1.6	3.1	4.0	2.3
Other	np	np	np	np	np	*0.3
Don't know	np	np	np	np	np	*0.3
DVD players	77.3	89.9	90.9	92.7	95.6	89.6
Set top boxes	22.8	36.4	35.2	40.4	44.0	36.4
Video cassette recorders	51.8	57.2	53.2	54.0	53.9	53.9
Surround sound systems for home theatre	11.8	20.4	27.4	37.7	43.9	29.7
Stereo systems	48.9	58.0	61.3	65.0	68.6	60.8
Game consoles	14.7	30.4	41.5	50.7	55.3	39.8
Information technology products						
Desktop computers	40.8	55.5	58.5	68.3	71.9	60.3
Laptop/notebook computers	22.8	39.4	58.6	64.2	74.7	53.4
Printers, scanners or fax machines	41.6	63.2	75.2	81.0	88.6	71.1
Cordless phone systems	56.1	63.5	69.4	73.4	82.6	70.0
Mobile phone/battery or other charger	71.7	89.5	97.7	97.1	98.4	91.3
Total dwellings	100.0	100.0	100.0	100.0	100.0	100.0

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Includes don't know

(b) More than one response possible

PERTH METROPOLITAN REGION

	Central Metro.	East Metro.	North Metro.	South West Metro.	South East Metro.	Perth
PERSONS ('000)						
Male						
Public transport use						
Usually used for regular activities	*14.4	*14.7	42.2	19.5	25.5	116.3
Not usually used for regular activities	43.9	80.3	174.7	115.7	93.2	507.9
Level of public transport use over last 2 years						
Use increased	*7.6	*11.8	28.1	21.5	*10.3	79.3
Use decreased	*5.4	*8.1	20.0	*10.1	*6.5	50.0
Stayed the same	44.5	75.2	167.3	102.9	101.1	491.0
<i>Total(a)</i>	62.1	95.0	216.9	135.2	118.6	627.8
Female						
Public transport use						
Usually used for regular activities	10.6	*12.9	44.1	18.8	29.8	116.2
Not usually used for regular activities	37.4	92.9	191.0	102.5	88.2	512.0
Level of public transport use over last 2 years						
Use increased	*6.6	*6.6	29.0	22.7	17.5	82.4
Use decreased	*4.5	**5.1	22.0	*11.3	14.9	57.8
Stayed the same	35.5	94.1	183.1	87.3	82.8	482.8
<i>Total(a)</i>	48.0	105.9	236.2	121.3	118.0	629.3
Total						
Public transport use						
Usually used for regular activities	25.0	27.6	86.3	38.2	55.3	232.5
Not usually used for regular activities	81.3	173.3	365.7	218.2	181.3	1 019.9
Level of public transport use over last 2 years						
Use increased	*14.2	*18.4	57.1	44.2	27.8	161.7
Use decreased	*9.9	*13.2	42.0	21.4	21.4	107.8
Stayed the same	80.0	169.3	350.5	190.2	183.9	973.9
<i>Total(a)</i>	110.0	200.9	453.1	256.5	236.7	1 257.2

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Includes don't know

PERTH METROPOLITAN REGION

	Central Metro.	East Metro.	North Metro.	South West Metro.	South East Metro.	Perth
PROPORTION (%)						
Male						
Public transport use						
Usually used for regular activities	23.2	15.5	19.5	14.4	21.5	18.5
Not usually used for regular activities	70.8	84.5	80.5	85.6	78.5	80.9
Level of public transport use over last 2 years						
Use increased	*12.3	*12.4	13.0	15.9	*8.7	12.6
Use decreased	*8.7	*8.5	9.2	7.5	*5.4	8.0
Stayed the same	71.7	79.1	77.1	76.1	85.2	78.2
<i>Total(a)</i>	100.0	100.0	100.0	100.0	100.0	100.0
Female						
Public transport use						
Usually used for regular activities	22.1	*12.2	18.7	15.5	25.3	18.5
Not usually used for regular activities	77.9	87.8	80.9	84.5	74.7	81.4
Level of public transport use over last 2 years						
Use increased	13.8	*6.3	12.3	18.7	14.8	13.1
Use decreased	*9.4	**4.8	9.3	*9.3	12.7	9.2
Stayed the same	74.0	88.9	77.5	72.0	70.1	76.7
<i>Total(a)</i>	100.0	100.0	100.0	100.0	100.0	100.0
Total						
Public transport use						
Usually used for regular activities	22.7	13.8	19.0	14.9	23.4	18.5
Not usually used for regular activities	73.9	86.2	80.7	85.1	76.6	81.1
Level of public transport use over last 2 years						
Use increased	12.9	9.1	12.6	17.2	11.8	12.9
Use decreased	*9.0	*6.6	9.3	8.3	9.0	8.6
Stayed the same	72.7	84.3	77.3	74.2	77.7	77.5
<i>Total(a)</i>	100.0	100.0	100.0	100.0	100.0	100.0

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Includes don't know

	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	Total
PERSONS ('000)							
Public transport use							
Usually used for regular activities	52.2	52.7	33.8	30.2	29.1	34.4	232.5
Not usually used for regular activities	123.3	188.7	209.6	195.9	153.3	149.1	1 019.9
Level of public transport use over last 2 years							
Use increased	31.1	28.2	32.3	20.8	26.1	23.4	161.7
Use decreased	32.0	23.2	*16.6	15.7	*8.0	12.4	107.8
Stayed the same	112.5	184.0	193.9	188.9	147.6	147.0	973.9
Total (a)	176.7	243.8	243.4	227.4	182.4	183.5	1 257.2
PROPORTION (%)							
Public transport use							
Usually used for regular activities	29.6	21.6	13.9	13.3	15.9	18.8	18.5
Not usually used for regular activities	69.8	77.4	86.1	86.2	84.1	81.2	81.1
Level of public transport use over last 2 years							
Use increased	17.6	11.6	13.3	9.1	14.3	12.7	12.9
Use decreased	18.1	9.5	*6.8	6.9	*4.4	6.8	8.6
Stayed the same	63.7	75.5	79.6	83.1	80.9	80.1	77.5
Total (a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
* estimate has a relative standard error of 25% to 50% and should be used with caution							
(a) Includes don't know							

	<i>Persons</i>	<i>Proportion</i>
	'000	%
Reasons for increase use of public transport over last 2 years		
More convenient than before	56.3	34.8
Change in work circumstances/started work	27.6	17.1
Public transport cheaper/free	19.7	12.2
Access to public transport changed/moved house/work	14.7	9.1
No motor vehicle access	*9.8	6.0
No reliable parking near/at place of work/study	*6.9	*4.2
Other	26.8	16.6
<i>Total</i>	<i>161.7</i>	<i>100.0</i>
Reasons for decrease use of public transport over last 2 years		
Have acquired own car/drivers licence	33.2	30.8
Change in work circumstances	28.3	26.3
Less convenient than before	16.8	15.6
Access to public transport changed/moved house/work	*10.2	*9.5
Illness	*7.7	*7.1
Other	*11.5	*10.7
<i>Total</i>	<i>107.8</i>	<i>100.0</i>

* estimate has a relative standard error of 25% to 50% and should be used with caution

EXPLANATORY NOTES

INTRODUCTION

1 This publication contains results from the *Western Australia (WA) Household Choices Related to Water and Energy Survey*, conducted throughout WA during the two weeks commencing Sunday, 11 October 2009.

2 The survey was conducted as a supplement to the ABS Monthly Population Survey (MPS). The MPS is based on a multi-stage area sample of private dwellings and a list sample of special dwellings (hotels, motels, hospitals, prisons, short-stay caravan parks, etc.). Persons living in special dwellings were excluded from the scope of this survey. Information is obtained from the occupants of the selected dwellings by specially trained interviewers. For details of the design, scope and coverage of the MPS, users should refer to any recent edition of the ABS publication, *Labour Force, Australia* (cat. no. 6202.0) or the November 2002 edition of *Information Paper: Labour Force Survey Sample Design* (cat. no. 6269.0).

3 The *WA Household Choices Related to Water and Energy Survey* was conducted on a subset of the full sample of private dwellings in WA that were included in the MPS.

4 The survey covered all private dwellings with the exception of those that:

- are in very remote parts of Australia
- consist entirely of members of the Australian permanent defence forces, diplomatic personnel of overseas governments, overseas residents or members of non-Australian defence forces.

5 Private dwelling households consisting entirely of visitors were excluded from coverage of the survey.

6 Information was collected by either face to face or by telephone interview from one responsible adult per household. This adult answered questions on behalf of the household. Information was sought from an estimated 2,537 dwellings and data was obtained from 95.7% or 2,429 dwellings.

7 For the public transport component of the survey, one 'in scope' person (aged 18 years and over) from each household was randomly selected for questioning. The ARA (any responsible adult) answered the public transport questions on behalf of that person.

EFFECTS OF ROUNDING

8 Estimates in this publication have been rounded and discrepancies may occur between sums of the component items and totals.

ACKNOWLEDGEMENT

9 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated. Without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act, 1905*.

RELATED PUBLICATIONS

10 The ABS produces a wide range of publications concerning social, housing and demographic statistics. Users may wish to refer to the following ABS publications which relate to the survey topic:

- *Experimental Estimates of Regional Water Use, Australia, 2004-2005*, cat. no. 4610.0.55.002
- *Travel to Work and School, Greater Perth Region, October 1994*, cat. no. 9201.5
- *Environmental Issues: Energy Use and Conservation, Australia, March 2008*, cat. no. 4602.0.55.001
- *Environmental Issues: People's Views and Practices, March 2007*, cat. no. 4602.0
- *Environmental Issues: People's Views and Practices, March 2005*, cat. no. 4602.0
- *Domestic Use of Water and Energy, WA, Oct 2006*, cat. no. 4652.5
- *Domestic Water Use, Western Australia, Oct 2003*, cat. no. 4616.5.55.001

EXPLANATORY NOTES *continued*

RELATED PUBLICATIONS *continued*

- *Information Paper: An Introduction to Socio-Economic Indexes for Areas (SEIFA), 2006*, cat. no. 2039.0
- *Information Paper: Population Concepts, Australia 2008*, cat. no. 3107.0.55.006.

11 Current publications and other products released by the ABS are listed in the *Catalogue of Publications and Products* (cat. no. 1101.0). The Catalogue is available from any ABS office or the ABS web site <<http://www.abs.gov.au>>. The ABS also issues a daily *Release Advice* on the web site which details products to be released in the week ahead.

APPENDIX

POPULATIONS

Household energy and water use

All dwellings

Dwellings with gardens and lawns

- Separate house
- Semi-detached, row or terrace house, townhouse
- Other but not including flat, unit or apartment structures

Dwellings that have purchased white-goods in the past 12 months

Use of public transport

- All persons aged 18 years and over as at October 2009
- Persons who changed patterns of public transport use

ADDITIONAL DATA AVAILABLE

In addition to the statistics provided in this publication, the ABS can produce customised tabulations on request. Subject to confidentiality and sampling variability constraints, tabulations can be produced from the survey by cross-classifying any of the following data items for the relevant survey populations.

DATA ITEMS

Place of usual residence

Place of usual residence

- Perth metropolitan
 - Central metropolitan
 - East metropolitan
 - North metropolitan
 - South West metropolitan
 - South East metropolitan
- Remainder WA
- WA

Dwelling characteristics

Age of dwelling

- Less than 2 years old
- More than 2 years old

Dwelling type

- Separate house
- Semi-detached, row or terrace house, townhouse etc.
- Flat, unit or apartment and other

Insulation

- Whether insulation is installed
- Reasons for no having insulation

Tenure type

- Fully owned
- Being paid off
- Renting (publicly)
- Renting (other/private)
- Other

Household characteristics

Age categories

18–24 years	25–34 years	35–44 years
45–54 years	55–64 years	65 years or more

Sex

- Males
- Females

APPENDIX *continued*

Household characteristics *continued*

Children in household

Whether children in the household

With children (at least one household resident aged 0–14 years)

Without children (no household resident aged 0–14 years)

Household type

Person living alone

Couple only

Couple with dependent children only

Lone parent with dependent children only

Other household types

Household size

One person

Two person

Three to five persons

Six or more persons

Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)

Lowest quintile

Second quintile

Third quintile

Fourth quintile

Highest quintile

Index of Relative Socio-economic Disadvantage (IRSD)

Lowest quintile

Second quintile

Third quintile

Fourth quintile

Highest quintile

Water access and use

Sources of water

Mains water

Garden bore

 own garden bore

 shared garden bore

Rainwater tank

Rainwater tank plumbed into dwelling

Number of toilets

None

One

Two

Three

Four or more

Toilets that are dual flush

All

Some

None

Number of showers

None

One

Two

Three

Four or more

APPENDIX *continued*

Water access and use
continued

Showers that have low flow heads attached
All
Some
None

Gardens and lawns water use

Whether dwelling has any garden/lawn
Location of lawn
Front yard only
Back yard only
Both front and back lyards
Other
Source of water for watering garden/lawn
Mains water
Garden bore
Rainwater tank
Recycled water/grey water
Other
Not watered/rain
Whether dwelling has a reticulated watering system
Type of reticulated watering system
Mains water – automatic
Mains water – non automatic
Garden bore – automatic
Garden bore – non automatic
Rainwater tank – automatic
Rainwater tank – non automatic
Recycled water – automatic
Recycled water – non automatic
Other – automatic
Other – non automatic

Energy source

Sources of energy
Electricity
Gas – mains
Gas – LPG/bottled
Solar energy
Wood
Oil
Photo Voltaic - electricity
Other

Space cooling and heating

Whether household has any air conditioners
Number of air conditioners used for cooling
One
Two
Three or more

APPENDIX *continued*

*Space cooling and heating
continued*

Type of main air conditioner (used most often)

- Reverse cycle
 - split system
 - set in wall or window
 - ducted
 - portable
 - other
- Refrigerated
 - split system
 - set in wall or window
 - ducted
 - portable
 - other
- Evaporative
 - set in wall or window
 - ducted
 - portable
 - other
- Don't know

Type of main heating (used most often)

- Electric
 - ducted
 - not ducted (resistant, radiators etc.)
 - floor slab
- Gas
 - ducted
 - not ducted - flued
 - not ducted - unflued
 - floor slab
- Reverse cycle
 - ducted
 - not ducted
- Wood
 - combustion
 - open fire
 - pot belly
- Other heating

Hot water system

Type of hot water system

- Storage
- Instantaneous
- Other
- Don't know

Main energy source

- Electricity
- Gas – mains
- Gas – LPG/bottled
- Solar energy
- Other

APPENDIX *continued*

Hot water system continued

Type of booster used in solar hot water system

- Electricity
- Gas – mains
- Gas – LPG/bottled
- Solar energy
- Other
- Not used

*Electrical
appliances–Whitegoods*

Whitegoods

- Washing machines
- Clothes dryers
- Dishwashers
- Refrigerators
- Separate freezers
- Microwaves

Type of washing machine

- Top loading
- Front loading
- Other

Number of wash loads per week

- Less than three loads per week
- Three to five loads
- Six to ten loads
- Eleven loads or more

Frequency of clothes dryer use

- At least once a week
- At least once a fortnight
- At least once a month
- Less than once a month
- Depends on weather/season
- Never used

Frequency of dishwasher use

- Daily
- Three or more times a week (but not daily)
- Once or twice a week
- Less often than once a week
- Never

Number of refrigerators in use

- One
- Two
- Three or more
- None

Age of main refrigerator

- Less than one year
- One year to less than five years
- Five years to less than ten years
- Ten years or more
- Don't know

APPENDIX *continued*

*Electrical
appliances-Whitegoods
continued*

- Number of separate freezers in use
 - None
 - One
 - Two
 - Three or more
- Age of main separate freezer
 - Less than one year
 - One year to less than five years
 - Five years to less than ten years
 - Ten years or more
 - Don't know
- Whether whitegoods purchased in last 12 months
- Factors considered when purchasing these white goods
 - Energy star rating
 - Water efficiency rating
 - Cost
 - Dimensions
 - Feature
 - Capacity
 - Brand name
 - Appearance
 - Reliability
 - Environmental considerations
 - Recommended by friend/expert
 - Availability
 - Other
 - None
 - Don't know

*Electrical appliances-Home
entertainment equipment*

- Televisions
- Number of televisions
 - None
 - One
 - Two
 - Three
 - Four
 - Five
 - Six or more
- Type of televisions
 - Normal picture tube TV (CRT) (analog)
 - LCD
 - Plasma
 - Either LCD or Plasma (unsure)
 - Projector
 - Other
 - Don't know
- Other home entertainment equipment
 - DVD player/recorders
 - Set Top Boxes
 - VCR or Video recorders
 - Surround sound systems for home theatre
 - Stereo systems
 - Game console

APPENDIX *continued*

*Electrical
appliances–Information
technology products*

Information technology products
Desktop computers
Laptop/notebook computers
Printer, scanner or fax machines
Cordless Phone systems
Mobile Phone/Battery or other chargers

*Gross annual household
income*

Gross annual household income
Less than \$25,000
Less than \$50,000 (\$25,000 to less than \$50,000)
Less than \$70,000 (\$50,000 to less than \$70,000)
Less than \$110,000 (\$70,000 to less than \$110,000)
\$110,000 or more
Don't know

Concession card holder

Whether concession card used to receive a discount on energy and water bills.

FURTHER INFORMATION

For further information about additional data available on request, please contact Judy Griffin on Perth (08) 9360 5935.

TECHNICAL NOTE DATA QUALITY

RELIABILITY OF THE ESTIMATES

1 Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all occupants of all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings (or occupants) was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

2 The imprecision due to sampling variability, which is measured by the SE, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents and recording by interviewers, and errors made in coding and processing data. Inaccuracies of this kind are referred to as non-sampling error, and they occur in any enumeration, whether it be a full count or sample. Every effort is made to reduce non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers, and efficient operating procedures.

3 Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate:

$$RSE\% = \frac{SE}{estimate} \times 100$$

4 RSEs for estimates from 2009 *Household Choices Related to Water and Energy* survey are published for each individual data cell. The Jackknife method of variance estimation is used for this process, which involves the calculation of 30 'replicate' estimates based on 30 different sub-samples of the original sample. The variability of estimates obtained from these sub-samples is used to estimate the sample variability surrounding the main estimate.

5 Limited publication space does not allow for the separate indication of the SEs and/or RSEs of all the estimates in this publication. However, RSEs for all these estimates will be available free-of-charge on the ABS web site <www.abs.gov.au>.

6 In the tables in this publication, only estimates (numbers and proportions) with RSEs less than 25% are considered sufficiently reliable for most purposes. However, estimates with larger RSEs have been included and are preceded by an asterisk (e.g. *3.4) to indicate they are subject to high SEs and should be used with caution. Estimates with RSEs greater than 50% are preceded by a double asterisk (e.g. **2.1) to indicate that they are considered too unreliable for general use.

ESTIMATION PROCEDURE

7 The estimates in this publication were obtained using a post-stratification procedure. This procedure ensured that the survey estimates conformed to an independently estimated distribution of the population, by state, part of state, age and sex rather than the distribution among respondents.

PROPORTIONS AND PERCENTAGES

8 Proportions formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion is given below. This formula is only valid when x is a subset of y.

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

DIFFERENCES

9 Published estimates may also be used to calculate the difference between two survey estimates (of numbers or percentages). Such an estimate is subject to sampling error. The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x - y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

10 While this formula will only be exact for differences between separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all differences likely to be of interest in this publication.

SIGNIFICANCE TESTING

11 A statistical significance test can be performed to indicate whether the survey results provide sufficient evidence that differences between survey estimates reflect an actual difference in the population. The following measure, called a "test statistic", can be used to test the statistical significance of a difference between two survey estimates. (The standard error of the difference between two corresponding estimates (x and y) can be calculated using the formula in paragraph 9.)

$$\frac{(x - y)}{SE(x - y)}$$

12 If the value of this test statistic is greater than 1.96, then we may say there is strong evidence the difference between the survey estimates reflects there is a difference in the population.

GLOSSARY

Air conditioner	An apparatus for controlling the temperature of an enclosed space. It can be portable or fixed into the structure of the dwelling, usually in the wall or ceiling.
Bore water	See 'garden bore'.
Bottled gas	Gas provided in a large bottle or canister which is located near the house. A gas retailer may remove empty canisters and replace them with new ones.
Cathode ray tube (CRT) television	A television that uses a vacuum tube containing an electron gun and a fluorescent screen to create images in the form of light emitted from the fluorescent screen.
Couple only household	A couple relationship is defined as two people usually residing in the same household who share a social, economic and emotional bond usually associated with marriage and who consider their relationship to be a marriage or marriage-like union. This relationship is identified by the presence of a registered marriage or de facto marriage.
Couple with dependent children only household	A couple family with dependent children only. These children are either aged under 15 years or are 15–24 year old full-time students living in the same usual residence as his or her natural, step, foster or adoptive parents.
Dual flush toilet	A toilet that allows the volume in the cistern to be half or fully flushed. It may have two separate buttons, or one button or lever that is pushed down for full flush and up for half flush.
Ducted air conditioner	A ducted air conditioner is one where air is piped from a single source through the dwelling to more than one outlet.
Evaporative air conditioner	An air conditioner that draws outdoor air through a water filtration system whereby some heat from the air is absorbed through water evaporation. The air is cooled and filtered as it passes through moistened pads.
Front loading washing machine	An automatic washing machine that is loaded from the front and uses less water than top loading washing machine.
Garden bore	A pump or windmill that brings ground water to the surface. Households can access bore water from a single household bore (used by one household only) or as a shared bore (used by more than one households or adjoining properties).
Gardens or lawns	Private gardens or lawns attached to a dwelling (excluding flats, units, apartments etc.).
Gas heater	Heaters that use gas for heating. These heaters may also need electricity to ignite or start the appliance.
Grey water	See 'recycled or re-used water'.
Gross annual household income	The sum of all income sources before income tax and the Medicare levy have been deducted for all members of the household over a 12 month period. For this survey, between September 2008 and October 2009.
Hot water system	A device used for heating water in a dwelling. Such devices include instantaneous hot water systems, solar hot water systems and storage hot water systems. Each of these systems are further described in the glossary under relevant headings.
Household	A group of residents of a dwelling who share common facilities and meals or who consider themselves to be a household. It is possible for a dwelling to contain more than one household, for example, where regular provision is made for groups to take meals separately and where persons consider their household to be separate.
Household size	The number of children in the household plus the number of adults in scope of the Labour Force Survey.

GLOSSARY *continued*

Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)	<p>A general socio-economic index that was created using measures of relative disadvantage (similar to those used in the Index of Relative Socio-economic Disadvantage), as well as measures of relative advantage. It summarises information about the economic and social resources of people and households within an area, however includes both relative advantage and disadvantage measures.</p> <p>Further detail is available from ABS <i>Information Paper: An Introduction to Socio-Economic Indexes for Areas (SEIFA), 2006</i> (cat. no. 2039.0).</p>
Index of Relative Socio-economic Disadvantage (IRSD)	<p>A general socio-economic index that summarises a range of information about the economic and social resources of people and households within an area. Unlike the other indexes, this index includes only measures of relative disadvantage. This means that, unlike the other indexes, a high score (or decile) reflects a relative lack of disadvantage rather than relative advantage.</p> <p>Further detail is available from ABS <i>Information Paper: An Introduction to Socio-Economic Indexes for Areas (SEIFA), 2006</i> (cat. no. 2039.0).</p>
Instantaneous hot water system	<p>Instantaneous hot water systems heat only the water required and do not use a storage tank.</p>
Insulation	<p>Insulation can help keep a dwelling at a constant temperature by minimising heat transfer. There are a variety of products available, including fibreglass, rockwool and natural wool based batts. All have different acoustic and thermal insulation properties.</p>
LCD television	<p>Flat-panel display technology that uses rod-shaped molecules (liquid crystals) that flow like liquid and bend light.</p>
Lone parent with dependent children household	<p>A family consisting of a lone parent with dependent children only. These children are either aged under 15 years or are 15–24 year old full-time students living in the same usual residence as his or her natural, step, foster or adoptive parent.</p>
Low flow shower head	<p>A shower head that has a water efficient or low flow regulator fitted to it so as to restrict water flow.</p>
LPG	<p>LPG (Liquefied petroleum gas) (also called LP Gas, or autogas) is the generic name for mixtures of hydrocarbon (mainly propane and butane). It is used as a fuel in heating appliances and vehicles, and increasingly replacing chlorofluorocarbons as an aerosol propellant and a refrigerant to reduce damage to the ozone layer.</p>
Mains gas	<p>Gas connected to the household by underground pipes and provided on a continuous basis by an energy company.</p>
Mains water supply	<p>Water supplied to a user often through a non-natural network (piped/open channel or other carrier), and where an economic transaction has occurred for the exchange of water. Sometimes referred to as town water supply.</p>
Normal flow shower head	<p>A shower head that does not have a water efficient or low flow device fitted to it.</p>
Non-metropolitan region	<p>The <i>Australian Standard Geographical Classification</i> (ASGC) divides Western Australia into two Major Statistical Regions, namely Perth Major Statistical Region and the Balance of Western Australia. Non-metropolitan region is represented by the Balance of Western Australia Major Statistical Region, and can be further subdivided into two Statistical Regions, namely: Lower Western WA Statistical Region; and Remainder – Balance WA Statistical Region. For further information refer to <i>Australian Standard Geographical Classification</i> (cat. no. 1216.0).</p>
Other family type households	<p>This may include family of related individuals residing in the same household, as well as families with both dependent and non-dependent children. These individuals do not form a couple or parent-child relationship with any other person in the household and are not related to a couple or one parent family in the household.</p>
Place of usual residence	<p>See 'Region of usual residence'.</p>

GLOSSARY *continued*

Plasma television	Flat-panel display technology that ignites small pockets of gas to light phosphors.
Portable air conditioner	A portable air conditioner can be moved around the dwelling. It is often on wheels.
Private dwelling	A dwelling that is intended to have people live in it (e.g. house, flat, unit, caravan, houseboat, tent, etc.).
Projector television	Uses a bright beam of light and a lens system to project television images to a much larger size which are then viewed by the audience.
Public transport	Public transport includes all modes of transporting people via 'public means'. In WA these include bus, train or taxi travel.
Rain water tank plumbed into the dwelling	A tank used to store rainwater that is connected with pipes to a tap, washing machine or toilet inside the dwelling.
Recycled or re-used water	Sometimes known as 'grey water' or 'dirty water', covers a broad range of practices undertaken by households to re-use water (after it has been used once, and that would normally go down the drain but is used for another purpose) from in and around the house. Examples include using sophisticated recycled water systems, collecting water from running a shower or bath, using suds saver on washing machine, and pouring leftover water from water bottles and vases onto gardens/lawns.
Reduced flow shower head	See 'low flow' shower head.
Refrigerated air conditioner	These air conditioners cool indoor air by blowing it over a refrigeration coil and then redirecting it indoors. The refrigeration coil is cooled externally by a fan or by natural convection using outdoor air.
Region of usual residence	A person's area of usual residence as classified by the Statistical Region structure in the <i>Australian Standard Geographical Classification</i> (ASGC). The classification divides Western Australia into two Major Statistical Regions – the Perth Major Statistical Region and the Balance of WA (otherwise known as the non-metropolitan region.). Perth Major Statistical Region is further divided into Statistical Regions of Central Metropolitan, East Metropolitan, North Metropolitan, South West Metropolitan and South East Metropolitan. For further information refer to <i>Australian Standard Geographical Classification</i> , cat. no. 1216.0 and <i>Information Paper: Regional Labour Force Statistics, September 1997</i> , cat. no. 6262.0.
Reticulation system	A reticulation system provides a complete watering supply to your garden. It usually consists of a network of underground pipes connected to sprinklers.
Reverse cycle air conditioner	A reverse cycle air conditioner may also be used as a heater. The temperature is able to be varied between warm and cool settings.
Set top box	A device that converts digital TV broadcasts into a format suitable for analog TV reception. i.e., to enable digital broadcasts to be viewed on televisions without inbuilt digital characteristics (CRT and older plasma televisions).
Single flush toilet	An older style toilet that has one button or lever that flushes the full volume of the cistern.
Solar hot water system	Includes solar hot water systems that usually have boosters to heat water during periods of rain or overcast conditions, and when heavy demand exhausts the hot water supply before it can be reheated by the sun. The boosters may be of gas, electricity or some other energy source. Not all solar hot water systems have boosters.

GLOSSARY *continued*

Space cooling and heating	Relates to types of appliances and forms of energy used for dwelling heating and cooling. See also: <ul style="list-style-type: none">Split system air conditionerReverse cycle air conditionerRefrigerated air conditionerPortable air conditionerDucted air conditionerEvaporative air conditioner.
Split system air conditioner	A split system air conditioner is separated (but still connected by pipes or ducts) into a main unit that houses the compressor, and one or more outlets. The main unit is usually located outside the dwelling.
Storage hot water system	A storage/tank hot water system heats water and stores it in a tank until it is needed.
Surround sound system for home theatre	A sound system designed to place the listener in the centre of the sound.
Top loading washing machine	An automatic washing machine that is loaded from the top.
Water efficient shower head	See 'low flow shower head'.

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