## VICTORIAN UTILITY CONSUMPTION SURVEY 2001

### FINAL REPORT

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#### **EXECUTIVE SUMMARY**

The 2001 Victorian Utility Consumption Survey was a follow-on from a similar survey conducted in 1996. Interviews were conducted in Melbourne, Ballarat, Bendigo, Geelong and Shepparton amongst concession households and non-concession households. A total of 2,006 interviews were conducted. Energy, water and council rate billing information was also collected from the relevant sources for each survey respondent. Where applicable, survey results were compared between the 1996 and 2001 surveys.

Throughout this report primary analysis has been conducted amongst three main subgroups – aged/service concession households, other concession households and nonconcession households. Definitions of these sub-groups can be found in Section 2.1 of this report.

#### SAMPLE CHARACTERISTICS

Compared with the 1996 sample, the ratio of concession households to non-concession households in Victoria has fallen in 2001 (1996 - 41%:59% cf 2001 - 38%:62%). Whilst the ratio has fallen more dramatically in Melbourne (1996 - 39%:61% cf 2001 - 32%:68%), the ratio has actually increased in country Victoria so that there are now more concession households than non-concession households (1996 - 47%:53% cf 2001 - 54%:46%). The ratio of aged/service concession households to other concession households has remained relatively stable since 1996 (23%:18%), with the 2001 ratio being 20%:18%. See Chart A.



Chart A: <u>Sample Type by Year</u>

Base : Total respondents 2001 (n=2,006) and 1996 (n=2,000).

Not surprisingly, the vast majority of **aged/service pensioners** were aged 65 years and over (86%). More than half have lived at their current address for 20 or more years, with nine in ten living in 1 or 2 person households. More than 4 in 5 have estimated household incomes of less than \$20,000 per annum (84%), with six in ten having a personal annual income of \$10,000-\$19,999 (58%). Personal income levels have risen since 1996 where two-thirds of aged/service pensioners had personal incomes of less than \$10,000 per annum (65%). Only 2% were in any type of paid employment. One in ten aged/service concession households have a main language other than English (11%), with the dominant language being Italian (3%). More than eight in ten own their own home (85%) and nine in ten have held their concession card for 2 or more years (91%).

The average age of **other concession holders** is higher in 2001, with 58% now aged 40 years or more, compared with 48% in 1996. Male other concession holders tend to be older on average than females, with 66% aged 40 years and over, compared with 54% of females in this category. Other concession holders also tend to be more transient than other groups, with 46% living at their current address for less than 5 years. Household size tends to be shrinking amongst this group with 47% currently living in 1 or 2 person households compared with 42% in 1996. Less than half of these households have dependent children (48%), with only one in eight having 3 or more children under 16 years of age (13%).

Six in ten other concession households have an estimated annual household income of less than \$20,000 (61%), with eight in ten of these card holders having a personal annual income of less than \$30,000 (83%). Whilst this proportion is comparable with 1996 results (88%), far fewer now personally earn less than \$10,000 per annum (23% cf 52%). Slightly fewer other concession card holders now claim to be undertaking home duties than in 1996 (32% cf 36%) or be in paid employment (21% cf 23%), with far greater proportions claiming to be retired/pensioners (28% cf 16%). This may explain why more in this category have held their concession card for 2 years or more (68% cf 60%).

One in six other concession households have a main language other than English (17%), with the other dominant languages being Vietnamese and Greek (each 3%). More than half own or are in the process of buying their own home (56%), up from 43% in 1996. The incidence of renting public accommodation has fallen markedly since 1996 amongst this group (13% cf 22%).

In relation to **non-concession householders**, no significant differences in age were evident when compared with 1996 results. However, slightly more non-concession females surveyed in 2001 were aged 40 years and over when compared with 1996 data (58% cf 52%).

In terms of the length of time that each in this group had lived at their current address, proportions were evenly spread across all time categories. Almost four in ten non-concession households had children under 16 living with them (39%), but as evidenced amongst other concession households, the average size of households has fallen since 1996 (44% 1-2 person households cf 38% in 1996).

Over half of non-concession households have annual household incomes of 50,000 or more (53%), with the proportion with personal incomes of 50,000 plus more than doubling since 1996 (21% cf 8%). As was the case in 1996, two-thirds on non-concession householders were in paid employment (65%). Home ownership has remained relatively static for this group since 1996 (41% cf 39%).

One quarter of all households surveyed in 2001 had other members in their household holding concessions cards (26%). Half of all concession households had at least one other household member with a concession card (50%), as compared with just 10% of non-concession households (ie. whilst the main bill-payer was not a concession card holder, another household member did hold a concession card).

#### ENERGY USAGE, CONSUMPTION AND EXPENDITURE

All households surveyed in 2001 used electricity, whilst 94% used gas, of which virtually all used mains gas. Increases in the proportions using gas since 1996 were found amongst aged/service pensioners (92% cf 84%) and households in Bendigo (96% cf 91%) and Melbourne (94% cf 90%). The incidence of using gas increased with household size (one person households – 91%; 4+ person households 98%).

The incidence of Victorian households using **gas** for cooking and hot water (76% and 78% respectively) has increased since 1996 (71% for each), whilst usage of gas for heating has remained relatively constant at 88%. Usage of gas for all purposes has particularly increased over time amongst Melbourne and Bendigo households.

Usage of **electricity** for heating has remained stable since 1996 (each 28%), usage of electricity for hot water has fallen slightly (23% cf 27% in 1996), whilst usage for cooking has risen marginally (53% cf 49%). The fall in the usage of electricity for hot water was most marked amongst aged/service pensioners (29% cf 38%), whilst the increase in use of electricity for cooking was most notable amongst non-concession households (58% cf 50%). Slight increases were observed for provincial cities in terms of usage of electricity for heating and cooking since 1996, with the exception of Bendigo, where the proportion using electricity for cooking fell from 51% to 37%.

Average annual **electricity consumption** increased by 15% over the 5 years from 1996 from 4,529 kilowatts to 5,190 kilowatts in 2001. General consumption increased by 23% from 3,623 kilowatts per household in 1996 to 4,456 kilowatts in 2001. Off peak consumption only increased by 10% over this period from 3,689 kilowatts in 1996 to 4,072 kilowatts in 2001. If fact, the proportion of households consuming off peak electricity fell from 24% in 1996 to 17% in 2001, indicating a movement away from off peak consumption over time.

Growth in electricity consumption since 1996 was highest in country Victoria (25%), particularly in the provincial centres of Geelong (30%) and Ballarat (26%). Growth in electricity consumption was also high amongst public rental households (25%) and all concession households (19%) over this period.

The average annual **electricity bill paid** in 2001 was \$705 up from \$449 in 1996. However, 1996 billing data is not considered to be reliable, and so strict comparisons with 2001 results are not advisable (see section 4.2.2. for more detail). The average annual electricity bill paid in 2001 by aged/service pensioners was \$576, compared with \$641 by other concession households and \$765 for non-concession households. Country Victorians on average paid more for their electricity than did Melbourne households (\$835 cf \$654).

All households received a **winter electricity bonus** of \$60 in 2001, although the average amount paid by electricity suppliers was \$65, because some households received lump sum discounts for bonuses not paid in 1999 and/or 2000.

One in six households were eligible for **concession discounts on their electricity bill** (17%), compared with 27% of households in 1996. Four in ten (39%) of aged/service households and 35% of other concession households received concession discounts. Interestingly, just 8% of country Victorian households received concession discounts on their electricity bill. The average concession amount paid to households was \$61, which did not vary substantially across sub-groups.

**Gas consumption** since 1996 has increased by 8% from 54,851 mJ to 59,415 mJ in 2001. This increase in consumption more than doubles the increase in the proportion of households using gas since 1996 (3%). Gas consumption fell slightly amongst Ballarat households over the period (-1.1%), whilst significant increases were observed amongst private rental households (+35%), Shepparton households (+23%) and amongst other concession households (+18%).

On average across all sample types, gas consumption for the seven winter<sup>1</sup> months is 3 times greater than consumption for the five summer<sup>2</sup> months (44,350 mJ cf 15,083 mJ). On an average monthly basis, winter consumption is only twice as large as average summer month consumption (6,336 mJ cf 3,017 mJ).

A total of \$500 was the average annual **gas bill amount paid** by households in 2001, compared with \$415 in 1996, representing an increase of 20% over this 5 year period. Aged/service pensioners paid on average \$402 per year, other concession households paid \$444 per year and non-concession households paid \$545 per year. The annual gas bill was marginally higher for Melbourne than country Victorian households (\$510 and \$473 respectively).

The average annual **gas concession discount** applicable in 2001 was \$71 compared with \$83 in 1996, whilst the proportion receiving concession discounts on their gas bill increased (54% cf 36%). Detailed explanations for this fall in the average concession discount amount can be found in section 4.3.2 of this report.

#### MAJOR HOUSEHOLD APPLIANCES USED

On average, each Victorian household has 1.1 fridge/freezers, 0.9 microwave ovens, 0.6 clothes driers, 0.6 electric stoves, 0.5 electric ovens, 0.4 dishwashers, 0.4 separate freezers and 0.1 bar fridges. These averages have not changed markedly since 1996 across all sub-samples, with minor growth evident in the prevalence of dishwashers (from 0.3 in 1996).

The incidence of having a gas **hot water system** has increased from 71% in 1996 to 78% in 2001, whilst at the same time the proportion of households with electric hot water systems has fallen (from 27% to 23%). The most marked change toward gas hot water systems and away from electric systems were found amongst aged/service pensioners and one and two person households.

Almost all households with electric hot water systems had one system (94%), similar to that observed in 1996 (95%). The incidence of off-peak versus standard electric hot water systems has hardly changed since 1996 (73% and 15% respectively).

More than eight in ten households indicated that their **main heater** was gas fuelled (87%) in 2001.

<sup>1.</sup> Winter months are defined as lasting from May to November.

<sup>2.</sup> Summer months are defined as lasting from December to April.

Almost half indicated that they had a built-in gas heater (46%), whilst four in ten operated gas ducted heating systems (40%). The incidence of using gas ducting is increasing slightly over time (29% in 1996), whilst the reverse is so for in-built gas heaters (54% in 1996). Gas ducting is far more prevalent in Melbourne (48%) than in country Victoria (17%).

The incidence of using one's main heater is falling slightly over time, with it being used on average 31 times per month during cooler months in 2001, compared with 32 times per month in 1996.

The average length of time that these heaters are used on each occasion has also fallen slightly, from 7.2 hours in 1996 to 6.9 hours in 2001. This means that main heaters are now used on average for 14 hours a month less than in 1996 (216 cf 230 hrs).

As was the case in 1996, the main **perceived difficulties in heating homes** were house design (10%) and draughts/poor construction (9%). More other concession households experienced difficulties in heating their homes than other sample types (42%), but this was lower than in 1996 when half did so (50%).

More than half of all households have **air conditioners or air coolers** in 2001 (57%) compared with 4 in 10 in 1996 (40%). Whilst Ballarat has the lowest proportion of air conditioners (28%) and Bendigo and Shepparton have the highest (75% and 85% respectively), the incidence of having air conditioning has increased significantly across all regions in the past 5 years.

Almost six in ten of those households with air cooling have single room air conditioners (55%), whilst half have multiple room air conditioners (51%). Therefore around 6% have both types of air conditioners. Other concession households more commonly had single room air conditioners (63%), whilst more non-concession households had multiple room air conditioners (54%). Less than one in ten households with air cooling had more than one single room air conditioner (8%), whilst just 3% had more than one multiple room air conditioner.

Over a third of households had reverse cycle air conditioning (36%), with this style least prevalent amongst aged/service pensioners (30%) and most common amongst non-concession households (40%). Just 4% of households with air cooling had more than one reverse cycle air conditioner.

With the large increase in the incidence of air conditioning experienced over the last 5 years, it is not surprising that the average number of days per month in which air conditioners are used in the warmer months has increased dramatically (from 10 days to 17 days per month). In addition, the average number of hours in which they are in use has also increased, from 4.3 hours in 1996 to 5.6 hours in 2001. This equates to an increase in average monthly usage of air conditioners of 54 hours (from 41 to 95 hours per month). Increases were observed across all sub-samples.

The average monthly use of **clothes driers** in warmer months has remained virtually static since 1996 (2.6 cf 2.5 times per month), whilst the frequency of using a clothes drier in colder months has fallen marginally over time (from 11.5 to 11.3 times per month). Non-concession households bucked the trend in warmer months by increasing their average frequency of use (2.9 cf 2.6 times per month).

Average monthly usage of **dishwashers** in 2001 was slightly lower than in 1996 in both warmer and colder months (warmer months – 14.8 cf 15.4; colder months – 16.9 cf 17.0). However, average monthly usage increased for all concession households over the same period in both warmer and cooler months (warmer months – 10.4 cf 10.1; colder months – 11.6 cf 11.3).

#### WATER USAGE, CONSUMPTION AND EXPENDITURE

The proportion of households with **separate water meters** has increased from 84% in 1996 to 93% in 2001. Increases were particularly marked amongst concessions households (75% cf 91%), which may be due to the increase in the proportion of these groups moving out of rented accommodation into their own homes (particularly other concession households).

More than nine in ten households **receive water bills** in 2001 (93%) compared with 87% five years ago, with this change primarily due to the increase of receipt amongst concession households (90% cf 80%). The bulk of those who receive water bills are charged both the service and consumption fees (87%), although one in six other concession households are only charged for the actual amount of water they use (16%).

Average **annual water consumption** has increased by 16% since 1996, from 238 KL to 276 KL in 2001. Average water consumption in Geelong decreased over this 5 year period (from 221 KL to 208 KL), which is not surprising, since Geelong has been placed on water restrictions. Average annual water consumption has also fallen marginally amongst public rental households since 1996 (from 232 KL to 229 KL). Water consumption increased markedly amongst Bendigo households (from 281 KL to 454 KL).

Summer<sup>1</sup> month water consumption (December to April) is significantly higher than winter<sup>2</sup> month water consumption (May to November), with summer consumption being 162 KL on average, compared with 122 KL in winter months. Average monthly consumption in summer is 32 KL compared to 17 KL in winter.

The average **annual amount of a water bill** in 2001 is \$442, slightly down from \$444 in 1996. Considering that water consumption over the same period has increased by 16% it may be surprising that the amount charged to households has fallen by 0.5%. However, the method of calculation of water bills has been altered since 1996. This modification has obviously resulted in the average annual water bill charged to households to fall. This recalculation has also had an impact on the concession discount applicable on water bills, because this discount has, on average, fallen from \$155 in 1996 to \$108 in 1996.

Interestingly, the amount of the water bill charged in summer<sup>1</sup> months is identical to that charged in winter<sup>2</sup> months (each \$247), even though water consumption is 33% higher in the summer months. The reason for these charges being of similar amounts is that the annual parks charge of \$36 is generally applied in the winter months, thereby offsetting any consumption charge reduction that would apply in winter.

#### WATER FITTINGS

The only water fitting to have increased significantly in proportion since 1996 are baths with spa jets (6% cf 12%), with increases observed across all sample types. The larger the household the more likely the household was to have any type of water fitting, as was also the case if the property was owned or in the process of being purchased.

The average number of **toilets** per dwelling has increased slightly since 1996 from 1.4 to 1.6. Almost half of households have 2 or more toilets (46%) compared with 32% in the previous survey. The average number of single flush toilets has remained relatively constant over time (0.7 cf 0.6), whilst the average number of dual flush toilets has increased slightly (1.1 cf 1.2). However, the proportion of households with single flush toilets has fallen from 55% in 1996 to 37% in 2001, whilst the proportion of households with dual flush toilets has increased (71% cf 53%). Increases have been observed across all sample types.

<sup>1.</sup> Summer months are defined as lasting from December to April.

<sup>2.</sup> Winter months are defined as lasting from May to November.

The proportion of households with multiple numbers of **showers** has increased from 27% in 1996 to 40% in 2001, with the largest increases evident amongst concession households (13% cf 24%). The proportion of water saving showers has increased marginally from 22% in 1996 to 26% in 2001. The largest increase was observed amongst aged/concession households (18% cf 29%).

The incidence of households having a **spa pool** or **swimming pool** has not changed considerably since 1996, with just 4% of households now having a spa pool and 6% now having a swimming pool. There has been a movement away from heating spa pools via gas toward electric heating (gas 68% cf 60%; electric 9% cf 30%). A fall in gas heating of swimming pools has also been observed over time (12% cf 6%).

The proportion of households with **washing machines** has increased from 93% to 98% in 2001. The increase has been mainly via a doubling in the proportion of front loaders (from 5% to 10%), whilst the proportion of top loaders has remained relatively constant at 87%. Front loaders are more commonplace amongst non-concession and other concession households (12% and 5% respectively).

Nine in ten households had **gardens** in both 2001 and 1996 (91% cf 89%). Three quarters use a hand held hose to water their garden (75%), while four in ten use built in sprinkler systems (39%). Both forms of watering experienced increases since 1996 (69% and 27% respectively – respondents could name more than one watering method).

In warmer months the garden was watered on average 3.4 times a week, the same as in 1996. On average, the length of watering was 1.2 hours compared to 1.1 hour in 1996.

6% of properties have **water tanks**, the same proportion as in 1996, while just 1% have bores. Country Victorian households had the greatest incidence of water tanks compared with Melbourne (14% cf 3%), with three in ten Bendigo households having one (28%). Country Victorian households mainly used water tanks for drinking water only (65%), whilst Melbourne households primarily use them for garden watering (75%).

#### CONSERVATION OF ENERGY AND WATER

Almost half of all households claim that there is nothing in their house that causes **high energy usage** (43%). As was also the case in 1996, aged/service pensioners were far more likely to claim this (2001 - 67%; 1996 - 74%). The most common causes nominated were lights/appliances left on (20%), long showers/frequent baths (13%), frequent use of large electric appliances (12%) and open plan design (10%). These percentages did not vary considerably from those obtained in the previous survey, except for open plan design (10%) cf 4%).

The biggest impact on a household's energy bills was considered to be lights/appliances left on (18% of those naming a cause of high energy usage), with the major growth item since 1996 being open plan design (12% cf 5%). Open plan design was more commonly nominated by aged/service pensioners (20%) than by other sample types.

Half of all respondents indicated that they had incorporated **energy saving features**, **modifications or improvements** into their current dwelling (55%), with the incidence increasing by size of the household (1 person household 42%; 4+ person household 63%).

Data could not be strictly compared with 1996 results because these questions were asked differently in each survey. The most common energy saving modification made was the installation of roof insulation (65% of those making modifications), followed by special window treatments (34%), wall insulation (29%) and draught stoppers on doors (25%). Almost half of these households claimed that roof insulation had the biggest impact on reducing energy bills (44%).

The **major actions undertaken** by households to conserve energy or avoid energy wastage was turning the lights off when not in use (63%), followed by turning appliances off when not in use (40%) and closing doors to unused rooms (36%). Since 1996 there has only been a minor fall in the proportion of households who do not undertake any energy conservation actions (16% cf 12%).

Two actions were considered to have the biggest impact on energy bills - turning the lights off when not in use (26% of those undertaking energy conservation actions) and closing doors to unused rooms (22%). Households nominating each of these actions fell from 1996 levels (34% and 24% respectively), but the proportions nominating turning appliances off when not in use (14% cf 2%) and wearing extra clothing (12% cf 8%) increased markedly over the period.

Awareness of **information sources about energy conservation** has fallen slightly since 1996 (83% cf 76%), although there is far greater knowledge in 2001 that an information source is available, households don't know where to find it (1% cf 17%). The majority claim to find out about energy conservation from their electricity supplier (56%) and gas supplier (44%). Whilst a large increase in the proportion naming their local council as an information source was observed (less than 0.5% cf 12%), this increase may be simply due having this source as a prompted response rather than an unprompted one, as was the case in 1996.

The main **perceived causes of high water usage** was long showers/frequent baths (31%), followed by high garden water usage (19%) and high washing machine usage (16%).

The incidence of claiming that nothing in the household caused high water usage has fallen since 1996 (47% cf 35%), with the most significant fall occurring amongst aged/service pensioner households (72% cf 55%). The activity having the biggest impact on water usage was considered to be the same three causes - long showers/frequent baths (33% of those naming a cause), high garden water usage (23%) and high washing machine usage (14%).

Far greater proportions to those observed in 1996 indicated that they undertake **actions to prevent water wastage** (1996 – 74%; 2001 – 86%). Turning off dripping taps was the most nominated action in 2001, while it was placed third in 1996 (16% cf 30%) and was followed by having shorter showers (21% cf 28%) and dual flush toilets (20% cf 25%). Two other actions were nominated by significant proportions of households – the economical use of washing machines (9% cf 20%) and mulching of gardens (18%), which was not collected in 1996.

The action which is claimed to have the biggest impact on household water bills was having shorter showers (16% of those naming a water conservation action), although turning off dripping taps (13%), dual flush toilets (11%) and the economical use of washing machines (11%) were not far behind.

Not surprisingly, the **major information source on water conservation** was water suppliers (70%), followed by the local council (12%). Those able to name a water conservation information source was lower than in 1996 (82% cf 94%).

#### COUNCIL RATES AND EXPENDITURE

Eight in ten Victorian households **paid council rate bills** in 2001 (80%), with incidence lower in the provincial centres of Geelong (75%) and Shepparton (76%). Far fewer other concession households paid council bills (58%), whilst just 3% of renting households did so.

Three in ten households paying Council bills received a **concession discount** on them (29%). Three quarters of concession households paying council rate bills received these discounts (75%), with 89% of aged/service ratepayers and 53% of other concession ratepayers receiving them. This disparity in receipt of concession discounts is not surprising because far fewer other concession households are actually eligible to receive these discounts.

Of interest is that 13% of households who believe they receive a concession discount on their bills *actually don't*, while 7% of those who don't think they receive this concession discount *actually do*. This result may indicate that there is some misconception amongst Victorians as to who is or is not eligible to receive concession discounts on Council bills.

The average annual Council rates bill charged to Victorian households in 2001 is \$652 (including any concession discounts that apply). The average concession discount applicable is \$135 per annum. Whilst the concession discount value remained consistent across all sub-groups, the overall rates bill did vary considerably. Geelong households paid on average \$497 per annum, whilst Shepparton and Melbourne households paid around \$662 and \$681 per annum respectively.

Aged/service pensioners on average paid the least for their Council rates \$486 pa, followed by other concession households (\$572 pa) and non-concession households (\$724 pa). This is not surprising because aged/service pensioners are the most likely to receive a concession discount on their rates bill.

Seven in ten (70%) Councils also incorporated into their Council rate fees a Waste Management Charge of \$96, whilst 36% incorporated a Council Administration Charge of \$57. Just 2 Councils incorporated a Special Product/Service charge of \$38 per year in the total rates bill.

#### **KNOWLEDGE AND TAKE UP OF CONCESSIONS**

Awareness levels of being able to claim **concession discounts** on gas bills (88%), electricity bills (89%) and water bills (85%) have remained relatively constant since 1996. However awareness levels have risen amongst concession households over time, particularly in relation to discounts on water bills (75% cf 89%) and gas bills (86% cf 93%). More than three quarters of households were aware of concession discounts on council rates (78%), with awareness levels the highest for aged/concession households (87%) and lowest amongst other concession households (68%), which, as already observed, are the group least likely to pay council rates.

Awareness sources in relation to concession discounts did not vary considerably with bill type or over time. Four in ten households claimed that they found out about concession discounts because the information came with their bill (42%), whilst one quarter obtained the information from Centrelink (20%), 22% from friends and family and 10% indicated that the information was actually on their bill.

It should be noted however, that not all concession card holders are eligible for discounts on their Council rates (ie. only pensioner concession card holders and war widow and TPI Repatriation card holders are eligible), which would explain the lower proportion of concession card holders claiming concession discounts on their Council rates. Chart B following provides more detail by sample type.



Chart B: Incidence of Claiming Concessions

Base : Total respondents 2001 (n=2,006).

Survey results indicate that being able to claim a concession slightly increases a household's energy and water consumption. Around 12% of those claiming concessions indicated that receiving a concession discount allows them to increase their consumption, whilst around 8% consider that the effect of a concession reduces consumption. The vast majority consider that receiving a concession discount has no effect on consumption (76%). More Ballarat and Bendigo concession holders than any other group consider that these discounts allow them to increase their energy and water consumption (around 14% and 15% respectively for each bill type).

#### **BILL PAYING**

No matter what type of bill (ie. gas, electricity, water or council rate bill) around three quarters of households pay the bill by the due date, around one in six pay it as soon as the bill arrives, while just 7% pay it once a reminder letter has been sent.

Approximately four in ten households pay their utility bills via cash, down from around six in ten in 1996. The incidence of paying by cheque has also fallen since 1996, with around 12% paying their utility bills in this manner compared to 30% previously. Significant increases in bill payment via credit/debit card (5% cf 23%), electronic funds transfer (0% cf 17%) and direct debit (4% cf 8%) have been observed since 1996. Method of council rate bill payment varies slightly from utility bill payment methods, with 37% paying by cash, 23% by cheque, 21% via credit card, 15% by electronic funds transfer and 4% via direct debit.

In 2001 respondents were also asked about what *medium* they used to pay their bills. Around six in ten households pay their utility bills at the Post Office, with almost one quarter paying over the telephone. Only small proportions used any other payment medium, with automated direct debit (7%), B-Pay (6%) and Internet payments (5%) likely to grow with time. The medium types used to pay Council rates differed somewhat from those used to pay utility bills, with 39% paying at the Post Office, 20% at Council offices and 18% via telephone.

Payment medium usage varied considerably with the payment *method* used. For example, almost all respondents paying utility bills by cash used the Post Office (94%-98%), whilst 71%-72% of those paying by credit/debit card paid over the telephone. More detailed information on payment medium by payment method can be found in section 11.2.2 of this report.

Since 1996 there has been a slight fall in the proportions **aware of the Easy Way or Easy Pay** instalment bill payment method – gas bills (76% cf 73%); electricity bills (79% cf 73%); water bills (67% in each year); council rates (75% in 2001).

**Incidence of bill payment via instalment** could not be strictly compared with 1996 results due to re-design of the question. For 2001, 18% of households had ever paid their electricity bills by instalment, 16% had paid their gas bill via this method, 14% their water bill and 30% their Council rates bill. Other concession households were the most likely to use instalments to pay their utility bills (electricity 34%, gas 28% and water 22%).

Non-concession households had the greatest proportions paying their council rates by instalment (34%). Details on the frequency of paying by instalment can be found in section 11.2.3.2 of this report.

Over time there has been a general move away from the Flexi Way plan of instalment payment toward the Easy Way methods. Of those ever paying gas or electricity bills by instalment, both Easy methods were most commonly used (35% each). Instalment payment of water bills and Council rates was most commonly undertaken using the Easy Way fixed amount estimate method (43% and 73% respectively).

When paying utility bills by instalment one third discussed and agreed the instalment amount with the supplier, three in ten set the instalment amount themselves and a quarter had the amount set by the supplier. Virtually all Council rate instalment amounts were set by the Councils themselves (82%).

The opportunity to pay bills by instalment had a slightly positive effect on increasing energy and water consumption, with around 12% indicating that paying by instalment increased consumption and only 4% stating that it decreased consumption. The vast majority (around 79%) indicated that payment by instalment had no effect on their energy and water consumption.

The incidence of households having **difficulties in meeting their utility bill payments** was lower than in 1996, with around 12% experiencing difficulties in 2001 compared with around 15% in 1996. Other concession holders had the greatest proportion experiencing difficulties (electricity bills 30%; gas 26%; water 23%). Less than one in ten households had difficulties in meeting Council rate bill payments in 2001 (9%). More households in Geelong had difficulties in meeting Council rate payments than any other group (electricity bills 23%; gas 22%; water 17%, council rates 14%).

In 2001 far smaller proportions on average discussed their bill payment problems with their supplier than did so in 1996 (33% cf 55%) and of those, far fewer on average received help (67% cf 85%). Of those having difficulty with payments, the greatest proportions discussed the problem with the supplier (electricity 38%; gas 34%; water 29%), with around eight in ten actually receiving help from the supplier. Around half were given the option to pay in instalment, with around 45% given an extension of the due date. For electricity and gas payment difficulties around 6% were referred to the Utility Relief Grants Scheme (URGS), while one in six households with water bill payment difficulties were referred to URGS (18%).

Awareness of URGS has fallen since 1996, with one in six households aware of the scheme in 2001 compared with one in five in 1996. This decline was observed across all sample types. Interestingly, whilst awareness was lower, of those aware, more have been assisted by the scheme in 2001 than in 1996 (11% cf 7%).

Those assisted by URGS were more commonly other concession holders (21% of those aware). Just 2% of households had used any other forms of emergency relief, a similar result to that observed in 1996 (3%).

#### HOUSEHOLD EXPENDITURE PRIORITIES

Almost half of all households consider that they **spend the most money each year** on food and groceries, a similar proportion to that observed in 1996 (45% cf 47%). Rent/mortgage was the next most common response (31%), followed by car expenses (9%). This trend did not alter markedly from the 1996 results. When results were analysed by the mean ranking of expenditure items, rent/mortgage was ranked first (mean score 2.00), followed by food and groceries (2.12). The opposite trend was observed in 1996 when rent/mortgage also included council rates (food & groceries 1.99; rent/mortgage/rates 3.00).

In terms of **priority of bill paying**, rent/mortgage was more commonly named as the first bill to be paid (40%), with the main reason being that people *need a place to live/roof over head/don't want to be evicted*. One in five named electricity bills as the first bill to be paid (19%), with *needing power/light*, *needed for cooking/heating* and *to keep the house warm* being the three major reasons.

The mean ranking of priority in bill paying has changed considerably over time, with payment of rent/mortgage moving from second place in 1996 to first in 2001 and payment of electricity bills moving from first to second place. The other significant change in mean ranking observed was payment of water bills (from  $4^{\text{th}}$  to  $7^{\text{th}}$ ).

#### **1 INTRODUCTION**

#### 1.1 BACKGROUND

The Department of Human Services commissioned Roy Morgan Research to conduct this survey to identify patterns of household utility consumption amongst Victorian households, and to make comparisons with baseline data developed in 1996. Furthermore, the Department sought to examine the impact of utility pricing changes and concessions availability on consumption patterns and use the information collected as inputs into a micro-modelling exercise for policy development.

There has been a change in the pricing (and in some cases the delivery structure) for utilities over the last 5 years. The Department is keen to identify if these changes have resulted in changes to consumption behaviour. The surveying of customer consumption patterns in 2001 prior to the commencement of retail contestability in the energy markets also provides an important baseline of consumption behaviour for comparison against future studies.

#### **1.2 RESEARCH OBJECTIVES**

The objectives of this study were to provide:

- Detailed information on current Victorian household utility consumption and expenditure patterns by household type, tenure, locality, income level and duration of receipt of Commonwealth income support payments;
- Information on the level and take-up of concessions by household type, tenure, allowance type and income levels; and
- Identification of changes in consumer behaviour since 1996.

The information obtained from the survey would then be used:

- To examine the distributional impact of current utility tariff rates and structures;
- To inform the evaluation of the adequacy, equity and effectiveness of concessions in meeting their objectives;
- To identify other opportunities for improving the affordability of utility charges for low income households; and
- Using the results obtained to input into the NATSEM micro-economic modelling system.

#### **1.3 SCOPE OF THE RESEARCH**

The Household Utility Consumption Survey 2001 employed multi-stage stratified random sampling techniques, using a face-to-face survey methodology of 2,006 households, stratified according to location and specific household attributes (ie holders and non-holders of selected concession cards).

Information was collected both from the household, from the utility companies supplying that household with water, gas and electricity, plus municipal councils. In order to obtain information from utility suppliers and councils, permission from the householder was obtained in writing prior.

The sampling methodology for the 2001 survey remained quite similar with the sampling methodology employed in 1996. Regions in which interviewing was conducted in 1996 also remained consistent between the two surveys, namely in the urban regions of the following Victorian cities and towns:

- Melbourne;
- Geelong;
- Ballarat;
- Bendigo; and
- Shepparton

The questionnaire was designed as a collaborative process between Roy Morgan Research and the Department, and was amended as a result of a pilot survey. The 2001 survey replicated in part the survey conducted in 1996, with additional information not covered in the 1996 survey also collected. A copy of the questionnaire and billing information sought from utilities and councils is included in the Appendices of this report.

The research methodology is discussed in more detail in the following section.

#### 1.3.1 Pilot Testing

The pilot testing process was conducted from February to April 2001. Pilot interviewing was conducted from 19 February to 7 March, with collection of information from utilities and councils performed from 8 March to 20 April 2001.

In essence, the questionnaire was modelled on the 1996 questionnaire (including layout), as were the interviewing instructions.

A total of 30 pilot interviews were conducted, with 5 interviews conducted in the rural region of Ballarat and the remainder in spatially diverse areas of metropolitan Melbourne. Each set of 5 interviews was conducted as per the survey proper (ie. 5 interviews per CCD start point).

Interviewers were required to conduct the entire interviewing and selection process (including obtaining consent to obtain billing information from utilities and councils) to identify any problems with the questionnaire or interviewing instructions. Interviewer briefing and de-briefing sessions were also conducted to assess the interviewing and briefing process.

The completed interviews from the pilot were also used to seek billing information from utilities and councils. A request was sent to these utilities and councils (via e-mail) to provide billing information relating to pilot respondents giving consent. The turnaround time and validity of data provided were then assessed to identify any problems with the billing request system. Any issues identified could then be addressed before the actual survey commenced.

Pilot results indicated that the 2001 questionnaire took longer to administer than in 1996 by approximately **5-6** *minutes*, making average interview length approximately 40-41 minutes. A total of 6 attempts was required to obtain 1 interview. Of these 6 attempts approximately *three* resulted from the potential respondent being out (ie. not at home), with approximately *one* attempt resulting from refusal to be interviewed.

The pilot found that respondents were generally willing to provide consent to their billing information. The only significant difficulty in providing consent information to utilities and councils for the pilot was the lack of accurate e-mail addresses to send the information. These addresses were subsequently updated for the survey proper.

The pilot also identified that there was some delay in receiving the billing data from the various councils/suppliers, and that greater cooperation would be required for the main survey. The norm for data turnaround of billing data was three to four weeks.

#### 1.3.2 Collection of 2001 Survey Data

Interviewer briefings commenced on 2 April 2001, with interviewing commencing thereafter. The bulk of interviewing was completed by 15 June 2001, with some minor 'clean-up' interviewing continuing until 9 July 2001.

Few difficulties were experienced by interviewers in selecting eligible respondents and in administering the questionnaire. Only a small number of respondents sought clarification with DHS in relation to the survey.

The data obtained from respondents was relatively 'clean'. As such, little data imputation was required for the survey.

Briefing sessions for utilities and councils were conducted in early February 2001 in order to inform them of the data requirements for the project and to identify any difficulties in suppliers providing such data. No significant issues were raised at these meetings in relation to data provision.

Preliminary e-mails were also sent to councils and utilities in the week commencing 18 June 2001 so that these entities could prepare for provision of the requested data. Formal requests for billing data were sent out in the week commencing 20 June once the majority of consent information had been processed by Roy Morgan Research. The deadline for return of billing data was 11 July 2001. Follow-up requests were also sent to those utilities and councils for respondents whose consent forms were received after 20 June.

Final billing data was provided in late November 2001. The major reasons for the considerable delay in obtaining this billing information are as follows:

- 1. E-mail addresses for contacts in some utilities and councils were incorrect and new addresses had to be obtained from DHS before requests for billing information could be dispatched;
- 2. The person attending the initial briefing sessions in February 2001 was not always the person who received the data request. Delays were encountered in instances where internal approval had to be sought prior to providing billing data;
- 3. Personnel changes at some utilities and councils required the provision of additional background information on the survey prior to those entities agreeing to provide billing information;
- 4. Some utilities had out-sourced their data storage facility, so request for billing information had to go through a third party creating delays in data delivery;
- 5. One major utility asked to sight every consent form prior to providing billing data;
- 6. The merger of two utilities caused administrative difficulties in obtaining retrospective billing information from the merged entities; and

7. Whilst at briefing sessions conducted in February 2001 both utilities and councils agreed to place priority on providing billing information (most determined that it would take no more than two weeks to provide the data), the majority placed low priority on providing such information. Regular requests by Roy Morgan Research and, in some extreme circumstances, by DHS did not have a significant impact on increasing turnaround time in the provision of data.

In addition, Roy Morgan Research encountered delays in processing billing data, with considerable delays. The major reasons for the delay were as follows:

- A significant proportion of councils and utilities did not retain the link of customer number to respondent survey ID number. This lead to considerable resources being allocated to re-matching customers numbers with respondent ID numbers;
- 2. Data for certain billing items was not provided in the format requested. For example, the actual number of payments made by each respondent was poorly reported, with many councils and utilities only providing information on the bills sent, rather than on the payments made. Consequently, data on instalments paid could not be accurately provided for this project;
- 3. Whilst billing data was requested for the financial year 2000-2001 a significant number of utilities provided data that did not match this period. Considerable resources were expended on matching billing data as closely as possible to this financial year. Sorting billing data into winter and summer periods also impacted on time lines;
- 4. Data was in some instances provided in a format other than Excel and therefore had to be converted; and
- 5. In some instances, missing data items had to be imputed based on existing data.

Also, because billing information was collected from almost 50 different suppliers (33 Councils, 6 Electricity suppliers, 3 Gas Suppliers and 7 Water suppliers), the data obtained was, on occasion, either incomplete or inappropriate for the project's requirements. Reasons for these anomalies are as follows:

- 1. Suppliers did not collect some data items for their own records and therefore could not provide such data for the project;
- 2. The data extraction methodologies used by some suppliers were not sufficiently sophisticated to enable the provision of all data items required or in the format required;

- 3. The information required for some data items was misinterpreted by some suppliers (even though all were briefed on the data items required), resulting in a re-calculation of the actual data item required on a case by case basis;
- 4. In many instances, data was provided for the 12-month period as a whole, rather than for each billing period, This was particularly prevalent amongst Councils; and
- 5. In particular, information on the incidence and value of concessions was not provided, even though the final bill value sent to households included a concession discount. This resulted in the extensive re-calculation of concession values.

As a consequence, some billing data items for some suppliers had to be re-calculated (and on some occasions, estimated) in order to provide data in the format originally requested.

We therefore note that, on occasion, some billing data items may not provide as accurate information on the Victorian market as envisaged at the commencement of this project. As such, billing information should be treated as being indicative, rather than precise.

Furthermore, due to the increasing privatisation and de-regulation of the utility market, with interstate and even overseas providers more likely to enter the market in the future, collection and analysis of billing data may become increasingly difficult for any subsequent survey that may be conducted.

#### 2 RESEARCH METHODOLOGY

The research methodology was designed to ensure that the aims and objectives of the study were adequately addressed and to ensure that comparison with 1996 results, where possible, could be reliably conducted.

#### 2.1 SUB-GROUP DEFINITIONS

Throughout this report detailed analysis of survey results has been conducted by 'sample type'. This comprises two main sub-groups, **concession card holder households** and **non-concession households**. Concession card households were further segmented into *aged/service pensioner households* and *other concession households*. The definitions for each of these sub-groups are provided below:

**Concession households -** The adult member of the household who is normally responsible for payment of the household bills *must currently hold* one or more of the following – a Pensioner Concession Card (aged or non-aged), a Health Care Card or a Repatriation Health Card (except those stamped 'Dependent').

Within Concession households the sample is divided into -

*Aged/Service Pensioner Households* - The adult member of the household who is normally responsible for payment of the household bills *must currently hold* one or more of the following – an Aged Pensioner Concession Card or a Repatriation Health Card (except those stamped 'Dependent');

*Other Concession Households* - The adult member of the household who is normally responsible for payment of the household bills *must currently hold* one or more of the following – a Non-aged Pensioner Concession Card or a Health Care Card.

**Non-Concession Households** - The adult member of the household who is normally responsible for payment of the household bills *must <u>not</u> currently hold* any of the aforementioned Concession cards.

Please note that in some circumstances other members of the household being surveyed may hold concessions cards. However, these persons were defined as not being the person responsible for payment of the household bills. Therefore in some instances a Non-concession household may in fact receive concession discounts on some bills because another member of the household may hold a concession card. This also means that a household defined as an 'other' concession household may also have another household member who holds aged/service concession cards, or vice versa.

#### 2.2 SAMPLE METHODOLOGY

A two stage stratified random sampling technique was adopted. The first stage consisted of randomly selecting ABS Census Collection Districts (CCDs) within the greater Melbourne metropolitan area and the 4 provincial cities. As the survey required 50% of the respondents to be "concession card holders", the CCDs were selected with a probability proportional to the number of low-income household in each CCD as identified by the ABS. Low income households for this purpose were defined as households with incomes of less than \$500 per week.

The second stage consisted of selecting households within the selected CCDs. A starting point within each CCD was randomly selected, using a list of all street addresses in Australia. Five interviews were to be obtained from each start point in each CCD selected.

Interviewers were each given a starting point from where to commence interviewing. The starting point address was not selected for interview; it was simply used as a starting point. A skip pattern of five was employed to randomly select households for interview ie. interviewers went to the starting point ensuring that it was immediately on their left. They then counted 5 dwellings on from this point and the 5<sup>th</sup> dwelling on their left became their first address for interview. The next household for interview was the 5<sup>th</sup> dwelling on from the first household selected for interview. This process continued until a total of 5 dwellings were randomly selected for interview.

Each dwelling selected for interview was approached up to three times for interview. Interviewers were instructed to call back at two more times after the initial approach to obtain an interview. Approaches were made at different times of the day and week to improve the chances of finding a person at home. Where applicable, a suitable time was to be arranged with the person in the household who usually pays the bills to participate in the interview.

If, once a person was contacted in the household and an interview was refused or the bill payer did not meet quotas then an additional household was randomly selected, being the  $5^{\text{th}}$  dwelling on from the  $5^{\text{th}}$  household initially selected for interview. This process was to be repeated until 5 successful interviews were obtained from each start point.

A new household was not selected for interview until it was determined that one of the existing households selected for interview refused to be interviewed, were defined as out of scope or over quota, or 3 or more call-backs had been made to the household without making contact.

This is a slight deviation from the procedures used in the original survey in 1996, where it appears that no call-backs may have been made on households after the first five.

#### 2.3 SAMPLE STRATIFICATION

The sample stratification details are outlined below:

- 50% of the respondents should be from "concession card holding" households. The sampling methodology used increased the chances of approaching "concession" households. A quota of 1,000 "concession card households " and 1,000 "non-concession" households was assigned to replicate the 1996 survey and to ensure a suitable sample distribution. In the survey, 998 interviews were completed in "concession" households and 1,008 in "non-concession" households. The non-concession households were quota controlled by household size to ensure representativeness.
- Of the concession households, 50% were to be in receipt of an Age or Service Pension, the other 50% holders of other concession cards.

Quotas were applied to achieve this sample split. In the final sample 536 interviews were conducted with aged/service pensioners and 462 with other card holding households.

• 70% of the total sample should be from the Melbourne metropolitan area, with the remaining 30% spread equally across the 4 Victorian provincial cities of Geelong, Ballarat, Bendigo and Shepparton.

The initial random CCD selection stage, as previously described, ensured this geographical distribution of sample. A total of 1,404 interviews were conducted in metropolitan Melbourne and 602 across the provincial cities.

#### 2.4 SURVEY RESPONDENT

The eligible respondent for this survey was defined as:

The adult member of the household who is normally responsible for payment of the household bills <u>or</u> the adult member of the household who could provide details about bills paid by the household.

This was usually be the person whose name appears on the bill, but it may have been another member of the household who was responsible for the financial management of the household.

In some circumstances there were households where different utility and rate bills were in different names. We interviewed the person who could properly answer on behalf of the other residents, in respect of all utility and rate bills. In households where two or more people were equally responsible for payment of bills, then either (or any) of these people were interviewed.

There were also instances where the person whose name appeared on the bill did not pay these bills themselves. (eg. an elderly person's name may appear on the bill, but their son/daughter may pay these bills on the elderly person's behalf). The person who paid the bills may or may not have lived in the same household as the person whose name appeared on the bill. In such circumstances, an appropriate time was arranged so that **both** the person whose name appeared on the bills were both present at the interview.

The respondent needed to *sign consent forms* on behalf of the household so that Roy Morgan Research could obtain billing information from each applicable utility and council.

Only information about the household and dwelling approached for interview was gathered. If the respondent had other properties they were to limit their responses only to the dwelling approached and exclude any information about other properties for which they had responsibility.

For a household to be eligible for the survey *current residents must have lived at the address approached since at least the end of June 2000*. If not, the respondent was not eligible for the survey.

For those who had lived at the residence for less than 2 years, the month and year in which they moved in *had to be obtained*, so that billing information sought could be matched with the period in which the householder had lived in this dwelling.

In some instances, respondents who had provided consent for collection of billing information could not be identified by utilities or councils. These respondents were excluded from survey result because the information on the household was deemed to be incomplete.

#### 2.5 SAMPLE WEIGHTING

#### 2.5.1 Weighting Process – 2001 Data

Following discussions with DHS and NATSEM, weights for the individual households were calculated as follows:

- Households were not selected with equal probability. To improve the strike rate and to target households likely to yield more relevant information, CCDs were selected with probability proportional to the number of low-income households they contained. 'Low income' for these purposes was defined as 'less than \$500 per week at the 1996 Census'. To correct for this a 'prior weight' was assigned to each household inversely proportional to the proportion of households in its CCD that was 'low-income'.
- Each household was treated as the sum of its inhabitants. All the inhabitants of the household (including all those ineligible for interview) were treated as 'pseudo-respondents' and initially assigned the prior weight of the household. Individual 'working' weights were calculated by comparing the profile of the summed prior weights with the age/sex/region profile of the population as at mid-2001.
- In addition the weighted sample of pseudo-respondents was weighted to yield the appropriate proportions of holders of defined benefit cards, using the following mid-2000 estimates supplied by DHS, projected pro-rata to accord with the projected population growth. See Table below.

Concession Card Numbers in Victoria, Mid 2000	Metro	% Metro	Non- Metro	% Non- Metro	Total
Age Pension concession card	265,149	60.04	176,488	39.96	441,637
Other pension concession cards	158,428	57.68	116,259	42.32	274,687
DVA pension concession card	22,496	60.00	14,998	40.00	37,494
Other DVA recipients (Gold card)	61,276	60.00	40,851	40.00	102,127
Health Care Cards	231,565	60.88	148,820	39.12	380,385
Total Concession Cards	738,914	59.77%	497,416	40.23%	1,236,330

# Table 2.5.1: Concession Status for persons, by metro, non-metro division for Victoria, mid-2000 estimates

- As there were no demographic profiles for holders of benefit cards, the weights were arrived at by a process of marginal weighting ('raking' or 'rim-weighting'). The mutually-exclusive and exhaustive age/sex/region categories were treated as one weighting dimension, the card-holder categories/regions as another, independent dimension and the weights evolved by an iterative process such that all target sums of weights were met. The assumption was made that the card-holder categories were mutually exclusive.
- When the pseudo-respondent weights had been calculated the household was assigned a final weight equal to the mean of its members' working weights, as reportedly conducted by NATSEM in the 1996 survey.
- The non-metropolitan sample was selected from four provincial centres specified by DHS and previously used in the 1996 survey. These centres are taken to be representative of country Victoria. Although the populations of those provincial cities are unequal, equal numbers of respondents were selected in each of the four. Where results are presented for the individual provincial centres, the results shown have been projected from the estimated populations of *each individual provincial centre*. Where these centres are combined, the projections are projected from the estimated *total country Victoria population*.

#### 2.5.2 Weighting Process – 1996 Data

The 1996 survey data was weighted in as similar a manner as possible. However, as no information was available about the method of selection of CCDs no prior weights were assigned. The card-holder estimates used were the 1995 figures provided by DHS and reportedly used by NATSEM in their analysis of the 1996 data. See table below.

Concession Card Numbers in Victoria, June 1995	Metro	% Metro	Non- Metro	% Non- Metro	Total
Age Pension concession card	272,744	67.67	130,789	32.33	404,533
Other pension concession cards	177,968	68.22	82,908	31.78	260,876
DVA pension concession card	56,337	68.00	26,512	32.00	82,849
Health Benefits card	7,787	75.14	2,577	24.86	10,364
Health Care Cards	270,518	68.04	127,074	31.96	397,592
Total Concession Cards	786,354	68.01	369,860	31.99	1,156,214
No concessions	2,427,989	72.48	921,810	27.52	3,349,799
Total	3,214,343	71.33	1,291,670	28.67	4,506,013

Table 2.5.2: Concession Status for persons, by metro, non-metro division forVictoria, June 1995

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#### 2.6 RESPONSE RATES

One of the key measures of the relative efficiency of a survey is the number of approaches for interview that an interviewer makes to obtain a completed interview. This is generally known as the strike rate of a survey. There are two aspects of the strike rate; the number of calls attempted; and the number of actual households contacted to achieve an interview.

#### 2.6.1 Strike Rates - Number of Calls Made per Interview

The following table highlights the number of calls made to achieve a completed interview:

		No. per completed	
Call result type	No.	interview	% of total attempts
Not Eligible	660	0.33	3.73
Out	9,090	4.53	51.32
Terminate	78	0.04	0.44
Respondent Not Available	267	0.13	1.51
Quota Fail	651	0.32	3.68
Call Back	1,050	0.52	5.93
Consent Not Given	27	0.01	0.15
Refused	2,982	1.49	16.84
Interviewed – data not used	103	0.05	0.58
Other	798	0.40	4.51
Interviewed	2,006	1.00	11.33
Total Attempts Made	17,712	8.83	100.00

Table 2.6.1.1: Number of Attempts Made per Interview by Call Result Type

Not Eligible: Failed screening criteria

**Out:** Respondent not at home at time of visit

Terminate: Interview not completed

Respondent Not Available: Respondent not available to complete survey at time of visit

Quota Fail: Respondent didn't meet the desired profile

Call Back: Interviewer requested to call back at a later date

Consent not given: Consent to obtain billing data from utilities or councils was not given

Other: Locked Gate/Savage Dog, House vacant etc

Refused: Respondent refused to be interviewed

Interviewed - data not used: Billing data could not be matched with the respondent
The key outcome from the interviewer strike rates is that approximately *eight* additional attempts to obtain an interview are required to obtain one interview (ie. 9 attempts in total results in 1 successful interview). More importantly, of these 9 attempts, approximately *four* result from the potential respondent being out (ie. not at home), with approximately *one* attempt resulting from refusal to be interviewed.

The table below shows the strike rates for the various cities, with on average fewer attempts required for Shepparton, but greater than average attempts required for Geelong.

Location	No of attempts.	No. per completed interview
Melbourne	12,355	8.80
Ballarat	1,330	8.81
Bendigo	1,301	8.62
Geelong	1,861	12.24
Shepparton	865	5.84
Total Attempts Made	17,712	8.83

Table: 2.6.1.2: Number of Attempts Made per Interview by Region

The average strike rate of 1 in 9 is due in part to the rigorous respondent selection procedures put in place, which as mentioned before required:

- Every 5<sup>th</sup> dwelling being selected for interview; and
- Replacement of an eligible household only in the event of:
  - A household failing the selection criteria;
  - A household refusing to participate in the survey;
  - A household being eligible, but the quota for that type of household is full; and
  - A household has been approached 3 times with no interview obtained.

In particular, the requirement that a household be approached *three times* before replacement impacts significantly on the strike rate.

#### 2.6.2 Response Rates - Number of Households Approached per Interview

Not all attempts to obtain an interview are made at different households. As outlined earlier call-backs are required. The following table outlines the number of actual households approached to achieve the interviews:

Location	Initially Approached	Interviews Obtained	Households approached per interview
Melbourne	6,985	1,404	4.98
Ballarat	861	151	5.70
Bendigo	767	151	5.08
Geelong	1,187	152	7.81
Shepparton	603	148	4.07
Total households	10,403	2,006	5.18

Table 2.6.2: Number of Households Approached per Interview By Region

This table shows that on average, to obtain one successful interview, *five households had to be approached*. Fewer households on average had to be approached in Shepparton, while more on average were required in Geelong.

When this overall ratio is combined with the number of attempts to obtain a successful interview (ie. 1 in 9), it can be determined that on average, each household at which an interview is attempted is *approached twice* for interview (8.83 attempts  $\div$  5.18 households approached = 1.70 attempts per household).

### 2.7 INTERVIEW LENGTH

In 1996 the survey questionnaire took on average 35.7 minutes to administer. Whilst questions relating to washing loads, garden watering and general energy and water consumption habits were excluded from the 2001 survey, questions were added pertaining to council rate billing and in obtaining consent to obtain billing information from councils. As a result the average questionnaire length for the 2001 survey was 39.02 minutes.

Average interview length varied considerably between Melbourne metropolitan and Victorian regional centres, with Melbourne interviews taking 36.09 minutes to administer, whilst regional centres took, on average, 46.54 minutes.

## 2.8 COMPARISONS WITH 1996 DATA

Where possible results obtained in 2001 were compared with results obtained in 1996. It should be noted that due to the format in which the 1996 data was provided, the relative lack of information on how the 1996 sample was selected, modifications to question wording and response categories, plus weighting restrictions, results obtained in 2001 may not be strictly comparable with 1996 *in some circumstances*.

However, it is still considered that the results provided in this report are more precise than the unweighted results provided in the previous report because data has been weighted to more accurately reflect Victoria's population characteristics in both 1996 and 2001.

# **3** SAMPLE CHARACTERISTICS

## 3.1 SAMPLE OVERVIEW

As previously mentioned the sample was stratified according to concessions held and size of household (and location). Table 3.1 shows a more detailed *unweighted* breakdown of the number of respondents in each location according to type of concession held. The corresponding figures for the 1996 survey are shown in brackets.

Location	Aged/ Service Pensioner	Other card holders	Non card holder	Total
Geelong	34 (51)	38 (35)	80 (66)	152 (152)
Ballarat	46 (47)	41 (31)	64 (72)	151 (150)
Bendigo	45 (41)	34 (34)	72 (76)	151 (151)
Shepparton	35 (58)	45 (33)	68 (61)	148 (152)
Provincial cities	160 (197)	158 (133)	284 (275)	602 (605)
Melbourne	376 (386)	304 (269)	724 (740)	1404 (1395)
Total	536 (583)	462 (402)	1008 (1015)	2006 (2000)

## Table 3.1: <u>Structure of the 2001 sample compared to the 1996 sample<sup>1</sup>.</u>

As shown in Table 3.1, the structure of the 2001 sample was similar to the structure of the 1996 sample. However, the 2001 sample had a higher ratio of other card holders to aged/service pensioners than the 1996 sample.

<sup>&</sup>lt;sup>1</sup> The numbers in brackets are the figures for the 1996 sample.

## **3.2 SAMPLE GROUPS**

Analysis of this section and all other sections in this document have been conducted on *weighted* data for both the 1996 and 2001 surveys.

## **3.2.1** Location of Sample Type

The proportion of households in each sample type category has not varied considerably since 1996. Around four in ten households are defined as concession households (38%), with an equitable distribution of households being aged/service and other concession households (20% and 18% respectively).

The proportion of concession households varies considerably between metropolitan and country Victoria (32% and 54% respectively), with Ballarat having the highest percentage of concession households (59%) and Geelong the lowest (47%) compared with other provincial cities.

Compared with the 1996 sample, the make-up of the provincial cities of Ballarat, Bendigo and Shepparton vary considerably by sample type. These differences may be due in part to the more stringent sample selection methodology employed in 2001 than to any real change in the population characteristics of these regional cities.

	% 2001 (n=2,006)						
Sample Type	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Victoria	Total
Age/Service concession	17	23	33	33	23	28	20
Other concession	15	24	25	24	31	26	18
Total Concession	32	47	59	56	54	54	38
Non-concession	68	53	41	44	46	46	62
TOTAL	100	100	100	100	100	100	100
			199	6 (n=2,00	0)		
Age/Service concession	22	28	24	21	32	26	23
Other concession	17	22	20	21	20	21	18
Total Concession	39	49	44	42	52	47	41
Non-concession	61	51	56	58	48	53	59
TOTAL	100	100	100	100	100	100	100

Table 3.2.1:	Sample	Type by	Location
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### 3.2.2 Concession Card Holder Sample

Almost four in ten of the total sample was a concession household (38%) and nearly half of this group were aged over 65 years and over (48%). Of the male concession holders 57% were aged 65 years and over and 42% of the female concession holders were aged 65 years and over.

The age and gender profile has changed little since the 1996 benchmark survey.

		% 2001				
		(n=998)				
Age	Male	Female	Total			
Under 18	*	*	*			
18-24	4	4	4			
25-39	11	20	16			
40-54	14	19	17			
55-64	15	15	15			
65-99	57	42	48			
TOTAL	100	100	100			
		% 1996				
		(n=985)				
Under 18	-	*	*			
18-24	2	5	4			
25-39	14	20	18			
40-54	13	15	14			
55-64	15	16	15			
65-99	57	43	48			
TOTAL	100	100	100			

Table 3.2.2: Concession Card Householders by age and gender

Base: Total concession card respondents

#### **3.2.2.1** Aged/Service Pension Concession Card Holders

One in five households in the total sample were classified as aged/service pension concession card holders (20%). Of those respondents receiving an aged/service pension 90% of males and 83% of females were aged 65 years and over.

The age profile for aged/service pensioner households is slightly older in 2001 than was found in 1996.

 Table 3.2.2.1: <u>Aged/Service Concession Card Householders by age and gender</u>

		% 2001			
		(n=536)			
Age	Male	Female	Total		
25-39	-	1	*		
40-54	1	2	2		
55-64	9	14	12		
65-99	90	83	86		
TOTAL	100	100	100		
		% 1996			
		(n=578)			
25-39	-	*	*		
40-54	2	-	1		
55-64	10	19	15		
65-99	88	80	84		
TOTAL	100	100	100		

Base: Total aged service concession respondents

### 3.2.2.2 Other Concession Card Holders

Eighteen percent of the total sample were classified as other concession card holders. Of the male concession holders 57% were aged 25 to 54 years, while 71% of the female concession holders were of this age. Far greater proportions of males were aged 55 years and over (34%) compared with females of this age (19%).

An older age and gender profile was found amongst other concession card holders in 2001 when compared with the 1996 sample.

		% 2001 (n=462)	
Age	Male	Female	Total
Under 18	1	*	1
18-24	8	8	8
25-39	25	36	33
40-54	32	35	34
55-64	24	15	18
65-99	10	4	6
TOTAL	100	100	100
		% 1996	
		(n=407)	
Under 18	-	1	*
18-24	5	11	9
25-39	39	43	42
40-54	32	32	32
55-64	23	12	15
65-99	2	1	1
TOTAL	100	100	100

Table 3 2 2 2 •	Other Concess	sion Card Hous	eholders by age	and gender
1 ant J.2.2.2.	Other Concess	sion Caru nous	choluci's by age	and genuer

Base: Total other concession respondents

#### 3.2.3 Non-Concession Sample

Six in ten households in the total sample were classified as non-concession households (62%). Within the non-concession sample three quarters (78%) of females and 67% of males were aged 25 to 54.

A slightly older age profile was found in 2001 when compared with 1996 amongst female non-concession card households.

		% 2001				
		(n=1,008)				
Age	Male	Female	Total			
Under 18	*	*	*			
18-24	5	4	5			
25-39	35	37	37			
40-54	32	41	38			
55-64	16	12	14			
65-99	11	5	7			
TOTAL	100	100	100			
		% 1996				
		(n=1,015)				
Under 18	*	-	*			
18-24	4	3	3			
25-39	36	44	40			
40-54	34	38	37			
55-64	16	8	12			
65-99	10	6	8			
TOTAL	100	100	100			

 Table 3.2.3: Non-Concession Card Householders by age and gender

Base: Total non-concession respondents

## **3.3 HOUSEHOLD PROFILE**

#### 3.3.1 Length of Time Living at Current Address

Almost two thirds of respondents (64%) had lived at their current address for more than 5 years, 24% had lived at their current address for between 2 and 5 years and 12% had lived at their current address for less than 2 years. The distribution of lengths of time which respondents had lived at their current address was similar between metropolitan and provincial households. Half (53%) of aged service pension households had lived at their current address for 20 years or more compared with only 15% of other concession groups. Nearly half (48%) of non-concession householders had lived at their current address for 2 to 10 years.

1996 data was not available for comparison in relation to length of time living at one's current address.

	2001 (n=2,006) %				
Time Living at Current Address	Aged/ Service	Other Concession	Total concession	Non concession	Total
Less than 1 year	*	3	2	1	1
1 years to less than 2 years	3	15	9	12	11
2 years up to 5 years	10	28	19	27	24
Over 5 years up to 10 years	10	20	15	21	18
Over 10 years up to 20 years	23	20	21	22	22
20 years or more	53	15	35	17	24
TOTAL	100	100	100	100	100

 Table 3.3.1: Length of Time Living at Current Address by Sample Type

Base: Total respondents

### 3.3.2 Household Size

Overall, just under one in five respondents lived by themselves (19%). Just over one third (35%) lived with one other person and almost three in ten (28%) lived with four or more people. As would be expected, aged/service pensioners were much more likely to live by themselves; 92% of aged pensioners lived either by themselves or with one other person. In comparison 36% of non-concession groups lived in larger households of four or more persons.

Compared with the 1996 sample, other concession households tend to be smaller in size in 2001, whilst 2 person households are now more prevalent amongst aged/service and non-concession households.

	% 2001 (n=2,006)				
Size of household	Aged Service Concession	Other Concession	Total concession	Non concession	Total
1 person	41	19	31	12	19
2 person	51	28	40	32	35
3 person	6	23	14	20	18
4 or more persons	3	29	15	36	28
TOTAL	100	100	100	100	100
			% 1996 (n=2,000)		
1 person	48	14	33	10	20
2 person	40	28	35	28	31
3 person	9	20	14	20	18
4 or more persons	3	38	18	41	32
TOTAL	100	100	100	100	100

Base: Total respondents

### **3.3.3** Incidence of Children under 16 in Household

Two thirds (67%) of all of the households did not have children under the age of 16 living in them. Almost all aged/service households (99%) did not have children living in the household. Twenty-two percent of other concession and 23% of non-concession households had two or three children living in the household.

Survey results could not be compared with 1996 data for this question.

Table 3.3.3: Incidence of Children under 16 in Household by Sample Type

	2001 (n=2,006) %											
Size of household	Aged Service Concession	Other Concession	Total concession	Non concession	Total							
No Children	99	52	77	61	67							
One child	1	22	11	16	14							
Two children	-	13	6	16	12							
Three children	*	9	4	7	6							
Four children	*	4	2	1	1							
Five or more children	-	*	*	*	*							
TOTAL	100	100	100	100	100							

Base: Total Respondents

### 3.3.4 Derived Total Household Income

Total household income was a **derived** survey item. Respondents were asked to indicate from a list of ranges the level of any income that they and other household members received from employment. The midpoint of each of these ranges was used to calculate the household income received from employment. Pensions and other government benefits were added in at an estimated \$192 per week. No data was collected on the level of income from self-funding household members. Hence this income was excluded from calculations of household income. In cases where no household members received income from employment or government benefits, household income was listed as "other income source". It should be noted that a proportion of low-income households may be higher than in the general population because of the exclusion of the additional income sources.

One third of households had a total income of \$50,000 or more (35%). As expected, half of non-concession households earnt more than \$50,000 (53%) compared with 5% of concession householders. More than eight in ten (84%) of aged/service concession households earnt less than \$20,000 annually, compared with six in ten (61%) other concession households and only 4% of non-concession households. Results could not be compared with 1996 data for this question.

Estimated total annual household income	Aged Service Concession	Other Concession	Total concession	Non concession	Total (n=2,006)
Less than \$10,000	44	36	40	2	17
\$10,000-\$19,999	40	25	33	2	14
\$20,000-\$29,999	-	6	3	4	4
\$30,000-\$39,999	4	11	8	7	7
\$40,000-\$49,999	1	3	2	9	6
\$50,000 or more	3	8	5	53	35
Other income source	5	5	5	9	8
Can't say	4	5	5	13	10

 Table 3.3.4:
 Derived total annual household income by Sample Type

Base: Total Respondents

## 3.3.5 Main Language Spoken in the Household

In most households (88%) English was the main language spoken. Eighty nine percent of non-concession households' main language was English compared with only 83% of other concession groups. Three percent of other concession households' main language was Vietnamese or 3% Greek, while 3% of aged/service concession households' had Italian as their main language.

Results were very similar to those obtained in 1996.

	Aged Service Concession		Aged Service Concession Other Concession		Total concession		Non concession		Total	
Main Language Spoken	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'</b> 96
English	89	89	83	80	86	85	89	89	88	87
Italian	3	5	1	2	2	3	1	1	1	2
Greek	1	2	3	2	2	2	1	1	1	2
Vietnamese	*	*	3	3	2	1	*	2	1	2
Arabic	*	-	2	2	1	1	*	*	1	1
Spanish	*	*	1	1	*	1	1	1	*	1
Turkish	*	*	1	2	1	1	*	1	*	1
Cantonese	*	*	*	1	*	1	1	*	1	*
Mandarin	-	*	*	1	*	*	1	1	*	1
Other	6	4	6	7	6	5	6	5	6	5
Can't Say	-	-	*	-	*	-	-	-	*	-

 Table 3.3.5: Main Language Spoken in the Household of Sample

Base: Total Respondents - 2001 (n=2,006); 1996 (n=2,000)

### **3.3.6** Home Ownership Status

Respondents were asked about their current housing arrangements. Almost four in five households (79%) respondents were currently buying or already owned their own home. One in five households (20%) were renting their homes. The majority (84%) of aged/service concession households owned their own home and four in ten (41%) of non-concession households also owned their own home. Renting was far more common-place amongst concession holders (27%) compared with non-concession householders (16%). Private rental was far more prevalent amongst other concession householders (29%), as was public rental (13%).

Home ownership breakdowns were somewhat different for other concession households than was observed in 1996. Greater proportions now own or are paying off their own homes, with the incidence of renting considerably lower. The proportion of households renting public properties has fallen over time across all types of concession households.

	Aged/Service Concession		Other	Concession	Total	concession	Non	concession	Total	
Home Ownership Status	<b>'01</b>	·01 ·96		<b>'</b> 96	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'96</b>
Owned/fully paid off	84	76	33	26	59	54	41	39	48	45
Buying/paying off	4	4	23	17	13	10	42	42	31	28
Rent – Private	5	5	29	35	17	18	15	16	16	17
Rent – Public	7	14	13	22	10	17	1	3	4	9
Other	*	*	1	1	1	1	*	1	*	1
Can't Say	*	-	*	-	*	-	1	-	1	-

#### Table 3.3.6: Sample Home Ownership Status

Base: Total Respondents - 2001 (n=2,006); 1996 (n=2,000)

### 3.3.7 Incidence of Other Household Members holding Concession Cards

One in ten households had at least one other member of the household holding either an aged pension concession card (10%) or a Health Care card (11%). Just 5% of households had at least one other member of the household holding and non-aged pension card, whilst 1% held a Repatriation Health Care card.

Not surprisingly, a large proportion of Aged/service pensioner households had another member also holding an aged/service concession (41%), whilst a third of other concession households had another household member holding a Health Care card. Interestingly, 10% of non-concession households included members who had a concession card of some type.

Results could not be compared with 1996 data.

Type of Concession Card Held by Other Household Members	Aged/Service Concession	Other Concession	Total concession	Non concession	Total (n=2,006)
Aged Pensioner Card	41	5	24	2	10
Non-Aged Pensioner					
Card	5	16	11	2	5
Health Care Card	4	33	18	7	11
Repatriation Health Card	2	2	2	1	1
Total <sup>1</sup>	50	48	50	10	26

 Table 3.3.7: Incidence of other household members holding concession cards

Base: Total Respondents

1. A member of the household could hold more than one concession card.

Please note that whilst other members of the household may hold concessions cards, these persons were not defined as being the person responsible for payment of the household bills.

Therefore in some instances a Non-concession household may in fact receive concession discounts on some bills because another member of the household may hold a concession card. This also means that a household defined as an 'other' concession household may also have another household member who holds aged/service concession cards, or vice versa.

### **3.4 RESPONDENT PROFILE**

#### 3.4.1 Length of Time Holding a Concession Card

Most (80%) respondents who held a concession card had held it for more than 2 years and nearly all (91%) of aged service concession householders had held their card for more than 2 years. Other concession card holders tended to hold their concession cards for a shorter term, with only 69% other concession holders having owned their card for more than 2 years and 10% for 6 months or less. This is not surprising since many other card holders would have health care cards due to being currently unemployed.

On average, other concession card holders have tended to have held their cards for slightly longer than was the case in 1996.

	Aged/Service		Other	Concession	Total concession		
Length of Time Holding a Concession Card	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'96</b>	
Less than 4 months	1	2	6	8	3	4	
4-6 months	2	1	4	6	3	3	
7-12 months	1	2	6	15	4	8	
Over 1 year to 2 years	3	5	12	11	7	7	
2 years or more	91	90	68	60	80	77	
Can't Say	2	*	4	*	3	*	

 Table 3.4.1: Length of Time Holding a Concession card by Sample Type

Base: Total Respondents holding a concession card – 2001 (n=998); 1996 (n=985)

### 3.4.2 Employment Status

Just over four in ten respondents (44%) were working, three in ten were retired or pensioners (28%), while one fifth (21%) considered their main activity to be home duties. Only 3% were looking for work and 3% were studying. Of those who worked, just over half (52%) worked full-time, 36% worked part-time and 11% were self-employed.

As expected nearly all (87%) of aged/service pensioner concession households were retired with a further 11% performing home duties. Two-thirds (65%) of non-concession households were employed. A third (32%) of other concession households were engaged in home duties and a further 28% were retired.

The proportions undertaking home duties has fallen across almost all sample types since 1996, whilst the opposite trend is evident for retired/pensioners. These trends are particularly noticeable amongst other concession households.

		Aged/Service		Other Concession		Total concession		Non concession		
Employment Status	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'96</b>	<b>'</b> 01	<b>'96</b>	<b>'</b> 01	<b>'96</b>	<b>'</b> 01	<b>'96</b>
Full Time Employment	-	*	4	7	2	3	36	45	23	28
Part Time Employment	2	1	14	12	8	6	21	16	16	12
Self Employed	-	*	2	3	1	2	8	7	5	5
Total Employed	2	2	21	23	11	11	65	67	44	44
Home Duties	11	13	32	38	21	24	21	21	21	22
Studying	-	*	7	6	3	3	3	3	3	3
Looking for Work	*	*	10	14	5	7	1	1	2	3
Retired/Pensioner	87	82	28	16	59	53	8	7	28	26
Total not Employed	98	96	77	74	88	87	34	32	55	44
Other	*	*	2	3	1	2	1	1	1	1

#### Table 3.4.2: Employment Status Sample Type

Base: Total Respondents - 2001 (n=2,006); 1996 (n=2,000)

#### 3.4.3 Income Sources

Overall most respondents' (35%) income was derived from pension and other government benefits and income from employment (46%). Eighty-six percent of concession households' income was derived from pensions and other government benefits. As expected, non-concession households' income was mainly derived from employment.

The distribution of income sources has not varied significantly form those observed in 1996, with the rise in self-funded income amongst other concession households being the only notable exception.

#### Table 3.4.3: Income Sources of Main Respondent

	Aged Service Concession		Aged Service Concession Other Concession		Total concession		Non concession		Total	
Income Sources	<b>'01</b>	<b>'01 '96</b>		<b>'96</b>	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'96</b>
Wages/ salary/ income from employment	1	2	21	22	11	11	68	70	46	46
Pensions/ other government benefits	93	96	79	78	86	88	3	5	35	39
Self Funded	19	16	8	3	14	10	15	12	15	11
Other source	-	1	1	2	*	1	1	3	1	2
None	-	1	2	4	1	3	13	14	9	10
Can't say	1	-	2	-	1	-	3	-	2	-

Base: Total respondents - 2001 (n=2,006); 1996 (n=2,000)

### 3.4.4 Personal Income

Of those non-concession households who gained income from employment 21% personally earned \$50,000 or over. In comparison 38% of concession householders who were employed had incomes in the range from \$10,000 to \$19,999.

The distribution of personal annual income by sample type has varied considerably since 1996, particularly in the lower income categories. Both aged/service and other concession card holders tend to be earning slightly more than was the case in 1996, with the majority of these households moving from the lowest income category to the \$10,000-\$19,999 category since 1996. The average income level for non-concession respondents has also risen over time, with far greater proportion earning more than \$30,000 per annum.

Personal Annual	Aged Service Concession Other Concession			Total	concession	Non	concession	Total		
Income	<b>'01</b>	<b>•01 •96</b>		<b>'</b> 96	<b>'01</b>	<b>'96</b>	<b>'01</b>	<b>'</b> 96	<b>'01</b>	<b>'</b> 96
Less than \$10,000	9	65	23	52	22	59	7	13	9	32
\$10,000 - \$19,999	58	25	36	29	38	27	15	17	17	21
\$20,000 - \$29,999	14	4	24	7	24	5	17	20	18	14
\$30,000 - \$39,999	19	*	5	2	6	1	17	13	16	8
\$40,000 - \$49,999	-	-	4	1	3	*	13	8	12	5
\$50,000 plus	-	*	2	-	2	*	21	8	20	5
Can't Say/Refused	-	5	5	5	5	5	9	7	9	6

Table 3.4.4: Personal Income of Main Respondent (from employment)

Base: Total respondents who have income from employment – 2,001 (n=767); 1996 (n=1,195).

## **4 ENERGY CONSUMPTION AND EXPENDITURE**

## 4.1 USE OF ELECTRICITY AND GAS

#### 4.1.1 Incidence of Gas Use

Incidence of mains gas usage in households around Victoria is high with 94% of households using gas. This is an increase from 1996 where 91% used mains gas. Usage in Melbourne has particularly increased from 90% in 1996 to 94% in 2001. Amongst the provincial centres Ballarat had the highest incidence with 98% of households using mains gas, compared to 94% of Melbourne households.

#### Table 4.1.1.1: Use of Gas in Household by Region

		2001 (n=2,006) %						1996 (n=2,000) %						
Use of Gas	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Vic	Total	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Vic	Total
Use mains gas	94	95	98	94	91	94	94	90	94	95	91	89	92	91
Use cylinder gas	*	* 2 2 1 *					*	*	1	1	-	2	2	*
Do not use gas/neither	6	6	2	4	8	5	5	10	5	4	9	9	7	9

Base: Total respondents 2001 and 1996 Surveys.

Amongst concession households 92% used mains gas compared to 96% of non-concession households. Incidence of mains gas usage amongst concession households has increased since 1996 (from 85% to 92%), particularly amongst aged/service households (from 84% to 91%).

	2001 (n=2,006) %						1996 (n=2,000) %				
Use of Gas	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	
Use mains gas	96	91	92	92	94	94	84	88	85	91	
Use cylinder gas	*	1	*	*	1	1	1	*			
Do not use gas/neither	4	8	7	8	5	5	16	11	14	9	

 Table 4.1.1.2: Use of Gas in Household by Sample Type

Base: Total respondents 2001 and 1996 Surveys.

\* Less than 0.5% response

Nearly all (98%) households with four or more persons use mains gas compared with only 90% of households with only one person. As in 1996, the incidence of mains gas increases with the number of people in a household. However, single person households have significantly increased their usage of mains gas over this 5 year period (from 80% to 90%).

## Table 4.1.1.3: Use of Gas in Household by Household Size

		(	2001 n=2,006) %		1996 (n=2,000) %							
Use of Gas	1 person	2 persons	3 persons	4 or more persons	Total	1 person	2 persons	3 persons	4 or more persons	Total		
Use mains gas	90	93	95	98	94	80	91	93	96	91		
Use cylinder gas	1	*	*	*	*	-	1	1	*	*		
Do not use gas/neither	9	7	4	2	5	20	8	6	4	9		

Base: Total respondents 2001 and 1996 Surveys.

### 4.1.2 Energy Sources for Heating, Cooking and Hot Water

Gas use was highest for heating (88%), followed by hot water (78%) and cooking (76%).

Incidence of using gas for cooking has increased since 1996 from 71% to 76% for all households and use of gas for hot water increased from 71% to 78%. Usage of gas for heating has increased marginally over time from 86% in 1996 to 88% in 2001.

The proportion of households using gas for hot water has increased substantially in all centres with the exception of Geelong, where it has remained constant. Bendigo has experienced substantial increases in the proportion of households using gas for heating and cooking since 1996. Melbourne also experienced substantial increases in the use of gas for cooking and hot water.

		2001 (n=2,006) %							1996 (n=2,000) %							
Regular Uses of Gas	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Vic	Total	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Vic	-		
Heating	87	89	95	93	87	91	88	84	92	93	85	85	89	86		
Cooking	80	69	64	83	56	67	76	72	70	72	74	55	68	71		
Hot Water	78	81 80 79 72 78 78 71 81 72 75								63	72	71				

#### Table 4.1.2.1: Regular Uses of Gas in Household by Region

Base: Total respondents 2001 and 1996 Surveys.

		()	2001 n=2,006) %			1996 (n=2,000) %						
Regular Uses of Gas	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total		
Heating	89	88	87	88	88	89	80	81	80	86		
Cooking	77	71	80	75	76	74	61	74	66	71		
Hot Water	79	71	81	76	78	77	58	71	64	71		

 Table 4.1.2.2: <u>Regular Uses of Gas in Household by Sample Type</u>

Base: Total respondents 2001 and 1996 Surveys.

There were increases in the proportion of households using gas for all purposes between 1996 and 2001. In particular, there were substantial increases in the use of gas for heating, cooking and hot water for one person households.

		(	2001 (n=2,000 %	6)		1996 (n=2,000) %						
Regular Uses of Gas	1 person	2 persons	3 persons	4 or more persons	Total	1 person	2 persons	3 persons	4 or more persons	Total		
Heating	83	86	89	94	88	73	86	87	92	86		
Cooking	73	71	75	85	76	63	67	72	79	71		
Hot Water	70	76	79	84	78	59	67	76	81	71		

Base: Total respondents 2001 and 1996 Surveys.

Half of households in 2001 used electricity for cooking (53%), 28% for heating and 23% for hot water.

Proportions using electricity for heating (28%) have remained constant since 1996, whilst the incidence of using electricity for hot water has fallen (from 27% to 23%), and use of electricity for cooking has risen (from 49% to 53%).

Increases in incidence of using electricity for heating and cooking has occurred in country Victoria (heating 19% to 22%, cooking 44% to 51%) with substantial increases in some centres. Usage of electricity for hot water has fallen over time in all areas whilst remaining static in Geelong.

	2001 (n=2,006) %							1996 (n=2,000) %						
Regular Uses of Electricity	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Vic	Total	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Vic	Total
Heating	31	23	20	21	25	22	28	32	19	14	24	18	19	28
Cooking	54	56	49	37	60	51	53	51	38	39	51	46	44	49
Hot Water	22	19	21	20	29	23	23	28	18	25	25	34	26	27

Table 4.1.2.4: <u>Regular Uses of Electricity in Household by Region</u>

Base: Total respondents 2001 and 1996 Surveys.

The proportion of non-concession households using electricity for cooking has increased from 50% in 1996 to 58% in 2001. There was a fall in the use of electricity for hot water, cooking and heating among both concession types between surveys. There was also a small drop in the proportion of non-concession households using electricity for hot water.

		(n	2001 n=2,006) %		1996 (n=2,000) %						
Regular Uses of Electricity	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	
Heating	29	27	26	27	28	26	34	25	30	28	
Cooking	58	49	40	45	53	50	52	40	47	49	
Hot Water	21	29	20	25	23 38 25 32						

Base: Total respondents 2001 and 1996 Surveys.

All households experienced a decline in the use of electricity for hot water between surveys. Over time, usage of electricity for heating has increased for larger households of four or more persons (28% in 2001 compared with 22% in 1996), and the use of electricity for cooking has increased substantially for three person households and four or more person households.

		(n	2001 =2,006) %		1996 (n=2,000) %						
Regular Uses of Electricity	1 person	2 persons	3 persons	4 or more persons	Total	1 person	2 persons	3 persons	4 or more persons	Total	
Heating	30	29	27	28	28	33	31	26	22	28	
Cooking	53	54	53	53	53	51	52	46	46	49	
Hot Water	29	25	20	16	23	36	31	25	19	27	

Table 4.1.2.6: <u>Regular Uses of Electricity in Household by Household Size</u>

Base: Total respondents 2001 and 1996 Surveys.

## 4.2 ELECTRICITY COSTS AND CONSUMPTION

#### 4.2.1 Electricity Consumption

Annual average general and off-peak electricity consumption for 2001 and 1996 is shown in **Chart 4.2.1** overleaf. In 2001 all households surveyed received electricity bills, whilst 97% did so in 1996. Average annual *general* electricity consumption has increased by 23% over the intervening 5 years between surveys from 3,623 kilowatts (kW) in 1996 up to 4,456 kW in 2001. The greatest proportional increases in average annual *general* electricity consumption since 1996 have occurred amongst all country Victorian households (+33%), particularly in Geelong (up 35%). Big rises have also occurred in public rental households (+41%), private rental households (+32%) and in one person households (+34%).

Average monthly *general* consumption during the seven months of winter was 357 kW, compared to 361 kW per month in the five months of summer, a difference of only 4 kW per month between winter and summer consumption.

The proportion of households that consume electricity *off peak* has fallen from 24% in 1996 to 17% in 2001 (a fall of 29%). The greatest declines in the proportions using *off peak* electricity were observed amongst Shepparton households (-49%), private rental households (-48%) and public rental households (-45%).

Whilst the proportions consuming *off peak* electricity fell over the period, average annual off peak consumption of those consuming increased over time (up 10% from 3,689 kW in 1996 to 4,072 kW in 2001). Average annual *off peak* consumption increased greatly amongst Shepparton households (+54%) and those buying/paying off their homes (+25%) since 1996, while average annual consumption fell markedly amongst public rental households (-16%) and one person households (-10%) over the same period.

It would appear that *off peak* consumption varies considerably between winter and summer amongst Victorian households. Average monthly *off peak* consumption during the seven months of winter was 372 kW, compared to 300 kW per month for the five months of summer, a difference of 72 kW per month.

Overall, average annual electricity consumption grew by 15% since 1996 from 4,529 kW to 5,190 kW in 2001. Marked growth in average electricity consumption was observed amongst country Victorian households over time 25%, particularly in Geelong (30%), as well as amongst public rental households (25%).

		(Kilov	onsumption watts)		Off	suming Peak		(Kilov	onsumption watts)		Total Cor (Kilo		
		2001		1996	2001	1996	~	2001		1996	2001	1996	%
Sub man	Summer	Winter	Total	1.0.12	• • • •	1.0.12	Summer	Winter	Total	102	• • • •	1.0.12	Growth
Sub-group	n=2,004	n=2,003	n=2,005	n=1,943	n=2,005	n=1,943	n=362	n=356	n=362	n=483	n=2,005	n=1,943	
By Region -													
Melbourne	1,784	2,669	4,451	3,725	17	23	1,370	2,354	3,700	3,643	5,083	4,597	10.6
Geelong	1,774	2,439	4,192	3,099	16	18	1,637	2,268	3,849	3,340	4,826	3,725	29.6
Ballarat	1,617	2,633	4,249	3,215	21	24	1,522	2,930	4,452	3,941	5,240	4,174	25.5
Bendigo	1,647	2,597	4,244	3,237	18	23	1,265	3,162	4,427	3,592	5,119	4,104	24.7
Shepparton	2,347	2,784	5,131	3,929	19	37	2,504	3,861	6,235	4,054	6,574	5,457	20.5
Total country Victoria	1,857	2,617	4,468	3,369	19	26	1,782	3,127	4,862	3,794	5,464	4,364	25.2
By Sample Type -													
Non-Concession	1,942	2,898	4,835	4,062	16	23	1,559	2,802	4,326	4,012	5,578	5,000	11.6
Aged/Service	1,449	2,101	3,550	2,761	21	30	1,272	2,408	3,669	3,066	4,390	3,708	18.4
Other Concession	1,721	2,425	4,143	3,262	15	20	1,651	2,156	3,765	3,672	4,735	4,014	18.0
Total Concession	1,580	2,258	3,836	2,978	18	26	1,420	2,311	3,706	3,271	4,557	3,840	18.7
By Household Size -													
1 Person	1,226	1,715	2,941	2,196	18	26	923	1,585	2,473	2,745	3,395	2,946	15.2
2 Persons	1,677	2,454	4,129	3,160	18	28	1,496	2,702	4,179	3,359	4,937	4,116	19.9
3 Persons	2,104	2,807	4,911	4,088	18	23	1,793	2,645	4,370	4,388	5,727	5,137	11.5
4 or more Persons	2,158	3,438	5,584	4,699	15	19	1,739	3,185	4,923	4,504	6,361	5,576	14.1
<b>By Housing Status -</b>													
Owned/Paid off	1,801	2,573	4,371	3,671	21	29	1,471	2,446	3,900	3,847	5,230	4,798	9.0
Buying/Paying off	1,949	3,041	4,987	4,278	14	18	1,648	3,053	4,684	3,752	5,678	4,952	14.7
Renting – Private	1,631	2,367	3,994	3,017	15	29	1,369	2,489	3,740	3,235	4,574	3,960	15.5
Renting - Public	1,330	1,845	3,175	2,258	6	11	935	2,036	2,971	3,548	3,344	2,678	24.9
Total All Households	1,804 <sup>1</sup>	<b>2,501</b> <sup>1</sup>	4,456	3,623	17	24	1,502 <sup>2</sup>	<b>2,601</b> <sup>2</sup>	4,072	3,689	5,190	4,529	14.6

#### Chart 4.2.1: Average Annual Electricity Consumption 2001 and 1996 (Kilowatts)

Base: Total respondents 2001 and 1996 surveys.
1. Average summer month general consumption (ie. December-April) is 361 kW. Average winter month general consumption (ie. May-November) is 357 kW.
2. Average summer month off peak consumption (ie. December-April) is 300 kW. Average winter month off peak consumption (ie. May-November) is 372 kW.

## 4.2.2 Electricity Costs

Average annual electricity bill in 2001 paid by households was \$705 (or \$641 plus GST). In 1996, the average annual bill paid was \$449. This represents an 57% increase in the bill amount paid since 1996 (or 43% if GST is excluded). Considering that electricity consumption increased by just 15% over the period, this percentage increase in the bill amount paid would seem to be inordinately large. (see Table 4.2.2)

However, the average electricity charge applicable (ie. the amount that could be charged if discounts were not applied) was \$780 (or \$709 plus GST) in 2001. The charge applicable in 1996 was \$610, representing an increase of 28% over the period (or 16% if GST is excluded), which would appear to be realistic, given the inflation rate and the increase in consumption over the past 5 years.

This disparity in value of the *bill amount paid* in 1996 and 2001 compared with *electricity charge applicable* in 1996 and 2001 would therefore seem to be a result of any discount applicable in each year. In 2001 discounts were provided in two forms - a winter electricity bonus of \$60 given to all households consuming electricity and a concession discount available to eligible households. One in six households in 2001 obtained a concession discount on their electricity bill (17%), with an average annual value of \$61. As such, all households consuming electricity in 2001 received on average a total annual discount on their electricity bill of \$75. In 1996, 27% of households paying electricity bills obtained an average annual concession discount of \$240.

It would appear then that in 1996 households on average received a proportionally greater discount on their electricity bill than did households in 2001, which directly contributed to a substantially higher electricity bill amount being paid by households in 2001.

However, it should also be stressed that 1996 electricity billing data appears to be far from accurate in relation to concession discounts applicable to households. In some instances the concession discount is greater than the charge applicable, which would mean that in some instances electricity suppliers would have to pay households for consuming electricity. This is obviously not the case, and it can only be concluded that accuracy of 1996 electricity billing data is questionable.

It is therefore considered that electricity billing data should only be analysed on a year by year basis and not between years.

In 2001 the average annual bill amount paid by aged/service pensioner households was \$576, whilst other concession households paid \$641 and non-concession households paid \$765.

Country Victorian households tended to pay more for their electricity than metropolitan households do (\$835 cf \$654), with households in Shepparton paying over \$1,000 in 2001 (\$1,039). One person households and public rental households paid the lowest average amount for their electricity per year (\$478 and \$486 respectively).

Whilst all households received a winter electricity bonus of \$60, the average annual value was closer \$65, because some households received bonuses not paid to them in 1999 and/or 2000.

Two in five concession households (37%) received concession discounts on their electricity bills in 2001 (39% of aged service pensioners and 35% of other concession holders) and on average received a \$63 discount (\$61 of aged service pensioners and \$64 of other concession holders). Far fewer households in country Victoria received concession discounts on their electricity bills (8%).

Whilst the average winter electricity charge applicable was \$465, compared to \$315 in summer, the winter period covered 7 months, whilst the summer period covered just 5 months. This gives rise to an average monthly winter charge of \$66 compared with an average monthly summer charge of \$63 – a difference of just \$3 per month.

More precise detail can be found in the table overleaf.

		Aver Electricit Applica	y Charge ble (\$) <sup>1</sup>		Electrici Appli	Winter ty Bonus cable <sup>2</sup>	Disc Appl	ncession ount icable	Disc Appli	Total ount cable <sup>3</sup>	Disc Appli	ncession ount cable <sup>4</sup>	Electric Amou	
	Summer	Winter	<b>2001<sup>5</sup></b>	1996	%	\$	%	\$	%	\$	%	\$	2001	1996
	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n= _	n=
Sub-group	2,006	2,006	2,,006	1,858	2,006	2006	463	452	2,006	2,006	589	589	<b>2,006<sup>5</sup></b>	1,767
By Region -														
Melbourne	292	434	727	621	100	61	21	59	100	73	30	276	654	437
Geelong	330	453	783	528	100	71	8	54	100	76	28	82	707	433
Ballarat	349	553	902	559	100	76	6	48	100	79	25	39	824	461
Bendigo	310	521	831	541	100	72	8	89	100	80	16	94	752	458
Shepparton	489	635	1,124	678	100	78	11	70	100	85	8	66	1,039	554
Total country Victoria	373	543	915	579	100	75	8	67	100	80	19	82	835	476
By Sample Type -														
Non-Concession <sup>6</sup>	334	497	831	666	100	64	5	52	100	66	16	335	765	500
Aged/Service	269	398	666	507	100	67	39	61	100	91	45	169	576	363
Other Concession	301	427	728	555	100	65	35	64	100	87	40	210	641	401
Total Concession	284	412	696	528	100	66	37	63	100	89	43	185	607	378
By Household Size -														
1 Person	229	326	555	431	100	64	26	49	100	77	33	128	478	314
2 Person	299	441	739	551	100	65	20	63	100	78	28	226	661	404
3 Person	364	499	863	670	100	64	13	57	100	71	24	278	792	501
4 or more Persons	363	565	928	744	100	64	10	80	100	72	24	326	857	551
<b>By Housing Status -</b>														
Owned/Paid off	319	463	782	630	100	65	23	61	100	79	30	265	702	454
Buying/Paying off	335	516	851	681	100	64	7	63	100	69	19	321	783	510
Renting - Private	282	408	690	526	100	63	16	60	100	72	22	150	619	409
Renting - Public	234	331	566	417	100	64	29	57	100	79	50	138	486	293
Total All Households	3157	<b>465</b> <sup>7</sup>	780	610	100	65	17	61	100	75	27	240	705	449

1. Base: Total respondents 2001 and 1996 that have electricity bills with value >\$0.

2. Some households received multiples of the winter bonus value in 2001 (ie. \$120 or \$180 for bonuses not paid in 2000 or 1999). Hence the average value of the winter bonus in 2001 is greater than \$60.

3. Winter Bonus plus Concession Discount.

4. Arithmetically estimated by subtracting the Electricity Bill Charged from the Total Electricity Bill Applicable for only those households receiving a concession on their electricity bill.

5. GST applies to 2001 charges/bills, but not to 1996 charges/bills.

6. Whilst the person who pays the bills for the household may not hold a concession card, another person in the household may do so. As such 5% of non-concession card households received concession discounts in 2001.

7. Six months of summer (ie. December-April) average monthly Electricity Charge Applicable is \$63. For six months of winter (ie. May-November) average monthly Electricity Charge Applicable is \$66.

### 4.3 GAS COSTS AND CONSUMPTION

#### 4.3.1 Gas Consumption

**Chart 4.3.1** following shows the average annual gas consumption by sample type and year. In 2001, each household on average consumed 59,415 mJ of gas compared with 54,851 mJ in 1996. This represents an average increase in consumption per household of 8.3% over this 5 year period.

Gas consumption actually fell over this period for Ballarat households (-11%). Conversely, the greatest percentage increases in average annual gas consumption from 1996 to 2001 were observed in private rental households (+34.5%), Shepparton households (+22.5%) and other concession households (+18.1%).

On a regional basis Ballarat households consumed the most gas per year (69,892 mJ) whilst Geelong households consumed the least (48,649 mJ). This is not surprising considering the relative altitudes and prevailing weather conditions in each region.

In terms of sample type, aged/service pensioners consumed the lowest levels of gas (49,441 mJ), followed by other concession households (55,144 mJ) and non-concession households (63,661 mJ). Not surprisingly, gas consumption increased with household size (41,800 mJ for one person households through to 72,319 mJ for 4 or more person households).

Annual gas consumption is far lower in rented households than non-rented households, although the average rate of increase in average annual consumption since 1996 is far greater amongst rental households. This may be because more rental households are moving toward using gas heating rather than electric heating over time.

When 2001 data was analysed by winter<sup>1</sup> and summer<sup>2</sup> consumption, on average winter month gas consumption was 3 times greater than summer month gas consumption. This trend did not vary substantially by sub-group. However, it should be noted that for this survey the winter period is defined as being seven months long, whilst the summer period is only 5 months. Therefore the disparity between colder and warmer months is in reality closer to 2 rather than 3.

<sup>&</sup>lt;sup>1</sup> Winter months are defined as lasting from May to November.

<sup>&</sup>lt;sup>2</sup> Summer months are defined as lasting from December to April.

Average Annual Gas Consumption (Megajoules)					
	2001			1996	6
Sub-sample	Summer	Winter	Total		
	n=1,851	n=1,854	n=1,854	n=1,768	Growth
By Region -					
Melbourne	15,356	45,399	60,737	56,329	7.8
Geelong	12,950	35,699	48,649	46,603	4.4
Ballarat	18,474	51,418	69,892	70,662	-1.1
Bendigo	12,409	40,966	53,376	46,123	15.7
Shepparton	13,375	38,074	51,386	41,932	22.5
Total country Victoria	14,389	41,680	56,052	51,274	9.3
By Sample Type -					
Non-Concession	16,232	47,443	63,661	61,005	4.4
Aged/Service	12,185	37,296	49,441	43,697	13.1
Other Concession	14,134	41,009	55,144	46,681	18.1
Total Concession	13,130	39,093	52,200	45,034	15.9
By Household Size -					
1 Person	10,255	31,580	41,800	36,892	13.3
2 Persons	14,328	40,805	55,133	47,651	15.7
3 Persons	15,742	48,672	64,366	58,854	9.4
4 or more Persons	18,555	53,764	72,319	68,655	5.3
By Housing Status -					
Owned/Paid off	14,568	43,376	57,935	56,440	2.6
Buying/Paying off	17,115	50,159	67,274	63,230	6.4
Renting – Private	13,545	38,187	51,682	38,421	34.5
Renting - Public	11,985	33,576	45,462	39,334	15.6
Total All Households	15,083 <sup>1</sup>	44,350 <sup>2</sup>	59,415	54,851	8.3

#### Table 4.3.1: <u>Average Annual Gas Consumption 2001 and 1996 (Megajoules)</u>

Base: Total respondents 2001 and 1996 surveys that have gas bills with value >\$0.

1. Average monthly winter gas consumption (May-November) is 6,336 mJ.

2. Average monthly summer gas consumption (December-April) is 3,017 mJ.

## 4.3.2 Gas Charges

The proportion of households paying gas bills has remained constant over time (94% in 2001 and 91% in 1996). (Table 4.3.1) Increases in the proportion of households paying gas bills was observed amongst aged/service pensioners (91% cf 84%), one person households (90% cf 80%), public rental households (86% cf 71%) and private rental households (89% cf 84%).

Households that received gas bills (with a value of more than \$0) spent an average of \$500 per year on gas consumption in 2001 compared with \$415 in 1996. This represents an increase in outlays of 20.5% since 1996, whilst gas consumption has increased by just 8.3% over the same period.

When results were analysed by region, the average annual gas bill paid was slightly higher amongst Melbourne than country Victorian households (\$510 and \$473 respectively). The most significant increases in the gas bill amounts paid were observed in Bendigo and Shepparton (up 38% and 31% since 1996 respectively).

When gas bills were analysed by sample type, concession households paid on average \$122 less for their gas bills than did non-concession households (\$545 cf \$423). This difference is comparable with 1996 results (\$458 cf \$347 – difference \$111). Aged/service pensioners now pay on average \$402 per year on their gas bill compared to \$388 in 1996 (19% increase). Other concession households pay \$444 per year on gas bills compared with \$357 in 1996 (24% increase).

Not surprisingly, the size of the annual gas bill paid increased with the size of the household. One person households on average paid \$363 per annum on gas compared with \$606 for households with four or more persons. Smaller households have generally experienced greater proportional increases in the size of their annual gas bill compared with larger households. However, this result must be considered in the light that smaller households also consume greater relative proportions of gas than was the case in 1996.

When results are analysed by housing status private rental households have experienced the largest proportional increase in their annual gas bill of all sub-groups. In 1996 this group paid on average \$299 per year for their gas consumption, whilst in 2001 they paid \$439. This represents an increase of 47% on the 1996 figure. However, it should also be noted that this group increased its gas consumption by 35% over the same period.

In 1996, 36% of households received a concession on their gas bill. In 2001, 54% of households did so. However, it should be noted that the information provided on concession discounts by gas suppliers was incomplete and in some instances was imputed. Furthermore, virtually all households serviced by Origin Energy in 2001 obtained a concession discount on their gas bill (88%). Therefore, it is considered that the proportion receiving concession discounts on their gas bill in 2001 may have been overstated. One example of this is the town of Shepparton, which is exclusively serviced by Origin Energy. In 1996 44% of Shepparton households received a concession discount on their gas bill, whilst in 2001 billing data indicates that 78% did so.

When Origin Energy billing data is excluded from survey results 34% of households obtained concession discounts on their gas bill compared with all 36% of all households paying a gas bill in 1996. Sub-groups showing marked increases in the proportion receiving concessions included aged/service pensioners (91% cf 63%), other concession households (84% cf 58%), public rental households (78% cf 51%) and two person households (61% cf 36%).

In 1996 the average annual concession discount value was \$83, whilst in 2001 this amount was just \$71. When Origin Energy data is excluded, the average concession discount in 2001 was even lower at \$65 per annum. It can therefore be concluded that the amount of the concession discount on a household's annual gas bill is lower than that obtained in 1996.

This evidence is confirmed by the fact that the total gas charge applicable in 2001 (ie. the amount that could be charged if no concession discounts applied) was \$538, whilst in 1996 it was \$500. This represents an increase in the total bill that could be charged of 8%, which is the same as the increase in gas consumption over the same period (8%). Given that the average annual gas bill charged in 2001 has increased by 21% since 1996 (ie. from \$415 to \$500), it therefore can be concluded that the average concession discount applicable must have fallen over the same period (which it has, from \$83 to \$71 – down 15%).

The concession discount rate is based on a flat 17.5% discount off the total gas bill applicable. Based on billing data, the average discount amount in 1996 was 16.6% (ie. \$83  $\div$  \$500). This average discount rate is plausible because some respondents would not receive the concession discount over the entire 12-month period. (ie. some other concession households would only receive discounts whilst they hold a health care card – for the period that they are unemployed, which may be less than 12 months). However, in 2001 the average concession discount amount is just 13.2% (ie. \$71  $\div$  \$538).

There are some possible explanations for this result -

1. Data provided by gas suppliers in relation to concession amounts in 2001 is not accurate (or is incomplete). It should be noted that concession discount information provided by gas suppliers was either of questionable quality or was not provided. It has already been stated that 88% of households serviced by Origin Energy received concession discounts, whilst in some instances concession information was imputed for other gas suppliers.

However, across gas suppliers the average annual concession discount as a proportion of the total charge applicable was relatively consistent in 2001. Origin Energy data shows that the average concession discount amount is 13.5% of the total gas bill applicable ( $$76 \div $566$ ). The average concession discount amount for gas suppliers excluding Origin Energy is 12.1% ( $$63 \div $524$ );

- 2. Origin Energy *actually did* provide a concession discount to 88% of the households it serviced in 2001, *but* the full 17.5% discount was not applied to all of these households. In fact, the same discount policy may have been applied by all gas suppliers, thereby reducing the overall average concession amount applicable. Such a conclusion could only be verified by contacting gas suppliers directly. Roy Morgan Research was unable to successfully contact gas suppliers to obtain such information;
- 3. There has been an increase in the proportion of households receiving concessions for only *part* of the 12-month period. This means that if more households receive concession discounts for only *part* of the year, rather than the full year the *average* concession discount amount applied over a 12 month period will be *lower* than if more households received a concession discount for the entire 12 month period.

There is some evidence that a greater incidence of partial payment of concession discounts occurred in 2001. Greater proportions of public rental households received gas bills in 2001 (86% cf 71%), with far more receiving concession discounts (78% cf 51%). It is likely that people living in public rental accommodation are more transient and are so more likely to live in households for shorter periods, and so may therefore only obtain a discount for the period in which they lived in this form of accommodation. If greater proportions of these people now live in homes with gas appliances, it is likely that some would have only moved in within the last 12 months, so the discount on the gas bill would only apply for the proportion of the time lived in such accommodation.
Secondly, the proportion of other concession households receiving concession discounts has increased from 54% to 84% over this period (even if Origin Energy data is excluded, the rate receiving such discounts is 75% for 2001). A significant proportion of these households would hold health care cards. These households are only eligible for a concession discount for the period in which the health care card applies. A significant proportion of health care card holders have these cards because they are *unemployed*. Therefore their concession discounts would only apply for some or all of the portion of time that they are unemployed. As such, if greater proportions of health care card holders only receive concession discounts for part of the year, then the overall average discount rate applicable would be lower than if all received the discount for the entire 12-month period;

4. Billing data results indicate that the average growth in the total bill applicable is comparable with the average growth in consumption over the past 5 years (7.6% versus 8.3%). However, the application of the concession discount may have not have increased proportionally with gas consumption over the same period (ie. maybe partial discounts applied to certain concession types). If this was the case then the overall average discount rate applicable would be lower than in 1996. Again, such a conclusion could only be verified by contacting gas suppliers directly. As stated previously, Roy Morgan Research was unable to successfully contact gas suppliers to obtain such information.

It is likely that all of these four scenarios may have influenced (to varying degrees) the average annual concession discount amount in 2001.

	9 Pay Gas	ving	Rece	% iving ession ounts	Gas C Applica	onal harge ble (\$) <sup>1</sup>	Gas Charge		Average 2001 Seasonal Gas Concession Discount Applicable (\$) <sup>1</sup> Sum- Win-		Average Concession Discount Applicable (\$) <sup>1</sup>		Averag Season Bill Ai (\$	al Gas mount	Annual	rage Gas Bill ount 5) <sup>1</sup>
	2001	1996	<b>2001</b> <sup>2</sup>	1996	Sum- mer	Win- ter	2001	1996	Sum- mer	Win- ter	2001	1996 <sup>3</sup>	Sum- mer	Win- ter	2001	1996
	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=
Sub-group	2,006	2,000	1,854	1,811	1,853	1,853	1,854	1,767	1,071	1,087	1,087	722	1,853	1,853	1,854	1,770
By Region -							- 10					0.5			- 1 0	10.5
Melbourne	94	90	53	35	143	407	549	512	22	52	73	85	131	379	510	425
Geelong	94	95	39	32	123	328	451	417	16	42	58	33	117	311	428	356
Ballarat	98	96	56	48	163	456	619	637	22	56	77	113	151	424	575	526
Bendigo	94	91	52	36	119	371	491	430	17	49	66	74	111	345	456	355
Shepparton	91	91	78	44	131	349	477	396	20	45	64	74	116	314	427	327
Total country Victoria	94	93	56	40	135	377	511	469	19	48	67	78	124	350	473	390
By Sample Type -	0.6	0.5			1.40	10.1			2		0.1	100	1.4.1	105		450
Non-Concession <sup>4</sup>	96	95	34	21	149	424	573	552	26	56	81	109	141	405	545	458
Aged/Service	91	84	91	63	119	340	459	401	18	45	63	64	103	299	402	338
Other Concession	92	89	84	58	133	369	502	433	19	49	68	76	118	327	444	357
Total Concession	91	86	88	61	126	354	480	415	18	47	65	69	110	313	423	347
By Household Size -	0.0	0.0		45	105	204	200	2.42	1.5	20			0.5	2(0)	2 (2	202
1 Person	90	80	66	47	105	294	399	343	15	39	54	53	95	268	363	292
2 Person	93	91	61	36	135	370	505	442	20	50	70	82	123	339	463	365
3 Person	95	94	49	33	145	434	577	534	26	56	81	94	133	407	538	441
4 or more Persons	98	96	42	32	166	475	641	615	25	59	83	102	156	450	606	510
By Housing Status -	0.5	0.4	(0)	- 10	105	201	505		0.1	10	(0)	0.1	10.4	2(1	40.5	10.6
Owned/Paid off	95	94	60	42	137	391	527	515	21	49	69	91	124	361	485	426
Buying/Paying off	97	97	40	23	156	445	601	569	25	60	84	99	146	421	568	473
Renting - Private	89	84	57	39	130	348	477	362	20	46	66	67	119	322	439	299
Renting - Public	86	71	78	51	118	308	424	358	17	42	59	34	104	275	378	308
<b>Total All Households</b>	94	91	54	36	141 <sup>5</sup>	398 <sup>5</sup>	538	500	21 <sup>6</sup>	51 <sup>6</sup>	71	83	<b>129</b> <sup>7</sup>	<b>371</b> <sup>7</sup>	500	415

#### Table 4.3.2: Households Paying Gas Bills, Claiming Concessions, Amount Paid for Gas and Concession Amount Received

1. Base: Total respondents 2001 and 1996 that have gas bills with value >\$0.

2. Almost every household serviced by Origin Energy received a concession discount in 2001, so the % receiving concessions is higher than expected.

3. Arithmetically estimated by subtracting the Gas Bill Charged from the Total Gas Bill Applicable for only those households receiving a concession on their gas bill.

4. Whilst the person who pays the bills for the household may not hold a concession card, another person in the household may do so. As such 34% of non-concession card households received concession discounts in 2001.

5. Average monthly winter gas charge applicable (May-November) is \$57. Average monthly summer gas charge applicable (December-April) is \$28.

6. Average monthly winter concession discount applicable (May- November) is \$7. Average monthly summer concession discount applicable (December-April) is \$4.

7. Average monthly winter gas bill amount (May- November) is \$53. Average monthly summer gas bill amount (December-April) is \$26.

# 5 ENERGY USAGE

## 5.1 MAJOR APPLIANCES USED

### 5.1.1 Incidence of Having One or More Major Appliances

Table 5.1.1 details the mean number of major appliances within concession and nonconcession households. The fridge is the most common household appliance and has remained consistently so since 1996. The average number of fridges was 1.1 per household in both 1996 and 2001. These results did not vary between sample type.

The second most common household appliance was the microwave oven. Again, prevalence of microwaves was relatively consistent between sample groups. Aged service households had an average of 0.8 microwaves compared with non-concession and other concession households who had an average of 0.9 microwave ovens.

		(1	2001 n=2,006) %				(	1996 n=2,000) %		
No of Showers	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total Mean No.	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total Mean No.
No. of fridges/freezers	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
No. of bar fridges	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
No of separate freezers	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
No of clothes driers	0.6	0.5	0.5	0.5	0.6	0.7	0.4	0.5	0.4	0.6
No. of dishwashers	0.5	0.3	0.3	0.3	0.4	0.4	0.2	0.1	0.2	0.3
No of microwave ovens	0.9	0.8	0.9	0.8	0.9	n/c	n/c	n/c	n/c	n/c
No. of electric ovens	0.6	0.5	0.4	0.4	0.5	n/c	n/c	n/c	n/c	n/c
No. of electric stoves	0.6	0.6	0.5	0.6	0.6	n/c	n/c	n/c	n/c	n/c

### Table 5.1.1: Mean Number of Major Appliances by Sample Type

Base: Total respondents 1996 and 2001 surveys

n/c not collected in 1996

## 5.1.2 Type of Hot Water System

There was little or no difference between city and country in the incidence of use of gas or electric hot water systems. Of the provincial centres, Shepparton had the smallest proportion of gas hot water systems (72%) and Geelong the highest (81%).

Evident in both Melbourne and in provincial households was the increased proportion of gas hot water systems during the period 1996 to 2001. Melbourne household's incidence of gas hot water rose from 71% to 78% whilst country Victoria rose from 73% to 78%. As a consequence, a comparable fall can be seen in incidence rates of electrical hot water systems during this period.

			(n	2001 =2,00 %	6)			1996 (n=2,000) %							
Type of Hot Water System	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Vic	Total	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Vic	Total	
Gas	78	81	80	79	72	78	78	71	81	72	75	63	73	71	
Electric	22	19	21	20	29	23	23	28	18	25	25	34	26	27	
Solar - only	-	-	-	-	-	-	I	*	-	-	-	-	-	*	
Solar – gas boosted	*	I	-	-	*	*	*	*	-	-	-	-	-	*	
Solar – elec. boosted	*	I	-	-	-	-	*	1	-	-	1	2	1	1	
Other	*	-	1	1	1	1	*	-	-	-	-	-	-	-	
Can't Say	*	-	-	-	-	-	*	3	1	3	1	3	2	3	

Table 5.1.2.1:	Type of Hot Water S	ystem in Household by Region
1 abic 3.1.2.1.	Type of flot water o	ystem in nousenoid by negion

Base: Total respondents 2001 and 1996 Surveys.

\* Less than 0.5% response

Non-concession householders are marginally more likely to have a gas hot water system than concession householders (79% compared with 76%). However, usage of gas hot water amongst concession households has risen dramatically during the 5 years between 1996 and 2001, particularly amongst other concession households. Over three quarters (76%) of concession households had a gas hot water system in 2001 compared with only 64% in 1996. Consequently, there is a fall off in usage of electrical hot water systems over the last 5 years across all sample types.

			2001 (n=2,006) %	)		1996 (n=2,000) %								
Type of Hot Water System	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total				
Gas	79	71	81	76	78	77	63	64	64	71				
Electric	21	29	20	25	23	23	32	33	32	27				
Solar - only	-	-	*	*	I	*	-	-	-	*				
Solar – gas boosted	*	*	-	-	*	*	*	-	*	*				
Solar – elec. boosted	*	*	-	*	*	1	1	-	*	*				
Other	*	1	1	1	*	-	-	-	-	-				
Can't Say	-	-	*	*	*	1	5	3	5	3				

 Table 5.1.2.2: <u>Type of Hot Water System in Household by Sample Type</u>

Base: Total respondents 2001 and 1996 Surveys.

\* Less than 0.5% response

The difference in incidence of usage of gas hot water systems between large and small households is relatively clear with 84% of households of four or more persons using these systems compared with 70% of one person households. However, the incidence rate for gas hot water systems has only risen slightly (from 81% to 84%) amongst the largest households between 1996 and 2001 compared to over 10 percent amongst the smallest households (from 59% to 70%).

The use of electric hot water systems declined across all households between surveys.

		(n	2001 =2,006) %	)				1996 (n=2,00 %		
Type of Hot Water System	1 person	2 persons	3 persons	4 or more persons	Total	1 person	2 persons	3 persons	4 or more persons	Total
Gas	70	76	79	84	78	59	67	76	81	71
Electric	29	25	20	16	23	36	31	25	19	27
Solar - only	-	*	-	-	-	-	*	-	-	*
Solar – gas boosted	*	*	*	*	*	*	*	*	*	*
Solar - elec. boosted	-	*	1	1	*	*	*	1	1	1
Other	1	*	1	*	*	-	-	-	-	-
Can't Say	*	*	-	-	*	6	2	1	2	3

 Table 5.1.2.3: <u>Type of Hot Water System in Household by Household Size</u>

Base: Total respondents 2001 and 1996 Surveys.

\* Less than 0.5% response

# 5.1.3 Electrical Hot Water Systems

In the 2001 survey, 23% of households had an electric hot water system with the incidence slightly higher for aged/service pensioners (29%). Those with electric hot water systems were then asked questions concerning the number and type of hot water systems installed. Of the 24% of households with an electric hot water system, 94% had one system and 2% had two.

In 1996 all households (regardless of whether there was an electric or gas hot water service installed) were asked about the number of hot water systems. Twenty seven percent of households had an electric hot water system. Of this group 95% had one system, 3% had two and 2% had three or more hot water systems.

A small drop in the proportion of multiple electric hot water systems over time can be seen amongst all households. However, there was a corresponding increase in the proportion who could not say how many electric hot water systems they had, which could account to some extent for these falls in the proportion of multiple electric hot water systems.

Table 5.1.3.1: <u>Number</u>	of Electrical Hot `	<u>Water Systems in</u>	Household by Sample Type

			2001 1=478) %					1996 (n=554 %	)	
Number of Hot Water Systems	Non- Concession	Aged/Service	Other Concession	Total Concession	Total	Non- Concession	Aged/Service	Other Concession	Total Concession	Total
1 hot water system	95	93	94	94	94	93	96	98	97	95
2 hot water systems	1	4	1	3	2	5	2	1	1	3
3 or more hot water systems	-	-	-	-	-	1	2	2	2	2
Can't Say	4	3	5	3	4					

Base: Total Respondents 2001 and 1996 surveys with an electric hot water system

In 2001 (of the 24% of households with an electrical hot water system) 73% had an off peak system and 15% a standard system.

Whilst nearly three quarters (71%) of non-concession households had an off peak electric hot water system, only 66% of other concession households did so. Amongst aged/service concession households the incidence of off peak electrical hot water systems has risen from 72% to 81% during the period 1996 to 2001 whereas for non-concession households it has fallen and other concession households has remained the same.

			2001 1=478) %					1996 (n=554 %	)	
Type of Electrical Hot Water System	Non-Concession	Aged/Service	Other Concession	Total Concession	Total	Non-Concession	Aged/Service	Other Concession	Total Concession	Total
Off Peak	71	81	66	75	73	73	72	66	70	72
Standard	18	8	17	12	15	15	11	18	13	14
Can't Say	11	11	17	13	12	11	14	14	14	12

 Table 5.1.3.2: <u>Type of Electrical Hot Water Systems in Household by Sample Type</u>

Base: Total Respondents 2001 and 1996 surveys with an electric hot water system

# 5.1.4 Incidence of Heaters

Almost half (48%) of Melbourne households had gas ducted heating compared to only 19% of provincial households. In comparison, only 37% of Melbourne households had a built-in gas heater compared to 68% of provincial households. Incidence of built-in gas heaters has fallen during the period 1996 to 2001 in both provincial (74% to 68%) and metropolitan areas (46% to 37%), but the incidence of gas ducted heating has risen from 11% to 19% in provincial households and 36% to 48% in metropolitan households during the same period.

Fifty eight percent of concession householders and 38% of non-concession households had built-in gas heaters. Incidence of built-in gas heaters has fallen in both concession and non-concession households. During the period 1996 to 2001 concession householders usage of built-in gas heaters fell from 63% to 58% whilst non-concession households usage fell from 48% to 38%. As a result, ducted gas heating incidence rate has risen during this period from 17% to 27% for concession householders and 38% to 47% for non-concession households.

Usage of electrical heaters has remained consistently low. Age service households usage of built-in electrical heaters has fallen from 5% to 3% during the period 1996 to 2001. However, usage of portable electrical heaters has risen slightly during this time from 4% to 5% amongst this group. Households of one person were more likely to have used a portable electrical heater (7%) and built-in electrical heater (5%) than larger households. Usage of electrical heaters has remained fairly stable during the period 1996 to 2001 amongst large and smaller households.

# Table 5.1.4.1: Main Space or Room Heater used in Household by Region

			(	2001 n=2,006) %				1996 (n=2,000) %							
Main Types of Room Heaters	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Victoria	TOTAL	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Victoria	TOTAL	
Gas -															
Built-in gas heater (wall furnace)	37	69	69	72	64	68	46	46	75	71	71	80	74	54	
Gas ducted/central heating	48	18	23	18	16	19	40	36	14	14	13	3	11	29	
Hydronic	1	-	3	-	*	1	1	4	-	4	-	-	1	3	
Electric -															
Portable electric heater (fan heater etc)	4	3	1	-	2	1	3	4	1	-	1	1	1	3	
Reverse cycle air conditioner	1	4	-	3	3	3	1	1	1	-	1	1	1	1	
Built-in electric heater	3	3	*	*	5	2	3	4	4	1	3	4	3	4	
Electric ducted/central heating	1	1	1	-	-	*	1	*	-	-	-	1	*	*	
Slab floor/pyrotenix heating	*	-	1	2	5	2	1	1	-	1	-	2	1	1	
Electric operated, oil heated system	1	1	-	-	-	*	1	1	-	-	-	-	-	1	
Other Heaters -															
Kerosene heater	*	1	-	-	-	*	*	-	-	-	-	-	-	-	
Wood heater/solid fuel	3	2	3	4	4	3	3	2	5	8	12	8	8	4	
Oil Heater	1	-	-	-	-	-	1	*	-	1	-	-	*	*	

Base: Total respondents 2001 and 1996 Surveys. \* Less than 0.5% response

				Sa	ample	Гуре							Hous	ehold S	Size			
		(1	2001 n=2,00 %				(n=2	96 ,000) %)			20 (n=2 %	,006)		1996 (n=2,000) (%)				
Main Types of Room Heaters	TOTAL	Non- Concession	Aged/ Service	Other Concession	Total Concession	Non- Concession	Aged/ Service	Other Concession	Total Concession	1 person household	2 persons household	3 persons household	4 or more persons	1 person household	2 persons household	3 persons household	4 or more nersons	TOTAL
Gas -																		
Built-in gas heater (wall furnace)	46	38	58	59	58	48	63	63	63	56	46	48	37	59	56	56	48	55
Gas ducted/central heating	40	47	28	26	27	38	16	17	17	25	38	37	53	14	26	29	41	29
Hydronic	1	1	1	1	1	3	4	4	4	1	1	2	1	4	4	2	2	3
Electric -																		
Portable electric heater (fan heater etc)	3	3	5	3	4	2	4	5	5	7	4	2	1	7	4	1	1	3
Reverse cycle air conditioner	1	2	1	2	1	*	2	*	1	1	3	1	1	1	1	*	*	1
Built-in electric heater	3	2	2	4	3	3	5	5	5	5	2	4	1	7	4	5	1	4
Electric ducted/central heating	1	1	1	1	1	*	1	*	*	1	1	1	1	1	*	1	*	*
Slab floor/pyrotenix heating	1	1	1	1	1	1	1	*	1	-	1	1	1	1	1	1	*	1
Electric operated, oil heated system Other Heaters -	1	*	1	1	1	1	1	*	1	1	1	*	-	2	*	-	*	1
Kerosene heater	*	*	*	*	*	-	-	-	-	*	*	*	-	-	-	-	-	-
Wood heater/solid fuel	3	4	2	4	3	5	2	3	2	1	3	4	5	2	4	4	5	4
Oil Heater	1	1	1	-	*	*	1	1	1	*	1	-	-	*	1	1	-	*

### Table 5.1.4.2: Main Space or Room Heater used in Household by Sample Type and Household Size

Base: Total respondents 2001 and 1996 Surveys. \* Less than 0.5% response

## 5.1.5 Use of Heaters

Incidence rates for usage of household main heaters during colder months are high (see Chart 5.1.5.1). Eighty percent of households used their main heater at least once a day during the colder months and a further 11% 4-6 times a week.

### Chart 5.1.5.1: Usage of Main Household Heater in Colder Months by Year

"How often would your household use this (main) heater in the colder months, that is, May to November"



Base: Total 2001 and 1996 survey respondents with Main Heater

A similar proportion of non-concession and concession households reported usage of the main heater in 2001. Eighty percent of non-concession and concession households used their main heater at least once a day. In comparison, in 1996 86% of concession households and 87% of non-concession households used their main heater at least once a day. Whilst this is a relatively significant fall in daily usage between 1996 and 2001, average monthly usage has only dropped marginally from 32 times per month in 1996 to 31.3 times per month in 2001.

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	2001 1996 (n=1,995) (n=1,989) % %					)				
Frequency of Usage of Main Heater in Colder Months	Non concession	Aged/Service	Other Concession	<b>Total</b> concession	Total	Non concession	Aged/Service	Other Concession	<b>Total</b> concession	Total
At least once a day	80	82	77	80	80	87	87	84	86	86
4-6 times a week	11	9	13	11	11	8	5	8	6	7
1-3 times a week	5	4	6	5	5	4	4	5	4	4
Once every 2 or 3 weeks	1	*	*	*	1	1	1	1	1	1
Once a month	1	*	-	*	*	*	1	1	1	1
Less Often	1	1	2	2	1	1	2	1	2	1
Not Used	-	*	1	1	*	-	-	-	-	-
Can't Say	1	3	2	1	1	-	-	1	*	*
Average times per month	31.3	32.0	30.6	31.3	31.3	32.3	32.0	31.6	31.8	32.0

## Table 5.1.5.1: Usage of Main Heater in Colder Months by Sample Type

Base: Total 2001 and 1996 survey respondents with Main Heater

\* Less than 0.5% response

Despite a fall in average monthly usage of main heaters between 1996 and 2001, the average length of usage of main heaters during the colder months has stayed relatively consistent (6.7 hours in 2001 cf 7.2 hours in 1996) (see Table 5.1.5.2). Almost half (43%) of all the households used their main heater for 4-6 hours every time in 2001 compared with 44% in 1996. This can be seen in graphic form in Chart 5.1.5.2.

Concession household's hourly usage of a main heater tended to be slightly longer on average than for non-concession households (7.3 hours versus 6.7 hours). For example 22% of concession household's usage of main heaters lasted nine hours or more compared with 19% of non-concession households. Aged service households average usage was slightly longer than the average for non-concession households (7.5 hours cf 6.7 hours).

	2001 (n=1,995) %				1996 (n=1,989) %					
Hours Used by Main Heater in Colder Months	Non concession	Aged/Service	Other Concession	<b>Total</b> concession	Total	Non concession	Aged/Service	Other Concession	Total concession	Total
Less than 1 hour	*	1	*	1	1	1	2	1	1	1
1 hour	4	3	3	3	4	2	2	5	3	3
2 hours	8	4	8	6	7	5	7	6	7	6
3 hours	11	9	11	10	11	9	6	13	9	9
4 hours	18	15	17	16	17	15	14	11	13	14
5 hours	12	10	9	10	11	15	11	9	11	13
6 hours	15	16	15	15	15	17	16	16	16	17
7 hours	5	4	3	3	4	5	6	5	5	5
8 hours	6	7	7	7	7	9	10	9	9	9
9-12 hours	9	16	11	11	11	10	14	12	13	11
13-16 hours	3	7	6	4	5	5	6	5	5	5
17 to 20 hours	1	1	2	1	1	1	1	2	1	1
21 to 24 hours	6	5	6	6	6	5	6	7	6	6
Not Used	-	*	1	*	*	-	-	-	-	-
Can't Say	1	2	2	2	2	*	-	-	-	*
Average Hours	6.7	7.5	7.2	7.3	6.9	7.1	7.3	7.4	7.3	7.2

# Table 5.1.5.2 Usage (Hours) of Main Heater in Colder Months by Sample Type

Base: Total 2001 and 1996 survey respondents with Main Heater

\* Less than 0.5% response

### Chart 5.1.5.2: <u>Number of Hours Used Heaters During Colder Months by Year</u>

"Each time you use that (main) heater in the colder months, on average for how many hours would it be switched on?"



Base: Total 2001 and 1996 survey respondents with Main Heater

# 5.1.6 Incidence of Air Conditioning or Air Cooling

Overall incidence rates of air conditioning and air cooling systems have risen considerably from 40% in 1996 to 57% in 2001. In 2001 just over half of Melbourne households (56%) had air conditioning or air cooling in their home compared with 61% of country Victorian households. Shepparton had the highest proportion of air conditioning (85%) whilst Ballarat had the lowest (28%).

Incidence of Air Conditioning or Air Cooling	2001 (n=2,006) %	1996 (n=2,000) %
Melbourne	56	39
Geelong	54	36
Ballarat	28	13
Bendigo	75	53
Shepparton	85	74
Total country Victoria	61	44
Total with air cooling	57	40

### Table 5.1.6.1: Incidence of Air Conditioning or Air Cooling in Household by Region

Base: Total respondents 2001 and 1996 Surveys.

Fifty nine percent of non-concession households had air conditioning or air cooling in 2001 compared with 42% in 1996. The incidence rates for concession households with air cooling has also risen significantly from 38% in 1996 to 54% in 2001. Marked rises have been experienced since 1996 amongst both aged/service households (from 41% to 56%) and other concession households (from 33% to 53%).

Table 5.1.6.2:	Incidence	of Air C	onditioning	or Air	<b>Cooling</b> in	Household by Sa	<u>ample</u>
<b>Type</b>							

Incidence of Air Conditioning or Air Cooling Sample Type	2001 (n=2,006) %	1996 (n=2,000) %
Non-concession	59	42
Aged/Service	56	41
Other concession	53	33
Total Concession	54	38
Total with air cooling	57	40

Base: Total respondents 2001 and 1996 Surveys.

As might be expected, households with more than four persons had a higher incidence rate of air conditioning or air cooling (64%) than smaller households of one person (44%). Again, since 1996 there has been a considerable rise in incidence rates of air conditioning and air cooling amongst households of all sizes. In particular, the increase has been notable in larger households of three and 4 or more persons.

 Table 5.1.6.3: Incidence of Air Conditioning or Air Cooling in Household by

 Household Size

Incidence of Air Conditioning or Air Cooling	2001 (n=2,006) %	1996 (n=2,000) %
Household Size		
1 person household	44	29
2 persons household	57	42
3 persons household	61	41
4 or more persons	64	46
Total with air cooling	57	40

Base: Total respondents 2001 and 1996 Surveys.

### 5.1.7 Use of Air Conditioners

As discussed, the proportion of households with air conditioners/coolers has increased dramatically since 1996 from 40% to 57% with the proportional increase relatively consistent across all sample types.

The majority of households with air conditioners/coolers have only one per household (85%), although non-concession households are marginally more likely to have more than one air conditioner/cooler than concession households (15% and 13% respectively).

Single room air conditioning is more prevalent in concession households (60%), particularly in other concession households (63%), whilst multi-room air conditioning is more common-place in non-concession households (54%), as is reverse cycle air conditioning (39%).

	%					
Air conditioners and Air coolers	Non- concession	Aged/Service	Other Concession	T otal concession	Total	
% with air conditioners/cooler 1996 <sup>1</sup>	42	37	39	38	40	
% with air conditioner/cooler 2001 <sup>2</sup>	59	56	53	54	57	
	% with air conditioners/coolers 2001					
			(n=1,115	)		
1 air conditioner/cooler	84	41	33	87	85	
2 air conditioners/cooler	12	11	8	10	11	
3 + air conditioners/cooler	3	2	4	3	3	
% with single room air conditioner	51	58	63	60	55	
% with multiple room air conditioner	54	50	42	46	51	
% with reverse cycle air conditioner	39	30	34	31	36	
Average no. of air conditioners/coolers (mean)	1.2	1.2	1.2	1.2	1.2	

<sup>&</sup>lt;sup>1</sup> n=2,000

<sup>&</sup>lt;sup>2</sup> n=2,006

Almost half (47%) of all households with air conditioners/coolers have one single room air conditioner. Few households have more than one single room air-conditioner with the average being 1.2 per household. Concession households, particularly other concession households are more likely to have single room air conditioning in one room.

	2001 (n=1,115) %				
Number of single room air conditioners in household	Non concession	Aged/Service	Other Concession	Total concession	Total
1 single room air conditioner	43	53	55	54	47
2 single room air conditioners	6	4	5	4	6
3 or more single room air conditioners	2	1	3	2	2
None cool single room only/Can't say	48	43	36	40	45
Mean number of single room air conditioners	1.2	1.1	1.2	1.1	1.2

Base: Total respondents with an air conditioner

Almost half of all households with air conditioners/coolers have one multiple room air conditioner (48%). Few have more than one of these units with the mean being 1.1 per household. Non-concession households are more likely to have more than one multiple room air conditioners (3%).

	2001 (n=1,115) %					
Number of multiple room air conditioners in household	Non- concession	Aged/Service	Other Concession	Total concession	Total	
1 multiple room air conditioner	51	47	41	44	48	
2 multiple room air conditioners	3	3	1	2	3	
3 or more multiple room air conditioner	*	-	1	*	*	
None cool multiple rooms/Can't say	46	50	59	54	49	
Mean number of multiple room air conditioners	1.1	1.1	1.0	1.0	1.1	

Base: Total respondents with an air conditioner

\* Less than 0.5% response

The majority of households with air conditioners do not have a reverse cycle air conditioner (64%). However, a third of households (32%) have one reverse cycle air conditioner and only 4% two or more. Non-concession households are more likely to have one or more reverse cycle air conditioners (39%) as compared with concession households (31%).

	2001 (n=1,115) %					
Number of reverse cycle air conditioners in household	Non- concession	Aged/Service	Other Concession	Total concession	Total	
1 reverse cycle air conditioner	34	30	31	29	32	
2 reverse cycle air conditioners	4	2	2	1	3	
3 + reverse cycle air conditioners	1	-	1	1	1	
No reverse cycle air conditioners/Can't say	61	71	66	68	64	
Mean number of reverse cycle air conditioners	1.2	1.0	1.1	1.1	1.1	

## Table 5.1.7.4: <u>Number of Reverse Cycle Air Conditioners by Sample Type</u>

Base: Total respondents with an air conditioner

Chart 5.1.7.1 details frequency of use of air conditioning units in warmer months. Of those households surveyed in 2001 with an air conditioning unit, 26% used it at least once a day and a further 21% 4-6 times a week. In comparison 13% of households surveyed in 1996 with an air conditioning unit used it at least once a day and a further 9% used it 4-6 times a week. The lesser usage of air conditioning in 1996 might be attributed to climatic factors.

### Chart 5.1.7.1: Frequency of Use of Air Conditioners in Warmer Months

"How often would you household use the air conditioner for cooling in the warmer months, that is December to April?"



Base: Total 2001 and 1996 survey respondents with an air conditioner

On average people used their air conditioner 16.9 times per month in warmer months compared with almost 10 times per month in 1996. An increase in average frequency of use was the greatest amongst other concession households where it increased from 10.1 times per month in 1996 to 18.8 times per month in 2001.

Table 5.1.7.5: <u>Average Frequence</u>	y of use of Air	Conditioners in	Warmer Months by
<u>Sample Type</u>			

	Average No. of Days per Month					
Sample Type	2001 (n=1,115) Means	1996 (n=807) Means				
Non-concession	16.2	9.0				
Aged/Service	17.5	10.5				
Other concession	18.8	11.2				
Total Concession	18.0	10.8				
Total with air cooling	16.9	9.6				

Base: Total 2001 and 1996 survey respondents with an air conditioner.

Chart 5.1.7.2 overleaf shows that hours of usage has also increased in 2001. Twenty per cent of households surveyed in 2001 (with an air conditioning unit) used the unit 8 to 12 hours a day in comparison to only 11% of households, in 1996.

### Chart 5.1.7.2: Hours Used Air Conditioners on Each Occasion

"How many hours would it (air conditioner) be used on average each time (use of air conditioner in the warmer months)?"



Base: Total 2001 and 1996 survey respondents with an air conditioner

On each occasion of use, households with air conditioners used their air conditioner for 5.6 hours on average in 2001 compared with 4.3 hours in 1996. Other concession households used their air conditioner for longer periods than other groups in both 2001 and 1996 (6.3 hours and 4.7 hours respectively).

Table 5.1.7.6: Average Hours of Use of Air Conditioners in Warmer Months by Sample Type

2001 (n=1,115) Means	1996 (n=807) Means
5.5	4.3
5.4	4.2
6.3	4.4
5.8	4.3
5.6	4.3
	(n=1,115) Means 5.5 5.4 6.3 5.8

uents 2001 and 1990 Surveys.

### 5.1.8 Use of Clothes Driers

As expected, household usage of clothes driers is more frequent during colder months than in warmer months (Chart 5.1.8.1). For example 40% of households who own a clothes drier used it 1-3 times a week during colder months in 2001 compared with 11% during warmer months.

### Chart 5.1.8.1: <u>Frequency of Use in Warmer and Colder Months of Clothes Driers</u> (2001)

"In the colder/warmer months, that is May to November/December to April, how often on average does your household use the clothes drier?"



Base: Total respondents who own a clothes drier 2001 survey

Non-concession householders who own a clothes drier tend to use it more frequently than concession householders. Non-concession householders who owned a drier used it 2.9 times a month during warmer months on average, compared with 1.9 times a month for concession holders. During the colder months non-concession householders used their clothes drier 11.8 times a month on average compared to 10 times a month for concession householders.

Compared to 1996, average monthly usage of clothes driers has increased slightly in the warmer months (2.5 times a month in 1996 cf 2.6 times in 2001) and fallen slightly in the colder months (11.5 times a month in 1996 cf 11.3 times in 2001).

Frequency of usage during warmer months has fallen since 1996 for concession households (from 2.3 in 1996 to 1.9 times per month), whilst usage has increased amongst non-concession households (from 2.6 in 1996 to 2.9). Frequency of use during the colder months fell between surveys for concession households (from 10.4 times a month in 1996 to 10.0 in 2001) and it also fell for non-concession households (from 12.0 in 1996 to 11.8).

Table 5.1.8.1 Frequency of Use in Warmer Months of Clothes Driers by Sample Type

	2001 (n=1,085) %				1996 (n=1,080) %					
Frequency of use of Clothes Driers in Warmer Months	Non- Concession	Aged/Service	Other Concession	Total Concession	Total	Non- Concession	Aged/Service	Other Concession	Total Concession	Total
At least once a day	2	2	2	2	2	2	4	2	3	2
Four to six times a week	3	1	2	1	2	2	I	1	1	2
One to three times week	13	4	7	6	11	9	4	8	6	8
Once every two or three weeks	10	1	3	2	7	7	2	6	4	6
Once a month	8	3	11	7	8	11	3	10	6	9
Less often	49	59	53	56	51	57	66	56	61	58
Not used	10	19	14	17	12	-	-	-	-	-
Can't Say	6	11	8	10	7	12	21	18	20	14
Average times per month	2.9	1.6	2.2	1.9	2.6	2.6	2.4	2.2	2.3	2.5

Base: Total Respondents 2001 and 1996 surveys with a clothes drier

\* Less than 0.5% response

	2001 (n=1,085) %					1996 (n=1,080) %				
Frequency of use of Clothes Driers in Cooler Months	Non- Concession	Aged/Service	Other Concession	Total Concession	Total	Non- Concession	Aged/Service	Other Concession	Total Concession	Total
At least once a day	14	6	18	13	13	14	9	21	15	14
Four to six times a week	14	4	13	9	13	17	4	15	9	15
One to three times week	42	36	38	37	40	39	34	32	33	37
Once every two or three weeks	9	12	12	12	10	11	9	15	12	11
Once a month	10	14	9	12	11	6	13	3	8	7
Less often	10	23	8	16	11	14	32	14	23	17
Not used	*	2	1	1	1	-	-	-	-	-
Can't Say	1	2	2	2	1	-	-	-	-	-
Average times per month	11.8	6.9	12.9	10.0	11.3	12.0	7.2	13.8	10.4	11.5

# Table 5.1.8.2: Frequency of Use in Colder Months of Clothes Driers by Sample Type

Base: Total Respondents 2001 and 1996 surveys with a clothes drier

\* Less than 0.5% response

### 5.1.9 Use of Dishwashers

Chart 5.1.9 shows that usage of dishwashers does not tend to be affected by the change in seasons. For example, almost a third of those respondents with a dishwasher used it at least once a day during both the colder and warmer months (29% compared with 28%). In fact, average monthly usage of dishwashers averaged 14.8 times per month in warmer months and 16.9 times per month in cooler months. These averages are slightly down on those reported in 1996 (15.4 and 17.0 times per month respectively).

### Chart 5.1.9: Frequency of Use in Warmer and Colder Months of Dishwasher (2001)

"In the colder/warmer months, that is May to November/December to April, how often on average does your household use the dishwasher?"



Base: Total Respondents who own a dishwasher 2001 survey

Non-concession householders who own a dishwasher appear to use it more frequently than do concession householders. Non-concession householders who owned a dishwasher in 2001 used it 16.1 times a month on average during warmer months compared with 10.4 times a month for concession holders.

Similarly, in the colder months, non-concession households used the dishwasher 18.5 times a month compared to 11.6 times a month for concession households. This was due to the less frequent use by aged/service pensioners who own dishwashers.

	2001 (n=705) %				1996 (n=568) %					
Frequency of use of Dishwashers in Warmer Months	Non- Concession	Aged/Service	Other Concession	Total Concession	Total	Non- Concession	Aged/Service	Other Concession	Total Concession	Total
At least once a day	30	10	30	19	28	34	13	19	15	30
Four to six times a week	20	10	13	12	18	22	12	24	17	21
One to three times week	28	23	15	19	26	24	24	21	23	24
Once every two or three weeks	4	12	10	11	6	3	6	10	8	4
Once a month	4	9	7	8	5	4	7	-	4	4
Less often	8	30	15	24	12	14	37	26	33	17
Not used	2	3	4	4	2	-	-	-	-	-
Can't Say	3	3	6	4	3	*	-	-	-	*
Average times per month	16.1	7.6	13.9	10.4	14.8	16.7	8.5	12.6	10.1	15.4

### Table 5.1.9.1: Frequency of Use in Warmer Months of Dishwashers by Sample Type

Base: Total Respondents 2001 and 1996 surveys with a dishwasher

\* Less than 0.5% response

	2001 (n=705) %				1996 (n=568) %					
Frequency of using Dishwashers in Cooler Months	Non- Concession	Aged/Service	Other Concession	Total Concession	Total	Non- Concession	Aged/Service	Other Concession	Total Concession	Total
At least once a day	32	11	27	18	29	33	13	21	16	30
Four to six times a week	21	11	13	12	19	21	10	24	16	20
One to three times week	27	23	20	22	26	25	27	19	24	25
Once every two or three weeks	4	14	11	13	6	3	6	19	8	4
Once a month	5	8	9	8	6	4	10	-	6	4
Less often	7	28	12	20	10	14	34	26	31	17
Not used	2	2	5	3	2	-	-	-	-	-
Can't Say	2	3	4	4	3	-	-	-	-	-
Average times per month	18.5	8.8	15.1	11.6	16.9	18.4	9.3	14.3	11.3	17.0

# Table 5.1.9.2: Frequency of Use in Colder Months of Dishwashers by Sample Type

Base: Total Respondents 2001 and 1996 surveys with a dishwasher

# 5.2 DIFFICULTIES ENCOUNTERED IN HEATING DWELLING

Almost a third (32%) of non-concession households named at least one difficulty with heating their homes in the colder months, compared with 42% of other concession households and 19% of aged concession holders. Fewer households are encountering problems heating homes during colder months than in 1996 (31% compared with 37%).

The key difficulty in maintaining warmth in the colder months was caused by house design (high ceilings etc) named by one in ten households. Thirteen percent of other concession households stated that house design was one of the biggest problems encountered in heating their homes, and 13% had problems with draughts or poor dwelling construction.

Drafts/poor construction, the equal most nominated response in 1996 (11%) was named by 9% of households in 2001. All other difficulties were named by less than one in ten respondents across all concession categories.

	2001 (n= 2,006) %				1996 (n=2,000) %					
Difficulties	Non- concession	Aged/ Service	Other concession	Total concession	Total	Non- concession	Aged/ Service	Other concession	Total concession	Total
Design of house (high ceilings etc)	11	5	13	9	10	12	5	14	9	11
Draughts/poor construction	10	3	13	8	9	11	5	19	11	11
Hard to maintain constant temperature	4	5	10	7	5	5	2	6	4	5
Running costs of heating	4	6	7	7	5	3	4	7	5	4
Takes a long time to heat up	4	3	8	6	5	5	3	6	4	5
No insulation	4	1	5	3	3	5	2	9	5	5
Inefficient/ defective heater	4	1	5	3	3	4	1	8	4	4
Large Windows/Too much glass	2	-	1	*	1	n/c	n/c	n/c	n/c	n/c
Cost of buying/installing better heater	1	1	1	1	1	1	1	1	1	1
Not enough heaters	1	1	1	1	1	n/c	n/c	n/c	n/c	n/c
Doors left open/traffic flow	1	-	1	*	*	n/c	n/c	n/c	n/c	n/c
Other reason	5	3	6	4	5	14	8	13	10	12
No difficulties with heating	68	81	58	70	69	61	79	50	66	63

### Table 5.2.1: Difficulties with Heating in Cold Months by Sample Type

Base: Total respondents 2001 and 1996 Surveys.

Note: Respondents could give more than one answer to this question.

\* Less than 0.5% response/ n/c not completed 1996

Amongst private renters, design of house (14%) and draughts/poor construction (15%) were the biggest difficulties faced with heating in the colder months, however, this has dropped since 1996 (16% and 23% respectively). However, the proportion of public renters facing problems when heating their dwelling has risen between 1996 and 2001 (41% in 1996 to 50% in 2001). In particular, a fifth (21%) of public renters in 2001 had difficulties with draughts/poor construction of their dwelling, 17% had problems with the design of the house, and 16% said it takes a long time to heat up.

	2001 (n=2,006) %				1996 (n=2,000) %			
Difficulties	Own/ Buying	Renting - Private	Renting - Public	Total	Own/ Buying	Renting - Private	Renting - Public	Total
Design of house (high ceilings etc)	9	14	17	10	10	16	7	11
Draughts/poor construction	7	15	21	9	8	23	14	11
Hard to maintain constant temperature	4	9	12	5	3	10	5	5
Running costs of heating	5	7	9	5	4	5	6	4
Takes a long time to heat up	3	9	16	5	3	8	9	5
No insulation	2	7	6	3	4	13	3	5
Inefficient/ defective heater	2	7	8	3	3	7	6	4
Cost of buying/installing better heater	1	2	-	1	1	2	1	1
Not enough heaters	1	3	2	1	n/c	n/c	n/c	n/c
Large Windows/Too Much Glass	1	1	*	1	n/c	n/c	n/c	n/c
Doors left open/traffic flow	1	-	-	*	n/c	n/c	n/c	n/c
Other reason	4	5	8	5	12	15	14	12
No difficulties with heating	74	51	50	69	69	41	59	63

Table 5.2.2: Difficulties with Heating in Cold Months by Home Ownership Status

Base: Total respondents 2001 and 1996 Surveys.

Note: Respondents could give more than one answer to this question.

\* Less than 0.5% response/ n/c not completed 1996

# **6** WATER CONSUMPTION AND EXPENDITURE

### 6.1 INCIDENCE OF BILLING FOR WATER CONSUMPTION

### 6.1.1 Incidence of Water Meters

Nine in ten dwellings have separate water meters (93%) compared to eight in ten in 1996 (84%). Almost all (99%) separate houses had a water meter, compared to three quarters (74%) of semi-detached houses, under half (41%) of low-rise flats and 38% of high-rise flats. Given that concession-card holders were less likely than non-card householders to live in a separate house (77% compared to 86%), concession-card holders were less likely to have a water meter. Incidence of water meters has increased notably across all sample groups since 1996.

Incidence of Household Having Separate Water Meters	2001 (n=2,006) %	1996 (n=2,000) %
Non-concession	94	90
Aged/Service	93	76
Other concession	89	74
Total Concession	91	75
Total with Water Meter	93	84

#### Table 6.1.1.1: Incidence of Water Meter by Sample Type

Base: Total respondents 2001 and 1996 Surveys.

### Table 6.1.1.2: Incidence of Water Meter by Housing Type

Incidence of Household Having Separate Water Meters	2001 (n=2,006) %	1996 (n=2,000) %
Separate House	99	96
Dwelling/non dwelling combined	100	56
Semi Detached	74	52
Low Rise Flats	41	26
High Rise Flats <sup>1</sup>	38	-
Total with Water Meter	93	84

Base: Total respondents 2001 and 1996 Surveys.

1. Public rental high rise flats are not individually metered. In such instances DHS Public Housing deliver water concessions based on average consumption per flat (ie. total consumption  $\div$  no. of flats in complex.

### 6.1.2 Incidence of Receiving a Water Bill

Overall, 93% of households received a water bill in 2001 compared with only 87% in 1996. The increase in prevalence of water bills was seen across all sample groups. For example 93% of aged service concession households received a water bill in 2001 compared with 84% in 1996. High rise tenants experienced the biggest proportional increase receiving water bills. In 1996 only 1% of high rise tenants received a water bill compared to 34% in 2001.

Almost a third (30%) of those who reported not having a water meter claimed to receive a water bill, while 3% of households with a water meter claimed to not receive a water bill.

 Table 6.1.2.1: Incidence of Receiving a Water Bill by Sample Type

Received Water Bill	2001 (n=2,006) %	1996 (n=2,000) %
Non-concession	94	92
Aged/Service	93	84
Other concession	85	74
Total Concession	90	80
Total Received Bill	93	87

Base: Total respondents 2001 and 1996 Surveys.

### Table 6.1.2.2: Incidence of Receiving a Water Bill by Housing type

Received Water Bill	2001 (n=2,006) %	1996 (n=2,000) %
Separate House	98	96
Dwelling/non dwelling combined	83	91
Semi Detached	80	66
Low Rise Flats	39	34
High Rise flats	34	1
Total Received Bill	93	87

Base: Total respondents 2001 and 1996 surveys

## 6.1.3 Type of Water Bill Received

The 2001 survey assessed for the first time the type of water bill households received. The three types were the actual amount of water used *only*, a fixed service charge *only*, or a combination of both. The majority (87%) of households who received a water bill received a combination water bill, with only small proportion receiving other types of bills.

Sixteen percent of other concession households received a water consumption only bill compared with 5% non-concession households. Households in semi-detached (14%) and low rise flats (13%) were also slightly more likely to receive a water consumption only bill than other households, as were private renters (35%) and public renters (49%)

Conversely, more than nine in ten non-rental households receive a combined bill for water and sewerage consumption and disposal, plus a fixed service charge (92% own/paid off home, 94% buying/paying off home). One in ten public rental households that claim to receive a water bill can't say water type of bill they receive.

	2001 (n= 1,817) %				
Type of Water Bill	Non- concession	Aged/ Service	Other concession	Total concession	Total
Actual amount of water used only	5	5	16	10	7
Fixed Service charge only	4	4	3	4	4
Combination of both	89	88	79	84	87
Can't Say	2	3	2	2	2

 Table 6.1.3.1: <u>Type of Water Bill Received by Sample Type</u>

Base: Total respondents 2001 survey who received a water bill

	2001 (n= 1,817) %					
Type of Water Bill	Separate House	Dwelling combined	Semi detached	Low rise flats	.High rise flats	Total
Actual amount of water used only	6	-	14	13	9	7
Fixed Service charge only	4	-	5	1	11	4
Combination of both	88	100	78	76	80	87
Can't Say	2	-	3	10	-	2

# Table 6.1.3.2: <u>Type of Water Bill Received by Housing Type</u>

Base: Total respondents 2001 survey who received a water bill

# Table 6.1.3.3: <u>Type of Water Bill Received by Housing Status</u>

		2001 (n= 1,817) %					
Type of Water Bill	Owned/ fully paid off	Buying/ paying off	Rent - Private	Rent – Public/ governme	Total		
Actual amount of water used only	3	1	35	49	7		
Fixed Service charge only	3	4	7	4	4		
Combination of both	92	94	52	38	87		
Can't Say	2	1	6	9	2		

Base: Total respondents 2001 survey who received a water bill

# 6.2 WATER COSTS AND CONSUMPTION

# 6.2.1 Water Consumption

Table 6.2.1 provides details of average water consumption amongst households in both 2001 and 1996. Average annual water consumption has increased by 16% since 1996, from 238 Kilolitres to 276 Kilolitres in 2001.

Average water consumption decreased amongst Geelong households from 221 Kilolitres in 1996 to 208 Kilolitres in 2001. Over this period Geelong has been placed on water restrictions, so the general growth in water consumption over time has been temporarily arrested for this centre. Consumption in Ballarat also fell by 1% between 1996 and 2001. Conversely, a significant increase in average water consumption was exhibited in Bendigo over this period (from 281 KL to 454 KL).

As would be expected, aged/service households have the lowest average water consumption rates of all sample types (233 KL), but these consumption rates have increased by 33% since 1996 for this group (175 KL).

The trend is for average water consumption to increase with household size (196 KL for one person households through to 324 KL for 4 or more person households). Notably, significant increases in average water consumption were observed amongst one (up 37%) and two (up 34%) person households since 1996, with the growth rate in consumption amongst 4 or more person households is far smaller (up 6% since 1996).

The only other sub-group to experience a fall in average water consumption since 1996 (besides Geelong and Ballarat households) was public rental households, down 1% over this period.

When 2001 results were analysed by average winter<sup>1</sup> versus average summer<sup>2</sup> consumption habits it was not surprising to find that summer water consumption was, on average, 33% higher than winter water consumption (162 KL cf 122 KL). Sub-groups with higher than average summer versus winter consumption disparities were Ballarat households (61% higher in summer), 2 person households (41%) and those who own or have paid off their homes (40%). Households with lower than average summer versus winter consumption disparities were public renters (18% higher in summer) and Shepparton households (7%).

<sup>&</sup>lt;sup>1</sup> Winter months are defined as lasting from May to November

<sup>&</sup>lt;sup>2</sup> Summer months are defined as lasting from December to April
	Average Annua	al Water Cons	umption (Kiloli	itres)	
		2001		1996	
	Summer	Winter	Total	Total	% Growth
Sub-sample	n=1,790	n=1,701	n=1,803	n=1,680	_
By Region -					
Melbourne	147	108	254	220	15.5
Geelong	118	91	208	221	-5.9
Ballarat	183	114	215	217	-0.9
Bendigo	260	196	454	281	61.6
Shepparton	239	224	460	398	15.6
Total country Victoria	200	165	333	281	18.5
By Sample Type -					
Non-Concession	167	126	287	258	11.2
Aged/Service	140	103	233	175	33.1
Other Concession	167	129	285	247	15.4
Total Concession	153	115	257	204	26.0
By Household Size -					
1 Person	117	88	196	143	37.1
2 Persons	161	114	268	200	34.0
3 Persons	170	127	289	259	11.6
4 or more Persons	183	147	324	306	5.9
By Housing Status -					
Owned/Paid off	162	116	269	226	19.0
Buying/Paying off	163	132	290	269	7.8
Renting – Private	159	122	275	198	38.9
Renting - Public	130	110	229	232	-1.3
Total All Households	162 <sup>1</sup>	1221	276	238	16.0

Table 6.2.1: Average	Annual Water Co	onsumption 2001 a	nd 1996 (Kilolitres)
1 abic 0.2.1. 11/01 age		mouniprion 2001 a	<u>nu 1770 (</u> Ithonu co)

Base: Total respondents 2001 and 1996 surveys that have water bills with value >\$0.

1. Six months of summer (ie. December-April) average monthly water consumption is 32 KL. For six months of winter (ie. May-November) average monthly water consumption is 17 KL.

### 6.2.2 Water Charges

Prior to identifying the key elements of Water Charges, particularly when comparing results from the 2001 and 1996 surveys, it should be pointed out that between 1996 and 2001 the method of calculation of Water Charges has been significantly altered. A 20% reduction in fixed service charges, plus a revised calculation of consumption charges during the period between surveys means that results in 1996 are not strictly comparable with results in 2001. However, analysis of water charges between years is provided below.

The average annual bill paid for water by households in 2001 was \$442. (**Table 6.2.2**) This compares with an average outlay of \$444 in 1996. Therefore, whilst water consumption has increased by 16% since 1996 the average annual bill amount paid by households has fallen by 0.5%.

Further, whilst similar proportions of households in both surveys received concession discounts on their water (35% in 2001 and 37% in 1996 of those paying water charges), the average annual concession discount has fallen from \$155 in 1996 to \$108 in 2001. This therefore indicates that the average annual water charge that households would pay if concession discounts were *excluded* has fallen by an even greater proportion since 1996. This is borne out by the fact that the annual water charge applicable in 1996 was \$560, while in 2001 these charges totalled \$480 (a fall of 14%). However, it should also be noted that the maximum concession discount applicable in 1996 was \$135, even though survey results give rise to an average of \$155. Possible explanations are that (a) some carryover of concession discounts from 1995 were passed on to households in 1996, thereby raising the average annual concession discount applicable, or (b) data provided from water suppliers in 1996 was not entirely accurate.

It must be concluded that the revised method of water fee calculation has significantly reduced the average annual amount that all households have to pay for the provision of water and sewerage services since 1996. This conclusion is based on the assumption that the billing data obtained from water suppliers in both 1996 and 2001 is reasonably accurate.

Nine in ten households pay water bills (93%), with the proportions lowest amongst public rental households (62%), private rental households (64%), one person households (86%), other concession households (85%) and Shepparton households (88%). It is noteworthy that six in 10 public rental households paid water bills in 2001 compared with just four in 10 in 1996 (62% and 39% respectively).

However, with the exception of Shepparton and Geelong, these sub-groups have experienced an increase in the proportions paying water bills when compared with 1996 - public rental households (39% cf 62%), private rental households (59% cf 64%), 1 person households (73% cf 86%) and other concession households (74% cf 88%). Increases in the proportions paying water bills were also observed in Ballarat and Bendigo households (88% cf 98% and 84% cf 96% respectively).

The total average annual water fee applicable to be charged to households (ie. the charge *excluding* any concessions that may apply) has fallen from \$560 in 1996 to \$480 in 2001. However, increases were observed in three of the four provincial cities surveyed – Ballarat (\$365 cf \$402), Bendigo (\$522 cf \$527) and Shepparton (\$306 cf \$433). Other concession card holders also experienced an increase in the total average annual water fee applicable to be charged to households (\$433 cf \$424), as did private rental households (\$333 cf \$369).

Since 1996 there has been a fall in the proportion of concession households that receive a concession discount on their water bill (83% cf 76%). This fall is most evident amongst aged/service pensioners (92% cf 85%). An even greater fall was experienced amongst Shepparton households (51% cf 38%). Conversely, increases in the proportion of households receiving concession discounts since 1996 were observed amongst Ballarat and Bendigo households (37% cf 69% and 33% cf 55% respectively).

The average annual concession discount on water bills has fallen from \$155 in 1996 to \$108 in 2001 (a 30% decrease). The average concession discount for aged/service pensioners fell from \$172 in 1996 to \$118 in 2001. Proportionally greater falls were also observed amongst other sub-groups, mainly due to the relatively small proportions that receive discounts in these sub-groups (see non-concession households). It must be concluded that the new method of water charging and pricing effect the concession discount that can be obtained, thereby decreasing the amount of the overall concession discount available.

The average annual cost of water charged to households (ie. the applicable charge *including* any concession discount that may apply) has fallen slightly from \$444 in 1996 to \$442 in 2001. Sub-groups that experienced significant increases in the bill size were the same as those that experienced increases in the total charge applicable – ie. Ballarat, Bendigo and Shepparton households, other concession card holders and private rental households.

When the average water bill charged to households was analysed by summer<sup>1</sup> and winter<sup>2</sup> payments, average bill size does not differ (both \$247). This is surprising considering that summer and winter water consumption differs greatly (summer 162 KL cf winter 122 KL). The reason for this parity in summer and winter water bills is that nine in ten households that pay water bills have the annual parks charge applied to their winter bills (89%), compared with just 11% that have this charge applied to their summer bills. This annual parks charge of \$36 almost offsets the reduction in the water consumption charges in the winter months, thereby making average summer and winter amounts paid by households virtually identical.

<sup>&</sup>lt;sup>1</sup> Summer months are defined as lasting from December to April.

<sup>&</sup>lt;sup>2</sup> Winter months are defined as lasting from May to November.

															Total	Water	9	/o	Ave	rage	Ave	rage
	9	6	Wa	ater	Cons	ump-	Drai	inage	Sewe	erage	Sewe	erage	An	nual	Cha	rges	Rece	iving	Conc	ession	An	nual
	Pay	ing	Ser	vice	tio	on	Ser	vice	Ser	vice	Use C	harge	Pa	rks	Appli	icable	Conc	ession		ount	Wate	er Bill
	Wate	r Bills	Char	ge (\$) <sup>1</sup>	Charg	$ge(\$)^1$	Char	ge (\$) <sup>1</sup>	Charg	ge (\$) <sup>1</sup>	(\$	$5)^{1}$	Char	ge (\$) <sup>1</sup>	(\$	$()^1$	Disco	ounts	Applica	able (\$) <sup>1</sup>	Amou	nt (\$) <sup>1</sup>
	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996 <sup>3</sup>	2001	1996
~ .	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=
Sub-group	2,006	2,000	1,686	1,524	1,809	1,677	1,202	1,120	1,661	1,512	1,419	1,357	1,249	1,075	1,815	1,530	1,817	1,723	782	751	1,815	1,530
By Region -																						
Melbourne	92	86	58	88	168	144	57	56	98	321	98	22	37	43	500	625	29	35	114	142	467	512
Geelong	93	94	93	99	131	121	77	90	114	120	83	101	26	41	362	482	48	39	119	114 <sup>2</sup>	305	389 <sup>2</sup>
Ballarat	98	88	45	122	143	93	40	-	188	122	80	68	26	-	402	365	69	37	68	144	355	211
Bendigo	96	84	93	121	227	136	40	95	225	288	80	44	26	41	527	522	55	33	120	126	461	366
Shepparton	88	92	77	96	157	87	40	82	266	158	80	98	26	41	433	306	38	51	109	109	391	182
Total country Victoria	94	89	76	110	164	108	42	90	185	174	82	83	26	41	430	416	53	40	100	204 <sup>2</sup>	377	255 <sup>2</sup>
By Sample Type -																						
Non-Concession <sup>4</sup>	94	92	57	97	176	147	49	60	122	296	103	34	34	43	501	611	12	9	92	159	490	515
Aged/Service	93	84	73	92	139	96	76	62	123	260	77	25	43	43	455	483	85	92	118	172	355	323
Other Concession	85	74	75	83	166	134	64	51	118	231	90	31	40	41	433	424	67	70	104	129	363	318
Total Concession	90	80	74	89	151	111	71	58	121	250	82	27	42	42	445	459	76	83	113	155	359	321
By Household Size -																						
1 Person	86	73	59	96	118	76	61	59	121	259	76	20	41	43	412	459	55	59	103	143	355	350
2 Person	93	87	64	92	161	113	58	60	120	266	89	29	37	42	466	521	41	41	113	168	420	397
3 Person	91	89	65	93	177	144	52	56	119	279	102	33	35	43	490	555	32	31	106	170	456	456
4 or more Persons	98	94	64	96	197	175	53	61	126	302	111	38	34	43	531	639	20	25	109	144	509	519
<b>By Housing Status -</b>																						
Owned/Paid off	100	99	65	95	164	127	61	61	125	275	92	33	38	43	497	593	47	48	114	178	444	450
Buying/Paying off	100	99	61	94	175	152	52	58	119	284	104	34	36	43	507	623	18	18	107	158	488	523
Renting – Private	64	59	57	90	164	116	42	55	112	295	92	20	28	43	369	333	26	33	88	81	347	274
Renting – Public	62	39	56	91	139	115	40	55	109	250	102	28	26	39	263	289	61	54	65	83	223	234
Total All Households	93	87	63	94	167	134	56	59	122	279	96	32	36	43	480	560	35	37	108	155	442	444

#### Table 6.2.2: Households Paying Water Bills, Claiming Concessions, Amount Paid for Water and Concession Amount Received

1. Base: Total respondents 2001 and 1996 surveys that have water bills with value >\$0. 3.

2. Column figures originally transposed in 1996 data, so regional averages have been arithmetically estimated.

Arithmetically estimated by subtracting the Average Annual Water Bill Amount Charged from the Total Water Charges Applicable for only those households receiving a concession on their water bill.

4. Whist the person who pays the bills for the household may not hold a concession card, another person in the household may do so. As such 12% of non-concession card households received concession discounts in 2001.

# 7 WATER USAGE

### 7.1 HOUSEHOLD WATER FITTINGS

#### 7.1.1 Types of Household Fittings

Tables 7.1.1.1 through to 7.1.1.3 detail the prevalence of household water fittings. The most common household fittings are baths named by 86% of households, marginally down from 88% in 1996. However, there has been a corresponding increase over the same period of baths with spa jets, from 6% in 1996 to 12% in 2001. This increase in the prevalence of baths with spa jets is mainly confined to non-concession households (from 9% to 16%), although there has also been a rise amongst concession households (2% to 5%). The incidence of households having spa pools has also increased marginally since 1996 across all sample types, whilst the reverse is the case for waterbeds.

		(	2001 n=2,006 %	<b>)</b>		1996 (n=2,000) %							
Type of Fitting	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total			
Bath	86	83	86	84	86	90	81	89	85	88			
Bath with spa jets	16	5	5	5	12	9	2	3	2	6			
Spa pool	6	2	2	2	4	4	1	1	1	3			
Above ground swimming pool	4	1	3	2	3	3	1	1	1	2			
In ground swimming pool	5	*	1	*	3	5	1	1	1	3			
Toddler's Pool	5	*	6	3	4	7	*	8	3	6			
Sauna	*	-	1	*	*	*	-	*	*	*			
Waterbed	3	*	3	1	2	5	1	5	2	4			
None of the above	5	13	8	10	7	4	18	8	14	8			

#### Table 7.1.1.1: <u>Types of Household Fittings by Sample Type</u>

Base: Total respondents 2001 and 1996 Surveys.

\* Less than 0.5% response

Larger households of four or more persons were more likely to have a bath (89%) than households of one person (80%). Larger households are also more likely to have luxury items such as a bath with spa jets (17%), spa pools (9%) and in-ground swimming pools (6%) than smaller households. In general, the incidence of luxury items such as baths with spa jets and spa pools has increased across all households sizes since 1996.

		(	2001 n=2,006 %	5)		1996 (n= 2,000) %						
Type of Fitting	1 person	2 persons	3 persons	4 or more persons	Total	1 person	2 persons	3 persons	4 or more persons	Total		
Bath	80	85	86	89	86	79	87	90	93	88		
Bath with spa jets	4	11	12	17	12	2	5	7	9	6		
Spa pool	1	3	3	9	4	1	2	3	4	3		
Above ground swimming pool	1	1	4	6	3	*	1	2	4	2		
In ground swimming pool	*	3	3	6	3	*	2	4	6	3		
Toddler's Pool	-	1	6	10	4	*	1	6	13	6		
Sauna	-	-	*	*	*	-	*	-	1	*		
Waterbed	1	1	2	4	2	1	3	4	7	4		
None of the above	14	6	6	3	7	20	8	6	3	8		

#### Table 7.1.1.2: <u>Types of Household Fittings by Household Size</u>

Base: Total respondents 2001 and 1996 Surveys.

\* Less than 0.5% response

Public rented households were the least likely of any household groups to have a bath (75%). This incident rate has decreased during the period 1996 to 2001 by 6%. As expected, households who owned or were buying their homes had higher incidence rates of 'luxury' household fittings than renters, particularly for baths with spa jets, which has increased from 8% in 1996 to 14% in 2001.

		200 (n=2,0 %	06)		1996 (n=2,000) %						
Type of Fitting	Own/ Buying	Renting - Private	Renting - Public	Total	Own/ Buying	Renting - Private	Renting - Public	Total			
Bath	86	87	75	86	88	89	81	88			
Bath with spa jets	14	4	-	12	8	1	-	6			
Spa pool	5	1	-	4	3	-	-	3			
Above ground swimming pool	3	1	-	3	3	*	-	2			
In ground swimming pool	4	1	-	3	4	1	-	3			
Toddler's Pool	4	6	4	4	6	5	4	6			
Sauna	*	-	-	*	*	-	-	*			
Waterbed	2	1	1	2	4	5	2	4			
None of the above	5	11	24	7	6	10	19	8			

 Table 7.1.1.3: <u>Types of Household Fittings by Home Ownership Status</u>

Base: Total respondents 2001 and 1996 Surveys.

\* Less than 0.5% response

### 7.1.2 Number of and Types of Showers and Toilets

### 7.1.2.1 Toilets

The mean number of toilets overall per household has risen from 1.4 to 1.6 during the period 1996 to 2001. The mean number of single flush toilets decreased slightly from 0.7 to 0.6 and the average number of dual flush toilets rose slightly (1.1 in 1996 to 1.2 in 2001). The proportion of households with dual flush toilets has increased from 53% in 1996 to 71% in 2001, whilst the corresponding proportion of single flush toilets has fallen from 55% to 37%. These changes are generally consistent across all sample types.

		(n	2001 =2,006) %				(	1996 n=2,000 %	))	
No. of Toilets	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total
1 toilet	44	68	71	69	54	59	79	84	81	68
2 toilets	42	29	26	27	36	34	19	16	18	27
3+ toilet	14	3	3	3	10	7	1	1	1	5
Mean No of Toilets	1.7	1.4	1.3	1.3	1.6	1.5	1.2	1.2	1.2	1.4
No single Flush Toilets	43	37	37	37	41	48	38	43	40	45
1+ single flush toilets	33	46	42	44	37	52	62	57	60	55
Mean No of Single Flush	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.6	0.7	0.7
No Dual Flush Toilet	16	23	23	23	18	11	10	5	8	10
1+ dual flush toilet	75	61	65	63	71	58	44	47	45	53
Mean No of Dual Flush	1.4	0.9	1.0	0.9	1.2	1.2	1.0	1.1	1.0	1.1

#### 7.1.2.1.1: <u>Mean Number and Type of Toilets by Sample Type</u>

### 7.1.2.2 Showers

In 2001 non-concession households had a slightly higher mean number of showers (1.6) than concession households (1.3) with both up slightly from 1996 (1.4 and 1.1 respectively in 1996). Almost a quarter of households had at least one water saving shower (24%), marginally higher than in 1996 (22%). Non-concession households had the highest incidence rate of water saving showers (0.4 per household), but there was very little change across all sub-groups between 1996 and 2001.

		(	2001 n=2,006) %			1996 (n=2,000) %						
No. of Showers	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total		
1 Shower	51	76	75	75	60	64	86	87	86	73		
2 Showers	43	23	24	23	36	33	12	13	13	25		
3+ Showers	6	1	2	1	4	3	1	*	1	2		
Mean No. of Showers	1.6	1.3	1.3	1.3	1.4	1.4	1.1	1.1	1.1	1.3		
No Water Saving Showers	74	71	79	75	74	75	82	81	81	78		
1 Water Saving Shower	16	23	18	20	17	19	18	17	17	18		
2 Water Saving Showers	9	5	3	4	7	6	1	2	1	4		
3+ Water Saving Showers	1	*	-	*	*	1	*	*	*	*		
Mean No. of Water Saving	0.4	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3		
Showers												

### 7.1.2.2: <u>Mean Number and Type of Showers by Sample Type</u>

## 7.1.3 Heating Systems for Spas and Swimming Pools

In 2001, just 4% of households had a spa pool, up from 3% in 1996. Six percent of households had a swimming pool, slightly higher than in 1996 (5%).

		2001 (n=2,006) %			1996 (n=2,000) %	
No. of Spas/Swimming Pools	Non- Concession	Total Concession	Total	Non- Concession	Total Concession	Total
Have Spa Pool	6	2	4	4	1	3
Have Swimming Pool	9	2	6	8	2	5

Due to small sample sizes analysis of the types of heating systems used for both spa pools and swimming pools has been limited to comparisons between concession and nonconcession households.

Since 1996 there appears to be an increase in the prevalence of heating spa pools by both electrical means and via solar means, at the expense of gas. There also appears to be a trend away from using gas heating for swimming pools over this period, and a substantial increase in the use of solar heating.

		2001 (spa n=65) pool n= 94) %			1996 (spa n=46) (pool n= 102) %	
Types of Heating for Spas/Pools	Non- Concession	Total Concession	Total	Non- Concession	Total Concession	Total
Spa- Electric	28	34	30	8	13	9
Spa-Gas	55	72	60	68	63	68
Spa- Solar	13	-	10	5	24	9
Pool – Gas	6	6	6	14	-	12
Pool - Solar	43	-	35	36	27	35

#### 7.1.3.2: Types of Heating for Spas and Pools by Sample Type

Base: Total Respondents 2001 and 1996 surveys has spa pool and/or swimming pool

### 7.2 HOUSEHOLD WATER APPLIANCES

#### 7.2.1 Washing Machines

In the 2001 survey most households had a top loader washing machine (87%) rather than a front loader (10%). The proportion of households with top loader washing machines has increased for concession households and decreased for non-concession households. There was a corresponding increase in the incidence of front loaders for non-concession households.

The incidence of households without a washing machine has halved since 1996, whilst the incidence of front loaders has increased from 5% to 10%.

	2001 (n=2006) %						1996 (n=2,000) %					
Type of Washing Machine	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total		
Top Loader	85	94	88	91	87	90	85	86	86	88		
Front Loader	13	3	5	4	10	6	3	3	3	5		
Other	*	1	2	2	1	n/c	n/c	n/c	n/c	n/c		
None of these	2	2	5	3	2	5	11	11	11	7		
Can't Say	1	-	*	*	*	-	-	-	-	-		

Base: Total respondents 2001 and 1996 Surveys

\* Less than 0.5% response

In 2001 one person households were more likely to have a top loader machine (85%) than in 1996 (77%), whilst incidence of top loader machines amongst other households fell or remained unchanged. The incidence of front loaders increased across all sub-groups between 1996 and 2001.

A relatively high proportion of one person households did not have a washing machine in 1996 (19%). However, this figure was only 7% in 2001.

		(	2001 n=2,006 %	5)	1996 (n=2,000) %					
Type of Washing Machine	1 person	2 persons	3 persons	4 or more persons	Total	1 person	2 persons	3 persons	4 or more persons	Total
Top Loader	85	88	87	87	87	77	88	90	93	88
Front Loader	6	9	10	12	10	4	6	6	4	5
Other	2	1	1	-	1	n/c	n/c	n/c	n/c	n/c
None of these	7	2	2	1	2	19	6	4	3	7
Can't Say	1	*	*	*	*	-	-	-	-	-

 Table 7.2.1.2: <u>Types of Washing Machine by Household Size</u>

Base: Total respondents 2001 and 1996 Surveys

\* Less than 0.5% response

Public renters were the least likely group to have a washing machine of any kind, down from 41% in 1996 to 14% in 2001. Owners/buyers were more likely to have any type of washing machine than renters were.

Front loading washing machines were more commonly found in households that are owned or privately rented (10% each) than in public rental households (3%).

		200 (n=2,0 %	06)	1996 (n=2,000) %					
Type of Washing Machine	Own/ Buying	Renting - Private	Renting - Public	Total	Own/ Buying	Renting - Private	Renting - Public	Total	
Top Loader	89	81	78	87	93	80	57	88	
Front Loader	10	10	3	10	5	5	2	5	
Other	1	*	5	1	n/c	n/c	n/c	n/c	
None of these	*	8	14	2	1	16	41	7	
Can't Say	*	1	-	*	-	-	-	-	

 Table 7.2.1.3: <u>Types of Washing Machine by Home Ownership Status</u>

Base: Total respondents 2001 and 1996 Surveys

\* Less than 0.5% response

### 7.3 GARDENS, WATER TANKS & BORES

### 7.3.1 Incidence of Having a Garden

In 2001, 91% of all households reported having a garden compared to 89% in 1996.

In respect of sample type, a slightly higher proportion of non-concession households had a garden in 2001 than did concession cardholders (91% cf 90%). However, a higher proportion of aged/service concession holders than other cardholders had a garden (94% cf 86%). In 1996, 93% of non-concession householders and 84% of concession cardholders had gardens. A higher proportion of aged/service pensioners had a garden in 1996 than other concession households (87% cf 81%).

In general, the bigger the household the more likely it was to have a garden. In 2001, 95% of households with 4 or more people had a garden, compared to 92% of households with 3 people, 91% of two person households and 84% of single person households. The same trend was apparent in the 1996 survey.

Homeowners (97%) and home buyers (95%) were also more likely to have a garden in 2001 than households in private or public rental (70% each). This was also the case in 1996 where the majority of homeowners (98%) and home buyers (98%) had gardens compared to 72% of private sector renters and 51% of public sector renters.

#### 7.3.2 Methods used for Watering Gardens

Table 7.3.2 overleaf shows the methods used to water gardens by households that had gardens. Note that multiple answers could be given so the table does not show the main method used to water the garden, rather it shows the incidence of methods used.

Hand held hoses were used by over three quarters of households in 2001 (75%) and over a third of households used a built-in sprinkler (39%). Those were also the main methods used in 1996 but the proportion of households using hoses and built-in sprinklers was lower than for 2001. Slightly more households used a portable sprinkler or other methods of watering or never watered their garden in 1996 than in 2001.

In respect of location, in 2001 Melbourne households with gardens were slightly more likely than country Victorian households to use a hand held hose (76% cf 73%). Melbourne households were however, less likely to use a built-in sprinkler (37% cf 42%) or a portable sprinkler (19% cf 25%) than households in country Victoria. This trend was even more marked in 1996, when 73% of Melbourne households used a hand-held hose compared to 63% of households in country Victoria. In addition, country households were more than twice as likely as Melbourne households to use a portable sprinkler (39% cf 16%) and more likely to use a built-in sprinkler (34% cf 23%).

In 2001, non-concession householders with gardens were more likely than concession cardholders with gardens to use a built-in sprinkler (46% cf 27%) or a portable sprinkler (23% cf 18%), whilst a greater proportion of concession cardholders used a hand held hose than non-concession householders (81% cf 71%). This was also the case in 1996, where 33% of non-concession householders used a built-in sprinkler compared to 17% of concession cardholders. Three quarters (75%) of concession cardholders and two thirds (65%) of non-concession householders used a hand held hose.

Not surprisingly, homebuyers and home owners (43% each) were more likely than households in the private (19%) or public (2%) rental sectors to use a built-in sprinkler in 2001. This was also the case in 1996, where 35% of home buyers and 29% of home owners used a built-in sprinkler compared to 8% each of private sector and public sector rental households.

Method	2001 (n=1,790) %	1996 (n=1,774) %
Hand held hose	75	69
Built-in sprinkler	39	27
Portable/walking sprinkler	21	23
Other methods of watering	2	3
Never water the garden	3	6
Can't say	*	-

<b>Table 7.3.2:</b>	Methods Used to	Water Gardens 2001 and 1996

Base: Total respondents with a garden 2001 and 1996.

Note: Multiple answers could be given for this question.

### 7.3.3 Watering in Warmer Months

In the warmer months, households that had a garden in 2001 watered the garden an average of 3.4 times a week, and spent an average of 1.2 hours watering each time (an average total of approximately 4 hours spent watering per week). These results did not vary between sample type and other key sub-groups.

In 1996, households that had a garden watered their garden 3.4 times a week on average in the warmer months. These households spent an average of 1.1 hours watering each time, or an average total of approximately 3.7 hours per week, slightly less than in 2001.

### 7.3.4 Water Tanks

Chart 7.3.4 details the incidence of water tanks on households from both the 1996 and 2001 surveys. In the 2001 and 1996 surveys, Bendigo households had the highest incidence rate of water tanks (28% and 26% respectively). Shepparton was the only region where incidence of water tanks decreased during the period 1996 to 2001 (from 12% to 8%). The proportion with water tanks in the remaining sample sub-groups has stayed relatively consistent over time

### Chart 7.3.4: Incidence of Water Tanks by Year, Sample Type, Household Size and Location

"Is there tank water on this property"



Base: Total respondents 2001 and 1996 surveys.

Overall in 2001 and 1996, 46% of all households who owned a water tank used the water for drinking only. This was higher for country Victoria where 65% of country households who owned a water tank used it for drinking water only in 2001 and 61% in 1996. Bendigo had the highest incidence of drinking water only with 72% of households using their water tanks for drinking, compared to 57% of Melbourne households.

After drinking water only (46%), the next most common use of tank water was for garden watering (38%). Melbourne households were more likely to use their tank water for garden watering (74%) than country Victorian households were (20%).

	2001 (n=123) %								1996 (n=106) %						
Uses of Tank Water	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Vic	Total	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total country Vic	Total	
Drinking only	7	54	58	72	65	65	46	11	68	65	55	72	61	46	
Drinking/cooking/ washing	13	18	49	21	-	23	20	19	29	12	30	5	22	21	
Emergency use	6	-	4	-	-	1	2	3	-	-	6	-	3	3	
Fire fighting purposes	2	-	-	-	-	-	1	n/c	n/c	n/c	n/c	n/c	n/c	n/c	
All purposes	9	5	-	2	-	2	4	-	-	-	3	-	2	1	
Garden watering	75	59	7	11	16	20	38	n/c	n/c	n/c	n/c	n/c	n/c	n/c	
Other	24	-	7	2	-	3	9	36	29	23	22	7	19	25	
Don't use	-	-	7	8	19	8	5	n/c	n/c	n/c	n/c	n/c	n/c	n/c	

Table 7.3.4.1: Uses of Tank Water by Location

Base: Total respondents 2001 and 1996 Surveys have water tank on property.

• Less than 0.5% response

Non-concession households are more likely to use their water tank for gardens (47%) than concession households (28%). Concession households more commonly used water tanks solely for drinking than non-concession households (60% and 32% respectively).

		(	2001 n=123) %		1996 (n=106) %					
Uses of Tank Water	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total
Drinking only	32	59	64	60	46	43	56	35	50	46
Drinking/cooking/washing	15	30	12	25	20	21	26	13	22	21
Emergency use	3	2	I	1	2	5	-	-	-	3
Fire fighting purposes	-	2	-	1	1	n/c	n/c	n/c	n/c	n/c
All purposes	3	7	-	5	4	2	-	-	-	1
Garden watering	47	27	31	28	38	n/c	n/c	n/c	n/c	n/c
Other	14	-	18	5	9	28	24	6	19	25
Don't use	5	5	6	6	5	n/c	n/c	n/c	n/c	n/c

 Table 7.3.4.2: Uses of Tank Water by Sample Type

Base: Total respondents 2001 and 1996 Surveys have water tank on property. n/c not completed 1996

### 7.3.5 Bores

In both the 2001 and 1996 surveys, 1% of all households had bore water on the property.

In 2001, 3% of Bendigo properties had bore water and 1% each in Melbourne and Shepparton with none in Geelong. In 1996, 1% of properties in Melbourne, Ballarat and Shepparton had bore water with none in Geelong and Bendigo.

No trends were evident by concession type.

## 8 FACTORS AFFECTING ENERGY AND WATER USAGE

### 8.1 HEALTH PROBLEMS

Overall 7% of households had a health problem which affected their electricity energy usage, 6% which affected their gas energy usage and 2% their water usage. Similar incidence rates were recorded in the 1996 survey (7% each for electricity/gas, 2% for water).

Of those households where health problems affected their electricity usage in 2001, 49% were due to asthma, 16% to arthritis, 6% to emphysema and 5% to multiple sclerosis. Most of those households who consumed additional energy did so for their vaporiser (45%) or for heating in order maintain a constant household temperature (53%).

Of those households where health problems affected gas usage in 2001, 43% were due to asthma and 21% to arthritis/back pain/joint complaints. Nearly all of those households who consumed additional gas did so in order to heat their homes and retain a constant temperature (77%). Only a small percentage of households had a member who suffered from a health problem which affected their water usage. Over a third (37%) of these households stated that water usage increased due to additional showers/baths.

Other concession holders and non-concession households were more likely to have their electricity usage affected by asthma problems (66% and 55%), and aged/service pensioners by arthritis/bad back/joint problems (32%). This was also the case with gas usage.

	2001 %						1	1996 %		
	Non- Concession	Aged Service	Other Concession	Total Concession	Total	Non Concession	Aged Service	Other Concession	Total Concession	Total
Health problem which		(	(n=157)	)				(n=145)	)	
affects electricity usage -			i	•	i		i			
Asthma	55	23	66	45	49	46	11	60	37	40
Arthritis/bad back/joints	9	32	9	20	16	16	45	14	29	24
Emphysema/lungs	2	11	9	10	6	-	-	-	-	-
Multiple Sclerosis	6	5	5	5	5	-	-	-	-	-
Other	27	39	17	28	28	38	44	26	35	36
Can't Say	5	4	4	4	5	-	-	-	-	-
Health problem which		(	(n=128)					(n=155)	)	
affects gas usage-										
Asthma	50	20	51	35	43	32	8	41	24	27
Arthritis/bad back/joints	10	39	24	32	21	26	45	24	35	32
Other	40	61	25	44	42	42	48	37	43	43
Can't Say	5	2	8	5	5	-	-	-	-	-
Health problem which	(n=37) (n=40)									
affects water usage-										
Miscellaneous	100	100	89	95	97	100	100	100	100	100
Can't Say	-	-	11	5	3	-	-	-	-	-

Base: Total respondents with a health problem which affects electricity, gas or water usage

### 8.2 CONSERVATION OF ENERGY AND WATER

#### 8.2.1 Energy Conservation

#### 8.2.1.1 Perceived Causes of High Energy Usage or Wastage

Tables 8.2.1.1.1 through to 8.2.1.1.3 detail the causes of high energy wastage. Between the period 1996 to 2001 reported causes of high energy usage have remained fairly consistent between all of the sample groups. Of interest is the consistently high number of householders (46% in 1996 compared with 43% in 2001) who state there are no causes of high energy usage/wastage within their homes. This claim is particularly evident amongst aged service households (74% and 67% in 1996 and 2001 respectively).

The principal perceived cause of high energy wastage amongst both concession (13%) and non-concession (24%) householders was of appliances being left on. Non-concession householders also frequently stated that long showers and baths (16%) and frequent usage of large electrical appliances (14%) causes high energy wastage. In comparison only 9% of concession holders mentioned long showers and 8% frequent use of electrical appliances. The perceived causes of high energy usage amongst concession and non-concession households has remained fairly consistent during the period 1996 to 2001. Notable differences between surveys include open plan design (4% in 1996 and 10% in 2001), frequent use of large electrical appliances (9% and 12%) and no/poor insulation (1% and 5%).

			2001 =2,006) %		1996 (n=2,000) %					
Causes of high energy usage or waste	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total
Lights/appliances left on	24	5	21	13	20	24	4	23	12	19
Long showers or frequent baths	16	4	15	9	13	15	2	13	7	12
Frequent use of large electric appliances	14	5	12	8	12	11	4	11	7	9
Open plan design	11	7	9	8	10	6	1	3	2	4
Doors left open and heat lost	9	3	13	8	8	14	4	17	9	12
Very high ceilings	6	5	5	5	6	8	4	7	5	7
Heating turned up too high	7	3	10	6	6	8	2	6	4	7
No/poor insulation	5	1	8	4	5	1	*	2	1	1
Poor quality dwelling	2	1	7	4	3	4	2	9	5	4
Expensive to run/faulty appliances	3	2	4	3	3	4	1	4	2	3
General usage of	4	2	3	3	3	n/c	n/c	n/c	n/c	n/c
heating/external use										
Excessive people traffic	2	1	3	2	2	3	*	1	1	2
Other	11	5	6	5	9	4	1	5	3	3
None	37	67	37	53	43	37	74	37	58	46
Can't say	3	5	6	5	4	n/c	n/c	n/c	n/c	n/c

## Table 8.2.1.1.1 Causes of High Energy Usage or Wastage by Sample Type

Base: Total respondents 2001 and 1996 Surveys.

\* Less than 0.5% response

Larger households of four or more persons more commonly mentioned lights and appliances being left on (35%), long showers (25%), frequent use of large electrical appliances (19%) and open plan design (14%) as causes for energy wastage than did smaller households.

		(	2001 n=2,006) %			1996 (n=2,000) %						
Causes of high energy usage or waste	1 person	2 persons	3 persons	4 or more persons	Total	1 person	2 persons	3 persons	4 or more persons	Total		
Lights/appliances left on	6	12	26	35	20	6	11	23	35	19		
Long showers or frequent baths	4	8	15	25	13	2	5	16	21	12		
Frequent use of large electric appliances	2	8	17	19	12	4	7	11	14	9		
Open plan design	7	7	10	14	10	4	4	6	5	4		
Doors left open and heat lost	3	5	12	13	8	5	8	12	20	12		
Very high ceilings	5	6	5	5	6	7	6	9	6	7		
Heating turned up too high	4	5	8	9	6	2	6	6	10	7		
No/poor insulation	4	6	4	4	5	1	2	2	1	1		
Poor quality dwelling	2	3	2	3	3	3	5	5	4	4		
Expensive to run/faulty appliances	3	3	4	3	3	2	3	3	4	3		
General usage of	2	3	4	4	3	n/c	n/c	n/c	n/c	n/c		
heating/external usage												
Excessive people traffic	1	*	2	5	2	1	1	3	3	2		
Other	6	8	13	10	9	4	4	3	3	3		
None	63	50	33	26	43	65	57	39	27	46		
Can't say	5	3	4	3	4	n/c	n/c	n/c	n/c	n/c		

Base: Total respondents 2001 and 1996 Surveys.

\* Less than 0.5% response

A relatively high proportion of public (14%) and private (10%) renters mentioned poor insulation as a cause of high energy usage in 2001, up since 1996.

Table 8.2.1.1.3	Causes of High	<b>Energy Usage or</b>	Wastage by Home	Ownership Status
-----------------	----------------	------------------------	-----------------	------------------

		200 (n=2, %	006)			1996 (n=2,00 %		
Causes of High Energy Usage or Waste	Own/ Buying	Renting - Private	Renting - Public	Total	Own/ Buying	Renting - Private	Renting - Public	Total
Lights/appliances left on	20	19	16	20	20	20	13	19
Long showers or frequent baths	14	10	8	13	12	12	7	12
Frequent use of large electric appliances	12	14	9	12	9	13	3	9
Open plan design	10	10	5	6	5	6	2	4
Doors left open and heat lost	8	9	12	8	12	12	10	12
Very high ceilings	5	6	4	6	7	9	1	7
Heating turned up too high	6	7	6	6	6	7	7	7
Excessive people traffic	2	2	2	2	2	1	-	2
No/poor insulation	4	10	14	5	1	3	1	1
Poor quality dwelling	2	8	9	3	2	11	10	4
Expensive to run/faulty appliances	3	5	7	3	4	4	1	3
General usage of	3	3	3	3	n/c	n/c	n/c	n/c
heating/external use								
Other	8	12	7	9	3	6	3	3
None	44	35	47	43	47	38	53	46
Can't say	4	3	1	4	n/c	n/c	n/c	n/c

Base: Total respondents 2001 and 1996 Surveys.

\* Less than 0.5% response

### 8.2.1.2 Perceived Impacts on High Energy Usage or Wastage

Respondents were asked which causes of energy usage or wastage had the biggest impact on their energy bills. This question was only asked of those householders who had previously named one or more factors that caused energy wastage in their homes.

In 2001, the biggest impact on energy bills was lights/appliances left on (18%) followed by frequent use of large electrical appliances (13%), open plan design (12%) and long showers or frequent baths (11%). These factors were also mentioned by more frequently than others in 1996, with the exception of open plan design, where only 5% said that was an impact on energy bills. However, doors left open and heat lost was a greater impact in 1996 than in 2001 (10% cf 4%).

Non-concession households were more likely to mention long showers or frequent baths as an impact on energy bills than were concession households (13% cf 9%). This was also the case in 1996. However, there were no notable differences between non-concession and concession households in 2001. In 1996, a far larger proportion of non-concession households mentioned lights/appliances left on than concession households (21% cf 15%).

		2001 (n=990) %						1996 (n=1,029) %					
Biggest Impact on Energy Bills	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total			
Lights/appliances left on	19	10	20	17	18	21	8	19	15	19			
Frequent use of large electric appliances	13	15	10	12	13	11	11	13	12	11			
Open plan design	12	20	8	12	12	5	4	4	4	5			
Long showers or frequent baths	13	6	10	9	11	12	5	7	6	10			
Heating turned up too high	6	9	10	9	7	8	8	6	6	8			
No/poor insulation	6	4	6	6	6	1	1	1	1	1			
Doors left open and heat lost	3	3	9	7	4	10	10	10	10	10			
Very high ceilings	3	6	3	4	4	6	10	7	8	7			
Expensive to run/faulty appliances	4	4	4	4	4	5	7	4	5	5			
Poor quality dwelling	2	2	7	5	3	2	4	10	8	4			
General usage of	2	-	2	2	2	n/c	n/c	n/c	n/c	n/c			
heating/external use													
Excessive people traffic	1	-	2	1	1	3	-	1	1	2			
Other	14	15	6	9	12	5	2	5	4	4			
Can't say	3	6	4	5	3	n/c	n/c	n/c	n/c	n/c			

## Table 8.2.1.2.1: <u>Biggest Impact on High Energy Bills by Sample Type</u>

Base: Total respondents 2001 and 1996 surveys who stated a cause of high energy usage

\* Less than 0.5% response

In 2001, the larger the household the greater the proportion who named lights/appliances left on, frequent use of large electric appliances, long showers or frequent baths and open plan design as having the biggest impact on bills. One person households were more likely to name open plan design (16%) and heating turned up too high (10%) than other households.

		2001 (n=990) %					(	1996 n=1,029 %	))	
Biggest Impact on Energy Bills	1 person	2 persons	3 persons	4 or more persons	Total	1 person	2 persons	3 persons	4 or more persons	Total
Lights/appliances left on	9	16	19	21	18	13	16	18	24	19
Frequent use of large electric appliances	7	11	15	15	13	9	15	9	11	11
Open plan design	16	10	11	13	12	8	5	7	3	5
Long showers or frequent baths	7	9	13	14	11	3	6	13	14	10
Heating turned up too high	10	7	8	6	7	5	11	8	7	8
No/poor insulation	9	9	4	3	6	1	3	1	*	1
Doors left open and heat lost	2	3	5	6	4	9	8	11	12	10
Very high ceilings	5	7	1	2	4	11	7	8	5	7
Expensive to run/faulty appliances	7	5	2	3	4	6	4	6	5	5
Poor quality dwelling	5	4	2	2	3	5	7	3	3	4
General usage of heating/external usage	2	1	1	2	2	n/c	n/c	n/c	n/c	n/c
Excessive people traffic	-	-	1	2	1	2	1	3	2	2
Other	18	14	14	8	12	6	5	4	4	4
Can't say	4	2	5	3	3	n/c	n/c	n/c	n/c	n/c

Table 8.2.1.2.2: Biggest Impact on High Energy Bills by Household Size

Base: Total respondents 2001 and 1996 surveys who stated a cause of high energy usage

\* Less than 0.5% response

No or poor insulation and a poor quality dwelling were named as having the biggest impact on energy bills in 2001 by greater proportions of rental households than those owning or buying their homes. A higher proportion of households in public rental named expensive to run/faulty appliances (10%) as having the biggest impact on energy bills than other households did.

		200 (n=9 %	90)			199 (n=1,0 %	29)	
Biggest Impact on Energy Bills	Own/ Buying	Renting - Private	Renting - Public	Total	Own/ Buying	Renting - Private	Renting - Public	Total
Lights/appliances left on	19	16	13	18	20	17	17	19
Frequent use of large electric appliances	13	14	13	13	11	16	4	11
Open plan design	13	8	7	12	5	5	2	5
Long showers or frequent baths	13	4	10	10	11	8	6	10
Heating turned up too high	7	6	8	7	7	9	10	8
No/poor insulation	5	9	10	6	1	3	1	1
Doors left open and heat lost	4	6	3	4	11	8	12	10
Very high ceilings	3	5	-	4	7	7	4	7
Expensive to run/ faulty appliances	3	5	10	4	6	3	3	5
Poor quality dwelling	1	8	12	4	2	7	17	4
General usage of heating/external use	1	2	3	2	n/c	n/c	n/c	n/c
Excessive people traffic	1	-	1	1	2	2	-	2
Other	12	14	8	12	4	7	2	4
Can't say	4	2	1	3	n/c	n/c	n/c	n/c

Table 8.2.1.2.3	<b>Biggest Imnact on</b>	High Energy Bills h	y Home Ownership Status
1 abit 0.2.1.2.0	Diggest impact of	I Ingh Energy Dins b	y mome o wher ship Status

Base: Total respondents 2001 and 1996 surveys who stated a cause of high energy usage

\* Less than 0.5% response

### 8.2.1.3 Energy Saving Modifications Made

The question regarding energy saving modifications was slightly altered for the 2001 survey. By focusing on modifications made by the current householder (as opposed to modifications *ever* made to the dwelling as in 1996) it was considered that a truer representation of household modifications to save energy would be obtained. As such, the proportions naming energy saving modifications has fallen considerably since 1996 as can be seen in the table following. This difference in the sample base should be taken into consideration when interpreting the results for this question, and as such the 1996 and 2001 results are not strictly comparable.

Incidence of making energy saving modifications to current dwelling	% Naming Energy Saving Modifications		% No Energy Saving Modifications Made		Any ] Sa Modif	aware of Energy ving ications ade	% Can't say		
	2001 1996		2001	1996	2001	1996	2001	1996	
By Sample Type -									
Non Concession	58	89	22	5	16	6	4	n/c	
Aged Service	55	85	23	7	17	7	5	n/c	
Other Concession	46	69	27	14	22	17	5	n/c	
Total Concession	50	78	25	10	20	12	5	n/c	
By Household Size -									
1 person	42	76	30	11	23	13	5	n/c	
2 persons	55	87	24	6	18	7	3	n/c	
3 persons	58	83	22	9	16	8	4	n/c	
4 + persons	63	88	18	4	15	8	4	n/c	
By Home Status -									
Own/Buying	63	93	20	4	13	3	4	n/c	
Renting – private	23	63	37	14	34	23	6	n/c	
Renting – Public	27	51	32	20	35	29	6	n/c	
TOTAL	55	84	23	7	18	9	4	n/c	

### Table 8.2.1.3.1 Incidence of Energy Saving Modifications Being Made

In the 2001 survey, the most commonly mentioned energy saving modification made to dwellings was roof insulation, named by over two thirds of households whose dwellings had energy saving modifications (65%). The incidence of this modification has fallen since the 1996 survey, where 83% named this action. The second most commonly named modification in 2001 was having special window treatments (34%), a higher proportion than that named in 1996 (21%). Wall insulation (29%) and the use of draught stoppers on doors (25%) were also mentioned by over a quarter of households each.

In 2001, non-concession households were more likely to mention wall insulation (33%) than concession households (23%). Other than that, there was little difference in the types of modifications made by non-concession and concession households.

			2001 =1,082) %		1996 (n=1,684) %					
Energy Saving Modifications Made	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total
Roof insulation	64	70	60	67	65	86	83	73	79	83
Special window treatments	33	39	34	37	34	20	26	19	23	21
Wall insulation	33	17	31	23	29	34	23	21	22	30
Draught stoppers on doors	24	26	26	26	25	44	43	43	43	44
Special energy efficient light globes	17	9	14	12	15	20	10	13	11	17
North facing aspect	9	8	11	9	9	31	28	21	25	28
Deciduous shading plants	8	9	5	7	8	22	13	13	13	19
Fewer/smaller windows facing west	2	2	2	2	2	18	12	11	12	16
Double glazed windows	3	2	2	2	2	2	2	1	2	2
Skylights	2	1	1	1	2	n/c	n/c	n/c	n/c	n/c
Ceiling Fans	2	1	2	1	2	n/c	n/c	n/c	n/c	n/c
Other Energy Saving Features	25	13	18	15	22	n/c	n/c	n/c	n/c	n/c

Table 8.2.1.3.2 Energy Saving Modifications Made to Dwelling by Sample Type

Base: Total respondents naming an energy saving modification to their dwelling 2001 and 1996 Surveys.

\* Less than 0.5% response

There were no significant differences in 2001 between households of different sizes and energy saving modifications made. The larger the household the more likely they were to have mentioned wall insulation. Similarly, with special energy efficient light globes.

	2001 (n=1,082) %						1996 (n=1,684) %					
Energy Saving Modifications named	1 person	2 persons	3 persons	4 or more persons	Total	1 person	2 persons	3 persons	4 or more persons	Total		
Roof insulation	62	66	68	62	65	76	83	80	89	83		
Special window treatments	33	37	34	32	34	24	23	23	18	21		
Wall insulation	14	26	34	36	29	20	24	27	41	30		
Draught stoppers on doors	28	21	22	30	25	41	45	43	45	44		
Special energy efficient light globes	9	12	17	19	15	7	16	17	22	17		
North facing aspect	14	7	11	9	9	27	29	27	30	28		
Deciduous shading plants	7	9	6	8	8	9	21	17	23	19		
Fewer/smaller windows facing west	3	1	3	1	2	13	17	12	17	16		
Double glazed windows	1	2	3	3	2	2	1	3	3	2		
Skylights	*	1	*	3	2	n/c	n/c	n/c	n/c	n/c		
Ceiling Fans	2	1	2	2	2	n/c	n/c	n/c	n/c	n/c		
Other Energy Saving Features	17	19	22	27	22	n/c	n/c	n/c	n/c	n/c		

Table 8.2.1.3.3 Energy Saving Modifications Made to Dwelling by Household Size

Base: Total respondents naming an energy saving modification to their dwelling 2001 and 1996 Surveys

\* Less than 0.5% response

As expected, far fewer renters named energy saving modifications to their households than those owning or buying their home. In particular, 69% of owners/buyers had installed roof insulation compared to a little over 20% of renters. The modifications that renters were more likely to have made than owners/buyers were draught stoppers on doors and special energy efficient light globes.

		200 (n=1,0 %	<b>)82</b> )		1996 (n=1,684) %				
Energy Saving Modifications Made	Own/ Buying	Renting - Private	Renting - Public	Total	Own/ Buying	Renting - Private	Renting - Public	Total	
Roof insulation	69	24	21	65	90	50	57	83	
Special window treatments	36	23	20	34	21	20	30	21	
Wall insulation	32	6	3	29	34	9	6	30	
Draught stoppers on doors	24	33	45	25	44	42	46	44	
Special energy efficient light globes	14	23	24	15	19	6	7	17	
North facing aspect	9	13	-	9	30	22	23	28	
Deciduous shading plants	8	3	-	8	20	13	6	19	
Fewer/smaller windows facing west	2	1	7	2	16	15	5	16	
Double glazed windows	3	-	-	2	2	*	-	2	
Skylights	2	2	-	2	n/c	n/c	n/c	n/c	
Ceiling Fans	2	-	7	2	n/c	n/c	n/c	n/c	
Other Energy Saving Features	22	23	11	22	n/c	n/c	n/c	n/c	

Table 8.2.1.3.4	Energy	Saving	<b>Modifications</b>	Made to	<b>Dwelling</b>	by Ho	ome Ownership
	<u>Status</u>						

Base: Total respondents naming an energy saving modification to their dwelling 2001 and 1996 Surveys

\* Less than 0.5% response

### 8.2.1.4 Energy Saving Modifications with the Biggest Impact on Energy Bills

In the 2001 survey, households were asked which energy saving feature or modification had the biggest impact on the household's energy bills.

Roof insulation was the dominant energy saving modification, named by 44% of households that had made modifications. The only other feature named by more than one in ten was special window treatments, including drapes (13%).

No significant differences were evident when results were analysed by sample type and household size. However, differences were evident when analysed by housing status. Home owners or buyers were much more likely (47%) to say that roof insulation had had the biggest impact on energy bills than rental households. On the other hand, both public and private renters were more likely than owners/buyers to name draught stoppers on doors and special energy efficient light globes. These results reflect the types of energy modifications made by the various housing sub-groups as set out in the previous section. Rental households were more likely to make the types of modifications that did not involve structural changes to the dwelling.
	2001 (n=1,082) %						
Modifications named with Biggest Impact on Energy Bills	Own/ Buying	Renting - Private	Renting - Public	Total			
Roof insulation	47	18	19	44			
Special window treatments	13	13	12	13			
Draught stoppers on doors	6	19	18	7			
Special energy efficient light globes	5	17	24	6			
Wall insulation	4	3	3	4			
North facing aspect	4	8	-	4			
Deciduous shading plants	1	2	-	1			
Double glazed windows	1	-	-	1			
Skylights	1	-	-	1			
Fewer/smaller windows facing west	*	1	7	*			
Ceiling Fans	1	-	4	1			
Other Energy Saving Features	14	18	9	14			
Can't Say	4	2	5	4			

# Table 8.2.1.4: Energy Saving Feature or Modifications which has the Biggest Impact on Energy Bills by Home Ownership Status - 2001

Base: Total respondents naming an energy saving modification to their dwelling 2001 survey

\* Less than 0.5% response

## 8.2.1.5 Actions Undertaken to Save Energy

The predominant action taken by both non-concession and concession households in order to save on energy bills is to turn lights off when they are not in use (63% each). This is not a surprising outcome considering that most households believe this is a prime cause of energy wastage in their home.

Between 1996 and 2001 a marginally greater proportion of households were taking action in order to save energy. Specifically, wearing extra clothing and having shorter showers were action that were named by more households in 2001 than previously. In particular, here was a huge difference between 1996 and 2001 in the proportion of households who named turning appliances off when not in use (5% and 40% respectively).

		(1	2001 n=2,006) %				(	1996 n=2,000) %		
Action taken to save energy	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total
Turn lights off when not in use	63	61	65	63	63	63	58	59	58	61
Turn appliances off when not in use	38	44	44	44	40	5	5	4	5	5
Close doors to unused rooms	34	39	42	41	36	33	31	38	34	34
Wear extra clothing	24	30	26	28	26	15	17	20	18	16
Have shorter showers	12	12	14	13	13	9	10	12	11	10
Choose energy efficient appliances	13	8	10	9	11	9	3	5	4	7
Buy energy efficient light globes	11	7	9	8	10	10	6	7	7	9
Use appropriate part of stove	8	9	10	9	8	8	10	6	8	8
Efficient use of heaters	6	3	4	3	5	8	5	5	5	7
Closing of windows/blinds/drapes	4	2	3	2	3	6	2	5	3	5
Careful/sensible use of energy	1	3	1	2	2	2	3	3	3	2
Other	10	9	9	9	10	10	8	9	8	9
None	12	13	11	12	12	15	19	17	18	16
Can't say	2	2	2	2	2	1	2	2	2	1

### Table 8.2.1.5: Main Action Taken to Save on Energy Bills by Sample Type

## 8.2.1.6 Biggest Impact of Main Actions Undertaken to Save Energy

Respondents were asked which of the energy wasting actions they had taken had the biggest impact on energy bills. Turning the lights off when not in use was the most common action nominated in 2001 (26%), followed by close doors to unused rooms (22%). This was also the case in 1996, but a higher proportion in 1996 named turning lights off (34%) than in 2001 (26%).

Notable increases between surveys were wearing extra clothing (8% in 1996 compared with 12% in 2001) and turning appliances off when not in use (2% and 14% respectively). No significant differences between sub sample were observed when results were analysed by sample type and household size.

			2001 =1,709) %			1996 (n=1,643) %						
Action with the biggest impact on energy bills	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total		
Turn lights off when not in use	27	23	28	25	26	35	33	34	33	34		
Close doors to unused rooms	21	22	28	25	22	20	22	23	25	24		
Turn appliances off when not in use	14	15	11	13	14	3	3	2	2	2		
Wear extra clothing	12	15	13	14	12	6	10	11	10	8		
Efficient use of heaters	5	2	2	2	4	8	4	5	5	7		
Have shorter showers	3	2	3	3	3	3	3	5	4	3		
Buy energy efficient light globes	2	2	2	2	2	2	3	2	2	2		
Choose energy efficient appliances	4	1	2	2	3	3	2	1	1	2		
Careful/sensible use of energy	1	3	1	2	1	2	3	2	3	2		
Closing of windows/blinds/drapes	1	1	1	1	1	3	*	1	1	2		
Use appropriate part of stove	1	3	-	2	1	1	4	*	2	1		
Other	6	7	4	6	6	6	2	4	3	5		
Can't say	4	7	6	6	5	-	-	-	-	-		

Table 8.2.1.6.1: <u>Biggest Impact of Main Action on Energy Bills by Sample Type</u>

Base: Total respondents 2001 and 1996 surveys who named a main action to avoid wasting energy.

\* Less than 0.5% response

Public rental households were more likely than other households to turn lights off when not in use, both in 2001 (31%) and 1996 (36%). However, these households were less likely to close doors to unused rooms than other households. Rental households were more likely than owners/buyers to turn appliances off when not in use.

		200 (n=1,7 %	709)		1996 (n=1,643) %					
Action with the biggest impact on energy bills	Own/ Buying	Renting - Private	Renting - Public	Total	Own/ Buying	Renting - Private	Renting - Public	Total		
Turn lights off when not in use	26	22	31	26	34	35	36	34		
Close doors to unused rooms	22	23	16	22	22	23	19	22		
Turn appliances off when not in use	13	17	18	14	2	3	3	2		
Wear extra clothing	11	19	13	12	7	10	11	8		
Efficient use of heating/heaters	4	3	1	4	7	7	4	7		
Have shorter showers	3	2	3	3	3	5	4	3		
Buy energy efficient light globes	2	3	3	2	2	1	4	2		
Choose energy efficient appliances	4	*	1	3	2	1	-	2		
Careful/sensible use of energy	1	1	3	1	2	2	3	2		
Closing of windows/blinds/drapes	1	1	-	1	2	2	-	2		
Use appropriate part of stove	1	*	2	1	1	*	3	1		
Other	6	8	1	6	5	3	4	5		
Can't say	5	3	8	5	-	-	-	-		

Table 8.2.1.6.2:	<b>Biggest Imp</b>	act of Mai	n Action o	n Energy	Bills by	Home Ownership
<u>Status</u>						

Base: Total respondents 2001 and 1996 surveys who named a main action to avoid wasting energy

\* Less than 0.5% response.

## 8.2.1.7 Energy Conservation Information Sources

In both 1996 and 2001, households were asked where energy conservation information could be obtained. The proportion who could name any information source fell from 83% in 1996 to 76% in 2001. However, there was a transference of response in the proportion who were aware that a source was available, but could not name such a source (1% in 1996; 13% in 2001) away from those who considered that no information source was available (less than 1% in 1996; 17% in 2001).

Energy suppliers were the most commonly nominated as information sources, with more than half of all households naming electricity suppliers (56%) and 44% naming gas suppliers. These proportions were similar to those obtained in 1996 (56% and 41% respectively). Energy Victoria was named by 15% of households, up 5% from 1996. Local councils was named by 12%, up from less than 1% in 1996. There were also minor increases over time in the proportions nominating media and advertising sources. Similar response patterns were observed in sample type categories between surveys.

			2001					1996			
			=2,006) %			(n=2,000) %					
Energy Conservation Information Sources	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	
Electricity supplier	57	48	53	53	56	61	43	54	48	56	
Gas supplier	48	36	41	38	44	47	27	40	33	41	
Energy Victoria/ Sustainable Energy Authority of Victoria	16	13	11	12	15	13	4	8	6	10	
Local Council	12	10	13	11	12	-	*	1	*	*	
TV/radio programs	6	6	8	7	6	3	1	4	2	3	
Magazines/newspaper articles	4	5	6	6	5	6	3	3	3	5	
Advertising (TV/radio/press)	4	6	6	6	5	4	1	3	2	3	
Internet/web sites	9	1	4	2	6	n/c	n/c	n/c	n/c	n/c	
Word of mouth/advice from friends or family	3	3	3	3	3	6	5	4	5	5	
Other	9	10	5	7	8	15	19	18	18	16	
Total Aware of Info Source	79	71	72	71	76	87	74	81	77	83	
No source available	6	8	8	8	7	13	26	19	23	17	
Available but don't know where	15	21	20	21	17	1	2	1	1	1	

## Table 8.2.1.7.1: Unaided Awareness of Information Sources by Sample Type

Base: Total respondents 2001 and 1996 Surveys.

Note: Respondents could give more than one answer to this question.

\* Less than 0.5% response

For the major information sources nominated, knowledge of them tended to increase with household size, and this was also the case in 1996.

		(	2001 n=2,006 %	<b>b</b> )		1996 (n=2,000) %				
Energy Conservation Information Sources	1 person	2 persons	3 persons	4 or more persons	Total	1 person	2 persons	3 persons	4 or more persons	Total
Electricity supplier	52	52	56	63	56	45	58	52	62	56
Gas supplier	35	38	50	55	44	31	43	40	47	41
Energy Victoria/ Sustainable Energy Authority of Victoria	13	14	13	17	15	7	8	8	16	10
Local Council	9	11	14	13	12	-	*	*	*	*
TV/radio programs	4	6	7	7	6	2	2	5	4	3
Magazines/newspaper articles	5	6	5	4	5	3	5	7	5	5
Advertising (TV/radio/press)	2	6	4	6	5	2	2	3	5	3
Internet/web sites	5	6	5	7	6	n/c	n/c	n/c	n/c	n/c
Word of mouth/advice from friends or family	4	3	2	3	3	4	6	6	5	5
Other	7	10	8	8	8	17	16	18	15	16
Total Aware of Info Sources	72	76	73	80	76	74	84	82	88	83
No source available	8	7	8	6	7	26	16	18	12	17
Available but don't know where	20	18	19	14	17	-	-	-	*	-

Table 8.2.1.7.2: Unaided Awareness of Information Sources by Household Size

Base: Total respondents 2001 and 1996 Surveys.

Note: Respondents could give more than one answer to this question.

\* Less than 0.5% response

Awareness of energy conservation sources was lower for public renters (64%) than for other households in 2001. This was also the case in 1996. However, fewer people living in private rental accommodation in 2001 named electricity or gas suppliers as information sources than any other sub-group.

		200 (n=2, %	006)		1996 (n=2,000) %					
Energy Conservation Information Sources	Own/ Buying	Renting - Private	Renting - Public	Total	Own/ Buying	Renting - Private	Renting - Public	Total		
Electricity supplier	59	40	50	56	58	50	39	56		
Gas supplier	48	26	39	44	44	38	26	41		
Energy Victoria/ Sustainable Energy Authority of Victoria	16	12	10	15	11	7	6	10		
Local Council	12	11	9	12	*	1	-	*		
TV/radio programs	6	8	5	6	3	3	4	3		
Magazines/newspaper articles	5	7	5	5	5	4	2	5		
Advertising (TV/radio/press)	5	4	2	5	3	2	3	3		
Internet/web sites	5	12	1	6	n/c	n/c	n/c	n/c		
Word of mouth/advice from friends or family	3	3	2	3	6	5	2	5		
Other	8	9	7	8	15	20	14	16		
Total Aware of Info Sources	78	69	64	76	85	80	67	83		
No source available	6	7	12	7	15	21	33	17		
Available but don't know where	16	23	24	17	-	-	1	-		

Table 8	.2.1.7.3:	Unaided	Awareness	of	Information	Sources	by	Home	<b>Ownership</b>	
		<u>Status</u>								

Base: Total respondents 2001 and 1996 Surveys.

Note: Respondents could give more than one answer to this question.

\* Less than 0.5% response

## 8.2.2 Water Conservation

## 8.2.2.1 Perceived Causes of High Water Usage or Wastage

Overall, just over a third (35%) of the households surveyed in 2001 stated that there were no activities within their home that caused high water usage. This figure was 47% in 1996. This result may indicate that households are becoming more aware of water conservation and wastage practices.

The most commonly nominated cause of water wastage was long showers or frequent baths named by 31% of households in 2001 and 29% in 1996. High garden water usage (19%) and high washing machine usage (16%) were the next most common responses, up slightly from 1996.

When analysed by sample type fewer aged/service household named causes of high water usage, with over half (55%) indicating that there was no such causes in their household. This result however, was far lower than that obtained in 1996 (72%).

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			2001 (n=2,006) %	)		1996 (n=2,000) %					
Perceived Cause of High Water Usage	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	
Long showers or frequent baths	36	12	33	22	31	35	10	34	20	29	
High garden water usage	21	16	18	17	19	15	12	8	10	13	
High washing machine usage	18	10	17	13	16	17	4	17	9	14	
Dripping taps	8	4	12	8	8	5	2	8	5	5	
Single flush toilet	8	6	7	7	7	3	1	2	1	2	
Leaving tap running when brushing teeth	7	2	7	4	6	8	3	5	4	7	
Swimming pool/spa	5	1	4	2	4	3	-	1	*	2	
High Dishwasher usage	3	*	1	1	2	2	*	3	1	1	
Use of hose for cleaning	4	1	2	2	3	1	*	1	1	1	
Landlord doesn't attend to repairs	*	*	2	1	1	1	-	3	1	1	
Other	7	3	8	6	6	4	2	5	3	4	
None	30	55	32	44	35	47	72	44	60	47	
Can't say	3	5	4	5	3	2	3	2	3	2	

# Table 8.2.2.1.1 Perceived Cause of High Water Usage by Sample Type

Base: Total respondents 2001 and 1996 Surveys.

\* Less than 0.5% response

In 1996, 32% of public renters named a cause of high water usage and in 2001 this figure was 56%. The proportion of public rental households aware of causes of high water usage has increased since 1996. It is likely that since 1996 greater proportions of public tenants are receiving water bills and are therefore more conscious of water conservation.

		2001 (n=2,00 %			1996 (n=2,000) %				
Perceived Cause of Water Usage	Own/ Buying	Renting - Private	Renting - Public	Total	Own/ Buying	Renting - Private	Renting - Public	Total	
Long showers or frequent baths	31	27	32	31	29	32	18	29	
High garden water usage	21	13	7	19	16	6	3	13	
High washing machine usage	16	16	19	16	15	16	5	14	
Dripping taps	7	13	9	8	4	8	8	5	
Single flush toilet	8	6	6	7	2	3	1	2	
Leaving tap running when brushing teeth	6	6	5	6	7	6	4	7	
Swimming pool/spa	5	1	-	4	2	2	-	2	
High Dishwasher Usage	2	3	-	2	2	1	1	1	
Use of hose for cleaning	3	1	2	3	1	-	1	1	
Landlord doesn't attend to repairs	-	3	5	1	-	2	3	1	
Other	6	8	11	6	4	5	5	4	
None	35	38	40	35	46	46	63	47	
Can't say	3	3	5	3	1	2	6	2	

Table 8.2.2.1.2: Perceived Cause of High Water Usage by Home Ownership Status

Base: Total respondents 2001 and 1996 Surveys.

## 8.2.2.2 Activities Having the Biggest Impact on High Water Usage

Households that had named one or more causes of high water usage were asked to name which causes had the biggest impact on water usage. Perceptions since 1996 have remained relatively stable in relation to the activities that have the biggest impact on water usage. Long showers or frequent baths remains the most common response, (up from 1996) followed by high garden water usage (also up) and high washing machine usage.

		(1	2001 n=1,140) %					1996 (n=976) %		
Biggest Impact on Water Usage	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total
Long showers or frequent baths	36	21	33	28	33	27	17	27	24	26
High garden water usage	23	33	16	23	23	16	38	11	21	17
High washing machine usage	13	15	14	15	14	16	7	20	15	16
Single flush toilet	5	9	7	8	6	1	2	2	2	2
Dripping taps	5	6	6	6	5	3	3	6	5	4
Swimming pool/spa	5	-	4	2	4	3	1	-	*	2
Leaving tap running when brushing teeth	2	2	2	2	2	5	7	2	4	5
Use of hose for cleaning	2	2	1	1	2	1	1	-	*	1
Landlord doesn't attend to repairs	*	*	1	1	1	*	-	2	1	1
High Dishwasher usage	1	1	-	*	1	1	-	3	2	1
Other	5	7	8	7	6	6	8	4	5	6
Can't say	3	5	8	7	4	6	6	9	8	6

 Table 8.2.2.2.1 Biggest Impact on High Water Usage by Sample Type

Base: Total respondents 2001 and 1996 Surveys who stated a cause of high water usage

\* Less than 0.5% response

Perceptions have changed somewhat over time when results were analysed by home ownership status. A higher proportion of owners/buyers mentioned long showers or frequent baths in 2001 than in 1996, and public rental households were more inclined to report high washing machine usage and single flush toilet as having a bigger impact in 2001 than in 1996. For private renters, high garden water usage was up between surveys (by 8%) as well as dripping taps (up 6%).

		200 (n=1,1 %	40)		1996 (n=985) %					
Biggest Impact on Water Usage	Own/ Buying	Renting - Private	Renting - Public	Own/ Buying	Renting - Private	Renting - Public	Total			
Long showers or frequent baths	34	28	35	33	25	26	35	26		
High garden water usage	26	16	4	23	21	8	4	17		
High washing machine usage	12	17	22	13	15	20	12	16		
Single flush toilet	6	5	10	6	1	3	-	2		
Dripping taps	4	11	2	6	3	5	12	4		
Swimming pool/spa	5	2	-	4	3	2	-	2		
Leaving tap running when brushing teeth	2	3	-	2	5	4	4	5		
Use of hose for cleaning	2	1	2	2	1	-	2	1		
Landlord doesn't attend to repairs	-	3	5	1	-	2	4	1		
High Dishwasher Usage	1	1	-	1	2	2	-	1		
Other	5	8	12	6	6	6	4	6		
Can't say	4	6	8	4	6	8	9	6		

Table 8.2.2.2.2: Biggest Impact on High Water Usage by Home Ownership Status

Base: Total respondents 2001 and 1996 Surveys who stated a cause of high water usage

## 8.2.2.3 Actions Undertaken to Conserve Water

In 2001, the three most common actions undertaken by all households to conserve water were turning off dripping taps (30%), having shorter showers (28%) and installing dual flush toilets (25%). The proportion of households turning off dripping taps has doubled from 16% in 1996 to 30% in 2001, thus becoming the most common action to conserve water.

Between 1996 and 2001 a greater proportion of households were taking action in order to conserve water. For example 25% of households in 1996 said they took no action to conserve water compared with 12% in 2001. In particular, the proportion of concession households who took no action to conserve water fell from 32% in 1996 to 17% in 2001. As a result most actions rose amongst concession households between 1996 and 2001.

The proportions of households who could not name any action fell for multiple person households from approximately 73% in 1996 and 83% in 2001, while for all household sizes between surveys. In particular, 35% of one person households in 1996 did not take any action to conserve water compared to 18% in 2001. The proportions naming each water conservation action therefore increased proportionally with increases in awareness levels across all household sizes.

Despite increases in awareness of water conservation actions between surveys, the proportion of rental households who indicated no actions were undertaken to conserve water in 2001 (23% of public and 25% of private rented households) remained higher than that of owners/buyers (11%).

		(1	2001 n=2,006) %				(	1996 n=2,000) %		
Action undertaken to Conserve Water	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total
Turn off dripping taps	28	31	34	32	30	17	14	14	14	16
Have shorter showers	29	24	28	26	28	20	21	25	23	21
Dual Flush Toilets	28	20	21	20	25	23	13	18	15	20
Economical use of washing machine	21	14	20	17	20	11	5	7	6	9
Mulch Garden	20	18	9	14	18	n/c	n/c	n/c	n/c	n/c
Collect waste water from washing machine	11	18	11	14	12	10	15	10	13	11
Wash car on lawn	12	10	10	10	11	11	6	9	7	9
Sweep (not hose) driveway	9	9	10	10	9	7	5	8	7	7
Water saving shower	8	6	7	6	8	4	4	5	4	4
No/little watering	9	7	3	5	7	11	7	8	7	9
Careful/sensible use of water	2	4	3	4	3	3	5	4	5	4
Timers on taps	4	2	2	2	3	n/c	n/c	n/c	n/c	n/c
Minimal running of taps	4	1	2	1	3	n/c	n/c	n/c	n/c	n/c
Economical use of dishwasher	3	*	1	1	2	n/c	n/c	n/c	n/c	n/c
Brick in toilet cistern	1	2	2	2	1	1	1	2	2	1
Water at times evaporation is low	1	-	-	-	1	n/c	n/c	n/c	n/c	n/c
Other	16	12	14	13	16	9	10	10	10	9
None	12	15	19	17	12	25	34	29	32	25
Can't Say	2	4	4	4	2	*	1	*	1	*

## Table 8.2.2.3.1 Actions Undertaken to Conserve Water by Sample Type

Base: Total respondents 2001 and 1996 Surveys

Note: Respondents could give more than one answer to this question.

Less than 0.5% response

		(	2001 n=2,006 %	)			(1	1996 n=2,000) %	)	
Action undertaken to Conserve Water	1 person	2 persons	3 persons	4 or more persons	Total	1 person	2 persons	3 persons	4 or more persons	Total
Turn off dripping taps	29	28	31	32	30	16	16	15	17	16
Have shorter showers	27	26	29	29	28	20	20	21	24	21
Dual Flush Toilets	18	24	27	31	25	15	17	23	25	20
Economical use of washing machine	18	21	15	23	20	6	9	10	10	9
Mulch Garden	12	19	15	20	18	n/c	n/c	n/c	n/c	n/c
Collect waste water from washing machine	14	14	11	10	12	10	12	10	11	11
Wash car on lawn	6	11	13	14	11	5	8	11	12	9
Sweep (not hose) driveway	5	9	12	10	9	4	6	8	10	7
Water saving shower	3	7	11	9	8	2	5	3	6	4
No/little watering	7	7	7	6	7	6	11	10	10	9
Careful/sensible use of water	6	2	3	1	3	4	5	2	3	4
Timers on taps	2	3	2	4	3	n/c	n/c	n/c	n/c	n/c
Minimal running of taps	2	2	5	3	3	n/c	n/c	n/c	n/c	n/c
Economical use of dishwasher	1	2	1	5	2	n/c	n/c	n/c	n/c	n/c
Brick in toilet cistern	1	2	2	1	1	1	1	1	2	1
Water at times evaporation is low	-	*	1	1	1	n/c	n/c	n/c	n/c	n/c
Other	12	14	12	19	16	10	11	9	8	9
None	18	14	13	12	12	35	29	27	22	28
Can't Say	3	2	2	3	2	1	*	1	*	*

## Table 8.2.2.3.2 Actions Undertaken to Conserve Water by Household Size

Base: Total respondents 2001 and 1996 Surveys.

Note: Respondents could give more than one answer to this question.

\* Less than 0.5% response

		200 (n=2,0				1996 (n=2,00					
		%				%					
Action undertaken to Conserve Water	Own/ Buying	Renting - Private	Renting - Public	Total	Own/ Buying	Renting - Private	Renting - Public	Total			
Turn off dripping taps	30	28	31	30	15	18	13	16			
Have shorter showers	27	28	29	28	23	23	24	21			
Dual Flush Toilets	28	14	21	25	22	13	18	20			
Economical use of washing machine	20	18	13	20	9	8	8	9			
Mulch Garden	21	8	-	18	n/c	n/c	n/c	n/c			
Collect waste water from washing machine	14	7	2	12	13	6	6	11			
Wash car on lawn	13	5	3	11	10	8	3	9			
Sweep (not hose) driveway	10	5	5	9	8	5	3	7			
Water saving shower	8	5	4	8	5	2	4	4			
No/little watering	7	6	3	7	11	4	3	9			
Careful/sensible use of water	3	3	4	3	4	4	4	4			
Timers on taps	4	1	-	3	n/c	n/c	n/c	n/c			
Minimal running of taps	3	1	1	3	n/c	n/c	n/c	n/c			
Economical use of dishwasher	3	1	-	2	n/c	n/c	n/c	n/c			
Brick in toilet cistern	3	1	1	1	2	*	1	1			
Water at times evaporation is low	1	1	-	1	n/c	n/c	n/c	n/c			
Other	15	16	13	16	9	9	7	9			
None	11	25	23	12	25	34	38	28			
Can't Say	2	4	9	2	*	-	1	*			

## Table 8.2.2.3.3 Actions Undertaken to Conserve Water by Home Ownership Status

Base: Total respondents 2001 and 1996 Surveys. Note: Respondents could give more than one answer to this question.

\* Less than 0.5% response

## 8.2.2.4 Biggest Impact on Water Conservation

The most commonly named impact on water conservation was having short or shorter showers (18% in 1996 and 16% in 2001). Turning off dripping taps (13%), economical use of washing machines (11%) and dual flush toilets (11%) were the next most commonly mentioned impact in 2001. This was also the case in 1996 except for the economical use of washing machines which rose from 6% and forth position in 1996 to 11% and third position in 2001.

When analysed by sample type the proportion of non-concession households naming dual flush toilets in 2001 is considerably lower than in 1996 (11% and 18% respectively) as is no or little watering of lawns and gardens (down 5%). However, economical use of washing machines was up by 5% for non-concession households. Shorter showers was down between surveys by 5% for concession households but economical use of washing machines was up 4% and turn off dripping taps up by 5%.

No marked differences were observed when survey results were analysed by household size or by home ownership status.

		(	2001 n=1,632) %			1996 (n=1,430) %								
Biggest Impact on Water Conservation	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total				
Have short(er) showers	16	15	17	16	16	17	19	23	21	18				
Turn off dripping taps	11	16	16	16	13	11	11	11	11	11				
Economical use of washing machine	13	5	11	8	11	8	3	6	4	6				
Dual flush toilets	11	10	10	10	11	18	10	13	11	15				
Collect waste water from washing machine etc	6	10	8	9	7	7	12	8	10	8				
Mulch garden	8	8	1	5	7	n/c	n/c	n/c	n/c	n/c				
No/little watering of lawns/gardens	5	6	1	3	4	10	6	8	7	9				
Wash car on lawn	3	4	6	5	4	5	2	3	2	4				
Sweep rather than hose driveway	2	3	3	3	2	2	3	3	3	2				
Water saving shower	3	3	2	2	3	2	2	3	3	2				
Careful/sensible usage of water	2	4	2	3	2	4	6	6	6	5				
Timers on taps/sprinklers	2	2	2	2	2	n/c	n/c	n/c	n/c	n/c				
Brick in toilet cistern	*	1	1	1	1	1	1	1	1	1				
Minimal running of taps	2	1	1	1	2	n/c	n/c	n/c	n/c	n/c				
Economical use of dishwasher	1	*	1	1	1	n/c	n/c	n/c	n/c	n/c				
Water at times when evaporation is low	*	-	-	-	*	n/c	n/c	n/c	n/c	n/c				
Other	8	5	10	7	8	5	9	4	7	6				
Can't say	7	8	11	9	8	6	8	6	7	6				

# Table 8.2.2.4: <u>Biggest Impact on Water Conservation by Sample Type</u>

Base: Total respondents 2001 and 1996 Surveys who had taken action to save water

\* Less than 0.5% response

## 8.2.2.5 Water Conservation Information Sources

Eight in ten households could name at least one information source in relation to water conservation in 2001 (82%). The higher figures for total awareness of information sources in 1996 are misleading. These figures include those who could not give an answer to the question and are therefore higher than they should be.

The most commonly named water conservation information source was water suppliers, named by 70% of households in 2001 and 73% in 1996. Whilst those mentioning media and advertising experienced some increases since 1996, the source experiencing the greatest increase in awareness was local council, named by just 2% in 1996, but by 12% in 2001.

Aged service households had the lowest proportions naming any type of water conservation information source. In 2001 and in 1996. Similarly, one person households had the lowest incidence of naming water conservation information sources, with larger households more likely to name one or more information sources. Public renters also had smaller proportions naming information sources relative to private renters and owners/buyers.

<b></b>						1						
		(	2001 n=2,006) %			1996 (n=2,000) %						
Water Conservation Information Sources	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total	Non- Concession	Aged/ Service	Other Concession	Total Concession	Total		
Water supplier	72	66	68	67	70	78	61	72	66	73		
Local Council	13	10	13	11	12	2	3	3	3	2		
TV/radio programs	8	5	6	5	7	4	2	5	3	4		
Advertising (TV/radio/press)	7	5	7	6	7	5	2	3	3	4		
Magazines/newspaper articles	5	4	4	4	5	5	4	4	4	4		
Word of mouth/advice from friends or family	3	2	1	2	3	2	2	2	2	2		
Internet/web sites	6	-	3	1	4	n/c	n/c	n/c	n/c	n/c		
Plumber/plumbing supplier	1	1	1	2	1	1	-	1	*	1		
Other	6	5	4	5	5	5	2	2	2	3		
Total Awareness of	85	76	79	77	82	96	91	92	91	94		
sources												
Not aware of any	9	13	12	12	10	4	9	8	9	6		
Can't say	6	11	10	11	8	-	-	-	-	-		

## Table 8.2.2.5: Unaided Awareness of Information Sources by Sample Type

Base: Total respondents 2001 and 1996 Surveys. Note: Respondents could give more than one answer to this question.

\* Less than 0.5% response

# 9 COUNCIL RATES AND EXPENDITURE

# 9.1 BILLING FOR COUNCIL RATES AND ASSOCIATED CONCESSIONS

## 9.1.1 Incidence of Being Billed for Council Rates

In 2001, 80% of all households received council rate bills. (**Table 9.2**) Data for Council rates was not collected in the 1996 survey.

The proportion of households paying Council bills was virtually identical in country Victoria and Melbourne (81% cf 80%), although the proportion was lower in Geelong and Shepparton (75% and 76% respectively).

Although a greater proportion of non-concession households paid Council bills than concession cardholders (88% cf 73%), a high proportion of aged/service pensioners paid Council bills (84%), due to the high proportion of home owners in this sub-group (84%). All home owners and home buyers paid Council bills in 2001. As a consequence, the proportion of other concession holders that paid Council bills was low, with just over half doing so (58%).

## 9.1.2 Incidence of Receiving Concession Discounts on Council Rates Bills

Of those paying Council rates bills 29% received a concession discount on their bill (23% of all households) (**Table 9.2**). The incidence rate does not vary considerably by country region (varying from 37% in Geelong and Shepparton to 43% in Ballarat and Bendigo), but is much lower in Melbourne (24%).

Three quarters of concession card holders paying Council rates received concession discounts (75%), with nine in ten aged/service pensioner households doing so (89%). Just over half of other concession households that paid Council bills receive a concession discount (53%), which is not surprising because not all would be eligible for such a discount (ie. only pensioner concession card holders and war widow and TPI Repatriation card holders are eligible).

The incidence of receiving concession discounts on Council rates bills decreased with household size. Half of one person households paying Council bills received a concession discount (51%), whilst only 10% of 4 or more person households do so. Four in 10 households that own or have paid off their house received a concession discount on their rates bill (40%), compared with just 10% of those who are currently paying off their house.

Interestingly, just 87% of those who claimed on the survey questionnaire that they received concession discounts on their Council rates bill *actually did* receive these concession discounts. This means that 13% of those who believed they receive Council rates concession discounts actually didn't. Conversely, 7% of those who claimed that they don't receive concession discounts on their Council rates bill actually did receive such a discount.

There could be three causes for these anomalies -

- 1. Households may have received concession discounts in the past, but do not now and have not recognised the fact, while households that did not receive concession discounts in the past have recently become eligible and have not yet become aware of it;
- 2. There is some misconception amongst Victorian households as to who is or is not eligible to receive concession discounts on Council rates bills. This is illustrated by the fact that 29% of other concession card holders who believe that they receive a Council rate discount actually don't; and
- 3. The data provided by Councils was inaccurate. However, the billing data provided by Councils was of much higher quality than that provided by utility suppliers. Therefore it is considered that any data inaccuracies would have had a minimal effect on survey results.

It is likely that both scenarios 1 and 2 are operating in the market place.

## 9.2 COUNCIL RATE COSTS

**Table 9.2** also shows the average yearly rate bills paid by households. The average amount that *can be* charged by Councils in 2001 was \$699. However, when concession discounts are deducted, Councils on average *actually billed* **\$652** per annum. The average annual concession discount was **\$135** per eligible household.

Melbourne and Shepparton households (\$681 and \$662 respectively) paid higher council rates on average in 2001 than did households in other provincial cities. Geelong households paid the lowest amount in Council rate bills (\$497), followed by Bendigo (\$528) and Ballarat (\$627).

Non-concession households paid approximately \$205 more on average in annual rate bills than concession cardholders (\$724 cf \$519) and relative to other sample types, aged/service pensioners paid the least (\$486).

The larger the household the higher the Council rate bill paid. Households with four or more people paid \$727 on average in rate bills, compared to \$660 for 3 person households, \$649 for 2 person households and \$525 for single person households. This is likely to be partly due to the larger number of bedrooms required by bigger households and with the NAV (Net Annual Value) charge being based to some degree on house size.

Whilst all Councils incorporated as part of this survey based their Council rate bills around Municipal rates and associated concessions, some Councils also passed on other charges to households. Seven in ten Councils passed on a separate Waste Management Charge to households (23 of 33 Councils), with the average amount charged being \$96 per annum. Shepparton Council had a significantly higher Waste Management Charge than other Councils (\$115), whilst the Bendigo Council charge was much lower (\$60).

Just over a third of Councils passed on a separate Annual Council Administration charge (36% or 12 of 33 Councils), with the average annual amount being \$57. This charge was higher in Bendigo (\$75) and lower in Geelong (26%) and was not applied in Ballarat. Two Melbourne metropolitan Councils also passed on a separate Special Product/Service charge to households, with the average amount being \$38 per year.

Annual Amount Paid for Rates and Average Concession Received												
	% Paying Council Rate Bills 2001	Average Annual Municipal/ Council Rates Charge (\$) <sup>1</sup>	Average Annual Waste Management Charge (\$) <sup>1</sup>	Average Annual Council Administration Charge (\$) <sup>1</sup>	Total Average Annual Rate Charge Applicable (\$) <sup>1</sup>	% Receiving Concession Discounts	Average Annual Concession Discount Applicable (\$) <sup>1</sup>	Average Annual Council Bill Amount Charged (\$) <sup>1</sup>				
Sub-group	n=2,006	n=1,545	n=1,019	n=697	n=1,545	n=1,545	n=576	n=1,545				
By Region -												
Melbourne	80	631	98	61	714	24	136	681				
Geelong	75	427	94	26	547	37	134	497				
Ballarat	85	604	82	-	685	43	135	627				
Bendigo	86	495	60	75	625	43	135	528				
Shepparton	76	543	115	55	777	37	135	662				
Total country Victoria	81	520	94	53	661	40	135	581				
By Sample Type -												
Non-Concession <sup>2</sup>	84	636	97	59	739	4	129	724				
Aged/Service	88	520	94	54	612	89	136	486				
Other Concession	58	552	99	53	648	53	135	572				
Total Concession	73	532	96	54	626	75	136	519				
By Concession -												
Aged pensioners	86	507	95	54	600	92	136	468				
Non-pension concession holders	65	552	96	53	647	61	135	561				
By Household Size -												
1 Person	74	500	99	54	598	51	135	525				
2 Persons	81	612	96	54	703	37	135	649				
3 Persons	77	596	97	59	692	22	132	660				
4 or more Persons	84	647	95	61	759	10	138	727				
By Housing Status -												
Owned/Paid off	100	601	98	55	703	40	136	637				
Buying/Paying off	100	601	93	60	698	10	132	681				
Renting – Private	2	450	97	52	537	38	135	486				
Renting - Public	*	391*	105*	-	496*	-	-	496*				
Total All Households	80	600	96	57	699	29	135	652				

<b>Table 9.2:</b>	Households Paid	Council Rates and	d Claimed Concess	ion and Average
	<u>Annual Amount P</u>	aid for Rates and A	verage Concession I	<u>Received</u>

1. Base: Total respondents 2001 survey with value >\$0.

Whist the person who pays the bills for the household may not hold a concession card, another person in the household may do so. As such 4% of non-concession card households received concession discounts in 2001.
 Response based on one household only.

# **10 KNOWLEDGE AND TAKE UP OF CONCESSIONS**

# 10.1 AWARENESS OF CONCESSION AVAILABILITY ON UTILITIES AND COUNCIL RATES

The level of awareness that discounts are available to people with concession cards on their water and gas bills has remained relatively constant since 1996, whilst, awareness concession discounts on electricity bills has fallen slightly from 92% in 1996 to 89% in 2001. Awareness levels of discounts to concession householders for their council rates, collected for the first time in 2001, was lower than those observed for utility bills at 78%.

When analysed by sample type, awareness of concession discounts for utility bills has generally increased for concession households since 1996, particularly amongst other concession households. Awareness levels have fallen over time for non-concession households.

Awareness of concession discounts for council rates was far lower for other concession households (68%), which is not surprising considering just over half of this group pay council rates (58%).

Table 10.1.1:	Awareness of	<b>concessions</b>	availability	on utili	ities and	council 1	rates and
<u>Sample Type</u>							

			2001 (n=2,006) %			(n	1996 n=2,000) %			
Awareness of discounts available to concession card holders	Non- Concession	Aged/ Service	Other Concession	Non- Concession	Aged/ Service	Other Concession	<b>Total</b> <b>Concession</b>	Total		
For payment of gas bills	85	94	93	93	88	89	88	86	87	88
For payment of electricity bills	86	95	94	95	89	90	96	93	95	92
For payment of water bills	83	92	85	89	85	86	87	75	81	84
For payment of council rates	78	87	68	78	78	n/c	n/c	n/c	n/c	n/c

Base: Total respondents 2001 and 1996 Surveys.

Awareness levels for concession discounts on utility bills has increased markedly in the Bendigo region since 1996, particularly in relation to water bills (80% in 1996 compared with 96% in 2001). However, awareness levels have in general fallen in Melbourne, Geelong and Shepparton. Awareness of council rate discounts for concession holders was around 9 in 10 for Ballarat and Bendigo residents (88% and 93% respectively), but at around 3 in 4 for Melbourne, Geelong and Shepparton (76%, 79% and 75% respectively).

 Table 10.1.2: <u>Awareness of concessions availability on utilities and council rates and Region</u>

		2001 (n=2,006) %							1996 (n=2,000) %					
Awareness of discounts available to concession card holders	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC country	Total	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC country	Total
For payment of gas bills	86	91	95	96	86	92	88	87	92	95	92	89	92	88
For payment of electricity bills	87	94	95	99	90	94	89	91	94	96	95	92	94	92
For payment of water bills	83	90	94	96	84	91	85	83	94	86	80	86	86	84
For payment of council rates	76	79	88	93	75	83	78	n/c	n/c	n/c	n/c	n/c	n/c	n/c

Base: Total respondents 2001 and 1996 Surveys

n/c not completed 1996

Awareness levels for concession discounts on utility bills has increased dramatically since 1996 for public rental households, particularly in relation to gas and water bills (water – 51% up to 67%; gas – 73% up to 88%). Smaller increases were also evident amongst private rental households for both gas and water bill concession discount awareness over the same period (water – 70% up to 72%; gas – 80% up to 85%). Awareness levels for concession discounts on all utilities fell from 92%-93% in 1996 to 88%-89% in 2001 for respondents owning or buying their homes.

In relation to awareness discounts for concession households on council rates, just three in ten public renters were aware (31%), compared with half of private renters (52%) and nine in ten owner/buyers (86%).

## 10.1.1 Awareness sources on Concession Discounts on Utilities and Council Rates

Of the households aware that discounts were available to concession card households for payment of utility and council rate bills, four in ten claimed that they were made aware of this via information provided with their bill (42% for gas, electricity & water concessions). This represents a fall of 7%-8% 10% in absolute terms since 1996 (50% for gas and electricity and 49% for water concessions). Proportions naming sources such as Centrelink and friends/family have remained relatively consistent over time. Approximately one in ten households indicated that they obtained this information directly from their bill. This information was not collected in 1996.

			001 %		1996 %				
Concession Discount Awareness Sources	Gas (n= 1,781)	Electricity (n=1,806)	Water (n=1,699)	Council Rates (n=1,553)	Gas (n= 1,767)	Electricity (n=1,849)	Water (n=1,685)		
Information came with bill	42	42	42	40	50	50	49		
Friends/Family	22	21	21	23	21	21	21		
Centrelink	20	21	20	18	19	20	19		
Saw it on bill	10	10	11	10	n/c	n/c	n/c		
Dept of Human Services	1	1	1	1	n/c	n/c	n/c		
Dept Veteran Affairs	3	3	3	3	2	3	3		
I asked supplier	1	1	1	1	1	1	-		
Internet	*	*	-	-	n/c	n/c	n/c		
Other	4	4	4	4	7	7	8		
Can't Say/Recall	5	4	5	7	7	4	4		

#### Table 10.1.1.1: Awareness of sources on concessions on bills and Sample Type

Base: Total respondents 2001 and 1996 Surveys who are aware of concessions on gas/electricity/water and council rate bills

\* Less than 0.5% response

n/c not completed 1996

When results were analysed by sample type similar trends were evident across all bill types. As would be expected, far fewer non-concession households obtained information on concession discounts from Centrelink compared with concession households (approximately 11% and 35% respectively across all bill types).

Conversely, far greater proportions of non-concession households than concession households obtained this information by seeing it on the bill (approximately 14% and 6% respectively across all bill types) or from friends and family (approximately 29% and 9%-10% respectively). Approximately 10% of age service pensioners obtained information on concession discounts from the Department of Veterans Affairs, compared with 0-4% for other sample types across all bill categories.

When results were analysed by region Centrelink was nominated as an information source for concession discount awareness across all bills types by both Geelong and Bendigo respondents (25%-30% compared with 19%-21% in other centres). Whilst this trend has remained consistent amongst Geelong households since 1996, a substantial rise has been evidenced amongst Bendigo households (15%-16% in 1996). A significant fall was also observed amongst Shepparton households over this period (27% cf 21%).

Far greater proportions of Ballarat households claimed to become aware of concession discounts by seeing it on their bill (around 21% across all bill types) than did households in other centres. Awareness via the Department of Veterans Affairs was also consistently higher amongst Geelong and Shepparton households than in other centres.

	2001 (n=1,781) %							1996 (n=1,767) %						
Concession Discount Awareness Sources	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC Country	Total	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC Country	Total
Information came with bill	42	44	36	46	41	42	42	51	35	56	54	43	47	51
Friends/Family	23	23	16	10	20	18	21	19	27	23	40	15	26	21
Centrelink	19	28	19	30	22	25	20	19	24	17	16	27	21	19
Saw it on bill	11	4	21	6	3	9	10	n/c	n/c	n/c	n/c	n/c	n/c	n/c
Dept of Human Services	1	3	1	1	4	2	1	n/c	n/c	n/c	n/c	n/c	n/c	n/c
Dept Veteran Affairs	2	6	1	4	5	4	3	2	1	3	1	4	2	2
I asked supplier	1	1	2	1	*	1		1	1	3	5	-	2	1
Internet	-	-	-	-	*	*	*	n/c	n/c	n/c	n/c	n/c	n/c	n/c
Other	4	2	4	5	5	4	4	8	4	5	8	7	6	7

Table 10.1.1.2: Awareness of sources on concessions on gas bills and Region

Base: Total respondents 2001 and 1996 Surveys who are aware of concessions on gas bills

\* Less than 0.5% response

		2001 (n=1,806) %							1996 (1,849) %							
Concession Discounts Awareness Sources	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC Country	Total	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC Country	Total		
Information came with bill	43	43	37	47	38	41	42	51	36	56	54	45	48	50		
Friends/Family	22	23	14	10	18	17	21	18	27	22	39	15	26	21		
Centrelink	19	28	19	30	21	25	21	19	24	18	16	28	21	20		
Saw it on bill	12	4	21	5	4	9	10	n/c	n/c	n/c	n/c	n/c	n/c	n/c		
Dept of Human Services	1	2	1	1	4	2	1	n/c	n/c	n/c	n/c	n/c	n/c	n/c		
Dept Veteran Affairs	3	5	4	3	5	5	3	2	2	4	2	5	3	3		
I asked supplier	1	1	2	1	1	1	1	1	1	3	5	-	2	1		
Internet	-	-	-	-	1	*	*	n/c	n/c	n/c	n/c	n/c	n/c	n/c		
Other	4	3	4	5	3	4	4	7	4	5	6	6	5	7		

### Table 10.1.1.3: Awareness of sources on concessions on electricity bills and Region

Base: Total respondents 2001 and 1996 Surveys who are aware of concessions on electricity bills

\* Less than 0.5% response

n/c not completed 1996

		2001 (n=1,699) %									1996 =1,685 %	5)		
Concession Discount Awareness Sources	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC Country	Total	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC Country	Total
Information came with bill	43	43	35	43	37	40	42	51	34	50	47	46	44	49
Friends/Family	23	23	14	11	23	18	21	19	26	24	41	14	26	21
Centrelink	19	25	18	32	21	24	20	18	24	18	15	26	21	19
Saw it on bill	11	4	22	6	4	9	11	n/c	n/c	n/c	n/c	n/c	n/c	n/c
Dept of Human Services	1	2	1	-	4	2	1	n/c	n/c	n/c	n/c	n/c	n/c	n/c
Dept Veteran Affairs	3	6	4	4	6	5	3	2	2	4	2	5	3	3
I asked supplier	1	3	3	1	-	2	1	-	-	-	-	-	-	-
Internet	-	-	-	-	-	-	-	n/c	n/c	n/c	n/c	n/c	n/c	n/c
Other	4	3	3	5	3	4	4	-	-	-	-	-	-	_

## Table 10.1.1.4: Awareness of sources on concessions on water bills and Region

Base: Total respondents 2001 and 1996 Surveys who are aware of concessions on water bills.

\* Less than 0.5% response

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		2001 (n=1,553) %										
Concession Discount Awareness Sources	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC Country	Total					
Information came with bill	42	37	36	41	36	37	40					
Friends/Family	25	23	16	11	21	18	23					
Centrelink	17	24	16	30	18	22	18					
Saw it on bill	9	6	25	3	4	10	10					
Dept of Human Services	1	3	1	-	3	2	1					
Dept Veteran Affairs	3	8	1	4	6	4	3					
I asked supplier	1	-	2	2	1	1	1					
Internet	-	-	-	-	-	-	-					
Other	4	4	2	5	4	4	4					

## Table 10.1.1.5: <u>Awareness of sources on concessions on council rates and Region</u>

Base: Total respondents 2001 and 1996 Surveys who are aware of concessions on council rates.

## **10.2 INCIDENCE OF CLAIMING CONCESSIONS**

Incidence of claiming concessions for utility bills has not varied considerably since 1996. One third of households claimed concessions on gas bills (32% in 2001; 33% in 1996), and electricity bills (35%; 38%) and three in ten claimed on water bills (31%; 30%).

Almost one quarter of households claim concessions on their council rate bills in 2001 (23%). However this result should be considered in the light that not all households pay Council rates. Furthermore, not all concession card holders are eligible for discounts on their Council rates (ie. only pensioner concession card holders and war widow and TPI Repatriation card holders are eligible), which would also explain the lower proportion of concession card holders claiming concession discounts on their Council rates.

However, marked differences are evident in the proportions claiming concession on their utility bills since 1996 when results are analysed by subgroup. Greater proportions of other concession households are claiming concession on gas and water utility bills compared with 1996. In conjunction with this trend, more public rental households are also claiming concessions for their utility bills. Far more Ballarat and Bendigo households are claiming concessions on each utility bill since 1996, whilst the reverse is the case for Melbourne, Geelong and Shepparton households, albeit to a smaller degree.

Please note that whilst other members of the household may hold concessions cards, these persons were not defined as being the person responsible for payment of the household bills.

Therefore in some instances a Non-concession household may in fact receive concession discounts on some bills because another member of the household may hold a concession card.

				%			
	G	as	Elect	ricity	Wa	iter	Council
						Rates	
Incidence of	2001	1996	2001	1996	2001	1996	2001
<b>Claiming Concessions</b>	(n=2,006)	(n=2,000)	(n=2,006)	(n=2,000)	(n=2,006)	(n=2,000)	(n=2,006)
By Region -							
Melbourne	27	30	30	35	26	28	19
Geelong	36	41	40	45	37	41	27
Ballarat	55	37	55	40	53	29	41
Bendigo	51	35	56	39	49	27	36
Shepparton	42	48	46	52	40	46	32
By Sample Type -							
Non-concession	3	3	3	3	3	3	2
Aged/service	83	78	91	91	83	78	76
Other Concession	77	73	82	82	69	57	39
Total Concession	80	76	87	87	77	69	58
By Household Size -							
1 person households	50	46	50	61	47	43	38
2 person households	36	38	36	42	36	35	29
3 person households	26	30	26	32	24	27	18
4+ person households	20	22	20	22	19	19	9
By Home Ownership							
Status -							
Owned/buying	30	31	30	33	32	32	29
Rent - Private	30	32	30	39	21	20	1
Rent - Public	73	52	73	72	50	29	-
Total	32	33	35	38	31	30	23

## Table 10.2: Incidence of Claiming Concessions by Year

Base: Total Respondents 1996 and 2001 surveys

## **10.3 EFFECT OF CLAIMING CONCESSIONS ON CONSUMPTION**

For the 2001 survey a new question was asked of those who claim concessions on their utility bills. We asked whether people's energy or water consumption had changed as a result of being able to claim such concessions.

The effect of claiming a gas concession on consumption appears relatively small. Three quarters of households claimed that their gas consumption stayed the same even with being able to claim a concession on their bill (76%). One in ten claimed that their gas consumption had increased, but only slightly. Similar proportions claimed that their gas consumption had decreased slightly as a result of receiving a concession.

Slight increases in gas consumption were claimed by greater proportions in Ballarat and Bendigo.

		2001 (n=834) %										
Effect on Gas Consumption of Claiming Concession	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC country	Total					
Increased greatly	1	4	6	1	-	3	2					
Increased Slightly	10	6	9	12	9	9	10					
TOTAL INCREASED	11	10	15	13	9	12	11					
Stayed Same	76	74	77	76	72	75	76					
Decreased Slightly	9	4	6	6	-	4	7					
Decreased greatly	*	3	-	-	-	1	*					
TOTAL DECREASED	10	7	6	6	-	5	8					
Can't Say	3	9	2	5	19	8	5					

## Table 10.3.1: Effect of claiming concession on gas consumption and Region

Base: Total respondents 2001 who claim gas concessions.

\* Less than 0.5% response

One in eight households claiming electricity concessions indicated that their electricity consumption had increased as a result of receiving a discount on their energy bill (13%), while 8% indicated that their electricity consumption had fallen due to the discount obtained.

Again, greater proportions of households in Ballarat and Bendigo stated that their electricity consumption had increased as a result of receiving billing discounts.

		2001 (n=908) %										
Effect on Electricity Consumption of Claiming Concession	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC country	Total					
Increased greatly	2	4	7	-	-	3	2					
Increased Slightly	11	7	8	16	10	10	10					
TOTAL INCREASED	12	11	15	16	10	13	13					
Stayed Same	75	75	76	74	71	75	75					
Decreased Slightly	9	4	6	7	2	5	7					
Decreased greatly	1	2	-	-	-	1	1					
TOTAL DECREASED	9	6	6	7	2	5	8					
Can't Say	3	8	2	4	18	8	5					

Table 10.3.2: Effect of claiming concession on electricity consumption and Region

Base: Total respondents 2001 who claim electricity concessions

\* Less than 0.5% response

A similar trend was observed for those obtaining a discount on their water bill as a result of receiving a concession as that observed for both gas and electricity. However, only Bendigo had relatively higher proportions reporting an increase in consumption as a result of discounts, with one in six Shepparton households unable to comment on how concession discounts effected their water consumption.

	2001 (n=776) %										
Effect on Water Consumption of Claiming Concession	Melbourne	Geelong	Ballarat	Bendigo	Shepparton	Total VIC country	Total				
Increased greatly	1	4	3	3	-	3	2				
Increased Slightly	9	9	8	13	7	9	9				
TOTAL INCREASED	10	13	11	15	7	12	11				
Stayed Same	77	69	79	70	75	74	76				
Decreased Slightly	9	4	6	11	2	6	7				
Decreased greatly	1	4	-	-	-	1	1				
TOTAL DECREASED	9	8	6	11	2	7	8				
Can't Say	4	9	4	4	16	8	5				

Table 10.3.3: Effect of claiming concession on water consumption and Region

Base: Total respondents 2001 who claim water concessions.
## **11 BILL PAYING**

#### **11.1 PROMPTNESS OF BILL PAYMENT**

In 2001, almost three-quarters of households reported paying their utilities bills and council rates at least by the due date, with around a fifth of households in each billing category paying bills as soon as they arrived. **(Table 11.1)** A small but significant proportion of households paid their bills when they received a reminder letter. This proportion was consistent across utilities but was smaller for council rates (7% cf 3%). Results were similar for 1996, where the majority of households paid their bills by at least the due date, although there is a slight trend away from paying bills as soon as the arrive toward paying them by the due date. Information about council rates was not collected in 1996.

Promptness of Bill Payments (%)										
		20	01		1996					
When Bills Usually Paid:	Elec (n=2,006)	Gas (n=1,854)	Water (n=1,817)	Rates (n=1,545)	Elec (n=1,999)	Gas (n=1,832)	Water (n=1,791)			
As soon as they arrive	18	18	18	16	22	21	19			
By the due date	73	73	74	79	67	68	70			
On reminder letter	7	7	7	3	9	9	7			
On disconnection warning	*	*	*	n/c	1	1	1			
On legal action notification	-	-	-	*	n/c	n/c	n/c			
Can't say/not used	2	2	2	2	1	1	3			

Table 11.1: Promptness of Paying Utilities Bills and Council Rates 2001 and 1996

Base: Total respondents 2001 and 1996 surveys that have electricity/gas/water/rates bill.

\* Less than 0.5% response

In 2001, aged/service pensioners were more likely to pay their bills as soon as they arrived than were households in other sample types. Three in ten aged/service pensioners paid electricity, gas, water or rates right away compared to less than a sixth of non-card householders and a quarter of other concession holders that did so. This trend was also observed when paying Council rates bills, but to a lesser degree.

Around one in eight of other concession cardholders paid their electricity, gas or water bills when they received a reminder letter (12%), marginally higher than for non-concession households (8%).

The pattern of bill paying differed to a slight degree in 1996. About four in ten aged/service pensioners paid their electricity, gas or water bills when they arrived. However, non-concession households were more likely than other concession households to pay bills at this time (30% cf 20%). Other concession households were more likely than non-concession households to pay bills when they received the reminder letter (15% cf 7%), similar to the trend observed in 2001.

#### **11.2 METHODS OF BILL PAYMENT**

#### 11.2.1 Means of Payment

#### 11.2.1.1 Electricity

In 2001, four in ten households usually paid their electricity bills in cash (41%), 23% by credit/debit card, 17% by electronic funds transfer and 12% by cheque. A smaller proportion (8%) paid by direct debit. (Chart 11.2.1.1) In contrast, in 1996 six in ten households (60%) that received electricity bills paid in cash, while cheques were used by over a quarter (28%) of households. The chart shows some significant changes in methods of bill payment between the two surveys, with the popularity of cash and cheques declining in favour of credit cards and electronic funds transfer.



#### Chart 11.2.1.1: Method of Payment of Electricity Bills 2001 and 1996

Base: Total respondents receiving electricity bills 2001 and 1996 surveys.

Greater proportions of country Victorian households were likely to pay their electricity bills in cash than were Melbourne households (45% cf 39%). This means of payment was particularly high in Geelong (55%). The incidence of using a credit/debit card to pay electricity bills amongst Melbourne households was double that of country Victorian

households (27% cf 14%). Just one in ten Geelong households paid their electricity bills via electronic funds transfer compared with 15% of all Victorian households.

A high proportion of households in public rental housing paid their electricity bills in cash in 2001 (75%) compared to households in other housing sectors. This was also the case in 1996, with 93% of renters in the public sector who paid with cash compared to 69% of private renters, 58% of homeowners and 47% of home buyers doing so. Home buyers were more likely than home owners or renters to pay using credit cards (30%) and electronic funds transfer (25%) in 2001. In 1996, a third (36%) of home buyers paid by cheque, a somewhat higher proportion that home owners (31%), private renters (23%).

Concession holders were twice more likely than non-concession householders to pay for their electricity bills in cash in 2001 than in 1996 (60% cf 29%). Aged/service pensioners were virtually equally as likely as other card holders to pay using cash (57% cf 63%). A higher proportion of other card holders used electronic funds transfer than aged/service pensioners (13% cf 5%) and a higher proportion of aged/service pensioners paid using cheques than other concession holders (16% cf 7%). Non-concession households were more likely than concession holders to pay using credit/debit cards (30%) or electronic funds transfer (22%). In 1996, more than three quarters of other concession holders (81%) and aged/service pensioners (76%) paid electricity bills using cash compared with less than half of non-concession households (47%). Conversely, a higher proportion of non-concession holders (12%).

#### 11.2.1.2 Gas

Similar to the payment of electricity bills, four in ten households who received gas bills in 2001 usually paid them in cash (40%). A quarter (23%) used credit/debit cards, 17% used electronic funds transfer, 12% used cheques and 9% used direct debit. (**Chart 11.2.1.2**) The figures for payment of gas bills in 1996 were also almost identical to the results for payment of electricity bills for 1996, and showed that a high proportion of households used cash (60%) and cheques (29%) to pay gas bills. The trend for an increase in the use of credit cards and electronic funds transfer to pay electricity bills between 1996 and 2001 was also apparent for gas bill payments.



Chart 11.2.1.2: Methods of Payment for Gas Bills 2001 and 1996

Cash was used as the main method of payment of gas bills for Melbourne and country Victorian households (39% and 45% respectively) in 2001 and in 1996 (59% and 61% respectively). Whilst a higher proportion of Melbourne households used credit/debit cards to pay gas bills (26%) in 2001, cheques were used by a greater proportion of country Victorian households than Melbourne households (16% cf 11%). The proportion of Melbourne and country Victorian households that used cheques in 1996 was almost identical (29% cf 31%). As was the case when paying electricity bills, Geelong households had greater proportions paying in cash and far smaller proportions paying by cheque or electronic funds transfer than did households in other provincial centres.

In 2001, almost three quarters (73%) of households in the public rental sector used cash to pay gas bills compared to a little over a half of private renters (53%) and a third of home owners (39%) or home buyers (32%). Home owners (17%) and home buyers (10%) were more likely than private or public renters (5% and 1%) to use cheques to pay gas bills, and a greater proportion of home buyers than other households used credit cards (29%) or electronic funds transfer (25%).

Base: Total respondents receiving gas bills 2001 and 1996 surveys.

In 1996, the majority of public rental households (89%), private rental households (70%) and home owners (59%) used cash to pay gas bills. Under half of home buyers used cash (48%) but relative to other households, home buyers were more likely to pay by cheque (36%).

In 2001, as was the case with payment of electricity bills, the proportion of concession cardholders that paid with cash was twice that of non-concession households (60% cf 29%). There was little difference between the proportion of aged/service pensioners and other concession holder households that paid with cash (58% and 63% respectively). Credit/debit card payment was used by 29% of non-concession households to pay gas bills, while 22% used electronic funds transfer. These figures were lower for concession cardholders at 12% and 9% respectively, however other cardholders were more likely than aged/service pensioners to use electronic funds transfer (12% cf 5%). Most (78%) concession card holders used cash to pay for electricity bills in 1996, but under half (47%) of non-concession households did so. Non-concession households were more likely than concession cardholders to use cheques to pay gas bills (39% cf 15%), with over one third using this method to pay gas bills. There was also some difference in the proportion of aged/service pensioner and other concession cardholder households that used cash (75% compared with 82% respectively) or cheques (17% and 12% respectively) as a method of payment.

#### 11.2.1.3 Water

Cash was again the most commonly used means of usually paying water bills (39%) in 2001, followed by credit/debit card (23%), electronic funds transfer (18%), cheque (14%) and direct debit (7%). (Chart 11.2.1.3) Cash was used by over half (56%) of all households that received water bills in 1996, followed in prevalence by cheque payments (32%). There was a similar decline in the use of cash and cheques to pay water bills between 1996 and 2001 as was seen in the case of electricity and gas payments. Payment of water bills using credit cards and electronic funds transfer has increased between 1996 and 2001 at the expense of cash and cheques.



Chart 11.2.1.3: Methods of Payment of Water Bills 2001 and 1996

Although households in Melbourne and country Victoria had similar proportions using cash (38% and 44% respectively) and electronic funds transfer (18% cf 16%) to pay water bills, Melbourne households were more likely to use a credit/debit card in 2001 compared with country Victorians (27% cf 14%). Again payment patterns for Geelong households varied considerably from households in other provincial centres, as was the case for paying gas and electricity bills.

In 1996, over half of households in Melbourne (57%) and country Victoria (55%) used cash to pay water bills. A higher proportion of households in country Victoria used cheques to pay than Melbourne households (37% cf 30%) and this was also the case in 2001 (18% cf 12%), although at a lower level.

Cash was used to pay water bills by 58% of concession cardholders compared to 29% of non-concession households in 2001. Both aged/service pensioners (57%) and other concession holders (60%) were twice as likely to use cash than non-card households. Non-concession households were more likely than concession cardholders to use credit/debit cards to make payments (30% cf 12%) and electronic funds transfer (23% cf 8%). Electronic funds transfer was also used by a higher proportion of other cardholders compared to aged/service pensioners (13% cf 5%).

Base: Total respondents receiving water bills 2001 and 1996 surveys.

In 1996, three quarters (76%) of concession cardholders used cash to pay for water bills compared to 45% of non-concession households. A high proportion of both aged/service pensioners and other cardholders paid with cash (74% and 78% respectively). Relative to concession cardholders, a higher proportion of non-concession households paid by cheque (43% cf 17%) in 1996.

Households in public rental accommodation were much more likely to use cash to pay water bills than were other households in 2001. Three quarters (74%) paid their water bills with cash compared with around half of households in private rental (54%) and four in ten households where the home was fully paid off (39%). Although homebuyers were likely to use cash as their main method of payment (31%), three in ten (29%) paid with credit/debit card and a further quarter (26%) paid with electronic funds transfer. A similar trend was apparent in 1996, with cash payments made for water by 85% of public renters, 66% of private renters, 58% of home owners and 47% of home buyers. Home buyers (39%) and home owners (33%) were considerably more likely than private (21%) or public (7%) rental households to pay by cheque in 1996.

#### 11.2.1.4 Council Rates

The most frequently used method of payment by households that received bills for Council rates in 2001 was by cash (37%). This was followed by cheque (23%), credit/debit card (21%), electronic funds transfer (15%) and by direct debit (4%). Information about Council rates was not collected in 1996.

There was virtually no difference in the proportion of Melbourne households or country Victorian households who paid their Council rates in cash (36% cf 39%). There was also little difference between the proportions of Melbourne households and country Victorian households using other methods of payment, with the exception of payments by credit/debit card, where Melbourne households were more likely to pay by this method than country Victorian households (24% and 15% respectively).

The majority of rate payers were home owners or home buyers (99%). Cash was the most commonly used method of payment for both of these sub-groups (38% and 35% respectively). However, relative to home owners who are generally older, home buyers were more likely to pay Council rates by credit/debit card (25%) or electronic funds transfer (19%).

Half of concession cardholders paid their Council rates in cash (54%) compared to less than three in ten (29%) non-concession households. Both aged/service pensioners (53%) and other cardholders (56%) were more likely to use cash than non-concession households. However, non-concession households were more likely than concession cardholders to pay using credit/debit card (27% cf 11%) or by electronic funds transfer (19% cf 8%). Other cardholders were slightly more likely to use electronic funds transfer (10%) or credit card (13%) than were aged/service pensioners were (6% electronic funds transfer and 11% credit/debit card).

#### 11.2.2 Payment Medium

In 2001 (but not in 1996) respondents were asked what *medium* they used to pay bills. As discussed previously, cash was the *means* used by which most households to pay utilities bills and Council rates in 2001.

Of households that paid cash for electricity bills, 98% made payments at a Post Office. Most payments by cheque were also likely to be paid at a Post Office (82%), with one in five paying via electronic funding transfer payments at this venue (21%). (Table 11.2.2)

The majority of credit/debit card payments for electricity bills were made by telephone (72%).

Under half (44%) of non-concession households made electricity bill payments at a Post Office, but the majority of aged/service pensioners (77%) and other concession holders (80%) did so. Non-concession households were much more likely (32%) than aged/service pensioners (7%) or other concession holders (10%) to pay such bills via telephone.

Cash payments made by households for gas bills were almost always usually made at a Post Office (98%). The majority of payments by cheque were also made at a Post Office (80%), while most of the other gas bill payments made by cheque were sent by mail (18%).

Seven in ten (71%) payments by credit/debit card for gas bills were made by telephone, as were one third of electronic funds transfer payments (34%). Four in ten (44%) non-concession households paid their gas bill at a Post Office, while the majority of aged/service pensioners (76%) and other concession holders (80%) did so. Non-concession households were much more likely (31%) than aged/service pensioners (6%) or other concession holders (10%) to pay by telephone.

Among different sample types, the method of payment for gas bills followed the same trend as observed for electricity bill payments.

Methods of payment made for water bills were similar to methods made for electricity and gas payments. Most (94%) households who paid by cash did so at a Post Office, and over three-quarters (77%) of households that paid water bills by cheque did so at a Post Office.

The majority of credit/debit card water bills payments were made by telephone (71%) and a third of payments by electronic funds transfer were also made by telephone (32%).

Once again, the majority of aged/service pensioners (73%) and other concession holders (75%) paid their water bills at a Post Office, but non-concession households were less likely to do so (43%). They were more likely than concession cardholders to pay water bills by telephone (31% cf 8%) or customer initiated direct debit (10% cf 1%).

Council rates paid in cash in 2001 were usually paid at a Post Office (64%) or at the Council offices (25%). Payments made by cheque were usually made at a Post Office (43%), the Council offices (26%) or by mail (25%). Six in ten (60%) payments made by credit/debit card were made by telephone.

The main methods used by non-concession households to pay their Council rates were at the Post Office (33%), by telephone (24%) and at the Council offices (16%). The majority of concession cardholders paid their rates at the Post Office (50%) or at the Council offices (28%). Aged/service pensioners and other concession holders were almost equally as likely to pay using those methods.

Method of Bill Payment 2001									
Bill Type/Payment Medium	Total %	Cash %	Credit/ Debit card %	Cheque %	Direct Debit %	Electronic Funds Transfer %			
Electricity -									
At the Post Office	57	98	17	82	10	21			
At the Bank	2	2	2	2	8	*			
By Mail	2	*	1	16	1	1			
By Telephone	23	1	72	3	9	32			
Via Internet	4	1	6	*	*	19			
Automated Direct Debit	7	*	6	1	71	2			
Customer Initiated Direct Debit (B-Pay)	6	*	4	*	5	28			
Gas -									
At the Post Office	56	98	17	80	5	22			
At the Bank	2	1	1	2	7	*			
At Gasmart Outlets	*	*	-	*	*	*			
By Mail	2	*	1	18	1	1			
By Telephone	23	1	71	3	8	34			
Via Internet	5	1	6	*	*	20			
Automated Direct Debit	8	*	6	1	74	2			
Customer Initiated Direct Debit (B-Pay)	6	*	5	*	7	26			
Water -									
At their Office (s)	2	4	2	3	*	*			
At the Post Office	55	94	16	77	8	22			
At the Bank	2	2	2	3	7	*			
By Mail	3	*	1	17	1	*			
By Telephone	23	1	71	4	10	32			
Via Internet	5	1	7	*	*	19			
Automated Direct Debit	6	*	5	1	69	2			
Customer Initiated Direct Debit (B-Pay)	6	*	4	*	9	28			
Council Rates -									
At their Office (s)	20	25	12	26	1	6			
At the Post Office	39	64	14	43	8	16			
At the Bank	5	8	4	6	3	1			
By Mail	6	*	2	25	2	1			
By Telephone	18	*	60	2	9	31			
Via Internet	4	1	6	*	*	17			
Automated Direct Debit	5	*	5	1	78	1			
Customer Initiated Direct Debit (B-Pay)	5	*	4	*	4	29			
Base: Total respondents with electricity/gas/water	r bills and	Council	rates 2001.						

### Table 11.2.2: Method of Bill Payment by Medium 2001

#### 11.2.3 Payment via Instalment

#### 11.2.3.1 Awareness of Easy Way or Easy Pay Method

In 2001, household awareness of Easy Way or Easy Pay method of paying bills by instalment was relatively high for electricity (73%), gas (73%) and Council rates (75%). A slightly smaller proportion were aware of the Easy Way method for payment of water bills (67%). In 1996, 79% of households were aware of the Easy Way method of paying electricity bills, 76% for gas bills and 67% for water bills. Households were not asked about Council rates in 1996. As **Chart 11.2.3.1** below shows, awareness of this method of bill payment fell or was maintained for all utilities between surveys.





Base: Total respondents 2001 and 1996 surveys.

There were differences in awareness between households in different locations and housing status, and to a lesser extent, between non-concession households and concession cardholders.

Awareness of the Easy Way method was higher in country Victoria than in Melbourne, but in general, awareness in both locations fell between surveys.

In respect of electricity, in 2001 awareness of Easy Way was 86% in country Victoria and 68% in Melbourne, and in 1996 awareness was 89% in country Victoria and 75% in Melbourne.

For gas, in 2001 awareness of Easy Way was 86% in country Victoria and 68% in Melbourne. In 1996, 84% of households in provincial cities were aware of Easy Way and 72% of Melbourne households.

In 2001 79% of households in country Victoria were aware of the Easy Way method to pay water bills compared to 62% of Melbourne households. In 1996, these figures were 74% and 64% respectively, signifying a rise in awareness in country Victoria, a reversal of the trend seen for electricity and gas.

In 2001, 83% of provincial city households were aware of the Easy Way method to pay Council rates and awareness was lower in Melbourne at 72% of households.

Differences in awareness of the Easy Way method for payment of electricity, gas and water bills between non-concession households and concession cardholders was not considerable. However, awareness for Easy Way was highest for other card holders than aged/service pensioners and non-concession households for gas and electricity bills, but not for Council rates. This is likely to be because a smaller proportion of other concession holders paid Council rates relative to other sub-groups.

In respect of Council rates, 77% of non-concession households and aged/service pensioners were aware of Easy Way, compared with 65% of other concession holders.

Awareness of Easy Way payments for electricity in 2001 was highest for households in public rental (85%) and home buyers (78%) relative to private sector renters (71%) and home owners (69%). In 1996, awareness was evenly spread across those subgroups (around 80%).

For gas, awareness of Easy Way was highest in 2001 for households in public rental (82%) and home buyers (79%), than for home owners (70%) or households in private rental (69%). In 1996, home buyers (79%) and home owners (78%) were more likely to be aware of Easy Way than private (70%) or public renters (64%).

Awareness of the Easy Way method for payment of water bills in 2001 was higher for home buyers (72%) and home owners (68%) relative to households in public (62%) and

private (52%) rental. In 1996 the same trend was apparent, with 78% of home owners, 69% of home buyers, 53% of private renters and 31% of public renters aware of Easy Way.

#### **11.2.3.2 Frequency of Paying by Instalments**

Comparisons of results between the 2001 and 1996 surveys for this section could not be strictly undertaken since in 1996 there was no distinction made as to the frequency of paying in instalments (always, sometimes and so forth). Respondents in 1996 were asked to give a 'yes' or 'no' response to the question '*do you pay your (electricity/gas/water) bill in instalments*?' The data collected in 1996 therefore collected information only those households that paid in instalments at the time of the survey.

However, the 2001 result shows that people either regularly pay in instalments or they don't at all, with small proportions paying via this method sometimes (4%) or hardly ever (2%). Unless there is evidence that payment habits have changed considerably since 1996 (which does not appear to be the case), it does look as if comparisons can be made between those saying 'yes' in 1996 and those saying 'always' in 2001. (**Table 11.2.3.2**)

Frequency of Bill Payment	Non- concession	Aged/ service	Other concession	Total concession	Total
Pay gas bills by instalment					
Always	7	9	20	14	10
Sometimes/ Hardly ever	6	3	8	5	6
Total 2001	13	12	28	19	16
Total 1996	7	9	23	15	11
Pay electricity bills by instalment					
Always	8	10	22	16	11
Sometimes/ Hardly ever	6	4	12	8	7
Total 2001	14	14	34	24	18
Total 1996	8	11	30	20	14
Pay water bills by instalment					
Always	7	8	13	10	9
Sometimes/ Hardly ever	4	3	9	6	5
Total 2001	11	11	22	16	14
Total 1996	6	7	11	9	7
Pay Council rates bills by instalment					
Always	24	23	19	21	23
Sometimes/ Hardly ever	10	5	7	6	7
Total 2001	34	28	26	27	30

# Table 11.2.3.2: Frequency of Payment of Utility Bills and Council Rates by Instalment by Sample Type

Base: Total respondents 2001 and 1996 surveys.

#### 11.2.3.2.1 Electricity

Three-quarters (76%) of households that *received electricity bills* in 2001 and *were aware of Easy Way* never paid their electricity bill in instalments. Thirteen percent always did, 5% sometimes did and 3% hardly ever did.

There were no significant differences in the proportion of households that had *never* paid in instalments between Melbourne and country Victoria in 2001 (77% and 74% respectively), although greater proportions of Geelong households always paid by instalment (17%). In respect of sample type however, concession cardholders were more likely than non-concession households to always pay their electricity bills in instalments (18% cf 10%). This was mainly due to the proportion of 'other card holder' households who always paid by instalment (25%) relative to other sample types. Most (80%) nonconcession households never paid in instalments compared to 70% of cardholders.

This difference was also reflected in household's housing status where 43% of renters in the public sector always paid electricity in instalments compared to 21% of households in private rental, 15% of households buying their home and 7% of households who owned their home.

#### 11.2.3.2.2 Gas

The results were similar for gas payments as were observed for electricity. In 2001, 78% of households *who paid gas bills* and *were aware of Easy Way* never paid their gas bill by instalments, 12% always paid in instalments, 4% sometimes did and 3% hardly ever did. Greater proportions of Geelong households always paid their gas bills by instalment (19%) than do households in other provincial centres.

One fifth (18%) of concession cardholders *always* paid their gas bills by instalments compared to 9% of non-concession households. Again, this was mostly due to the relatively high proportion of 'other card holders' that always paid in instalments (25%). Eighty percent of non-concession households *never* paid in instalments compared to 73% of cardholders.

Nearly half (46%) of households in the public rental sector, 20% of households renting privately, 14% of buyers and 6% of home owners *always* paid their gas bills in instalments. Most (85%) home owners, thee quarters (76%) of homebuyers, two thirds (66%) of private sector renters and 40% of public sector renters *never* paid their gas bills in instalments.

#### 11.2.3.2.3 Water

Most (80%) households that had water bills and were aware of instalment payment plans had *never* paid their water bill in instalments, 11% always did, 4% sometimes did and 2% hardly ever did. Just 4% of Shepparton households always paid their water bills by instalment, compared with 12% of Geelong households and 13% of Ballarat households.

Again, a higher proportion of non-concession households had *never* used instalments than concession cardholders (83% cf 76%). However, a high proportion of aged/service pensioners never paid by instalment relative to other concession holders (84% and 68% respectively). About a fifth (18%) of other concession cardholders *always* paid their water bills by instalments compared to 9% of non-concession households and 10% of aged/service households.

Similarly, 23% of renters in the public sector, 12% in private rental, 14% of home buyers and 7% of home owners always paid water bills by instalment.

#### 11.2.3.2.4 Council Rates

Council rates were more likely to be paid in instalments than utility bills. In 2001, a third of households who paid Council rates *always* paid in instalments (23%), 9% sometimes did and 3% hardly ever did. Just over half (55%) *never* paid Council rates in instalments.

Far greater proportions of Melbourne households always paid their Council rates by instalment when compared with households in country Victoria (36% cf 26%). Interestingly, far fewer Geelong households always paid these rates by instalment (19%) than did households in other provincial centres – a reversal of the trend observed for utility bill payment.

Not surprisingly, households paying off their homes had far greater proportions paying off their Council rates by instalment than did those who fully own their home (40% cf 28%). This trend is also likely to account for why more other concession households always paid rates via instalment when compared with aged/service households (36% cf 30%), as 'other concession household are less likely to have paid off their homes.

#### 11.2.3.3 Instalment Type Used

Households that always, sometimes or hardly ever used instalments to pay utility bills or Council rates were asked what type of instalment method they used. Analysis by subgroup is not presented in this section due to small sample sizes.

In respect of electricity bills, in 2001 35% of households that used instalments paid with the Easy Way fixed amount including an amount toward an outstanding bill, 34% used the Easy Way fixed amount estimate and 22% used Flexi Way (9% could not say).

Similarly with gas in 2001, 36% of households that used instalments paid with the Easy Way fixed amount including an amount toward an outstanding bill, 35% used the Easy Way fixed amount estimate, 20% used Flexi Way and 9% could not say.

The most frequently used instalment payment plan used by households for water bills was the Easy Way fixed amount estimate (43%), followed by the Easy Way fixed amount including an amount toward an outstanding bill (30%) and Flexi way (14%), while 13% could not say.

Again, a comparison with the 1996 data could not strictly be conducted because incidence of payment by instalment was asked differently in the 2001 and 1996 surveys. However, trends between 1996 and 2001 indicate that there has been a movement away from the use of the Flexi Way plan toward other of the Easy Way plans.

The majority of households that had ever paid their Council rates by instalment used the Easy Way fixed amount estimate (73%), 17% used the Easy Way fixed amount including an amount toward an outstanding bill and 9% could not answer.

#### 11.2.3.4 How Instalment Is Set

Households that paid their utilities bills and Council rates by instalment were asked how these instalment amounts were set.

In 2001, of households that paid their electricity bills by instalment, 37% decided upon the amount themselves, 33% discussed and agreed the amount with the supplier, and 23% had the amount set by the supplier without discussion with the household (7% could not answer).

Similarly, for households that paid gas bills by instalment in 2001, 37% discussed and agreed the amount with the supplier, 32% decided upon the amount themselves and 22% had the amount set by the supplier without discussion with the household (7% could not answer).

In 2001, instalments for water bills were set by the supplier without discussion with the household for 36% of households, 31% discussed and agreed the amount with the supplier, 23% decided the amount themselves and 10% could not answer.

For the majority of households in 2001 that paid Council rates in instalments, the amount was set by Council without consultation with the household (82%), whilst for the remainder 10% discussed and agreed the amount with the Council and 8% could not say how the amounts were set.

Since 1996, the proportions deciding the instalments amount themselves has fallen, whilst the proportion having the supplier set the value has been maintained or increased slightly across all bill types. However, the proportions discussing and agreeing the value of the instalment with the supplier has increased for electricity and gas bills since 1996, but has fallen for water bills.

Due to small sample sizes analysis by sub-group could not be conducted.

#### 11.2.3.5 Effect of Paying Instalments on Consumption

In 2001, the majority of households that paid their utilities bills by instalment and who nominated how the instalments were set, reported that their consumption of electricity, gas or water had stayed the same as a result of being able to pay bills in instalments. This question was not asked in 1996. Analysis by sub-group is not presented in this section due to small sample sizes.

In respect of electricity, 79% of households reported that their consumption stayed the same, 11% had increased their consumption (albeit most indicated slight rather than great increases), 4% had decreased their electricity consumption and 6% could not say.

The pattern for gas consumption was similar. In 2001, 78% of households who paid by using an instalment scheme had no change in their gas consumption, 12% increased and 5% decreased their consumption of gas (5% could not say).

Similar responses were given for water consumption. Seventy nine percent of households reported that their consumption stayed the same, 12% had increased their consumption and 4% had decreased their electricity consumption (5% did not answer).

#### **11.3 DIFFICULTIES IN MEETING PAYMENTS**

#### **11.3.1 Incidence and Frequency of Having Difficulties in Meeting Payments**

#### 11.3.1.1 Electricity

In 2001, 14% of all households that received electricity bills did have problems at some time with paying them. This figure was lower than in 1996 (17%).

There were regional differences. In 2001, 17% of households in country Victoria had had trouble paying electricity bills compared to 12% in Melbourne. Almost a quarter (23%) of Geelong households had experienced trouble compared to 19% of Ballarat households, 18% in Bendigo and 9% in Shepparton. In 1996, the proportion of households in country Victoria that had payment problems was higher than in Melbourne (20% cf 16%) as it was in 2001. There was not much difference between provincial cities (around 20%) but the proportion in Ballarat was lower at 15%.

Not surprisingly, a higher proportion of concession cardholders had experienced problems with payment of electricity bills in 2001 compared to non-concession households (17% cf 11%). This was primarily due to the high proportion of other concession holders that reported problems (30%) relative to aged/service pensioners (6%). This was also the case in 1996, where 40% of other cardholders had experienced difficulties compared to 6% of aged/service pensioners and 14% of non-concession households.

In 2001, over a quarter (27%) of households in the private rental sector had experienced problems paying electricity bills and a quarter (25%) of households in public rental had done so. Seventeen percent of home buyers reported problems paying electricity bills, as did 6% of home owners. Similarly, in 1996 a third (32%) of households in public rental had experienced difficulties and 27% of households in private rental had done so. A fifth (21%) of home buyers had experienced problems, a little more than in 2001, and a small proportion of home owners had had trouble paying their electricity bills (8%).

Household size was also a factor, with 18% of households with 4 or more people reporting that they had trouble compared with 16% of households with 3 people, 11% of households with 2 people and 10% of one person households that reported trouble paying in 2001. Almost a fifth (24%) of households with 4 or more people had had problems in 1996 and 21% of 3 person households, and 12% of two and single person households had had trouble.

Of households that had ever had trouble paying their electricity bills in 2001, half (50%) *sometimes* had trouble paying, 34% *hardly ever* had trouble and 16% *always* had trouble paying. This distinction was not used in the 1996 survey. Respondents were asked if they had *regularly* had trouble paying these bills. Thirty four percent of households that had had trouble paying electricity bills had regularly had trouble.

#### 11.3.1.2 Gas

In 2001, 12% of all households that paid gas bills had trouble paying their gas bill at some time. This proportion was higher in 1996, with 16% reporting financial trouble paying gas bills.

The proportion of households in 2001 in country Victoria that had problems was 16% compared to 10% in Melbourne. A higher proportion of Geelong households in particular had problems relative to other locations (22%). In 1996, there was little difference between Melbourne households and country Victorian households (15% and 18% respectively). The proportion that had problems was higher in Shepparton (23%) relative to other locations.

Concession cardholders were more likely than non-concession households to have experienced problems. In 2001, 15% of concession cardholders had trouble at some time paying their gas bills compared to 10% of non-concession households. In particular, almost a quarter (26%) of other cardholders had problems in contrast to 5% of aged/service pensioners. This was also the case in 1996, where over a third (37%) of other cardholders had problems compared to 6% of aged/service pensioners and 13% of non-concession households.

A higher proportion of households in the private rental sector (24%) and public rental (22%) had experienced problems relative to home buyers (14%) and home owners (6%) in 2001. In 1996, a higher proportion of public renters had had problems (38%) relative to private renters (24%), home buyers (20%) or home owners (7%).

The greater the number of people in the household, the more likely that household had experienced problems paying gas bills. Eighteen percent of households with 4 or more people reported financial trouble in 2001 compared to 13% of households with 3 people, 9% of 2-person households and 7% of one-person households. In 1996, 21% of households with 4 or more people had problems paying gas bills compared to 19% of 3 person households, 11% of 2 person and single person households.

Of those households that reported they had ever had problems paying gas bills in 2001, half (50%) had problems *sometimes*, a third (35%) *hardly ever* and 15% *always* had problems. In 1996, 27% of households that had had problems paying gas bills had problems *regularly*.

#### 11.3.1.3 Water

A little over 1 in 10 (11%) of all households in 2001 who received water bills reported that they had ever experienced trouble paying. This was slightly higher in 1996, with 13% of households having had experienced problems.

Thirteen percent of households in country Victoria had problems paying at some time in 2001, as did 9% of Melbourne households, although households in Geelong and Ballarat had the highest proportions of households that reported problems (17% and 16% respectively). In 1996, there was no difference in the proportion of Melbourne households and country Victorian households that had problems (13% each). Shepparton households were slightly more likely (18%) than households in other locations to have had problems.

Again, a higher proportion of concession cardholders (13%) than non-concession households (9%) had had problems in 2001, as did households with 4 or more people relative to smaller households (15% 4+ person households, 11% 3 person households, 8% 2 person households and 6% one person households). As seen with problems with payment of electricity and gas bills, the higher proportion of concession holders that had problems relative to non-concession households was due to the high proportion of other concession holders that had trouble paying (23%) rather than aged/service pensioners (5%). In 1996, the same trend was apparent with 30% of other concession holders who reported problems with payment of water bills compared to 5% of aged/service pensioners and 12% of non-concession households. Larger households also had more problems in 1996 (18% 4+ person households, 17% 3 person households, 8% 2 person and single person households).

Similarly, in 2001 the proportion of households in public rental that had had problems paying water bills was higher (25%) than for private renters (20%), home buyers (14%) or home owners (6%). In 1996, the same trend was evident. Twenty seven percent of public renters, 20% of private renters, 19% of homebuyers and 7% of home owners had problems paying water bills.

In 2001, of households that had ever had problems paying water bills, half (49%) had had problems *sometimes*, 36% *hardly ever* and 15% *always*. In 1996, 27% of households that had financial difficulties had problems *regularly*.

#### 11.3.1.4 Council Rates

The proportion of households who paid Council rates and who had ever had trouble paying them was 9% in 2001. This question was not asked in 1996.

Households in country Victoria were slightly more likely to have had trouble paying their rates bills than Melbourne households (11% cf 9%). This was due to a higher proportion of households in Ballarat (14%) and Geelong (14%) that had trouble paying at some time.

There was virtually no difference in 2001 between the proportion of non-concession households and concession cardholders that had trouble paying Council rates (9% and 10% respectively). However, the proportion of other concession holders that had trouble was higher than for aged/service pensioners (20% cf 4%).

A higher proportion of home buyers reported they had ever had difficulty paying Council rates than home owners (14% cf 6%). One in ten households with 3 or more persons had had trouble paying rates (12%), 8% of two person households and 5% of one person households.

Of households that had problems paying their council rates, 47% had problems only *sometimes*, 37% *hardly ever* and 16% *always* had problems.

#### **11.3.2** Assistance with Meeting Payments

Between surveys, there was a higher proportion of households in 2001 than in 1996 that discussed their bill paying difficulties with the relevant supplier, but a higher proportion of those that asked for help in 1996 actually received help than in 2001. Analysis by sub-group is not presented in this section due to small sample sizes.

In 2001, 38% of households that had ever had trouble paying their electricity bills had discussed the problem with the supplier in the last 12 months (108 respondents). Three quarters (72%) of the households that asked for help from the supplier received help (77 respondents). The form of help received by these households included being allowed to pay off the bill in instalments (53%), extension of the due date of the bill (52%) and information given about the Utility Relief Grants Scheme (URGS) (5%). Respondents could provide multiple responses for this question.

In 1996, two thirds (64%) of households that regularly had trouble paying their electricity bills had discussed the problem with the supplier in the last 12 months. Most (84%) households that had discussed the problems said that the supplier had offered help. Of those households that were offered help, half (49%) were allowed to pay the bill off in instalments, 41% were offered an extension on the due date, 4% were given information on URGS and the remainder (6%) were given other (unspecified) forms of assistance.

A little over a third (34%) of households that had ever had difficulty meeting payments for gas bills in 2001 had discussed the problem with the gas supplier in the last 12 months (73 respondents), and 70% of those households received help (50 respondents). The form of help received was extension of the due date of the bill (50%), allowed to pay off the bill in instalments (45%), information given about the Utility Relief Grants Scheme (URGS) (7%) or other unspecified assistance (2%) (multiple answers were allowed for this question).

In 1996, 58% of households that regularly had difficulties paying their gas bills had spoken to the supplier about them in the last 12 months. Most (89%) households that discussed their problems were offered help. Of the households offered help, half (51%) were allowed to pay the bill off in instalments, 43% were offered an extension on the due date and the remainder were given other (unspecified) forms of assistance (6%).

In respect of water bills, in 2001 29% of households that had difficulty paying had discussed the problem with the supplier (53 respondents), and six in ten (61%) of those that asked for help received help from the water supplier (34 respondents).

In half of cases (54%) the help was in the form of payment of the bill in instalments. Other help offered to those households was an extension of the due date for the bill (31%), information on URGS (18%) and other unspecified help (2%).

Four in 10 (43%) households that regularly had difficulties paying their water bills had discussed the problem with the supplier in 1996. Most (81%) of the households that had discussed the problem received help from the supplier and of those, 53% were given an extension on the due date of the bill and 43% were allowed to pay the bill off in instalments.

For Council rates 30% of households that had difficulty paying had discussed the difficulties with the relevant Council (37 respondents). This question was not asked in 1996. Only half (50%) of households that had discussed their problems with local Council received help (19 respondents). The assistance received by households that were offered help were one or more of the following; payment of the bill in instalments (59%), extension of the due date (27%), referral to a financial counsellor (11%) and other unspecified forms of help (10%).

#### **11.4 DISCONNECTION AND RECONNECTION**

Analysis by sub-group is not presented in this section due to small sample sizes. In 2001, 2% of households that had ever had difficulty paying their electricity bills actually had their electricity disconnected in the last 12 months (0.2% of households with electricity bills – 5 respondents). Of those, 4 households had the electricity disconnected once in the last 12 months and one household had been disconnected four or more times. One household had problems getting electricity reconnected for a reason other than not having the reconnection fee. In 1996, a similar proportion of households that had ever had trouble paying their electricity bills had actually had the electricity disconnected in the last 12 months (3%) (0.5% of all households that receive electricity bills). Of those 12 respondents, 6 had had the electricity disconnected more than once and half of those (3 respondents) had had problems in getting it reconnected. One of those respondents did not have the reconnection fee and the remaining 2 respondents gave other reasons for having had problems with reconnection.

For gas, in 2001 5% (0.5% of households with gas bills – 10 respondents) who had trouble paying their gas bill had their gas disconnected in the last 12 months. Of those 10 households, 9 only had their gas disconnected once. The remaining household had it disconnected 4 or more times. Three of the 10 households that had gas disconnected had problems getting it reconnected.

One of these households had problems because they did not have the reconnection fee and the remaining two households gave other reasons for the problems. In 1996, 3% of households had had their gas disconnected in the last 12 months (0.5% of households that received a gas bill), and all of those households had had the gas disconnected more than once in that time (9 households). Less than half (4 households) of households that had their gas disconnected had had problems getting it reconnected. For all of them the reason was that they did not have the reconnection fee.

In respect of water, 2% of households that had ever had problems with water bills had their water restricted in 2001 (0.3% of households with water bills – 5 respondents). Four households had water restricted once in this time and 1 household had had it restricted 4 or more times. One respondent had had problems getting the water restored for a reason other than not having the reconnection fee. In 1996, only one respondent had had the water restricted and it had not happened more than once to that household (0.1% of all households that receive water bills).

In 2001, 2% of households who had difficulty paying their Council rates had legal action taken against them (0.2% of households with Council rates -3 respondents). These three households had legal action taken against them by the Council only once in the last 12 months.

This question was not asked in 1996.

#### **11.5 EMERGENCY ASSISTANCE**

#### 11.5.1 Awareness of the Utility Relief Grants Scheme (URGS)

In 2001, 16% of households were aware of the Utility Relief Grants Scheme (URGS), a State Government scheme that helps people in need with payment of their utility bills. A fifth of households (19%) were aware of URGS in 1996.

Awareness levels for URGS were virtually the same amongst both Melbourne and country Victorian households (15% and 18% respectively) in 2001, but were slightly higher for Bendigo households relative to households in other locations (20%). In 1996, there was almost no difference in awareness levels between Melbourne households and country Victorian households (19% cf 20%) and little difference between locations in country Victoria.

Awareness was higher amongst concession cardholders than non-concession households (20% cf 13%) in 2001 and awareness for both aged/service pensioners (19%) and other concession holders (21%) was high relative to non-concession households. In 1996, a quarter (24%) of concession holders had heard of URGS compared to 15% of non-concession households. In a reversal of previous trends, a slightly higher proportion of aged/service pensioners (24%) than other card holders (23%) were aware of URGS.

In 2001, a higher proportion of households that were in the public rental sector were aware of URGS (29%) than private renters (16%), home owners (17%) or home buyers (12%). In 1996, those figures were 26% of private renters, 21% of home owners, 16% of private renters and 16% of home buyers.

#### **11.5.2** Use of the Utility Relief Grants Scheme (URGS)

Those aware of the URGS scheme were asked if they had ever been assisted through the scheme to pay electricity, gas or water bills. In 2001, 11% of those households had been assisted by URGS (36 respondents) and in 1996 7% had been assisted.

In 2001, the proportion of concession cardholders aware of the scheme and that had been assisted was 13% compared to 5% of non-concession households. One in five (21%) of other card holders had been assisted, but the proportion of aged/service pensioners (5%) who had been assisted by the scheme was the same as non-concession households<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Non-concession households can claim URGS because another household member holds a concession card.

Results in 1996 showed that there was more of a distinction between concession (13%) and non-concession households (2%).

There were also differences in the uptake of URGS between households where the home was rented, owned or being purchased. In 2001, one in five (19%) households in public rental who were aware of URGS had been helped by the scheme as had 20% of households in the private rental sector, 11% of home buyers and 3% of home owners. In 1996, one third (33%) of households in public rental that had heard of URGS had been assisted through the scheme to pay bills. Thirteen percent of private renters, 4% of home buyers and 1% of home owners had been assisted.

#### **11.5.3 Other Emergency Relief**

Only 2% of all households in 2001 and in 1996 received emergency relief other than URGS to help with utility bills or Councils.

In 2001 similar proportions of households received emergency help in Melbourne as in country Victoria (2% cf 3%), and this was also the case in 1996.

As with the URGS scheme, it was more likely that concession cardholders had used other emergency schemes in 2001 (5%) than non-concession households had (1%). Again, this was due to the higher proportion of 'other card holders' who had received emergency help (8%) than aged/service pensioners (2%).

In 1996, non-concession households were also less likely to have been assisted by other emergency schemes than concession holders (5% cf 1%). other card holders were more likely than aged/service pensioners to have been assisted (9% cf 1%).

One in ten households in the public rental sector (13%) had used emergency relief to pay utilities bills or Council rates<sup>1</sup> in 2001, whilst 4% of private renters, 2% of homebuyers and 1% of home owners had used emergency relief. This was also the case in 1996, where 13% of public renters had used emergency relief compared to 4% of private renters, 1% of home owners and less than 0.5% of home buyers.

<sup>&</sup>lt;sup>1</sup> Some households can claim emergency relief on Council rates even though they live in public rental accommodation, because the household also owns property in another name.

### **12 HOUSEHOLD EXPENDITURE PRIORITIES**

#### **12.1 GREATEST EXPENDITURE ITEMS**

#### 12.1.1 Expenditure Items Spent Most Money on During One Year

As can be seen in chart 12.1.1 on average households spend the most during the year on food and groceries. This was the case for both 2001 and 1996 (45% and 47% respectively). Rents and mortgages followed this, which in 1996 was considered the highest expenditure item by 33% of households and in 2001 by 31% of households. Note that these figures cannot be compared directly since in 1996 the questionnaire asked about 'rent/mortgage/rates' whilst in 2001 Council rates stood alone as a separate item. However, it is clear from these results that rent/mortgage was considered to be a significant expense by about a third of households.

All sample types ranked food and groceries first in 2001 but a higher proportion of aged/service pensioners ranked this item first (56%) relative to other card holders (45%) or non-concession households (41%). However, only 6% of aged/service pensioners ranked rent/mortgage first compared to 38% of non-concession households and 32% of other card holders. This is a reflection of the higher proportion of aged/service pensioner households that own or have paid off their home (84%). Aged/service pensioners were more likely (12%) than other card holders (5%) or non-concession households (3%) to rank Council rates first.

In 1996, 56% of aged/service pensioners and 45% of non-concession households and 41% of other concession households ranked food and groceries first. Rent/mortgage/rates was ranked as the main expense by 40% of non-concession households, 38% of other concession households and 12% of aged/service pensioners. Aged/service pensioners were more likely (14%) than non-card householders (2%) or other cardholders (5%) to rank electricity as their main expense.

In 2001, a higher proportion of country Victorian households ranked food and groceries first than did Melbourne households (53% cf 42%) and this trend was also apparent in 1996 (51% and 45% respectively). Rent/mortgage was ranked as the item households spent more on by 33% of Melbourne households and 23% of country Victorian households in 2001. There was a wider discrepancy between city and country in 1996, where more than a third (36%) of Melbourne households ranked rent/mortgage rates as their biggest expense compared to a quarter (26%) of country Victorian households.

The only sub-groups in 2001 to rank rent/mortgage first as the greatest expenditure item ahead of food or groceries were homebuyers (58% cf 31%) and private rental households (62% cf 31%). This trend was also apparent in 1996, where 67% of households in private rental ranked rent/mortgage/rates as their main expense as did 61% of home buyers.

Almost half of households with 4 or more persons (48%) or 2 more persons (48%) and 4 in 10 households with 3 persons (42%) ranked food and groceries as their major expense in 2001 compared to 35% of single person households. In 1996, the same trend was apparent with about half of households of 4 or more people (52%), 3 people (49%) and 2 people (48%) ranking food and groceries as the biggest expense compared to 34% of single person households. Rent/mortgage was ranked as the main expense in 2001 by around 4 in 10 households with 4 or more (37%) or 3 people (38%), and around a quarter of households with 2 people (25%) or one person (23%) living there. The figures for 1996 were similar to 2001 for 4 or more person and 3 person households (each 36%) but there was a slight increase in the proportion of single person (32%) and 2 person (30%) households that ranked rent/mortgage/rates first. It is important to remember when comparing these results that the 1996 questionnaire included rates with rent/mortgage.



#### Chart 12.1.1: Items Households Spend Most On 2001 and 1996

Note: The 1996 questionnaire did not ask respondents to rank Council rates or personal loans.

Base: Total respondents 2001 and 1996 surveys.

#### 12.1.2 Mean Expenditure Ranking on Items during a Year

In terms of expenditure outlays, analysis has been able to be undertaken by mean ranking in both 2001 and 1996. However, it must be stressed that the mean ranking in 2001 is out of ten (ie: ten expenditure items ranked), whilst in 1996 the mean ranking is out of eight (ie: eight expenditure item ranked). It must also be noted that outlays on rent/mortgage and council rates were combined in 1996, so mean ranking's are not strictly comparable.

Please note that the lower the mean score achieved, the higher the item was ranked in terms of expenditure outlaid (ie: the lowest mean score obtains a ranking of one).

Table 12.1.2 highlights the mean ranking's for expenditure items. Of note is that whilst 45% of households ranked expenditure on food and drink first in 2001, this item was ranked second in terms of mean ranking. Rent/mortgage was ranked first in terms of mean ranking, named as the greatest expenditure item by 31% of respondents in 2001.

Analysis by sample type is also provided in the table following:

	2001 (n=2,006)						1996 (n=2,000)					
Mean ranking for Bil Payment	Non- concession	Aged/service	Other concession	<b>Total</b> concession	Total	Non- concession	Aged/service	Other concession	Total concession	Total		
Rent/Mortgage	1.85 (1)	3.42 (3)	2.09(1)	2.38 (2)	2.00(1)	2.80 (2)	3.75 (4)	2.76 (2)	3.31 (3)	3.00 (2)		
Food & groceries	2.15 (2)	2.03 (1)	2.13 (2)	2.08 (1)	2.12 (2)	1.94 (1)	2.07 (1)	2.05 (1)	2.06 (1)	1.99 (1)		
Car expenses	3.46 (3)	3.46 (4)	3.87 (3)	3.68 (4)	3.53 (3)	3.55 (3)	3.72 (3)	4.04 (4)	3.87 (4)	3.66 (3)		
Electricity	4.37 (4)	3.30 (2)	3.90 (4)	3.60 (3)	4.08 (4)	4.12 (4)	3.03 (2)	3.59 (3)	3.28 (2)	3.77 (4)		
Council Rates	4.70 (5)	3.53 (5)	4.64 (5)	3.97 (5)	4.44 (5)	#	#	#	#	#		
Phone	5.04 (7)	4.91 (7)	4.69 (6)	4.81 (7)	4.95 (6)	4.75 (5)	4.46 (6)	4.23 (5)	4.36 (5)	4.59 (5)		
Personal Loans	4.94 (6)	8.24 (9)	5.28 (8)	5.69 (9)	5.10(7)	n/c	n/c	n/c	n/c	n/c		
Gas	5.78 (8)	4.39 (6)	5.10(7)	4.74 (6)	5.39 (8)	5.18 (6)	4.45 (5)	4.75 (6)	4.58 (6)	4.95 (6)		
Water	6.18 (9)	5.26 (8)	6.02 (9)	5.62 (8)	5.97 (9)	5.49 (7)	4.72 (7)	5.66 (7)	5.11 (7)	5.34 (7)		
Hire Purchase	7.18 (10)	8.66 (10)	7.71 (10)	7.48 (10)	7.26 (10)	5.89 (8)	7.38 (8)	5.97 (8)	6.45 (8)	6.05 (8)		

Table 12.1.2 – Mean Expenditure Rankings on Items During a Year by Sample Type

Total Respondents 2001 and 1996.

#: Collected as Rent/mortgage and council rates in 1996.

n/c: Not collected in 1996.

#### **12.2 PRIORITY OF BILL PAYING**

#### 12.2.1 First Priority for Bill Paying

Respondents were asked to rank a number of items in response to a hypothetical question about which order they would pay bills if the bills were all due at the same time and all of the a similar size. The results for the bills that they would pay first are shown in **Chart 12.2.1**.

The most important items in 2001 and 1996 were rent/mortgage (40% and 50% respectively) and electricity bills (19% and 23% respectively). As with the previous section, the 1996 and 2001 results cannot be compared directly for rent/mortgage since Council rates were included in with rent/mortgage in 1996 but as a separate item in 2001. However, it is clear that a substantial proportion of households would pay their rent or mortgage first, and about one in five of all households would pay electricity bills first. This trend alters as would be expected by sample type.

The main reason given in 2001 by households that put rent/mortgage bills first was *need a place to live/roof over head/don't want to be evicted* (88%). The main reason given in 1996 was also *need a place to live/roof over head/don't want to be evicted* (58%)

Reasons given in 2001 for putting electricity bills first were *need for power/light* (80%), *need for cooking/heating* (37%) and *to heat the house/keep warm* (17%). In 1996, the main reason given for paying electricity bills first was *need for power/light* (42%).

The main reasons given for paying Council rates first were *high interest/penalty for late payment* (71%) and *need a place to live/roof over head/don't want to be evicted* (20%). In 2001 a higher proportion of households would pay credit cards first than in 1996 (11% cf 4%). The main reasons given by those households for putting credit card payment first were *high interest/penalty for late payment* (64%) and *can use credit card to pay off other bills* (37%).





Base: Total respondents 2001 and 1996 surveys.

Note: The 1996 questionnaire did not ask respondents to rank Council rates or personal loans.

#### 12.2.2 Mean Ranking for Bill Payment

Mean ranking for priority of bill paying has been provided for both 2001 and 1996 surveys. The lower the mean score, the higher the ranking (ie. the lowest mean score gives that item a ranking of one). Strict comparisons with the 1996 data could not be made because eight items were ranked in 1996 and ten were ranked in 2001. Furthermore, the items of rent/mortgage and council rates were combined in 1996, thereby making assessment of these items more difficult.

The table following charts that rent/mortgage achieved the ranking of one for 2001. This was the case for all sample types with the exception of aged/service pensioners who are less likely to have a mortgage or rent than other groups. Car expenses is the item that varies considerably by sample type, but the variation is consistent across surveys. Notably, the mean ranking of water rates has moved for four to seven since 1996.

	2001 (n=2,006)					1996 (n=2,000)					
Mean ranking for Bill Payment	Non- concession	Aged/service	Other concession	Total concession	Total	Non- concession	Aged/service	Other concession	Total concession	Total	
Rent/mortgage#	1.96 (1)	2.87 (2)	1.79 (1)	2.05 (1)	1.99 (1)	2.50(1)	3.26 (3)	2.17 (1)	2.78 (2)	2.61 (2)	
Electricity	3.25 (2)	2.23 (1)	2.88 (2)	2.54 (2)	2.98 (2)	2.79 (2)	2.06 (1)	2.52 (2)	2.26 (1)	2.57 (1)	
Gas	4.23 (3)	3.02 (3)	3.52 (3)	3.26 (3)	3.87 (3)	3.63 (3)	2.98 (2)	3.19 (3)	3.07 (3)	3.41 (3)	
Car expenses	4.26 (4)	4.38 (7)	4.46 (4)	4.42 (5)	4.32 (4)	4.24 (4)	4.53 (6)	4.45 (5)	4.49 (6)	4.33 (5)	
Credit Cards	4.58 (5)	3.92 (5)	4.74 (6)	4.53 (=6)	4.53 (5)	5.34 (8)	5.70 (7)	5.74 (8)	5.72 (7)	5.44 (7)	
Council rates	4.90 (6)	3.61 (4)	4.58 (5)	3.99 (4)	4.58 (6)	#	#	#	#	#	
Water	5.20 (8)	4.28 (6)	4.82 (7)	4.53 (=6)	4.95 (7)	4.32 (5)	3.63 (4)	4.32 (4)	3.92 (4)	4.17 (4)	
Phone	5.26 (9)	4.39 (8)	4.85 (8)	4.61 (8)	5.02 (8)	4.84 (6)	4.24 (5)	4.53 (6)	4.36 (5)	4.65 (6)	
Personal loans	5.14 (7)	7.16 (10)	5.08 (9)	5.48 (9)	5.22 (9)	n/c	n/c	n/c	n/c	n/c	
Hire purchase	6.22 (10)	6.51 (9)	6.51 (10)	6.48 (10)	6.29 (10)	5.33 (7)	5.94 (8)	5.68 (7)	5.79 (8)	5.49 (8)	

 Table 12.2.2
 Mean Ranking for Bill Payment by Sample Type.

Total Respondents 2001 and 1996.

#: Collected as Rent/mortgage and council rates in 1996.

n/c: Not collected in 1996.

# **APPENDIX 1 -**

# QUESTIONNAIRE
## **APPENDIX 2 -**

## **SHOW CARDS**

## Card A

1-2.





3.



TPI

## CARD B

SPOUSE/PARTNER	1
SON	2
DAUGHTER	3
MOTHER/MOTHER IN-LAW	4
FATHER/FATHER IN-LAW	5
BROTHER	6
SISTER	7
RELATED IN SOME OTHER WAY	8
NOT RELATED (EG. FRIEND, BOARDER)	9

Ref: [x:\productn\field\adhoc\r1964\card-b.doc;17]

## CARD C

FULL-TIME EMPLOYMENT	1
PART-TIME EMPLOYMENT	2
SELF EMPLOYED	3
HOME DUTIES	4
STUDENT	5
LOOKING FOR WORK	6
RETIRED/PENSIONER	7
PRE-SCHOOL AGE	8

OTHER (PLEASE STATE)

Ref: [x:\productn\field\adhoc\r1964\card-c.doc;6]

## Card D

## 1.





## 2.





3.





### WAGES/SALARY, INCOME FROM EMPLOYMENT ......1

PENSIONS/OTHER GOVERNMENT BENEFITS.....2

OTHER (PLEASE STATE)

Ref: [x:\productn\field\adhoc\r1964\card-e.doc;7]

#### CARD F

<u>PLEASE NOTE</u>: WHEN CALCULATING INCOME, PLEASE INCLUDE INCOME FROM **ALL** SOURCES, INCLUDING SALARIES, INTEREST, DIVIDENDS, BONUSES, CAPITAL GAINS, PROFITS AND SO ON.

TOTAL YEARLY	OR	WEEKLY
LESS THAN \$10,000	OR	LESS THAN \$193L
\$10,000 TO \$19,999	OR	\$194 TO \$384F
\$20,000 TO \$29,999	OR	\$385 TO \$574Z
\$30,000 TO \$39,999	OR	\$575 TO \$769B
\$40,000 TO \$49,999	OR	\$770 TO \$959Y
\$50,000 OR MORE	OR	\$960 OR MOREG

Ref: [x:\productn\field\adhoc\r1964\card-f.doc;12]

## CARD G

OWNED/FULLY PAID OFF	.1
BUYING/PAYING OFF HOME	.2
RENTING - PRIVATE	.3
RENTING - PUBLIC/GOVERNMENT HOUSING	.4

OTHER (PLEASE STATE)

Ref: [x:\productn\field\adhoc\r1964\card-g.doc;6]

## CARD H

GAS	1
ELECTRIC	2
SOLAR – ONLY	3
SOLAR – GAS BOOSTED	4
SOLAR – ELECTRIC BOOSTED	5
OTHER	6

Ref: [x:\productn\field\adhoc\r1964\card-h.doc;7]

## CARD i

AT LEAST ONCE A DAY	. 1
FOUR TO SIX TIMES A WEEK	.2
ONE TO THREE TIMES A WEEK	.3
ONCE EVERY TWO OR THREE WEEKS	.4
ABOUT ONCE A MONTH	.5
LESS OFTEN	.6

### CARD J

## **Gas Heaters**

BUILT-IN GAS HEATER (WALL FURNACE)	01
GAS DUCTED/CENTRAL HEATING	02
HYDRONIC HEATING	03

## **Electric Heaters**

PORTABLE ELECTRIC HEATER (FAN HEATER, BAR HEATER, RADIATOR)	.04
REVERSE CYCLE AIRCONDITIONER	05
BUILT-IN ELECTRIC HEATER	06
ELECTRIC DUCTED/CENTRAL HEATING	07
SLAB FLOOR/PYROTENIX HEATING	08
ELECTRIC OPERATED, OIL HEATED SYSTEM (INCLUDING PORTABLE COLUMN OIL HEATERS)	09

## **OTHER HEATERS**

KEROSENE HEATER	10
WOOD HEATER/SOLID FUEL (OPEN FIRE, POTBELLY STOVE)	11
OIL HEATER	12

Ref: [x:\productn\field\adhoc\r1964\card-j.doc;9]

## CARD K

AT LEAST ONCE A DAY	.1
FOUR TO SIX TIMES A WEEK	.2
ONE TO THREE TIMES A WEEK	.3
ONCE EVERY TWO OR THREE WEEKS	.4
ABOUT ONCE A MONTH	.5
LESS OFTEN	6

Ref: [x:\productn\field\adhoc\r1964\card-k.doc;3]

## CARD L

BATH	1
BATH WITH SPA JETS	2
SPA POOL	3
ABOVE GROUND SWIMMING POOL	4
IN-GROUND SWIMMING POOL	5
TODDLERS POOL	6
SAUNA	7
WATERBED	8

Ref: [x:\productn\field\adhoc\r1964\card-I.doc;5]

## CARD M

HAND HELD HOSE	.1
PORTABLE/WALKING SPRINKLER	.2
BUILT IN SPRINKLER SYSTEM	.3

OTHER (PLEASE STATE)

Ref: [x:\productn\field\adhoc\r1964\card-m.doc;7]

### CARD N

CAR EXPENSES

### COUNCIL RATES

## ELECTRICITY

FOOD AND GROCERIES

GAS

HIRE PURCHASE AGREEMENT(S)

PERSONAL LOAN(S)

PHONE

**RENT/MORTGAGE** 

WATER

Ref: [x:\productn\field\adhoc\r1964\card-n.doc;9]

### CARD O

CAR EXPENSES

COUNCIL RATES

CREDIT CARDS

ELECTRICITY

GAS

HIRE PURCHASE AGREEMENT(S)

PERSONAL LOAN(S)

PHONE

**RENT/MORTGAGE** 

WATER

Ref: [x:\productn\field\adhoc\r1964\card-o.doc;12]

## CARD P

CASH1	
CREDIT CARD/DEBIT CARD2	2
CHEQUE	3
DIRECT DEBIT FROM ACCOUNT	ŀ
ELECTRONIC FUNDS TRANSFER (EG. EFTPOS, INTERNET, B-PAY)5	5
SOME OTHER (PLEASE STATE)	

Ref: [x:\productn\field\adhoc\r1964\card-p.doc;8]

## CARD Q

AT THEIR OFFICE(S)1
AT THE POST OFFICE2
AT THE BANK
AT GASMART OUTLETS4
BY MAIL5
BY TELEPHONE6
VIA INTERNET7
AUTOMATED DIRECT DEBIT FACILITY
CUSTOMER INITIATED DIRECT DEBIT FACILITY (EG. B-PAY, MAXI-KIOSK)9
OTHER (PLEASE SPECIFY)

Ref: [x:\productn\field\adhoc\r1964\card-q.doc;9]

## CARD R

ALWAYS	1
SOMETIMES	2
HARDLY EVER	3
NEVER	4

Ref: [x:\productn\field\adhoc\r1964\card-r.doc;4]

#### CARD S

You pay in advance of the due date, in amounts of \$10 or more, as and when you choose. This is also known as Flexi-way.......1

Ref: [x:\productn\field\adhoc\r1964\card-s.doc;11]

### CARD T

ALWAYS	1
SOMETIMES	2
HARDLY EVER	3
NEVER	4

Ref: [x:\productn\field\adhoc\r1964\card-t.doc;4]

## LIST OF UTILITY SUPPLIERS

## **1. ELECTRICITY**













**2. GAS** 







## **3. WATER**















## LIST OF COUNCILS

Ballarat	401
Banyule	402
Bayside	403
Boroondara	
Brimbank	405
Casey	406
Darebin	
Frankston	408
Glen Eira	409
Greater Bendigo	410
Greater Dandenong	411
Greater Geelong	
Greater Shepparton	
Hobsons Bay	414
Hume	
Kingston	416
Knox	417
Manningham	418
Maribyrnong	419
Maroondah	420
Melbourne	421
Monash	
Moonee Valley	423
Moreland	
Mornington Peninsula	425
Nillumbik	
Port Phillip	427
Stonnington	428
Whitehorse	
Whittlesea	
Wyndham	431
Yarra	
Yarra Ranges	

# APPENDIX 3 -

## **CONSENT FORMS**







To the Gas Supplier,

I, the account holder at the address below (or on behalf of the account holder) authorise you, the gas company, to release gas billing information for this address to an executive of Roy Morgan Research. The specific information I authorise you to release to Roy Morgan research is the fixed and variable charges for gas supplied for the period 1 April 2000 to 31 March 2001 or the relevant part thereof.

I understand that this information will be confidential to Roy Morgan Research and that it cannot be disclosed to any other person or authority, for any reason. I also understand that the information will only be used for the purpose for which you provide it to Roy Morgan Research and that it cannot be disclosed to any other person or authority for any reason. I understand that the information will be used for the purpose for which you provide it to Roy Morgan Research and that it cannot be disclosed to any other person or authority for any reason. I understand that the information will be used for the purpose for which you provide it to Roy Morgan Research, namely the Victorian Household Utility Consumption Survey 2001.

The details of the account are as follow.

#### GAS ACCOUNT DETAILS

#### NAME OF ACCOUNT HOLDER (AS SHOWN ON ACCOUNT)

#### ACCOUNT NUMBER (IF AVAILABLE)

ADDRESS OF DWELLING (AS SHOWN ON ACCOUNT)

NUMBER:

STREET:

SUBURB/TOWN:

HOUSEHOLD ID:

POSTCODE:

CIRCLE GAS SUPPLIER NUMBER:

201 ...... Origin Energy (formerly Energy21)
203 ...... Pulse (formerly IKON)
202 ...... TXU (formerly Kinetik)

Name of account holder:

 Signature
 Date:

 SAMPLE CCD NO:
 CONTRACTOR NO:

If lived in dwelling less than 2 years record **month** and **year** moved in (Refer to S.1d on front page).

MONTH:			YEAR:				
--------	--	--	-------	--	--	--	--





To the Water Authority/Company,

I, the account holder at the address below (or on behalf of the account holder) authorise you, the water authority/company, to release water billing information for this address to an executive of Roy Morgan Research. The specific information I authorise you to release to Roy Morgan research is the water consumption and sewerage disposal rates and charges for the period 1 April 2000 to 31 March 2001 or the relevant part thereof.

I understand that this information will be confidential to Roy Morgan Research and that it cannot be disclosed to any other person or authority, for any reason. I also understand that the information will only be used for the purpose for which you provide it to Roy Morgan Research and that it cannot be disclosed to any other person or authority for any reason. I understand that the information will be used for the purpose for which you provide it to Roy Morgan Research and that it cannot be disclosed to any other person or authority for any reason. I understand that the information will be used for the purpose for which you provide it to Roy Morgan Research, namely the Victorian Household Utility Consumption Survey 2001.

The details of the account are as follow.

#### WATER ACCOUNT DETAILS

#### NAME OF ACCOUNT HOLDER (AS SHOWN ON ACCOUNT)

ACCOUNT NUMBER (IF AVAILABLE)
-------------------------------

#### ADDRESS OF DWELLING (AS SHOWN ON ACCOUNT)

NUMBER: STREET:

SUBURB/TOWN:

POSTCODE:

#### CIRCLE WATER SUPPLIER NUMBER:

301 City West Water	<b>304</b> Barwon Water	307	Goulburn Valley Water
302 South East Water	305 Central Highlands Water		
303 Yarra Valley Water	<b>306</b> Coliban Water		
→ If Yarra Valley Water: Recor	d Property No.		
Name of account holder:			
Signature	Date://		
SAMPLE CCD NO:	CONTRACT	OR NO:	
HOUSEHOLD ID:			
If lived in dwelling less than 2 year	rs record <u>month</u> and <u>year</u> moved ir	n (Refer to	S.1d on front page).
MONTH:	YEAR:		





To the Electricity Supplier,

I, the account holder at the address below (or on behalf of the account holder) authorise you, the electricity supplier, to release electricity billing information for this address to an executive of Roy Morgan Research. The specific information I authorise you to release to Roy Morgan research is the fixed and variable charges for electricity supplied, and charges levied for the period 1 April 2000 to 31 March 2001 or the relevant part thereof.

I understand that this information will be confidential to Roy Morgan Research and that it cannot be disclosed to any other person or authority, for any reason. I also understand that the information will only be used for the purpose for which you provide it to Roy Morgan Research and that it cannot be disclosed to any other person or authority for any reason. I understand that the information will be used for the purpose for which you provide it to Roy Morgan Research, namely the Victorian Household Utility Consumption Survey 2001.

The details of the account are as follow.

#### **ELECTRICITY ACCOUNT DETAILS**

#### NAME OF ACCOUNT HOLDER (AS SHOWN ON ACCOUNT)

#### ACCOUNT NUMBER (IF AVAILABLE)

ADDRESS OF DWELLING (AS SHOWN ON ACCOUNT)

NUMBER:

STREET:

SUBURB/TOWN:

POSTCODE:

#### CIRCLE ELECTRICITY SUPPLIER NUMBER:

101	Pulse (formerly United Energy)	104	TXU Electricity (formerly Eastern Energy)
102	AGL	105	Powercor

103 ..... Citipower

HOUSEHOLD ID:

101	THE Electrony	(Ionneny	Eastern Energ
105	Powercor		

Name of account holder:											
Signature					•••••	Date					
SAMPLE CCD NO:								CONTRACTOR NO:			

If lived in dwelling less than 2 years record **month** and **year** moved in (Refer to S.1d on front page).

MONTH: YEAR:	
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To the Local Government Authority,

I, the rate payer at the address below (or on behalf of the rate payer) authorise you, the Loca; Government Authority, to release council municipal billing information for this address to an executive of Roy Morgan Research. The specific information I authorise you to release to Roy Morgan research is the fixed and variable charges for council/municipal rates, and charges levied for the period 1 July 2000 to 30 June 2001 or the relevant part thereof.

I understand that this information will be confidential to Roy Morgan Research and that it cannot be disclosed to any other person or authority, for any reason. I also understand that the information will only be used for the purpose for which you provide it to Roy Morgan Research and that it cannot be disclosed to any other person or authority for any reason. I understand that the information will be used for the purpose for which you provide it to Roy Morgan Research and that it cannot be disclosed to any other person or authority for any reason. I understand that the information will be used for the purpose for which you provide it to Roy Morgan Research, namely the Victorian Household Utility Consumption Survey 2001.

The details of the account are as follow.

#### MUNICPAL RATES AND CHARGES ACCOUNT DETAILS

NAME OF RATE PAYER (A	AS SHOWN ON ACCOUNT)
-----------------------	----------------------

ACCOUNT NUMBER (IF AVAILABLE)

#### ADDRESS OF DWELLING (AS SHOWN ON ACCOUNT)

NUMBER:

STREET:

SUBURB/TOWN:

**POSTCODE:** 

NAME OF LOCAL GOVERNMENT AUTHORITY

Name of ratepayer:		
Signature of ratepayer	Date:///	
SAMPLE CCD NO:	CONTRACTOR NO: SUPPLIER ID:	
If lived in dwelling less than 2 years record <b>month</b> and <b>year</b> moved in (Refer to S.1d on front page).		
MONTH: YEAR:		

## **APPENDIX 4 -**

## **INTERVIEWING INSTRUCTIONS**



#### HOUSEHOLD UTILITY CONSUMPTION SURVEY - 2001

#### **INTERVIEWER INSTRUCTIONS**

#### 1. Background

This is a survey of households in five major areas of Victoria to identify various matters relating to the use of electricity, gas, water and council rates by households. It is being conducted on behalf of the Victorian Department of Human Services.

The survey is in essence a repeat of a previous survey conducted by Reark Research in 1996 about utility consumption habits. Information on council rates has been included for the first time in this survey.

#### 1.1 Where

The survey will be conducted in the urban regions of the following cities and towns:

- Melbourne;
- Geelong;
- Ballarat;
- Bendigo; and
- Shepparton.

#### 1.2 What

The survey aims to:

- Collect data on the consumption of utility resources (ie. electricity, gas and water);
- Relate usage to the type of household interviewed;
- Assess energy and water conservation practices conducted in the household; and
- Assess the level of knowledge of the availability, and assistance provided by, concessions and other Government assistance, amongst households.

A brochure, which provides more information about the survey, has been produced to introduce the survey to the public. This brochure is entitled *"Victorian Household Utility Consumption Survey 2001"* and is primarily red, white and grey in colour.

A copy of this brochure should be given to all potential households to read, by handing or leaving a copy at <u>all households approached</u> for interview.

#### 2. Who is interviewed

The survey is conducted **door-to-door** amongst households in the 5 Victorian cities and towns listed previously.

The respondent for this survey will be:

# The adult member of the household who is normally responsible for payment of the household bills <u>or</u> the adult member of the household who can provide details about bills paid by the household.

This will usually be the person whose name appears on the bill, but it may be another member of the household who is responsible for the financial management of the household.

There may be households where different utility and rate bills are in different names. We do not expect you to interview different people, but to speak to the person who can properly answer on behalf of the other residents, in respect of all utility and rate bills.

In households where two or more people are equally responsible for payment of bills, then either (or any) of these people may be interviewed.

There may be other circumstances where the person whose name appears on the bills does not pay these bills themselves. (eg. an elderly person's name may appear on the bill, but their son/daughter may pay these bills on the elderly person's behalf). The person who pays the bills may or may not live in the same household as the person whose name appears on the bill. In such circumstances, an appropriate time should be arranged so that **both** the person whose name appears on the bills are both present at the interview.

The respondent will need to *sign consent forms* on behalf of the household so that Roy Morgan Research can obtain billing information from each applicable utility and council.

It is important to remember that we are only gathering information about the household and dwelling you have approached for interview. If the respondent has other property they should limit their responses only to the dwelling you have approached and exclude any information about other properties for which they have responsibility.

#### 2.1 Period of Residence

For a household to be eligible for the survey *current residents must have lived at this address since at least the end of June 2000*. If not, the respondent is not eligible for the survey and should be recorded as such on the Call Record Sheet.

For those who have lived at the residence for less than 2 years, the month and year in which they moved in *must be obtained*, so that billing information sought can be matched with the period in which the householder has lived in this dwelling.

#### 3. Utilities, Rates and Concessions

The Victorian State Government provides concessions on a number of costs to the holders of various concession cards. Concessions rates to card holders are available on gas, electricity, water bills and council rates, as well as other charges such as motor vehicle registration, travel on public transport and health care costs.

A topic of major interest for this study is the degree to which people are aware of the concessions which are available and the take-up rate of concessions. There are also some questions about the usefulness of financial management programs that the Government can provide to people who have difficulty paying their bills.

Aside from the brochures to be handed out to respondents, we will supply you with a copy of the Department of Human Services brochure entitled "*State Concessions – Your Entitlements*", which provides more detail on which concessions can be claimed. It is primarily purple and white in colour. <u>One copy of this brochure should be kept for your records – all others may be given to respondents</u>.

#### 3.1 Concession Card Holders

Half of the sample to be surveyed will be with households in which the person responsible for paying the bills is a concession card holder. There are screening questions which alert you to the type of respondent you are about to interview.

In the early days of the fieldwork, you will use the designated call pattern described in these instructions to obtain interviews. Later in the course of fieldwork you may be advised by your supervisor to limit your interviews to specific types of respondent, as quotas are imposed.

**Showcard A** illustrates the various concession cards. There are three main categories of concession card – Pensioner Concession Card, Health Care Card and Repatriation Health Card, although there appears to be many more cards and all are displayed on Showcard A.

In more detail, the three card categories are as follows:

- Pensioner Concession Card (a grey/blue credit card sized card with either a light or dark purple header section) issued by either Centrelink (Commonwealth Department of Family and Community Services) or the Commonwealth Department of Veterans' Affairs;
- 2. Health Care Card (a pastel yellow large paper card with light purple header section, which can be folded in half to become credit card sized) issued by the Department of Health and Aged Care; and
- 3. Repatriation Health Card (a gold credit card sized card) issued by the Department of Veteran's Affairs. There are various versions of this card for which all are eligible *except* the one with the word "DEPENDANT" printed at the bottom left hand corner of the card.
- *NB.* Seniors Cards issued by the Government of Victoria are not categorised as concession cards for this survey.

#### 3.2 Sample Type

If the respondent is the holder of ANY of the concession cards shown on Showcard A then the household is to be included and counted toward the **"Concession Card Holders"** sample.

If the respondent does not hold any of these cards, but someone else in the household does, then this *does not count* in the "Concession Card Holders" sample, but in the **"Non-card Holders"** sample.

The only time when this instruction will not apply is when the person whose name appears on the bills **and** the person who pays the bills are both present at the interview **and** the person whose name appears on the bills is a concession card holder. The person whose name appears on the bills would be categorised as the respondent (even though the person who pays the bills may answer the majority of the questions on that person's behalf) and be counted toward the **"Concession Card Holders"** sample.

Pensioner Card holders may be one of two types – aged/service pensioners or **other** pensioners. For quota purposes you will need to record which category the respondent is in.

#### **3.3** Concessions on Utility Consumption and Rates

Each concession card entitles the holder to the following concessions that are of interest to this survey:

- 17.5% off the winter energy bill for gas and electricity usage (Winter May to November each year);
- 50% off the water consumption bill, up to a maximum of \$67.50 per year;
- 50% off the sewerage disposal bill, up to a maximum of \$67.50 per year; and
- 50% off municipal rates/service charges, up to a maximum of \$135 per year.

To claim these concessions the card holder simply has to show their card if paying in person, or to follow the instructions on the account if paying by mail, quoting the concession number (**NB.** Showing the card is the only option when obtaining the concession on council rates).

#### Electricity and Gas

• Electricity and gas bills are relatively simple, in that the people who live in the dwelling are responsible for the full amount of the bill, whether they be owner/occupiers or renting tenants. The bill consists of a service charge and a component for the amount of energy used. A concession card holder would only pay the reduced (concession) amount shown on the bill, while other households pay the full amount.

#### Water and Sewerage – Owner/occupiers

• In dwellings which are owned or being bought by residents (owner/ occupiers), the water bill includes a component for water usage and a component for sewerage disposal, as well as an amount for the provision of the water and sewerage service to the property.

#### Water and Sewerage – Renters

• The arrangements are different for rented properties. The landlord is responsible for the service charge, as this is included in the charge for rates on the property. In general, the charge for water usage and an estimated sewerage disposal cost is paid by the tenant. However, in some instances the landlord may choose not to pass on water and sewerage consumption rates to the tenant. If a water or sewerage bill is raised for the tenant then a concession rate applies if the tenant holds a concession card.

#### Council rates

• Only owner/occupiers pay council rates – renters are ineligible. The bill includes a general municipal rate, a waste management charge, a council administration charge and in some cases, a special product/service delivery charge. Concessions can be claimed on all of these charges.

#### 3.4 Other Assistance

In addition to the concessions which are generally available to card holders, there are other forms of assistance available on a less regular basis to people in need. People who have difficulty paying a particular bill may be offered:

- An extended due date;
- Information on URGS (Utility Relief Grants Scheme); and
- The opportunity to pay by instalments (either to help pay for one outstanding bill only or for future bills).

**Flexi Plan** or **Flexi Way** are payment methods that allow people to pay small amounts off a bill in advance, thus making the actual bill they receive smaller. They can pay amounts of \$10 or more at a time whenever they want.

**Easy Way**, **Easy Pay** or **Budget Plan** are agreements between the authority and the customers (for 6 or 12 months), which involves them paying a frequent (usually fortnightly) amount in order to pay off an outstanding bill, *plus* an amount that covers their continuing usage. This latter amount covering their usage is based on an annual estimate, charged in equal amounts (usually, but not exclusively, fortnightly). This has the effect of making the bills more even across the year. Once the outstanding amount is paid off, customers can choose to remain on the estimated regular billing plan.

Householders having difficulties in paying bills may also be referred to:

- URGS (Utility Relief Grants Scheme);
- Financial advisory services/counsellors; and
- Another agency, such as the Salvation Army, St Vincent de Paul or the Brotherhood of St Lawrence.
#### 4. The Sample & Sampling Procedures

The survey will be conducted in 2,000 households, selected from the five locations (Melbourne and four Victorian regional centres).

At each of these 5 locations a number of Census Collection Districts (CCDs) have been selected. These CCDs divide the 5 locations into manageable areas for data collection and analysis.

A '*start point*' for interviewing will be selected in each CCD, from which <u>five</u> completed interviews must be obtained.

#### 4.1 Quotas

There are two distinct types of households that are to be interviewed, (1) Concession Card Holders and (2) Non-Card Holders, and quotas apply for each type.

Within the Concession Card Holder sample there is a further subdivision into those who are in receipt of an aged or service pension (ie. codes 1 and 4 in S.2a) and those who are in low income households (codes 2 & 3 in S.2a).

For the Non-Card Holder sample quotas will be set by household size (S.2b).

The table below shows the sample distribution for this study:

	NO. OF HOUSENDIAS									
			d Holder nple	Concession Sam						
		Househ	old Size		Aged/		Total			
Location	1 person	2 people	3 people	4+ people	service	Other				
Melbourne	160	220	120	200	350	350	1,400			
Geelong	17	23	12	23	38	37	150			
Bendigo	18	22	13	22	37	38	150			
Ballarat	17	23	12	23	38	37	150			
Shepparton	18	22	13	24	37	38	150			
Total	230	310	170	290	500	500	2,000			
%	11.5	15.5	8.5	14.5	25.0	25.0	100.0			

No. of Households

#### 5. Call Procedures

The procedures outlined below should be followed precisely to select and interview respondent households:

- Each assignment will contain one *'start point'* or address from which you are to commence selection of households for interview. A total of **five completed interviews** must be obtained from each 'start point'.
- Each interviewer workload will be made up of one or more assignments.
- To select and call upon sampled households you will always walk **anti-clockwise** around the block with your **left** shoulder facing toward each dwelling. See Call Pattern Example on page 10 of this document.
- The 'start point' address will **not** be selected for interview at any time. It is simply used as the starting point from which selection and interviewing is to commence.
- You will attempt to obtain an interview at *every fifth dwelling*. So if the 'start point' is at 3 Smith Street, you would count that as dwelling 1 and count until the 5<sup>th</sup> dwelling is found (probably 11 Smith Street). This is the first dwelling at which an interview is to be attempted. Continue in this fashion, with your left shoulder to the fence until you have selected the 5 dwellings for interview. **Remember to turn left as you leave each gateway and at each street corner.**
- Please assume that *all structures are dwellings* unless it can be determined otherwise (eg. a corner shop may also be a dwelling, a building or warehouse may have a permanent superintendent etc.). In these instances, please check that the dwelling part of the structure receives separate utility bills. Please <u>exclude</u> Australian Defence Force barracks, hospitals, hostels, prisons, hotels, motels and non-permanent caravans from interview.
- Flats, units, granny flats and permanent sited caravans are all considered dwellings. A good way to check for these types of dwellings is to check for separate letter boxes, water, gas and electricity meters etc.
- For flats and multi-storey buildings follow the call pattern procedure rather than calling by flat number.
- For retirement villages, please check with the administration to determine if any of the dwellings receive separate utility bills. If this is the case only approach those dwellings billed in this manner.
- Where a structure is deemed not to be a dwelling, please **do not include** it in the count to identify every fifth dwelling. See Selection Pattern Example on page 11 of this document.

- After the first approach for interview *two callbacks* to each household are required. You only select and approach a new household for interview once the 'final call status' on one of the first five households selected has been determined *and* it is not a successful interview. Final call status can be one of the following outcomes:
  - 1. Successful interview;
  - 2. Refusal;
  - 3. Not eligible (ie. respondent fails screening criteria);
  - 4. Quota filled; and
  - 5. 3 calls have been attempted with no result.

You should not proceed to the sixth house until two callbacks (ie. three attempts in total) have been made on <u>one</u> of the first five households selected and <u>an interview was not obtained</u>. This means that you will often need to move on to one of the other start points in your workload, rather than attempt second or subsequent calls, or knocking on sixth or seventh doors.

- Every call to a dwelling must be recorded on the Call Record Sheet. The use of this record sheet is discussed in detail later.
- At the end of each day spent interviewing, details of each completed interview must be recorded on the Interview Quota Sheet. These details are to be transferred from the "Check Sample Type" box located on page 1 of the completed questionnaire. The use of this quota sheet is discussed in detail later.
- Interviewers must call the Field Supervisor for the project twice a week (ie. every Monday and every Thursday or every Tuesday and every Friday). The Supervisor will record the types of interviews obtained and provide you with instructions as to the type of respondent(s) required for future interviews. Quotas will become more rigorous as interviewing proceeds. Supervisor contact phone numbers are (03) 9224 5193 or 1800 337 332.

#### 5.1 Interviewing times

You may interview at weekends *and* on week days. Calls should only be made during daylight hours unless a specific appointment has been made.

As always in door-to-door interviewing, calls must be made at different times of the day and on different days of the week to maximise our chances of interviewing 'hard to catch' respondents.



#### **Call Pattern Example**

- Start Point 17 Margaret Street Commence counting dwellings walking anti-clockwise with left shoulder facing houses
- Arrive at Ball Creek walk along bank until reach next dwelling on block – Getty Rise (If can't walk along creek, walk around the block to arrive at same point on Getty Rise)
- Keeping left shoulder facing houses, continue around the block until you arrive back at the start point
- 2. From start point walk to nearest street corner which has not yet been called upon Cnr Margaret St & Gibney Ave (point 2) and continue call pattern
- Woff Lane is an access lane for rear entry to houses – check for dwellings but do not exit lane (treat as a Cul-de-sac)

- Continue pattern until arrive back at point 2
- From point 2 walk to nearest street corner not yet called upon Cnr Gibney Ave & Margaret St (point 3) and continue call pattern
- Follow Cul de sac of David Crt so that both sides of street are called upon
- Continue until arrive again at Ball Creek walk to next dwelling on block Margaret St and continue until arrive back at point 3
- 4. From point 3 walk to nearest street corner not yet called upon Cnr Glynn St & Gibney Ave (point 4) and continue call pattern
- 5. From point 4 walk to nearest street corner not yet called upon Cnr Gibney Ave & Noel Pl (point 5) and continue call pattern

- 6. From point 5 walk to nearest street corner not yet called upon Cnr Noel Pl & Schwensen Cl (point 6) and continue call pattern
- From point 6 walk to nearest street corner not yet called upon - Levine Park. But there are no dwellings on this block, so go to next nearest street corner not yet called upon – Cnr Angela St & Gibney Ave (point 7)
- From point 7 walk to nearest street corner not yet called upon - Cnr Lenon Ave & Parminder Dr (point 8) and continue call pattern



BROWN DRIVE

Selection Pattern Example

- 1. Start Point 15 Smith Street Commence counting 5 dwellings beginning with the start point and walking anti-clockwise with left shoulder facing houses
- 21 Smith St has 3 detached units the fifth dwelling is 21b Smith Street Interview No.1
- 2. Re-commence counting 25 Smith St is a Doctor's Surgery Enter and ask whether it is also a private dwelling
- If private dwelling ask whether utility bills are provided separately for the private dwelling and the surgery If so: count as a dwelling; If not: exclude from count
- *If not a private dwelling* exclude from count
- The surgery was not a private dwelling, so exclude from count 83 Jones Rd has four attached units –

the fifth dwelling is 1/83 Jones Rd – **Interview** No.2

- 3. Re-commence counting the fifth dwelling is 8 Brown Dr – **Interview No.3**
- 4. Re-commence counting 12 Brown Dr is a Retirement Village – Go to Admin building and ask
  whether any of the private dwellings have utility bills provided separately
- If so: count each as a dwelling; If not: exclude from count
- The caretaker's cottage receives separate bills, so include in count
- 20 Brown Dr seems to have a granny flat, but does not have its own letterbox. Check for separate water, gas or electricity meters
- If so: count as a dwelling; If not: exclude from count

- The granny flat has separate meters the fifth dwelling is then the granny flat **Interview No.4**
- 5. Re-commence counting 22 Brown Dr is a Milk Bar – Enter and ask whether it is also a private dwelling
- *If private dwelling* ask whether utility bills are provided separately for the private dwelling and the Milk Bar – **If so:** count as a dwelling; **If not:** exclude from count
- *If not a private dwelling* exclude from count
- The Milk Bar was not a private dwelling, so exclude from count continue counting
- Fifth dwelling counted is a Youth Hostel a commercial property exclude from count
- Fifth dwelling is 13 Smith Street Interview No.5

#### 6. Obtaining Consent to Request Utility and Rates Billing Data

For a completed interview to 'qualify' for the survey we **must have** the respondent's **consent** to obtain the household's consumption and billing details from the relevant utilities and councils.

The questionnaire will enable us to obtain information about the household, the people in it and their habits in relation to energy and water consumption and bill payments. In order to determine exactly how this relates to actual energy and water usage, we need records of bills and consumption from April 2000 to March 2001 (July 2000 to June 2001 for Council Rates). The best way for us to obtain this information is electronically from the actual utility or council. Before we can approach these parties for this information, we must have consent from the household.

A legal requirement is that a separate signature is required for each utility and council. Each of these parties wants express consent from their customer before they are willing to release the relevant data about that household to us. Consent may be obtained before, during or after the interview, although the consent forms have been inserted in the questionnaire at the end of each relevant section (on coloured paper), so obtaining consent during the interview would be the most efficient method.

## *NB.* A questionnaire will <u>only</u> count towards your workload if you have obtained signed consent forms for all utilities and councils that apply to that household.

In general, all households will have mains electricity and so consent for disclosure of information from the electricity supplier will be required in almost every instance. However, not all households have gas, and tenants of rental properties do not receive council rate bills and may not receive water bills. Keep this in mind when seeking to obtain consent.

It was found in the 1996 study and 2001 pilot that obtaining consent was quite straightforward. Interviewers reported that the best approach was to inform the respondent at the beginning of the interview that consent would be required. **Please direct respondents to the relevant section in the survey brochure.** 

If, at the end of the interview, the respondent refuses to sign the consent forms, you should advise the respondent that a supervisor will contact them to seek their cooperation. You will need to inform your supervisor immediately, so that the follow-up can be undertaken as quickly as possible.

In addition, you can direct the respondent to the Help Line number on the brochure, where a Department of Human Services staff member will seek to address the respondent's concerns. The contact phone numbers are (03) 9616 7593, or after hours on 0401 710 586.

For the 1996 survey, less than 10 calls were made to the Help Line in relation to refusal of consent. It was also clear from a couple of the calls which were received, that some respondents felt somewhat intimidated by the prospect of a supervisor coming to follow-up on their refusal to provide consent. The incidence of this was clearly low, but illustrates the necessity for interviewers to be sensitive to concerns which respondents might feel.

Finally, in 1996 one respondent initially refused consent because it was believed that the Government already has such billing and consumption information. The Government does in fact have access to this information, but only in aggregated form. It is not possible for *anyone* (including Governments) to obtain information about individual accounts *without consent* from the householder.

#### 7. Record Keeping

You will be required to keep records of all your calls and travel during the survey on three forms that have been designed for this purpose. They are as follows:

- 1. Call Record Sheet;
- 2. Interview Quota Sheet; and
- 3. Interviewer Payment Request Form (Pay Sheet).

Copies of each of these are provided at the end of this document.

#### 7.1 Call Record Sheet

This form is used to assist you in keeping a record of exactly where you are up to in terms of the dwellings visited in each of your work assignments. A *separate* Call Record Sheet will be required for *each* of your work assignments (CCD start points). You will need to have continuous reference to this sheet. It requires your name, the CCD number to which your work assignment refers and the start point address.

The Call Record Sheet helps you to keep track of your progress in relation to obtaining 5 successful interviews within each work assignment. Please record every contract you have made with potential respondents, detailing the outcome of each contact.

Please note that call result 'C' "*Consent not obtained (specify)*" should only be used when an <u>interview has been completed</u>, but consent has not been obtained. Please notify your supervisor immediately in this instance.

When a successful interview is obtained, please record the Household ID Number and the Sample Type. The Household ID Number can be found in the top left-hand corner of the front page (page 1) of the questionnaire. The Sample Type can be copied from the "Check Sample Type" box adjacent to S.3 in the bottom right-hand corner of the front page of the questionnaire.

#### 7.2 Interview Quota Sheet

This form is designed to assist you to keep a tally of the types of respondents you have interviewed and match them against any quotas set by your supervisor. You will use this form as a reference when conducting your twice weekly telephone contact with your supervisor.

You will be expected to contact your supervisor twice a week as follows:

Mondays and Thursdays; or Tuesdays and Fridays.

After completing your day spent interviewing, please fill in the number of interviews completed by Sample Type (ie. A-F). This information can be copied from your Call Record Sheet or from the "Check Sample Type" box on the front page of each questionnaire.

On the designated day to contact your supervisor, call them and inform them of the number of interviews you have completed in each of the Sample Type categories *for the period since you last provided details to your supervisor*.

After recording this information your supervisor **may** provide you with some quota instructions for you to follow. Please record these in the Interview Quota Section on the form and record the date that these quotas were set. These quotas will apply until your supervisor provides you with new quota instructions.

#### 7.3 Interviewer Payment Request Form

The Interviewer Payment Request Form (or Pay Sheet) is where you record all of your hours worked for this project. Please record:

- Day and Date worked;
- Area(s) worked on that day;
- Time left home and time returned home;
- Travel time;
- Kilometres travelled;
- Non-interview time (or non-work hours eg. lunch, other breaks, shopping etc.);
- Interview hours (including time conducting call and selection patterns, following-up with potential respondents, arranging interview times and interviewing);
- Clerical hours (ie. the time spent completing forms etc.);
- Briefing hours;
- Total hours (interview hours + clerical hours + briefing hours = Total hours);
- Number of interviews completed; and
- Details of any other reimbursements claimed (eg. public transport fares, phone calls etc.).

Then sign and date the form on completion (or when required to submit).

# N.B: Interview hours only includes time spent selecting households for interview, searching for potential respondents, making call-backs and conducting interviews. It <u>does not</u> include travel time to or from work-load areas, or lunch breaks.

Examples of all three forms are provided at the end of this document.

#### 8. The Questionnaire

In the Pilot test the average interview length including the time to obtain consent was 40 minutes.

The questionnaire is divided into seven major sections, as follows:

Front Page:	Introduction and Screening Questions
Section A:	Home and Household Characteristics
Section B:	Electricity & Gas Consumption and Expenditure
Section C:	Water Consumption and Expenditure
Section D:	Conservation of Energy & Water
Section E:	Rates/Concessions and Assistance Programs
Interview Details:	Interview length, date and certification signature

As a general rule for this survey, fill in all <u>boxes</u> provided. This means ticking check boxes, placing zeros and using leading zeros in numeric boxes wherever appropriate.

#### 8.1 Front Page of the Questionnaire (Screening Questions)

Record start time.

The sample **CCD number** is the Census Collectors District number from your Call Record Sheet. This number has seven digits.

The **Household ID number** is the number of the interview conducted. This is computer generated.

The Cont. No. is your Contractor Number.

All 3 of these numbers also need to be written on all the signed consent forms for the suppliers. These consent forms can be found on the blue, green and grey coloured pages located throughout the questionnaire.

**S.1a/b/c/d** These questions ascertain the length of time the respondent has been living at that address. We wish to *exclude boarders* and *people who have only lived at their address a short time* because we will not be able to obtain billing data from their suppliers to cover all seasons of the year. As it is, if people have only lived in their house since January 2001 we can only get their data based on the summer and Autumn months. Remember this survey only relates to the sampled dwelling so we are not interested in anything prior to the householder's residency at this address.

For those living in the dwelling for less than 2 years, we will ask them the month and year that they moved in (S.1c/d). These questions will enable us to inform suppliers and councils of those respondents who have only lived at the address for part of the billing period.

**S.2** a/b/c The responses here will determine which sample type the household belongs to and whether you need to interview them, depending on progress with the quotas.

As fieldwork progresses you will be advised by your supervisor about the imposition of quotas. No quotas will apply at the commencement of interviewing.

#### **S.3** Please **circle the code** for the sample type applicable.

*Shaded Check Box* – please **circle** the appropriate sample type in the shaded check box as follows:

- Code A: An Aged or Service Pensioner comprises those with a code 1 or 4 at S.2a
- Code B: All other Concession Card Holders (codes 2 or 3 at S.2a)
- Code C: Non-Card Holders: Household size = 1 (code V at S.2a and 01 recorded at S2b)
- Code D: Non-Card Holders: Household size = 2 (code V at S.2a and 02 recorded at S2b)
- Code E: Non-Card Holders: Household size = 3 (code V at S.2a and 03 recorded at S2b)
- Code F: Non-Card Holders: Household size = 4 or more (code V at S.2a and 04 or higher recorded at S2b)
- *N.B:* Do not circle household size in the check box for A & B, <u>only</u> for C F

As fieldwork progresses and quotas are imposed, S.3 may need to be asked earlier. Your supervisor will advise if this becomes necessary.

#### 8.2 Section A: Household Characteristics

This section of the questionnaire aims to provide a picture of the household living at the address. The household is all the people living at that address regardless of their relationship to each other.

In homes with 'granny flats', the factor that determines whether the 'flat' should be included or excluded from the dwelling throughout the questionnaire is whether or not there is any separate metering for utilities.

If there is no separate metering then the granny flat (or bungalow etc. as the case may be) is counted just as 'other rooms' of the dwelling. The inhabitant(s) of the granny flat are counted as usual residents of the main household.

If there is separate metering for *at least one* of the utilities (but not necessarily for the others), then the granny flat will **not** be included as part of the dwelling and is counted as a separate dwelling.

*Questions A.1 to A.9 should be asked for each member of the household* – so after writing down the first name of each member, go to A.2 and ask about everyone's ages in turn. Then to A.3 for everyone's sex in turn, and so on.

Please follow the skip instructions carefully for each member of the household particularly for A.6 - A.9.

**A.1** If a name is not provided, record *some description* of the person (eg. second daughter or eldest son etc.).

**A.2** Record age to the *nearest whole year* (eg. if an infant is 18 months, record as 02; if an infant is 5 months, record as 00 etc.).

**A.4** Record husband/wife/de facto as code 1 'Spouse/partner'. If the person is a 'step' or 'half', code to the nearest standard relationship (eg. half brother code as brother, step daughter code as daughter etc.).

**A.5** If the answer is 'other' please write '9' in the box and also write the details of the response on the line below the box. This applies to any question of this kind, where you are only required to write a number on the questionnaire but an 'other specify' option is available to the respondent.

**A.7a** The respondent may also call out a code number here. Please read back the *name* of the card type for confirmation.

**A.8** The respondent may also call out a code number here. Please read back the *source of income* given for confirmation. **This may be a multiple response.** 

**A.9** The income bands are broad and should make it easy for the respondent to answer on behalf of others in the household whose income they are unsure of.

A.10 You should record one language only – the language <u>spoken most often</u> in the household.

**A.12** Shaded Check Box - Wherever you need to refer to information that has already been obtained, you will find a shaded check box to direct you to the place in the questionnaire where the information was obtained. You must **circle** the correct response in the checkbox before moving on, so that the questionnaire logic can be checked if necessary.

#### 8.3 Section B: Electricity & Gas Consumption/Expenditure

Section B relates to the household's usage of gas and electricity and some of the main appliances in the house.

**B.1** In regional areas cylinder gas may be used in place of mains gas. The reference to cylinder gas is only intended to include large (not portable) cylinders that some people use where no mains gas is available. If a small cylinder is used, for a BBQ for example, then this is not to be included.

**B.2** You will record either yes or no for *each* of the three functions/uses.

**B.3** Even if a respondent answers yes to all three functions/uses at B.2 you must still ask this question. There is no reason why both gas and electricity might not be used for some functions. You will record either yes or no for *each* of the three functions/uses.

**B.4** If a respondent does not know if the solar hot water system is gas or electric boosted, then code as 'solar-electric boosted' - as this is most likely what it is.

**B.5a** *Shaded Check Box* – Please check codes applicable.

This question is only asked of those who use electricity for their hot water\* (at B3). Please record the number of electric hot-water systems in the household (including the main system).

**B.5b** Record whether the electric hot-water systems in the household are off-peak. Record for up to 3 hot-water systems (including the main system).

**B.6** You must write a number/code in *every* box. If the respondent does not have one of the items listed, you must record this as '0'. If the respondent does not know how many of a particular item they have in the household, you must record as 'X'.

**B.7/8** These questions only refer to the usage of the clothes drier(s) and dishwasher(s) from B.6, and should only be asked if the respondent has any of these respective items. If Can't Say/ Don't Know code as 'X'.

**B.9/10/11** You should determine the type of main heater first, and ask about its frequency of use and number of hours used on each occasion during the colder months of May to November, before moving on to other heaters which are used. If no heating is used at B.9 then 'None' should be coded as '**VV**' and you skip to B.12.

For all questions that ask about 'hours in use' in this questionnaire (eg. B.11), you should **record to the nearest complete hour**. So, half an hour or three quarters of an hour should be recorded as 1, but 20 minutes would be recorded as 0. An hour and a half would be recorded as 2 etc.

**B.12** You should expect respondents to mention any type of difficulties ranging from physical attributes of the dwelling to financial problems or lifestyle peculiarities. Please try to match responses to the coded answers before using the other (specify) code.

**B.13b** Please record the number of air-conditioning/cooler systems in the household. If the answer at B.13a is code '1', the answer to B.13b can't be '0'.

**B.14** Please record the number of portable air-conditioning units as being used for <u>single room cooling only</u>. Their purpose is to cool one room at a time (hence they are portable), even if they are used to cool more than one room at a time (by opening doors etc). If none record as '0'. Please do not leave any of these boxes blank.

**B.15** Some respondents may have already given information about a reverse cycle air-conditioner in B.9 (when describing their type of heater), but in this question we are asking about a different function. Please record the number of reverse cycle air-conditioners in the box provided. Code none as **'0'** if applicable.

**B.16** Please record the code relating to the frequency of using the air conditioning in the warmer months (ie December to April). You may need to ask the respondent for the code from the showcard.

B.17 Again, hours to be recorded to the nearest complete hour.

**B.18** Asked of everyone. This question may explain abnormal consumption patterns for an individual household. If the respondent answers 'No' to this question then they should skip at this point to the Electricity Bill Consent form.

**B.19** We are only looking for a general description of the sort of health problem. It is not necessary to note a lot of medical jargon.

**B.20** You should probe fully to obtain the respondent's understanding of how the health problem affects their electricity usage.

Now fill in the Electricity Consent Form and get the respondent to sign it - If after attempting to convert the respondent they refuse consent, inform them that your supervisor will contact them to seek their co-operation and that a help-line is available if they have concerns about confidentiality.

If and <u>only</u> if you are convinced that the respondent cannot be converted to give their consent – then terminate the interview.

#### Electricity consent form (blue):

The electricity consent form must now be filled in as fully as possible and signed by the respondent. The name on the account, the account number and the address of dwelling must be **exactly as appears on the electricity bill**. You may need to show the laminated Electricity Suppliers logo card if the respondent doesn't know the name of their supplier. A good idea might be to get the respondent to look for their last bill to help fill in all these details. Do not forget to *fill in* the sample CCD, the contractor number, the household ID and *circle* the supplier's ID as shown on the consent form.

If the respondent has lived in the house for less than 2 years also record the month and year they moved to this address (refer to S.1d on front page of questionnaire).

Interviewers may allow respondents to fill in the consent forms, but the interviewer must check for completeness. **B.21** *Shaded Check Box* - Ensure that the correct response is noted in the shaded check box before proceeding.

**B.22/23/24** Same as B.18/19/20 but for Gas.

Now fill in the Gas Consent Form and get the respondent to sign it – If after attempting to convert the respondent they refuse consent, inform them that your supervisor will contact them to seek their co-operation and that a help-line is available if they have concerns about confidentiality.

If and <u>only</u> if you are convinced that the respondent cannot be converted to give their consent – then terminate the interview.

#### Gas consent form (green):

The gas consent form must now be filled in as fully as possible and signed by the respondent. The name on the account, the account number and the address of dwelling must be **exactly as appears on the gas bill**. You may need to show the laminated Gas Suppliers logo card if the respondent doesn't know the name of their supplier. A good idea might be to get the respondent to look for their last bill to help fill in all these details. Do not forget to *fill in* the sample CCD, the contractor number, the household ID and *circle* the supplier's ID as shown on the consent form.

If the respondent has lived in the house for less than 2 years also record the month and year they moved to this address (refer to S.1d on front page of questionnaire).

# Interviewers may allow respondents to fill in the consent forms, but the <u>interviewer must check for completeness.</u>

#### 8.4 Section C: Water Consumption & Expenditure

Section C is about water consumption and about all related appliances in the household.

**C.1a** Showers include shower heads installed above baths; they do not need to be separate shower cubicles. Therefore, a shower head installed above a bath will end up being counted as both a shower and as a bath (in C.2). Shower heads that can be connected to the bath taps which are not installed above a bath should be excluded. If the respondent doesn't know how many then code as '**X**'. This box must be filled, so if there are no showers code as '**0**'.

**C.1b** If the respondent doesn't know how many of the showers have a special head fitted to save water, then code as **'X'**. This box must be filled, so if there are no showers with special water saving heads or valves code as **'0'**.

**C.2** A spa pool is different from a spa bath. In a pool the water stays in all the time (as in a swimming pool) and is treated to keep it clean.

**C.3** Is only asked of those that have a spa pool or swimming pool (codes 3, 4 or 5 in C.2). If the respondent does not know if the pool/spa has gas or electric boosted solar heating, then code as 'solar-electric boosted' - as this is most likely what it is.

**C.4a/b** This means actual toilet cisterns, not toilet 'rooms.' If can't say code as **'X'**. If none code as **'0'**. Please do not leave any of the boxes blank.

**C.5** Top loading machines generally use more water per wash, than front loaders do.

**C.6** If the respondent believes that the pot plants on the balcony constitute a garden, then you should accept this. A garden would also include lawns, vegetable gardens and so forth. It does not include plots, orchards or vineyards which are metered separately.

**C.7** This is a multiple response question. You should record the watering systems *usually used* at that dwelling, not those seldom used.

C.8a If can't say code as 'XX'.

**C.8b** Again, only whole hours to be recorded, so code <u>to the nearest whole</u> <u>hour</u>. *Do not write in minutes* (eg. if 50 minutes code as '01'; if less than  $\frac{1}{2}$  an hour code as '00'). If can't say code as '**XX'**.

C.9 Some households, even in suburban Melbourne, may have access to a bore.

**C.10** This means collection tank only, that is, from the roof (not from the hot water system!). In some areas of Melbourne water tanks are not permitted, so you may have a respondent tell you that this is illegal. However, the survey covers a number of regions of Victoria, so it is possible that some respondents will have water tanks.

**C.11** If the respondent suggests a use which is not listed, obtain a full description of the use so it can be coded later.

C.12/13/14 Same as B.18/19/20 and B.22/23/24, but this time, for water. Again we do not need to know very specific details of the health condition but do need to know generally what it is and how it affects their water usage.

C.15 This question is asked of *all* respondents. Most dwellings will have a separate water meter, but some units or flats may not. In such cases the water consumption for the whole development is divided equally amongst all the dwellings in it.

**C.16** Some tenants do not get a water bill. A water consumption bill can only be provided to tenants (renters) where the property is separately metered.

**C.17** Asked of those who receive a water bill to ascertain the type of bill received (ie. whether for fixed charge only, for consumption only or a combination of both). This is a single response question.

Now fill in the Water Consent Form and get the respondent to sign it - If after attempting to convert the respondent they refuse consent, inform them that your supervisor will contact them to seek their co-operation and that a help-line is available if they have concerns about confidentiality.

If and <u>only</u> if you are convinced that the respondent cannot be converted to give their consent – then terminate the interview.

#### Water consent form (grey):

The Water consent form must now be filled in as fully as possible and signed by the respondent. The name on the account, the account number and the address of dwelling must be **exactly as appears on the water bill**. You may need to show the laminated Water Suppliers logo card if the respondent doesn't know the name of their supplier. A good idea might be to get the respondent to look for their last bill to help fill in all these details. Do not forget to *fill in* the sample CCD, the contractor number, the household ID and *circle* the supplier's ID as shown on the consent form.

If the respondent has lived in the house for less than 2 years also record the month and year they moved to this address (refer to S.1d on front page of questionnaire).

If respondent gets a water bill from **Yarra Valley Water (code 303)**, you need to obtain the **'property' number**. This number can be found under the 'CURRENT CHARGE SUMMARY' text in the detailed billing information section located below the address details on the bill. It is generally an *8 digit* number.

Interviewers may allow respondents to fill in the consent forms, but the interviewer must check for completeness.

#### 8.5 Section D: Conservation of Energy and Water

This section asks about the conservation of water and energy (which includes gas and electricity).

NB. Responses to questions D.1a, D2a, D.3a, D.5a and D.6a can be *multiple* responses.
Responses to D.1b, D2b, D.3b, D.5b and D.6b are single responses only.

D.1 - D.4 Relate to *energy* conservation, which includes gas and electricity *only*. So please do not accept responses relating to water.

**D.5 – D.7** Relate specifically to *water* conservation.

**D.1a/b** Relates to energy wasting features of the household members, as well as those aspects of the design or condition of the dwelling which result in high usage. **D.1a can be a multiple answer, however D.1b is a single answer only**, and tries to determine which factor (mentioned at D.1a) has the biggest impact on the household energy bills. If the answer provided at D.1b was not given at D.1a then get respondent to confirm. If correct, then code that answer at D.1a as well.

Note that you *do not* read out the list. If the respondent can't think of anything or says 'don't know' you will code as  $\mathbf{X}$ . If the respondent says there is 'nothing' about their house or household members activities which cause high energy use then this is the *only* circumstance where you will record a code '13'.

**D.2a/b** Relates to the energy saving features of the dwelling. Generally speaking only people who have made some effort to make their homes more energy efficient will have the items coded 3 to 9. Some respondents may not have an answer for this section of this question. Not knowing is different from saying that they don't have these features, and you must be sure about what the respondent is really saying. **D.2a can be a multiple answer, however D.2b is a single answer only**, and tries to determine which feature (mentioned at D.2a) has had the biggest impact on the household energy bills. If the answer provided at D.2b was not given at D.2a then get respondent to confirm. If correct, then code that answer at D.2a as well.

# *N.B:* Exclude at this question any energy savings features that were installed <u>prior</u> to the respondent moving into this dwelling, <u>unless</u> they planned or requested the feature when building or renovating the dwelling.

**D.3a/b** This is different to D.1a/b. We want to know what *behavioural* aspects are in place to **save** energy in the household and if more than one is mentioned, which has the greatest impact on the bill. Do not prompt the respondent with the list. **D.3a can be a multiple answer, however D.3b is a single answer only**, and tries to determine which behaviour (mentioned at D.3a) has had the biggest impact on the household energy bills. If the answer provided at D.3b was not given at D.3a then get respondent to confirm. If correct, then code that answer at D.3a as well.

**D.4** Respondent recall is required again. Do not read out this list either. If the respondent believes there are no sources of information, you should code 'V'. If the respondent thinks there might be something but has no idea how to get it or where it is, then you should code 'X'.

**D.5 to D.7** are the same as D.1, D.3 and D.4 but for **water** conservation instead of energy conservation.

#### 8.6 Section E: Rates/Concessions & Assistance Programs

This section starts off by asking the respondent whether the household pays Council rates on the dwelling or not. The section then focuses on household costs, about how the utilities fit in, problems people might experience paying their bills, the assistance they are offered by the suppliers and about their use of concessions.

**E.1** Ascertains firstly whether the house pays council rates on their dwelling. If they code 'Yes', then get respondent to fill in/sign Council Rate Consent Form. Otherwise skip to E.2.

Now fill in the Council Rates Consent Form and get the respondent to sign it – If after attempting to convert the respondent they refuse consent, inform them that your supervisor will contact them to seek their co-operation and that a help-line is available if they have concerns about confidentiality.

If and <u>only</u> if you are convinced that the respondent cannot be converted to give their consent – then terminate the interview.

#### Council rates consent form (blue):

The Council Rates consent form must now be filled in as fully as possible and signed by the respondent. The name on the account, the account number and the address of dwelling must be **exactly as appears on the rates bill**. You may need to show the laminated <u>showcard of Councils</u> if the respondent doesn't know the name of theirs. A good idea might be to get the respondent to look for their last bill to help fill in all these details. Do not forget to *fill in* the sample CCD, the contractor number, the household ID and the <u>supplier's ID</u> as shown on showcard of councils.

If the respondent has lived in the house for less than 2 years also record the month and year they moved to this address (refer to S.1d on front page of questionnaire).

# Interviewers may allow respondents to fill in the consent forms, but the <u>interviewer must check for completeness.</u>

**E.2** Respondents are asked to rank those expenses they spend the most on over the year. They will probably find it easiest to rank the highest and second highest, and then maybe move to the lowest – and eventually meet in the middle. We are interested in the average over the year.

Respondents should ignore those expenses that are not applicable to them, which should each be coded as '**VV**'. Please confirm with the respondent that those expenses remaining unranked do not apply to them.

N.B: Items cannot be ranked equally. Boxes must be zero filled where applicable (ie. 01, 02 etc.).

**E.3** Aims to determine a number of things. We are trying to establish payment priorities for each of the listed expense items that all households' may need to different degrees:

- how important utilities are in relation to other household expenses (ie. how ready are they to go without things in order to keep the gas being cut off or the water being restricted etc.); and
- whether the customers of electricity, gas and water perceive the suppliers as hard nosed and unyielding about cutting off the supply when bills go unpaid, or whether they are considered kind and compassionate.

If one or more of the items on the list is not applicable in that household you should code as 'VV' in the relevant box(es) and get the respondent to rank all remaining items.

#### E.2 - E.3

N.B: Items cannot be ranked equally.

NB. Boxes must be zero filled where applicable (ie. 01, 02 etc.).

*N.B:* The lists for E.2 and E.3 are not the same. So do not accept an answer like "same as before" or "same as above" etc. for E.3.

N.B: Only accept items listed on the showcard.

**E.4** This is a partially open-ended question. You should probe fully for a complete understanding of their response to E.3 and then circle the most appropriate pre-code, before using other (specify).

#### E.5a/b

For these questions and all similar questions where there is a 'not used' answer code, please record for each bill applicable to that household. If the bill is not applicable record as 'not used'.

Relates to means of bill payment and is divided into 2 parts. E.5a asks *how* bill payment for each relevant utility/rates is made (ie. cash, cheque, credit card etc.).

This is irrespective of <u>where</u> they made the payment (ie. regardless of whether they post the cheque or pay it at the post office or bank).

E.5b asks the method used to make payment to ascertain *where*, or how (eg. telephone, mail, Internet etc.) payments were made.

Code "Maxi-Kiosk" as code 9 ie 'Customer Initiated Direct Debit'.

**E.6** Every respondent should be asked about their awareness of payment programs for each utility. **Even if they don't use gas or receive a water bill** they may be aware of what payment programs are offered.

**E.7** This covers payment by instalments for any reason including, for instance, being made to pay off an outstanding bill in instalments by the supplier. It includes both payments made in voluntary instalments and instalments determined by the supplier. Obviously you can only ask about the instalment payments on utilities where the respondent is aware that this is available (from E.6).

**E.8** *Shaded Check Box* - If the answer at E.7 is codes 1, 2 or 3 for a utility or rates, then the box for that utility or rates should be ticked at E.8. This will help you identify which utilities/rates are relevant for the respondent at E.9 and E.10a/b.

**E.9** There are three main ways of paying by instalments, under different plans.

- The first (Flexi Way) allows customers to pay small amounts, as they can, in advance of the bill. The paid amount is deducted from the bill, with the rest due as normal on the due date.
- The second (known as Easy Way, Easy Pay or Budget Plan) involves fixed, usually fortnightly payments which include one amount which goes towards an outstanding bill and one amount which pays for current usage. The current usage part works as follows: the supplier makes an estimate of the likely 6 or 12 monthly charge, based on the account history, and divides this by 26 (to arrive at a 12 month plan) or by 13 (for a 6 month plan). So the one fixed regular payment pays off a bill in arrears as well as keeping the current usage charges covered.
- The third possibility is the same as the second (above) except there is no arrears component; so the fortnightly bill is only the estimated usage amount.

This method is simply preferred by some customers as a means of getting frequent, small and consistent bills. (This would also apply to quarterly or monthly rates payments).

**E.10a** The supplier may set an instalment amount for the customer, such as \$10 a week until the outstanding amount is paid up. Alternatively, the customer may choose to pay some amount whenever they can in preparation for a bill (eg. \$10 one week, \$5 the next week, nothing the week after).

**E.10b** For each utility paid for in instalments we would like to find out if the availability of instalment paying has impacted on their usage of energy/water (ie. are they using more because they know they can gradually pay for it?). If necessary *probe* for whether greater or slightly.

**E.11** This question is asked of *all* respondents. Again, at this point you should ask about all three utilities and for council rates.

**E.12** Shaded Check Box - If the answer at E.11 is code 1 for a utility or council bill, then the box for that utility or council bill should be ticked at E.12. This will help you identify which utilities/rates are relevant for the respondent at E.13.

**E.13** This question is only asked for those utilities where the respondent was aware of the availability of a concession discount (from E.11/12).

**E.14a** This question is only asked for those utilities where the respondent was aware of the availability of a concession discount (from E.11/12).

It is possible for another member of the household to use a concession card to legitimately claim a discount.

**E.14b** For each utility a concession has been claimed for, we would like to find out if the availability of the concession has impacted on their usage of energy/water (ie. are they using more because they know they are getting help paying for it?). If necessary *probe* for whether greater or slightly.

**E.15** This question is asked of *all* respondents. Some people pay their bills as late as possible as a cash management practice, not necessarily because they have difficulty paying.

Some respondents may indicate that they pay bills *before* they arrive as part of an instalment payment plan. Please record this response as code **1**, "As soon as they arrive?".

**E.16** This need not mean that they were unable to pay a bill, just that they found it difficult and perceived themselves to have had a problem paying it at the time. Include customers who say they had a problem once but that it was temporary.

# *NB. Please do not include people whose only problem was that they mislaid or forgot to pay the bill.*

If you record that they have had a problem they will need to be able to answer the next set of questions about how often they have had these problems, whether they discussed them with the suppliers, whether they were offered any help by the supplier etc.

**E.17** *Shaded Check Box* - If the respondent is a code 1 for a utility or rates at E.16, then the box for that utility or rates should be ticked at E.17. This will help you identify which utilities/rates are relevant for the respondent at E.18.

#### E.18-E.25

Are asked in respect of any utility where the respondent has had difficulty in paying a bill at E.16/E.17, but **please take careful note of the specific skips for each question within this loop**. In particular E.22, which is asked in respect of any utility where the respondent has claimed to have had (varying frequency of) difficulty paying a bill at E.18 (codes 1, 2 or 3)

**E.22** Legally, the water supplier cannot turn the water off, it can only be restricted. In very rare circumstances Councils choose to take legal action to obtain payments.

**E.26** If a respondent knows of the Utility Relief Grant Scheme, it is quite probable that it will be known as URGS.

**E.28** Generally these charities only provide money for food etc., but if a household has spent money on paying the electricity bill and then has no money for food, the respondent may see this as assistance to pay the bill.

#### 8.7 End of Interview

**E.29** Ask the respondent for their telephone number and explain that your supervisor may need to use this to check your work.

Please check that you have completed the following:

- **Consent Forms**: *Shaded Check Box* Make sure all relevant consent forms are fully filled in (including suppliers/council, CCD, contractor numbers etc.);
- Thank Respondent for their time and assistance;
- **Record day and time** of interview, you only need to circle the codes 1 or 2 for each;
- Record type of dwelling. Please code best description;
- **Record the address** of the dwelling, which will further assist in ensuring that we don't have problems matching consent to questionnaire;
- Record End Time and calculate/insert Interview Length in minutes;
- **Record Date** of Interview; and
- **Record your name and contractor number** and **sign** the interviewer declaration.

Finally check the entire questionnaire prior to leaving the immediate vicinity, so that you can go back and ask any question that may have been inadvertently missed.

#### 9. Supervisor's Role

Whilst interviewers will work independently of each other, a supervisor will oversee each interviewer's workload through regular contact with each interviewer. Supervisors will assist with converting refusals of consent, set and administer quotas and be the person with whom you will have your twice weekly contact phone calls.

#### 9.1 Refusal Management

In order for us to maintain the most rigorous statistical sampling possible, it is important that every effort is made to convert any refusal that you may encounter. Where you are not able to persuade the respondent to complete consent forms yourself, your supervisor may contact the householder and attempt conversion, or at least ascertain the reason for it.

#### 9.2 Validation

As in all fieldwork, supervisors will audit at least 10% of your interviews and offer guidance and praise where appropriate.

#### 9.3 Reporting Progress and Setting Quotas

You will report your progress to your supervisor on twice weekly basis. It is vital that up-to-the-minute records are kept of the number of interviews achieved and the sample type to which they belong, so that quotas can be set as fieldwork progresses. The Interview Quota Sheet will help you in this regard.

Supervisors will either contact you or inform you during the twice weekly phone calls of any quotas that have been set.



### UTILITY CONSUMPTION SURVEY CALL RECORD SHEET

To be completed by interviewers in the field.

Job Name:	Victorian Utility Consumption Survey 2000	Job Number:	R1964
Interviewer Name:		CD Number:	
Start Point Address:		City/Suburb/Town:	

#### **CALL RESULT CODES**

#### Code Description

Code	Description	Total	Code	Description	Total
Ι	Interview		QF	Quota Full	
С	Consent not obtained (specify)		F	Insufficient or no English	
Т	Termination (explain)		LD	Locked Gate/Dog	
NE	Not Eligible (explain)		V	Vacant Residence/Block	
0	Out/No-one home		R	Refused	
RNA	Respondent Not Available (explain)		Oth	Other (explain)	
СВ	Call Back (specify day & time)				

		Street	Call Back		C	all Re	sults	Household	Sample
	No.	Name	Information	1	2	3	Other	ID No.	Type (A-F)
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	Street	-	Call Back	Cal	l Res	ults		Household	Sample
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#### NOTES

Roy Morgan

#### UTILITY CONSUMPTION SURVEY INTERVIEW QUOTA SHEET

To be completed by interviewers at the end of each day spent interviewing.

Job Name:Victorian Utility Consumption Survey 2000Job Number:Interviewer Name:

#### SAMPLE TYPE CODES

- A Concession Card Holder Aged or Service Pensioner
- B Concession Card Holder Other

C Non-Card Holder - 1 person household

R1964

- D Non-Card Holder 2 person household
- E Non-Card Holder 3 person household
- F Non-Card Holder 4 or more person household

NB. Supervisor will set and inform you of interviewing quotas, if and when required. Otherwise no quotas apply.

		Interview Quota							
Date Quotas Set	Α	B	С	D	Е	F	Total		
Commence interviewing	n/a	n/a	n/a	n/a	n/a	n/a			
		No. of Interviews Completed							
Date of Interview	Α	В	С	D	E	F	Total		

		Interview Quota									
Date Quotas Set	Α	В	С	D	E	F	Total				
		No. of Interviews Completed									
Date of Interview	Α	В	С	D	E	F	Total				

		Interview Quota									
Date Quotas Set	Α	В	С	D	E	F	Total				
	No. of Interviews Completed										
Date of Interview	Α	B	С	D	E	F	Total				

		Interview Quota									
Date Quotas Set	Α	B	С	D	E	F	Total				
		No. of Interviews Completed									
Date of Interview	Α	B	С	D	Е	F	Total				

				Interview Qu	ota					
Date Quotas Set	A	B	С	D	E	F	Total			
	No. of Interviews Completed									
Date of Interview	Α	B	С	D	E	F	Total			

		Interview Quota								
Date Quotas Set	A	В	С	D	E	F	Total			
	No. of Interviews Completed									
Date of Interview	Α	В	С	D	E	F	Total			

	Interview Quota													
Date Quotas Set	A	B	С	D	E	F	Total							
	No. of Interviews Completed													
Date of Interview	Α	В	С	D	Е	F	Total							

NOTES

Ref: [f:\ccd\_webfiles\concessions\final report june 2001 - utility consumption survey by roy morgan research.doc;2]

Contractor Number	
NAME	
ADDRESS	
POSTCODE	



**INTERVIEWER PAYMENT** 

## **REQUEST FORM**

Household Utilities Consumption Survey 2001

Job No: R1964

Day + Date	Area Worked	Time Left Home	Time Returned Home	Travel Time	Kms Travelled	Non- Interview Hours (eg. Lunch, breaks etc.)	Interview Hours (Col 1)	Clerical Hours (Col 2)	Briefing (Col 3)	TOTAL HOURS (Cols 1+2+3)	Interviews Completed	Other Reimbursements	Claimed
												OFFICE USE O	NLY
												TOTAL (FEES)	
		]	TOTALS										
	ewer to sign here to								OFFI	CE USE	ONLY		
	ted in accordance with the strictest contract.		istruction	is and tha	t all infoi	mation o	otained v	s S	FC:				
Intervie													
Signatu	ire:				_ Date _	//		N	FFFM: _			TOTAL (EXPENSES)	

# **APPENDIX 5 -**

# BILLING INFORMATION REQUEST FORMS

### **Billing Information Request Letter:**

Dear Sir/Madam,

The Department of Human Services has commissioned Roy Morgan Research to conduct the "Victorian Utility Consumption Survey 2001". The Department may have informed you of this previously, or you may have attended one of our information sessions conducted in early February of this year. However, if you need further information on the purpose of this survey, please contact Merryle French at <u>merryle.french@dhs.vic.gov.au</u>.

As part of this project, we require billing and consumption information about some of your customers. Written consent has been obtained from these customers to allow your organisation to provide Roy Morgan Research with this information. Please note that the billing and consumption information is for the period <u>1 JULY</u> <u>2000 to 30 JUNE 2001</u>. As there may be more than one bill in that period, please insert the number of lines needed for each customer, such that each bill has an individual line.

The account details together with the information requirements are provided in the attached file. If you experience difficulties with the file, clarification about the information requirements, or would like to view the customer consent form, please call me on (03) 9224 5281.

Thanking in advance for your co-operation and reply by 11 July 2001.

Yours sincerely,

David Ball Manager - Customised and Automotive (Data Analysis) Roy Morgan Research

## **Electricity Billing Data Items Requested:**

RMR ID	Name of account holder	Account number	House Number	Street	Suburb / Town	Post Code	Name of electricity supplier	Supplier		Meter reading date (DDMMYYYY)	Elapsed days	Kilowatts (general) consumed	Kilowatts (off peak) consumed	Winter Bonus \$	Total \$ Amount due (excl GST)	GST \$ amount duel
*	*	**	*	*	*	*	*	*	Х	Х	Х	Х	Х	Х	Х	Х
*	Provided by Roy	/ Morgan Resea	arch fror	n Consent Form.												
**	Provided by Roy	/ Morgan Resea	arch if R	espondent could pro	ovide the Account nur	nber.										
Х	To be Provided a															

## Gas Billing Data Items Requested:

Roy															Whether	Concession	
Morgan	Name of								Bill	Meter reading			Total \$	GST \$	Concession	\$ amount	GST \$
Respondent	account	Account	House		Suburb /		Name of gas		sequence	date	Elapsed	Megajoules	Amount due	amounton	claimed	due (excl	amount on
ID	holder	number	Number	Street	town	Post Code	supplier	Supplier ID	number	(DDMMYYYY)	days	consumed	(excl GST)	Total	(Y/N)	GST)	Concession
*	*	**	*	*	*	*	*	*	Х	Х	Х	Х	Х	Х	Х	Х	Х
*	Provided by	Roy Morg	an Researd	ch from Cor	sent Form.												
** Provided by Roy Morgan Research if Respondent could provide the Account number.																	
Х	To be Prov	ided and Re	eturned by	Supplier.													

## Water Billing Data Items Requested:

Roy Morgan Respondent ID		Account number	House Number	Street	Suburb	Post Code	Name of water supplier	Yarra Valley property number		Bill number	Meter reading date (DDMMYYYY)	Elapsed days		Totral Consumptio n charge \$
*	*	**	*	*	*	*	*	***	*	Х	Х	Х	Х	Х
*	Provided by Roy	Morgan Research from Co	nsent Fo	m.										
**	Provided by Roy	Morgan Research if Respo	ondent co	uld provide the Acc	count number.									
***	Provided by Roy	Morgan Research from Co	nsent Fo	rm for Respondents	s receiving supply from	n Yarra Vall	ey Water only.							
Х	To be Provided a	and Returned by Supplier.												

## **Council Rates Billing Data Items Requested:**

Roy Morgan Respondent ID	Name of rate payer	Account number	House number	Street	Suburb / Town	Post Code	Name of local Govt Authority	Supplier ID		Bill period period applicable (ddmmyyyy · ddmmyyyy)		Municipal / general rate \$
*	*	**	*	*	*	*	*	*	Х	Х	Х	Х
*	Provided by Roy Morgan Research from Cor	nsent Form.										
**	Provided by Roy Morgan Research if Respon	ount number.										
Х	To be Provided and Returned by Supplier.											