



# **Needs Assessment for the Energy Savings Assistance and the California Alternate Rates for Energy Programs**

## ***Volume 3: Technical Appendix***

Final Report

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## Appendix

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This document is Volume 3 (Technical Appendix) of the Needs Assessment study that Evergreen Economics conducted for the Energy Savings Assistance (ESA) and the California Alternate Rates for Energy (CARE) programs for the joint California investor-owned utilities (IOUs).

This volume contains the following sections:

- Section 6: Energy Burden Detailed Results
- Section 7: Low-Income Population Characterization Detailed Results
- Section 8: Telephone Survey Detailed Results
- Section 9: Detailed Modeling Results
- Section 10: In-Home Interview Detail
- Section 11: Low-Income Program Review Detail
- Section 12: Study Methods Detail
- Section 13: Research Instruments

The study report contains three volumes. Volume 1 is the Summary Report and Volume 2 is the Detailed Findings.

## 6 Energy Burden Detailed Results

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This section presents detailed results on energy burden. Section 6.1 provides an overview of the methods used to estimate energy burden, Section 6.2 provides detailed results on mean low-income (LI) customer energy burden and Section 6.3 presents general population energy burden compared to LI customer energy burden.

### 6.1 Methods

Our assessment of energy-related burden is focused on the magnitude of energy expenditures faced by LI households relative to income. More specifically, LI energy burden was defined as the portion of total household income that goes toward paying electric and gas utility bills, over the period of one year. LI energy burden was calculated for the telephone survey sample, which was drawn from the population of IOU CARE participants, which we assume are income-qualified and thus “low-income”.

To support these calculations, estimates of bill amount and income were required. To form estimates of bill amount, the four California IOUs provided a sample of household energy billing data representing 5 percent of total active residential accounts. Three of the four IOUs provided histories extending from January 2010 through December 2012; SoCalGas provided a 12-month history extending from January 2012 to December 2012. Bill summaries for three of the four IOUs included energy consumption (kWh and therms as applicable) and dollar amount of the bill. SDG&E provided kWh and therm consumption values.<sup>1</sup> IOU billing histories were used to create an average bill for each account, for each month of the year, which were then combined to form an average seasonal bill. For the survey sample, the customer-specific bill history was the source for energy expenditure estimates for the purposes of burden analyses. For the general population, burden analysis was based on aggregated values across IOU zip codes. That is, the seasonal bills were aggregated across IOU zip code areas to form a representative general population seasonal bill size for the zip code area.

Income figures were developed for the survey sample and the general population using different methods. General population income figures were developed using a combination of Census (2011 ACS/PUMS) and Athens data. Census data provides median income at the Census block group level. These data were aggregated to the IOU zip code level by calculating a weighted median per zip code, using Athens’ based counts of households for a given IOU service territory and block group. Estimates of household income for the survey sample were based primarily on self-reports, though

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<sup>1</sup> Prices estimated using data from surrounding territories with similar climate were used to estimate bill size for SDG&E

CARE and ESA databases were used to fill in gaps where necessary and where data were available.<sup>2</sup>

For the general population, the zip code level median income and bill statistics were combined to form estimates of general population burden. For the survey sample, the customer specific billing history and self-reported household income were combined to form the burden estimate.

Importantly, the technique used here to form general population burden estimates involves taking average measurements of bill size and income before taking a ratio. This approach effects the statistics' underlying distribution when considered in contrast to the measure of burden used for the survey sample that aggregates *customer-specific* ratios of expenditure to income. In fact, the difference is so substantial as to render statistics assembled these two ways largely incomparable. The next section describes this difference and its implications in greater detail. To form burden statistics for the survey sample that can be compared to the general population statistics, mean values for energy expenditures and household income are calculated first, and a ratio of the mean values is taken second.

#### *6.1.1.1 Overall Energy Burden Versus Customer Energy Burden*

Energy Burden has been calculated in two different ways, in this study and in the previous LINA. The two calculation methods are as follows:

- “Customer Energy Burden:”
  - This is calculated by *first* computing the ratio of household annual energy expense to household annual income *for each customer*, and *second*, taking an average of the resulting ratio over the population—or sample—of households.
- “Overall Energy Burden:”
  - This is calculated by *first* computing the average annual energy expenditure amount over the population—or sample—of households, *then* computing the average annual household income amount, and *third*, taking the ratio of the average expense to average income.

Note that household size is not explicitly factored into either estimation method.<sup>3</sup>

The “Overall Energy Burden” approach was used in the 2007 LINA and is the only method available to estimate burden for the general population. We use the “Overall Energy Burden” approach in order to make comparisons to the prior 2007 estimate and to the general population. However, we believe that the “Customer Energy Burden” provides a better estimate of average energy burden. Consequently, we use that metric to present the LI population’s energy burden results. The other method is

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<sup>2</sup> The CARE and ESA income figures were adjusted moderately to better represent the observed relationship between self-reported income and CARE/ESA database income.

<sup>3</sup> Though it is implicitly factored into the average income, since CARE-eligibility is based on the household size.

used only for comparison purposes, to show relative differences over time and with the general population.

When interpreting either the overall energy burden or the customer energy burden, we caution the reader to bear in mind the following important caveats:

- Income comes in more forms than simply dollars. There are food stamps, family services and other forms of assistance, directed largely at the lowest dollar income groups;
- Income is self-reported and may contain errors; and
- Poverty and qualification for the CARE and ESA LI programs are a function of both income and size of household.

Table 1 below presents an example to illustrate the difference in results that can occur applying these two different methods to the same sample of customers. As shown in column 2 of the table, the average annual income across the three hypothetical customers X, Y and Z is \$24,167. The average annual bill amount for customers X, Y and Z is \$1,233. The “overall energy burden” is the ratio of the average bill amount to the average income, or  $\$1,233/\$24,167$ , i.e. 5.1 percent.

The ratio of annual energy expense to annual energy for customers X, Y and Z are 36, 5 and 3 percent, as shown in the right-most column in the table below. The “customer energy burden” is the average of these three values, or 14.7 percent—almost three times “overall energy burden.”

**Table 1: Example, Results Using Different Burden Calculation Methods**

Example Customer Set	Annual Income (A)	Annual Energy Bill (B)	Ratio of Customer-Bill to Customer HH Income (B/A, or “Customer Energy Burden”)
Customer X	\$2,500	\$900	36%
Customer Y	\$25,000	\$1,300	5%
Customer Z	\$45,000	\$1,500	3%
Average for Customers X, Y, Z	\$24,167	\$1,233	14.7%
“Overall Energy Burden”			5.1%
“Customer Energy Burden”			14.7%

- The 2007 LINA used the “overall energy burden” method to calculate the LI population burden estimates. However, when classifying customers as “low”, “moderate” or “high” burden, the “customer energy burden” was used.



- In this study we use consistent methodology to the 2007 LINA for the purposes of comparing 2013 to 2007 findings.
- The energy burden of California’s general population is presented in this study for comparison to the LI population. We did not have household-specific annual income data for the general population sample, only representative figures from the U.S. Census. Thus, “overall energy burden” was calculated for the general population, and compared with the “overall energy burden” of the 2013 LI population.
- In all cases outside of comparisons to 2007 or the general population, the “customer energy burden” is presented.

### *6.1.1.2 Missing Data*

Missing Income Data: Of the 1,028 completed telephone surveys with LI customers, 129 did not provide a household annual income. We looked to utility CARE and ESA databases as a secondary source to fill some of this missing data in. There were a total of 372 surveyed customers with income data in the CARE/ESA (“program”) database. Among these, 326 also had provided a self-reported income, and 46 were among those that did not provide an income figure.

Self-reported data and program data related to income likely have distinct underlying distributions based on reporting bias. For this reason, we examined the 326 points with income data in both the survey and the program database to assess the relationship. The overall mean difference between self-reported and across the 326 customers was \$1,337, with the program database containing higher values. However, we also found that the relationship between the two sources changed consistently with the size of the program database income—where those with lower database income tended to report higher incomes during the survey, and those with higher database income tended to report lower income during the survey. Our solution was to divide the sample into five categories based on the size of the program database<sup>4</sup> income. The mean difference between the program database and survey income figures was applied as an adjustment factor to the 46 customers for whom we had only program database income. That is, for different income levels, the ratio of self-reported income to database income was applied to the database income before it was adopted as the estimate of income.

Missing Energy Bill Data: For SDG&E customers, we had usage data but not bill amount. In these cases we applied an average price observed for a sample with close geographic proximity. In other cases, we had gas bills but not electric or vice-versa. For these cases, we applied a mean bill based on geographic proximity and home type.

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<sup>4</sup> Less than \$10,000; \$10,000 to \$20,000; \$20,000 to \$30,000; \$30,000 to \$40,000 and \$40,000 and up

## 6.2 Customer Energy Burden Detailed Results

This section presents the LI customer energy burden detailed results.

**Table 2: Seasonal Energy Burden For Electric & Gas Customers for California LI Population**

		Low Income				
		PG&E	SoCalGas	SCE	SDG&E	Total
<b>Population segment size</b>		31.1%	54.8%	41.3%	8.3%	94.4%
<b>Mean Annual Burden</b>	Summer	9.1%	7.1%	6.4%	6.5%	7.8%
	Winter	12.1%	7.0%	6.3%	9.1%	9.1%
	Fall	8.4%	6.8%	6.1%	6.9%	7.4%
	Spring	9.5%	5.8%	5.1%	7.2%	7.3%
	Annual	9.9%	6.7%	6.1%	7.3%	8.0%
<b>Mean Electric Burden</b>	Summer	7.1%	5.6%	5.1%	4.9%	6.1%
	Winter	7.0%	3.6%	3.0%	5.3%	5.0%
	Fall	6.2%	5.2%	4.7%	5.3%	5.6%
	Spring	5.8%	3.5%	3.0%	4.7%	4.5%
	Annual	6.8%	4.6%	4.1%	5.0%	5.4%
<b>Mean Gas Burden</b>	Summer	2.0%	1.5%	1.3%	1.6%	1.7%
	Winter	5.1%	3.4%	3.3%	3.8%	4.1%
	Fall	2.2%	1.5%	1.3%	1.5%	1.8%
	Spring	3.6%	2.2%	2.1%	2.5%	2.8%
	Annual	3.2%	2.2%	2.0%	2.4%	2.6%
n		254	418	368	179	853

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 3: Seasonal Energy Burden by Urban/Rural, by Electric-Only Customers for California LI Population**

		Low-Income	Low-Income	
		Electric-Only	Urban	Rural
<b>Population segment size</b>		-	95.9%	4.1%
<b>Mean Annual Burden</b>	Summer	5.5%	7.8%	6.0%
	Winter	7.8%	9.2%	9.2%
	Fall	5.5%	7.4%	5.6%
	Spring	5.8%	7.4%	6.8%
	Annual	6.1%	6.8%	8.1%
<b>Mean Electric Burden</b>	Summer	5.5%	6.1%	4.7%
	Winter	7.8%	5.1%	5.7%
	Fall	5.5%	5.7%	4.3%
	Spring	5.8%	4.5%	4.5%
	Annual	6.1%	4.9%	5.5%
<b>Mean Gas Burden</b>	Summer	5.5%	1.7%	1.4%
	Winter	7.8%	4.2%	3.5%
	Fall	5.5%	1.8%	1.3%
	Spring	5.8%	2.9%	2.3%
	Annual	6.1%	2.1%	2.6%
n		54	909	45

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 4: Seasonal Energy Burden by ESA Participation Type for California LI Population**

		ESA Participation		
		Prior Participants	Recent Participants	Non-Participants
<b>Population segment size</b>		28.8%	22.2%	49.1%
<b>Mean Annual Burden</b>	Summer	7.5%	8.8%	6.4%
	Winter	10.1%	10.5%	7.5%
	Fall	7.4%	8.2%	6.0%
	Spring	7.9%	8.4%	5.8%
	Annual	8.3%	9.1%	6.5%
<b>Mean Electric Burden</b>	Summer	5.8%	6.9%	5.1%
	Winter	5.7%	5.4%	4.1%
	Fall	5.5%	6.1%	4.7%
	Spring	4.9%	5.0%	3.6%
	Annual	5.5%	6.1%	4.5%
<b>Mean Gas Burden</b>	Summer	1.8%	1.8%	1.3%
	Winter	4.4%	5.1%	3.4%
	Fall	1.9%	2.1%	1.3%
	Spring	3.0%	3.4%	2.3%
	Annual	2.7%	3.1%	2.1%
n		294	277	384

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 5: Seasonal Energy Burden by Climate Zone for California LI Population**

Category Description		T24 Climate Zone Region- LI					
		Central Valley - 11-13	Desert - 14,15	Mountain - 16	North Coast - 1-5	South Coast - 6-8	South Inland - 9,10
<b>Population segment size</b>		24.7%	5.9%	2.1%	16.3%	23.4%	27.6%
<b>Mean Annual Burden</b>	Summer	11.0%	7.7%	6.9%	5.8%	7.4%	6.2%
	Winter	13.6%	5.9%	7.7%	9.7%	8.7%	6.3%
	Fall	9.6%	6.8%	6.0%	6.2%	7.8%	5.8%
	Spring	10.6%	5.0%	6.5%	7.5%	7.1%	5.1%
	Annual	11.5%	6.7%	6.1%	7.2%	7.7%	6.0%
<b>Mean Electric Burden</b>	Summer	9.3%	6.6%	5.0%	3.7%	5.6%	5.0%
	Winter	7.7%	2.9%	5.1%	5.5%	4.8%	3.2%
	Fall	7.5%	5.5%	4.6%	4.0%	5.8%	4.7%
	Spring	6.7%	3.4%	4.5%	4.1%	4.4%	3.2%
	Annual	8.3%	4.9%	4.9%	4.2%	5.1%	4.1%
<b>Mean Gas Burden</b>	Summer	1.7%	1.1%	2.0%	2.2%	1.9%	1.3%
	Winter	5.9%	3.0%	2.7%	4.2%	3.9%	3.0%
	Fall	2.0%	1.3%	1.4%	2.2%	2.0%	1.2%
	Spring	3.8%	1.7%	2.0%	3.4%	2.7%	2.0%
	Annual	3.3%	1.7%	2.2%	3.0%	2.6%	1.9%
n		230	59	23	136	252	255

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 6: Seasonal Energy Burden by ESA Measure Eligibility for California LI Population**

		Low Income	
		RAC replace and evap cooler install - 10-16	CAC replacement - 13-15
<b>Population segment size</b>		44.3%	13.2%
<b>Mean Annual Burden</b>	Summer	9.5%	10.2%
	Winter	11.0%	8.6%
	Fall	8.5%	8.2%
	Spring	8.7%	6.8%
	Annual	9.7%	9.1%
<b>Mean Electric Burden</b>	Summer	8.0%	8.6%
	Winter	6.1%	3.9%
	Fall	6.8%	6.5%
	Spring	5.5%	4.0%
	Annual	6.9%	6.3%
<b>Mean Gas Burden</b>	Summer	1.5%	1.5%
	Winter	4.9%	4.7%
	Fall	1.7%	1.7%
	Spring	3.2%	2.8%
	Annual	2.8%	2.7%
n		455	127

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 7: Seasonal Energy Burden by Home Type for California LI Population**

		Home Type	
		Single Family/Mobile Homes	Multi-Family Homes
<b>Population segment size</b>		58.7%	41.3%
<b>Mean Annual Burden</b>	Summer	8.8%	6.2%
	Winter	11.2%	6.4%
	Fall	8.4%	5.8%
	Spring	8.7%	5.4%
	Annual	9.4%	6.1%
<b>Mean Electric Burden</b>	Summer	7.0%	4.8%
	Winter	6.2%	3.6%
	Fall	6.5%	4.3%
	Spring	5.4%	3.2%
	Annual	6.4%	4.1%
<b>Mean Gas Burden</b>	Summer	1.8%	1.5%
	Winter	5.0%	2.9%
	Fall	1.9%	1.5%
	Spring	3.3%	2.2%
	Annual	3.0%	2.0%
n		632	323

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 8: Seasonal Energy Burden by Home Ownership for California LI Population**

		Home Ownership	
		Own	Rent
<b>Population segment size</b>		30.4%	22.7%
<b>Mean Annual Burden</b>	Summer	7.1%	9.8%
	Winter	9.3%	10.9%
	Fall	6.8%	9.3%
	Spring	7.1%	8.7%
	Annual	7.7%	9.8%
<b>Mean Electric Burden</b>	Summer	5.7%	7.5%
	Winter	4.9%	5.7%
	Fall	5.2%	7.0%
	Spring	4.3%	5.2%
	Annual	5.2%	6.5%
<b>Mean Gas Burden</b>	Summer	1.4%	2.2%
	Winter	4.4%	5.2%
	Fall	1.6%	2.3%
	Spring	2.8%	3.5%
	Annual	2.5%	3.3%
n		455	132

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.



**Table 9: Seasonal Energy Burden by Primary Language for California LI Population**

		Primary Language		
		English	Spanish	Other non-English language
<b>Population segment size</b>		68.6%	22.2%	9.1%
<b>Mean Annual Burden</b>	Summer	8.1%	6.5%	8.5%
	Winter	10.0%	6.8%	11.0%
	Fall	7.7%	6.1%	8.4%
	Spring	7.9%	5.6%	8.4%
	Annual	8.5%	6.3%	9.1%
<b>Mean Electric Burden</b>	Summer	6.5%	4.7%	6.9%
	Winter	5.6%	3.5%	6.3%
	Fall	5.9%	4.4%	6.8%
	Spring	4.9%	3.3%	5.2%
	Annual	5.9%	4.1%	6.4%
<b>Mean Gas Burden</b>	Summer	1.6%	1.8%	1.6%
	Winter	4.4%	3.3%	4.6%
	Fall	1.8%	1.7%	1.7%
	Spring	3.0%	2.3%	3.2%
	Annual	2.7%	2.3%	2.8%
n		709	201	99

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 10: Seasonal Energy Burden by Ethnicity for California LI Population**

		Ethnicity				
		White (Non-Hispanic)	African-American	Asian	Hispanic	Other
<b>Population segment size</b>		39.2%	12.0%	3.5%	38.7%	6.6%
<b>Mean Annual Burden</b>	Summer	7.1%	10.1%	9.0%	7.6%	7.8%
	Winter	9.8%	12.9%	8.2%	8.0%	8.0%
	Fall	6.9%	10.2%	8.7%	7.0%	6.5%
	Spring	7.7%	9.8%	6.8%	6.6%	6.2%
	Annual	7.9%	10.8%	8.2%	7.5%	7.4%
<b>Mean Electric Burden</b>	Summer	5.8%	7.8%	7.3%	5.6%	6.5%
	Winter	5.6%	7.5%	4.4%	4.1%	4.4%
	Fall	5.5%	7.7%	7.0%	5.0%	5.1%
	Spring	5.0%	6.0%	4.0%	3.8%	3.8%
	Annual	5.6%	7.3%	5.8%	4.8%	5.3%
<b>Mean Gas Burden</b>	Summer	1.3%	2.3%	1.7%	2.0%	1.3%
	Winter	4.1%	5.4%	3.7%	3.9%	3.6%
	Fall	1.4%	2.6%	1.7%	2.0%	1.4%
	Spring	2.7%	3.8%	2.8%	2.8%	2.4%
	Annual	2.4%	3.4%	2.5%	2.7%	2.1%
n		385	99	38	344	63

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 11: Seasonal Energy Burden by Presence of Children in Home for California LI Population**

		Children in Home	
		One or more children	No children
<b>Population segment size</b>		43.0%	57.0%
<b>Mean Annual Burden</b>	Summer	8.6%	7.1%
	Winter	9.4%	9.1%
	Fall	7.9%	6.9%
	Spring	7.5%	7.3%
	Annual	8.5%	7.6%
<b>Mean Electric Burden</b>	Summer	6.7%	5.6%
	Winter	5.5%	4.8%
	Fall	6.1%	5.2%
	Spring	4.8%	4.3%
	Annual	5.9%	5.1%
<b>Mean Gas Burden</b>	Summer	1.9%	1.5%
	Winter	3.9%	4.3%
	Fall	1.9%	1.7%
	Spring	2.7%	2.9%
	Annual	2.6%	2.6%
n		386	567

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 12: Seasonal Energy Burden by Historical Household Type for California LI Population**

		Household Groups--Historical Match				
		Adults (Age 35-59)	Large Family (5+ people)	Seniors Only	Small Family (2-4 people)	Young Adults (Age 18-34)
<b>Population segment size</b>		8.7%	25.5%	26.2%	38.7%	0.9%
<b>Mean Annual Burden</b>	Summer	7.1%	8.7%	6.1%	8.4%	5.4%
	Winter	9.2%	10.0%	8.4%	9.5%	4.3%
	Fall	7.0%	8.3%	5.8%	7.9%	3.8%
	Spring	7.9%	8.1%	6.6%	7.4%	3.9%
	Annual	7.8%	8.8%	6.8%	8.4%	4.8%
<b>Mean Electric Burden</b>	Summer	5.7%	6.8%	4.7%	6.6%	4.3%
	Winter	5.9%	6.1%	4.0%	5.1%	2.5%
	Fall	5.4%	6.4%	4.3%	6.1%	3.0%
	Spring	5.3%	5.4%	3.7%	4.4%	2.1%
	Annual	5.6%	6.3%	4.3%	5.7%	3.3%
<b>Mean Gas Burden</b>	Summer	1.4%	1.9%	1.4%	1.8%	1.1%
	Winter	3.4%	3.9%	4.4%	4.3%	1.8%
	Fall	1.6%	1.9%	1.5%	1.9%	0.9%
	Spring	2.6%	2.8%	2.9%	2.9%	1.8%
	Annual	2.2%	2.6%	2.5%	2.7%	1.4%
n		74	237	275	361	6

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 13: Seasonal Energy Burden by Presence of Elderly or Disabled Persons in Home for California LI Population**

		Age and Disability						No disabled people in home	No elderly people in home
		One or more elderly person in home	One or more disabled person in home	One or more elderly and disabled person in home	One or more person with hearing/vision/physical disability	One or more person with a mental/emotional disability			
<b>Population segment size</b>		48.8%	59.0%	37.6%	39.1%	17.1%	41.0%	51.2%	
<b>Mean Annual Burden</b>	Summer	6.8%	7.9%	7.1%	9.0%	8.7%	7.3%	8.6%	
	Winter	8.9%	9.7%	9.1%	10.8%	10.8%	8.3%	9.6%	
	Fall	6.6%	7.5%	6.9%	8.5%	8.3%	7.0%	8.1%	
	Spring	7.1%	7.7%	7.4%	8.8%	8.8%	6.6%	7.6%	
	Annual	7.4%	8.3%	7.7%	9.4%	9.2%	7.5%	8.6%	
<b>Mean Electric Burden</b>	Summer	5.4%	6.3%	5.7%	7.2%	7.2%	5.7%	6.7%	
	Winter	4.7%	5.5%	4.9%	5.9%	6.6%	4.5%	5.5%	
	Fall	5.0%	5.8%	5.3%	6.5%	6.6%	5.3%	6.1%	
	Spring	4.4%	4.8%	4.6%	5.4%	5.8%	4.0%	4.7%	
	Annual	5.0%	5.7%	5.2%	6.5%	6.7%	5.0%	5.9%	
<b>Mean Gas Burden</b>	Summer	1.4%	1.6%	1.4%	1.8%	1.6%	1.7%	1.9%	
	Winter	4.2%	4.3%	4.2%	4.9%	4.2%	3.8%	4.1%	
	Fall	1.6%	1.8%	1.6%	2.0%	1.7%	1.7%	1.9%	
	Spring	2.7%	2.9%	2.8%	3.3%	2.9%	2.6%	2.9%	
	Annual	2.4%	2.6%	2.4%	3.0%	2.6%	2.4%	2.7%	
n		516	585	388	386	158	357	435	

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 14: Seasonal Energy Burden by Reasons for Recent Changed Income for California LI Population**

		Reasons for recent changed income		
		Due to job loss or cut in hours	Due to increase in hours	Due to move or job change
<b>Population segment size</b>		34.1%	2.4%	11.7%
<b>Mean Annual Burden</b>	Summer	9.1%	3.6%	6.6%
	Winter	11.3%	4.5%	7.4%
	Fall	8.8%	3.3%	6.2%
	Spring	8.4%	3.6%	5.9%
	Annual	9.4%	3.8%	6.7%
<b>Mean Electric Burden</b>	Summer	7.1%	2.9%	5.1%
	Winter	6.3%	2.7%	3.5%
	Fall	6.7%	2.5%	4.6%
	Spring	5.0%	2.4%	3.3%
	Annual	6.4%	2.7%	4.2%
<b>Mean Gas Burden</b>	Summer	2.0%	0.7%	1.5%
	Winter	5.0%	1.8%	3.9%
	Fall	2.1%	0.8%	1.6%
	Spring	3.4%	1.2%	2.6%
	Annual	3.1%	1.1%	2.4%
n		182	14	55

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 15: Seasonal Energy Burden by Sickness due to Home Conditions for California LI Population**

		Sickness due to home conditions		
		Very often sick due to home conditions	Sometimes sick due to home conditions	Never sick due to home conditions
<b>Population segment size</b>		10.6%	39.5%	50.0%
<b>Mean Annual Burden</b>	Summer	12.7%	6.7%	7.5%
	Winter	16.3%	8.1%	8.7%
	Fall	12.0%	6.4%	7.2%
	Spring	13.4%	6.2%	7.0%
	Annual	13.8%	6.9%	7.7%
<b>Mean Electric Burden</b>	Summer	10.6%	5.3%	5.8%
	Winter	10.6%	4.4%	4.5%
	Fall	9.6%	4.9%	5.3%
	Spring	9.4%	3.7%	4.2%
	Annual	10.3%	4.7%	5.1%
<b>Mean Gas Burden</b>	Summer	2.2%	1.5%	1.7%
	Winter	5.6%	3.7%	4.2%
	Fall	2.4%	1.5%	1.9%
	Spring	4.0%	2.5%	2.8%
	Annual	3.5%	2.3%	2.6%
n		101	349	492

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.

**Table 16: Seasonal Energy Burden by Yearly Income for California LI Population**

		Yearly Income				
		Less than \$15,000	\$15,000- \$30,000	\$30,000- \$45,000	\$45,000- \$60,000	\$60,000+
<b>Population segment size</b>		35.0%	41.2%	15.1%	5.4%	3.4%
<b>Mean Annual Burden</b>	Summer	15.8%	4.3%	3.3%	3.1%	1.8%
	Winter	19.4%	5.0%	3.4%	3.1%	2.2%
	Fall	15.0%	4.1%	3.2%	2.8%	1.8%
	Spring	15.5%	4.0%	2.8%	2.4%	1.8%
	Annual	16.7%	4.3%	3.2%	2.9%	1.9%
<b>Mean Electric Burden</b>	Summer	12.3%	3.4%	2.7%	2.6%	1.5%
	Winter	10.7%	2.8%	1.9%	1.8%	1.3%
	Fall	11.3%	3.1%	2.6%	2.3%	1.5%
	Spring	9.5%	2.4%	1.8%	1.6%	1.3%
	Annual	11.2%	3.0%	2.3%	2.1%	1.4%
<b>Mean Gas Burden</b>	Summer	3.5%	0.9%	0.6%	0.5%	0.3%
	Winter	8.7%	2.3%	1.5%	1.3%	0.9%
	Fall	3.7%	0.9%	0.6%	0.5%	0.3%
	Spring	6.0%	1.6%	1.0%	0.8%	0.6%
	Annual	5.4%	1.4%	0.9%	0.8%	0.5%
n		285	369	150	52	41

Source: 2013 Analysis of IOU customer billing data, CARE participant telephone survey data, 2012 Athens data, and 2011 PUMS data.



### 6.3 Energy Burden of Low-Income Versus General Population

The table analysis compares the overall energy burden of the LI population to the general population (which includes the LI population). This comparison provides greater context for interpreting the magnitude and the patterns of the LI population energy burden. These results are intended to provide a comparison to the general population only. The customer energy burden presented previously provides our estimates of the LI population mean energy burden.

In the table below, the left most column includes (a) the general population overall burden, the next column is (b) the LI population overall burden and the final column is (c) the ratio of the two results. The first two columns (a) and (b) are interim calculations only (providing “relative” estimates of burden) to produce the ratios shown in the (c) results. The previous section (6.2) presented the LI customer energy burden results. We are unable to produce absolute customer energy burden results for the general population given the data constraints described herein.

**Table 17: Seasonal Energy Burden For Electric & Gas Customers by Population and IOU**

		General Population (a) ^					Low Income (b) ^^					Ratio of LI to GenPop (c=b/a)				
		PG&E	SCG	SCE	SDG&E	Total	PG&E	SCG	SCE	SDG&E	Total	PG&E	SCG	SCE	SDG&E	Total
<b>Mean Energy Burden</b>	Summer	2.4%	2.2%	2.2%	1.6%	2.2%	4.4%	3.9%	3.9%	3.3%	4.1%	1.8	1.8	1.8	2.1	1.9
	Winter	3.2%	2.5%	2.4%	2.1%	2.7%	5.9%	3.7%	3.6%	4.7%	4.7%	1.8	1.5	1.5	2.2	1.7
	Fall	2.3%	2.2%	2.2%	1.8%	2.2%	4.1%	3.7%	3.6%	3.6%	3.9%	1.8	1.7	1.7	2.0	1.8
	Spring	2.4%	2.0%	1.9%	1.8%	2.1%	4.6%	3.1%	2.9%	3.7%	3.7%	1.9	1.5	1.5	2.1	1.8
	Annual	2.6%	2.2%	2.2%	1.8%	2.3%	4.7%	3.6%	3.5%	3.8%	4.1%	1.8	1.6	1.6	2.1	1.8
<b>Mean Electric Burden</b>	Summer	2.0%	1.8%	1.8%	1.4%	1.8%	3.4%	3.2%	3.1%	2.6%	3.3%	1.7	1.8	1.7	1.8	1.8
	Winter	1.9%	1.7%	1.6%	1.5%	1.7%	3.3%	2.0%	1.9%	2.8%	2.6%	1.7	1.2	1.2	1.8	1.5
	Fall	1.8%	1.8%	1.8%	1.5%	1.8%	3.0%	3.0%	2.9%	2.8%	3.0%	1.7	1.7	1.6	1.9	1.7
	Spring	1.6%	1.5%	1.4%	1.3%	1.5%	2.8%	1.9%	1.8%	2.4%	2.3%	1.7	1.3	1.3	1.9	1.5
	Annual	1.8%	1.7%	1.7%	1.4%	1.7%	3.1%	2.5%	2.4%	2.6%	2.8%	1.7	1.5	1.4	1.9	1.6
<b>Mean Gas Burden</b>	Summer	0.5%	0.4%	0.4%	0.3%	0.4%	1.0%	0.8%	0.7%	0.8%	0.8%	1.9	1.9	1.8	2.6	2.1
	Winter	1.3%	0.9%	0.8%	0.7%	1.0%	2.6%	1.8%	1.7%	1.9%	2.1%	2.0	1.9	2.1	2.7	2.1
	Fall	0.5%	0.4%	0.4%	0.3%	0.4%	1.1%	0.8%	0.7%	0.8%	0.9%	2.1	1.9	1.8	2.5	2.2
	Spring	0.9%	0.6%	0.5%	0.5%	0.6%	1.8%	1.1%	1.1%	1.3%	1.4%	2.0	1.9	2.2	2.5	2.3
	Annual	0.8%	0.5%	0.5%	0.4%	0.6%	1.6%	1.1%	1.1%	1.2%	1.3%	2.0	2.2	2.1	2.9	2.2
Sample Size (n)		178*	704*	187*	64*	1,132*	340	420	368	179	939					

\* Thousands of records

^Source: 2013 IOU customer billing data, 2012 Athens data, and 2011 PUMS data.

^^Source IOU Customer billing data, CARE/ESA tracking databases, LINA telephone survey data,

## 7 LI Population Characterization Detailed Results

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This section provides detailed results from the LI population characterization, including demographic and home and equipment characteristics.

### 7.1 Sources for LI Population Characterization

We compiled data from four main sources for this characterization task, which are summarized below. In Section 2.4, we provide more information about the secondary sources and in Section 2.5, we provide more information about the customer telephone phone survey.

- ACS/PUMS – 2011 and 2004 ACS data that provided the demographic characteristics for the state of California, the LI population, and within the LI population, by various categories such as IOU service territory, home type and primary language
- CLASS – 2013 California on-site survey data that provided the home and equipment characteristics for the state of California, the LI population, and within the LI population, by various categories such as IOU service territory, home type and primary language
- RASS – 2010 California mail survey data that provided the climate zone breakdowns for the home and equipment characteristics
- Telephone survey – The customer telephone survey was used to provide data on the ESA participants and ESA non-participants, in order to compare demographic and home/equipment characteristics across these two groups

A LI household is defined as a household that has a household income that is at or below 200% of federal poverty according to the 2012 Federal Poverty Guidelines<sup>5</sup> shown in Table 18 below. We chose this definition as it is the same metric that determines eligibility for both the CARE and ESA programs.

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<sup>5</sup> 2012 Poverty Guidelines. U.S. Department of Health & Human Services.  
<http://aspe.hhs.gov/poverty/12fedreg.shtml>

**Table 18: 200% 2012 Federal Poverty Guidelines**

Household Size	Income Eligibility Upper Limit*
1	\$22,340
2	\$30,260
3	\$38,180
4	\$46,100
5	\$54,020
6	\$61,940
7	\$69,860
8	\$77,780
Each Additional Person	\$7,920

\* Upper Limit Calculation = 200% of Federal Poverty Guidelines

Whether a household was at or below 200% federal poverty was determined differently for each secondary data source depending on the level of detail of household income provided. The ACS/PUMS data provides a specific dollar value for household income allowing us to identify if the household falls below the income threshold limits in the table above depending on the household size. The CLASS and RASS data provides household income within a range as detailed in Table 19. Households were designated as low-income in these datasets if the midpoint of their income range fell below the Income Eligibility Upper Limit given the number of persons in the household. For example, if a CLASS household had three people and an income range of \$30,000 - \$40,000 it would be considered low income because the midpoint \$35,000 is less than the Income Eligibility Upper Range of \$38,180.

**Table 19: CLASS & RASS Income Ranges**

CLASS Income Ranges	RASS Income Ranges
< \$20,000	< \$25,000
\$20,000-30,000	\$25,000-35,000
\$30,000-40,000	\$35,000-\$50,000
\$40,000-50,000	> \$50,000
\$50,000-60,000	
\$60,000-75,000	
\$75,000-100,000	
\$100,000-150,000	
\$150,000-200,000	

The telephone survey sample was drawn from the population of IOU CARE participants. Given that the eligibility threshold for CARE is based on 200% of Federal Poverty, we assume that all CARE households are low income by our definition above.

### 7.1.1 Sample Sizes and Statistical Significance

This section presents sample sizes and estimates of sampling error for each source used to develop the LI population characterization summarized in Section 4.3 and presented in more detail below in Sections 7.2 and 7.3. The exception is the CLASS data, where the sample size varied by each result since it reflects inventories of equipment. The other data sources are based on households, and the sample size varied little across results, allowing a more simplified approach to presenting sample size and sampling error estimates.

The precision of the data can be represented by the approximate estimates of sampling error shown in Table 20 and Table 21 below, which shows the half-length of the "approximate" 90 percent confidence intervals for parameters estimated for various sample segments for each of the sources.<sup>6</sup> The first column, "Percent value", refers to the percentage value for which the sampling error is being examined. These values can be used when interpreting the results in this report, by applying the interval to a percentage estimate.

For example, if looking at an estimated percentage that is near 50 percent for the California total population based on the PUMS data, the lower (upper) bound of the 90 percent confidence interval for the true value of the percentage would be equal to the estimated

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<sup>6</sup> We refer to the confidence interval as "approximate" because they are based on survey data, which are "complex" in that the surveyed households (by design) do not perfectly represent the population of interest and, therefore, parameter estimates must be computed using weights. Methods do exist to calculate (near) exact standard errors; however, the development of individual standard errors for each parameter of interest requires extensive analysis. Because of this, results from large-scale surveys such as this generally compute approximate standard errors based on sample size and assumptions about the sampling distribution.

percentage minus (plus) 0.2 percentage points. Thus, we are approximately 90 percent confident that the true—but unknown—percentage is between 49.8 percent and 50.2 percent.<sup>7</sup> (The PUMS sample sizes are very large, with associated very small sampling error.) This interval can be applied to the same estimate for a different sub-group (e.g., California’s LI population) to determine if there is a statistically significant difference (at the 90% level of confidence) between the two groups.

Note that there may also exist measurement errors associated with auditors and respondents making errors in recording information that cannot be estimated and are not reflected in the sampling error estimates below.

**Table 20: 2004 and 2011 PUMS Data Sample Sizes (and Telephone Survey Sample for ESA Participants and Non-Participants) and 90% Confidence Intervals for California LI Population<sup>1</sup>**

Sample Segment	Total 2011*	Total 2004*	LI Population 2011*	LI Population 2004*	ESA Participants** (Phone Survey)	ESA Non-participants** (Phone Survey)
Percent value	Confidence Interval					
10/90%	0.1%	0.2%	0.3%	0.5%	2.0%	2.4%
25/75%	0.2%	0.3%	0.4%	0.7%	2.9%	3.5%
50%	0.2%	0.4%	0.4%	0.8%	3.3%	4.0%
Sample Size	146,280	43,413	38,293	11,046	610	418

<sup>1</sup>Unless otherwise indicated, sample segment is for 2011, LI-population  
Sources: (\*)2004 and 2011 PUMS; (\*\*)2013 CARE Participant Telephone Survey.

<sup>7</sup> Stated another way, if we drew the same size sample from the population 100 times and each time calculated a 90 percent confidence interval for the true value of the percentage, 90 of the 100 estimated ranges would actually contain the true value of the percentage.

**(Table 20 continued)**

Sample Segment	PG&E	SCE	SDG&E	SoCalGas	Urban	Rural
Percent value	Confidence Interval					
10/90%	0.4%	0.3%	0.6%	0.3%	0.3%	0.9%
25/75%	0.6%	0.4%	0.8%	0.4%	0.4%	1.3%
50%	0.6%	0.5%	0.9%	0.5%	0.4%	1.5%
Sample Size	16,786	26,033	8,052	26,382	35,269	3,024

<sup>1</sup>Unless otherwise indicated, sample segment is for 2011, LI-population  
Source: 2011 PUMS.

**(Table 20 continued)**

Sample Segment	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Primary Language Spanish	Primary Language Other
Percent value	Confidence Interval						
10/90%	0.4%	0.6%	0.4%	1.6%	0.4%	0.4%	0.6%
25/75%	0.6%	0.8%	0.6%	2.3%	0.5%	0.6%	0.9%
50%	0.7%	0.9%	0.7%	2.6%	0.6%	0.7%	1.0%
Sample Size	13,696	7,850	14,683	1,000	17,973	14,087	6,233

<sup>1</sup>Unless otherwise indicated, sample segment is for 2011, LI-population  
Source: 2011 PUMS.

**Table 21: 2010 RASS Data Sample Sizes and 90% Confidence Intervals by Climate Zone Group and ESA Measure Eligibility for California LI Population**

Sample Segment	Central Valley (11-13)	Desert (14,15)	Mountain (16)	North Coast (1-5)	South Coast (6-8)	South Inland (9,10)
Percent value	Confidence Interval					
10/90%	2%	3%	4%	2%	2%	2%
25/75%	1%	2%	2%	1%	1%	1%
50%	2%	3%	4%	2%	2%	2%
Sample Size	1463	724	394	1121	2166	2102

Source: 2010 RASS.

**(Table 21 continued)**

<b>Sample Segment</b>	<b>RAC Replace and Evap. Cooler Install (10-16)</b>	<b>CAC Replacement (13-15)</b>
Percent value	Confidence Interval	
10/90%	1%	1%
25/75%	1%	2%
50%	1%	2%
Sample Size	3476	1504

Source: 2010 RASS.

### 7.1.2 Comparison of Sources

We assumed that the PUMS data are the most robust and representative source, with nearly 150,000 records. We compared the LI population sub-samples from CLASS and RASS, and customer telephone survey, to the PUMS as shown in Table 22 below. Section 8.1 discusses how the customer telephone survey compares to PUMS, and adjustment weights that we developed to correct for the difference between home ownership rates.

The RASS and CLASS LI sub-samples have more homeowners than the PUMS LI sub-sample, with nearly half the sample owning their home compared to 33 percent in PUMS. The CLASS also over-represents households whose primary language is English (this variable was not available for RASS).

We did not adjust the RASS and CLASS samples, but we do provide all the home and equipment characteristic results from CLASS by homeowners versus renters and for households whose primary language is Spanish or English.



**Table 22: Comparison of Demographic Characteristics Across Secondary Sources and the Customer Telephone Survey for California LI Population**

Demographic Characteristic	Data Source			
	2011 PUMS LI Sample	2013 LINA Telephone Survey	2010 RASS	2013 CLASS
% own	33%	51%	48%	49%
% with seniors*	26%	53%	31%	35%
Primary language is English	46%	76%	Not available	65%
Respondent is white	36%	46%	Not available	Not available
% Single-family home	51%	56%	57%	56%
% Multi-family home	43%	40%	33%	41%
Average # people in the home	3.0	3.0	3.9	3.5
Average age of home	47	41	37	45
*Definition of senior	Over 65 years	Over 60 years	Over 65 years	Over 65 years

Sources: 2010 RASS; 2011 PUMS; 2013 CLASS; 2013 CARE Participant Telephone Survey.

## 7.2 Demographic Characteristics Results<sup>8</sup>

This section contains demographic data from the 2004 and 2011 ACS/PUMS. The ACS/PUMS data were introduced in Section 2.4. The segments shown in the tables were introduced in Section 4.3. Note we also included two columns for ESA participants versus non-participants based on the telephone survey data, where the data were available. These data are referenced in Section 5.

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<sup>8</sup> Multi-family homes are defined as any housing structure with two or more units. This differs from the 2007 KEMA study where multi-family homes are defined as housing structures with five or more units. This also differs from the concurrent Cadmus multi-family LI study which also defines multi-family homes as housing structures with five or more units.

**Table 23: Home Tenure Status - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
	Owned with mortgage or loan	41%	44%	20%	20%	34%	35%	20%	22%	19%
Owned free and clear	14%	15%	13%	14%			16%	13%	13%	12%
Rented	44%	40%	64%	63%	62%	65%	62%	63%	65%	65%
Occupied without payment of rent	2%	1%	3%	2%	4%	0%	3%	2%	2%	2%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

**Table 24: Home Tenure Status - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population							
	Single-Family	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
Owned with mortgage or loan (include home equity loans)	35%	3%	16%	19%	21%	18%	20%	21%
Owned free and clear	19%	2%	53%	19%	7%	13%	13%	22%
Rented	42%	96%	32%	59%	70%	66%	65%	53%
Occupied without payment of rent	4%	0%	0%	3%	2%	3%	2%	5%

Source: 2011 ACS/PUMS.

**Table 25: Urban/Rural Status<sup>9</sup> – By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
Urban	94%	NA	93%	NA	4%	5%	85%	97%	97%	99%
Rural	6%	NA	7%	NA	96%	95%	15%	3%	3%	2%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

<sup>9</sup> The definition of urban and rural is based on county, since that is the geographic information provided for the PUMS data. If a home was in a county that was in a metropolitan area with population of 250,000 or greater, the home was considered to be in an urban area. Otherwise, it was considered rural.

**Table 26: Urban/Rural Status – By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
Urban	90%	92%	96%	81%	89%	95%	98%	NA	NA
Rural	10%	8%	4%	20%	11%	5%	2%	NA	NA

Source: 2011 ACS/PUMS.

**Table 27: Building Type – By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
Mobile home or trailer	4%	4%	6%	6%	4%	2%	7%	6%	5%	2%
One-family house detached	59%	58%	44%	42%	58%	56%	49%	45%	36%	56%
One-family house attached	7%	7%	7%	7%	7%	6%	6%	6%	10%	6%
2 Apartments	3%	2%	4%	3%	7%	6%	4%	3%	3%	6%
3-4 Apartments	5%	6%	8%	9%	7%	6%	8%	8%	7%	8%
5-9 Apartments	6%	6%	8%	10%	9%	11%	8%	8%	9%	11%
10-19 Apartments	5%	5%	7%	7%	4%	6%	6%	8%	11%	6%
20-49 Apartments	5%	5%	7%	7%	12%	13%	5%	7%	8%	13%
50 or more apartments	7%	6%	9%	8%			8%	9%	12%	9%
Boat, RV, van, etc.	0%	0%	0%	0%	NA	NA	0%	0%	0%	NA

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

<sup>1</sup> Note: categories vary slightly. Those shown in the “5-9 Apartments” row may actually contain between 5 and 10 units, while those in the “10-19 Apartments” row may contain between 11 and 20 units. Finally, those in the merged row containing 20 units and above actually contain 21 units and above.

**Table 28: Building Type - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
Mobile home or trailer	0%	0%	0%	96%	7%	6%	2%	5%	14%
One-family house detached	93%	80%	0%	0%	46%	45%	37%	43%	56%
One-family house attached	7%	20%	0%	0%	6%	7%	8%	7%	4%
2 Apartments	0%	0%	8%	0%	3%	4%	3%	4%	4%
3-4 Apartments	0%	0%	18%	0%	7%	9%	7%	8%	7%
5-9 Apartments	0%	0%	19%	0%	8%	9%	8%	9%	5%
10-19 Apartments	0%	0%	17%	0%	7%	8%	8%	8%	3%
20-49 Apartments	0%	0%	17%	0%	6%	7%	10%	8%	3%
50 or more apartments	0%	0%	21%	0%	9%	6%	16%	10%	3%
Boat, RV, van, etc.	0%	0%	0%	4%	0%	0%	0%	0%	1%

Source: 2011 ACS/PUMS.

**Table 29: Household Size - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
1 person	25%	25%	30%	29%	28%	25%	32%	27%	32%	27%
2 persons	30%	30%	21%	21%	19%	21%	22%	20%	24%	20%
3 persons	16%	16%	14%	13%	16%	15%	13%	14%	15%	14%
4 persons	15%	15%	14%	15%	12%	15%	13%	15%	13%	15%
5 or more persons	14%	14%	21%	21%	26%	25%	20%	24%	16%	24%
Average persons per home	2.77	2.75	2.98	2.98	2.89	2.95	2.85	3.15	2.73	3.15
Standard Error	0.00	0.00	0.01	0.00	0.07	0.07	0.01	0.01	0.03	0.01

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

**Table 30: Household Size - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
1 person	28%	15%	36%	39%	46%	11%	28%	29%	33%
2 persons	25%	16%	21%	22%	25%	14%	27%	21%	26%
3 persons	12%	16%	15%	12%	13%	15%	16%	14%	13%
4 persons	12%	20%	13%	10%	9%	20%	14%	14%	12%
5 or more persons	24%	33%	15%	17%	9%	40%	15%	22%	15%
Average persons per home	3.09	3.78	2.62	2.57	2.16	4.07	2.77	3.01	2.65
Standard Error	0.02	0.02	0.01	0.04	0.01	0.02	0.02	0.01	0.03

Source: 2011 ACS/PUMS.

**Table 31: Race/Ethnicity of Householder - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
White (Non-Hispanic)	51%	62%	36.1%	46%	35%	44%	44%	31%	48%	30%
African-American	6%	5%	8.6%	7%	13%	11%	8%	9%	6%	9%
Asian	12%	11%	10.3%	10%	3%	5%	11%	9%	8%	9%
Other Race Alone	1%	1%	1.0%	2%	7%	6%	1%	1%	1%	1%
Two or More Races	2%	1%	2.0%	2%			2%	2%	2%	2%
Hispanic	28%	20%	42.1%	33%	42%	34%	34%	49%	36%	50%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

**Table 32: Race/Ethnicity of Householder - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
White (Non-Hispanic)	45%	28%	31%	54%	64%	4%	33%	34%	64%
African-American	5%	9%	12%	2%	17%	1%	3%	9%	2%
Asian	11%	9%	12%	3%	2%	0%	58%	11%	2%
Other Race Alone	1%	1%	1%	1%	1%	0%	2%	1%	2%
Two or More Races	2%	2%	2%	1%	3%	0%	4%	2%	3%
Hispanic	37%	52%	42%	39%	13%	95%	1%	43%	27%

Source: 2011 ACS/PUMS.



**Table 33: Language Spoken in Household - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
English	58%	61%	46%	48%	73%	72%	55%	41%	52%	40%
Spanish	25%	24%	38%	37%	25%	22%	30%	45%	32%	46%
Asian	10%	9%	9%	9%	1%	3%	10%	8%	7%	8%
Other	7%	6%	7%	6%	2%	4%	6%	6%	9%	6%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

**Table 34: Language Spoken in Household – By Housing Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
English	51%	42%	43%	59%	100%	0%	0%	44%	71%
Spanish	34%	46%	38%	35%	0%	100%	34%	39%	25%
Asian	9%	8%	11%	3%	0%	0%	58%	10%	2%
Other	6%	4%	9%	3%	0%	0%	8%	7%	3%

Source: 2011 ACS/PUMS.

**Table 35: Household Income - By Population and IOU**

Year	Percent California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
Less than \$5,000	3%	3%	10%	11%	11%	6%	10%	9%	13%	9%
\$5,000 to \$9,999	3%	4%	10%	15%	9%	5%	10%	10%	11%	10%
\$10,000 to \$14,999	6%	5%	18%	18%	18%	14%	20%	18%	18%	18%
\$15,000 to \$19,999	5%	5%	17%	17%	12%	13%	18%	17%	18%	17%
\$20,000 to \$24,999	5%	6%	14%	11%	14%	15%	14%	14%	14%	14%
\$25,000 to \$29,999	5%	5%	10%	8%	10%	9%	10%	10%	10%	10%
\$30,000 to \$34,999	5%	5%	7%	6%	5%	6%	6%	7%	6%	7%
\$35,000 to \$39,999	4%	5%	5%	5%	3%	8%	4%	5%	4%	5%
\$40,000 to \$45,999	5%	6%	4%	4%	2%	4%	4%	5%	4%	5%
\$46,000 to \$49,999	3%	3%	2%	1%	3%	3%	1%	2%	2%	2%
\$50,000 or more	56%	51%	4%	4%	3%	7%	3%	4%	3%	4%
Average Household Income (\$)	80,684	69,596	20,621	20,427	20,377	25,886	20,075	21,446	18,607	21,432
Standard Error (\$)	244.5	334.1	70.6	158.5	671.0	852.7	103.3	99.8	228.2	96.0

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

**Table 36: Household Income - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
Less than \$5,000	9%	8%	11%	8%	13%	5%	13%	10%	9%
\$5,000 to \$9,999	7%	9%	12%	10%	12%	8%	11%	10%	10%
\$10,000 to \$14,999	14%	15%	22%	22%	22%	13%	18%	18%	20%
\$15,000 to \$19,000	16%	15%	18%	21%	19%	14%	18%	17%	19%
\$20,000 to \$24,999	14%	14%	14%	14%	14%	14%	13%	14%	14%
\$25,000 to \$29,999	11%	11%	9%	11%	8%	12%	9%	10%	9%
\$30,000 to \$34,999	7%	9%	6%	5%	4%	10%	7%	7%	6%
\$35,000 to \$39,999	6%	7%	4%	4%	3%	8%	5%	5%	4%
\$40,000 to \$45,999	6%	6%	3%	3%	2%	7%	4%	4%	3%
\$46,000 to \$49,999	3%	2%	1%	1%	1%	3%	2%	2%	2%
\$50,000 or more	7%	5%	2%	2%	1%	7%	3%	4%	3%
Average Household Income (\$)	23656	23257	17860	18872	16883	25735	19320	20694	19701
Standard Error (\$)	140.1	167.1	94.8	224.4	81.5	130.1	174.6	74.2	221.4

Source: 2011 ACS/PUMS.

**Table 37: Family Size - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
	Single Person	25%	25%	30%	29%	28%	25%	32%	27%	32%
Small families (2-4)	61%	61%	49%	49%	46%	50%	48%	49%	53%	49%
Large families (5+)	14%	14%	21%	21%	26%	25%	20%	24%	16%	24%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

**Table 38: Family Size - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
Single Person	28%	15%	36%	39%	46%	11%	28%	29%	33%
Small families (2-4)	49%	52%	49%	44%	46%	50%	57%	49%	51%
Large families (5+)	17%	24%	13%	15%	9%	40%	15%	22%	15%

Source: 2011 ACS/PUMS.

**Table 39: Elderly or Disabled Household Member - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
	No elderly household member	74%	78%	74%	76%	46%	55%	74%	74%	75%
Elderly household member	25%	22%	26%	24%	54%	45%	26%	26%	25%	26%
Disabled household member	22%	25%	31%	34%	67%	59%	33%	31%	27%	30%

Sources: 2004 and 2011 ACS/PUMS; 2013 CARE Participant Telephone Survey.

**Table 40: Elderly or Disabled Household Member - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
No elderly household member	57%	87%	80%	78%	69%	84%	63%	74%	72%
Elderly household member	43%	13%	20%	22%	31%	16%	37%	26%	28%
Disabled household member	34%	28%	30%	41%	37%	25%	31%	31%	40%

Source: 2011 ACS/PUMS.

**Table 41: Employment Status of Head of Household - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
	Employed	63%	65%	43%	46%	NA	NA	41%	40%	42%
Unemployed	6%	4%	11%	7%	NA	NA	12%	11%	10%	11%
Not in labor force (including retired population)	30%	31%	46%	47%	NA	NA	47%	46%	50%	45%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

**Table 42: Employment Status of Head of Household - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
Employed	37%	50%	45%	33%	58%	44%	38%	43%	38%
Unemployed	9%	13%	12%	10%	11%	14%	9%	11%	11%
Not in labor force (including retired population)	54%	37%	44%	57%	31%	43%	53%	46%	51%

Source: 2011 ACS/PUMS.

**Table 43: Education of Head of Household - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
Bachelor's degree (or more)	34%	31%	14%	13%	16%	22%	14%	13%	20%	13%
Some college	32%	32%	31%	28%	30%	35%	33%	29%	35%	29%
High school graduate	18%	20%	24%	25%	27%	25%	25%	24%	22%	23%
Less than high school graduate	15%	16%	31%	34%	27%	18%	28%	35%	23%	35%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

**Table 44: Education of Head of Household - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
Bachelor's degree (or more)	18%	9%	15%	6%	17%	5%	28%	14%	12%
Some college	23%	25%	25%	24%	43%	18%	28%	30%	39%
High school graduate	32%	30%	28%	35%	27%	22%	20%	24%	25%
Less than high school graduate	27%	36%	32%	35%	14%	55%	24%	32%	24%

Source: 2011 ACS/PUMS.

**Table 45: Annual Household Fuel Costs - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
\$1 – \$249	2%	2%	4%	5%	NA	NA	5%	3%	7%	3%
\$250 – \$499	9%	9%	13%	15%	NA	NA	12%	11%	21%	11%
\$500 – \$749	12%	14%	16%	18%	NA	NA	14%	16%	20%	16%
\$750 – \$999	12%	14%	14%	15%	NA	NA	13%	16%	14%	15%
\$1,000 – \$1,249	11%	12%	12%	12%	NA	NA	12%	12%	10%	12%
\$1,250 – \$1,499	9%	9%	8%	8%	NA	NA	8%	9%	6%	9%
\$1,500 – \$1,999	14%	14%	12%	11%	NA	NA	13%	13%	7%	13%
\$2,000 or greater	32%	25%	21%	16%	NA	NA	24%	21%	14%	21%
Average (\$)	1,782	1,502	1,425	1,200	NA	NA	\$1,483	\$1,437	\$1,110	\$1,446
Standard Error (\$)	4.2	6.0	6.7	10.2	NA	NA	10.6	8.9	19.4	8.6

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.



**Table 46: Annual Household Fuel Costs - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
\$1 – \$249	1%	1%	9%	1%	4%	3%	7%	4%	3%
\$250 – \$499	6%	6%	23%	10%	12%	12%	15%	13%	8%
\$500 – \$749	11%	12%	22%	15%	14%	17%	16%	16%	13%
\$750 – \$999	13%	14%	16%	17%	13%	16%	15%	15%	12%
\$1,000 – \$1,249	12%	13%	10%	14%	11%	12%	11%	12%	12%
\$1,250 – \$1,499	10%	10%	7%	7%	9%	8%	8%	8%	8%
\$1,500 – \$1,999	15%	16%	7%	14%	12%	13%	11%	12%	14%
\$2,000 or greater	33%	29%	7%	22%	25%	18%	17%	21%	31%
Average (\$)	1833	1699	918	1482	1528	1364	1265	1399	1731
Standard Error	12.1	14.4	7.1	43.8	10.5	9.9	15.9	6.8	26.9

Source: 2011 ACS/PUMS.

**Table 47: Age of Home - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
1939 or earlier	9%	10%	10%	11%			10%	10%	4%	10%
1940 to 1949	6%	7%	7%	9%	23%	18%	7%	8%	4%	8%
1950 to 1959	14%	15%	15%	16%	30%	28%	12%	17%	10%	17%
1960 to 1969	14%	15%	15%	16%			14%	15%	16%	15%
1970 to 1979	18%	20%	19%	20%	34%	31%	21%	17%	26%	17%
1980 to 1989	15%	17%	15%	16%			14%	15%	19%	15%
1990 to 1999	11%	11%	9%	9%	8%	12%	10%	9%	11%	9%
2000 to 2004	6%	5%	5%	3%			6%	5%	5%	5%
2005	2%	NA	2%	NA			2%	2%	1%	1%
2006	1%	NA	1%	NA			1%	1%	1%	1%
2007	1%	NA	1%	NA	5%	9%	1%	1%	1%	1%
2008	1%	NA	1%	NA			1%	1%	1%	1%
2009	1%	NA	1%	NA			1%	1%	1%	1%
2010	0%	NA	0%	NA			0%	0%	0%	0%
2011	0%	NA	0%	NA	0%	1%	0%	0%	0%	0%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

<sup>1</sup> Note: categories vary slightly. Those shown in the "1990 to 1999" row have homes built between 1990 and 2000, and those in the merged row said to be built between 2000 and 2010 may have actually been built between 2001 and 2010.

**Table 48: Age of Home - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
1939 or earlier	10%	14%	9%	1%	10%	11%	9%	10%	8%
1940 to 1949	9%	11%	5%	1%	7%	9%	5%	7%	6%
1950 to 1959	20%	20%	10%	4%	14%	16%	13%	15%	11%
1960 to 1969	13%	13%	17%	14%	14%	15%	14%	15%	12%
1970 to 1979	14%	15%	22%	39%	20%	18%	19%	19%	22%
1980 to 1989	14%	11%	17%	21%	16%	13%	16%	15%	16%
1990 to 1999	10%	7%	10%	11%	10%	8%	11%	9%	12%
2000 to 2004	6%	4%	5%	5%	5%	5%	6%	5%	6%
2005	2%	1%	1%	2%	2%	1%	2%	2%	2%
2006	1%	1%	1%	1%	1%	1%	1%	1%	2%
2007	1%	1%	1%	%	1%	1%	1%	1%	1%
2008	0%	1%	1%	%	1%	1%	1%	1%	1%
2009	0%	0%	1%	0%	1%	1%	1%	1%	1%
2010	0%	0%	0%	0%	0%	0%	1%	0%	0%
2011	0%	0%	0%	0%	0%	0%	0%	0%	0%

Source: 2011 ACS/PUMS.

**Table 49: Heating Fuel Type - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
Utility gas	66%	69%	59%	64%	NA	NA	56%	62%	52%	63%
Bottled, tank, or LP gas	3%	4%	3%	3%	NA	NA	4%	3%	2%	2%
Electricity	25%	22%	31%	25%	NA	NA	33%	27%	40%	27%
Fuel oil, kerosene, etc.	0%	0%	0%	0%	NA	NA	1%	0%	0%	0%
Coal or coke	0%	0%	0%	0%	NA	NA	0%	0%	0%	0%
Wood	2%	2%	2%	2%	NA	NA	3%	1%	1%	1%
Solar energy	0%	0%	0%	0%	NA	NA	0%	0%	0%	0%
Other fuel	0%	0%	0%	0%	NA	NA	1%	0%	0%	0%
No fuel used	3%	2%	5%	5%	NA	NA	2%	7%	4%	7%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

**Table 50: Heating Fuel Type - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
Utility gas	69%	62%	51%	58%	61%	56%	60%	61%	39%
Bottled, tank, or LP gas	4%	2%	1%	10%	4%	2%	2%	2%	11%
Electricity	20%	27%	42%	23%	30%	32%	34%	31%	33%
Fuel oil, kerosene, etc.	1%	0%	0%	1%	1%	0%	0%	0%	3%
Coal or coke	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wood	3%	2%	0%	4%	3%	1%	0%	1%	12%
Solar energy	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other fuel	0%	0%	0%	1%	1%	0%	0%	0%	1%
No fuel used	3%	6%	6%	3%	2%	9%	3%	5%	2%

Source: 2011 ACS/PUMS.

**Table 51: Presence of Children in Home - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
With children under 6 years only	8%	8%	9%	10%	7%	9%	9%	8%	9%	9%
With children 6 to 17 years only	20%	21%	22%	22%	21%	20%	24%	22%	24%	20%
With children under 6 years and 6 to 17 years	9%	9%	15%	16%	13%	14%	16%	12%	16%	14%
No children	63%	61%	54%	52%	60%	56%	51%	59%	51%	56%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

**Table 52: Presence of Children in Home - By Home Type, Language and Urban/Rural**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
With children under 6 years only	5%	11%	10%	6%	7%	12%	7%	9%	9%
With children 6 to 17 years only	23%	30%	19%	17%	15%	32%	20%	22%	19%
With children under 6 years and 6 to 17 years	12%	24%	13%	12%	7%	28%	8%	15%	11%
No children	60%	35%	57%	65%	71%	29%	65%	54%	61%

Source: 2011 ACS/PUMS.

**Table 53: Length of Time Residing at Present Address - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
23 months or less	23%	25%	28%	25%	7%	12%	30%	26%	29%	26%
2 to 4 years	19%	22%	22%	22%	20%	38%	22%	21%	25%	21%
5 to 9 years	19%	19%	18%	19%	17%	16%	17%	19%	19%	19%
10 to 19 years	20%	18%	17%	18%	27%	19%	16%	19%	15%	19%
20 to 29 years	9%	8%	7%	8%	29%	16%	7%	7%	6%	7%
30 years or more	9%	8%	8%	8%			9%	8%	7%	8%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

Note: Categories vary slightly. The row listed as "2 to 4 years" actually includes tenants who have stayed between 2 and 5 years, and those in the "5 to 9 years" may have resided at the same address between 6 and 10 years. Similarly, the "10 to 19 years" category includes those who stayed between 11 and 20 years.

**Table 54: Length of Time Residing at Present Address - By Home Type, Language and Urban/Rural**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
12 months or less	4%	27%	28%	14%	21%	19%	20%	20%	21%
13 to 23 months	3%	10%	10%	5%	7%	8%	9%	8%	7%
2 to 4 years	11%	29%	26%	21%	20%	25%	21%	22%	21%
5 to 9 years	20%	17%	17%	25%	16%	20%	19%	18%	17%
10 to 19 years	25%	12%	14%	22%	16%	19%	19%	17%	17%
20 to 29 years	14%	4%	3%	9%	8%	5%	7%	7%	8%
30 years or more	23%	2%	2%	4%	12%	5%	5%	8%	10%

Source: 2011 ACS/PUMS.

**Table 55: Linguistic Isolation - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
At least one person in the household 14 and over speaks English only or speaks English 'very well'	90%	89%	80%	77%	NA	NA	83%	79%	82%	78%
No one in the household 14 and over speaks English only	10%	11%	20%	23%	NA	NA	17%	21%	18%	22%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

**Table 56: Linguistic Isolation - By Home Type, Language and Urban/Rural**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
At least one person in the household 14 and over speaks English only or speaks English 'very well'	87%	81%	75%	83%	100%	66%	56%	79%	91%
No one in the household 14 and over speaks English only	13%	19%	25%	17%	NA	34%	44%	21%	9%

Source: 2011 ACS/PUMS.



**Table 57: Other Languages Spoken - By Population and IOU**

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
<b>English</b>	<b>90.0%</b>	<b>88.9%</b>	<b>80.0%</b>	<b>77.1%</b>	<b>95.3%</b>	<b>94.5%</b>	<b>83.0%</b>	<b>79.0%</b>	<b>82.0%</b>	<b>79.0%</b>
<b>Spanish</b>	<b>19.3%</b>	<b>15.0%</b>	<b>38.1%</b>	<b>31.5%</b>	<b>42.6%</b>	<b>36.5%</b>	<b>30.3%</b>	<b>44.6%</b>	<b>40.7%</b>	<b>44.8%</b>
<b>Other European</b>	<b>4.0%</b>	<b>4.6%</b>	<b>3.1%</b>	<b>3.5%</b>	<b>3.3%</b>	<b>4.8%</b>	<b>5%</b>	<b>2.6%</b>	<b>2.5%</b>	<b>2.6%</b>
German	0.8%	1.0%	0.4%	0.5%	0.3%	0.7%	0.5%	0.4%	0.4%	0.4%
Pennsylvania Dutch	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Yiddish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%
Dutch	0.2%	0.2%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Swedish	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Danish	0.1%	0.1%	0.0%	0.0%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%
Norwegian	0.0%	0.1%	0.0%	0.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Italian	0.4%	0.6%	0.2%	0.3%	0.2%	0.7%	0.3%	0.2%	0.2%	0.2%
French	0.8%	1.0%	0.5%	0.6%	0.7%	1.9%	0.4%	0.5%	0.4%	0.5%
Patois	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
French Creole	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Portuguese	0.4%	0.3%	0.3%	0.4%	0.5%	0.3%	0.4%	0.2%	0.1%	0.2%
Romanian	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Irish Gaelic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Greek	0.1%	0.2%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Albanian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Russian	0.5%	0.4%	0.7%	0.6%	0.2%	0.2%	0.9%	0.6%	0.3%	0.6%
Ukrainian	0.0%	0.0%	0.1%	0.1%	0.6%	0.0%	0.2%	0.0%	0.0%	0.0%
Czech	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
Polish	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Slovak	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
Bulgarian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Macedonian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Serbo Croatian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Croatian	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Serbian	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%
Lithuanian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Latvian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Finnish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hungarian	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%
Other European languages	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%
<b>Asian</b>	<b>13.7%</b>	<b>11.6%</b>	<b>12.2%</b>	<b>11.5%</b>	<b>2.9%</b>	<b>8.2%</b>	<b>11.9%</b>	<b>11.2%</b>	<b>9.7%</b>	<b>11.1%</b>
Armenian	0.5%	0.4%	0.9%	0.7%	0.1%	1.7%	0.1%	1.3%	0.1%	1.3%
Persian	0.7%	0.5%	0.7%	0.6%	0.0%	1.1%	0.6%	0.7%	0.9%	0.7%
Pashto	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%
Kurdish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Indian	0.0%	0.0%	0.0%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Hindi	0.6%	0.3%	0.2%	0.2%	0.3%	0.0%	0.4%	0.1%	0.1%	0.1%
Bengali	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%
Punjabi	0.3%	0.2%	0.3%	0.3%	0.1%	0.0%	0.5%	0.2%	0.2%	0.2%
Marathi	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Gujarati	0.2%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Urdu	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Nepali	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Pakistani	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sinhalese	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Turkish	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
Telugu	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kannada	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Malayalam	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tamil	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Chinese	1.9%	1.9%	1.8%	2.1%	1.1%	1.7%	2.1%	1.4%	0.9%	1.3%
Cantonese	0.7%	0.5%	0.9%	0.6%	0.3%	0.6%	1.3%	0.4%	0.2%	0.4%
Mandarin	0.8%	0.5%	0.6%	0.3%	0.1%	0.9%	0.5%	0.6%	0.4%	0.6%
Formosan	0.1%	0.2%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Burmese	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Thai	0.2%	0.2%	0.2%	0.1%	0.4%	0.3%	0.1%	0.2%	0.1%	0.2%
Miaoyao Mien	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Hmong	0.1%	0.0%	0.3%	0.2%	0.0%	0.0%	0.5%	0.2%	0.1%	0.2%
Japanese	0.8%	0.9%	0.5%	0.8%	0.2%	1.0%	0.4%	0.4%	0.2%	0.5%
Korean	1.2%	1.0%	1.5%	1.3%	0.0%	0.5%	0.6%	1.8%	1.2%	1.8%
Laotian	0.1%	0.1%	0.2%	0.1%	0.0%	0.3%	0.3%	0.2%	0.2%	0.2%
MonKhmer Cambodian	0.2%	0.1%	0.3%	0.2%	0.0%	0.0%	0.3%	0.3%	0.2%	0.3%
Vietnamese	1.3%	1.0%	1.7%	1.6%	0.3%	0.8%	1.7%	1.4%	3.1%	1.4%
Indonesian	0.1%	0.1%	0.1%	0.2%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%
Malay	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tagalog	2.9%	2.6%	1.3%	1.5%	0.6%	1.5%	1.4%	1.1%	1.3%	1.1%
Bisayan	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sebuano	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ilocano	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%
Other Asian languages	0.0%	0.1%	0.0%	0.1%	0.1%	0.3%	0.1%	0.0%	0.0%	0.0%
<b>Pacific Island Languages</b>	<b>0.2%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.3%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>
Chamorro	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
Samoa	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%
Tongan	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%
Hawaiian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Pacific Island languages	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Middle Eastern Languages</b>	<b>0.8%</b>	<b>0.6%</b>	<b>1.1%</b>	<b>0.7%</b>	<b>1.0%</b>	<b>1.5%</b>	<b>0.8%</b>	<b>1.1%</b>	<b>1.6%</b>	<b>1.1%</b>
Arabic	0.4%	0.3%	0.7%	0.5%	1.0%	1.5%	0.4%	0.8%	1.0%	0.8%
Hebrew	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Syriac	0.1%	0.0%	0.1%	0.0%	0.5%	0.0%	0.2%	0.1%	0.2%	0.1%
Amharic	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.2%	0.1%
Cushite	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%
<b>African Languages</b>	<b>0.2%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.5%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.1%</b>
Swahili	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%
Bantu	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
Mande	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fulani	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Krulbo/Yoruba	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%
African	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other specified African languages	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Native American Languages</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>
Other Algonquian languages	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Apache	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Navaho	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dakota	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Keres	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cherokee	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
American Indian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Year	Percent of California Population		Percent of California LI Population							
	Total 2011*	Total 2004*	Total 2011*	Total 2004*	ESA parts 2013**	ESA non-parts 2013**	PG&E 2011*	SCE 2011*	SDG&E 2011*	SoCalGas 2011*
South/Central American Indian languages	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other North American Indian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Other Languages</b>	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%

Sources: \*2004 and 2011 ACS/PUMS; \*\*2013 CARE Participant Telephone Survey.

This table presents the proportion of households that speak each language independent of whether other languages are spoken. As this table allows for multiple languages to be spoken per household, the column totals will sum to greater than 100%.

**Table 58: Other Languages Spoken - By Home Type, Language and Urban/Rural for California LI Population**

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
<b>English</b>	<b>87.3%</b>	<b>81.0%</b>	<b>74.6%</b>	<b>82.8%</b>	<b>100.0%</b>	<b>66.1%</b>	<b>55.7%</b>	<b>79.3%</b>	<b>90.9%</b>
<b>Spanish</b>	<b>33.8%</b>	<b>46.4%</b>	<b>37.8%</b>	<b>35.4%</b>	<b>0.0%</b>	<b>100.0%</b>	<b>1.4%</b>	<b>39.2%</b>	<b>24.6%</b>
<b>Other European</b>	<b>3.6%</b>	<b>1.3%</b>	<b>3.1%</b>	<b>2.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>19.3%</b>	<b>3.0%</b>	<b>1.7%</b>
German	0.8%	0.1%	0.4%	0.4%	0.0%	0.0%	2.8%	0.5%	0.3%
Pennsylvania Dutch	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Yiddish	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%
Dutch	0.1%	0.1%	0.0%	0.2%	0.0%	0.0%	0.5%	0.1%	0.1%
Swedish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Danish	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%	0.1%
Norwegian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Italian	0.4%	0.1%	0.2%	0.1%	0.0%	0.0%	1.4%	0.2%	0.1%
French	0.6%	0.3%	0.5%	0.2%	0.0%	0.0%	3.0%	0.5%	0.5%
Patois	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
French Creole	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Cajun	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Portuguese	0.4%	0.2%	0.2%	0.3%	0.0%	0.0%	1.6%	0.3%	0.1%
Romanian	0.1%	0.0%	0.1%	0.2%	0.0%	0.0%	0.6%	0.1%	0.0%
Irish Gaelic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Greek	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.5%	0.1%	0.0%
Albanian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Russian	0.4%	0.3%	1.3%	0.2%	0.0%	0.0%	4.6%	0.8%	0.2%
Ukrainian	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.7%	0.1%	0.1%
Czech	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Polish	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.5%	0.1%	0.0%
Slovak	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Bulgarian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
Macedonian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Serbo Croatian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Croatian	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Serbian	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.3%	0.0%	0.1%
Lithuanian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Latvian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Finnish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hungarian	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.5%	0.1%	0.1%
Other European languages	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
<b>Asian Languages</b>	<b>11.4%</b>	<b>10.0%</b>	<b>14.4%</b>	<b>3.4%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>76.8%</b>	<b>13.0%</b>	<b>2.2%</b>
Armenian	0.3%	0.6%	1.6%	0.0%	0.0%	0.0%	5.9%	1.0%	0.0%
Persian	0.6%	0.4%	1.1%	0.0%	0.0%	0.0%	4.6%	0.8%	0.1%
Pashto	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.3%	0.1%	0.1%
Kurdish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Indian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Hindi	0.2%	0.1%	0.3%	0.0%	0.0%	0.0%	1.5%	0.2%	0.2%
Bengali	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.4%	0.1%	0.0%
Panjabi	0.5%	0.3%	0.2%	0.1%	0.0%	0.0%	1.9%	0.3%	0.3%
Marathi	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Gujarati	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%
Urdu	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.7%	0.1%	0.1%
Nepali	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Pakistani	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sinhalese	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Turkish	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.4%	0.1%	0.0%
Telugu	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Kannada	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Malayalam	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
Tamil	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Chinese	2.4%	1.2%	1.9%	0.5%	0.0%	0.0%	11.4%	1.9%	0.2%
Cantonese	0.8%	0.8%	1.0%	0.1%	0.0%	0.0%	5.4%	0.9%	0.0%
Mandarin	0.7%	0.4%	0.8%	0.0%	0.0%	0.0%	4.0%	0.7%	0.0%
Formosan	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.6%	0.1%	0.0%
Burmese	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Thai	0.2%	0.1%	0.2%	0.0%	0.0%	0.0%	1.0%	0.2%	0.1%
MiaoyaoMien	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.4%	0.1%	0.0%
Hmong	0.3%	0.4%	0.2%	0.0%	0.0%	0.0%	1.6%	0.3%	0.2%
Japanese	0.5%	0.3%	0.5%	0.2%	0.0%	0.0%	2.9%	0.5%	0.2%
Korean	1.0%	0.7%	2.4%	0.1%	0.0%	0.0%	9.4%	1.6%	0.1%
Laotian	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	1.1%	0.2%	0.0%
MonKhmer Cambodian	0.2%	0.6%	0.3%	0.0%	0.0%	0.1%	1.8%	0.3%	0.1%
Vietnamese	1.5%	2.7%	1.3%	1.6%	0.0%	0.0%	10.5%	1.8%	0.2%
Indonesian	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.4%	0.1%	0.0%
Malay	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tagalog	1.5%	0.8%	1.5%	0.6%	0.0%	0.0%	8.3%	1.4%	0.2%
Bisayan	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Sebuano	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Ilocano	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%
Other Asian languages	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.3%	0.0%	0.1%
<b>Pacific Island Languages</b>	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	1.2%	0.2%	0.4%
Chamorro	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%
Samoa	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.5%	0.1%	0.2%
Tongan	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.4%	0.1%	0.0%
Hawaiian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Other Pacific Island languages	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
<b>Middle Eastern Languages</b>	0.6%	0.6%	1.7%	0.0%	0.0%	0.0%	6.7%	1.0%	0.0%



	Percent of California LI Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile Homes	English Only	Spanish	Other	Urban	Rural
Arabic	0.5%	0.5%	1.0%	0.0%	0.0%	0.0%	4.1%	0.7%	0.0%
Hebrew	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.7%	0.1%	0.0%
Syriac	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.8%	0.1%	0.0%
Amharic	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.8%	0.1%	0.0%
Cushite	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%
<b>African Languages</b>	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.9%	0.1%	0.0%
Swahili	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Bantu	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Mande	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fulani	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Krulbo/Yoruba	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.5%	0.1%	0.0%
African	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other specified African languages	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
<b>Native American Languages</b>	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.1%
Other Algonquian languages	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Apache	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Navaho	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dakota	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Keres	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cherokee	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
American Indian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South/Central American Indian languages	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%
Other North American Indian	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%
<b>Other Languages</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>

Source: 2011 ACS/PUMS.

This table presents the proportion of households that speak each language independent of whether other languages are spoken. As this table allows for multiple languages to be spoken per household, the column totals will sum to greater than 100%.

## 7.3 Home and Equipment Characteristics Results

This section contains home and equipment characteristic data from two sources: the KEMA CLASS (2013) and RASS (2010). RASS was used to provide data on weather-sensitive energy-using equipment by climate zone categories.

### 7.3.1 CLASS Data<sup>10</sup>

The following series of tables presents the more detailed home and equipment data from the 2013 CLASS (KEMA). The CLASS data were introduced in Section 2.4. The segments shown in the tables were introduced in Section 4.3.

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<sup>10</sup> Multi-family homes are defined as any housing structure with two or more units. This differs from the 2007 KEMA study where multi-family homes are defined as housing structures with five or more units. This also differs from the concurrent Cadmus multi-family LI study which also defines multi-family homes as housing structures with five or more units.

**Table 59: Average Square Footage of Home – By Population Segment and IOU**

	Percent of California LI Population					
	Total	Total	PG&E	SCE	SDG&E	SoCalGas
Average Sq Ft	1,643	1,311	1,332	1,298	1,292	1,330
Standard Error	24	40	64	63	87	63
Sample Size (n)	1,810	311	116	146	49	145

Source: 2013 CLASS.

**Table 60: Average Square Footage of Home – By Home Type and Language for California LI Population**

	Percent of California LI Population				
	Single-Family Own	Single-Family Rent	Multi-Family	Primary Language Spanish	English Only
Average Sq Ft	1,629	1,409	885	1,240	1,284
Standard Error	60	70	34	60	49
Sample Size (n)	160	57	83	64	230

Source: 2013 CLASS.

**Table 61: Heating Equipment Type – By Population Segment and IOU**

	Percent of California Population	Percent of California LI Population	Percent of California LI Population			
	Total	Total	PG&E	SCE	SDG&E	SoCalGas
<b>Electric</b>	<b>11%</b>	<b>10%</b>	<b>9%</b>	<b>9%</b>	<b>25%</b>	<b>3%</b>
Portable Heaters	2%	2%	1%	1%	3%	1%
Heat Pump	2%	2%	2%	2%	4%	1%
WII/Floor Heaters	1%	0%	0%	0%	0%	0%
Hot Air Furnace	2%	1%	0%	2%	2%	1%
Resistance/Baseboard	2%	3%	4%	1%	9%	0%
Other Electric	2%	2%	1%	2%	7%	0%
<b>Natural Gas</b>	<b>83%</b>	<b>79%</b>	<b>78%</b>	<b>85%</b>	<b>66%</b>	<b>93%</b>
Hot Air Furnace	61%	47%	48%	48%	46%	55%
Space Heaters/Wall Units	14%	27%	27%	30%	8%	31%
Hot Water Radiator/Baseboard	0%	0%	0%	0%	0%	0%
Other Gas	8%	5%	2%	7%	12%	7%
<b>Oil</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
Fireplace	0%	0%	0%	0%	0%	0%
Steam	0%	0%	0%	0%	0%	0%
Stove/Stove Insert	0%	0%	0%	0%	0%	0%
Space Heaters	0%	0%	0%	0%	0%	0%
Other Oil	0%	0%	0%	0%	0%	0%
<b>Propane</b>	<b>4%</b>	<b>2%</b>	<b>3%</b>	<b>2%</b>	<b>1%</b>	<b>0%</b>
Hot Air Furnace	3%	1%	2%	1%	1%	0%
Space Heaters	0%	0%	0%	0%	0%	0%
Hot Water Radiator/Baseboard	0%	0%	0%	0%	0%	0%
Fireplace	0%	0%	0%	0%	0%	0%
Steam	0%	0%	0%	0%	0%	0%
Other Propane	1%	1%	1%	1%	1%	0%
<b>Wood or Coal</b>	<b>1%</b>	<b>4%</b>	<b>7%</b>	<b>1%</b>	<b>2%</b>	<b>0%</b>
Fireplace	1%	2%	5%	0%	2%	0%
Stove/Stove Insert	0%	1%	2%	0%	0%	0%
Furnace	0%	0%	0%	0%	0%	0%
Hot Water Radiator/Baseboard	0%	0%	0%	0%	0%	0%
Other Wood/Coal	0%	0%	0%	0%	0%	0%
<b>No Heating Equipment</b>	<b>2%</b>	<b>4%</b>	<b>4%</b>	<b>4%</b>	<b>7%</b>	<b>4%</b>
Sample Size (n)	1,987	388	166	171	53	165

Source: 2013 CLASS.

**Table 62: Heating Equipment Type – By Home Type and Language for California LI Population**

	Percent of California LI Population				
	Single-Family Own	Single-Family Rent	Multi-Family	Primary Language Spanish	English Only
<b>Electric</b>	<b>5%</b>	<b>1%</b>	<b>19%</b>	<b>9%</b>	<b>12%</b>
Portable Heaters	1%	1%	1%	1%	2%
Heat Pump	1%	0%	5%	1%	3%
Wall/Floor Heaters	0%	0%	1%	1%	0%
Hot Air Furnace	1%	0%	2%	1%	1%
Resistance/Baseboard	0%	0%	7%	3%	3%
Other Electric	1%	0%	4%	2%	2%
<b>Natural Gas</b>	<b>82%</b>	<b>86%</b>	<b>76%</b>	<b>82%</b>	<b>78%</b>
Hot Air Furnace	64%	47%	32%	40%	49%
Space Heaters/Wall Units	15%	26%	40%	38%	23%
Hot Water Radiator/Baseboard	0%	0%	0%	0%	0%
Other Gas	4%	13%	4%	4%	6%
<b>Oil</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
Fireplace	0%	0%	0%	0%	0%
Steam	0%	0%	0%	0%	0%
Stove/Stove Insert	0%	0%	0%	0%	0%
Space Heaters	0%	0%	0%	0%	0%
Other Oil	0%	0%	0%	0%	0%
<b>Propane</b>	<b>3%</b>	<b>4%</b>	<b>0%</b>	<b>0%</b>	<b>3%</b>
Hot Air Furnace	3%	0%	0%	0%	2%
Space Heaters	0%	0%	0%	0%	0%
Hot Water Radiator/Baseboard	0%	0%	0%	0%	0%
Fireplace	0%	0%	0%	0%	0%
Steam	0%	0%	0%	0%	0%
Other Propane	0%	4%	0%	0%	1%
<b>Wood or Coal</b>	<b>6%</b>	<b>4%</b>	<b>1%</b>	<b>2%</b>	<b>4%</b>
Fireplace	5%	2%	1%	2%	2%
Stove/Stove Insert	1%	2%	0%	0%	2%
Furnace	0%	0%	0%	0%	0%
Hot Water Radiator/Baseboard	0%	0%	0%	0%	0%
Other Wood/Coal	0%	0%	0%	0%	0%
<b>No Heating Equipment</b>	<b>3%</b>	<b>5%</b>	<b>5%</b>	<b>7%</b>	<b>3%</b>
Sample Size (n)	174	72	111	90	259

Source: 2013 CLASS.

**Table 63: Cooling Equipment Type and Age – By Population Segment and IOU**

	Percent of California Population	Percent of California LI Population	Percent of California LI Population			
	Total	Total	PG&E	SCE	SDG&E	SoCalGas
<b>Type of Cooling Equipment/Systems</b>						
Central Air Conditioners	47%	32%	29%	38%	24%	41%
Heat Pumps	2%	2%	3%	3%	0%	1%
Room Air Conditioners	15%	25%	16%	36%	17%	32%
Evaporative Coolers	2%	6%	5%	7%	0%	6%
No Cooling Equipment	34%	35%	48%	17%	59%	20%
<b>Age of Cooling Equipment</b>						
<10 years	40%	53%	47%	62%	46%	57%
10-19 years	34%	27%	39%	23%	36%	27%
20-29 years	25%	20%	14%	16%	18%	15%
30 or more years	1%	0%	0%	0%	0%	0%
Average Age	12.7	10.0	10.1	9.5	12.1	9.8
Standard Error	1.1	2.2	3.2	1.5	1.1	1.1
Sample Size (n, Age)	388	53	17	27	10	27
Sample Size (n, Type)	1,987	388	166	171	53	165

Source: 2013 CLASS.

**Table 64: Cooling Equipment Type and Age – By Home Type and Language for California LI Population**

	Percent of California LI Population				
	Single-Family Own	Single-Family Rent	Multi-Family	Primary Language Spanish	English Only
<b>Type of Cooling Equipment/Systems</b>					
Central Air Conditioners	45%	26%	23%	24%	35%
Heat Pumps	2%	0%	4%	0%	4%
Room Air Conditioners	22%	36%	24%	35%	21%
Evaporative Coolers	8%	10%	1%	6%	6%
No Cooling Equipment	24%	29%	48%	35%	35%
<b>Age of Cooling Equipment</b>					
<10 years	56%	52%	56%	80%	51%
10-19 years	29%	29%	31%	20%	28%
20-29 years	15%	19%	13%	0%	21%
30 or more years	0%	0%	0%	0%	0%
Average Age	10.1	9.7	10.0	6.8	10.9
Standard Error	0.4	0.9	1.6	1.3	2.1
Sample Size (n, Age)	33	13	6	10	42
Sample Size (n, Type)	138	58	66	67	191

Source: 2013 CLASS.

**Table 65: Water Heating Equipment Type and Age – By Population Segment and IOU**

	Percent of California Population	Percent of California LI Population	Percent of California LI Population			
			Total	Total	PG&E	SCE
<b>Water Heating Fuel</b>						
Electricity	6%	8%	10%	7%	3%	2%
Natural Gas	84%	81%	74%	90%	74%	96%
Propane	4%	3%	5%	1%	2%	0%
Solar	1%	1%	1%	1%	0%	1%
Unknown	5%	8%	11%	2%	21%	2%
<b>Age of Water Heating Equipment</b>						
1-5 years	35%	33%	27%	37%	42%	37%
6-10 years	48%	45%	55%	37%	48%	37%
11-15 years	7%	9%	10%	9%	4%	8%
16-20 years	5%	8%	4%	12%	6%	12%
More than 20 years	4%	5%	4%	6%	0%	6%
Average Age	7.8	8.2	8.2	8.5	6.9	8.5
Standard Error	0.2	0.5	0.7	0.8	1.0	0.8
Sample Size (n, Age)	731	135	52	63	20	62
Sample Size (n, Type)	1,987	388	166	171	53	165

Source: 2013 CLASS.



**Table 66: Water Heating Equipment Type and Age – By Home Type and Language for California LI Population**

	Percent of California LI Population				
	Single-Family Own	Single-Family Rent	Multi-Family	Primary Language Spanish	English Only
<b>Water Heating Fuel</b>					
Electricity	7%	3%	10%	8%	8%
Natural Gas	86%	95%	69%	83%	80%
Propane	4%	1%	0%	1%	4%
Solar	1%	0%	0%	0%	1%
Unknown	1%	0%	20%	9%	7%
<b>Age of Water Heating Equipment</b>					
1-5 years	28%	45%	35%	31%	34%
6-10 years	52%	43%	38%	50%	45%
11-15 years	8%	0%	13%	9%	9%
16-20 years	5%	11%	11%	6%	7%
More than 20 years	7%	2%	3%	4%	5%
Average Age	8.6	6.9	8.2	7.7	8.2
Standard Error	0.7	0.9	0.9	0.9	0.5
Sample Size (n, Age)	69	25	38	33	96
Sample Size (n, Type)	180	76	118	99	266

Source: 2013 CLASS.

**Table 67: Existing Wall Insulation R-Value – By Population Segment and IOU**

	Percent of California Population	Percent of California LI Population	Percent of California LI Population			
	Total	Total	PG&E	SCE	SDG&E	SoCalGas
No insulation (R-0)	26%	35%	36%	33%	49%	32%
R-1 --> R-10	15%	20%	23%	20%	9%	20%
R-11 --> R-18	54%	44%	37%	45%	41%	47%
R-19 --> R-30	5%	0%	5%	1%	1%	1%
Sample Size (n)	1,835	358	147	166	47	161

Source: 2013 CLASS.

**Table 68: Existing Wall Insulation R-Value – By Home Type and Language for California LI Population**

	Percent of California LI Population				
	Single-Family Own	Single-Family Rent	Multi-Family	Primary Language Spanish	English Only
No insulation (R-0)	35%	46%	32%	41%	36%
R-1 --> R-10	13%	17%	27%	23%	18%
R-11 --> R-18	47%	37%	39%	36%	44%
R-19 --> R-30	5%	1%	1%	0%	2%
Sample Size (n)	173	70	104	86	251

Source: 2013 CLASS.

**Table 69: Foundation Type – By Population Segment and IOU**

	Percent of California Population	Percent of California LI Population	Percent of California LI Population			
			PG&E	SCE	SDG&E	SoCalGas
	<b>Total</b>	<b>Total</b>				
Slab	55%	52%	42%	59%	70%	60%
Crawl	31%	34%	39%	32%	15%	33%
Basement	7%	7%	10%	3%	7%	3%
Mobile home skirting	<1%	<1%	1%	0%	0%	0%
Not applicable (not on ground floor)	7%	9%	9%	6%	8%	4%
Sample Size (n)	1,984	387	166	170	53	164

Source: 2013 CLASS.

**Table 70: Foundation Type – By Home Type and Language for California LI Population**

	Percent of California LI Population				
	Single-Family Own	Single-Family Rent	Multi-Family	Primary Language Spanish	English Only
Slab	46%	45%	62%	58%	50%
Crawl	43%	51%	15%	30%	35%
Basement	10%	4%	5%	6%	6%
Mobile home skirting	0%	0%	0%	0%	<1%
Not applicable (not on ground floor)	0%	0%	18%	6%	8%
Sample Size (n)	180	76	118	99	265

Source: 2013 CLASS.

**Table 71: Refrigerator Characteristics – By Population Segment and IOU**

	Percent of California Population	Percent of California LI Population	Percent of California LI Population			
	Total	Total	PG&E	SCE	SDG&E	SoCalGas
<b>Number of Refrigerators</b>						
One	70%	77%	82%	73%	74%	73%
Two or three	29%	22%	18%	26%	26%	24%
<b>Style</b>						
Single door	12%	10%	6%	12%	9%	13%
Top/bottom doors	55%	63%	66%	61%	64%	60%
Side-by-side doors	33%	27%	28%	26%	27%	28%
<b>Size</b>						
Small (<17 cu ft)	14%	13%	13%	15%	9%	14%
Medium (17-20 cu ft)	28%	37%	34%	39%	34%	39%
Large (>20 cu ft)	57%	50%	54%	46%	57%	47%
<b>Type of Defrost</b>						
Frost-free	94%	91%	94%	88%	94%	88%
Partial frost-free	3%	4%	4%	5%	0%	4%
Manual	4%	5%	3%	7%	7%	8%
<b>Age</b>						
<6 years	24%	28%	27%	28%	43%	28%
6-10 years	37%	42%	42%	41%	37%	40%
11-15 years	24%	18%	20%	17%	8%	21%
16+ years	16%	13%	10%	15%	12%	12%
Average Age	9.8	8.8	8.8	9.0	7.3	8.5
Standard Error	0.2	0.4	0.5	0.5	1.1	0.5
Sample Size (n, Age)	1,249	268	111	134	25	124
Sample Size (n, Type)	1,987	388	166	171	53	165

Source: 2013 CLASS.

**Table 72: Refrigerator Characteristics – By Home Type and Language for California LI Population**

	Percent of California LI Population				
	Single-Family Own	Single-Family Rent	Multi-Family	Primary Language Spanish	English Only
<b>Number of Refrigerators</b>					
One	64%	72%	92%	78%	79%
Two or three	35%	27%	8%	21%	21%
<b>Style</b>					
Single door	10%	10%	7%	9%	9%
Top/bottom doors	52%	63%	80%	71%	63%
Side-by-side doors	37%	27%	13%	21%	27%
<b>Size</b>					
Small (<17 cu ft)	12%	12%	14%	12%	13%
Medium (17-20 cu ft)	22%	40%	55%	48%	32%
Large (>20 cu ft)	65%	48%	31%	40%	54%
<b>Type of Defrost</b>					
Frost-free	90%	92%	94%	90%	93%
Partial frost-free	5%	2%	3%	5%	2%
Manual	5%	7%	3%	5%	4%
<b>Age</b>					
<6 years	28%	20%	31%	34%	24%
6-10 years	45%	43%	44%	41%	44%
11-15 years	16%	18%	17%	10%	20%
16+ years	11%	19%	8%	15%	12%
Average Age	9.3	9.9	7.9	8.3	9.1
Standard Error	0.5	0.8	0.6	0.7	0.4
Sample Size (n, Age)	142	57	63	69	174
Sample Size (n, Type)	178	75	118	99	266

Source: 2013 CLASS.

**Table 73: Home Appliance Types – By Population Segment and IOU**

	Percent of California Population	Percent of California LI Population	Percent of California LI Population			
			Total	Total	PG&E	SCE
<b>Dishwasher</b>	74%	50%	45%	54%	56%	52%
No Dishwasher	26%	50%	55%	46%	44%	48%
<b>Clothes Washer</b>	81%	68%	68%	70%	63%	74%
No Clothes Washer	19%	32%	32%	30%	37%	26%
<b>Clothes Dryer</b>	79%	66%	65%	68%	60%	72%
Electric	28%	24%	42%	8%	17%	7%
Gas	49%	40%	21%	59%	43%	65%
Propane	2%	2%	2%	1%	1%	0%
No Clothes Dryer	21%	35%	35%	32%	40%	28%
Sample Size (n)	1,987	388	166	171	53	165

Source: 2013 CLASS.

**Table 74: Home Appliance Types – By Home Type and Language for California LI Population**

	Percent of California LI Population				
	Single-Family Own	Single-Family Rent	Multi-Family	Primary Language Spanish	English Only
<b>Dishwasher</b>	61%	44%	41%	26%	58%
No Dishwasher	39%	56%	59%	74%	42%
<b>Clothes Washer</b>	94%	97%	30%	60%	71%
No Clothes Washer	6%	3%	70%	40%	29%
<b>Clothes Dryer</b>	91%	91%	29%	53%	73%
Electric	31%	32%	15%	15%	27%
Gas	58%	56%	15%	38%	41%
Propane	2%	3%	0%	0%	3%
No Clothes Dryer	9%	9%	71%	47%	29%
Sample Size (n)	180	76	118	99	266

Source: 2013 CLASS.

**Table 75: Lighting Types – By Population Segment and IOU**

	Percent of California Population	Percent of California LI Population	Percent of California LI Population			
			Total	Total	PG&E	SCE
<b>Lighting Type</b>						
Incandescent Lamps	47%	41%	40%	41%	41%	42%
CFLs	34%	41%	42%	39%	40%	39%
Fluorescent Fixtures	7%	8%	7%	9%	11%	9%
Halogen Lamps	7%	4%	3%	4%	3%	4%
Other	4%	7%	7%	7%	5%	6%
<b>Lighting Controls Installed</b>	18%	14%	15%	14%	12%	14%
No Lighting Controls	82%	86%	85%	86%	88%	86%
Sample Size (n) <sup>11</sup>	64,297	8,982	3,846	3,988	1,213	3,959

Source: 2013 CLASS.

**Table 76: Lighting Types – By Home Type and Language for California LI Population**

	Percent of California LI Population				
	Single-Family Own	Single-Family Rent	Multi-Family	Primary Language Spanish	English Only
<b>Lighting Type</b>					
Incandescent Lamps	44%	37%	38%	31%	45%
CFLs	36%	43%	47%	48%	38%
Fluorescent Fixtures	8%	8%	8%	9%	7%
Halogen Lamps	5%	4%	2%	3%	4%
Other	7%	9%	6%	9%	5%
<b>Lighting Controls Installed</b>	15%	13%	14%	9%	16%
No Lighting Controls	85%	88%	86%	91%	84%
Sample Size (n)	5,332	1,715	1,648	1,697	6,654

Source: 2013 CLASS.

<sup>11</sup> The n's in this table reflect the number of lighting fixtures in the CLASS sample rather than the number of households.

### 7.3.2 RASS Data

The following series of tables presents home and equipment data that are weather-sensitive by climate zone from the 2010 RASS (KEMA). The RASS data were introduced in Section 2.4. The segments shown in the tables, along with the sample sizes, are:

- Climate Zone Group:
  - Central Valley - CEC building climate zone 11-13 (n = 1,463);
  - Desert - CEC building climate zone 14 and 15 (n = 724);
  - Mountain - CEC building climate zone 16 (n = 394);
  - North Coast - CEC building climate zones 1-5 (n = 1,121);
  - South Coast - CEC building climate zones 6-8 (n = 2,166); and
  - South Inland - CEC building climate zone 9 and 10 (n = 2,102).
- ESA Measure Eligibility (based on 2009-2011):
  - Room Air Conditioner Replacement and Evaporative Cooler Installation - CEC building climate zones 10-16 (n = 3,476); and
  - Central Air Conditioner Replacement CEC building climate zones 13-15 (n = 1,504).

**Table 77: Heating Fuel Type by Regional Climate Zone for California LI Population**

	Total	Climate Zone - Region					
		Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Heating Fuel</b>							
Natural Gas	71%	73%	71%	50%	73%	68%	73%
Electric	6%	7%	3%	17%	8%	7%	3%
Propane	3%	6%	5%	12%	3%	0%	1%
Wood/coal	2%	4%	3%	9%	2%	0%	0%
Other	5%	4%	13%	7%	5%	5%	5%
No heating equipment/ systems	9%	2%	2%	3%	5%	16%	13%
No Response	4%	5%	3%	3%	4%	4%	5%

Source: 2010 RASS.

**Table 78: Heating Set Point Range by Regional Climate Zone for California LI Population**

	Climate Zone - Region						
	Total	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Morning</b>							
55 to 60 °F	4%	3%	4%	21%	5%	3%	3%
61 to 65 °F	12%	15%	14%	12%	18%	7%	8%
66 to 70 °F	19%	26%	21%	15%	23%	16%	14%
71 to 75 °F	12%	18%	18%	16%	6%	9%	14%
Below 55 °F	2%	1%	1%	1%	2%	2%	1%
No response	11%	8%	13%	9%	11%	14%	11%
Not applicable	20%	8%	10%	15%	16%	29%	25%
Off	18%	17%	16%	9%	18%	18%	21%
Over 75 °F	3%	4%	3%	2%	0%	2%	3%
<b>Day</b>							
55 to 60 °F	3%	2%	6%	6%	5%	1%	3%
61 to 65 °F	9%	11%	7%	14%	17%	7%	6%
66 to 70 °F	14%	21%	15%	11%	15%	10%	12%
71 to 75 °F	10%	19%	15%	13%	5%	6%	11%
Below 55 °F	1%	2%	2%	2%	2%	1%	1%
No response	11%	8%	13%	9%	11%	14%	11%
Not applicable	20%	8%	10%	15%	16%	29%	25%
Off	29%	26%	29%	31%	30%	30%	30%
Over 75 °F	2%	2%	3%	1%	0%	2%	2%
<b>Evening</b>							
55 to 60 °F	3%	3%	3%	4%	5%	3%	2%
61 to 65 °F	9%	9%	4%	13%	16%	5%	6%
66 to 70 °F	21%	29%	26%	17%	23%	18%	16%
71 to 75 °F	14%	23%	19%	14%	7%	8%	16%
Below 55 °F	1%	0%	2%	0%	1%	1%	1%
No response	11%	8%	13%	9%	11%	14%	11%
Not applicable	20%	8%	10%	15%	16%	29%	25%
Off	19%	17%	18%	27%	21%	19%	20%
Over 75 °F	3%	3%	4%	1%	0%	4%	3%
<b>Night</b>							
55 to 60 °F	5%	5%	5%	10%	6%	3%	5%
61 to 65 °F	12%	17%	9%	11%	17%	8%	7%
66 to 70 °F	14%	14%	23%	10%	16%	11%	14%
71 to 75 °F	10%	18%	11%	10%	4%	8%	10%
Below 55 °F	3%	4%	3%	6%	3%	3%	2%



	Climate Zone - Region						
	Total	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
No response	11%	8%	13%	9%	11%	14%	11%
Not applicable	20%	8%	10%	15%	16%	29%	25%
Off	24%	22%	23%	28%	27%	22%	24%
Over 75 °F	2%	4%	3%	1%	0%	2%	3%

Source: 2010 RASS.

**Table 79: Heating Set Point Range by ESA Measure Eligibility for California LI Population**

	Climate Zone – ESA Measure Eligibility	
	RAC Replace and Evap. Cooler Install	CAC Replacement
<b>Morning</b>		
55 to 60 °F	5%	3%
61 to 65 °F	14%	13%
66 to 70 °F	23%	23%
71 to 75 °F	19%	18%
Below 55 °F	1%	2%
No response	9%	9%
Not applicable	10%	11%
Off	17%	17%
Over 75 °F	3%	3%
<b>Day</b>		
55 to 60 °F	3%	3%
61 to 65 °F	10%	9%
66 to 70 °F	19%	16%
71 to 75 °F	18%	20%
Below 55 °F	2%	1%
No response	9%	9%
Not applicable	10%	11%
Off	28%	29%
Over 75 °F	2%	2%
<b>Evening</b>		
55 to 60 °F	3%	3%
61 to 65 °F	8%	5%
66 to 70 °F	25%	23%
71 to 75 °F	22%	23%
Below 55 °F	1%	1%
No response	9%	9%
Not applicable	10%	11%
Off	19%	21%
Over 75 °F	3%	3%
<b>Night</b>		
55 to 60 °F	6%	5%
61 to 65 °F	14%	13%
66 to 70 °F	15%	18%
71 to 75 °F	16%	18%
Below 55 °F	4%	2%

	Climate Zone – ESA Measure Eligibility	
	RAC Replace and Evap. Cooler Install	CAC Replacement
No response	9%	9%
Not applicable	10%	11%
Off	24%	19%
Over 75 °F	3%	6%

Source: 2010 RASS.

**Table 80: Cooling Thermostat by Regional Climate Zone for California LI Population**

	Total	Climate Zone - Region					
		Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Cooling Thermostat Standard (Not Programmable)	17%	24%	20%	15%	6%	15%	22%
Programmable	14%	27%	25%	19%	5%	7%	16%
Programmable Communicating	9%	12%	24%	20%	7%	4%	8%
None	8%	11%	15%	13%	5%	6%	9%
Not Applicable	47%	22%	12%	31%	73%	66%	38%
No Response	4%	4%	4%	2%	5%	2%	7%

Source: 2010 RASS.

**Table 81: Cooling Thermostat by ESA Measure Eligibility for California LI Population**

	Climate Zone – ESA Measure Eligibility	
	RAC Replace and Evap. Cooler Install	CAC Replacement
Cooling Thermostat Standard (Not Programmable)	25%	27%
Programmable	26%	25%
Programmable Communicating	14%	17%
None	11%	13%
Not Applicable	20%	13%
No Response	5%	5%

Source: 2010 RASS.

**Table 82: Cooling Set Point Range by Regional Climate Zone for California LI Population**

	Total	Climate Zone - Region					
		Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Morning</b>							
70 to 73 °F	4%	5%	14%	3%	2%	2%	4%
74 to 76 °F	6%	11%	11%	9%	2%	2%	6%
77 to 80 °F	7%	12%	16%	19%	0%	3%	8%
Above 80 °F	1%	3%	2%	1%	0%	1%	1%
Below 70 °F	3%	4%	2%	3%	4%	2%	2%
No response	4%	4%	8%	2%	5%	3%	5%
Not applicable	57%	34%	27%	51%	79%	74%	49%
Off	18%	27%	20%	11%	7%	14%	25%
<b>Day</b>							
70 to 73 °F	6%	7%	9%	5%	4%	4%	9%
74 to 76 °F	7%	14%	12%	8%	3%	3%	7%
77 to 80 °F	9%	18%	18%	6%	1%	4%	11%
Above 80 °F	2%	3%	4%	1%	0%	1%	2%
Below 70 °F	4%	6%	3%	3%	2%	4%	3%
No response	4%	4%	8%	2%	5%	3%	5%
Not applicable	57%	34%	27%	51%	79%	74%	49%
Off	11%	14%	18%	24%	6%	8%	14%
<b>Evening</b>							
70 to 73 °F	7%	9%	17%	7%	4%	3%	9%
74 to 76 °F	8%	18%	12%	8%	3%	3%	9%
77 to 80 °F	9%	19%	21%	9%	1%	3%	11%
Above 80 °F	1%	3%	3%	1%	0%	1%	1%
Below 70 °F	4%	6%	3%	2%	3%	3%	3%
No response	4%	4%	8%	2%	5%	3%	5%
Not applicable	57%	34%	27%	51%	79%	74%	49%
Off	10%	8%	9%	19%	6%	11%	12%
<b>Night</b>							
70 to 73 °F	4%	5%	13%	4%	2%	3%	5%
74 to 76 °F	6%	14%	8%	4%	2%	2%	6%
77 to 80 °F	7%	12%	19%	5%	0%	3%	8%
Above 80 °F	2%	3%	2%	1%	0%	1%	1%
Below 70 °F	3%	5%	3%	2%	2%	2%	2%
No response	4%	4%	8%	2%	5%	3%	5%
Not applicable	57%	34%	27%	51%	79%	74%	49%
Off	18%	22%	20%	31%	9%	12%	24%

Source: 2010 RASS.

**Table 83: Cooling Set Point Range by ESA Measure Eligibility for California LI Population**

	Climate Zone – ESA Measure Eligibility	
	RAC Replace and Evap. Cooler Install	CAC Replacement
<b>Morning</b>		
70 to 73 °F	6%	8%
74 to 76 °F	11%	13%
77 to 80 °F	14%	15%
Above 80 °F	2%	3%
Below 70 °F	3%	4%
No response	5%	6%
Not applicable	32%	26%
Off	27%	26%
<b>Day</b>		
70 to 73 °F	8%	6%
74 to 76 °F	13%	14%
77 to 80 °F	18%	21%
Above 80 °F	3%	5%
Below 70 °F	5%	7%
No response	5%	6%
Not applicable	32%	26%
Off	16%	16%
<b>Evening</b>		
70 to 73 °F	10%	10%
74 to 76 °F	16%	18%
77 to 80 °F	19%	21%
Above 80 °F	3%	3%
Below 70 °F	5%	6%
No response	5%	6%
Not applicable	32%	26%
Off	11%	10%
<b>Night</b>		
70 to 73 °F	7%	7%
74 to 76 °F	12%	16%
77 to 80 °F	14%	16%
Above 80 °F	3%	4%
Below 70 °F	4%	6%
No response	5%	6%
Not applicable	32%	26%
Off	25%	20%

Source: 2010 RASS.

**Table 84: Primary Type of Heating Equipment by Regional Climate Zone for California LI Population**

	Total	Climate Zone - Region					
		Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Electric</b>							
Portable Heaters	5%	4%	5%	5%	3%	4%	7%
Heat Pump	2%	3%	4%	3%	0%	3%	2%
Through-the-wall Electric Heat Pump	1%	1%	1%	1%	2%	1%	2%
Central Forced Air Electric Furnace	5%	8%	4%	9%	3%	5%	5%
Resistance/Baseboard	5%	3%	2%	7%	6%	7%	3%
Other Electric	1%	0%	0%	2%	2%	1%	0%
<b>Natural Gas</b>							
Central Forced Air Gas Furnace	37%	46%	56%	36%	32%	29%	38%
Space Heaters/Wall Units	24%	17%	14%	10%	34%	27%	21%
Other Gas	1%	1%	1%	0%	0%	1%	1%
Fireplace	0%	0%	0%	0%	1%	0%	0%
Steam	1%	1%	1%	0%	1%	2%	1%
<b>Propane</b>							
Central Forced Air Propane Furnace	2%	5%	2%	7%	2%	0%	0%
Other Propane	0%	0%	0%	0%	0%	0%	0%
Steam	0%	0%	0%	0%	0%	0%	0%
Floor or Wall Propane Heater	1%	1%	2%	3%	1%	0%	0%
<b>Wood or Coal</b>							
Fireplace	1%	2%	2%	4%	0%	0%	0%
Stove/Stove Insert	1%	2%	1%	5%	1%	0%	0%
<b>Solar Heat</b>							
Solar Heat Electric Backup	0%	0%	0%	0%	0%	0%	0%
Solar Heat Natural Gas Backup	0%	0%	0%	0%	0%	0%	0%
Solar Heat Propane Backup	0%	0%	0%	1%	0%	0%	0%
Solar Heat No Backup	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	1%	0%	0%	1%
No primary heating equipment/systems	13%	7%	5%	6%	9%	20%	18%

Source: 2010 RASS.

**Table 85: Primary Type of Heating Equipment by ESA Measure Eligibility for California LI Population**

	Climate Zone – ESA Measure Eligibility	
	RAC Replace and Evap. Cooler Install	CAC Replacement
<b>Electric</b>		
Portable Heaters	4%	5%
Heat Pump	3%	2%
Through-the-wall Electric Heat Pump	1%	1%
Central Forced Air Electric Furnace	8%	7%
Resistance/Baseboard	3%	2%
Other Electric	0%	0%
<b>Natural Gas</b>		
Central Forced Air Gas Furnace	48%	54%
Space Heaters/Wall Units	14%	16%
Other Gas	1%	1%
Fireplace	0%	0%
Steam	1%	1%
<b>Propane</b>		
Central Forced Air Propane Furnace	4%	2%
Other Propane	0%	0%
Steam	0%	0%
Floor or Wall Propane Heater	1%	1%
<b>Wood or Coal</b>		
Fireplace	2%	1%
Stove/Stove Insert	1%	1%
<b>Solar Heat</b>		
Solar Heat Electric Backup	0%	0%
Solar Heat Natural Gas Backup	0%	0%
Solar Heat Propane Backup	0%	0%
Solar Heat No Backup	0%	0%
Other	0%	0%
No primary heating equipment/systems	8%	7%

Source: 2010 RASS.

**Table 86: Cooling Equipment/System Type by ESA Measure Eligibility for California LI Population**

	Climate Zone – ESA Measure Eligibility	
	RAC Replace and Evap. Cooler Install	CAC Replacement
<b>Cooling System</b>		
Central Air Conditioners Only	49%	52%
Room Air Conditioners Only	14%	9%
Central Evaporative Coolers Only	6%	8%
Multiple Types of AC	22%	25%
No AC	9%	6%

Source: 2010 RASS.

**Table 87: Existing Exterior Wall Insulation by Regional Climate Zone for California LI Population**

	Total	Climate Zone - Region					
		Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Existing Insulation</b>							
Has no Wall Insulation	29%	18%	18%	19%	31%	37%	29%
Has some Wall Insulation	18%	20%	14%	14%	17%	18%	18%
Has Wall Insulation everywhere	39%	52%	53%	40%	39%	27%	36%
No Response	14%	10%	14%	26%	12%	17%	17%

Source: 2010 RASS.

**Table 88: Existing Exterior Wall Insulation by ESA Measure Eligibility for California LI Population**

	Climate Zone – ESA Measure Eligibility	
	RAC Replace and Evap. Cooler Install	CAC Replacement
<b>Existing Insulation</b>		
Has no Wall Insulation	19%	21%
Has some Wall Insulation	17%	18%
Has Wall Insulation everywhere	51%	51%
No Response	12%	10%

Source: 2010 RASS.



**Table 89: Existing Attic Insulation by Regional Climate Zone for California LI Population**

	Total	Climate Zone - Region					
		Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Inches of Attic Insulation</b>							
No insulation	48%	40%	30%	31%	47%	58%	51%
0-3 Inches	16%	17%	18%	21%	16%	12%	17%
4-6 Inches	18%	23%	29%	16%	16%	12%	19%
7-10 Inches	5%	6%	6%	6%	7%	4%	3%
More than 10 Inches	2%	1%	4%	4%	2%	2%	2%
No Response	12%	13%	13%	22%	12%	12%	8%

Source: 2010 RASS.

**Table 90: Existing Attic Insulation by ESA Measure Eligibility for California LI Population**

	Climate Zone – ESA Measure Eligibility	
	RAC Replace and Evap. Cooler Install	CAC Replacement
<b>Inches of Attic Insulation</b>		
No insulation	38%	39%
0-3 Inches	18%	17%
4-6 Inches	24%	23%
7-10 Inches	5%	3%
More than 10 Inches	2%	2%
No Response	13%	15%

Source: 2010 RASS.

**Table 91: RASS Window Type by Regional Climate Zone for California LI Population**

	Total	Climate Zone - Region					
		Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Type of Window							
All or most single pane	29%	53%	39%	45%	43%	55%	52%
Mixture Single and Double Pane	18%	7%	12%	10%	12%	9%	11%
All or Most Double Pane	39%	35%	44%	40%	40%	25%	28%
No Response	14%	4%	5%	5%	5%	11%	10%

Source: 2010 RASS.

**Table 92: Window Type by ESA Measure Eligibility for California LI Population**

	Climate Zone – ESA Measure Eligibility	
	RAC Replace and Evap. Cooler Install	CAC Replacement
Type of Window		
All or most single pane	51%	49%
Mixture Single and Double Pane	8%	11%
All or Most Double Pane	36%	36%
No Response	5%	4%

Source: 2010 RASS.

## 8 Telephone Survey Detailed Results

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### 8.1 Comparison to Census

Table 22 (from Section 7.1.2 above) compared the customer telephone survey to PUMS, which we assume is the most reliable source. Below in Table 93 we show just the PUMS and telephone survey columns from the data source comparison table. As shown, the telephone survey overrepresents the following segments:

- Homeowners
- Households with seniors
- White respondents
- Households where English is the primary language

We developed adjustment weights to correct for the difference in home ownership, but we did not attempt to weight the sample of non-English speakers and non-white respondents. Given the study resource constraints, we were unable to conduct a survey with all non-English speakers (we conducted a Spanish-language version of the survey). We do not want to represent our non-white/non-English speaking samples as reflective of the total population of non-white and non-English speakers. Instead, we provide results in this appendix broken out by these segments.

Table 94 shows the home ownership and home type differences between Census and the customer telephone survey data broken out by IOU.

**Table 93: Comparison of Demographic Characteristics Across Secondary Sources and the Customer Telephone Survey for California LI Population**

Demographic Characteristic	Data Source	
	2011 PUMS LI Sample	2013 LINA Telephone Survey
% own	33%	51%
% with seniors*	26%	53%
Primary language is English	46%	76%
Respondent is white	36%	46%
% Single-family home	51%	56%
% Multi-family home	43%	40%
Average # people in the home	3.0	3.0
Average age of home	47	41
*Definition of senior	Over 65 years	Over 60 years

Sources: 2011 PUMS; 2013 CARE Participant Telephone Survey.

**Table 94: Comparison of Demographic Characteristics Across Secondary Sources and the Customer Telephone Survey for California LI Population – Own/Rent/Other and Home Type by IOU**

		PG&E	SCE	SDG&E	SoCalGas
<b>2011 PUMS</b>	Multi-Family Own	1%	2%	2%	2%
	Multi-Family Rent	36%	42%	40%	42%
	Multi-Family Other	0%	0%	0%	0%
	SF/Mobile Own	34%	31%	35%	30%
	SF/Mobile Rent	25%	23%	20%	23%
	SF/Mobile Other	3%	2%	2%	2%
<b>2013 CARE Participant Survey</b>	Multi-Family Own	4%	4%	9%	5%
	Multi-Family Rent	28%	22%	45%	24%
	Multi-Family Other	0%	0%	0%	0%
	SF/Mobile Own	52%	58%	34%	55%
	SF/Mobile Rent	15%	15%	11%	15%
	SF/Mobile Other	2%	1%	0%	0%

Sources: 2011 PUMS; 2013 CARE Participant Telephone Survey.

## 8.2 Telephone Survey Results<sup>12</sup>

Tables below show the weight used for each segment that phone survey results are presented by in this section.

**Table 95: Weight Used by ESA Participation and Utility for California LI Population**

	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Weight</b>	0.87	1.19	1.1	1.03	0.42	1.19	1.02

Source: 2013 CARE Participant Telephone Survey.

**Table 96: Weight Used by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Weight</b>	0.65	1.68	1.19	0.78	0.98	1.11	0.93	1.01	0.9

Source: 2013 CARE Participant Telephone Survey.

**Table 97: Weight Used by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Weight</b>	1.04	0.97	0.88	1.14	0.87	1.03	1.05	0.94

Source: 2013 CARE Participant Telephone Survey.

<sup>12</sup> Multi-family homes are defined as any housing structure with two or more units. This differs from the 2007 KEMA study where multi-family homes are defined as housing structures with five or more units. This also differs from the concurrent Cadmus multi-family LI study, which also defines multi-family homes as housing structures with five or more units.

## 8.2.1 Program Accessibility-ESA

**Table 98: ESA Awareness (S17) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>ESA Awareness</b>								
Unaware of ESA	32%	29%	36%	31%	33%	31%	33%	32%
Aware of ESA	68%	71%	64%	69%	67%	69%	67%	68%
Total (n)	1,028	610	418	389	384	203	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 99: ESA Awareness (S17) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>ESA Awareness</b>									
Unaware of ESA	33%	26%	36%	36%	27%	42%	43%	32%	23%
Aware of ESA	67%	74%	64%	64%	73%	58%	57%	68%	77%
Total (n)	483	136	360	42	532	213	49	978	49

Source: 2013 CARE Participant Telephone Survey.

**Table 100: ESA Awareness (S17) by Climate Zone for California LI Population**

	<b>Central Valley</b>	<b>Desert</b>	<b>Mountain</b>	<b>North Coast</b>	<b>South Coast</b>	<b>South Inland</b>
<b>ESA Awareness</b>						
Unaware of ESA	32%	27%	19%	30%	30%	37%
Aware of ESA	68%	73%	81%	70%	70%	63%
Total (n)	253	59	24	156	273	263

Source: 2013 CARE Participant Telephone Survey.



**Table 101: Source of ESA Awareness (E1) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How found out about ESA</b>								
Friend/family/colleague	27%	23%	31%	26%	27%	24%	28%	27%
Utility bill insert	21%	19%	23%	21%	21%	25%	20%	21%
Utility mailing	18%	18%	18%	15%	22%	16%	22%	22%
Phone call to me/household	9%	8%	10%	16%	3%	11%	3%	3%
Other- utility	8%	9%	8%	7%	12%	11%	9%	12%
Someone went to house	13%	17%	9%	13%	14%	5%	14%	15%
Television	5%	4%	6%	3%	4%	8%	7%	4%
Newspaper/news media/radio	3%	2%	4%	5%	3%	2%	2%	3%
While signing up for other program	4%	4%	4%	4%	6%	5%	4%	6%
Utility website	3%	1%	5%	1%	4%	5%	4%	4%
Community based organization	2%	2%	2%	3%	3%	2%	2%	3%
Door advertisement	1%	1%	1%	2%	1%	1%	1%	1%
Other	4%	6%	2%	4%	4%	4%	4%	4%
Don't know	12%	13%	11%	13%	11%	13%	11%	11%
Total (n)	619	366	253	240	224	129	248	222

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.

**Table 102: Source of ESA Awareness (E1) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How found out about ESA</b>									
Friend/family/colleague	25%	32%	25%	28%	25%	26%	29%	26%	41%
Utility bill insert	26%	19%	18%	30%	23%	19%	17%	21%	27%
Utility mailing	14%	12%	19%	29%	22%	12%	16%	19%	9%
Phone call to me/household	15%	7%	6%	12%	10%	5%	15%	9%	21%
Other- utility	9%	8%	8%	3%	7%	8%	0%	8%	4%
Someone went to house	11%	14%	14%	22%	11%	19%	8%	13%	10%
Television	4%	4%	6%	0%	4%	7%	0%	5%	14%
Newspaper/news media/radio	6%	3%	2%	3%	5%	1%	0%	3%	1%
While signing up for other program	5%	4%	4%	0%	3%	4%	4%	4%	0%
Utility website	2%	5%	2%	0%	2%	1%	32%	3%	0%
Community based organization	2%	2%	3%	3%	3%	3%	0%	2%	2%
Door advertisement	1%	1%	2%	0%	1%	1%	0%	1%	3%
Other	1%	2%	8%	0%	4%	2%	1%	4%	0%
Don't know	15%	15%	9%	10%	12%	13%	7%	12%	12%
<b>Total (n)</b>	<b>303</b>	<b>84</b>	<b>204</b>	<b>23</b>	<b>346</b>	<b>105</b>	<b>28</b>	<b>583</b>	<b>36</b>

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.

**Table 103: Source of ESA Awareness (E1) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>How found out about ESA</b>						
Friend/family/colleague	30%	32%	43%	22%	24%	27%
Utility bill insert	25%	27%	28%	15%	20%	21%
Utility mailing	15%	17%	14%	15%	24%	19%
Phone call to me/household	16%	3%	11%	14%	5%	4%
Other- utility	8%	24%	9%	4%	13%	4%
Someone went to house	10%	6%	10%	16%	15%	14%
Television	2%	5%	11%	5%	6%	7%
Newspaper/news media/radio	3%	2%	0%	6%	4%	1%
While signing up for other program	4%	2%	0%	5%	5%	4%
Utility website	2%	0%	6%	1%	4%	6%
Community based organization	2%	6%	9%	4%	1%	1%
Door advertisement	2%	5%	5%	0%	0%	1%
Other	3%	5%	0%	4%	6%	2%
Don't know	12%	10%	6%	14%	12%	12%
<b>Total (n)</b>	<b>148</b>	<b>39</b>	<b>19</b>	<b>99</b>	<b>174</b>	<b>140</b>

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.

**Table 104: Preference of Sources to Learn More About Programs (F0a\_2) by ESA Awareness by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How like to learn more about programs</b>								
Mail	56%	57%	56%	54%	57%	49%	59%	58%
Email	9%	8%	10%	9%	10%	13%	9%	10%
None/Don't want information	5%	3%	7%	7%	4%	7%	4%	4%
Phone	8%	8%	7%	8%	9%	4%	8%	9%
Online/internet	3%	2%	3%	1%	4%	4%	4%	4%
Other	2%	3%	2%	1%	2%	1%	3%	2%
TV	2%	2%	2%	3%	2%	2%	2%	2%
Community or assistance organizations	2%	2%	1%	2%	1%	3%	1%	1%
Flyer/brochure/print media	2%	2%	1%	2%	1%	3%	1%	1%
Come to my home	1%	2%	1%	2%	2%	2%	1%	2%
Word-of mouth (Friends, neighbors, etc.)	1%	1%	1%	1%	1%	2%	1%	1%
Don't know	8%	10%	7%	9%	7%	9%	8%	7%
At a meeting	1%	1%	0%	1%	0%	1%	1%	0%
Total (n)	863	505	358	234	378	199	426	374

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 105: Preference of Sources to Learn More About Programs (F0a\_2) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How like to learn more about programs</b>									
Mail	55%	58%	53%	54%	55%	65%	29%	56%	66%
Email	10%	11%	9%	4%	10%	3%	16%	10%	3%
None/Don't want information	6%	1%	6%	10%	8%	1%	2%	5%	7%
Phone	4%	14%	7%	17%	7%	7%	11%	7%	16%
Online/internet	2%	0%	5%	2%	3%	1%	3%	3%	0%
Other	4%	0%	3%	0%	3%	2%	5%	2%	0%
TV	2%	2%	2%	0%	1%	3%	7%	2%	0%
Community or assistance organizations	2%	2%	1%	3%	2%	0%	0%	2%	0%
Flyer/brochure/print media	2%	2%	1%	0%	2%	1%	0%	2%	0%
Come to my home	2%	1%	2%	2%	1%	1%	1%	1%	0%
Word-of mouth (Friends, neighbors, etc.)	2%	0%	1%	0%	1%	0%	5%	1%	3%
Don't know	7%	9%	9%	8%	6%	14%	20%	9%	3%
At a meeting	2%	0%	0%	0%	1%	1%	0%	0%	3%
<b>Total (n)</b>	<b>401</b>	<b>115</b>	<b>312</b>	<b>29</b>	<b>418</b>	<b>200</b>	<b>42</b>	<b>830</b>	<b>32</b>

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 106: Preference of Sources to Learn More About Programs (F0a\_2) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>How like to learn more about programs</b>						
Mail	51%	68%	67%	56%	58%	55%
Email	7%	15%	8%	12%	12%	6%
None/Don't want information	9%	2%	6%	3%	4%	5%
Phone	11%	8%	14%	9%	4%	7%
Online/internet	1%	0%	0%	0%	5%	4%
Other	4%	1%	0%	1%	1%	3%
TV	3%	0%	0%	3%	2%	2%
Community or assistance organizations	1%	0%	0%	3%	1%	2%
Flyer/brochure/print media	3%	0%	0%	2%	1%	2%
Come to my home	2%	0%	0%	1%	1%	2%
Word-of mouth (Friends, neighbors, etc.)	1%	2%	0%	1%	2%	0%
Don't know	8%	4%	0%	10%	7%	10%
At a meeting	0%	0%	5%	1%	1%	1%
<b>Total (n)</b>	<b>168</b>	<b>59</b>	<b>17</b>	<b>93</b>	<b>265</b>	<b>261</b>

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 107: Community Center/Meeting Attendance (F14a) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Visit local community center or attend community meetings</b>								
A lot	3%	4%	2%	3%	3%	5%	3%	3%
Sometimes	24%	27%	21%	23%	28%	24%	25%	28%
Never	73%	69%	77%	74%	69%	71%	72%	69%
Total (n)	1,021	606	415	386	382	201	430	378

Source: 2013 CARE Participant Telephone Survey.

**Table 108: Community Center/Meeting Attendance (F14a) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Visit local community center or attend community meetings</b>									
A lot	3%	3%	4%	1%	4%	2%	1%	3%	0%
Sometimes	26%	21%	26%	17%	23%	28%	19%	24%	35%
Never	72%	76%	71%	81%	73%	70%	80%	73%	65%
Total (n)	480	136	356	42	528	211	49	972	48

Source: 2013 CARE Participant Telephone Survey.

**Table 109: Community Center/Meeting Attendance (F14a) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Visit local community center or attend community meetings</b>						
A lot	3%	2%	0%	3%	5%	2%
Sometimes	20%	33%	24%	30%	20%	26%
Never	77%	65%	76%	67%	75%	72%
Total (n)	252	59	24	154	269	263

Source: 2013 CARE Participant Telephone Survey.

**Table 110: Religious Service Attendance (F14b) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Attend religious service</b>								
A lot	28%	30%	26%	29%	26%	29%	27%	26%
Sometimes	42%	41%	43%	36%	50%	33%	49%	51%
Never	30%	29%	31%	35%	23%	38%	24%	23%
Total (n)	1,019	606	413	382	382	203	430	378

Source: 2013 CARE Participant Telephone Survey.



**Table 111: Religious Service Attendance (F14b) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Attend religious service</b>									
A lot	32%	24%	27%	20%	33%	27%	23%	28%	38%
Sometimes	40%	45%	44%	47%	32%	53%	51%	43%	22%
Never	28%	31%	30%	33%	35%	20%	26%	29%	39%
Total (n)	479	136	356	41	527	212	49	971	47

Source: 2013 CARE Participant Telephone Survey.

**Table 112: Religious Service Attendance (F14b) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Attend religious service</b>						
A lot	27%	21%	41%	29%	26%	31%
Sometimes	44%	43%	29%	30%	48%	44%
Never	29%	36%	30%	40%	25%	25%
Total (n)	250	59	23	153	272	262

Source: 2013 CARE Participant Telephone Survey.

**Table 113: Internet Availability/Bill Pay (I1c, F15) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Internet availability/bill pay</b>								
Has internet	34%	35%	32%	33%	33%	40%	33%	32%
Does not have internet	31%	35%	27%	36%	28%	22%	29%	28%
Has internet and pays bill online always or sometimes	35%	30%	41%	31%	39%	38%	38%	39%
Total (n)	1,018	602	416	380	384	202	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 114: Internet Availability/Bill Pay (I1c, F15) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Internet availability/bill pay</b>									
Has internet	35%	35%	33%	28%	33%	38%	26%	34%	26%
Does not have internet	29%	22%	35%	44%	31%	43%	11%	31%	33%
Has internet and pays bill online always or sometimes	35%	43%	33%	28%	36%	20%	64%	35%	41%
Total (n)	477	134	359	41	523	213	49	970	48

Source: 2013 CARE Participant Telephone Survey.

**Table 115: Internet Availability/Bill Pay (I1c, F15) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Internet availability/bill pay</b>						
Has internet	26%	39%	35%	40%	35%	35%
Does not have internet	36%	25%	43%	32%	31%	26%
Has internet and pays bill online always or sometimes	37%	36%	22%	28%	34%	39%
Total (n)	247	59	23	154	273	262

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 116: Paper/Electric Bill (I1) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Paper/electronic bill</b>								
Paper bill	82%	87%	78%	83%	82%	79%	83%	82%
Electronic bill	15%	12%	17%	16%	15%	19%	13%	15%
Both paper and electronic	3%	1%	5%	1%	3%	3%	5%	3%
Total (n)	1,002	594	408	366	383	201	431	379

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 117: Paper/Electric Bill (I1) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Paper/electronic bill</b>									
Paper bill	85%	76%	82%	97%	81%	94%	61%	82%	80%
Electronic bill	13%	19%	15%	3%	17%	6%	20%	14%	18%
Both paper and electronic	2%	5%	3%	0%	3%	0%	19%	3%	1%
Total (n)	472	134	350	40	516	211	48	953	48

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 118: Paper/Electric Bill (I1) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Paper/electronic bill</b>						
Paper bill	83%	76%	100%	82%	82%	83%
Electronic bill	16%	24%	0%	18%	16%	9%
Both paper and electronic	1%	0%	0%	1%	2%	8%
Total (n)	241	59	23	146	272	261

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 119: Contact with IOU (I1a, I1aa) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Contact with IOU</b>								
Reads emails	10%	8%	11%	9%	12%	16%	9%	12%
Reads bill inserts	67%	69%	65%	69%	68%	65%	66%	68%
Reads emails and bill inserts	1%	1%	2%	1%	2%	2%	2%	2%
Reads neither	22%	21%	22%	21%	19%	17%	23%	19%
Total (n)	1,018	607	411	384	381	201	429	377

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 120: Contact with IOU (I1a, I1aa) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Contact with IOU</b>									
Reads emails	9%	13%	10%	1%	11%	4%	16%	9%	16%
Reads bill inserts	73%	58%	64%	84%	66%	74%	60%	67%	68%
Reads emails and bill inserts	1%	1%	2%	0%	2%	0%	0%	1%	1%
Reads neither	17%	28%	24%	15%	21%	22%	24%	22%	15%
Total (n)	479	134	356	42	527	213	48	968	49

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 121: Contact with IOU (I1a, I1aa) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Contact with IOU</b>						
Reads emails	9%	21%	0%	11%	13%	5%
Reads bill inserts	67%	69%	72%	70%	66%	66%
Reads emails and bill inserts	1%	0%	0%	1%	1%	4%
Reads neither	24%	9%	28%	19%	21%	25%
Total (n)	250	59	24	154	271	260

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 122: Online Utility Bill Pay (I1c) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Online utility bill pay</b>								
A lot	26%	20%	31%	24%	28%	32%	26%	28%
Sometimes	9%	9%	9%	7%	12%	7%	12%	12%
Never/No	65%	70%	59%	69%	61%	61%	62%	60%
Total (n)	1,017	603	414	387	381	197	429	377

Source: 2013 CARE Participant Telephone Survey.

**Table 123: Online Utility Bill Pay (I1c) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Online utility bill pay</b>									
A lot	27%	29%	25%	19%	27%	9%	57%	26%	25%
Sometimes	8%	14%	8%	8%	9%	11%	7%	9%	15%
Never/No	65%	58%	67%	73%	64%	80%	36%	65%	60%
Total (n)	480	135	353	42	527	212	49	967	49

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 124: Online Utility Bill Pay (I1c) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Online utility bill pay</b>						
A lot	26%	26%	12%	24%	24%	29%
Sometimes	11%	10%	9%	5%	10%	10%
Never/No	63%	64%	79%	72%	66%	61%
Total (n)	253	58	24	154	266	262

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 125: Utility Website Visits (I1b) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Visits Utility Website</b>								
A lot	5%	5%	6%	5%	0%	0%	0%	0%
Sometimes	15%	15%	15%	15%	0%	0%	0%	0%
Never/No	80%	80%	80%	80%	0%	0%	0%	0%
Total (n)	150	95	55	150	-	-	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 126: Utility Website Visits (I1b) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Visits Utility Website</b>									
A lot	4%	5%	5%	16%	4%	19%	12%	6%	0%
Sometimes	18%	29%	5%	5%	16%	8%	21%	15%	18%
Never/No	78%	65%	90%	79%	80%	74%	68%	79%	82%
Total (n)	71	21	44	13	107	9	7	134	16

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.



**Table 127: Utility Website Visits (I1b) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Visits Utility Website</b>						
A lot	7%	0%	0%	4%	0%	0%
Sometimes	16%	0%	13%	14%	0%	0%
Never/No	77%	0%	87%	82%	0%	0%
Total (n)	80	-	7	63	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 128: Utility Calls (I1d) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Calls Utility</b>								
A lot	2%	3%	0%	2%	0%	0%	0%	0%
Sometimes	57%	57%	58%	57%	0%	0%	0%	0%
Never/No	41%	40%	42%	41%	0%	0%	0%	0%
Total (n)	149	95	54	149	-	-	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 129: Utility Calls (I1d) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Calls Utility</b>									
A lot	3%	0%	3%	0%	2%	0%	0%	2%	0%
Sometimes	63%	66%	43%	79%	57%	45%	59%	55%	81%
Never/No	34%	34%	54%	21%	41%	55%	41%	43%	19%
Total (n)	71	21	43	13	107	8	7	132	17

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 130: Utility Calls (I1d) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Calls Utility</b>						
A lot	1%	0%	0%	3%	0%	0%
Sometimes	63%	0%	87%	47%	0%	0%
Never/No	36%	0%	13%	50%	0%	0%
Total (n)	81	-	7	61	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 131: Years Lived at Current Address (S8a) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Years lived at current address</b>								
Less than three years at address	18%	13%	24%	18%	23%	18%	19%	23%
Three to twenty years at address	59%	58%	60%	60%	57%	61%	58%	56%
More than 20 years at address	22%	29%	16%	22%	20%	21%	23%	20%
Total (n)	1,027	609	418	389	384	202	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 132: Years Lived at Current Address (S8a) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Years lived at current address</b>									
Less than three years at address	5%	25%	26%	11%	17%	18%	23%	19%	14%
Three to twenty years at address	51%	65%	62%	67%	56%	68%	61%	59%	59%
More than 20 years at address	44%	10%	12%	22%	27%	14%	16%	22%	26%
Total (n)	483	136	359	42	531	213	49	977	49

Source: 2013 CARE Participant Telephone Survey.

**Table 133: Years Lived at Current Address (S8a) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Years lived at current address</b>						
Less than three years at address	23%	32%	4%	13%	18%	16%
Three to twenty years at address	57%	57%	70%	63%	61%	57%
More than 20 years at address	20%	12%	25%	24%	22%	26%
Total (n)	253	59	24	156	273	262

Source: 2013 CARE Participant Telephone Survey.

## 8.2.2 Program Accessibility - CARE

**Table 134: CARE Awareness (S11) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>CARE awareness</b>								
Unaware of CARE	23%	26%	19%	18%	21%	23%	27%	21%
Aware of CARE	77%	74%	81%	82%	79%	77%	73%	79%
Total (n)	1,028	610	418	389	384	203	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 135: CARE Awareness (S11) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>CARE awareness</b>									
Unaware of CARE	21%	23%	24%	31%	16%	38%	30%	23%	9%
Aware of CARE	79%	77%	76%	69%	84%	62%	70%	77%	91%
Total (n)	483	136	360	42	532	213	49	978	49

Source: 2013 CARE Participant Telephone Survey.

**Table 136: CARE Awareness (S11) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>CARE awareness</b>						
Unaware of CARE	17%	24%	5%	20%	26%	29%
Aware of CARE	83%	76%	95%	80%	74%	71%
Total (n)	253	59	24	156	273	263

Source: 2013 CARE Participant Telephone Survey.

**Table 137: Source of CARE Awareness (E22) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Source of CARE awareness</b>								
Utility bill insert	31%	30%	32%	28%	32%	18%	36%	33%
Friend/family/colleague	23%	23%	21%	27%	20%	21%	19%	20%
Utility mailing	16%	11%	21%	11%	19%	14%	20%	18%
Phone call to me or household	7%	6%	9%	7%	5%	12%	7%	5%
Called the utility	10%	11%	9%	10%	12%	4%	11%	12%
Utility contacted me	6%	5%	7%	8%	6%	5%	5%	6%
Someone stopped by house	7%	7%	6%	6%	8%	1%	8%	8%
Television	3%	2%	5%	1%	3%	7%	5%	3%
Utility website	3%	3%	2%	2%	5%	3%	4%	5%
Utility-other	2%	2%	1%	2%	1%	9%	0%	1%
Paid bill at utility office/bill pay center	2%	2%	2%	2%	1%	7%	0%	1%
Learned about it when signed up for other program	2%	1%	3%	2%	3%	1%	2%	3%
Community based organization	2%	3%	2%	3%	2%	3%	1%	2%
Social services/case worker	2%	2%	1%	1%	2%	6%	1%	2%
Learned about it after receiving medical equipment/doctor	1%	2%	1%	0%	2%	3%	2%	2%
Landlord/property manager/manager of home	1%	2%	1%	2%	1%	1%	1%	1%
Newspaper	1%	1%	1%	0%	2%	0%	2%	2%
Previously on CARE	1%	1%	2%	1%	2%	0%	1%	2%
Through welfare/unemployment/social security/disability	1%	1%	0%	2%	0%	1%	0%	0%

	<b>Total</b>	<b>Participant</b>	<b>Non-Participant</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SoCalGas</b>	<b>SCE &amp; SoCalGas</b>
Other	3%	4%	2%	1%	5%	0%	5%	5%
<b>Total (n)</b>	<b>602</b>	<b>365</b>	<b>237</b>	<b>232</b>	<b>239</b>	<b>115</b>	<b>253</b>	<b>237</b>

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

Note: Multiple mentions allowed.

**Table 138: Source of CARE Awareness (E22) by ESA Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Source of CARE awareness</b>									
Utility bill insert	36%	24%	29%	34%	35%	26%	39%	31%	34%
Friend/family/colleague	19%	20%	26%	31%	23%	14%	35%	22%	38%
Utility mailing	17%	14%	18%	3%	15%	24%	8%	16%	13%
Phone call to me or household	7%	9%	7%	13%	7%	10%	9%	7%	7%
Called the utility	8%	14%	8%	26%	10%	11%	9%	10%	11%
Utility contacted me	6%	10%	5%	2%	7%	1%	3%	6%	2%
Someone stopped by house	8%	5%	6%	0%	5%	13%	0%	7%	3%
Television	3%	3%	5%	0%	2%	6%	3%	3%	8%
Utility website	2%	3%	3%	7%	3%	0%	2%	2%	9%
Utility-other	3%	1%	2%	0%	2%	1%	9%	2%	0%
Paid bill at utility office/bill pay center	4%	2%	1%	0%	0%	4%	6%	2%	0%
Learned about it when signed up for other program	2%	2%	3%	2%	1%	6%	0%	2%	0%
Community based organization	1%	5%	2%	0%	2%	1%	0%	2%	0%
Social services/case worker	1%	1%	3%	0%	2%	0%	1%	2%	0%
Learned about it after receiving medical equipment/doctor	2%	2%	0%	0%	1%	0%	0%	1%	0%
Landlord/property manager/manager of home	1%	0%	3%	0%	1%	1%	0%	1%	3%
Newspaper	1%	1%	0%	2%	1%	0%	9%	1%	1%
Previously on CARE	0%	3%	1%	2%	1%	0%	0%	1%	0%
Through welfare/unemployment/social security/disability	1%	1%	1%	0%	2%	0%	0%	1%	0%
Other	4%	3%	3%	0%	3%	2%	0%	3%	0%



	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Total (n)	286	87	199	25	328	99	28	569	32

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

Note: Multiple mentions allowed.

**Table 139: Source of CARE Awareness (E22) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Source of CARE awareness</b>						
Utility bill insert	23%	33%	60%	32%	27%	40%
Friend/family/colleague	30%	43%	18%	24%	15%	16%
Utility mailing	14%	23%	11%	9%	23%	16%
Phone call to me or household	10%	5%	0%	4%	11%	5%
Called the utility	9%	6%	17%	12%	6%	12%
Utility contacted me	7%	5%	6%	8%	4%	6%
Someone stopped by house	4%	6%	5%	7%	3%	13%
Television	1%	0%	12%	1%	6%	5%
Utility website	1%	5%	6%	2%	4%	3%
Utility-other	2%	0%	5%	2%	3%	1%
Paid bill at utility office/bill pay center	3%	2%	0%	1%	3%	0%
Learned about it when signed up for other program	2%	0%	0%	2%	5%	0%
Community based organization	4%	0%	0%	3%	3%	1%
Social services/case worker	1%	0%	0%	2%	5%	0%
Learned about it after receiving medical equipment/doctor	0%	0%	0%	0%	4%	2%
Landlord/property manager/manager of home	1%	6%	6%	2%	0%	0%
Newspaper	1%	5%	0%	0%	0%	0%
Previously on CARE	1%	6%	0%	1%	1%	0%
Through welfare/unemployment/social security/disability	2%	0%	0%	2%	1%	0%
Other	1%	1%	0%	2%	5%	4%
<b>Total (n)</b>	<b>144</b>	<b>34</b>	<b>18</b>	<b>99</b>	<b>160</b>	<b>147</b>

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

Note: Multiple mentions allowed.

### 8.2.3 ESA Drivers

**Table 140: Electricity/Gas Bill Change After Enrollment in CARE (E22a) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Electric/gas bill compared to bills before program participation</b>								
A lot less	25%	26%	24%	26%	25%	29%	23%	25%
Somewhat less	52%	52%	53%	49%	52%	51%	55%	52%
Somewhat more	5%	5%	5%	5%	4%	4%	5%	4%
A lot more	4%	4%	4%	4%	5%	4%	5%	5%
About the same as they were before the CARE discount	14%	14%	14%	15%	14%	12%	13%	14%
Total (n)	644	388	256	256	239	130	255	236

Source: 2013 CARE Participant Telephone Survey.

**Table 141: Electricity/Gas Bill Change After Enrollment in CARE (E22a) by ESA Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Electric/gas bill compared to bills before program participation</b>									
A lot less	22%	22%	27%	30%	26%	21%	27%	24%	36%
Somewhat less	58%	56%	47%	44%	52%	47%	51%	52%	51%
Somewhat more	4%	1%	7%	0%	5%	5%	7%	5%	1%
A lot more	6%	4%	4%	10%	3%	10%	1%	5%	0%
About the same as they were before the CARE discount	10%	17%	15%	17%	14%	18%	14%	14%	12%
Total (n)	305	90	219	25	352	104	32	607	36

Source: 2013 CARE Participant Telephone Survey.

**Table 142: Electricity/Gas Bill Change After Enrollment in CARE (E22a) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Electric/gas bill compared to bills before program participation</b>						
A lot less	24%	33%	27%	25%	24%	24%
Somewhat less	50%	39%	73%	53%	51%	56%
Somewhat more	7%	3%	0%	2%	7%	4%
A lot more	4%	1%	0%	5%	4%	7%
About the same as they were before the CARE discount	16%	23%	0%	15%	13%	9%
Total (n)	159	37	18	107	168	155

Source: 2013 CARE Participant Telephone Survey.

**Table 143: Energy Use After CARE Enrollment (E22b) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Energy use now compared to usage before program participation</b>								
A lot less	2%	3%	1%	2%	2%	5%	2%	2%
Somewhat less	8%	8%	7%	7%	11%	1%	9%	11%
Somewhat more	20%	20%	20%	14%	24%	25%	26%	24%
A lot more	9%	10%	8%	10%	8%	11%	8%	8%
About the same as they were before the CARE discount	61%	58%	64%	67%	56%	59%	55%	56%
Total (n)	667	404	263	258	257	134	272	254

Source: 2013 CARE Participant Telephone Survey.

**Table 144: Energy Use After CARE Enrollment (E22b) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Energy use now compared to usage before program participation</b>									
A lot less	2%	1%	2%	10%	2%	2%	0%	2%	0%
Somewhat less	7%	8%	6%	0%	8%	7%	7%	8%	7%
Somewhat more	18%	23%	22%	12%	18%	24%	27%	21%	6%
A lot more	9%	6%	11%	11%	8%	6%	13%	9%	11%
About the same as they were before the CARE discount	63%	62%	58%	67%	64%	60%	53%	60%	76%
Total (n)	314	94	228	26	365	109	32	629	37

Source: 2013 CARE Participant Telephone Survey.

**Table 145: Energy Use After CARE Enrollment (E22b) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Energy use now compared to usage before program participation</b>						
A lot less	2%	0%	0%	1%	4%	2%
Somewhat less	11%	13%	0%	6%	6%	7%
Somewhat more	13%	31%	11%	18%	29%	20%
A lot more	11%	12%	13%	9%	8%	6%
About the same as they were before the CARE discount	62%	44%	76%	67%	53%	65%
Total (n)	160	39	19	110	179	160

Source: 2013 CARE Participant Telephone Survey.

**Table 146: Reasons for ESA Participation (E1a) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Reasons for ESA Participation</b>								
Lower energy bill(s)/save money/lower utility cost	49%	47%	51%	52%	46%	49%	46%	45%
We need(ed) something that the program offers	21%	22%	20%	16%	25%	23%	25%	25%
Get free assistance/I need the help/We are qualified for it/Because it was offered/financial reasons	9%	11%	7%	9%	11%	9%	8%	11%
Other	5%	5%	6%	7%	3%	6%	4%	3%
Save energy	6%	6%	6%	6%	6%	4%	7%	7%
No need/No interest	2%	0%	4%	1%	3%	2%	3%	3%
Low/fixed income/retired/disabled	5%	7%	2%	6%	3%	4%	3%	4%
If I owned my home/didn't rent	1%	0%	3%	0%	1%	3%	2%	2%
Help the environment	1%	0%	1%	2%	0%	0%	0%	0%
To see what could be done/if anything needs to be fixed	1%	1%	2%	1%	2%	0%	2%	2%
Total (n)	925	548	377	335	356	185	401	352

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 147: Reasons for ESA Participation (E1a) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Reasons for ESA Participation</b>									
Lower energy bill(s)/save money/lower utility cost	42%	56%	52%	42%	44%	57%	61%	49%	46%
We need(ed) something that the program offers	20%	18%	23%	25%	23%	20%	5%	21%	24%
Get free assistance/I need the help/We are qualified for it/Because it was offered/financial reasons	13%	8%	5%	8%	10%	7%	5%	9%	12%
Other	6%	5%	6%	11%	7%	2%	11%	5%	8%
Save energy	7%	8%	5%	1%	4%	9%	7%	6%	4%
No need/No interest	5%	0%	1%	2%	2%	1%	3%	2%	2%
Low/fixed income/retired/disabled	5%	3%	4%	7%	5%	3%	5%	5%	3%
If I owned my home/didn't rent	0%	0%	3%	0%	2%	0%	0%	2%	0%
Help the environment	1%	1%	0%	2%	1%	0%	2%	1%	2%
To see what could be done/if anything needs to be fixed	2%	2%	0%	3%	2%	0%	1%	1%	0%
<b>Total (n)</b>	<b>431</b>	<b>127</b>	<b>324</b>	<b>37</b>	<b>471</b>	<b>190</b>	<b>44</b>	<b>880</b>	<b>44</b>

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.



**Table 148: Reasons for ESA Participation (E1a) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Reasons for ESA Participation</b>						
Lower energy bill(s)/save money/lower utility cost	49%	41%	37%	55%	47%	50%
We need(ed) something that the program offers	19%	23%	18%	16%	27%	20%
Get free assistance/I need the help/We are qualified for it/Because it was offered/financial reasons	9%	6%	17%	10%	7%	10%
Other	6%	2%	8%	8%	5%	5%
Save energy	8%	13%	8%	3%	3%	7%
No need/No interest	1%	2%	0%	0%	2%	3%
Low/fixed income/retired/disabled	6%	6%	9%	6%	3%	3%
If I owned my home/didn't rent	1%	7%	0%	0%	4%	0%
Help the environment	1%	0%	3%	3%	0%	0%
To see what could be done/if anything needs to be fixed	1%	0%	0%	0%	1%	2%
<b>Total (n)</b>	<b>222</b>	<b>53</b>	<b>23</b>	<b>132</b>	<b>248</b>	<b>247</b>

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 149: Importance of Landlord Support in ESA Participation (E2d) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Importance of landlord support in ESA participation</b>								
Not important	10%	12%	8%	12%	8%	21%	7%	8%
Somewhat important	26%	23%	30%	24%	24%	20%	29%	25%
Very important	59%	60%	59%	57%	64%	52%	61%	64%
Not applicable-not encouraged/suggested by landlord	4%	5%	4%	6%	4%	6%	3%	4%
Total (n)	435	239	196	160	143	106	167	141

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 150: Importance of Landlord Support in ESA Participation (E2d) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Importance of landlord support in ESA participation</b>									
Not important	0%	12%	9%	29%	13%	10%	8%	10%	22%
Somewhat important	0%	23%	28%	27%	30%	22%	12%	26%	36%
Very important	0%	62%	59%	27%	52%	69%	78%	60%	42%
Not applicable-not encouraged/suggested by landlord	0%	3%	5%	16%	6%	0%	1%	5%	0%
Total (n)	-	134	294	7	211	97	21	425	10

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 151: Importance of Landlord Support in ESA Participation (E2d) by Climate Zone for California LI Population**

	LI Eligible Population					
	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Importance of landlord support in ESA participation</b>						
Not important	11%	5%	49%	10%	9%	10%
Somewhat important	21%	22%	25%	30%	26%	29%
Very important	64%	68%	26%	53%	62%	58%
Not applicable-not encouraged/suggested by landlord	4%	5%	0%	8%	3%	3%
Total (n)	88	21	4	81	141	100

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 152: Importance of ESA Offerings for Participation (E2e) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Importance of the need for something that ESA offers</b>								
Not important	6%	4%	9%	7%	6%	9%	6%	6%
Somewhat important	28%	23%	33%	30%	24%	21%	27%	24%
Very important	66%	73%	58%	64%	70%	70%	67%	70%
Total (n)	1,009	599	410	381	379	198	426	375

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 153: Importance of ESA Offerings for Participation (E2e) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Importance of the need for something that ESA offers</b>									
Not important	9%	5%	5%	12%	10%	1%	7%	6%	18%
Somewhat important	29%	22%	30%	14%	29%	30%	19%	28%	27%
Very important	62%	73%	65%	74%	60%	69%	74%	67%	55%
Total (n)	471	134	355	42	521	210	48	961	47

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 154: Importance of ESA Offerings for Participation (E2e) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Importance of the need for something that ESA offers</b>						
Not important	6%	5%	14%	6%	5%	8%
Somewhat important	26%	25%	43%	31%	26%	28%
Very important	68%	70%	43%	63%	68%	65%
Total (n)	250	57	23	152	268	259

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 155: Importance of Utility Sponsorship for Participation (E2f) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Importance of utility sponsorship for ESA participation</b>								
Not important	9%	5%	12%	10%	7%	11%	7%	7%
Somewhat important	28%	23%	33%	28%	28%	22%	28%	29%
Very important	64%	72%	55%	62%	64%	67%	65%	64%
Total (n)	1,014	599	415	386	377	200	424	373

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 156: Importance of Utility Sponsorship for Participation (E2f) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Importance of utility sponsorship for ESA participation</b>									
Not important	13%	6%	7%	13%	13%	2%	11%	8%	15%
Somewhat important	26%	33%	28%	10%	30%	27%	21%	27%	33%
Very important	61%	61%	66%	77%	57%	71%	69%	64%	53%
Total (n)	476	135	354	42	528	208	47	964	49

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 157: Importance of Utility Sponsorship for Participation (E2f) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Importance of utility sponsorship for ESA participation</b>						
Not important	8%	5%	26%	9%	9%	8%
Somewhat important	27%	18%	26%	31%	27%	29%
Very important	65%	77%	48%	60%	64%	63%
Total (n)	251	58	24	155	268	258

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 158: Importance of Recommendations from Others for ESA Participation (E2h) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Importance of recommendations from others for ESA participation</b>								
Not important	16%	14%	19%	18%	13%	21%	14%	13%
Somewhat important	32%	28%	36%	37%	29%	27%	29%	29%
Very important	47%	51%	42%	41%	53%	44%	52%	53%
Not applicable - no one recommended it	5%	6%	3%	4%	5%	7%	5%	5%
Total (n)	991	586	405	368	375	199	420	371

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 159: Importance of Recommendations from Others for ESA Participation (E2h) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Importance of recommendations from others for ESA participation</b>									
Not important	21%	16%	13%	14%	22%	7%	19%	16%	22%
Somewhat important	32%	32%	33%	23%	35%	32%	20%	32%	45%
Very important	41%	49%	49%	51%	37%	58%	58%	47%	33%
Not applicable - no one recommended it	6%	3%	4%	12%	6%	2%	3%	5%	0%
Total (n)	464	127	353	40	509	208	48	945	45

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 160: Importance of Recommendations from Others for ESA Participation (E2h) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Importance of recommendations from others for ESA participation</b>						
Not important	19%	17%	24%	14%	16%	15%
Somewhat important	36%	16%	48%	35%	31%	30%
Very important	42%	60%	28%	46%	50%	48%
Not applicable - no one recommended it	3%	8%	0%	5%	4%	7%
Total (n)	237	55	23	151	269	256

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.



**Table 161: Knowledge of How to Reduce Utility Bill (EN4) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Knowledge of how to reduce utility bill</b>								
Yes	62%	62%	62%	70%	60%	65%	55%	60%
No	38%	38%	38%	30%	40%	35%	45%	40%
Total (n)	982	587	395	368	376	188	422	372

Source: 2013 CARE Participant Telephone Survey.

**Table 162: Knowledge of How to Reduce Utility Bill (EN4) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Knowledge of how to reduce utility bill</b>									
Yes	66%	61%	59%	66%	65%	45%	69%	72%	62%
No	34%	39%	41%	34%	35%	55%	31%	28%	38%
Total (n)	457	132	346	150	510	202	46	48	934

Source: 2013 CARE Participant Telephone Survey.

**Table 163: Knowledge of How to Reduce Utility Bill (EN4) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Knowledge of how to reduce utility bill</b>						
Yes	71%	53%	81%	66%	51%	61%
No	29%	47%	19%	34%	49%	39%
Total (n)	239	54	23	150	260	256

Source: 2013 CARE Participant Telephone Survey.

**Table 164: How Household Would Reduce Utility Bill (En5) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How household would reduce utility bill</b>								
Turn off lights	39%	40%	38%	30%	47%	43%	46%	46%
Use less electricity	22%	22%	21%	21%	21%	19%	23%	21%
Unplug equipment not in use	17%	20%	14%	19%	17%	17%	15%	17%
Don't use air conditioner	17%	18%	16%	14%	22%	11%	20%	22%
Other	17%	16%	17%	13%	22%	17%	20%	22%
Not use equipment during peak hours	13%	13%	13%	10%	17%	14%	15%	17%
Adjust thermostat	12%	11%	13%	15%	10%	5%	11%	10%
Close or open windows/blinds/curtains/doors	11%	9%	12%	8%	13%	12%	12%	13%
Don't use the heater	10%	12%	8%	14%	8%	13%	7%	8%
Buy energy efficient lighting/CFLs	10%	12%	8%	9%	11%	11%	10%	10%
Cut back on/turn off television/computer/electronics	9%	10%	9%	7%	11%	9%	12%	11%
Seal windows/doors	7%	8%	6%	6%	7%	5%	7%	7%
Replace siding/doors/windows/equipment/appliances	6%	6%	7%	7%	7%	7%	6%	7%
Turn AC/heater down	4%	4%	3%	4%	4%	4%	3%	4%
Shorter showers	3%	3%	3%	5%	2%	5%	1%	2%
Adjust water heater temperature	3%	2%	4%	4%	3%	2%	3%	3%
Use fans	3%	2%	3%	2%	3%	5%	2%	3%

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Cut back on laundry	2%	3%	2%	2%	3%	6%	2%	3%
Cook less	2%	3%	1%	3%	3%	1%	2%	3%
Contact utility	2%	3%	1%	3%	1%	2%	1%	1%
Already doing everything we can	2%	2%	2%	3%	2%	2%	2%	2%
Wear more/less clothes/blankets depending on season	2%	3%	1%	3%	1%	3%	1%	1%
Other - water-related	2%	2%	2%	2%	2%	1%	2%	2%
Wash laundry in cold water	1%	1%	2%	2%	1%	1%	1%	1%
Line dry clothes	1%	1%	1%	2%	1%	3%	1%	1%
Insulation	1%	1%	2%	1%	2%	2%	1%	2%
Leave home to avoid having to heat/cool home	1%	2%	1%	1%	1%	3%	1%	1%
Install solar panels	1%	2%	0%	1%	1%	0%	2%	1%
CARE program	1%	1%	1%	1%	2%	0%	1%	2%
Use cheaper fuel source	1%	1%	2%	2%	0%	0%	0%	0%
Total (n)	660	383	277	268	238	131	259	236

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.

**Table 165: How Household Would Reduce Utility Bill (EN5) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How household would reduce utility bill</b>									
Turn off lights	29%	38%	46%	46%	33%	52%	27%	40%	21%
Use less electricity	19%	22%	25%	16%	20%	31%	29%	22%	6%
Unplug equipment not in use	10%	16%	23%	21%	18%	13%	14%	17%	19%
Don't use air conditioner	15%	13%	20%	15%	17%	11%	12%	17%	19%
Other	17%	17%	16%	10%	17%	14%	28%	17%	12%
Not use equipment during peak hours	12%	18%	11%	9%	11%	15%	7%	13%	17%
Adjust thermostat	14%	10%	11%	14%	15%	4%	13%	12%	10%
Close or open windows/blinds/curtains/doors	10%	14%	10%	10%	8%	8%	18%	11%	8%
Don't use the heater	9%	14%	8%	18%	12%	3%	3%	10%	16%
Buy energy efficient lighting/CFLs	7%	11%	13%	2%	9%	15%	10%	10%	13%
Cut back on/turn off television/computer/electronics	8%	6%	12%	13%	8%	14%	0%	9%	13%
Seal windows/doors	5%	6%	8%	5%	9%	4%	6%	7%	3%
Replace siding/doors/windows/equipment/appliances	7%	7%	5%	2%	5%	10%	3%	6%	6%
Turn AC/heater down	5%	1%	3%	1%	5%	3%	0%	4%	0%
Shorter showers	3%	4%	2%	0%	4%	0%	5%	3%	0%
Adjust water heater temperature	4%	3%	3%	0%	5%	0%	0%	3%	12%
Use fans	2%	3%	3%	1%	3%	0%	1%	2%	7%
Cut back on laundry	3%	5%	0%	9%	3%	3%	0%	3%	0%
Cook less	1%	0%	4%	10%	2%	5%	4%	2%	0%
Contact utility	2%	1%	3%	1%	2%	3%	0%	2%	0%

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Already doing everything we can	2%	4%	1%	4%	2%	0%	8%	2%	9%
Wear more/less clothes/blankets depending on season	3%	1%	1%	10%	3%	0%	0%	2%	4%
Other - water related	3%	0%	2%	0%	2%	4%	0%	2%	0%
Wash laundry in cold water	1%	2%	1%	0%	1%	1%	6%	1%	1%
Line dry clothes	3%	1%	0%	7%	2%	0%	0%	1%	2%
Insulation	2%	1%	0%	0%	1%	1%	9%	1%	0%
Leave home to avoid having to heat/cool home	1%	2%	1%	2%	1%	3%	0%	1%	8%
Install solar panels	2%	1%	0%	0%	1%	1%	0%	1%	2%
CARE program	0%	0%	2%	0%	1%	0%	0%	1%	3%
Use cheaper fuel source	0%	0%	1%	0%	1%	0%	0%	1%	0%
Total (n)	317	87	222	32	364	105	34	625	34

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.

**Table 166: How Household Would Reduce Utility Bill (EN5) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>How household would reduce utility bill</b>						
Turn off lights	26%	49%	18%	37%	49%	46%
Use less electricity	20%	16%	5%	22%	24%	24%
Unplug equipment not in use	14%	33%	29%	21%	14%	15%
Don't use air conditioner	20%	28%	0%	5%	18%	20%
Other	14%	23%	20%	18%	17%	17%
Not use equipment during peak hours	11%	16%	15%	7%	18%	14%
Adjust thermostat	18%	16%	6%	10%	9%	9%
Close or open windows/blinds/curtains/ doors	8%	12%	5%	8%	16%	12%
Don't use the heater	9%	6%	0%	19%	10%	8%
Buy energy efficient lighting/CFLs	5%	7%	32%	11%	17%	8%
Cut back on/turn off television/computer/ electronics	7%	28%	5%	7%	19%	4%
Seal windows/doors	11%	0%	5%	5%	6%	6%
Replace siding/doors/windows/ equipment/appliances	6%	8%	0%	8%	9%	3%
Turn AC/heater down	6%	3%	0%	0%	7%	2%
Shorter showers	3%	0%	0%	6%	3%	1%
Adjust water heater temperature	3%	6%	5%	3%	3%	2%
Use fans	3%	1%	0%	1%	3%	3%
Cut back on laundry	3%	2%	7%	1%	3%	3%
Cook less	2%	8%	0%	4%	0%	3%
Contact utility	3%	1%	0%	4%	1%	2%
Already doing everything we can	1%	0%	15%	3%	0%	3%
Wear more/less clothes/blankets depending on season	3%	0%	0%	1%	2%	1%
Other - water related	2%	0%	0%	1%	2%	2%

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Wash laundry in cold water	2%	3%	0%	2%	2%	0%
Line dry clothes	1%	0%	10%	2%	1%	1%
Insulation	2%	3%	0%	1%	1%	1%
Leave home to avoid having to heat/cool home	2%	0%	2%	1%	0%	1%
Install solar panels	2%	0%	0%	1%	0%	1%
CARE program	1%	0%	5%	0%	2%	1%
Use cheaper fuel source	2%	0%	0%	2%	0%	0%
Total (n)	177	36	20	99	161	167

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.



**Table 167: How Household Would Reduce Utility Bill (EN5) by ESA Participation Groups for California LI Population**

	Recent ESA Participant who Recalls Participation	ESA Participant who Does Not Recalls Participation	Not a Recent ESA Participant	Total
<b>How Household Would Reduce Utility Bill</b>				
Turn off lights	40%	39%	38%	39%
Use less electricity	24%	21%	21%	22%
Unplug equipment not in use	17%	22%	14%	17%
Don't use the air conditioner	23%	15%	16%	17%
Other	19%	14%	17%	17%
Not use equipment during peak hours	9%	14%	13%	13%
Adjust thermostat	13%	10%	13%	12%
Close or open windows/blinds/curtains/doors	12%	8%	12%	11%
Don't use the heater	13%	11%	9%	10%
Buy energy efficient lighting/cfls	9%	14%	8%	10%
Cut back on/turn off television/computer/electronics	11%	9%	9%	10%
Seal windows/doors	6%	8%	6%	7%
Replace siding/doors/windows/equipment/appliances	8%	5%	7%	6%
Turn ac/heater down	8%	3%	3%	4%
Shorter showers	2%	3%	3%	3%
Adjust water heater temperature	2%	2%	4%	3%
Use fans	4%	2%	3%	3%
Cut back on laundry	3%	3%	2%	2%
Cook less	3%	4%	1%	2%
Contact utility	3%	4%	1%	2%
Already doing everything we can	1%	3%	2%	2%
Wear more/less clothes/blankets depending on season	4%	2%	1%	2%
Other - water related	1%	2%	2%	2%

	<b>Recent ESA Participant who Recalls Participation</b>	<b>ESA Participant who Does Not Recalls Participation</b>	<b>Not a Recent ESA Participant</b>	<b>Total</b>
Wash laundry in cold water	2%	1%	2%	2%
Line dry clothes	2%	1%	1%	1%
Insulation	2%	0%	2%	1%
Leave home to avoid having to heat/cool home	1%	2%	1%	1%
Install solar panels	4%	1%	1%	1%
CARE program	0%	2%	1%	1%
Use cheaper fuel source	4%	0%	0%	1%
<b>Total (n)</b>	<b>113</b>	<b>270</b>	<b>277</b>	<b>660</b>

Source: 2013 CARE Participant Telephone Survey.

**Table 168: How Often Household Tries Reduce Utility Bill (EN6) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How often households try to reduce utility bill</b>								
Most or all of the time	77%	77%	77%	77%	80%	77%	78%	81%
Sometimes	20%	20%	21%	20%	19%	22%	20%	18%
Never	2%	3%	2%	4%	1%	1%	2%	1%
Total (n)	1,027	610	417	389	384	202	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 169: How Often Household Tries Reduce Utility Bill (EN6) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How often households try to reduce utility bill</b>									
Most or all of the time	79%	76%	75%	93%	84%	64%	62%	77%	82%
Sometimes	20%	20%	22%	6%	15%	33%	30%	20%	18%
Never	1%	4%	3%	2%	1%	3%	8%	3%	0%
Total (n)	483	136	359	42	532	212	49	977	49

Source: 2013 CARE Participant Telephone Survey.

**Table 170: How Often Household Tries Reduce Utility Bill (EN6) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>How often households try to reduce utility bill</b>						
Most or all of the time	79%	79%	81%	75%	76%	78%
Sometimes	19%	21%	19%	20%	22%	20%
Never	2%	0%	0%	5%	2%	2%
Total (n)	253	59	24	156	272	263

Source: 2013 CARE Participant Telephone Survey.

**Table 171: Reasons for Saving Energy (EN7) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Reasons for saving energy</b>								
Saving money	96%	96%	97%	96%	0%	0%	0%	0%
Protecting the environment	34%	28%	44%	34%	0%	0%	0%	0%
To avoid wasting energy	6%	8%	4%	6%	0%	0%	0%	0%
Other	5%	6%	3%	5%	0%	0%	0%	0%
For the benefit of future generations	4%	2%	6%	4%	0%	0%	0%	0%
Helping California lead the way on saving energy	3%	4%	0%	3%	0%	0%	0%	0%
Health	2%	3%	0%	2%	0%	0%	0%	0%
Reducing our dependence on foreign oil	0%	0%	0%	0%	0%	0%	0%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%
Total (n)	145	94	51	145	-	-	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.

**Table 172: Reasons for Saving Energy (EN7) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Reasons for saving energy</b>									
Saving money	95%	100%	96%	90%	96%	100%	94%	97%	91%
Protecting the environment	33%	31%	44%	10%	34%	43%	54%	34%	31%
To avoid wasting energy	5%	5%	8%	10%	5%	26%	0%	6%	5%
Other	6%	0%	4%	21%	6%	0%	6%	5%	5%
For the benefit of future generations	1%	10%	3%	0%	4%	0%	34%	4%	0%
Helping California lead the way on saving energy	1%	5%	3%	0%	2%	15%	0%	3%	0%
Health	1%	0%	0%	16%	2%	0%	0%	1%	5%
Reducing our dependence on foreign oil	0%	0%	0%	0%	0%	0%	0%	0%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total (n)	70	19	42	13	104	9	6	128	17

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.

**Table 173: Reasons for Saving Energy (EN7) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Reasons for saving energy</b>						
Saving money	95%	0%	75%	100%	0%	0%
Protecting the environment	29%	0%	46%	40%	0%	0%
To avoid wasting energy	8%	0%	0%	4%	0%	0%
Other	7%	0%	13%	1%	0%	0%
For the benefit of future generations	3%	0%	0%	5%	0%	0%
Helping California lead the way on saving energy	1%	0%	0%	6%	0%	0%
Health	2%	0%	0%	1%	0%	0%
Reducing our dependence on foreign oil	0%	0%	0%	0%	0%	0%
Refused	0%	0%	0%	0%	0%	0%
Total (n)	79	-	7	59	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.

**Table 174: Reasons for Difficulties in Saving Energy (EN8) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Reasons for difficulties in saving energy</b>								
No/none	58%	58%	58%	59%	55%	61%	57%	55%
We need to use the heat/air conditioner/appliances	8%	7%	10%	8%	11%	10%	8%	11%
Drafts/leaks	7%	8%	6%	9%	8%	1%	7%	8%
Some members of the household not interested or able	7%	6%	8%	6%	7%	9%	7%	7%
Other	6%	5%	7%	7%	3%	4%	6%	3%
Age and condition of the equipment/appliance/home	5%	6%	4%	5%	6%	1%	6%	6%
No money/LI	5%	5%	5%	5%	5%	5%	5%	5%
Weather/temperature/very hot/cold climate	4%	4%	4%	6%	4%	2%	4%	4%
Medical/health reasons	3%	4%	3%	2%	4%	5%	4%	4%
Lack of information/don't know how	3%	3%	2%	3%	3%	2%	3%	3%
Not able to control our usage	2%	3%	2%	3%	2%	3%	2%	2%
Insulation	1%	1%	1%	1%	1%	0%	2%	1%
Need for air conditioning	1%	1%	1%	0%	2%	0%	2%	2%
High cost of bills	0%	0%	0%	0%	0%	1%	0%	0%
Landlord	0%	0%	0%	0%	0%	0%	0%	1%
It's not a priority for us	0%	0%	0%	0%	0%	0%	0%	0%
We don't pay the bill, someone else pays it	0%	0%	0%	0%	0%	0%	0%	0%
<b>Total (n)</b>	<b>849</b>	<b>497</b>	<b>352</b>	<b>237</b>	<b>367</b>	<b>193</b>	<b>415</b>	<b>363</b>

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.

**Table 175: Reasons for Difficulties in Saving Energy (EN8) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Reasons for difficulties in saving energy</b>									
No/none	59%	53%	61%	35%	60%	66%	46%	58%	64%
We need to use the heat/air conditioner/appliances	10%	5%	8%	33%	7%	4%	16%	9%	2%
Drafts/leaks	3%	8%	8%	10%	10%	2%	0%	7%	6%
Some members of the household not interested or able	8%	10%	5%	13%	6%	7%	3%	7%	3%
Other	4%	12%	5%	6%	3%	10%	16%	6%	2%
Age and condition of the equipment/appliance/home	4%	8%	4%	2%	7%	2%	2%	5%	9%
No money/LI	5%	3%	5%	8%	6%	2%	6%	5%	9%
Weather/temperature/very hot/cold climate	8%	4%	2%	0%	3%	4%	12%	4%	5%
Medical/health reasons	3%	5%	3%	13%	4%	0%	6%	3%	14%
Lack of information/don't know how	3%	2%	3%	3%	3%	4%	2%	3%	2%
Not able to control our usage	2%	2%	2%	8%	1%	2%	7%	2%	0%
Insulation	1%	3%	1%	0%	2%	0%	0%	1%	0%
Need for air conditioning	1%	1%	2%	0%	1%	2%	0%	1%	0%
High cost of bills	1%	0%	0%	0%	0%	1%	0%	0%	0%
Landlord	0%	0%	1%	0%	0%	0%	0%	0%	0%
It's not a priority for us	1%	0%	0%	0%	0%	0%	0%	0%	0%
We don't pay the bill, someone else pays it	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total (n)	399	110	307	28	413	192	43	816	32

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.



**Table 176: Reasons for Difficulties in Saving Energy (EN8) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Reasons for difficulties in saving energy</b>						
No/none	54%	48%	71%	64%	57%	61%
We need to use the heat/air conditioner/appliances	12%	13%	0%	3%	7%	9%
Drafts/leaks	10%	11%	11%	8%	7%	3%
Some members of the household not interested or able	7%	8%	11%	3%	8%	8%
Other	4%	2%	0%	9%	9%	6%
Age and condition of the equipment/appliance/home	8%	10%	0%	3%	4%	4%
No money/LI	6%	2%	2%	7%	7%	2%
Weather/temperature/very hot/cold climate	8%	3%	6%	4%	1%	5%
Medical/health reasons	5%	7%	5%	1%	3%	3%
Lack of information/don't know how	4%	0%	0%	2%	3%	3%
Not able to control our usage	2%	2%	0%	5%	3%	1%
Insulation	1%	0%	0%	1%	1%	2%
Need for air conditioning	0%	3%	0%	0%	0%	3%
High cost of bills	0%	0%	0%	0%	1%	0%
Landlord	0%	0%	0%	0%	1%	0%
It's not a priority for us	0%	0%	0%	0%	0%	0%
We don't pay the bill, someone else pays it	0%	0%	0%	0%	0%	0%
Total (n)	168	59	16	94	258	254

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple mentions allowed.

## 8.2.4 ESA Barriers

**Table 177: Problems with Enrollment/Receiving Services (B1a) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Problems with enrollment/receiving services</b>								
Yes	25%	17%	33%	25%	29%	22%	25%	29%
No	75%	83%	67%	75%	71%	78%	75%	71%
Total (n)	847	497	350	230	372	194	419	368

Source: 2013 CARE Participant Telephone Survey.

Note: This question was added when the survey was already in the field, and has a slightly lower sample size as a result.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 178: Problems with Enrollment/Receiving Services (B1a) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Problems with enrollment/receiving services</b>									
Yes	25%	24%	27%	24%	26%	30%	16%	24%	43%
No	75%	76%	73%	76%	74%	70%	84%	76%	57%
Total (n)	395	113	304	29	413	191	40	816	30

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added when the survey was already in the field, and has a slightly lower sample size as a result.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 179: Problems with Enrollment/Receiving Services (B1a) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Problems with enrollment/receiving services</b>						
Yes	23%	28%	48%	27%	24%	25%
No	77%	72%	52%	73%	76%	75%
Total (n)	166	58	16	91	260	256

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added when the survey was already in the field, and has a slightly lower sample size as a result.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 180: Difficult Issues with Enrollment/Receiving Services (B1) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Difficult issues with enrollment/receiving services</b>								
Too hard to be home during the visits/taking off work	37%	29%	43%	33%	45%	33%	43%	46%
Having contractors in my home	23%	19%	25%	17%	21%	31%	26%	20%
Getting my landlord's permission	9%	12%	7%	7%	12%	11%	11%	12%
Enrolling/scheduling/signing up	7%	13%	3%	11%	3%	2%	3%	4%
Trusting contractors	5%	4%	6%	7%	3%	6%	3%	3%
Number of visits	2%	1%	3%	2%	3%	0%	3%	3%
Not worth the paperwork, having to find/provide income docs	2%	1%	2%	1%	3%	1%	2%	3%
Do not think I need it/will benefit	2%	2%	1%	0%	4%	2%	3%	4%
Installing the equipment	1%	1%	2%	3%	0%	0%	0%	0%
Dissatisfied with equipment or repairs	1%	3%	0%	2%	0%	3%	0%	0%
Trusting the utility reps	1%	3%	0%	3%	0%	0%	0%	0%
Have not heard of it/do not know enough	1%	1%	0%	1%	0%	0%	0%	0%
Dissatisfied with contractor/installation	0%	1%	0%	0%	0%	0%	0%	0%
Adjusting/getting used to the new equipment/repairs	0%	0%	0%	0%	0%	0%	0%	0%

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Proving I own my home	0%	1%	0%	1%	0%	0%	0%	0%
Providing my household's income	0%	0%	0%	0%	0%	0%	0%	0%
Other	8%	10%	8%	11%	7%	10%	6%	7%
Total (n)	269	120	149	120	99	44	103	97

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 181: Difficult Issues with Enrollment/Receiving Services (B1) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Difficult issues with enrollment/receiving services</b>									
Too hard to be home during the visits/taking off work	36%	47%	36%	22%	34%	54%	44%	37%	38%
Having contractors in my home	26%	19%	18%	40%	26%	15%	15%	23%	18%
Trusting contractors	12%	0%	4%	0%	5%	2%	4%	4%	20%
Enrolling/scheduling/signing up	8%	6%	7%	12%	8%	9%	0%	6%	17%
Number of visits	3%	6%	0%	0%	1%	4%	23%	2%	0%
Not worth the paperwork, having to find/provide income docs	3%	0%	2%	0%	1%	0%	0%	2%	0%
Installing the equipment	2%	0%	2%	0%	1%	1%	0%	1%	0%
Do not think i need it/will benefit	2%	0%	2%	0%	2%	0%	0%	2%	0%
Dissatisfied with contractor/installation	1%	0%	0%	0%	0%	0%	0%	0%	0%
Dissatisfied with equipment or repairs	1%	0%	1%	5%	1%	0%	0%	1%	3%
Trusting the utility reps	1%	0%	3%	0%	2%	0%	9%	2%	0%
Proving I own my home	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adjusting/getting used to the new equipment/repairs	0%	0%	0%	0%	0%	0%	0%	0%	0%
Getting my landlord's permission	0%	12%	14%	0%	8%	15%	5%	10%	0%
Providing my household's income	0%	0%	0%	0%	0%	0%	0%	0%	0%
Have not heard of it/do not know enough	0%	0%	1%	0%	0%	0%	0%	1%	0%
Other	5%	10%	9%	20%	9%	1%	0%	9%	3%

Total (n)	122	33	101	12	156	49	12	252	17
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Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 182: Difficult Issues with Enrollment/Receiving Services (B1) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Difficult issues with enrollment/receiving services</b>						
Too hard to be home during the visits/taking off work	43%	33%	48%	25%	41%	37%
Having contractors in my home	13%	24%	33%	19%	22%	36%
Enrolling/scheduling/signing up	8%	10%	0%	16%	5%	1%
Getting my landlord's permission	6%	14%	0%	8%	18%	6%
Trusting contractors	4%	9%	0%	12%	2%	4%
Number of visits	4%	0%	0%	1%	3%	3%
Installing the equipment	2%	0%	0%	3%	0%	0%
Trusting the utility reps	2%	0%	0%	4%	0%	0%
Not worth the paperwork, having to find/provide income docs	2%	0%	0%	1%	5%	0%
Have not heard of it/do not know enough	2%	0%	0%	0%	0%	0%
Proving I own my home	1%	0%	0%	0%	0%	0%
Dissatisfied with contractor/installation	0%	0%	0%	1%	0%	0%
Dissatisfied with equipment or repairs	0%	0%	6%	3%	1%	0%
Adjusting/getting used to the new equipment/repairs	0%	0%	0%	0%	0%	0%
Providing my household's income	0%	0%	0%	0%	0%	0%
Do not think I need it/will benefit	0%	7%	0%	0%	1%	5%
Other	13%	4%	13%	7%	3%	8%
Total (n)	68	14	10	51	65	61

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.



**Table 183: Difficulty in Obtaining Landlord Permission (B2C) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Difficulty in getting landlord's permission</b>								
Easy	53%	63%	42%	55%	51%	55%	51%	51%
Somewhat hard	25%	22%	27%	26%	25%	18%	25%	24%
Very hard	11%	7%	16%	9%	14%	15%	13%	14%
Don't know	11%	8%	15%	11%	11%	12%	11%	11%
Total (n)	457	253	204	168	148	114	173	146

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 184: Difficulty in Obtaining Landlord Permission (B2C) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Difficulty in getting landlord's permission</b>									
Easy	100%	63%	45%	85%	56%	45%	49%	53%	60%
Somewhat hard	0%	22%	27%	0%	22%	31%	26%	25%	17%
Very hard	0%	8%	14%	15%	13%	12%	7%	11%	11%
Don't know	0%	7%	14%	0%	10%	13%	18%	11%	11%
Total (n)	1	136	306	7	225	103	23	447	10

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 185: Difficulty in Obtaining Landlord Permission (B2C) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Difficulty in getting landlord's permission</b>						
Easy	58%	70%	74%	56%	52%	43%
Somewhat hard	24%	10%	0%	25%	24%	29%
Very hard	8%	15%	26%	7%	13%	15%
Don't know	11%	6%	0%	12%	11%	13%
Total (n)	94	22	4	84	146	107

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 186: Difficulty in Filling Out Application with Contractor (B2D) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Difficulty in filling out application with contractor</b>								
Easy	65%	68%	62%	65%	63%	64%	65%	63%
Somewhat hard	22%	21%	23%	18%	24%	24%	25%	25%
Very hard	8%	7%	10%	11%	8%	9%	6%	8%
Don't know	5%	4%	5%	6%	4%	4%	3%	4%
Total (n)	1,021	607	414	386	383	200	431	379

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 187: Difficulty in Filling Out Application with Contractor (B2D) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Difficulty in filling out application with contractor</b>									
Easy	69%	72%	57%	81%	66%	57%	57%	65%	73%
Somewhat hard	21%	18%	26%	8%	17%	34%	32%	22%	13%
Very hard	7%	6%	11%	4%	11%	5%	11%	8%	14%
Don't know	3%	4%	6%	7%	6%	5%	1%	5%	0%
Total (n)	480	134	358	42	528	213	47	971	49

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 188: Difficulty in Filling Out Application with Contractor (B2D) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Difficulty in filling out application with contractor</b>						
Easy	64%	73%	79%	66%	65%	63%
Somewhat hard	17%	17%	8%	20%	25%	27%
Very hard	13%	10%	9%	8%	5%	7%
Don't know	6%	0%	4%	6%	5%	3%
Total (n)	250	59	24	156	271	261

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 189: Difficulty in Being Home for Contractor Visits (B2E) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Difficulty in being home for contractor visits</b>								
Easy	65%	73%	55%	62%	66%	67%	66%	66%
Somewhat hard	25%	20%	31%	26%	23%	24%	24%	22%
Very hard	10%	7%	14%	11%	12%	9%	10%	12%
Total (n)	1,007	602	405	380	378	197	426	374

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 190: Difficulty in Being Home for Contractor Visits (B2E) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Difficulty in being home for contractor visits</b>									
Easy	64%	64%	63%	75%	66%	62%	66%	65%	56%
Somewhat hard	25%	26%	27%	22%	22%	31%	20%	25%	33%
Very hard	12%	10%	10%	3%	12%	7%	15%	10%	11%
Total (n)	474	133	351	42	526	206	46	957	49

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 191: Difficulty in Being Home for Contractor Visits (B2E) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Difficulty in being home for contractor visits</b>						
Easy	67%	70%	56%	59%	69%	62%
Somewhat hard	21%	21%	27%	33%	24%	26%
Very hard	12%	9%	17%	8%	8%	12%
Total (n)	248	58	24	152	267	258

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 192: Participant Difficulty in Getting Used to Equipment/Repairs (B2F) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Difficulty in getting used to equipment/repairs</b>								
Easy	89%	89%	0%	89%	0%	0%	0%	0%
Somewhat hard	0%	0%	0%	0%	0%	0%	0%	0%
Very hard	4%	4%	0%	4%	0%	0%	0%	0%
Don't know	8%	8%	0%	8%	0%	0%	0%	0%
Total (n)	36	36	-	36	-	-	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 193: Participant Difficulty in Getting Used to Equipment/Repairs (B2F) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Difficulty in getting used to equipment/repairs</b>									
Easy	87%	75%	100%	100%	86%	100%	100%	91%	80%
Somewhat hard	0%	0%	0%	0%	0%	0%	0%	0%	0%
Very hard	9%	0%	0%	0%	3%	0%	0%	2%	10%
Don't know	4%	25%	0%	0%	11%	0%	0%	7%	10%
Total (n)	23	4	6	3	25	1	2	26	10

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 194: Participant Difficulty in Getting Used to Equipment/Repairs (B2F) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Difficulty in getting used to equipment/repairs</b>						
Easy	87%	0%	50%	95%	0%	0%
Somewhat hard	0%	0%	0%	0%	0%	0%
Very hard	0%	0%	50%	5%	0%	0%
Don't know	13%	0%	0%	0%	0%	0%
Total (n)	21	-	2	13	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 195: Recent/Non-Participant Difficulty in Getting Used to Equipment/Repairs (B2G) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Difficulty in getting used to equipment/repairs</b>								
Easy	78%	82%	74%	78%	0%	0%	0%	0%
Somewhat hard	16%	15%	18%	16%	0%	0%	0%	0%
Very hard	6%	3%	9%	6%	0%	0%	0%	0%
Total (n)	110	57	53	110	-	-	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 196: Recent/Non-Participant Difficulty in Getting Used to Equipment/Repairs (B2G) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Difficulty in getting used to equipment/repairs</b>									
Easy	83%	83%	74%	93%	81%	61%	100%	77%	100%
Somewhat hard	11%	12%	19%	7%	14%	31%	0%	17%	0%
Very hard	6%	6%	6%	0%	5%	7%	0%	6%	0%
Total (n)	46	17	36	10	81	7	4	103	7

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 197: Participant in Getting Used to Equipment/Repairs (B2G) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Difficulty in getting used to equipment/repairs</b>						
Easy	82%	0%	100%	72%	0%	0%
Somewhat hard	10%	0%	0%	25%	0%	0%
Very hard	8%	0%	0%	2%	0%	0%
Total (n)	59	-	5	46	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.



**Table 198: Difficulty in Providing Income Documentation (B2A) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Difficulty in providing income documentation</b>								
Easy	75%	76%	73%	77%	72%	76%	72%	72%
Somewhat hard	15%	15%	15%	15%	15%	12%	16%	15%
Very hard	10%	9%	12%	8%	13%	12%	12%	13%
Total (n)	997	586	411	379	373	195	419	369

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 199: Difficulty in Providing Income Documentation (B2A) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Difficulty in providing income documentation</b>									
Easy	76%	80%	71%	89%	75%	76%	70%	75%	75%
Somewhat hard	13%	13%	17%	6%	12%	15%	21%	15%	12%
Very hard	11%	7%	12%	5%	13%	9%	10%	10%	13%
Total (n)	468	135	347	40	512	209	48	947	49

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 200: Difficulty in Providing Income Documentation (B2A) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Difficulty in providing income documentation</b>						
Easy	76%	81%	79%	79%	71%	73%
Somewhat hard	17%	7%	0%	15%	14%	17%
Very hard	8%	13%	21%	6%	15%	10%
Total (n)	247	55	23	152	265	255

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 201: Difficulty in Providing Ownership Documentation (B2B) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Difficulty in providing ownership documentation</b>								
Easy	80%	80%	80%	84%	78%	81%	76%	78%
Somewhat hard	13%	14%	12%	9%	13%	15%	16%	13%
Very hard	7%	6%	8%	7%	10%	4%	7%	10%
Total (n)	540	334	206	208	225	84	246	223

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 202: Difficulty in Providing Ownership Documentation (B2B) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Difficulty in providing ownership documentation</b>									
Easy	80%	0%	78%	84%	85%	63%	71%	80%	89%
Somewhat hard	13%	0%	16%	9%	7%	28%	9%	13%	6%
Very hard	7%	0%	6%	7%	7%	9%	20%	7%	5%
Total (n)	457	-	49	34	292	105	24	502	37

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 203: Difficulty in Providing Ownership Documentation (B2B) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Difficulty in providing ownership documentation</b>						
Easy	84%	69%	97%	81%	77%	78%
Somewhat hard	10%	18%	3%	7%	17%	16%
Very hard	6%	13%	0%	12%	6%	6%
Total (n)	149	36	19	68	119	149

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 204: Difficulty in Trusting Utility (B2H) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Difficulty in trusting utility</b>								
Easy	74%	79%	68%	77%	70%	78%	70%	70%
Somewhat hard	21%	18%	24%	19%	23%	18%	23%	23%
Very hard	6%	4%	8%	4%	7%	4%	8%	7%
Total (n)	998	593	405	379	371	198	417	367

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 205: Difficulty in Trusting Utility (B2H) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Difficulty in trusting utility</b>									
Easy	70%	79%	72%	81%	76%	72%	66%	74%	68%
Somewhat hard	23%	16%	22%	14%	17%	24%	25%	21%	25%
Very hard	7%	5%	5%	5%	6%	4%	9%	6%	7%
Total (n)	470	133	348	40	522	202	45	948	49

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 206: Difficulty in Trusting Utility (B2H) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Difficulty in trusting utility</b>						
Easy	78%	77%	69%	76%	69%	71%
Somewhat hard	19%	15%	27%	20%	24%	21%
Very hard	3%	8%	4%	4%	7%	8%
Total (n)	246	58	23	152	265	254

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 207: Difficulty in Trusting Contractor (B2I) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Difficulty in trusting contractor</b>								
Easy	53%	63%	42%	53%	53%	57%	52%	53%
Somewhat hard	36%	30%	42%	38%	33%	33%	34%	32%
Very hard	12%	7%	16%	9%	14%	10%	14%	14%
Total (n)	991	589	402	376	371	195	416	367

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 208: Difficulty in Trusting Contractor (B2I) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Difficulty in trusting contractor</b>									
Easy	44%	59%	54%	72%	55%	57%	35%	53%	49%
Somewhat hard	41%	33%	34%	22%	32%	35%	47%	35%	41%
Very hard	15%	8%	12%	6%	13%	7%	18%	12%	11%
Total (n)	473	134	336	41	515	200	46	942	48

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 209: Difficulty in Trusting Contractor (B2I) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Difficulty in trusting contractor</b>						
Easy	54%	63%	45%	53%	54%	49%
Somewhat hard	36%	20%	46%	40%	33%	37%
Very hard	9%	18%	9%	8%	13%	14%
Total (n)	247	58	24	149	261	252

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 210: Difficulty in Scheduling Appointments (B2J) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Difficulty in scheduling appointments</b>								
Easy	76%	80%	70%	76%	0%	0%	0%	0%
Somewhat hard	18%	17%	20%	18%	0%	0%	0%	0%
Very hard	6%	3%	10%	6%	0%	0%	0%	0%
Total (n)	145	93	52	145	-	-	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 211: Difficulty in Scheduling Appointments (B2J) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Difficulty in scheduling appointments</b>									
Easy	77%	71%	82%	90%	76%	80%	100%	75%	88%
Somewhat hard	16%	15%	18%	10%	18%	20%	0%	19%	6%
Very hard	8%	14%	0%	0%	6%	0%	0%	6%	6%
Total (n)	70	21	40	13	104	9	6	128	17

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 212: Difficulty in Scheduling Appointments (B2J) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Difficulty in scheduling appointments</b>						
Easy	76%	0%	67%	78%	0%	0%
Somewhat hard	16%	0%	16%	20%	0%	0%
Very hard	8%	0%	16%	2%	0%	0%
Total (n)	79	-	7	59	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 213: Recent Participant Reasons for New Refrigerators Being Not at All Helpful (EN3\_10) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Reasons for new refrigerators being not at all helpful <sup>1</sup></b>								
Work was not done properly/fix was not permanent	100%	100%	0%	0%	100%	0%	100%	100%
Total (n)	1	1	-	-	1	-	1	1

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question asked of recent participants who recall participating and said that the new refrigerator was not at all helpful.



**Table 214: Recent Participant Reasons for New Refrigerators Being Not at All Helpful (EN3\_10) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Reasons for new refrigerators being not at all helpful<sup>1</sup></b>									
Work was not done properly/fix was not permanent	100%	0%	0%	0%	0%	0%	0%	100%	0%
Total (n)	1	-	-	-	-	-	-	1	-

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question was asked of recent participants who recall participating and said the new refrigerator was not at all helpful.

**Table 215: Recent Participant Reasons for New Refrigerators Being Not at All Helpful (EN3\_10) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Reasons for new refrigerators being not at all helpful<sup>1</sup></b>						
Work was not done properly/fix was not permanent	0%	100%	0%	0%	0%	0%
Total (n)	-	1	-	-	-	-

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question was asked of recent participants who recall participating and said that repairs to broken or leaky windows, doors, walls, or floors were not at all helpful.

**Table 216: Recent Participant Reasons for Window/Door/Wall/Floor Repair Being Not at All Helpful (EN3\_11) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Reasons for window/door/wall/floor repair being not at all helpful <sup>1</sup></b>								
Other Reason	53%	53%	0%	0%	0%	100%	0%	0%
Don't Know	47%	47%	0%	100%	0%	0%	0%	0%
Total (n)	2	2	-	1	-	1	-	-

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question was asked of recent participants who recall participating and said that the repairs to broken or leaky windows, doors, walls, or floors were not at all helpful.

**Table 217: Recent Participant Reasons for Window/Door/Wall/Floor Repair Being Not at All Helpful (EN3\_11) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Reasons for window/door/wall/floor repair being not at all helpful <sup>1</sup></b>									
Other Reason	0%	100%	0%	0%	53%	0%	0%	100%	0%
Don't Know	100%	0%	0%	0%	47%	0%	0%	0%	100%
Total (n)	1	1	-	-	2	-	-	1	1

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question was asked of recent participants who recall participating and said the repairs to broken or leaky windows, doors, walls, or floors were not at all helpful.

**Table 218: Recent Participant Reasons for Window/Door/Wall/Floor Repair Being Not at All Helpful (EN3\_11) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Reasons for window/door/wall/floor repair being not at all helpful<sup>1</sup></b>						
Other Reason	0%	0%	0%	0%	100%	0%
Don't Know	100%	0%	0%	0%	0%	0%
Total (n)	1	-	-	-	1	-

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup> Note: Question was asked of recent participants who recall participating and said that the repairs to broken or leaky windows, doors, walls, or floors were not at all helpful.

**Table 219: Recent Participant Reasons for Efficient Light Bulbs/Fixtures Being Not at All Helpful (EN3\_12) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Reasons for efficient light bulbs/fixtures being not at all helpful<sup>1</sup></b>								
Does not work like my other equipment	71%	71%	0%	76%	50%	77%	50%	50%
Don't know	16%	16%	0%	24%	0%	0%	0%	0%
Didn't save energy/didn't make any difference	3%	3%	0%	0%	0%	23%	0%	0%
Work was not done properly/fix was not permanent	10%	10%	0%	0%	50%	0%	50%	50%
No work was done/nothing was replaced	16%	16%	0%	24%	0%	0%	0%	0%
Total (n)	6	6	-	2	2	2	2	2

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question was asked of recent participants who recall participating and said that the efficient light bulbs and fixtures were not at all helpful.

**Table 220: Recent Participant Reasons for Efficient Light Bulbs/Fixtures Being Not at All Helpful (EN3\_12) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Reasons for efficient light bulbs/ fixtures being not at all helpful <sup>1</sup></b>									
Does not work like my other equipment	0%	0%	77%	100%	33%	0%	0%	85%	0%
Don't know	63%	0%	0%	0%	57%	0%	0%	0%	100%
Didn't save energy/didn't make any difference	0%	0%	23%	0%	10%	0%	0%	3%	0%
Work was not done properly/fix was not permanent	37%	0%	0%	0%	0%	0%	0%	12%	0%
No work was done/nothing was replaced	63%	0%	0%	0%	57%	0%	0%	0%	100%
Total (n)	2	-	2	2	3	-	-	5	1

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question was asked of recent participants who recall participating and said that the efficient light bulbs and fixtures were not at all helpful.

**Table 221: Recent Participant Reasons for Efficient Light Bulbs/Fixtures Being Not at All Helpful (EN3\_12) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Reasons for efficient light bulbs/fixtures being not at all helpful <sup>1</sup></b>						
Does not work like my other equipment	100%	0%	0%	0%	100%	0%
Don't know	0%	0%	100%	0%	0%	0%
Didn't save energy/didn't make any difference	0%	0%	0%	0%	0%	100%
Work was not done properly/fix was not permanent	0%	100%	0%	0%	0%	0%
No work was done/nothing was replaced	0%	0%	100%	0%	0%	0%
Total (n)	1	1	1	-	2	1

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question was asked of recent participants who recall participating and said that the efficient light bulbs and fixtures were not at all helpful.

**Table 222: Recent Participant Reasons for Sealing Leaks Being Not at All Helpful (EN3\_2) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Reasons for sealing leaks being not at all helpful<sup>1</sup></b>								
Installation contractor did not teach how to use it	45%	45%	0%	76%	0%	0%	0%	0%
Other reason sealing leaks to reduce drafts was not at all helpful	8%	8%	0%	0%	0%	21%	0%	0%
Work was not done properly/fix was not permanent	32%	32%	0%	0%	0%	79%	0%	0%
No work was done/nothing was replaced	14%	14%	0%	24%	0%	0%	0%	0%
Total (n)	6	6	-	2	-	4	-	-

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question was asked of recent participants who recall participating and said that sealing leaks was not at all helpful.

**Table 223: Recent Participant Reasons for Sealing Leaks Being Not at All Helpful (EN3\_2) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Reasons for sealing leaks being not at all helpful<sup>1</sup></b>									
Installation contractor did not teach how to use it	0%	74%	0%	0%	45%	0%	0%	45%	0%
Other reason sealing leaks to reduce drafts was not at all helpful	0%	0%	77%	0%	8%	0%	0%	8%	0%
Work was not done properly/fix was not permanent	47%	26%	23%	0%	32%	0%	0%	32%	0%
No work was done/nothing was replaced	53%	0%	0%	0%	14%	0%	0%	14%	0%
Total (n)	2	2	2	-	6	-	-	6	-

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question was asked of recent participants who recall participating and said that sealing leaks was not at all helpful.

**Table 224: Recent Participant Reasons for Sealing Leaks Being Not at All Helpful (EN3\_2) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Reasons for sealing leaks being not at all helpful<sup>1</sup></b>						
Installation contractor did not teach how to use it	100%	0%	0%	0%	0%	0%
Other reason sealing leaks to reduce drafts was not at all helpful	0%	0%	0%	0%	23%	0%
Work was not done properly/fix was not permanent	0%	0%	0%	0%	77%	100%
No work was done/nothing was replaced	0%	0%	0%	100%	0%	0%
Total (n)	1	-	-	1	3	1

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question was asked of recent participants who recall participating and said that sealing leaks was not at all helpful.



**Table 225: Recent Participant Reasons for Energy-Saving Tips Being Not at All Helpful (EN3\_8) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Reasons for energy-saving tips being not at all helpful<sup>1</sup></b>								
Other reason	22%	22%	0%	33%	0%	83%	0%	0%
Don't Know	12%	12%	0%	33%	0%	0%	0%	0%
Didn't save energy/didn't make any difference	2%	2%	0%	0%	0%	17%	0%	0%
Work was not done properly/fix was not permanent	45%	45%	0%	0%	87%	0%	87%	87%
No work was done/nothing was replaced	30%	30%	0%	67%	13%	0%	13%	13%
Total (n)	8	8	-	3	3	2	3	3

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup> Note: Question was asked of recent participants who recall participating and said that the energy-saving tips were not at all helpful.

**Table 226: Recent Participant Reasons for Energy-Saving Tips Being Not at All Helpful (EN3\_8) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Reasons for energy savings tips being not at all helpful<sup>1</sup></b>									
Other reason	37%	0%	0%	0%	30%	0%	0%	25%	0%
Don't Know	20%	0%	0%	0%	30%	0%	0%	0%	100%
Didn't save energy/didn't make any difference	0%	0%	5%	0%	5%	0%	0%	2%	0%
Work was not done properly/fix was not permanent	12%	0%	95%	0%	18%	100%	0%	51%	0%
No work was done/nothing was replaced	51%	0%	0%	0%	47%	0%	100%	34%	0%
Total (n)	6	-	2	-	5	1	1	7	1

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup> Note: Question was asked of recent participants who recall participating and said that the energy-saving tips were not at all helpful.

**Table 227: Recent Participant Reasons for Energy-Saving Tips Being Not at All Helpful (EN3\_8) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Reasons for energy savings tips being not at all helpful<sup>1</sup></b>						
Other reason	0%	0%	0%	100%	19%	0%
Don't Know	50%	0%	0%	0%	0%	0%
Didn't save energy/didn't make any difference	0%	0%	0%	0%	0%	23%
Work was not done properly/fix was not permanent	0%	0%	0%	0%	81%	0%
No work was done/nothing was replaced	50%	0%	0%	100%	0%	77%
Total (n)	2	-	-	1	3	2

Source: 2013 CARE Participant Telephone Survey.

<sup>1</sup>Note: Question was asked of recent participants who recall participating and said that the energy-saving tips were not at all helpful.

## 8.2.5 WTP in ESA

**Table 228: Non-Participant Willingness (O2) to Sign Up for ESA by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Willingness to sign up for ESA</b>								
Not at all willing	29%	0%	29%	28%	33%	34%	29%	33%
Somewhat willing	35%	0%	35%	34%	34%	23%	37%	33%
Very willing	36%	0%	36%	38%	34%	43%	34%	34%
Total (n)	407	-	407	156	154	78	171	152

Source: 2013 CARE Participant Telephone Survey.

**Table 229: Non-Participant Willingness (O2) to Sign Up for ESA by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Willingness to sign up for ESA</b>									
Not at all willing	35%	19%	29%	24%	35%	18%	29%	29%	23%
Somewhat willing	32%	40%	37%	24%	29%	48%	41%	36%	27%
Very willing	33%	41%	34%	52%	36%	34%	30%	35%	49%
Total (n)	180	59	156	12	229	67	26	382	25

Source: 2013 CARE Participant Telephone Survey.

**Table 230: Non-Participant Willingness (O2) to Sign Up for ESA by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Willingness to sign up for ESA</b>						
Not at all willing	29%	21%	15%	28%	32%	30%
Somewhat willing	31%	22%	42%	37%	32%	43%
Very willing	41%	57%	43%	34%	36%	27%
Total (n)	100	26	12	58	112	99

Source: 2013 CARE Participant Telephone Survey.

**Table 231: Reasons for No Willingness to Sign Up for ESA (O2b\_opn) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Reasons for no willingness to sign up for ESA</b>								
Bad prior experience	6%	4%	7%	7%	6%	4%	5%	6%
Low energy bills	3%	2%	4%	0%	5%	13%	4%	5%
No need (appliances work fine)	11%	9%	12%	11%	9%	7%	12%	9%
No need (efficient home already)	21%	11%	27%	12%	28%	17%	27%	28%
No need (sufficient income)	2%	1%	3%	2%	3%	0%	2%	3%
No need (unknown)	7%	6%	7%	5%	5%	15%	7%	5%
Other/unknown	9%	15%	7%	13%	7%	10%	7%	7%
Planned relocation	8%	6%	9%	10%	10%	0%	8%	10%
Prefer DIY	7%	9%	5%	3%	4%	0%	9%	4%
Previous participant?	9%	20%	4%	15%	7%	8%	6%	7%
Previously contacted - rejected	4%	4%	4%	5%	4%	0%	4%	4%
Program time requirements (burden)	2%	3%	2%	0%	2%	0%	3%	2%
Skepticism/Outsiders unwelcome	9%	7%	10%	10%	7%	8%	8%	7%
Split incentive (Landlord)	23%	24%	23%	30%	23%	30%	19%	23%
Total (n)	189	86	132	54	87	39	96	87

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added when the survey was already in the field, and has a slightly lower sample size as a result.

**Table 232: Reasons for No Willingness to Sign Up for ESA (O2b\_opn) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Reasons for no willingness to sign up for ESA</b>									
Bad prior experience	5%	11%	5%	0%	4%	9%	0%	6%	0%
Low energy bills	4%	0%	4%	0%	5%	1%	5%	3%	13%
No need (appliances work fine)	13%	6%	10%	39%	13%	7%	12%	12%	0%
No need (efficient home already)	27%	12%	20%	34%	32%	6%	0%	22%	16%
No need (sufficient income)	3%	0%	2%	0%	3%	0%	0%	1%	18%
No need (unknown)	13%	0%	4%	18%	5%	7%	24%	7%	0%
Other/unknown	8%	3%	13%	0%	7%	23%	12%	10%	0%
Planned relocation	2%	18%	10%	0%	4%	10%	22%	8%	0%
Prefer DIY	14%	0%	3%	0%	5%	0%	16%	7%	0%
Previous participant?	9%	28%	3%	10%	8%	19%	0%	10%	0%
Previously contacted - rejected	4%	11%	2%	0%	1%	0%	0%	4%	0%
Program time requirements (burden)	3%	0%	2%	0%	0%	0%	0%	2%	0%
Skepticism/Outsiders unwelcome	20%	6%	1%	0%	8%	12%	5%	7%	64%
Split incentive (Landlord)	0%	28%	42%	0%	28%	20%	5%	22%	46%
<b>Total (n)</b>	<b>91</b>	<b>18</b>	<b>73</b>	<b>7</b>	<b>109</b>	<b>31</b>	<b>12</b>	<b>182</b>	<b>7</b>

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added when the survey was already in the field, and has a slightly lower sample size as a result.

**Table 233: Reasons for No Willingness to Sign Up for ESA (O2b\_opn) by Climate Zone for California LI Population**

	LI Eligible Population					
	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Reasons for no willingness to sign up for ESA</b>						
Bad prior experience	10%	0%	0%	4%	8%	4%
Low energy bills	0%	0%	24%	0%	5%	4%
No need (appliances work fine)	4%	6%	0%	18%	10%	14%
No need (efficient home already)	18%	26%	0%	4%	26%	29%
No need (sufficient income)	4%	5%	0%	0%	2%	2%
No need (unknown)	6%	0%	0%	3%	7%	10%
Other/unknown	13%	0%	0%	12%	9%	8%
Planned relocation	21%	0%	0%	5%	6%	6%
Prefer DIY	0%	0%	0%	6%	7%	11%
Previous participant?	12%	4%	0%	24%	7%	4%
Previously contacted - rejected	5%	0%	0%	4%	3%	5%
Program time requirements (burden)	0%	0%	0%	0%	3%	3%
Skepticism/Outsiders unwelcome	10%	22%	76%	2%	9%	5%
Split incentive (Landlord)	13%	44%	51%	40%	25%	15%
<b>Total (n)</b>	<b>33</b>	<b>10</b>	<b>3</b>	<b>24</b>	<b>63</b>	<b>56</b>

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added when the survey was already in the field, and has a slightly lower sample size as a result.



## 8.2.6 Energy Insecurity

**Table 234: Food/Medicine Cutbacks to Pay Utility Bill (I1e) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Cuts back on food and medicine to pay utility bill</b>								
A lot	10%	12%	8%	10%	12%	13%	10%	12%
Sometimes	43%	44%	42%	40%	46%	36%	46%	45%
Never/No	47%	44%	50%	50%	42%	51%	44%	43%
Total (n)	1,020	605	415	387	381	200	429	377

Source: 2013 CARE Participant Telephone Survey.

**Table 235: Food/Medicine Cutbacks to Pay Utility Bill (I1e) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Cuts back on food and medicine to pay utility bill</b>									
A lot	10%	8%	11%	20%	11%	9%	16%	10%	11%
Sometimes	37%	53%	42%	44%	37%	47%	40%	43%	39%
Never/No	53%	38%	48%	35%	51%	44%	43%	47%	51%
Total (n)	480	134	357	42	528	210	49	970	49

Source: 2013 CARE Participant Telephone Survey.

**Table 236: Food/Medicine Cutbacks to Pay Utility Bill (I1e) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Cuts back on food and medicine to pay utility bill</b>						
A lot	12%	10%	10%	8%	11%	10%
Sometimes	44%	57%	39%	36%	47%	39%
Never/No	44%	33%	51%	56%	42%	51%
Total (n)	253	57	24	154	270	262

Source: 2013 CARE Participant Telephone Survey.

**Table 237: Borrows Money to Pay Utility Bill (I1f) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Borrows money to pay utility bill</b>								
A lot	3%	4%	2%	3%	2%	6%	2%	3%
Sometimes	30%	31%	30%	28%	34%	23%	33%	33%
Never/No	67%	66%	68%	69%	64%	71%	65%	65%
Total (n)	1,025	608	417	387	384	203	431	380

Source: 2013 CARE Participant Telephone Survey.

**Table 238: Borrows Money to Pay Utility Bill (I1f) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Borrows money to pay utility bill</b>									
A lot	4%	2%	2%	10%	3%	2%	3%	3%	0%
Sometimes	24%	35%	34%	37%	23%	40%	32%	31%	17%
Never/No	72%	63%	64%	53%	74%	59%	65%	66%	83%
Total (n)	482	136	358	42	531	213	48	975	49

Source: 2013 CARE Participant Telephone Survey.

**Table 239: Borrows Money to Pay Utility Bill (I1f) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Borrows money to pay utility bill</b>						
A lot	2%	1%	2%	4%	3%	3%
Sometimes	29%	34%	17%	28%	38%	26%
Never/No	68%	66%	82%	68%	59%	72%
Total (n)	252	59	24	155	273	262

Source: 2013 CARE Participant Telephone Survey.

**Table 240: Disconnection Messages (I1g) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Gets disconnection messages</b>								
A lot	4%	5%	4%	3%	4%	5%	5%	4%
Sometimes	26%	27%	25%	24%	28%	24%	27%	28%
Never/No	70%	68%	71%	72%	68%	71%	68%	69%
Total (n)	1,023	607	416	385	384	202	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 241: Disconnection Messages (I1g) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Gets disconnection messages</b>									
A lot	5%	3%	4%	12%	5%	3%	5%	4%	5%
Sometimes	21%	33%	26%	29%	25%	32%	16%	26%	26%
Never/No	74%	64%	70%	59%	70%	66%	79%	70%	69%
Total (n)	482	136	357	42	528	213	48	973	49

Source: 2013 CARE Participant Telephone Survey.

**Table 242: Disconnection Messages (I1g) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Gets disconnection messages</b>						
A lot	4%	1%	10%	2%	8%	4%
Sometimes	21%	24%	31%	30%	32%	23%
Never/No	75%	76%	59%	68%	60%	73%
Total (n)	251	59	24	154	272	263

Source: 2013 CARE Participant Telephone Survey.

**Table 243: Service Shut-Offs (I1h) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Gets service shut-offs</b>								
A lot	0%	0%	0%	0%	0%	0%	0%	0%
Sometimes	10%	9%	10%	9%	11%	6%	11%	11%
Never/No	90%	91%	90%	91%	88%	94%	89%	88%
Total (n)	1,023	608	415	385	384	202	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 244: Service Shut-Offs (I1h) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Gets service shut-offs</b>									
A lot	1%	0%	0%	0%	0%	1%	1%	0%	0%
Sometimes	8%	13%	10%	13%	8%	9%	3%	10%	10%
Never/No	92%	87%	90%	87%	92%	91%	96%	90%	90%
Total (n)	481	135	358	42	529	213	48	974	48

Source: 2013 CARE Participant Telephone Survey.

**Table 245: Service Shut-Offs (I1h) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Gets service shut-offs</b>						
A lot	0%	0%	2%	0%	0%	1%
Sometimes	8%	14%	20%	9%	11%	9%
Never/No	92%	86%	78%	91%	89%	91%
Total (n)	252	59	24	153	272	263

Source: 2013 CARE Participant Telephone Survey.

**Table 246: Less Heating/Cooling Use to Lower Bill (I1i) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Uses less heating/cooling to lower bill</b>								
A lot	28%	30%	26%	32%	28%	31%	24%	28%
Sometimes	45%	46%	43%	42%	46%	38%	48%	47%
Never/No	27%	24%	32%	26%	25%	31%	28%	25%
Total (n)	1,016	603	413	383	381	200	429	377

Source: 2013 CARE Participant Telephone Survey.

**Table 247: Less Heating/Cooling Use to Lower Bill (I1i) by Home Type, Language, Rural and Urban for California LI Population**

	LI Eligible Population								
	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Uses less heating/cooling to lower bill</b>									
A lot	27%	31%	27%	33%	27%	15%	42%	28%	37%
Sometimes	42%	43%	48%	38%	43%	53%	43%	45%	26%
Never/No	32%	26%	26%	29%	29%	31%	15%	27%	37%
Total (n)	478	134	356	42	526	212	48	966	49

Source: 2013 CARE Participant Telephone Survey.

**Table 248: Less Heating/Cooling Use to Lower Bill (I1i) by Climate Zone for California LI Population**

	LI Eligible Population					
	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Uses less heating/cooling to lower bill</b>						
A lot	31%	23%	21%	35%	26%	24%
Sometimes	47%	46%	41%	33%	43%	51%
Never/No	21%	30%	38%	32%	31%	26%
Total (n)	251	59	24	152	268	262

Source: 2013 CARE Participant Telephone Survey.

**Table 249: Use of Stove/Oven to Heat Home (I1j) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Uses stove/oven to heat home</b>								
A lot	4%	4%	4%	3%	4%	4%	5%	5%
Sometimes	11%	12%	10%	11%	8%	17%	11%	8%
Never/No	85%	84%	86%	87%	87%	79%	84%	87%
Total (n)	1,028	610	418	389	384	203	432	380

Source: 2013 CARE Participant Telephone Survey.



**Table 250: Use of Stove/Oven to Heat Home (I1j) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Uses stove/oven to heat home</b>									
A lot	2%	4%	6%	6%	4%	2%	10%	4%	0%
Sometimes	11%	13%	11%	19%	9%	10%	19%	11%	14%
Never/No	88%	83%	84%	75%	87%	88%	71%	85%	86%
Total (n)	483	136	360	42	532	213	49	978	49

Source: 2013 CARE Participant Telephone Survey.

**Table 251: Use of Stove/Oven to Heat Home (I1j) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Uses stove/oven to heat home</b>						
A lot	2%	4%	0%	4%	8%	4%
Sometimes	9%	1%	20%	12%	11%	14%
Never/No	89%	95%	80%	85%	81%	82%
Total (n)	253	59	24	156	273	263

Source: 2013 CARE Participant Telephone Survey.

**Table 252: Reasons for Use of Stove/Oven to Heat Home (I1\_b) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Reasons for stove/oven to heat home</b>								
Furnace does not work	41%	38%	50%	41%	0%	0%	0%	0%
Don't have another heating source	4%	5%	0%	4%	0%	0%	0%	0%
Home is too cold	13%	5%	50%	13%	0%	0%	0%	0%
Think it is more efficient than heating the whole house	4%	5%	0%	4%	0%	0%	0%	0%
Other	4%	5%	0%	4%	0%	0%	0%	0%
Power outage	4%	5%	0%	4%	0%	0%	0%	0%
Insufficient heating	4%	5%	0%	4%	0%	0%	0%	0%
Instead of heater when also cooking	4%	5%	0%	4%	0%	0%	0%	0%
Saves money vs. heater	25%	30%	0%	25%	0%	0%	0%	0%
<b>Total (n)</b>	<b>13</b>	<b>11</b>	<b>2</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample as a result.

**Table 253: Reasons for Use of Stove/Oven to Heat Home (I1\_b) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Reasons for stove/oven to heat home</b>									
Furnace does not work	17%	100%	31%	43%	40%	0%	0%	41%	0%
Don't have another heating source	17%	0%	0%	0%	0%	0%	0%	4%	0%
Home is too cold	0%	0%	31%	14%	20%	0%	0%	13%	0%
Think it is more efficient than heating the whole house	17%	0%	0%	0%	6%	0%	0%	4%	0%
Other	17%	0%	0%	0%	0%	100%	0%	4%	0%
Power outage	17%	0%	0%	0%	6%	0%	0%	4%	0%
Insufficient heating	17%	0%	0%	0%	6%	0%	0%	4%	0%
Instead of heater when also cooking	17%	0%	0%	0%	6%	0%	0%	4%	0%
Saves money vs. heater	0%	0%	38%	43%	20%	0%	0%	25%	0%
<b>Total (n)</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>13</b>	<b>0</b>

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample as a result.

**Table 254: Reasons for Use of Stove/Oven to Heat Home (I1\_b) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Reasons for stove/oven to heat home</b>						
Furnace does not work	35%	0%	0%	51%	0%	0%
Don't have another heating source	0%	0%	0%	12%	0%	0%
Home is too cold	21%	0%	0%	0%	0%	0%
Think it is more efficient than heating the whole house	0%	0%	0%	12%	0%	0%
Other	0%	0%	0%	12%	0%	0%
Power outage	0%	0%	0%	12%	0%	0%
Insufficient heating	0%	0%	0%	12%	0%	0%
Instead of heater when also cooking	7%	0%	0%	0%	0%	0%
Saves money vs. heater	38%	0%	0%	0%	0%	0%
Total (n)	7	0	0	6	0	0

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample as a result.

**Table 255: Energy Insecurity Summary (I1e, I1f, I1g, I1h, I1i, I1j) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Energy insecurity summary</b>								
High insecurity	6%	7%	4%	5%	6%	7%	6%	5%
Medium insecurity	37%	41%	33%	41%	39%	39%	34%	39%
Low insecurity	57%	52%	63%	54%	55%	55%	60%	55%
Total (n)	1,028	610	418	389	384	203	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 256: Energy Insecurity Summary (I1e, I1f, I1g, I1h, I1i, I1j) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Energy insecurity summary</b>									
High insecurity	5%	7%	6%	6%	6%	3%	10%	6%	3%
Medium insecurity	35%	39%	37%	37%	35%	29%	48%	37%	42%
Low insecurity	60%	55%	57%	57%	59%	68%	42%	57%	55%
Total (n)	483	136	360	42	532	213	49	978	49

Source: 2013 CARE Participant Telephone Survey.

**Table 257: Energy Insecurity (I1e, I1f, I1g, I1h, I1i, I1j) Summary by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Energy insecurity summary</b>						
High insecurity	5%	3%	3%	4%	9%	6%
Medium insecurity	39%	34%	36%	42%	36%	32%
Low insecurity	55%	63%	61%	53%	55%	62%
Total (n)	253	59	24	156	273	263

Source: 2013 CARE Participant Telephone Survey.

## 8.2.7 NEBs

**Table 258: Recent Participant Decrease in Electric/Gas Bill (PB8a) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Decrease in electric/gas bill</b>								
A lot	23%	23%	0%	22%	27%	23%	23%	27%
Somewhat	58%	58%	0%	54%	64%	41%	70%	64%
No change/No	18%	18%	0%	22%	9%	36%	7%	9%
Bills have gone up	1%	1%	0%	2%	0%	0%	0%	0%
Total (n)	157	157	-	62	54	37	58	54

Source: 2013 CARE Participant Telephone Survey.

**Table 259: Recent Participant Decrease in Electric/Gas Bill (PB8a) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Decrease in electric/gas bill</b>									
A lot	20%	9%	28%	0%	23%	14%	8%	23%	19%
Somewhat	60%	70%	56%	45%	51%	81%	77%	60%	34%
No change/No	18%	21%	16%	44%	24%	4%	14%	17%	28%
Bills have gone up	1%	0%	0%	11%	2%	0%	0%	0%	19%
Total (n)	90	20	37	7	87	19	8	146	11

Source: 2013 CARE Participant Telephone Survey.

**Table 260: Recent Participant Decrease in Electric/Gas Bill (PB8a) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Decrease in electric/gas bill</b>						
A lot	24%	63%	0%	25%	17%	12%
Somewhat	51%	31%	61%	56%	59%	80%
No change/No	23%	6%	39%	16%	24%	7%
Bills have gone up	2%	0%	0%	3%	0%	0%
Total (n)	43	11	3	22	45	33

Source: 2013 CARE Participant Telephone Survey.

**Table 261: Non-Recent Participant/Recent Participant Change in Comfort from Temperature (PB8b) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Increase in comfort in terms of temperature</b>								
A lot	37%	37%	0%	26%	45%	37%	48%	45%
Somewhat	28%	28%	0%	33%	25%	24%	24%	25%
No change/No	35%	35%	0%	41%	30%	39%	28%	30%
Total (n)	158	158	-	63	54	37	58	54

Source: 2013 CARE Participant Telephone Survey.

**Table 262: Non-Recent Participant/Recent Participant Change in Comfort from Temperature (PB8b) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Increase in comfort in terms of temperature</b>									
A lot	32%	36%	36%	25%	29%	59%	26%	38%	10%
Somewhat	37%	41%	15%	25%	30%	23%	49%	28%	27%
No change/No	32%	23%	48%	50%	40%	18%	25%	34%	63%
Total (n)	91	20	38	6	86	19	9	148	10

Source: 2013 CARE Participant Telephone Survey.

**Table 263: Non-Recent Participant/Recent Participant Change in Comfort from Temperature (PB8b) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Increase in comfort in terms of temperature</b>						
A lot	30%	59%	39%	28%	46%	34%
Somewhat	37%	14%	23%	24%	19%	36%
No change/No	34%	27%	39%	48%	35%	29%
Total (n)	44	11	3	22	44	34

Source: 2013 CARE Participant Telephone Survey.



**Table 264: Non-Recent Participant/Recent Participant Change in Illnesses (PB8c) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Decrease in illness</b>								
A lot	20%	20%	0%	9%	31%	15%	35%	31%
Somewhat	24%	24%	0%	27%	22%	18%	22%	22%
No change/No	56%	56%	0%	64%	47%	68%	43%	47%
Total (n)	156	156	-	64	53	36	56	53

Source: 2013 CARE Participant Telephone Survey.

**Table 265: Non-Recent Participant/Recent Participant Change in Illnesses (PB8c) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Decrease in illness</b>									
A lot	11%	29%	29%	23%	16%	36%	0%	21%	9%
Somewhat	26%	30%	18%	0%	26%	32%	19%	25%	9%
No change/No	63%	41%	53%	77%	58%	32%	81%	55%	81%
Total (n)	89	20	37	7	85	18	9	145	11

Source: 2013 CARE Participant Telephone Survey.

**Table 266: Non-Recent Participant/Recent Participant Change in Illnesses (PB8c) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Decrease in illness</b>						
A lot	5%	47%	39%	13%	33%	22%
Somewhat	40%	8%	0%	13%	23%	17%
No change/No	55%	45%	61%	74%	44%	61%
Total (n)	45	11	3	22	43	32

Source: 2013 CARE Participant Telephone Survey.

**Table 267: Non-Recent Participant/Recent Participant Change in Feelings of Household Safety (PB8e) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Increase in feelings of safety</b>								
A lot	42%	42%	0%	36%	47%	32%	52%	47%
Somewhat	22%	22%	0%	21%	23%	27%	23%	23%
No change/No	36%	36%	0%	43%	30%	41%	25%	30%
Total (n)	157	157	-	63	54	36	58	54

Source: 2013 CARE Participant Telephone Survey.

**Table 268: Non-Recent Participant/Recent Participant Change in Feelings of Household Safety (PB8e) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Increase in feelings of safety</b>									
A lot	43%	43%	37%	23%	32%	69%	26%	43%	28%
Somewhat	25%	18%	27%	22%	18%	31%	49%	22%	34%
No change/No	32%	39%	36%	55%	50%	0%	25%	36%	38%
Total (n)	90	20	37	7	86	19	9	146	11

Source: 2013 CARE Participant Telephone Survey.

**Table 269: Non-Recent Participant/Recent Participant Change in Feelings of Household Safety (PB8e) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Increase in feelings of safety</b>						
A lot	33%	59%	0%	43%	47%	44%
Somewhat	28%	31%	23%	13%	21%	22%
No change/No	39%	10%	77%	45%	32%	34%
Total (n)	44	11	3	22	43	34

Source: 2013 CARE Participant Telephone Survey.

**Table 270: Non-Recent Participant/Recent Participant Change in Water Usage (PB8f) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Decrease in water usage</b>								
A lot	22%	22%	0%	0%	0%	14%	49%	0%
Somewhat	32%	32%	0%	75%	0%	28%	15%	0%
No change/No	40%	40%	0%	25%	0%	47%	36%	0%
Don't know	6%	6%	0%	0%	0%	11%	0%	0%
Total (n)	39	39	-	5	-	30	4	-

Source: 2013 CARE Participant Telephone Survey.

**Table 271: Non-Recent Participant/Recent Participant Change in Water Usage (PB8f) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Decrease in water usage</b>									
A lot	16%	51%	4%	0%	14%	40%	0%	23%	0%
Somewhat	34%	24%	40%	0%	28%	27%	50%	33%	0%
No change/No	45%	16%	52%	100%	44%	33%	50%	38%	100%
Don't know	5%	8%	4%	0%	15%	0%	0%	6%	0%
Total (n)	16	7	15	1	21	6	2	38	1

Source: 2013 CARE Participant Telephone Survey.

**Table 272: Non-Recent Participant/Recent Participant Change in Water Usage (PB8f) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Decrease in water usage</b>						
A lot	0%	0%	0%	0%	36%	8%
Somewhat	33%	0%	0%	100%	22%	27%
No change/No	67%	100%	0%	0%	34%	59%
Don't know	0%	0%	0%	0%	8%	5%
Total (n)	3	1	-	2	21	12

Source: 2013 CARE Participant Telephone Survey.

**Table 273: Non-Recent Participant/Recent Participant Change in Ability to Save Energy (PB8g) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Change in ability to save energy by doing things around home</b>								
A lot	30%	30%	0%	25%	35%	32%	35%	35%
Somewhat	48%	48%	0%	45%	54%	33%	56%	54%
No change/No	22%	22%	0%	30%	12%	35%	10%	12%
Total (n)	157	157	-	62	54	37	58	54

Source: 2013 CARE Participant Telephone Survey.

**Table 274: Non-Recent Participant/Recent Participant Change in Ability to Save Energy (PB8g) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Change in ability to save energy by doing things around home</b>									
A lot	26%	12%	43%	0%	25%	47%	7%	30%	28%
Somewhat	47%	63%	40%	56%	49%	42%	56%	48%	43%
No change/No	27%	25%	17%	44%	26%	11%	37%	22%	28%
Total (n)	89	20	38	7	86	19	9	146	11

Source: 2013 CARE Participant Telephone Survey.

**Table 275: Non-Recent Participant/Recent Participant Change in Ability to Save Energy (PB8g) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Change in ability to save energy by doing things around home</b>						
A lot	27%	81%	39%	23%	25%	30%
Somewhat	48%	15%	23%	45%	51%	59%
No change/No	26%	4%	39%	33%	24%	11%
Total (n)	43	10	3	22	45	34

Source: 2013 CARE Participant Telephone Survey.

**Table 276: Non-Recent Participant/Recent Participant Level of Temperature Comfort (PB9a) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Comfort level of home temperature</b>								
Very comfortable	38%	34%	41%	41%	33%	39%	36%	33%
Somewhat comfortable	50%	52%	49%	48%	55%	49%	51%	55%
Not at all comfortable	12%	14%	10%	11%	12%	12%	13%	12%
Total (n)	859	448	411	322	326	163	370	322

Source: 2013 CARE Participant Telephone Survey.

**Table 277: Non-Recent Participant/Recent Participant Level of Temperature Comfort (PB9a) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Comfort level of home temperature</b>									
Very comfortable	41%	29%	40%	33%	46%	22%	43%	38%	31%
Somewhat comfortable	51%	52%	49%	53%	44%	62%	44%	50%	61%
Not at all comfortable	8%	19%	12%	14%	10%	16%	14%	12%	7%
Total (n)	389	114	317	35	442	192	39	820	38

Source: 2013 CARE Participant Telephone Survey.

**Table 278: Non-Recent Participant/Recent Participant Level of Temperature Comfort (PB9a) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Comfort level of home temperature</b>						
Very comfortable	39%	31%	34%	41%	37%	37%
Somewhat comfortable	52%	56%	57%	45%	50%	50%
Not at all comfortable	9%	14%	9%	14%	13%	13%
Total (n)	206	47	21	133	226	226

Source: 2013 CARE Participant Telephone Survey.

**Table 279: Non-Recent Participant/Recent Participant Level of Draftiness Comfort (PB9aa) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Comfort level of home in terms of draftiness</b>								
Very comfortable	40%	35%	43%	41%	38%	40%	39%	39%
Somewhat comfortable	49%	52%	46%	47%	50%	44%	50%	49%
Not at all comfortable	12%	14%	10%	12%	12%	16%	11%	12%
Total (n)	723	374	349	198	319	159	362	315

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample as a result.



**Table 280: Non-Recent Participant/Recent Participant Level of Draftiness Comfort (PB9aa) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Comfort level of home in terms of draftiness</b>									
Very comfortable	46%	29%	39%	48%	48%	29%	31%	39%	50%
Somewhat comfortable	44%	52%	52%	30%	41%	59%	53%	49%	44%
Not at all comfortable	10%	19%	9%	23%	11%	12%	16%	12%	6%
Total (n)	332	94	271	24	348	177	33	691	31

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample as a result.

**Table 281: Non-Recent Participant/Recent Participant Level of Draftiness Comfort (PB9aa) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Comfort level of home in terms of draftiness</b>						
Very comfortable	41%	47%	40%	41%	32%	43%
Somewhat comfortable	46%	47%	47%	47%	53%	47%
Not at all comfortable	13%	6%	13%	11%	14%	10%
Total (n)	138	45	16	80	221	223

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample as a result.

**Table 282: Non-Recent Participant/Recent Participant Level of Safety (PB9b) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Feelings of safety in home</b>								
Very safe	75%	71%	79%	75%	0%	0%	0%	0%
Somewhat safe	24%	27%	21%	24%	0%	0%	0%	0%
Not at all safe	1%	2%	0%	1%	0%	0%	0%	0%
Total (n)	115	60	55	115	-	-	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample as a result.

**Table 283: Non-Recent Participant/Recent Participant Level of Safety (PB9b) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Feelings of safety in home</b>									
Very safe	82%	83%	70%	71%	77%	67%	64%	74%	89%
Somewhat safe	18%	17%	27%	29%	23%	33%	36%	25%	11%
Not at all safe	0%	0%	3%	0%	0%	0%	0%	1%	0%
Total (n)	49	17	38	10	83	8	5	108	7

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample as a result.

**Table 284: Non-Recent Participant/Recent Participant Level of Safety (PB9b) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Feelings of safety in home</b>						
Very safe	75%	0%	78%	74%	0%	0%
Somewhat safe	22%	0%	22%	26%	0%	0%
Not at all safe	2%	0%	0%	0%	0%	0%
Total (n)	60	-	5	50	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample as a result.

**Table 285: Non-Recent Participant/Recent Participant Level of Safety from Window Condition (PB9c) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Feelings of safety from window condition</b>								
Very safe	53%	48%	58%	56%	49%	49%	53%	50%
Somewhat safe	40%	42%	38%	38%	43%	40%	41%	42%
Not at all safe	7%	10%	4%	6%	8%	10%	7%	8%
Total (n)	751	388	363	210	328	165	372	324

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample as a result.

**Table 286: Non-Recent Participant/Recent Participant Level of Safety from Window Condition (PB9c) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Feelings of safety from window condition</b>									
Very safe	58%	48%	53%	56%	59%	45%	58%	53%	66%
Somewhat safe	37%	46%	39%	28%	36%	47%	28%	40%	34%
Not at all safe	5%	6%	8%	16%	5%	9%	14%	7%	0%
Total (n)	341	99	283	25	360	185	35	719	31

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample as a result.

**Table 287: Non-Recent Participant/Recent Participant Level of Safety from Window Condition (PB9c) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Feelings of safety from window condition</b>						
Very safe	47%	50%	82%	63%	53%	53%
Somewhat safe	46%	50%	16%	30%	41%	39%
Not at all safe	7%	1%	2%	6%	7%	8%
Total (n)	148	48	16	84	227	228

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample as a result.

**Table 288: Non-Recent Participant/Recent Participant Level of Safety Using Heating/Cooling Equipment (PB9d) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Feelings of safety when using Heating/Cooling equipment</b>								
Very safe	48%	45%	50%	52%	45%	54%	45%	46%
Somewhat safe	44%	45%	43%	43%	46%	33%	46%	46%
Not at all safe	8%	10%	7%	4%	8%	13%	9%	9%
Total (n)	746	389	357	207	327	164	371	323

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample as a result.

**Table 289: Non-Recent Participant/Recent Participant Level of Safety Using Heating/Cooling Equipment (PB9d) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Feelings of safety when using heating/cooling equipment</b>									
Very safe	57%	35%	48%	38%	53%	41%	36%	47%	65%
Somewhat safe	36%	56%	43%	57%	40%	46%	58%	45%	29%
Not at all safe	7%	9%	9%	5%	6%	13%	7%	8%	6%
Total (n)	340	97	281	25	360	182	34	715	30

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample as a result.

**Table 290: Non-Recent Participant/Recent Participant Level of Safety Using Heating/Cooling Equipment (PB9d) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Feelings of safety when using heating/cooling equipment</b>						
Very safe	49%	46%	66%	50%	44%	48%
Somewhat safe	47%	45%	31%	44%	43%	44%
Not at all safe	4%	9%	2%	6%	13%	8%
Total (n)	146	46	16	83	228	227

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample as a result.

**Table 291: Level of Comfort and Safety\* (PB9a, PB9aa, PB9b, PB9c, PB9d) by Elderly in Home for California LI Population**

Health, Comfort or Safety Indicator		No Elderly Persons in Home	Elderly Persons in Home	Total (n)
Comfort level of home temperature	ESA Participant	89%	83%	448
	ESA Non-Participant	95%	86%	411
Comfort level in terms of draftiness	ESA Participant	90%	82%	374
	ESA Non-Participant	93%	87%	349
How safe respondent feels in home	ESA Participant	100%	94%	60
	ESA Non-Participant	100%	100%	55
In terms of window condition	ESA Participant	91%	88%	388
	ESA Non-Participant	98%	95%	363
In terms of heating and cooling equipment	ESA Participant	90%	90%	389
	ESA Non-Participant	96%	91%	357
Total (n)		385	470	-

Source: 2013 CARE Participant Telephone Survey.

\*Amongst ESA non-participants and participants that don't recall participation and responded "a lot" or "somewhat."

**Table 292: Level of Comfort and Safety\* (PB9a, PB9aa, PB9b, PB9c, PB9d) by Disabled Person(s) in Home for California LI Population**

Health, Comfort or Safety Indicator		No Disabled Person in Home	Disabled Person(s) in Home	Total (n)
Comfort level of home temperature	ESA Participant	86%	87%	448
	ESA Non-Participant	89%	90%	411
Comfort level in terms of draftiness	ESA Participant	86%	87%	374
	ESA Non-Participant	88%	92%	349
How safe respondent feels in home	ESA Participant	97%	100%	60
	ESA Non-Participant	100%	100%	55
In terms of window condition	ESA Participant	89%	90%	388
	ESA Non-Participant	95%	97%	363
In terms of heating and cooling equipment	ESA Participant	89%	94%	389
	ESA Non-Participant	91%	95%	357
Total (n)		325	514	-

Source: 2013 CARE Participant Telephone Survey.

\*Amongst ESA non-participants and participants that don't recall participation and responded "a lot" or "somewhat."



**Table 293: Level of Comfort and Safety by Child(ren) in Home\* (PB9a, PB9aa, PB9b, PB9c, PB9d)\* for California LI Population**

Health, Comfort or Safety Indicator		No Children in Home	Child(ren) in Home	Total (n)
Comfort level of home temperature	ESA Participant	80%	90%	448
	ESA Non-Participant	87%	92%	411
Comfort level in terms of draftiness	ESA Participant	81%	90%	374
	ESA Non-Participant	89%	91%	349
How safe respondent feels in home	ESA Participant	100%	96%	60
	ESA Non-Participant	100%	100%	55
In terms of window condition	ESA Participant	88%	91%	388
	ESA Non-Participant	97%	95%	363
In terms of heating and cooling equipment	ESA Participant	88%	92%	389
	ESA Non-Participant	91%	95%	357
Total (n)		508	348	-

Source: 2013 CARE Participant Telephone Survey.

\*Amongst ESA non-participants and participants that don't recall participation and responded "a lot" or "somewhat."

**Table 294: Usefulness of Things ESA Provides to Home Comfort/Safety ESA (EN1) by Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Most useful in the ESA program to help you improve household condition or safety</b>								
Don't know	21%	20%	22%	24%	22%	19%	20%	23%
Weather-stripping/reducing leaks or drafts	17%	15%	19%	19%	15%	17%	16%	14%
Doors/windows	11%	12%	10%	10%	12%	17%	11%	12%
Refrigerator	9%	10%	9%	9%	10%	7%	10%	10%
Air conditioning unit (central or window)	8%	8%	8%	8%	7%	4%	9%	7%
Nothing/Don't need anything done	6%	5%	8%	7%	6%	7%	5%	7%
Lower bill/assistance with bill	5%	5%	5%	4%	5%	2%	6%	5%
CFLs	4%	6%	3%	4%	4%	6%	5%	4%
Furnace	4%	4%	4%	5%	3%	1%	4%	3%
Other	2%	2%	2%	0%	2%	3%	1%	2%
Stove/oven	2%	3%	1%	1%	2%	2%	2%	2%
Energy information or service to save energy/be more comfortable	1%	2%	1%	2%	1%	3%	1%	1%
Repair of windows, doors	1%	2%	1%	1%	2%	1%	2%	2%
Up-to-date/energy efficient appliances	1%	1%	2%	1%	1%	3%	1%	1%
Evaporative cooler	1%	2%	0%	0%	3%	0%	2%	3%
Non-energy related response	1%	1%	1%	1%	0%	1%	1%	0%
Assessment	1%	0%	1%	1%	1%	1%	1%	1%

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Efficient lighting or compact fluorescent lamps and fixtures	1%	1%	0%	1%	0%	1%	0%	0%
Attic insulation	1%	0%	1%	1%	1%	1%	1%	1%
Solar panels	1%	0%	1%	1%	1%	1%	1%	1%
Water saving equipment (showerhead, aerators)	0%	1%	0%	0%	0%	0%	1%	0%
Water heater	0%	0%	0%	1%	0%	0%	0%	0%
Wiring	0%	0%	0%	1%	0%	1%	0%	0%
Repair/service of furnace	0%	0%	0%	0%	0%	1%	0%	0%
Efficient clothes washer	0%	0%	0%	0%	0%	1%	0%	0%
Other re-lamping	0%	0%	0%	0%	0%	0%	0%	0%
Microwave	0%	0%	0%	0%	0%	1%	0%	0%
Pool pump	0%	0%	0%	0%	0%	0%	0%	0%
Total (n)	1,028	610	418	376	384	203	432	380

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 295: Usefulness of Things ESA Provides to Home Comfort/Safety ESA (EN1) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Most useful in the ESA program to help you improve household condition or safety</b>									
Don't know	21%	22%	21%	15%	18%	26%	26%	21%	25%
Weather-stripping/reducing leaks or drafts	18%	20%	16%	12%	21%	13%	12%	17%	14%
Doors/windows	10%	14%	11%	16%	10%	7%	20%	11%	10%
Refrigerator	6%	10%	10%	17%	8%	13%	1%	9%	9%
Air conditioning unit (central or window)	7%	8%	8%	6%	7%	10%	11%	8%	3%
Nothing/Don't need anything done	7%	4%	6%	6%	7%	3%	8%	6%	12%
Lower bill/assistance with bill	4%	3%	6%	3%	4%	6%	0%	5%	1%
CFLs	4%	2%	7%	2%	4%	7%	2%	5%	1%
Furnace	4%	3%	4%	2%	5%	4%	0%	4%	4%
Other	3%	3%	2%	0%	2%	3%	3%	2%	2%
Stove/oven	1%	3%	2%	4%	3%	0%	1%	2%	0%
Energy information or service to save energy/be more comfortable	1%	1%	2%	6%	1%	0%	4%	1%	0%
Repair of windows, doors	2%	3%	0%	2%	1%	1%	0%	1%	0%
Up-to-date/energy efficient appliances	2%	0%	2%	0%	1%	1%	0%	1%	3%
Evaporative cooler	2%	1%	0%	6%	2%	1%	4%	1%	4%
Non-energy related response	2%	0%	1%	0%	1%	1%	1%	1%	0%
Assessment	1%	1%	1%	0%	1%	1%	2%	1%	0%
Efficient lighting or compact	1%	0%	1%	0%	1%	1%	1%	1%	3%

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
fluorescent lamps and fixtures									
Attic insulation	1%	1%	0%	0%	1%	0%	0%	0%	4%
Solar panels	2%	0%	0%	0%	0%	0%	3%	1%	1%
Water saving equipment (showerhead, aerators)	1%	0%	0%	4%	0%	1%	0%	0%	0%
Water heater	1%	0%	0%	0%	0%	1%	0%	0%	2%
Wiring	0%	0%	0%	1%	0%	0%	0%	0%	2%
Repair/service of furnace	1%	0%	0%	0%	0%	0%	0%	0%	0%
Efficient clothes washer	1%	0%	0%	0%	0%	0%	0%	0%	0%
Other re-lamping	0%	0%	0%	0%	0%	0%	0%	0%	0%
Microwave	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pool pump	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total (n)	483	136	360	42	532	213	49	978	49

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 296: Usefulness of Things ESA Provides to Home Comfort/Safety ESA (EN1) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Most useful in the ESA program to help you improve household condition or safety</b>						
Don't know	18%	14%	18%	27%	21%	20%
Weather-stripping/reducing leaks or drafts	17%	9%	19%	20%	19%	16%
Doors/windows	12%	12%	19%	8%	11%	12%
Refrigerator	9%	9%	4%	10%	10%	9%
Air conditioning unit (central or window)	12%	15%	6%	3%	2%	12%
Nothing/Don't need anything done	7%	7%	9%	7%	5%	5%
Lower bill/assistance with bill	3%	7%	5%	4%	7%	5%
CFLs	3%	7%	3%	4%	6%	5%
Furnace	2%	2%	9%	7%	5%	2%
Other	4%	4%	4%	1%	1%	2%
Stove/oven	1%	1%	0%	0%	5%	1%
Energy information or service to save energy/be more comfortable	3%	0%	0%	0%	2%	1%
Repair of windows, doors	1%	3%	0%	0%	1%	2%
Up-to-date/energy efficient appliances	0%	1%	4%	1%	2%	2%
Evaporative cooler	1%	5%	0%	0%	0%	2%
Non-energy related response	1%	0%	0%	0%	2%	0%
Assessment	1%	0%	0%	1%	1%	0%
Efficient lighting or compact fluorescent lamps and fixtures	1%	0%	0%	2%	1%	0%
Attic insulation	1%	1%	0%	0%	1%	1%
Solar panels	1%	1%	0%	0%	0%	1%
Water saving equipment (showerhead, aerators)	0%	1%	0%	0%	0%	1%
Water heater	0%	2%	0%	1%	0%	0%
Wiring	0%	0%	0%	1%	0%	0%
Repair/service of furnace	0%	0%	0%	0%	0%	0%

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Efficient clothes washer	0%	0%	0%	0%	0%	1%
Other re-lamping	0%	0%	0%	0%	0%	0%
Microwave	0%	0%	0%	0%	0%	0%
Pool pump	0%	0%	0%	0%	0%	0%
Total (n)	253	59	24	156	273	263

Source: 2013 CARE Participant Telephone Survey.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

## 8.2.8 Energy Efficiency Measures

**Table 297: Pool Pump Condition (EN11i) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How well pool pump working in home</b>								
Working well	78%	79%	76%	86%	72%	86%	71%	72%
In need of repair	16%	15%	17%	9%	20%	0%	23%	20%
Not working at all	6%	6%	6%	5%	8%	14%	6%	8%
Total (n)	103	58	45	38	45	15	50	45

Source: 2013 CARE Participant Telephone Survey.



**Table 298: Pool Pump Condition (EN11i) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How well pool pump working in home</b>									
Working well	77%	58%	88%	100%	88%	77%	100%	76%	100%
In need of repair	19%	33%	4%	0%	10%	11%	0%	17%	0%
Not working at all	4%	9%	8%	0%	2%	12%	0%	7%	0%
Total (n)	60	11	27	4	54	20	3	96	7

Source: 2013 CARE Participant Telephone Survey.

**Table 299: Pool Pump Condition (EN11i) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>How well pool pump working in home</b>								
Working well	86%	63%	100%	84%	78%	72%	79%	71%
In need of repair	14%	14%	0%	4%	19%	24%	14%	15%
Not working at all	0%	24%	0%	12%	4%	4%	7%	14%
Total (n)	28	10	3	13	16	33	55	19

Source: 2013 CARE Participant Telephone Survey.

**Table 300: Refrigerator Condition (EN11j) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How well refrigerator working in home</b>								
Working well	73%	66%	80%	75%	69%	73%	71%	69%
In need of repair	23%	27%	19%	21%	25%	26%	24%	25%
Not working at all	0%	1%	0%	0%	1%	1%	1%	1%
Received through program	4%	7%	1%	4%	5%	0%	4%	5%
Total (n)	1,020	607	413	381	384	203	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 301: Refrigerator Condition (EN11j) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How well refrigerator working in home</b>									
Working well	77%	68%	73%	65%	74%	74%	76%	73%	78%
In need of repair	19%	30%	21%	35%	21%	24%	15%	23%	19%
Not working at all	1%	0%	0%	0%	0%	1%	0%	1%	0%
Received through program	3%	2%	5%	0%	4%	1%	9%	4%	3%
Total (n)	482	135	354	42	526	213	48	970	49

Source: 2013 CARE Participant Telephone Survey.

**Table 302: Refrigerator Condition (EN11j) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>How well refrigerator working in home</b>								
Working well	71%	76%	71%	79%	67%	76%	72%	68%
In need of repair	26%	22%	29%	15%	27%	21%	25%	29%
Not working at all	0%	0%	0%	0%	1%	1%	0%	0%
Received through program	3%	1%	0%	6%	5%	2%	3%	3%
Total (n)	250	59	24	151	273	263	12	5

Source: 2013 CARE Participant Telephone Survey.

**Table 303: Clothes Dryer Condition (EN11L) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How well clothes dryer working in home</b>								
Working well	81%	79%	84%	86%	80%	79%	80%	80%
In need of repair	14%	16%	13%	13%	16%	16%	15%	16%
Not working at all	4%	5%	3%	1%	4%	5%	5%	4%
Total (n)	681	402	279	188	326	130	360	323

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 304: Clothes Dryer Condition (EN11L) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How well clothes dryer working in home</b>									
Working well	84%	75%	84%	75%	86%	78%	89%	81%	85%
In need of repair	14%	17%	13%	21%	12%	12%	11%	14%	13%
Not working at all	2%	9%	3%	3%	2%	11%	0%	4%	2%
Total (n)	395	104	150	26	339	156	27	649	31

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 305: Clothes Dryer Condition (EN11L) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>How well clothes dryer working in home</b>								
Working well	82%	83%	90%	87%	76%	83%	83%	77%
In need of repair	15%	16%	10%	11%	16%	14%	15%	20%
Not working at all	3%	1%	0%	2%	8%	3%	2%	3%
Total (n)	151	50	17	60	192	211	332	104

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 306: Dishwasher Condition (EN11m) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How well dishwasher working in home</b>								
Working well	70%	66%	73%	74%	69%	70%	67%	69%
In need of repair	16%	16%	17%	14%	16%	14%	19%	16%
Not working at all	14%	18%	10%	12%	15%	15%	15%	15%
Total (n)	445	235	210	135	196	96	212	194

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 307: Dishwasher Condition (EN11m) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How well dishwasher working in home</b>									
Working well	71%	55%	77%	69%	74%	51%	57%	70%	73%
In need of repair	12%	29%	13%	20%	17%	15%	16%	16%	20%
Not working at all	17%	17%	10%	10%	8%	33%	27%	14%	7%
Total (n)	237	52	133	18	253	69	24	427	18

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 308: Dishwasher Condition (EN11m) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>How well dishwasher working in home</b>								
Working well	75%	79%	76%	72%	66%	64%	72%	74%
In need of repair	16%	11%	24%	10%	18%	20%	17%	14%
Not working at all	9%	11%	0%	19%	16%	16%	10%	12%
Total (n)	102	43	10	48	114	128	240	79

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 309: Microwave Condition (EN11k\_2) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How well microwave working in home</b>								
Working well	82%	74%	91%	83%	82%	76%	83%	83%
In need of repair	14%	22%	6%	15%	13%	15%	13%	13%
Not working at all	3%	4%	3%	2%	5%	6%	4%	5%
Received through program	1%	1%	0%	1%	0%	3%	0%	0%
Total (n)	825	480	345	228	358	190	403	354

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 310: Microwave Condition (EN11k\_2) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How well microwave working in home</b>									
Working well	85%	75%	84%	95%	84%	79%	80%	82%	95%
In need of repair	11%	20%	13%	3%	13%	15%	18%	14%	5%
Not working at all	3%	4%	3%	2%	2%	6%	2%	3%	0%
Received through program	0%	1%	0%	0%	1%	0%	0%	1%	0%
Total (n)	390	110	292	27	403	188	41	792	32

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.



**Table 311: Microwave Condition (EN11k\_2) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>How well microwave working in home</b>								
Working well	80%	92%	95%	82%	82%	82%	83%	80%
In need of repair	16%	6%	5%	18%	11%	15%	13%	15%
Not working at all	4%	2%	0%	0%	6%	2%	3%	5%
Received through program	1%	0%	0%	0%	1%	0%	1%	0%
Total (n)	168	56	17	86	252	246	381	116

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 312: Oven/Stove Condition (EN11a) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How well oven/stove working in home</b>								
Working well	75%	69%	81%	77%	72%	78%	72%	73%
In need of repair	22%	27%	16%	20%	23%	21%	23%	23%
Not working at all	3%	4%	3%	3%	4%	1%	4%	5%
Total (n)	1,007	596	411	380	377	199	424	373

Source: 2013 CARE Participant Telephone Survey.

**Table 313: Oven/Stove Condition (EN11a) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How well oven/stove working in home</b>									
Working well	81%	73%	73%	76%	76%	74%	78%	74%	86%
In need of repair	18%	25%	23%	20%	22%	20%	19%	22%	13%
Not working at all	2%	2%	5%	3%	2%	6%	3%	3%	1%
Total (n)	478	133	348	42	524	208	46	958	48

Source: 2013 CARE Participant Telephone Survey.

**Table 314: Oven/Stove Condition (EN11a) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>How well oven/stove working in home</b>								
Working well	80%	87%	88%	70%	65%	77%	82%	77%
In need of repair	18%	13%	12%	25%	29%	20%	16%	22%
Not working at all	2%	0%	0%	5%	5%	3%	2%	2%
Total (n)	250	57	24	150	266	260	477	127

Source: 2013 CARE Participant Telephone Survey.

**Table 315: Door Condition (EN11e) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How well doors working in home</b>								
Working well	69%	72%	66%	71%	68%	71%	68%	69%
In need of repair	29%	26%	33%	27%	30%	28%	31%	29%
Not working at all	1%	2%	1%	1%	2%	0%	2%	2%
Total (n)	1,025	609	416	388	384	201	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 316: Door Condition (EN11e) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How well doors working in home</b>									
Working well	71%	65%	69%	61%	72%	67%	66%	69%	75%
In need of repair	27%	32%	30%	37%	27%	29%	34%	30%	25%
Not working at all	1%	3%	1%	2%	1%	3%	0%	2%	0%
Total (n)	480	136	360	42	531	213	48	975	49

Source: 2013 CARE Participant Telephone Survey.

**Table 317: Door Condition (EN11e) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>How well doors working in home</b>								
Working well	69%	65%	80%	72%	69%	67%	69%	65%
In need of repair	30%	34%	20%	26%	30%	30%	30%	35%
Not working at all	1%	1%	0%	1%	1%	3%	1%	0%
Total (n)	252	59	24	156	272	262	482	132

Source: 2013 CARE Participant Telephone Survey.

**Table 318: Window Condition (EN11f) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>How well windows working in home</b>								
Working well	63%	60%	66%	65%	65%	66%	61%	66%
In need of repair	35%	37%	33%	32%	33%	33%	37%	32%
Not working at all	2%	3%	2%	3%	2%	1%	2%	2%
Total (n)	1,022	608	414	387	381	203	428	377

Source: 2013 CARE Participant Telephone Survey.

**Table 319: Window Condition (EN11f) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>How well windows working in home</b>									
Working well	67%	55%	64%	49%	66%	63%	59%	62%	66%
In need of repair	31%	42%	34%	45%	32%	34%	41%	35%	28%
Not working at all	3%	3%	2%	6%	2%	3%	0%	2%	6%
Total (n)	480	134	358	42	532	211	49	973	48

Source: 2013 CARE Participant Telephone Survey.

**Table 320: Window Condition (EN11f) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>How windows working in home</b>								
Working well	64%	67%	49%	67%	61%	60%	63%	63%
In need of repair	32%	33%	42%	31%	37%	38%	34%	36%
Not working at all	4%	0%	9%	1%	3%	2%	3%	1%
Total (n)	250	57	24	156	273	262	478	128

Source: 2013 CARE Participant Telephone Survey.

**Table 321: Furnace/Heater More than 10 Years Old (EN11bb) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Furnace/heater more than 10 years old</b>								
Don't know	18%	10%	25%	22%	16%	13%	16%	16%
Yes	57%	66%	48%	50%	59%	60%	60%	58%
No	25%	24%	26%	27%	25%	26%	24%	25%
Received through program	0%	0%	0%	0%	0%	0%	0%	0%
Total (n)	807	473	334	219	363	179	406	360

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 322: Furnace/Heater More than 10 Years Old (EN11bb) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Furnace/heater more than 10 years old</b>									
Don't know	3%	28%	25%	2%	13%	22%	22%	18%	15%
Yes	63%	55%	53%	64%	59%	58%	58%	57%	55%
No	33%	17%	23%	34%	28%	20%	20%	25%	30%
Received through program	1%	0%	0%	0%	0%	0%	0%	0%	0%
Total (n)	387	108	279	27	394	188	38	781	25

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 323: Furnace/Heater More than 10 Years Old (EN11bb) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Furnace/heater more than 10 years old</b>								
Don't know	26%	15%	0%	17%	12%	18%	20%	18%
Yes	47%	53%	36%	58%	68%	56%	51%	53%
No	27%	32%	64%	25%	20%	26%	29%	29%
Received through program	0%	0%	0%	0%	1%	0%	0%	0%
Total (n)	164	56	12	86	247	242	371	114

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.



**Table 324: Central AC More than 10 Years Old (EN11cc) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Central AC more than 10 years old</b>								
Don't know	17%	11%	23%	20%	16%	17%	16%	16%
Yes	49%	54%	45%	46%	45%	56%	50%	45%
No	32%	31%	32%	35%	35%	28%	30%	35%
Received through program	2%	4%	0%	0%	4%	0%	3%	4%
Total (n)	475	268	207	141	235	76	258	235

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 325: Central AC More than 10 Years Old (EN11cc) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Central AC more than 10 years old</b>									
Don't know	1%	35%	24%	2%	13%	21%	23%	18%	8%
Yes	57%	46%	41%	76%	52%	48%	51%	49%	51%
No	41%	18%	32%	22%	33%	32%	27%	31%	40%
Received through program	1%	1%	3%	0%	2%	0%	0%	2%	0%
Total (n)	248	53	149	22	232	120	25	458	16

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 326: Central AC More than 10 Years Old (EN11cc) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Central AC more than 10 years old</b>								
Don't know	24%	14%	0%	5%	16%	15%	19%	21%
Yes	46%	41%	41%	50%	50%	54%	48%	44%
No	30%	25%	59%	45%	33%	31%	30%	25%
Received through program	0%	21%	0%	0%	0%	0%	3%	10%
Total (n)	145	44	9	23	97	157	295	96

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 327: Window/Room AC More than 10 Years Old (EN11dd) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Window/room AC more than 10 years old</b>								
Don't know	15%	15%	14%	27%	8%	21%	8%	8%
Yes	39%	43%	35%	45%	37%	41%	37%	37%
No	46%	42%	51%	27%	56%	38%	55%	55%
Received through program	0%	0%	0%	1%	0%	0%	0%	0%
Total (n)	324	205	119	74	156	70	179	155

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 328: Window/Room AC More than 10 Years Old (EN11dd) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Window/room AC more than 10 years old</b>									
Don't know	3%	21%	17%	23%	12%	22%	11%	15%	12%
Yes	46%	36%	33%	38%	47%	34%	66%	39%	47%
No	50%	42%	49%	38%	41%	44%	23%	46%	41%
Received through program	1%	0%	0%	0%	0%	0%	0%	0%	0%
Total (n)	147	49	116	9	126	104	17	311	12

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 329: Window/Room AC More than 10 Years Old (EN11dd) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Window/room AC more than 10 years old</b>								
Don't know	31%	11%	28%	11%	15%	5%	23%	23%
Yes	39%	29%	28%	60%	39%	37%	38%	29%
No	29%	59%	43%	30%	46%	58%	39%	48%
Received through program	1%	0%	0%	0%	0%	0%	0%	0%
Total (n)	65	19	8	22	96	114	152	43

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 330: Water Heater More than 10 Years Old (EN11gg) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Water heater more than 10 years old</b>								
Don't know	18%	18%	17%	22%	18%	23%	15%	18%
Yes	35%	41%	30%	34%	36%	35%	36%	36%
No	47%	40%	53%	44%	47%	42%	49%	46%
Total (n)	813	471	342	222	369	172	415	365

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 331: Water Heater More than 10 Years Old (EN11gg) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Water heater more than 10 years old</b>									
Don't know	8%	20%	26%	3%	14%	23%	19%	18%	14%
Yes	35%	41%	31%	51%	37%	36%	39%	36%	34%
No	57%	39%	44%	46%	49%	41%	42%	47%	52%
Total (n)	407	112	259	29	386	194	40	781	31

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 332: Water Heater More than 10 Years Old (EN11gg) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Water heater more than 10 years old</b>								
Don't know	25%	19%	9%	20%	18%	12%	21%	20%
Yes	36%	34%	39%	31%	37%	36%	35%	40%
No	39%	47%	53%	49%	45%	52%	45%	41%
Total (n)	167	57	17	82	242	248	378	117

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 333: Clothes Washer More than 10 Years Old (EN11hh) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Clothes washer more than 10 years old</b>								
Don't know	8%	6%	10%	8%	6%	10%	8%	6%
Yes	44%	49%	39%	43%	47%	35%	45%	46%
No	48%	45%	51%	49%	47%	54%	47%	48%
Total (n)	706	420	286	198	339	132	373	336

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 334: Clothes Washer More than 10 Years Old (EN11hh) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Clothes washer more than 10 years old</b>									
Don't know	3%	8%	16%	2%	7%	9%	5%	8%	10%
Yes	40%	48%	37%	70%	47%	41%	30%	43%	59%
No	57%	44%	46%	28%	46%	50%	65%	49%	30%
Total (n)	404	105	164	27	345	166	31	673	32

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 335: Clothes Washer More than 10 Years Old (EN11hh) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Clothes washer more than 10 years old</b>								
Don't know	7%	12%	4%	7%	11%	7%	8%	8%
Yes	43%	44%	62%	44%	41%	45%	43%	51%
No	50%	44%	34%	48%	48%	48%	49%	42%
Total (n)	153	53	17	68	195	220	341	109

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 336: Pool Pump More than 10 Years Old (EN11ii) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Pool pump more than 10 years old</b>								
Don't know	21%	18%	24%	24%	18%	48%	17%	18%
Yes	46%	45%	46%	48%	47%	36%	45%	47%
No	33%	37%	30%	27%	35%	17%	38%	35%
Total (n)	104	53	51	29	52	18	57	52

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.



**Table 337: Pool pump More than 10 Years Old (EN11ii) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Pool pump more than 10 years old</b>									
Don't know	4%	4%	42%	44%	19%	38%	0%	22%	0%
Yes	54%	59%	39%	0%	48%	37%	93%	46%	46%
No	42%	37%	19%	56%	33%	25%	7%	32%	54%
Total (n)	55	9	36	3	57	20	3	98	6

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 338: Pool Pump More than 10 Years Old (EN11ii) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Pool pump more than 10 years old</b>								
Don't know	0%	0%	0%	41%	56%	14%	5%	0%
Yes	60%	45%	0%	41%	26%	53%	55%	46%
No	40%	55%	100%	18%	18%	34%	40%	54%
Total (n)	19	12	3	13	22	35	50	20

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 339: Refrigerator More than 10 Years Old (EN11jj) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Refrigerator more than 10 years old</b>								
Don't know	9%	8%	11%	15%	5%	17%	5%	5%
Yes	41%	42%	39%	35%	45%	37%	44%	45%
No	45%	42%	49%	44%	44%	45%	46%	44%
Received through program	4%	8%	1%	6%	5%	0%	4%	5%
Total (n)	884	520	364	245	384	203	432	380

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 340: Refrigerator More than 10 Years Old (EN11jj) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Refrigerator more than 10 years old</b>									
Don't know	2%	8%	16%	11%	8%	9%	13%	10%	1%
Yes	48%	40%	34%	52%	42%	39%	26%	40%	53%
No	47%	49%	44%	37%	45%	51%	51%	45%	42%
Received through program	3%	2%	6%	0%	5%	1%	10%	4%	4%
Total (n)	417	115	317	29	429	204	42	849	34

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 341: Refrigerator More than 10 Years Old (EN11jj) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Refrigerator more than 10 years old</b>								
Don't know	14%	18%	0%	17%	5%	6%	12%	13%
Yes	43%	52%	41%	30%	40%	42%	43%	53%
No	39%	28%	59%	44%	49%	50%	42%	31%
Received through program	5%	1%	0%	9%	5%	2%	3%	3%
Total (n)	175	59	17	97	273	263	399	120

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 342: Clothes Dryer More than 10 Years Old (EN11LL) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Clothes dryer more than 10 years old</b>								
Don't know	9%	8%	10%	8%	6%	10%	9%	6%
Yes	49%	58%	40%	50%	52%	46%	49%	51%
No	42%	35%	49%	42%	42%	44%	42%	42%
Total (n)	683	403	280	188	327	131	361	324

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 343: Clothes Dryer More than 10 Years Old (EN11LL) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Clothes dryer more than 10 years old</b>									
Don't know	3%	9%	19%	2%	8%	8%	9%	9%	4%
Yes	47%	55%	38%	63%	50%	48%	36%	48%	72%
No	49%	37%	42%	35%	42%	45%	56%	43%	23%
Total (n)	395	105	151	26	340	157	27	651	31

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 344: Clothes Dryer More than 10 Years Old (EN11LL) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Clothes dryer more than 10 years old</b>								
Don't know	8%	9%	0%	8%	11%	10%	7%	8%
Yes	48%	49%	64%	58%	47%	47%	49%	54%
No	45%	42%	36%	35%	42%	43%	43%	38%
Total (n)	151	51	17	60	192	212	334	105

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 345: Dishwasher More than 10 Years Old (EN11mm) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Dishwasher more than 10 years old</b>								
Don't know	11%	8%	14%	17%	8%	13%	7%	8%
Yes	48%	55%	43%	44%	47%	43%	52%	47%
No	41%	38%	43%	39%	45%	43%	41%	44%
Total (n)	462	243	219	143	200	101	216	198

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 346: Dishwasher More than 10 Years Old (EN11mm) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Dishwasher more than 10 years old</b>									
Don't know	4%	20%	15%	5%	7%	20%	16%	11%	11%
Yes	51%	50%	39%	68%	44%	56%	60%	48%	39%
No	45%	29%	47%	27%	49%	24%	24%	40%	50%
Total (n)	243	54	142	18	260	75	26	444	18

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 347: Dishwasher More than 10 Years Old (EN11mm) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Dishwasher more than 10 years old</b>								
Don't know	21%	4%	0%	8%	9%	8%	14%	9%
Yes	46%	53%	33%	41%	48%	53%	49%	52%
No	32%	43%	67%	50%	43%	40%	37%	39%
Total (n)	109	45	10	49	116	133	253	82

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 348: AC Age (EN13) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Age of AC</b>								
Don't know	23%	25%	19%	23%	0%	0%	0%	0%
Less than one-year old	5%	5%	6%	5%	0%	0%	0%	0%
1 to 5 years old	15%	16%	14%	15%	0%	0%	0%	0%
6 to 10 years old	27%	21%	35%	27%	0%	0%	0%	0%
11 to 15 years old	15%	16%	14%	15%	0%	0%	0%	0%
16 or more years old	15%	17%	13%	15%	0%	0%	0%	0%
Total (n)	102	64	38	102	-	-	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 349: AC Age (EN13) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Age of AC</b>									
Don't know	14%	26%	29%	23%	26%	0%	0%	23%	20%
Less than one-year old	2%	6%	10%	0%	5%	0%	0%	6%	0%
1 to 5 years old	17%	13%	18%	8%	16%	28%	0%	16%	10%
6 to 10 years old	27%	29%	20%	39%	22%	34%	66%	25%	59%
11 to 15 years old	17%	13%	18%	0%	18%	26%	0%	16%	0%
16 or more years old	23%	13%	5%	31%	14%	12%	34%	15%	10%
Total (n)	50	16	27	9	75	5	6	94	8

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 350: AC Age (EN13) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Age of AC</b>								
Don't know	20%	0%	28%	31%	0%	0%	20%	12%
Less than one-year old	2%	0%	36%	14%	0%	0%	3%	12%
1 to 5 years old	17%	0%	0%	11%	0%	0%	17%	0%
6 to 10 years old	30%	0%	0%	18%	0%	0%	29%	29%
11 to 15 years old	17%	0%	0%	9%	0%	0%	17%	36%
16 or more years old	14%	0%	36%	18%	0%	0%	14%	12%
Total (n)	76	-	3	23	-	-	79	12

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 351: Main Refrigerator Age (EN12) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Age of main refrigerator</b>								
Don't know	8%	6%	12%	8%	0%	0%	0%	0%
Less than one-year old	9%	9%	8%	9%	0%	0%	0%	0%
1 to 5 years old	36%	38%	33%	36%	0%	0%	0%	0%
6 to 10 years old	33%	35%	29%	33%	0%	0%	0%	0%
11 to 15 years old	11%	10%	12%	11%	0%	0%	0%	0%
16 or more years old	3%	2%	5%	3%	0%	0%	0%	0%
Total (n)	150	95	55	150	-	-	-	-

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 352: Main Refrigerator Age (EN12) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Age of main refrigerator</b>									
Don't know	3%	5%	17%	0%	8%	12%	0%	9%	0%
Less than one-year old	8%	4%	11%	21%	9%	6%	0%	9%	5%
1 to 5 years old	33%	44%	40%	15%	36%	27%	74%	35%	45%
6 to 10 years old	38%	32%	20%	53%	32%	49%	21%	33%	31%
11 to 15 years old	13%	14%	8%	5%	12%	6%	0%	11%	14%
16 or more years old	5%	0%	3%	5%	4%	0%	6%	3%	5%
Total (n)	71	21	44	13	107	9	7	133	17

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.



**Table 353: Main Refrigerator Age (EN12) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Age of main refrigerator</b>								
Don't know	9%	0%	0%	8%	0%	0%	8%	14%
Less than one-year old	10%	0%	0%	7%	0%	0%	10%	0%
1 to 5 years old	41%	0%	29%	31%	0%	0%	40%	50%
6 to 10 years old	29%	0%	13%	39%	0%	0%	28%	22%
11 to 15 years old	7%	0%	25%	14%	0%	0%	8%	0%
16 or more years old	4%	0%	33%	0%	0%	0%	5%	14%
Total (n)	81	-	7	62	-	-	88	12

Source: 2013 CARE Participant Telephone Survey.

Note: this question was removed after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 354: Level of Helpfulness in Sealing Leaks to Reduce Draft (EN2b) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness - sealing leaks to reduce draft</b>								
Very helpful	55%	63%	48%	52%	58%	54%	57%	58%
Somewhat helpful	16%	15%	16%	14%	13%	16%	17%	12%
Not at all helpful/No	20%	14%	25%	25%	17%	25%	16%	17%
Not applicable - did not receive/do not need	9%	8%	10%	9%	13%	5%	10%	13%
Total (n)	897	484	413	337	326	183	373	322

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

**Table 355: Level of Helpfulness in Sealing Leaks to Reduce Draft (EN2b) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness - sealing leaks to reduce draft</b>									
Very helpful	47%	63%	57%	62%	46%	72%	51%	56%	27%
Somewhat helpful	19%	16%	14%	11%	11%	20%	18%	16%	20%
Not at all helpful/No	25%	17%	18%	15%	30%	4%	27%	19%	38%
Not applicable - did not receive/do not need	9%	4%	11%	12%	13%	3%	4%	9%	15%
Total (n)	408	122	326	36	462	197	45	858	38

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 356: Level of Helpfulness in Sealing Leaks to Reduce Draft (EN2b) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness - sealing leaks to reduce draft</b>								
Very helpful	55%	50%	30%	51%	60%	56%	53%	51%
Somewhat helpful	12%	11%	30%	15%	14%	21%	15%	13%
Not at all helpful/No	24%	31%	16%	26%	17%	14%	22%	28%
Not applicable - did not receive/do not need	9%	8%	24%	8%	9%	8%	10%	8%
Total (n)	217	47	21	137	241	234	414	109

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 357: Level of Helpfulness in AC Replacement (EN2c) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness in AC replacement</b>								
Very helpful	47%	51%	44%	41%	52%	43%	52%	51%
Somewhat helpful	12%	13%	11%	11%	13%	10%	13%	13%
Not at all helpful/No	19%	13%	25%	22%	18%	22%	17%	18%
Not applicable - did not receive/do not need	21%	24%	19%	26%	18%	26%	17%	18%
Total (n)	864	452	412	319	334	164	377	330

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 358: Level of Helpfulness in AC Replacement (EN2c) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness in AC replacement</b>									
Very helpful	42%	60%	43%	63%	39%	57%	62%	48%	39%
Somewhat helpful	12%	11%	13%	13%	10%	17%	11%	12%	11%
Not at all helpful/No	28%	10%	19%	14%	27%	10%	8%	19%	29%
Not applicable - did not receive/do not need	18%	20%	25%	10%	24%	16%	19%	21%	21%
<b>Total (n)</b>	<b>391</b>	<b>115</b>	<b>319</b>	<b>35</b>	<b>440</b>	<b>193</b>	<b>40</b>	<b>825</b>	<b>38</b>

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 359: Level of Helpfulness in AC Replacement (EN2c) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness in AC replacement</b>								
Very helpful	53%	56%	48%	29%	43%	55%	54%	60%
Somewhat helpful	16%	19%	9%	4%	13%	11%	15%	17%
Not at all helpful/No	20%	16%	11%	23%	18%	19%	19%	16%
Not applicable - did not receive/do not need	10%	8%	32%	44%	27%	15%	12%	7%
Total (n)	203	56	21	132	224	228	405	116

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 360: Level of Helpfulness in Receiving Showerhead/Faucet Restrictor (EN2d) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness in water saving showerheads/faucet restrictors</b>								
Very helpful	49%	59%	40%	47%	49%	57%	48%	49%
Somewhat helpful	18%	15%	20%	15%	18%	21%	19%	18%
Not at all helpful/No	23%	18%	26%	28%	19%	13%	20%	19%
Not applicable - did not receive/do not need	11%	8%	14%	11%	13%	9%	12%	14%
Total (n)	890	477	413	323	328	187	376	324

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 361: Level of Helpfulness in Receiving Showerhead/Faucet Restrictor (EN2d) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness in water saving showerheads/faucet restrictors</b>									
Very helpful	42%	56%	50%	48%	34%	74%	50%	50%	25%
Somewhat helpful	19%	12%	20%	9%	18%	17%	16%	18%	22%
Not at all helpful/No	25%	24%	19%	32%	33%	6%	25%	21%	47%
Not applicable - did not receive/do not need	13%	8%	11%	11%	16%	3%	9%	11%	7%
Total (n)	400	121	329	36	456	197	40	850	39

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.



**Table 362: Level of Helpfulness in Receiving Showerhead/Faucet Restrictor (EN2d) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness in water saving showerheads/faucet restrictors</b>								
Very helpful	47%	36%	19%	48%	54%	51%	43%	42%
Somewhat helpful	14%	18%	10%	18%	24%	16%	15%	19%
Not at all helpful/No	28%	27%	53%	23%	16%	20%	27%	28%
Not applicable - did not receive/do not need	11%	19%	18%	12%	7%	13%	15%	12%
Total (n)	207	48	21	132	245	237	408	109

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 363: Level of Helpfulness in Receiving Microwave (EN2e) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness in getting a microwave</b>								
Very helpful	38%	46%	32%	33%	43%	41%	41%	43%
Somewhat helpful	12%	13%	11%	15%	9%	11%	10%	9%
Not at all helpful/No	19%	13%	24%	21%	18%	18%	18%	18%
Not applicable - did not receive/do not need	31%	28%	33%	31%	30%	30%	31%	31%
Total (n)	870	452	418	324	330	168	374	326

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 364: Level of Helpfulness in Receiving Microwave (EN2e) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness in getting a microwave</b>									
Very helpful	29%	41%	43%	35%	26%	64%	40%	39%	13%
Somewhat helpful	13%	10%	11%	22%	10%	14%	18%	12%	14%
Not at all helpful/No	26%	19%	16%	8%	22%	16%	24%	20%	16%
Not applicable - did not receive/do not need	32%	30%	29%	34%	42%	6%	19%	30%	56%
Total (n)	392	117	322	35	446	194	40	831	38

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 365: Level of Helpfulness in Receiving Microwave (EN2e) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness in getting a microwave</b>								
Very helpful	35%	24%	13%	37%	46%	39%	33%	36%
Somewhat helpful	13%	10%	16%	15%	13%	8%	12%	8%
Not at all helpful/No	21%	28%	13%	19%	13%	23%	19%	20%
Not applicable - did not receive/do not need	32%	37%	58%	29%	28%	29%	36%	36%
Total (n)	208	48	21	133	229	231	404	110

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 366: Level of Helpfulness in Clothes Washer Replacement (EN2f) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness in clothes washer replacement</b>								
Very helpful	46%	50%	42%	43%	48%	44%	48%	47%
Somewhat helpful	12%	11%	13%	13%	13%	9%	11%	13%
Not at all helpful/No	23%	20%	25%	26%	21%	22%	20%	21%
Not applicable - did not receive/do not need	20%	19%	20%	18%	19%	24%	21%	19%
Total (n)	861	446	415	321	330	162	374	326

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 367: Level of Helpfulness in Clothes Washer Replacement (EN2f) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness in clothes washer replacement</b>									
Very helpful	46%	57%	39%	63%	38%	62%	30%	46%	36%
Somewhat helpful	18%	10%	9%	12%	10%	14%	15%	12%	18%
Not at all helpful/No	26%	25%	19%	16%	30%	12%	37%	22%	38%
Not applicable - did not receive/do not need	10%	8%	33%	10%	22%	12%	19%	20%	7%
Total (n)	388	115	319	35	440	194	39	823	37

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 368: Level of Helpfulness in Clothes Washer Replacement (EN2f) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness in clothes washer replacement</b>								
Very helpful	45%	45%	33%	41%	49%	47%	44%	46%
Somewhat helpful	12%	8%	27%	12%	15%	9%	12%	13%
Not at all helpful/No	28%	23%	26%	24%	17%	22%	25%	22%
Not applicable - did not receive/do not need	16%	23%	14%	24%	19%	22%	19%	19%
Total (n)	206	48	21	132	227	227	398	110

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 369: Level of Helpfulness in Water Heater Replacement (EN2g) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness in water heater replacement</b>								
Very helpful	47%	51%	44%	43%	48%	41%	51%	49%
Somewhat helpful	15%	15%	15%	16%	15%	15%	14%	15%
Not at all helpful/No	24%	21%	26%	27%	23%	25%	21%	23%
Not applicable - did not receive/do not need	14%	13%	15%	14%	13%	19%	14%	13%
Total (n)	841	435	406	312	324	157	368	320

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.



**Table 370: Level of Helpfulness in Water Heater Replacement (EN2g) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness in water heater replacement</b>									
Very helpful	42%	60%	44%	49%	36%	67%	46%	47%	36%
Somewhat helpful	18%	11%	16%	14%	14%	16%	16%	15%	20%
Not at all helpful/No	27%	16%	24%	34%	32%	13%	25%	23%	40%
Not applicable - did not receive/do not need	14%	14%	16%	3%	18%	5%	13%	15%	4%
Total (n)	387	112	304	34	428	190	39	802	38

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 371: Level of Helpfulness in Water Heater Replacement (EN2g) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness in water heater replacement</b>								
Very helpful	52%	38%	37%	37%	49%	50%	48%	56%
Somewhat helpful	12%	17%	15%	21%	15%	13%	13%	11%
Not at all helpful/No	20%	36%	36%	30%	20%	23%	24%	20%
Not applicable - did not receive/do not need	16%	10%	12%	13%	15%	14%	15%	13%
Total (n)	201	48	21	127	220	224	392	109

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 372: Level of Helpfulness of Safety/Comfort Information (EN2h) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness of information about things to do in home for safety/comfort</b>								
Very helpful	65%	71%	59%	60%	66%	58%	70%	66%
Somewhat helpful	26%	23%	29%	28%	26%	31%	24%	27%
Not at all helpful/No	9%	6%	11%	12%	7%	11%	5%	7%
Not applicable - did not receive/do not need	0%	0%	1%	0%	1%	0%	1%	1%
Total (n)	1,019	603	416	383	384	200	432	380

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 373: Level of Helpfulness of Safety/Comfort Information (EN2h) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness of information about things to do in home for safety/comfort</b>									
Very helpful	57%	73%	67%	53%	54%	88%	69%	66%	45%
Somewhat helpful	30%	22%	24%	31%	33%	10%	23%	26%	26%
Not at all helpful/No	12%	5%	8%	16%	13%	2%	8%	8%	28%
Not applicable - did not receive/do not need	0%	0%	1%	0%	1%	0%	0%	0%	0%
Total (n)	478	134	358	42	525	212	49	970	48

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 374: Level of Helpfulness of Safety/Comfort Information (EN2h) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness of information about things to do in home for safety/comfort</b>								
Very helpful	62%	68%	32%	63%	68%	69%	61%	69%
Somewhat helpful	27%	29%	26%	28%	25%	24%	28%	25%
Not at all helpful/No	11%	3%	42%	9%	6%	7%	10%	6%
Not applicable - did not receive/do not need	0%	0%	0%	1%	1%	0%	0%	0%
Total (n)	251	59	23	153	270	263	481	132

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 375: Level of Helpfulness in Refrigerator Replacement (EN2) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness in refrigerator replacement</b>								
Very helpful	57%	66%	50%	51%	60%	67%	60%	59%
Somewhat helpful	17%	18%	16%	20%	14%	16%	15%	14%
Not at all helpful/No	17%	12%	22%	22%	16%	12%	14%	16%
Not applicable - did not receive/do not need	9%	4%	12%	7%	10%	6%	11%	10%
Total (n)	629	311	318	251	259	86	289	256

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 376: Level of Helpfulness in Refrigerator Replacement (EN2) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness in refrigerator replacement</b>									
Very helpful	45%	69%	60%	59%	46%	73%	52%	57%	44%
Somewhat helpful	21%	10%	15%	16%	18%	19%	16%	17%	10%
Not at all helpful/No	24%	14%	15%	20%	25%	8%	22%	17%	40%
Not applicable - did not receive/do not need	10%	7%	10%	4%	11%	1%	10%	9%	6%
Total (n)	298	82	221	25	297	176	28	605	23

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 377: Level of Helpfulness in Refrigerator Replacement (EN2) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness in refrigerator replacement</b>								
Very helpful	49%	51%	50%	59%	60%	61%	51%	55%
Somewhat helpful	20%	18%	15%	21%	18%	12%	17%	23%
Not at all helpful/No	23%	14%	30%	17%	13%	15%	21%	12%
Not applicable - did not receive/do not need	8%	17%	5%	4%	8%	12%	11%	10%
Total (n)	160	32	15	107	148	167	289	84

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.



**Table 378: Level of Helpfulness in Window/Door/Wall/Floor Replacement (EN2k) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness in window/door/wall/floor replacement</b>								
Very helpful	58%	65%	53%	53%	62%	62%	62%	61%
Somewhat helpful	15%	16%	15%	17%	12%	12%	15%	12%
Not at all helpful/No	20%	14%	24%	24%	18%	20%	16%	18%
Not applicable - did not receive/do not need	7%	6%	7%	7%	9%	5%	7%	9%
Total (n)	882	468	414	325	329	177	376	325

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 379: Level of Helpfulness in Window/Door/Wall/Floor Replacement (EN2k) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness in window/door/wall/floor replacement</b>									
Very helpful	49%	64%	64%	62%	49%	74%	63%	59%	34%
Somewhat helpful	19%	15%	12%	15%	16%	11%	12%	15%	19%
Not at all helpful/No	23%	17%	18%	14%	26%	13%	21%	19%	32%
Not applicable - did not receive/do not need	9%	5%	6%	9%	10%	2%	5%	6%	15%
Total (n)	398	122	323	35	448	197	41	842	39

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 380: Level of Helpfulness in Window/Door/Wall/Floor Replacement (EN2k) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness in window/door/wall/floor replacement</b>								
Very helpful	59%	57%	32%	49%	64%	61%	56%	58%
Somewhat helpful	15%	8%	30%	17%	14%	16%	15%	16%
Not at all helpful/No	21%	29%	15%	28%	17%	15%	20%	22%
Not applicable - did not receive/do not need	5%	6%	24%	7%	5%	9%	8%	4%
Total (n)	209	48	21	133	240	231	405	110

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 381: Level of Helpfulness of Efficient Light Bulbs/Fixtures (EN2L) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness of light bulbs/fixtures</b>								
Very helpful	60%	65%	55%	54%	62%	60%	64%	62%
Somewhat helpful	19%	20%	18%	20%	17%	20%	18%	17%
Not at all helpful/No	14%	11%	17%	20%	13%	12%	10%	13%
Not applicable - did not receive/do not need	7%	4%	10%	7%	9%	7%	8%	9%
Total (n)	933	517	416	340	347	198	391	343

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 382: Level of Helpfulness of Efficient Light Bulbs/Fixtures (EN2L) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness of light bulbs/fixtures</b>									
Very helpful	49%	66%	66%	52%	48%	81%	64%	61%	35%
Somewhat helpful	23%	15%	18%	14%	23%	14%	16%	19%	17%
Not at all helpful/No	20%	13%	8%	26%	18%	4%	18%	13%	30%
Not applicable - did not receive/do not need	8%	6%	7%	8%	10%	2%	3%	7%	18%
Total (n)	423	124	340	41	480	200	43	886	46

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 383: Level of Helpfulness of Efficient Light Bulbs/Fixtures (EN2L) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness of light bulbs/fixtures</b>								
Very helpful	57%	51%	19%	58%	63%	66%	54%	59%
Somewhat helpful	20%	18%	14%	20%	23%	15%	19%	23%
Not at all helpful/No	18%	20%	35%	17%	8%	10%	18%	12%
Not applicable - did not receive/do not need	5%	12%	31%	5%	6%	9%	10%	5%
Total (n)	217	55	24	140	255	242	433	123

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 384: Level of Helpfulness of Evaporative/Swamp Cooler Replacement (EN2n) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness of evaporative/swamp cooler replacement</b>								
Very helpful	41%	48%	37%	38%	46%	34%	43%	45%
Somewhat helpful	11%	9%	11%	5%	10%	13%	12%	10%
Not at all helpful/No	22%	17%	25%	29%	19%	24%	19%	19%
Not applicable - did not receive/do not need	26%	26%	27%	28%	26%	29%	26%	26%
Total (n)	617	314	303	130	313	133	350	309

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 385: Helpfulness of Evaporative/Swamp Cooler Replacement (EN2n) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness of evaporative/swamp cooler replacement</b>									
Very helpful	33%	63%	39%	27%	30%	61%	46%	41%	45%
Somewhat helpful	7%	10%	14%	2%	4%	21%	17%	11%	6%
Not at all helpful/No	32%	14%	18%	39%	30%	11%	19%	21%	39%
Not applicable - did not receive/do not need	28%	14%	30%	31%	36%	7%	17%	27%	10%
Total (n)	292	75	226	21	274	174	26	596	20

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.



**Table 386: Helpfulness of Evaporative/Swamp Cooler Replacement (EN2n) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness of evaporative/swamp cooler replacement</b>								
Very helpful	43%	48%	43%	43%	40%	40%	43%	48%
Somewhat helpful	6%	6%	12%	5%	14%	12%	7%	6%
Not at all helpful/No	28%	20%	33%	21%	17%	23%	24%	17%
Not applicable - did not receive/do not need	22%	26%	12%	30%	30%	25%	26%	29%
Total (n)	102	48	10	54	196	207	271	94

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 387: Level of Helpfulness in Furnace Replacement (EN2m) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Level of helpfulness - furnace replacement</b>								
Very helpful	47%	55%	41%	45%	51%	46%	49%	50%
Somewhat helpful	16%	14%	18%	15%	17%	21%	17%	17%
Not at all helpful/No	21%	17%	23%	22%	21%	21%	19%	21%
Not applicable - did not receive/do not need	16%	14%	17%	18%	12%	12%	15%	12%
Total (n)	844	439	405	315	321	160	365	317

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 388: Level of Helpfulness in Furnace Replacement (EN2m) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Level of helpfulness – furnace replacement</b>									
Very helpful	42%	53%	48%	50%	34%	70%	53%	48%	29%
Somewhat helpful	16%	17%	17%	13%	18%	13%	16%	17%	3%
Not at all helpful/No	24%	14%	20%	22%	29%	10%	17%	20%	43%
Not applicable - did not receive/do not need	18%	16%	15%	15%	19%	6%	14%	16%	24%
Total (n)	380	113	312	35	428	190	40	807	36

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to “not applicable/don't need” if they were a recent participant who recalled participating.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 389: Helpfulness of Furnace Replacement (EN2m) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Level of helpfulness of furnace replacement</b>								
Very helpful	46%	42%	25%	49%	52%	47%	46%	50%
Somewhat helpful	18%	24%	5%	14%	18%	14%	17%	22%
Not at all helpful/No	18%	28%	23%	26%	16%	21%	20%	19%
Not applicable - did not receive/do not need	18%	7%	48%	11%	13%	18%	17%	8%
Total (n)	201	47	21	130	220	225	393	107

Source: 2013 CARE Participant Telephone Survey.

Note: we miscoded some of the PG&E measures such that a small fraction of participants were asked whether some measures that they had already received would be helpful. We moved those cases to "not applicable/don't need" if they were a recent participant who recalled participating.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

Note: Question was phrased differently when asked of participants and non-participants due to their varying level of experience with the program.

**Table 390: Proportion of CFLs (EN14) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Proportion of CFLs</b>								
All	26%	28%	25%	27%	27%	23%	26%	27%
More than half	21%	20%	22%	22%	20%	23%	20%	20%
About half	19%	18%	19%	19%	18%	18%	19%	18%
Less than half	19%	19%	19%	19%	20%	19%	19%	20%
None	12%	11%	12%	10%	11%	11%	13%	11%
Don't know how many are CFLs	3%	2%	3%	2%	4%	4%	3%	4%
Don't know what a CFL is	1%	2%	0%	1%	1%	2%	1%	1%
Total (n)	1,028	610	418	389	384	203	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 391: Proportion of CFLs (EN14) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Proportion of CFLs</b>									
All	21%	28%	29%	22%	26%	28%	8%	26%	32%
More than half	29%	20%	16%	13%	23%	14%	39%	21%	31%
About half	20%	18%	17%	24%	16%	21%	9%	19%	15%
Less than half	19%	18%	20%	32%	21%	15%	22%	19%	19%
None	9%	14%	13%	8%	10%	18%	17%	12%	2%
Don't know how many are CFLs	1%	2%	5%	0%	3%	2%	5%	3%	0%
Don't know what a CFL is	2%	0%	1%	2%	1%	2%	0%	1%	1%
Total (n)	483	136	360	42	532	213	49	978	49

Source: 2013 CARE Participant Telephone Survey.

**Table 392: Proportion of CFLs (EN14) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Proportion of CFLs</b>								
All	24%	30%	47%	28%	19%	31%	27%	27%
More than half	23%	17%	21%	21%	22%	19%	23%	17%
About half	19%	21%	15%	18%	19%	18%	19%	22%
Less than half	21%	29%	17%	20%	19%	15%	20%	27%
None	10%	4%	0%	11%	15%	13%	8%	5%
Don't know how many are CFLs	2%	0%	0%	2%	4%	4%	3%	1%
Don't know what a CFL is	1%	0%	0%	0%	2%	0%	1%	0%
Total (n)	253	59	24	156	273	263	484	132

Source: 2013 CARE Participant Telephone Survey.

**Table 393: Proportion of Homes that Need Other Equipment Replaced (EN12a) by ESA Participation and Utility for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Proportion of homes that need other equipment replaced</b>								
Yes	10%	12%	8%	10%	11%	14%	9%	10%
No	90%	88%	92%	90%	89%	86%	91%	90%
Total (n)	871	509	362	235	383	202	430	379

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 394: Proportion of Homes that Need Other Equipment Replaced (EN12a) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Proportion of homes that need other equipment replaced</b>									
Yes	8%	14%	9%	24%	11%	7%	13%	10%	18%
No	92%	86%	91%	76%	89%	93%	87%	90%	82%
Total (n)	407	114	315	29	423	200	42	839	31

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.

**Table 395: Proportion of Homes that Need Other Equipment Replaced (EN12a) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Proportion of homes that need other equipment replaced</b>								
Yes	10%	11%	12%	10%	11%	8%	10%	9%
No	90%	89%	88%	90%	89%	92%	90%	91%
Total (n)	170	59	17	92	271	262	394	119

Source: 2013 CARE Participant Telephone Survey.

Note: this question was added after the survey was already in the field, and has a slightly lower sample size as a result.



**Table 396: Equipment that Needs Replacement (EN12b\_opn) by ESA Participation and Utility (among those that said they needed equipment replaced) for California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Equipment that needs replacement</b>								
Water appliances (toilet, tub)	16%	16%	15%	8%	17%	6%	23%	18%
Electrical	14%	17%	9%	8%	16%	11%	14%	11%
Plumbing	13%	9%	20%	14%	18%	0%	17%	19%
Ceiling fan(s)	8%	8%	8%	5%	10%	8%	6%	5%
Flooring	6%	9%	1%	0%	10%	8%	9%	11%
Lighting	6%	7%	4%	14%	1%	9%	1%	1%
Infiltration	5%	8%	0%	14%	0%	3%	0%	0%
Ceiling	4%	3%	6%	0%	8%	0%	7%	8%
Freezer	4%	5%	3%	0%	6%	9%	1%	1%
Roof	4%	5%	2%	8%	2%	6%	2%	2%
Showerhead	4%	7%	0%	8%	2%	6%	2%	2%
Stove fan/hood	4%	3%	5%	7%	4%	1%	4%	4%
Fireplace issues	3%	1%	7%	0%	5%	3%	5%	6%
Garbage disposal	3%	3%	3%	6%	2%	1%	2%	2%
Gate/Fence	3%	1%	5%	2%	4%	0%	4%	5%
Kitchen appliance	3%	1%	5%	0%	5%	3%	5%	5%
Screens	3%	4%	3%	0%	6%	3%	6%	6%
Swamp cooler	3%	4%	0%	2%	4%	0%	4%	4%
Weather-strip	3%	1%	6%	0%	4%	3%	4%	5%
Carpet	2%	3%	0%	6%	0%	0%	0%	0%
Faucet(s)	2%	2%	3%	0%	2%	9%	2%	2%
Garage door	2%	1%	2%	3%	2%	0%	2%	2%
Hot tub	2%	3%	0%	0%	4%	0%	4%	4%

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Insulation	2%	3%	0%	2%	2%	0%	2%	2%
Kitchen cabinets	2%	3%	0%	0%	3%	0%	3%	3%
Sprinkler system	2%	1%	3%	0%	3%	0%	3%	3%
Thermostat	2%	0%	5%	7%	0%	0%	0%	0%
Lighting (exterior)	1%	1%	0%	0%	0%	5%	0%	0%
N/A	1%	0%	2%	0%	1%	0%	1%	1%
Water cooler	1%	1%	0%	0%	1%	3%	1%	1%
Yard/Driveway	1%	1%	0%	2%	0%	0%	0%	0%
Bathroom	0%	0%	1%	0%	0%	4%	0%	0%
Cabinets	0%	1%	0%	0%	1%	0%	1%	1%
Electronics	0%	1%	0%	0%	0%	3%	0%	0%
Pool heater	0%	1%	0%	0%	1%	0%	1%	1%
Ventilation	0%	0%	1%	0%	0%	4%	0%	0%
Walls	0%	1%	0%	0%	1%	0%	1%	1%
Windows	0%	1%	0%	0%	1%	0%	1%	1%
Total (n)	97	69	28	22	46	26	48	45

Source: 2013 CARE Participant Telephone Survey.

**Table 397: Equipment that Needs Replacement (EN12b\_opn) by Home Type, Language, Rural and Urban for California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Equipment that needs replacement</b>									
Water appliances (toilet, tub)	21%	18%	13%	0%	13%	27%	0%	17%	0%
Roof	11%	3%	1%	0%	6%	7%	0%	3%	26%
Ceiling fan(s)	7%	4%	13%	0%	8%	11%	12%	9%	0%
Electrical	7%	0%	32%	0%	19%	4%	39%	15%	0%
Garage door	7%	0%	0%	0%	3%	2%	0%	2%	0%
Insulation	6%	0%	0%	0%	1%	2%	0%	1%	11%
Plumbing	6%	5%	22%	35%	11%	32%	7%	14%	0%
Screens	6%	5%	1%	0%	4%	0%	0%	3%	17%
Sprinkler system	6%	0%	0%	0%	2%	0%	0%	2%	0%
Garbage disposal	4%	0%	5%	0%	0%	0%	0%	3%	0%
Lighting	4%	3%	10%	0%	2%	2%	0%	6%	0%
Swamp cooler	4%	5%	0%	0%	3%	2%	0%	3%	0%
Faucet(s)	3%	4%	0%	0%	0%	8%	0%	2%	0%
Fireplace issues	3%	7%	0%	0%	5%	0%	0%	1%	34%
Gate/Fence	3%	0%	6%	0%	6%	0%	0%	3%	0%
Showerhead	3%	10%	0%	0%	5%	2%	7%	4%	0%
Yard/Driveway	3%	0%	0%	0%	1%	0%	0%	1%	0%
Cabinets	2%	0%	0%	0%	0%	2%	0%	0%	0%
Freezer	2%	4%	7%	0%	7%	0%	0%	4%	0%
Hot tub	2%	5%	0%	0%	0%	0%	7%	2%	0%
Kitchen appliance	2%	0%	7%	0%	4%	2%	0%	3%	0%
Lighting (exterior)	2%	0%	0%	0%	1%	0%	0%	1%	0%
Pool heater	2%	0%	0%	0%	1%	0%	0%	0%	0%

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Stove fan/hood	2%	12%	0%	0%	0%	13%	0%	4%	0%
Walls	2%	0%	0%	0%	0%	0%	0%	0%	0%
Water cooler	2%	0%	1%	0%	1%	2%	0%	1%	0%
Bathroom	0%	0%	1%	0%	1%	0%	0%	1%	0%
Carpet	0%	0%	5%	0%	4%	0%	0%	2%	0%
Ceiling	0%	12%	0%	0%	0%	12%	0%	4%	0%
Electronics	0%	0%	1%	0%	1%	0%	0%	0%	0%
Flooring	0%	10%	4%	27%	4%	11%	8%	5%	24%
Infiltration	0%	8%	6%	0%	4%	0%	0%	5%	0%
Kitchen cabinets	0%	5%	0%	0%	0%	0%	0%	2%	0%
N/A	0%	0%	2%	0%	0%	0%	10%	1%	0%
Thermostat	0%	7%	0%	0%	4%	0%	0%	2%	0%
Ventilation	0%	0%	1%	0%	0%	0%	0%	1%	0%
Weather-strip	0%	0%	1%	38%	1%	0%	0%	3%	0%
Windows	0%	0%	1%	0%	1%	0%	0%	1%	0%
Total (n)	39	19	36	3	44	19	7	92	5

Source: 2013 CARE Participant Telephone Survey.

**Table 398: Equipment that Needs Replacement (EN12b\_opn) by Climate Zone for California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
<b>Equipment that needs replacement</b>								
Infiltration	19%	0%	0%	0%	1%	0%	9%	0%
Plumbing	13%	0%	0%	12%	23%	8%	6%	0%
Water appliances (toilet, tub,	13%	6%	0%	0%	28%	16%	11%	7%
Electrical	11%	6%	0%	17%	27%	2%	6%	21%
Carpet	9%	0%	0%	0%	0%	0%	4%	0%
Stove fan/hood	9%	0%	0%	0%	0%	8%	6%	0%
Ceiling fan(s)	7%	0%	0%	0%	15%	8%	8%	0%
Hot tub	7%	0%	0%	0%	0%	2%	3%	12%
Roof	4%	6%	0%	11%	3%	2%	3%	3%
Lighting	3%	0%	0%	26%	3%	3%	3%	0%
Swamp cooler	3%	6%	0%	0%	0%	6%	6%	9%
Kitchen appliance	2%	0%	0%	0%	1%	9%	6%	3%
Bathroom	0%	0%	0%	0%	2%	0%	0%	0%
Cabinets	0%	0%	0%	0%	0%	2%	0%	0%
Ceiling	0%	0%	0%	0%	0%	15%	0%	0%
Electronics	0%	0%	0%	0%	1%	0%	0%	0%
Faucet(s)	0%	0%	0%	0%	4%	3%	1%	0%
Fireplace issues	0%	6%	100%	0%	1%	0%	6%	3%
Flooring	0%	20%	0%	0%	3%	15%	5%	12%
Freezer	0%	0%	0%	0%	8%	7%	4%	0%
Garage door	0%	6%	0%	7%	0%	2%	1%	3%
Garbage disposal	0%	14%	0%	14%	0%	1%	3%	8%

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland	RAC Replace and Evaporative Cooler Install	CAC Replacement
Gate/Fence	0%	0%	0%	6%	7%	0%	0%	0%
Insulation	0%	0%	0%	6%	0%	3%	1%	0%
Kitchen cabinets	0%	0%	0%	0%	0%	6%	0%	0%
Lighting (exterior)	0%	0%	0%	0%	2%	0%	0%	0%
N/A	0%	0%	0%	0%	0%	3%	0%	0%
Pool heater	0%	0%	0%	0%	0%	2%	1%	0%
Screens	0%	20%	0%	0%	5%	2%	4%	11%
Showerhead	0%	0%	0%	18%	0%	7%	3%	0%
Sprinkler system	0%	0%	0%	0%	0%	6%	1%	0%
Thermostat	0%	0%	0%	15%	0%	0%	0%	0%
Ventilation	0%	0%	0%	0%	2%	0%	0%	0%
Walls	0%	0%	0%	0%	0%	2%	1%	0%
Water cooler	0%	0%	0%	0%	1%	2%	1%	0%
Weather-strip	0%	29%	0%	0%	0%	2%	6%	17%
Windows	0%	0%	0%	0%	2%	0%	0%	0%
Yard/Driveway	0%	0%	0%	6%	0%	0%	0%	0%
Total (n)	16	8	1	10	27	35	47	13

Source: 2013 CARE Participant Telephone Survey.

## 8.2.9 Demographics

**Table 399: Year Home Built (S7) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
2011 or more recently	1%	0%	1%	0%	1%	0%	1%	1%
2001 to 2010	7%	5%	9%	9%	7%	6%	6%	7%
1990 to 2000	10%	8%	12%	12%	9%	9%	8%	9%
1970 to 1989	33%	34%	31%	30%	35%	39%	34%	35%
1950 to 1969	29%	30%	28%	30%	28%	33%	27%	27%
1949 or earlier	20%	22%	18%	18%	20%	13%	24%	20%
Total (n)	859	508	351	334	319	165	357	316

Source: 2013 CARE Participant Telephone Survey.

**Table 400: Year Home Built (S7) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
2011 or more recently	0%	0%	2%	0%	0%	2%	0%	1%	0%
2001 to 2010	6%	5%	10%	5%	7%	6%	18%	7%	13%
1990 to 2000	11%	6%	11%	10%	8%	15%	8%	10%	12%
1970 to 1989	26%	25%	43%	68%	33%	32%	37%	33%	38%
1950 to 1969	35%	35%	20%	17%	31%	23%	30%	30%	19%
1949 or earlier	22%	29%	15%	0%	20%	21%	6%	20%	18%
Total (n)	454	100	260	38	479	144	40	812	46

Source: 2013 CARE Participant Telephone Survey.

**Table 401: Year Home Built (S7) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
2011 or more recently	1%	0%	0%	0%	1%	1%
2001 to 2010	11%	26%	18%	5%	2%	4%
1990 to 2000	16%	17%	19%	8%	4%	7%
1970 to 1989	33%	38%	34%	27%	31%	37%
1950 to 1969	26%	11%	15%	32%	32%	33%
1949 or earlier	14%	7%	13%	28%	30%	18%
Total (n)	220	55	23	126	222	213

Source: 2013 CARE Participant Telephone Survey.

**Table 402: Years Lived at Address (S8, S8a) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
23 months or less	9%	7%	12%	9%	11%	7%	10%	11%
2 to 4 years	24%	17%	31%	25%	24%	25%	23%	24%
5 to 9 years	17%	17%	17%	19%	14%	17%	14%	13%
10 to 19 years	24%	27%	22%	21%	28%	27%	27%	28%
20 to 29 years	12%	15%	8%	13%	11%	8%	12%	11%
30 years or more	14%	17%	10%	13%	12%	16%	14%	12%
Total (n)	1,028	610	418	389	384	203	432	380

Source: 2013 CARE Participant Telephone Survey.



**Table 403: Years Lived at Address (S8, S8a) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
23 months or less	3%	10%	15%	4%	8%	11%	17%	9%	8%
2 to 4 years	8%	36%	31%	9%	21%	23%	29%	24%	25%
5 to 9 years	12%	19%	19%	27%	17%	15%	21%	17%	18%
10 to 19 years	27%	25%	21%	36%	24%	32%	15%	25%	21%
20 to 29 years	20%	6%	10%	16%	12%	14%	12%	12%	15%
30 years or more	30%	4%	6%	8%	18%	5%	6%	14%	13%
Total (n)	483	136	360	42	532	213	49	978	49

Source: 2013 CARE Participant Telephone Survey.

**Table 404: Years Lived at Address (S8, S8a) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
23 months or less	11%	15%	0%	8%	9%	8%
2 to 4 years	30%	43%	8%	19%	21%	21%
5 to 9 years	18%	11%	21%	20%	17%	15%
10 to 19 years	19%	19%	41%	22%	28%	28%
20 to 29 years	11%	7%	24%	17%	10%	12%
30 years or more	12%	4%	6%	15%	15%	17%
Total (n) n	253	59	24	156	273	263

Source: 2013 CARE Participant Telephone Survey.

**Table 405: Of Multi-family Homes, Number of Units in Building (S6a) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
2 to 4 units	19%	21%	17%	19%	18%	16%	19%	17%
5 to 10 units	30%	30%	31%	34%	23%	24%	29%	23%
11 to 20 units	14%	13%	16%	10%	20%	16%	17%	20%
More than 20 units	36%	37%	36%	37%	40%	44%	35%	41%
Total (n)	274	145	129	81	82	90	102	81

Source: 2013 CARE Participant Telephone Survey.

**Table 406: Of Multi-family Homes, Number of Units in Building (S6a) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
2 to 4 units	0%	0%	19%	0%	17%	22%	35%	19%	0%
5 to 10 units	0%	0%	30%	0%	31%	31%	24%	30%	100%
11 to 20 units	0%	0%	14%	0%	14%	20%	4%	15%	0%
More than 20 units	0%	0%	36%	0%	38%	27%	37%	36%	0%
Total (n)	-	-	274	-	135	64	14	273	1

Source: 2013 CARE Participant Telephone Survey.

**Table 407: Of Multi-family Homes, Number of Units in Building (S6a) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
2 to 4 units	16%	9%	0%	25%	27%	7%
5 to 10 units	33%	27%	0%	33%	29%	29%
11 to 20 units	3%	0%	0%	18%	12%	26%
More than 20 units	47%	64%	0%	24%	32%	38%
Total (n)	39	11	-	47	108	69

Source: 2013 CARE Participant Telephone Survey.

**Table 408: Number of People in Home at least Nine Months of the Year (D1) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
1 persons	26%	28%	25%	34%	19%	28%	21%	20%
2 persons	20%	18%	21%	19%	21%	21%	20%	21%
3 persons	15%	16%	15%	13%	19%	11%	17%	19%
4 persons	13%	11%	15%	14%	14%	12%	13%	14%
5 or more persons	26%	26%	25%	21%	27%	28%	29%	26%
Total (n)	1,026	609	417	389	383	202	431	379

Source: 2013 CARE Participant Telephone Survey.

**Table 409: Number of People in Home at least Nine Months of the Year (D1) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
1 persons	25%	10%	33%	35%	40%	8%	12%	27%	20%
2 persons	24%	12%	19%	24%	26%	11%	20%	19%	27%
3 persons	17%	16%	14%	14%	14%	11%	10%	15%	25%
4 persons	10%	20%	12%	11%	8%	22%	21%	13%	8%
5 or more persons	24%	41%	21%	15%	12%	47%	38%	26%	20%
Total (n)	482	136	360	41	531	213	49	976	49

Source: 2013 CARE Participant Telephone Survey.

**Table 410: Number of People in Home at least Nine Months of the Year (D1) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
1 persons	29%	30%	17%	39%	24%	17%
2 persons	19%	26%	14%	17%	20%	20%
3 persons	16%	15%	30%	9%	14%	18%
4 persons	14%	13%	8%	14%	14%	11%
5 or more persons	22%	15%	31%	21%	28%	33%
Total (n)	253	59	24	156	273	261

Source: 2013 CARE Participant Telephone Survey.

**Table 411: Number of People in Home in Age Groups (D2, D2A-D2K) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Children under 6 present in home	20%	20%	20%	19%	21%	20%	20%	21%
Children 6 to 17 present in home	35%	34%	36%	34%	35%	35%	35%	34%
Adults present in home	74%	72%	75%	67%	78%	71%	79%	78%
Seniors present in home	49%	54%	45%	51%	45%	52%	48%	46%
Total (n)	1,024	607	417	387	383	202	431	379

Source: 2013 CARE Participant Telephone Survey.

**Table 412: Number of People in Home in Age Groups (D2, D2A-D2K) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Children under 6 present in home	14%	26%	22%	16%	10%	35%	16%	20%	9%
Children 6 to 17 present in home	27%	53%	34%	24%	22%	59%	21%	35%	40%
Adults present in home	68%	86%	75%	59%	60%	91%	90%	74%	67%
Seniors present in home	67%	38%	39%	64%	59%	36%	59%	49%	61%
Total (n)	482	136	358	41	530	213	49	974	49

Source: 2013 CARE Participant Telephone Survey.

**Table 413: Number of People in Home in Age Groups (D2, D2A-D2K) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Children under 6 present in home	20%	20%	0%	21%	23%	18%
Children 6 to 17 present in home	33%	40%	53%	33%	36%	34%
Adults present in home	69%	65%	68%	65%	76%	83%
Seniors present in home	49%	48%	69%	50%	46%	51%
Total (n)	251	59	24	156	273	261

Source: 2013 CARE Participant Telephone Survey.

**Table 414: Average Age of Respondent (D3) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Average age	56	58	55	58	54	54	55	58
Respondent is under 30	7%	5%	10%	7%	7%	4%	8%	7%
Respondent is between 30 and 60	52%	51%	52%	48%	59%	53%	54%	59%
Respondent is 60 years or older	41%	44%	38%	45%	34%	43%	38%	34%
Total (n)	1,004	598	406	380	373	200	420	369

Source: 2013 CARE Participant Telephone Survey.

**Table 415: Average Age of Respondent (D3) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Average age	62	51	53	66	61	49	52	56	62
Respondent is under 30	2%	7%	12%	0%	3%	12%	18%	8%	0%
Respondent is between 30 and 60	43%	65%	54%	32%	42%	66%	42%	52%	49%
Respondent is 60 years or older	55%	28%	33%	68%	54%	22%	40%	41%	51%
Total (n)	471	133	351	42	522	210	48	956	47

Source: 2013 CARE Participant Telephone Survey.

**Table 416: Average Age of Respondent (D3) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Average age	56	57	65	58	56	54
Respondent is under 30	9%	7%	0%	5%	6%	10%
Respondent is between 30 and 60	48%	50%	33%	52%	58%	51%
Respondent is 60 years or older	43%	44%	67%	43%	37%	38%
Total (n)	248	57	24	151	268	256

Source: 2013 CARE Participant Telephone Survey.

**Table 417: Marital Status of Respondent (D4) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Married	36%	30%	43%	32%	42%	38%	39%	41%
Divorced	19%	20%	18%	19%	19%	23%	19%	19%
Separated	5%	5%	6%	4%	5%	4%	6%	4%
Widowed	18%	21%	14%	21%	14%	14%	15%	14%
Never married	12%	14%	11%	12%	12%	11%	12%	13%
Living with a partner	10%	10%	9%	11%	8%	10%	9%	8%
Total (n)	1,007	600	407	382	378	196	425	374

Source: 2013 CARE Participant Telephone Survey.

**Table 418: Marital Status of Respondent (D4) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Married	46%	46%	26%	32%	27%	47%	63%	36%	46%
Divorced	16%	16%	22%	25%	26%	7%	7%	19%	15%
Separated	2%	6%	7%	2%	4%	8%	12%	5%	4%
Widowed	23%	11%	13%	39%	23%	9%	8%	17%	23%
Never married	8%	8%	19%	1%	14%	10%	8%	13%	3%
Living with a partner	5%	14%	12%	1%	6%	20%	2%	10%	9%
Total (n)	476	136	347	41	520	211	49	957	49

Source: 2013 CARE Participant Telephone Survey.



**Table 419: Marital Status of Respondent (D4) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Married	39%	36%	64%	23%	34%	42%
Divorced	18%	30%	6%	22%	20%	16%
Separated	4%	2%	0%	3%	5%	8%
Widowed	20%	18%	31%	21%	13%	16%
Never married	9%	0%	0%	18%	17%	11%
Living with a partner	10%	15%	0%	13%	10%	7%
Total (n)	250	58	24	152	267	256

Source: 2013 CARE Participant Telephone Survey.

**Table 420: Language Spoken in Home (D5, D5\_1-D5\_20) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
English	95%	96%	95%	96%	94%	95%	94%	94%
Spanish	40%	43%	37%	26%	49%	37%	51%	49%
Mandarin	0%	0%	1%	0%	1%	0%	1%	1%
Cantonese	0%	0%	1%	1%	0%	0%	0%	0%
Tagalog/Filipino	1%	1%	1%	1%	1%	2%	1%	1%
Korean	0%	0%	1%	0%	0%	0%	0%	0%
Vietnamese	1%	0%	1%	0%	1%	1%	1%	1%
Other	4%	5%	3%	5%	1%	5%	2%	1%
German	1%	0%	1%	1%	0%	1%	0%	0%
Chinese	1%	1%	2%	2%	1%	0%	1%	1%
Danish	0%	0%	0%	1%	0%	0%	0%	0%
Russian	0%	0%	0%	0%	0%	0%	0%	0%
Arabic	1%	1%	1%	1%	1%	1%	1%	1%
French	1%	1%	2%	1%	1%	1%	2%	1%
Japanese	1%	0%	1%	0%	0%	3%	1%	0%
Italian	0%	0%	1%	1%	0%	1%	0%	0%
Portuguese	0%	0%	0%	1%	0%	0%	0%	0%
Farsi	0%	0%	1%	1%	0%	0%	0%	0%
Total (n)	1,024	607	417	386	383	203	431	379

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple responses allowed.

**Table 421: Language Spoken in Home (D5, D5\_1-D5\_20) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
English	95%	96%	95%	98%	100%	86%	71%	95%	100%
Spanish	36%	44%	44%	23%	0%	100%	6%	41%	7%
Mandarin	0%	0%	1%	0%	0%	0%	4%	1%	0%
Cantonese	1%	0%	1%	0%	0%	0%	5%	0%	0%
Tagalog/Filipino	1%	1%	1%	0%	0%	0%	11%	1%	0%
Korean	0%	0%	0%	0%	0%	0%	6%	0%	0%
Vietnamese	1%	1%	0%	0%	0%	0%	1%	1%	0%
Other	3%	6%	3%	0%	0%	0%	43%	4%	0%
German	0%	1%	1%	0%	0%	0%	3%	1%	0%
Chinese	2%	3%	0%	0%	0%	0%	19%	1%	0%
Danish	0%	1%	0%	0%	0%	0%	0%	0%	1%
Russian	0%	0%	0%	0%	0%	0%	5%	0%	0%
Arabic	1%	3%	1%	6%	0%	0%	15%	1%	0%
French	2%	2%	1%	0%	0%	0%	9%	1%	0%
Japanese	1%	0%	0%	0%	0%	0%	1%	1%	1%
Italian	1%	0%	0%	0%	0%	0%	0%	0%	0%
Portuguese	0%	1%	0%	0%	0%	0%	0%	0%	0%
Farsi	0%	1%	0%	0%	0%	0%	6%	0%	0%
Total (n)	479	136	360	42	532	213	49	974	49

Source: 2013 CARE Participant Telephone Survey.  
Note: Multiple responses allowed.

**Table 422: Language Spoken in Home (D5, D5\_1-D5\_20) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
English	98%	98%	100%	95%	96%	92%
Spanish	27%	41%	3%	31%	46%	54%
Mandarin	0%	0%	0%	1%	0%	1%
Cantonese	0%	0%	0%	2%	0%	0%
Tagalog/Filipino	1%	0%	0%	2%	1%	1%
Korean	0%	0%	0%	0%	1%	0%
Vietnamese	0%	0%	0%	1%	1%	1%
Other	5%	4%	0%	5%	0%	5%
German	0%	2%	0%	1%	0%	0%
Chinese	2%	0%	0%	2%	0%	2%
Danish	0%	0%	0%	1%	0%	0%
Russian	0%	0%	0%	0%	0%	0%
Arabic	2%	1%	4%	0%	0%	2%
French	0%	2%	0%	1%	0%	3%
Japanese	0%	1%	0%	0%	1%	1%
Italian	1%	0%	0%	1%	0%	0%
Portuguese	1%	0%	0%	1%	0%	0%
Farsi	1%	0%	0%	0%	0%	1%
Total (n)	251	59	24	155	273	262

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple responses allowed.

**Table 423: Primary Language Spoken in Home (D6) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
English	72%	72%	72%	79%	69%	80%	66%	69%
Spanish	23%	25%	22%	16%	28%	14%	31%	28%
Asian	2%	1%	3%	2%	2%	1%	2%	2%
Other	3%	2%	4%	3%	1%	5%	2%	1%
Total (n)	1,021	607	414	384	383	202	431	379

Source: 2013 CARE Participant Telephone Survey.

**Table 424: Primary Language Spoken in Home (D6) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
English	76%	66%	70%	97%	100%	0%	0%	71%	98%
Spanish	20%	26%	27%	3%	0%	100%	0%	24%	2%
Asian	2%	2%	1%	0%	0%	0%	36%	2%	0%
Other	2%	6%	2%	0%	0%	0%	64%	3%	0%
Total (n)	479	136	357	42	532	213	49	971	49

Source: 2013 CARE Participant Telephone Survey.

**Table 425: Primary Language Spoken in Home (D6) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
English	80%	84%	100%	74%	70%	61%
Spanish	14%	16%	0%	21%	28%	33%
Asian	2%	0%	0%	2%	1%	2%
Other	4%	0%	0%	2%	1%	5%
Total (n)	251	59	24	153	273	261

Source: 2013 CARE Participant Telephone Survey.

**Table 426: Race of Respondent (D8) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
White (non-hispanic)	39%	35%	44%	50%	32%	49%	29%	32%
African-American	11%	12%	11%	9%	11%	10%	13%	10%
Asian	3%	3%	4%	4%	3%	3%	2%	3%
Hispanic	36%	38%	33%	25%	44%	28%	46%	44%
Other	2%	1%	3%	2%	2%	2%	2%	2%
Two or more	8%	11%	6%	10%	8%	8%	7%	8%
Total (n)	996	594	402	376	375	194	422	371

Source: 2013 CARE Participant Telephone Survey.

**Table 427: Race of Respondent (D8) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
White (non-hispanic)	45%	36%	33%	71%	62%	4%	29%	37%	85%
African-American	9%	7%	16%	2%	20%	0%	1%	12%	0%
Asian	4%	5%	3%	0%	0%	0%	41%	3%	0%
Hispanic	33%	39%	39%	19%	6%	91%	5%	37%	2%
Other	1%	4%	2%	2%	2%	0%	20%	2%	2%
Two or more	9%	9%	8%	6%	9%	5%	3%	8%	11%
Total (n)	468	132	347	42	517	209	46	946	49

Source: 2013 CARE Participant Telephone Survey.

**Table 428: Race of Respondent (D8) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
White (non-hispanic)	54%	56%	94%	40%	24%	31%
African-American	5%	9%	0%	13%	27%	4%
Asian	2%	0%	0%	8%	2%	3%
Hispanic	25%	30%	2%	31%	42%	49%
Other	2%	2%	0%	1%	1%	4%
Two or more	12%	4%	4%	8%	5%	10%
Total (n)	244	57	24	152	264	255

Source: 2013 CARE Participant Telephone Survey.

**Table 429: Education Level of Respondent (D9) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Never attended school or only attended kindergarten	1%	1%	1%	1%	0%	2%	1%	0%
Grades 1 through 8 (Elementary)	12%	14%	9%	10%	12%	6%	14%	13%
Grades 9 through 11 (Some high school)	10%	12%	8%	11%	8%	9%	10%	8%
Grade 12 or GED (High school graduate)	26%	27%	25%	25%	27%	28%	26%	26%
College 1 year to 3 years (Some college, technical school, Associates)	32%	30%	35%	32%	35%	28%	34%	35%
College 4 years or more (College graduate)	19%	16%	22%	21%	18%	26%	15%	17%
Total (n)	1,014	604	410	385	378	199	426	374

Source: 2013 CARE Participant Telephone Survey.



**Table 430: Education Level of Respondent (D9) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Never attended school or only attended kindergarten	2%	1%	0%	0%	0%	4%	0%	1%	4%
Grades 1 through 8 (Elementary)	8%	19%	11%	7%	2%	41%	1%	12%	0%
Grades 9 through 11 (Some high school)	8%	13%	10%	12%	6%	19%	11%	10%	6%
Grade 12 or GED (High school graduate)	24%	24%	30%	25%	27%	22%	15%	26%	19%
College 1 year to 3 years (Some college, technical school, Associates)	35%	28%	31%	39%	43%	7%	30%	31%	59%
College 4 years or more (College graduate)	23%	15%	18%	17%	22%	8%	42%	19%	12%
Total (n)	476	135	354	42	528	212	46	964	49

Source: 2013 CARE Participant Telephone Survey.

**Table 431: Education Level of Respondent (D9) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Never attended school or only attended kindergarten	0%	0%	9%	1%	1%	2%
Grades 1 through 8 (Elementary)	13%	5%	0%	8%	12%	16%
Grades 9 through 11 (Some high school)	12%	6%	3%	9%	5%	14%
Grade 12 or GED (High school graduate)	26%	22%	10%	29%	32%	21%
College 1 year to 3 years (Some college, technical school, Associates)	31%	47%	67%	28%	29%	33%
College 4 years or more (College graduate)	18%	20%	11%	26%	20%	14%
Total (n)	250	57	24	155	268	260

Source: 2013 CARE Participant Telephone Survey.

**Table 432: Employment of People in Home 18 Years or Older (D10) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Working full-time	26%	31%	22%	24%	29%	23%	28%	29%
Working part-time	16%	17%	16%	13%	18%	17%	18%	18%
Not working and looking for work	18%	17%	20%	17%	19%	17%	19%	18%
Not working and not looking for work	39%	35%	43%	45%	34%	43%	35%	35%
Total (n)	2240	890	1350	748	925	443	1038	914

Source: 2013 CARE Participant Telephone Survey.

Note: The total (n) reflects the total number of adults over the age of 18 in 988 surveyed households. Data from 40 households was omitted due to missing information.

**Table 433: Employment of People in Home 18 Years or Older (D10) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Working full-time	25%	32%	26%	27%	16%	20%	35%	21%	16%
Working part-time	14%	17%	19%	15%	4%	15%	19%	14%	14%
Not working and looking for work	15%	18%	21%	16%	28%	15%	18%	27%	13%
Not working and not looking for work	46%	33%	34%	41%	53%	50%	28%	38%	57%
Total (n)	1136	337	682	1482	76	968	579	144	97

Source: 2013 CARE Participant Telephone Survey.

Note: The total (n) reflects the total number of adults over the age of 18 in 988 surveyed households. Data from 40 households was omitted due to missing information.

**Table 434: Employment of People in Home 18 Years or Older (D10) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Working full-time	23%	26%	20%	29%	26%	28%
Working part-time	13%	18%	11%	14%	17%	20%
Not working and looking for work	19%	10%	14%	16%	19%	20%
Not working and not looking for work	45%	47%	55%	41%	38%	32%
Total (n)	510	117	53	298	609	653

Source: 2013 CARE Participant Telephone Survey.

Note: The total (n) reflects the total number of adults over the age of 18 in 988 surveyed households. Data from 40 households was omitted due to missing information.

**Table 435: Household Income Now, Compared to Three Years ago (D13) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
A lot more	3%	1%	5%	3%	3%	4%	3%	3%
Somewhat more	14%	14%	13%	16%	11%	13%	12%	11%
Somewhat less	17%	18%	15%	17%	18%	18%	17%	18%
A lot less	21%	20%	22%	18%	26%	21%	23%	26%
About the same / no change	46%	46%	45%	47%	42%	44%	45%	42%
Total (n)	989	591	398	375	370	193	417	366

Source: 2013 CARE Participant Telephone Survey.

**Table 436: Household Income Now, Compared to Three Years ago (D13) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
A lot more	3%	4%	3%	0%	2%	4%	5%	3%	1%
Somewhat more	12%	14%	15%	22%	12%	15%	9%	14%	12%
Somewhat less	20%	15%	15%	13%	15%	19%	23%	17%	18%
A lot less	20%	20%	23%	36%	25%	14%	16%	21%	25%
About the same / no change	46%	48%	44%	29%	44%	49%	47%	46%	44%
Total (n)	469	131	341	41	521	199	45	939	49

Source: 2013 CARE Participant Telephone Survey.

**Table 437: Household Income Now, Compared to Three Years ago (D13) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
A lot more	2%	3%	0%	3%	1%	5%
Somewhat more	16%	5%	16%	16%	12%	13%
Somewhat less	16%	26%	30%	17%	13%	18%
A lot less	19%	19%	22%	14%	25%	24%
About the same / no change	47%	46%	32%	50%	48%	40%
Total (n)	243	56	24	151	263	252

Source: 2013 CARE Participant Telephone Survey.

**Table 438: What Caused Household Income to Change (D13a) by ESA Participation and Utility For California LI Population**

	Total	Partici pant	Non- Participant	PG&E	SCE	SDG&E	SoCal Gas	SCE & SoCalGas
Moved out	3%	2%	3%	2%	3%	5%	2%	3%
Job change	9%	6%	12%	9%	9%	9%	9%	9%
Job loss/not working	23%	25%	21%	22%	26%	29%	23%	26%
Cut in hours	13%	13%	14%	9%	16%	12%	16%	15%
Increase in hours	2%	1%	4%	3%	3%	2%	2%	3%
Pay decrease	5%	5%	4%	3%	8%	5%	6%	8%
Pay raise/increase	9%	7%	10%	9%	7%	9%	8%	7%
Additional household members working	4%	4%	4%	5%	3%	3%	4%	3%
Assistance from other programs stopped	4%	5%	3%	5%	3%	2%	4%	3%
Something else	13%	16%	10%	16%	13%	14%	12%	13%
Retired	6%	6%	7%	4%	7%	5%	8%	7%
Death in the family	5%	5%	5%	4%	3%	5%	5%	3%
Increase in social security/welfare/unemployment/pension	7%	11%	3%	8%	7%	9%	6%	7%
Hurt/injured	2%	1%	2%	3%	0%	1%	0%	0%
Economy/inflation/cost of living/recession	6%	4%	8%	8%	3%	2%	6%	4%
Medical reasons/health/got sick/disabled	8%	6%	10%	7%	8%	8%	9%	8%
Rent/bills/expenses increased	3%	3%	3%	3%	3%	5%	3%	3%
Decrease in social security/welfare/unemployment/pension	4%	4%	3%	5%	3%	2%	3%	3%
Separated/divorced	2%	1%	2%	3%	1%	2%	1%	1%
Change in child support payments	1%	1%	0%	1%	0%	0%	0%	0%
Total (n)	542	321	221	203	208	109	227	205

Source: 2013 CARE Participant Telephone Survey.  
Note: Multiple Mentions allowed.

**Table 439: What Caused Household Income to Change (D13a) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Moved out	2%	5%	2%	6%	4%	1%	2%	3%	0%
Job change	8%	14%	8%	2%	6%	11%	9%	9%	3%
Job loss/not working	22%	28%	22%	25%	22%	21%	22%	23%	22%
Cut in hours	11%	15%	15%	4%	7%	25%	16%	14%	3%
Increase in hours	3%	2%	3%	3%	2%	3%	11%	2%	6%
Pay decrease	5%	4%	6%	0%	5%	3%	2%	5%	8%
Pay raise/increase	6%	10%	10%	5%	7%	11%	8%	9%	5%
Additional household members working	5%	8%	2%	0%	2%	9%	7%	4%	3%
Assistance from other programs stopped	1%	7%	3%	16%	6%	2%	7%	4%	16%
Something else	10%	17%	11%	25%	16%	7%	14%	13%	28%
Retired	9%	4%	5%	14%	8%	5%	3%	6%	0%
Death in the family	8%	5%	3%	6%	5%	3%	6%	5%	0%
Increase in social security/welfare/unemployment/pension	5%	3%	9%	14%	10%	2%	8%	7%	15%
Hurt/injured	2%	3%	1%	0%	2%	0%	0%	1%	10%
Economy/inflation/cost of living/recession	9%	5%	5%	3%	10%	1%	4%	5%	18%
Medical reasons/health/got sick/disabled	13%	7%	6%	0%	10%	6%	6%	8%	14%
Rent/bills/expenses increased	4%	1%	4%	0%	3%	5%	8%	3%	3%
Decrease in social security/welfare/unemployment/pension	3%	3%	4%	8%	4%	0%	4%	4%	0%
Separated/divorced	2%	5%	0%	0%	3%	0%	0%	2%	7%
Change in child support payments	0%	0%	1%	3%	0%	0%	0%	1%	0%
Total (n)	252	72	192	24	286	97	30	516	26

Source: 2013 CARE Participant Telephone Survey.  
Note: Multiple Mentions allowed.

**Table 440: What Caused Household Income to Change (D13a) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Moved out	1%	9%	0%	2%	3%	2%
Job change	8%	9%	6%	10%	8%	11%
Job loss/not working	24%	25%	14%	21%	26%	22%
Cut in hours	11%	8%	6%	5%	14%	20%
Increase in hours	3%	6%	0%	6%	0%	2%
Pay decrease	3%	10%	13%	4%	4%	5%
Pay raise/increase	5%	0%	0%	16%	10%	9%
Additional household members working	5%	1%	0%	5%	2%	5%
Assistance from other programs stopped	5%	0%	27%	2%	2%	5%
Something else	17%	16%	50%	7%	11%	12%
Retired	6%	9%	0%	3%	10%	6%
Death in the family	6%	2%	0%	3%	2%	8%
Increase in social security/welfare/unemployment/pension	11%	1%	21%	3%	6%	6%
Hurt/injured	4%	3%	0%	3%	0%	0%
Economy/inflation/cost of living/recession	10%	1%	13%	4%	7%	4%
Medical reasons/health/got sick/disabled	7%	19%	6%	7%	7%	9%
Rent/bills/expenses increased	4%	7%	3%	1%	3%	3%
Decrease in social security/welfare/unemployment/pension	4%	6%	0%	6%	2%	3%
Separated/divorced	6%	0%	0%	0%	0%	1%
Change in child support payments	0%	0%	0%	2%	0%	0%
Total (n)	130	29	15	80	139	149

Source: 2013 CARE Participant Telephone Survey.

Note: Multiple Mentions allowed.



**Table 441: Adults in Household Unable to Work due to Physical, Mental, or Emotional Disability (D11) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Yes	37%	40%	34%	38%	35%	38%	36%	36%
No	63%	60%	66%	62%	65%	62%	64%	64%
Total (n)	1,008	599	409	377	381	199	428	377

Source: 2013 CARE Participant Telephone Survey.

**Table 442: Adults in Household Unable to Work due to Physical, Mental, or Emotional Disability (D11) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Yes	35%	33%	37%	62%	43%	28%	37%	36%	50%
No	65%	67%	63%	38%	57%	72%	63%	64%	50%
Total (n)	473	135	351	42	526	211	46	958	49

Source: 2013 CARE Participant Telephone Survey.

**Table 443: Adults in Household Unable to Work due to Physical, Mental, or Emotional Disability (D11) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Yes	45%	33%	58%	29%	36%	35%
No	55%	67%	42%	71%	64%	65%
Total (n)	246	58	24	151	269	260

Source: 2013 CARE Participant Telephone Survey.

**Table 444: Person in Household with a Hearing Impairment or Wearing a Hearing Aid (D15a) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
<b>Yes</b>	13%	14%	12%	14%	12%	19%	12%	12%
<b>No</b>	87%	86%	88%	86%	88%	81%	88%	88%
<b>Total (n)</b>	1,010	600	410	381	380	198	427	376

Source: 2013 CARE Participant Telephone Survey.

**Table 445: Person in Household with a Hearing Impairment or Wearing a Hearing Aid (D15a) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
<b>Yes</b>	16%	12%	9%	12%	15%	9%	24%	12%	27%
<b>No</b>	84%	88%	91%	88%	85%	91%	76%	88%	73%
<b>Total (n)</b>	475	134	352	42	529	210	47	960	49

Source: 2013 CARE Participant Telephone Survey.

**Table 446: Person in Household with a Hearing Impairment or Wearing a Hearing Aid (D15a) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
<b>Yes</b>	17%	6%	36%	9%	13%	11%
<b>No</b>	83%	94%	64%	91%	87%	89%
<b>Total (n)</b>	248	58	24	153	268	259

Source: 2013 CARE Participant Telephone Survey.

**Table 447: Adults in Household with a Vision Impairment that Cannot be Corrected with Eyeglasses or Contact Lenses (D15b) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Yes	12%	13%	10%	9%	11%	12%	13%	11%
No	88%	87%	90%	91%	89%	88%	87%	89%
Total (n)	1,004	598	406	377	378	198	425	374

Source: 2013 CARE Participant Telephone Survey.

**Table 448: Adults in Household with a Vision Impairment that Cannot be Corrected with Eyeglasses or Contact Lenses (D15b) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Yes	9%	13%	11%	16%	13%	11%	14%	12%	12%
No	91%	87%	89%	84%	87%	89%	86%	88%	88%
Total (n)	471	135	349	42	523	210	47	956	47

Source: 2013 CARE Participant Telephone Survey.

**Table 449: Adults in Household with a Vision Impairment that Cannot be Corrected with Eyeglasses or Contact Lenses (D15b) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Yes	10%	10%	10%	12%	16%	9%
No	90%	90%	90%	88%	84%	91%
Total (n)	245	56	24	152	268	259

Source: 2013 CARE Participant Telephone Survey.

**Table 450: Person in Household requires the use of a Cane, Walker, Wheelchair, or other Assistance to move Around Safely (D15c) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Yes	28%	33%	23%	31%	26%	32%	26%	27%
No	72%	67%	77%	69%	74%	68%	74%	73%
Total (n)	1,009	601	408	381	380	197	427	376

Source: 2013 CARE Participant Telephone Survey.

**Table 451: Person in Household requires the use of a Cane, Walker, Wheelchair, or other Assistance to move Around Safely (D15c) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Yes	34%	18%	27%	53%	35%	17%	20%	28%	42%
No	66%	82%	73%	47%	65%	83%	80%	72%	58%
Total (n)	473	135	352	42	527	211	47	959	49

Source: 2013 CARE Participant Telephone Survey.

**Table 452: Person in Household requires the use of a Cane, Walker, Wheelchair, or other Assistance to move Around Safely (D15c) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Yes	35%	21%	42%	24%	28%	26%
No	65%	79%	58%	76%	72%	74%
Total (n)	248	58	24	153	266	260

Source: 2013 CARE Participant Telephone Survey.

**Table 453: Person in Household has Emotional, Nervous or Psychiatric Problems (D15d) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Yes	17%	19%	14%	16%	18%	17%	18%	18%
No	83%	81%	86%	84%	82%	83%	82%	82%
Total (n)	997	593	404	373	377	197	423	373

Source: 2013 CARE Participant Telephone Survey.

**Table 454: Person in Household has Emotional, Nervous or Psychiatric Problems (D15d) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Yes	13%	16%	20%	28%	21%	12%	5%	17%	12%
No	87%	84%	80%	72%	79%	88%	95%	83%	88%
Total (n)	468	133	347	42	523	208	46	949	47

Source: 2013 CARE Participant Telephone Survey.

**Table 455: Person in Household has Emotional, Nervous or Psychiatric Problems (D15d) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Yes	21%	17%	15%	11%	17%	17%
No	79%	83%	85%	89%	83%	83%
Total (n)	244	58	24	149	265	257

Source: 2013 CARE Participant Telephone Survey.

**Table 456: Person in Household has Other Chronic Medical Conditions (D15e) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Yes	44%	49%	39%	47%	40%	55%	41%	41%
No	56%	51%	61%	53%	60%	45%	59%	59%
Total (n)	999	596	403	375	379	195	425	375

Source: 2013 CARE Participant Telephone Survey.

**Table 457: Person in Household has Other Chronic Medical Conditions (D15e) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Yes	47%	40%	42%	65%	54%	26%	45%	44%	57%
No	53%	60%	58%	35%	46%	74%	55%	56%	43%
Total (n)	467	135	348	42	520	210	46	950	48

Source: 2013 CARE Participant Telephone Survey.

**Table 458: Person in Household has Other Chronic Medical Conditions (D15e) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Yes	50%	48%	61%	41%	44%	39%
No	50%	52%	39%	59%	56%	61%
Total (n)	243	57	24	152	264	259

Source: 2013 CARE Participant Telephone Survey.

**Table 459: Care for Illness or Condition Needs Medical Equipment on Ongoing or Daily Basis that Requires Use of Electricity (D17) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Yes	36%	37%	35%	34%	38%	35%	39%	38%
No	64%	63%	65%	66%	62%	65%	61%	62%
Total (n)	542	341	201	218	177	121	203	177

Source: 2013 CARE Participant Telephone Survey.

**Table 460: Care for Illness or Condition Needs Medical Equipment on Ongoing or Daily Basis that Requires Use of Electricity (D17) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Yes	31%	45%	35%	44%	36%	29%	44%	36%	37%
No	69%	55%	65%	56%	64%	71%	56%	64%	63%
Total (n)	262	60	187	28	330	74	19	510	32

Source: 2013 CARE Participant Telephone Survey.

**Table 461: Care for Illness or Condition Needs Medical Equipment on Ongoing or Daily Basis that Requires Use of Electricity (D17) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Yes	38%	28%	30%	29%	42%	37%
No	62%	72%	70%	71%	58%	63%
Total (n)	140	30	17	80	142	133

Source: 2013 CARE Participant Telephone Survey.

**Table 462: Ownership of Home (S5) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Own	34%	34%	35%	35%	32%	38%	33%	33%
Rent	63%	62%	65%	61%	65%	62%	65%	65%
Other	0%	0%	1%	0%	1%	0%	1%	1%
Someone else owns/don't pay rent/live here for free	2%	4%	0%	4%	2%	0%	1%	2%
Total	1,028	610	418	389	384	203	432	380

Source: 2013 CARE Participant Telephone Survey.



**Table 463: Ownership of Home (S5) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Own	100%	0%	4%	58%	37%	29%	32%	33%	61%
Rent	0%	100%	95%	42%	59%	70%	68%	64%	39%
Other	0%	0%	1%	0%	0%	2%	0%	1%	0%
Someone else owns/don't pay rent/live here for free	0%	0%	0%	0%	4%	0%	0%	2%	0%
Total	483	136	360	42	532	213	49	978	49

Source: 2013 CARE Participant Telephone Survey.

**Table 464: Ownership of Home (S5) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Own	39%	34%	65%	25%	30%	36%
Rent	55%	65%	35%	71%	70%	61%
Other	0%	1%	0%	0%	0%	1%
Someone else owns/don't pay rent/live here for free	5%	0%	0%	4%	0%	1%
Total	253	59	24	156	273	263

Source: 2013 CARE Participant Telephone Survey.

**Table 465: Home Type (S6) by ESA Participation and Utility For California LI Population**

	Total	Participant	Non-Participant	PG&E	SCE	SDG&E	SoCalGas	SCE & SoCalGas
Single-Family	55%	56%	55%	58%	52%	52%	53%	53%
Multi-Family 2-4 Units	12%	13%	12%	11%	12%	10%	13%	12%
Multi-Family 5-10 Units	10%	9%	11%	9%	8%	9%	11%	8%
Multi-Family 11-20 Units	5%	4%	6%	3%	7%	6%	6%	7%
Multi-Family Over 20 Units	12%	11%	12%	10%	15%	16%	13%	15%
Multi-Family Unknown Units	3%	4%	3%	5%	3%	2%	2%	2%
Mobile Home	3%	4%	2%	4%	3%	5%	2%	3%
Total (n)	1,028	610	418	389	384	203	432	380

Source: 2013 CARE Participant Telephone Survey.

**Table 466: Home Type (S6) by Home Type, Language, Rural and Urban For California LI Population**

	Single-Family Own	Single-Family Rent	Multi-Family	Mobile	English Only	Primary Language Spanish	Primary Language Other	Urban	Rural
Single-Family	100%	100%	0%	0%	56%	52%	65%	54%	88%
Multi-Family 2-4 Units	0%	0%	30%	0%	11%	14%	17%	13%	0%
Multi-Family 5-10 Units	0%	0%	24%	0%	10%	12%	5%	10%	3%
Multi-Family 11-20 Units	0%	0%	11%	0%	4%	8%	1%	5%	0%
Multi-Family Over 20 Units	0%	0%	28%	0%	12%	11%	8%	12%	0%
Multi-Family Unknown Units	0%	0%	7%	0%	3%	2%	4%	3%	0%
Mobile Home	0%	0%	0%	100%	4%	0%	0%	3%	9%
Total (n)	483	136	360	42	532	213	49	978	49

Source: 2013 CARE Participant Telephone Survey.

**Table 467: Home Type (S6) by Climate Zone For California LI Population**

	Central Valley	Desert	Mountain	North Coast	South Coast	South Inland
Single-Family	67%	56%	75%	48%	43%	58%
Multi-Family 2-4 Units	8%	3%	0%	18%	22%	7%
Multi-Family 5-10 Units	7%	10%	0%	12%	13%	9%
Multi-Family 11-20 Units	1%	0%	0%	6%	6%	8%
Multi-Family Over 20 Units	10%	23%	0%	8%	14%	12%
Multi-Family Unknown Units	3%	2%	0%	7%	2%	3%
Mobile Home	5%	6%	25%	1%	0%	3%
Total (n)	253	59	24	156	273	263

Source: 2013 CARE Participant Telephone Survey.

## 9 Detailed Modeling Results

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### 9.1 CARE Modeling

Table 468 contains the results of the CARE *Participation* model and Table 469 contains the results of the CARE *Penetration* model. Because we estimated the models based on a logit-transformation of the proportion of households enrolled in CARE, the coefficient estimates (column b) have little intuitive meaning. They represent our estimates of the (marginal) change in the log-odds that a household would be enrolled in CARE based on a one-unit increase in the value of the respective independent variable, while holding the value of all other independent variables constant. While there is little or no intuitive meaning to the coefficient estimates, the sign of the coefficient (positive or negative) indicate if a one-unit increase in the independent variable would lead to an increase or decrease in the proportion of households enrolled in CARE. The standard errors (column c) are a measure of the precision of the coefficient estimates—the smaller the standard error, the greater the precision of the estimated coefficient. The t-statistic (column d) is a statistical measure of whether the true parameter is different from zero and is computed by dividing the coefficient by the standard error.<sup>13</sup> The larger the absolute value of the t-statistic, the greater the statistical evidence that the true parameter differs from zero. The t-statistic for each coefficient is statistically significant at the 0.05 level or greater, indicating a strong relationship between the respective explanatory variable and the dependent variable.<sup>14</sup>

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<sup>13</sup> The null hypothesis is that the true parameter is equal to zero (i.e., the independent variable does not affect the dependent variable) versus the alternative that the true parameter is different from zero (i.e., the independent variable has either a positive or negative effect on the dependent variable).

<sup>14</sup> In fact, most t-statistics are significant at the .001 level (or better), indicating a very strong relationship between the dependent and independent variable.

**Table 468: CARE Participation Model Results**

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
Variable	Coefficient	Standard Error	t-Statistic*	Change in Odds Ratio	Change in Proportion on CARE
(Constant)	-2.822	0.022	-126.0		
% HH < 100% FPL	0.009	0.000	22.3	0.90%	0.75%
Average Number Persons Per HH	0.423	0.011	38.6	52.65%	0.73%
% HHs with Person >= 65	0.013	0.000	39.2	1.31%	0.84%
% Spanish Speaking HHs	0.009	0.000	32.5	0.90%	1.49%
% Home Ownership	-0.008	0.000	-29.0	-0.80%	-1.34%
% Non English/Spanish HHs	0.003	0.000	11.3	0.30%	0.27%
% Single Parent HHs	0.050	0.001	46.2	5.13%	1.91%
% HHs on Public Assistance	0.009	0.001	11.4	0.90%	0.25%
% HHs with Income > \$200K	-0.046	0.000	-111.5	-4.50%	-2.53%
% African-American HHs	0.007	0.000	20.7	0.70%	0.20%

Model Summary Statistics: Adj. R2 = 0.83; n = 22,712; F-statistic = 9,991

\* All coefficients statistically significant at 0.001 level.

Column *e* of Table 468 shows the marginal change in the odds ratio associated with a one-unit change in the respective independent variable. This is not the same as the marginal change in the proportion of households enrolled in CARE. Rather, it's the effect on the *odds* that a household will be on a CARE rate. Recall that the odds are calculated as the ratio of the proportion of households on CARE to the proportion not on CARE. The values in Column *e* are estimates of the percent change in this ratio due to a one-unit change in the independent variable. Positive values in column *e* indicate that the odds that a household will be on a CARE rate increase when the respective independent variable increases by one unit. For example, the coefficient on the independent variable “% HH < 100% FPL” in Table 468 indicates that the odds that a household will be on a CARE rate increases by 0.90 percent if the percent of households living below the federal poverty level in that Census block group increases by one percentage point.

Likewise, negative values indicate that the odds that a household will be on a CARE rate decreases when the respective independent variable increases by one unit. For example, the independent variable “% Home Ownership” in Table 468 indicates that the odds that a household will be on a CARE rate decreases by 0.70 percent if the home ownership rate in that Census block group increases by one percentage point.

Column f in Table 468 shows the estimated percent change in the proportion of households on CARE due to a one-unit change in the value of the independent variable.<sup>15</sup> Because the model was estimated based on the log-odds transformation of the proportion of households on CARE, developing estimates of the marginal change on the CARE proportion requires the following non-linear transformation:

$$DCARE = \left( \frac{e^{b_k \bar{x}}}{1 + e^{b_k \bar{x}}} \right) - \left( \frac{e^{b_k \bar{x} + 1}}{1 + e^{b_k \bar{x} + 1}} \right)$$

Where:

$DCARE$  = Marginal change in CARE rate

$e^{b_k \bar{x}}$  = Estimated odds evaluated at mean value of independent variable

$e^{b_k \bar{x} + 1}$  = Estimated odds evaluated at mean value of independent variable plus one unit

The estimates of marginal change must be evaluated at a “point of approximation.” The standard point of approximation and the one used for this analysis is the mean value of the independent variable. The point of approximation matters because, as the formula above shows, the transformation is non-linear and so the estimated marginal impacts will differ based on the point at which the function is evaluated. Table 469 provides an interpretation of the estimated marginal impact on the proportion of CARE households (in a block group) associated with each of independent variables in the model. We will discuss these estimates of marginal change in detail in the *Finding from the CARE Models* section below.

Columns e and f of Table 469 show the same information as the corresponding columns in Table 468, but with respect to the penetration for CARE eligible households to be on a CARE rate. We will discuss the estimates of marginal impacts shown in column f in detail in the *Finding from the CARE Models* section below.

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<sup>15</sup> These values also represent estimates of the marginal change in the probability that a randomly drawn household will be on a CARE rate.

Note: the estimates of the marginal change in the proportion on CARE were calculated at the mean value of the respective independent variable.

**Table 469: CARE Penetration Model Results**

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
Variable	Coefficient	Standard Error	t-Statistic*	Change in Odds Ratio	Change in Proportion on CARE
(Constant)	0.243	0.086	2.822**		
% HH < 100% FPL	-0.100	0.001	-75.24	-9.52%	-1.51%
Average Number Persons Per HH	0.843	0.036	23.179	132.33%	4.32%
% HHs with Person >= 65	0.013	0.001	11.935	1.31%	0.32%
% Spanish Speaking HHs	0.012	0.001	13.101	1.21%	0.29%
% Home Ownership	0.002	0.001	1.94***	0.20%	0.05%
% Non English/Spanish HHs	0.006	0.001	6.944	0.60%	0.15%
% Single Parent HHs	0.120	0.004	33.728	12.75%	2.08%
% HHs on Public Assistance	0.022	0.003	8.043	2.22%	0.55%
% HHs with Income > \$200K	-0.040	0.001	-29.231	-3.92%	-0.98%
% African-American HHs	0.019	0.001	16.665	1.92%	0.47%
Avg Annual BTUs CARE HHs	-0.009	0.001	-12.53	-0.90%	-0.21%
Population Density	0.00001	0.000	3.561	0.00%	0.03%

Model Summary Statistics: Adj. R2 = 0.41; n = 22,715; F-statistic = 1,304

\* Unless indicated, statistically significant at .001 level or better.

\*\* Statistically significant at 0.01 level.

\*\*\*Statistically significant at 0.05 level.

### 9.1.1 Other Variables Considered for the CARE Models

In addition to the variables shown in Table 468 and Table 469 that were included as explanatory variable in the final CARE Participation and Penetration models, we considered numerous other potential explanatory variables, but did not include them because of one or more of the following reasons:

- 1) The variable was not statistically significant based on the t-statistic.
- 2) The variable was highly collinear with one or more variables already in the model.
- 3) Inclusion of the variable reduced the overall significance of the model as measured by the F-statistic.

Variables considered, but ultimately not included in the model are shown in Table 470.

**Table 470: Variables Considered, but not Included in the Participation or Penetration Models**

Type	Variable	Description	Reason Not Included
Income	Median Income	Median household income for block group	Not statistically significant*
	Percent FPL	Proportion of households below some percent of FPL	Highly collinear with the variable " <b>% HH &lt; 100% FPL</b> "
	Income Level	Percent of households below various income thresholds	Highly collinear with the variable " <b>% HH &lt; 100% FPL</b> "
Demographic	Pacific Islander	Percent of households that are Pacific Island	Not statistically significant*
	Population density	Persons per square mile	Marginally statistically significant; Reduced F-statistic ( <i>Participation</i> model only)
	Medicaid	Proportion of households on Medicaid	Collinear with " <b>% HH &lt; 100% FPL</b> "
Geographic	Climate zone	Dummy variable indicator for each climate zone (1 if block group in climate zone; else 0)	Highly collinear with one or more other variables; no theoretical reason to believe climate zone should influence CARE participation or penetration
	IOU territory	Dummy variable indicator for each IOU territory (1 if block group in climate zone; else 0)	Highly collinear with one or more other variables; no theoretical reason to believe climate zone should influence CARE participation or penetration
	Housing units	Count of housing units in block group	Not statistically significant*
Utility	CARE kWh	Average annual kWh for households in CARE program	Converted to BTUs and added with average gas usage in BTUs
	CARE Therms	Average annual Therm for households in CARE program	Converted to BTUs and added with average kWh usage in BTUs

\*These variables were not statistically significant in the context of the overall model. However, each of these variables may be statistically significantly related to the dependent variable, but that relationship is not incremental beyond those variables already in the model.

It is important to note that for many of the variables considered, but not included in either the Participation or Penetration model, their exclusion does not imply that the variables are not related to the dependent variable. Rather, many of the excluded variables contain high levels of the same information contained in the explanatory variables included in the regression model.



## 9.2 ESA Modeling

### 9.2.1.1 Model Results

In this section, we present detailed results of the Stage 1 and Stage 2 ESA models. Because the logistic regression model is non-linear, the coefficient values do *not* represent the marginal change in the dependent variable associated with a small change in the covariate (as they do in OLS regression), but rather the direction and relative magnitude of the contribution of that explanatory variable. Of greater use is information on how each explanatory variable affects the probability that a CARE enrollee will also participate in the ESA program. That is, a measure of the marginal impact that each explanatory variable has on the likelihood of ESA participation. To obtain estimates of the marginal impact for each explanatory variable, we used the same non-linear transformation we used for the CARE models (Equation 1).

#### Equation 1: Formula for Computing Marginal Impacts to Probability of Participating in ESA

$$DProb(ESA) = \left( \frac{e^{b_k \bar{x}}}{1 + e^{b_k \bar{x}}} \right) - \left( \frac{e^{b_k \bar{x}+1}}{1 + e^{b_k \bar{x}+1}} \right)$$

Where :

$DProb(ESA)$  = Marginal change in probability of participating in ESA

$e^{b_k \bar{x}}$  = Estimated odds evaluated at median value of explanatory variable

$e^{b_k \bar{x}+1}$  = Estimated odds evaluated at 60th percentile value of explanatory variable

For explanatory variables that are continuous, we computed the estimates of marginal impact based on a change from the median value the 60th percentile value.<sup>16</sup> For explanatory variables that are discrete and countable (e.g. number of failed payments to the utility), we used the median value and the median plus one unit. Finally, for binary explanatory variables (e.g. customer has medical equipment in home), we computed the marginal impact based on the difference between “yes” (1) and “no” (0).

The results of the ESA models are presented in the following five tables as follows:

- Table 471 contains the Stage 1 result for SCE

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<sup>16</sup> Alternatively, we could have used the change in value between any two other “points of approximation,” such as the mean and one standard deviation above the mean. Because percentiles are robust to extreme values (unlike parametric statistics such as the mean and standard deviation), we believe they provide a more realistic and reliable point of approximation for developing estimates of marginal change.

Note: The point of approximation does matter. As Equation 1 shows, the transformation is non-linear and so the estimated marginal impacts will differ (at least slightly) based on the point at which the function is evaluated.

- Table 472 contains the Stage 1 results for SoCalGas
- Table 473 contains the Stage 1 results for SDG&E
- Table 474 contains the Stage 1 results for PG&E
- Table 475 contains the Stage 2 results from the phone survey

The modeling results are segmented into three groups based on the type of explanatory variable: continuous, discrete and countable, and binary. The points of approximation for computing the odds ratios and marginal impacts differ for each of type of variable as explained above.

The coefficient estimates (**column b**) in each table have little intuitive meaning. They represent our estimates of the (marginal) change in the log-odds that a household would be enrolled in CARE based on a one-unit increase in the value of the respective independent variable, while holding the value of all other independent variables constant. The sign of each coefficient (positive or negative) indicate if an increase in the value of the independent variable would lead to an increase or decrease in the probability that a CARE enrollee lives in a home treated through the ESA program, either by choosing to participate in the program or by living in a home already treated. For independent variables that are binary, a positive coefficient indicates that the presence of that factor (e.g. “room AC eligible”) has a positive impact on the probability of ESA participation.

The standard errors (**column c**) are a measure of the precision of the coefficient estimates—the smaller the standard error, relative to the coefficient, the greater the precision of the estimated coefficient.

The Wald-statistic (**column d**) is a statistical measure of whether the true parameter is different from zero and, therefore, has an impact on the probability that a CARE enrollee will participate in ESA. The Wald-statistic is computed as the ratio of the square of the coefficient to the square of the standard error.<sup>17</sup> The larger the absolute value of the Wald-statistic, the greater the statistical evidence that the true parameter differs from zero. Below each table is a note indicating the statistical significance of the respective coefficients. Most are significant at the 0.01 level or better.

**Column e** shows the marginal change in the odds ratio for each explanatory variable. This is not the same as the marginal change in the probability that a CARE enrollee will participate in ESA, rather, it’s the effect on the *odds* that a CARE enrollee will participate in CARE (i.e. the ratio of the probability of ESA participation to the probability of not participating in ESA).

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<sup>17</sup> The null hypothesis is that the true parameter is equal to zero (i.e., the explanatory variable does not affect the dependent variable) versus the alternative that the true parameter is different from zero (i.e., the explanatory variable has either a positive or negative effect on the dependent variable).

The values in **Column e** are estimates of the percent change in this ratio due to a one-unit change in the explanatory variable. Positive values in column e indicate that the odds that a CARE enrollee will participate in ESA increases when the respective explanatory variable increases. For example, the value in column e for the variable “*Household Size*” in Table 471 indicates that the odds that a CARE enrollee will participate in ESA is seven percent greater for households with one more than the median household size, while holding all else constant.

Likewise, negative values in column e indicate that the odds that a CARE enrollee will participate in ESA decreases when the respective independent variable increases. For example, the explanatory variable “*Coastal Location*” indicates that the odds that a enrollee will participate in ESA decreases by 20.1 percent for enrollees in a coastal location (i.e., “*Coastal Location*” = 1).

**Column f** shows the estimated percent change in the probability that a CARE enrollee will participate in ESA due to a change in the value of the explanatory variable from one point of approximation to another.<sup>18</sup>

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<sup>18</sup> For continuous variables, the points of approximation are the median and the median plus one; for discrete and countable variables the points of approximation are the median and the median plus one; for binary variables the points of approximation are zero and one.

Note: the estimates of the marginal change in the proportion on CARE were calculated at the mean value of the respective independent variable.

**Table 471: Stage 1 ESA Participation Model Results—SCE**

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
Variable	Coefficient	Standard Error	Wald-Statistic*	Change in Odds Ratio	Change in Prob. of ESA Participation
Constant	-3.549	0.137	673.95	NA	NA
<b>Continuous Variables (Impacts evaluated at Median &amp; 60th %tile)</b>					
Account Age	0.037	0.002	546.96	-2.6%	2.3%
Median Income	-0.005	0.001	28.59	3.8%	-0.6%
Population Density	0.006	0.005	1.39	-0.5%	0.1%
Percent Spanish	1.754	0.090	382.85	0.6%	2.3%
Percent Non-English/Spanish	0.366	0.135	7.33	1.8%	0.3%
Percent 65 and Over	0.614	0.184	11.15	0.4%	0.3%
Months on CARE Rate	0.029	0.002	143.70	0.6%	0.5%
Average Home Age	0.003	0.001	4.42	2.9%	0.6%
Percent Black	1.12	0.128	76.41	0.3%	0.6%
<b>Discrete and Countable Variables (Impacts evaluated at Median &amp; Median + 1)</b>					
Household Size	0.068	0.009	51.51	7.0%	1.7%
Failed Utility Payment Count	0.013	0.005	8.36	1.3%	0.3%
Overdue Utility Payment Count	0.022	0.005	17.58	2.2%	0.6%
<b>Binary Variables (Impacts evaluated at 0 and 1)</b>					
Categorically Qualified	0.154	0.033	21.89	16.6%	3.8%
Central & Room AC Eligible	0.656	0.071	84.99	92.7%	15.8%
Room AC Eligible	0.777	0.052	226.18	117.5%	18.5%
Medical Equipment in Home	0.560	0.099	32.27	75.1%	13.7%
Coastal Location	-0.225	0.044	26.07	-20.1%	-5.6%
Single-Family Home	0.784	0.035	497.00	119.0%	18.7%
CARE App Recertified	0.574	0.033	309.45	77.5%	14.0%

\* All coefficients, except on Pop Density, are statistically significant at 0.05 level or better.

**Table 472: Stage 1 ESA Participation Model Results—SoCalGas**

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
Variable	Coefficient	Standard Error	Wald-Statistic*	Change in Odds Ratio	Change in Prob. of ESA Participation
Constant	-2.785	0.127	480.296	NA	NA
<b>Continuous Variables (Impacts evaluated at Median &amp; 60th %tile)</b>					
Median Income	-0.011	0.001	151.52	-1.1%	-1.39%
Avg. Daily Therms	-0.005	0.021	0.05	-0.5%	-0.02%
Account Age	0.007	0.001	32.49	0.7%	0.45%
Percent Spanish	0.986	0.091	118.69	1.0%	2.10%
Percent Non-English/Spanish	-1.307	0.116	127.42	-1.3%	-1.01%
Percent 65 and Over	0.782	0.182	18.53	0.8%	0.35%
Months on CARE Rate	0.050	0.004	152.29	5.1%	0.87%
Avg. Household Size	0.368	0.025	210.73	44.5%	1.49%
Percent Single Parent Families	0.459	0.365	1.58	0.5%	0.22%
Percent Black	1.533	0.112	187.37	1.5%	0.62%
<b>Binary Variables (Impacts evaluated at 0 and 1)</b>					
Medical Equipment in Home	0.736	0.115	40.982	108.8%	17.61%
Coastal	-0.590	0.031	361.213	-44.6%	-14.34%
Has IOU Electricity	0.346	0.032	118.736	41.3%	8.56%

\* All coefficients, except on *Avg Daily Therms* and *Percent Single Parent Families*, are statistically significant at 0.05 level or better.

**Table 473: Stage 1 ESA Participation Model Results—SDG&E**

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
Variable	Coefficient	Standard Error	Wald-Statistic*	Change in Odds Ratio	Change in Prob. of ESA Participation
Constant	-1.198	0.105	129.61	NA	NA
<b>Continuous Variables (Impacts evaluated at Median &amp; 60th %tile)</b>					
Avg Daily kWh	-0.029	0.002	247.24	-2.86%	-1.32%
Service Account Age	-0.005	0.002	11.29	-0.50%	-0.21%
Median Income	-0.013	0.001	210.22	-1.29%	-2.01%
Population Density	0.018	0.003	30.21	1.82%	0.37%
Spanish Speaking	0.299	0.097	9.53	0.30%	0.42%
Non-English/Spanish Speaking	-1.351	0.118	130.67	-1.34%	-0.66%
Percent Over 65	0.305	0.160	3.66	0.31%	0.17%
Percent Single Parent Families	5.659	0.387	213.61	5.82%	2.70%
Average Building Age	0.011	0.002	43.95	1.11%	0.30%
Percent on Medicaid	3.478	0.209	275.78	3.54%	3.78%
<b>Discrete and Countable Variables (Impacts evaluated at Median &amp; Median + 1)</b>					
Count of Calls to Customer	0.014	0.002	84.40	1.41%	0.35%
Count of Failed Payments	-0.075	0.030	6.23	-7.23%	-1.87%
Count of Utility Disconnects	-0.096	0.034	8.01	-9.15%	-2.40%
Count of Overdue Payments	0.003	0.002	3.76	0.30%	0.07%
<b>Binary Variables (Impacts evaluated at 0 and 1)</b>					
Coastal	-0.108	0.034	9.89	-10.24%	-2.70%

\* All coefficients are statistically significant at 0.10 level or better.

**Table 474: Stage 1 ESA Participation Model Results—PG&E**

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
Variable	Coefficient	Standard Error	Wald-Statistic*	Change in Odds Ratio	Change in Prob of ESA Participation
Constant	-2.715	0.107	640.025	NA	NA
<b>Continuous Variables (Impacts evaluated at Median &amp; 60th %tile)</b>					
Average Daily kWh	-0.006	0.001	25.103	-0.6%	-0.5%
Service Account Age	0.013	0.001	109.389	1.3%	0.8%
Median Income	-0.003	0.001	13.522	-0.3%	-0.6%
Population Density	-0.015	0.005	7.821	-1.5%	-0.2%
Spanish Speaking	0.957	0.089	115.359	0.1%	1.5%
Non-English/Spanish Speaking	0.502	0.101	24.535	0.1%	0.6%
Percent 65 & Older	1.554	0.162	92.026	0.2%	0.8%
Percent Single-Parent Families	1.584	0.363	19.024	0.4%	0.6%
Average Building Age	0.007	0.001	66.193	0.7%	0.7%
Percent on Medicaid	2.041	0.172	141.115	0.2%	1.8%
<b>Discrete and Countable Variables (Impacts evaluated at Median &amp; Median + 1)</b>					
Count of Utility Disconnects	-0.156	0.060	6.833	-14.4%	-3.9%
Number of Failed Payments	-0.114	0.054	4.432	-10.8%	-2.9%
<b>Binary Variables (Impacts evaluated at 0 and 1)</b>					
IOU Provides kWh & Gas	0.734	0.044	283.782	108.3%	17.6%
IOU Provides Only kWh	0.214	0.055	15.344	23.9%	5.3%
Medical Equipment in Home	0.246	0.057	18.462	27.9%	6.1%

\* All coefficients are statistically significant at 0.05 level or better.

**Table 475: Stage 2 ESA Participation Model Results—Phone Survey**

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
Variable	Coefficient	Standard Error	Wald-Statistic*	Change in Odds Ratio	Change in Prob of ESA Participation
Constant	-2.715	0.107	640.025	NA	NA
<b>Continuous Variables (Impacts evaluated at Median &amp; 60th %tile)</b>					
Avg. Daily kWh	-0.026	0.015	3.085	-2.6%	-3.8%
Population Density	-0.028	0.019	2.070	-2.8%	-3.1%
Home Tenure	0.044	0.006	52.431	4.5%	12.0%
Household Income	-0.014	0.005	7.274	-1.4%	-5.6%
<b>Discrete and Countable Variables (Impacts evaluated at Median &amp; Median + 1)</b>					
Household Size	0.160	0.046	11.948	17.4%	3.7%
<b>Binary Variables (Impacts evaluated at 0 and 1)</b>					
Male	-0.329	0.156	4.482	-28.0%	-8.2%
Married	-0.481	0.171	7.864	-38.2%	-11.8%
English Proficient	-0.377	0.191	3.885	-31.4%	-9.3%
Home Built 1970-1989	0.339	0.164	4.308	40.4%	8.4%
Other Race**	0.406	0.215	3.579	50.1%	10.0%
Primary Lang not English/Spanish	-0.635	0.378	2.825	-47.0%	-15.4%
Chronic Medical Condition	0.333	0.149	4.979	39.5%	8.3%
Aware of CARE Rate	-0.305	0.175	3.043	-26.3%	-7.6%
Forego Heating/Cooling***	0.522	0.158	10.895	68.5%	12.8%
ESA Offered Something Needed	0.414	0.153	7.293	51.3%	10.2%
Not a Barrier: Landlord	0.463	0.158	8.552	58.9%	11.4%
Not a Barrier: Being Home	0.455	0.160	8.075	57.6%	11.2%
Not a Barrier: Documentation	-0.273	0.169	2.607	-23.9%	-6.8%
Not a Barrier: Contractor	0.614	0.152	16.259	84.8%	14.9%

\* All coefficients are statistically significant at 0.05 level or better.

### 9.2.1.2 Other Variables Considered for the ESA Models

In addition to the variables shown in the tables above, Table 476 describes the types of variables we considered as explanatory variables in the ESA participation models. The explanatory variables included in the regression models are a subset of these variables and were included in the models based on their ability to predict the dependent variable (i.e., that a residential premise was treated through the ESA program).



**Table 476: Potential Explanatory Variables for Stage 1 ESA Participation Models**

<b>Variable</b>	<b>Source</b>	<b>Level</b>	<b>Description</b>
Location and climate	Census/Athens	Census Block Group	Population per square mile; rural/urban distinctions and climate zone
Household demographic & income, Workforce	Census/Athens	Census Block Group	Such as persons per home, race/ethnicity, seniors, children and disabled member information, primary languages; median household income; employment statistics
Participation in non-energy LI assistance programs	Athens, Census	Census Block Group	Public assistance income, SSI income, food stamp recipients, etc.
Housing stock and related economic data	CIS, Census, Athens, housing authority	Customer and Census Block Group	Distributions of home type, home size, home vintage, own versus rent,
Energy Usage and IOU territory	CIS/billing	Customer	Monthly kWh and therm consumption, Serviced by kWh/Gas IOU
IOU tariff/rate and payment information	CIS/billing	Customer	FERA, Medical Baseline. Arrearages and service interruptions
ESA Participation	ESA data	Customer	If and when home was retrofit through ESA
CARE enrollment characteristics	CARE data	Customer	Household is currently enrolled in CARE; timing of current enrollment; enrollment type (categorical versus income)

Many pairs of variables within the data set are highly correlated—i.e., have a strong positive or negative linear relationship. Because of this, they have the same or very similar relationship with the dependent variable, which can lead to problems in the estimation of the econometric model.<sup>19</sup> Including two (or more) highly correlated explanatory variables in the regression model would not only be unnecessary, but would likely result in large variances on the coefficient estimates of the collinear variables because the variables provide essentially the same information for predicting the dependent variable (likelihood that a residence participated in the ESA program). It is, therefore, important to note that for many of the variables considered, but not included in the ESA models, their exclusion does not imply that the variables are not related to the dependent variable. Rather, many of the excluded variables contain high levels of the same information contained in the explanatory variables included in the regression model.

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<sup>19</sup> The estimation problem, multicollinearity (or simply collinearity), is a condition occurring when two or more independent variables in the same regression model contain high levels of the same information and, consequently, are strongly correlated with one another. When significant collinearity is present, the coefficients of the independent variables in the regression model can be unstable, and even the signs of these coefficients may change when different variables are included, making it difficult to interpret the regression coefficients. In addition, standard errors may be inflated, resulting in insignificant t-statistics and incorrect conclusions regarding the statistical significance of the coefficients.

### 9.3 Conjoint Analysis

Table 477 below shows the results for ESA program Option 1 participation model. In this model, the coefficients should be interpreted as contributing to the overall probability of the customer participating in the ESA program. As with the previous model, the sign and magnitude of the coefficient estimates on all variables are as expected. The coefficient on Income Verification is not statistically significant—meaning it is not statistically different from zero—so no inference about this variables effect on the likelihood on participation can be made from this model.

**Table 477: Conjoint Results – ESA Program Option 1 – Participation Model**

Attribute	Estimate	Standard Error	Significance
Monthly Energy Savings	0.03494997	0.00522182	< 1%
Number of Home Visits	-0.28122272	0.08454755	< 1%
Income Verification	-0.32067475	0.21471195	14%
Comfort	0.97350353	0.20730736	< 1%
Total Time in Home	-0.24797019	0.06503928	< 1%

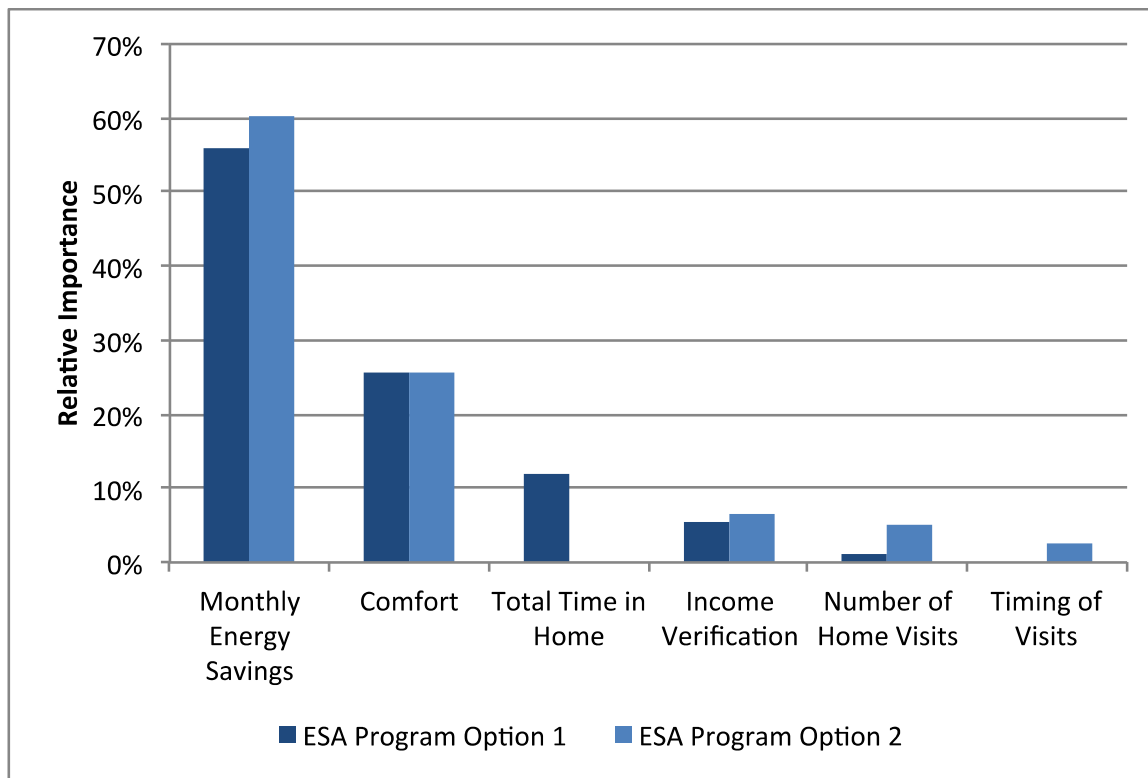
Table 478 below shows the results for the ESA program Option 2 participation model. In this model, the coefficients should be interpreted as contributing to the overall probability of the customer participating in the ESA program. More so than the rank model, the sign and magnitude of the coefficient estimates on all variables are as expected. The coefficient on Income Verification and Timing of Home Visits are not statistically significant—meaning they are not statistically different from zero—so no inference about these variables effect on the likelihood on participation can be made from this model.

**Table 478: Conjoint Results – ESA Program Option 2 – Participation Model**

Attribute	Estimate	Standard Error	Significance
Monthly Energy Savings	0.02984359	0.00509824	< 1%
Number of Home Visits	-0.47088404	0.08558553	< 1%
Income Verification	-0.11586613	0.2054695	57%
Comfort	0.82316006	0.20553007	< 1%
Timing of Home Visits	-0.27037356	0.21180599	20%

Figure 1 below shows a chart of the relative importance statistics that were reported above. It is apparent that monthly energy savings and comfort are the most important factor to customers.

**Figure 1: Relative Importance of Attributes**



### 9.3.1 ESA Program Option Participation Probabilities

Once the above models for ESA Program Option 1 and Option 2 participation decisions were estimated, the probability of participation was calculated by combining the coefficient estimates with attribute levels for different scenarios. These probabilities were calculated such that participation was minimized and maximized representing an ESA program that is least and most likely to evoke participation. Additionally, the analysis included a scenario that matched the current ESA program features as closely as possible. The three scenarios had the following characteristics for ESA Program Option 1:

- “Worst” Participation Scenario
  - Monthly Energy Savings: \$0
  - Number of Home Visits: 3
  - Income Verification: Documentation Required
  - Comfort: No Change
  - Total Time in Home: 4 hours

- “Best” Participation Scenario
  - Monthly Energy Savings: \$50
  - Number of Home Visits: 1
  - Income Verification: None
  - Comfort: Improvement
  - Total Time in Home: 1 hour
- Current Program Design Participation Scenario
  - Monthly Energy Savings: \$10
  - Number of Home Visits: 1
  - Income Verification: Documentation Required
  - Comfort: Improvement
  - Total Time in Home: 1 hour

Likewise for ESA Program Option 2:

- “Worst” Participation Scenario
  - Monthly Energy Savings: \$0
  - Number of Home Visits: 3
  - Income Verification: Documentation Required
  - Comfort: No Change
  - Timing of Home Visits: Evenings/Weekends Only
- “Best” Participation Scenario
  - Monthly Energy Savings: \$50
  - Number of Home Visits: 1
  - Income Verification: None
  - Comfort: Improvement
  - Timing of Home Visits: Days Only
- Current Program Design Participation Scenario
  - Monthly Energy Savings: \$10
  - Number of Home Visits: 1
  - Income Verification: Documentation Required
  - Comfort: Improvement
  - Total Time in Home: 1 hour

Table 479 below shows the participation scenarios for ESA Program Option 1 and the participation probability for each scenario. The first row reflects that the likelihood of participation is approximately 10 percent, meaning that 10 percent of those surveyed would be willing to participate in a program with attributes corresponding to those included in the same row. The purchase probability for the “best” participation scenario is 90 percent, and the purchase probability for the reasonable program design is 62 percent.

**Table 479: ESA Program Option 1 Participation Probabilities**

<b>Participation Scenario</b>	<b>Attribute Values</b>	<b>Purchase Probability</b>
"Worst"	Energy Savings: \$0 Number of Visits: 3 Verification: Documentation Req. Comfort: No Change Time in Home: 4 hours	0.104
"Best"	Energy Savings: \$50 Number of Visits: 1 Verification: None Comfort: Improvement Time in Home: 1 hour	0.900
Current Program Design	Energy Savings: \$10 Number of Visits: 1 Verification: Documentation Req. Comfort: Improvement Time in Home: 1 hour	0.616

Using the probabilities above for the three program scenarios and assuming a linear trend, we were able to calculate the monthly bill savings amount that is equivalent to:

- 1) Increasing the number of home visits by one.
- 2) Requiring income verification documentation.
- 3) Participants experiencing no change in comfort versus a significant change in comfort.
- 4) Increasing the duration of home visits by one hour.

As exhibited in Figure 2, participants must realize an additional \$8 in monthly bill savings if the program requires one additional home visit and the same level of program participation is to be maintained. Similarly, a program with no change in comfort versus one in which a significant improvement in comfort is experienced is equivalent to an additional \$28 in monthly bill savings. In other words, if there were no improvement in comfort, customers would need an additional \$28 a month in bill savings in order to maintain the same levels of participation. Given the higher amount in bill savings equivalence, it is apparent that improvements in comfort are more important to customers than other factors (except savings) when determining program participation.

**Figure 2: Equivalent Monthly Bill Savings Amounts – ESA Program Option 1**

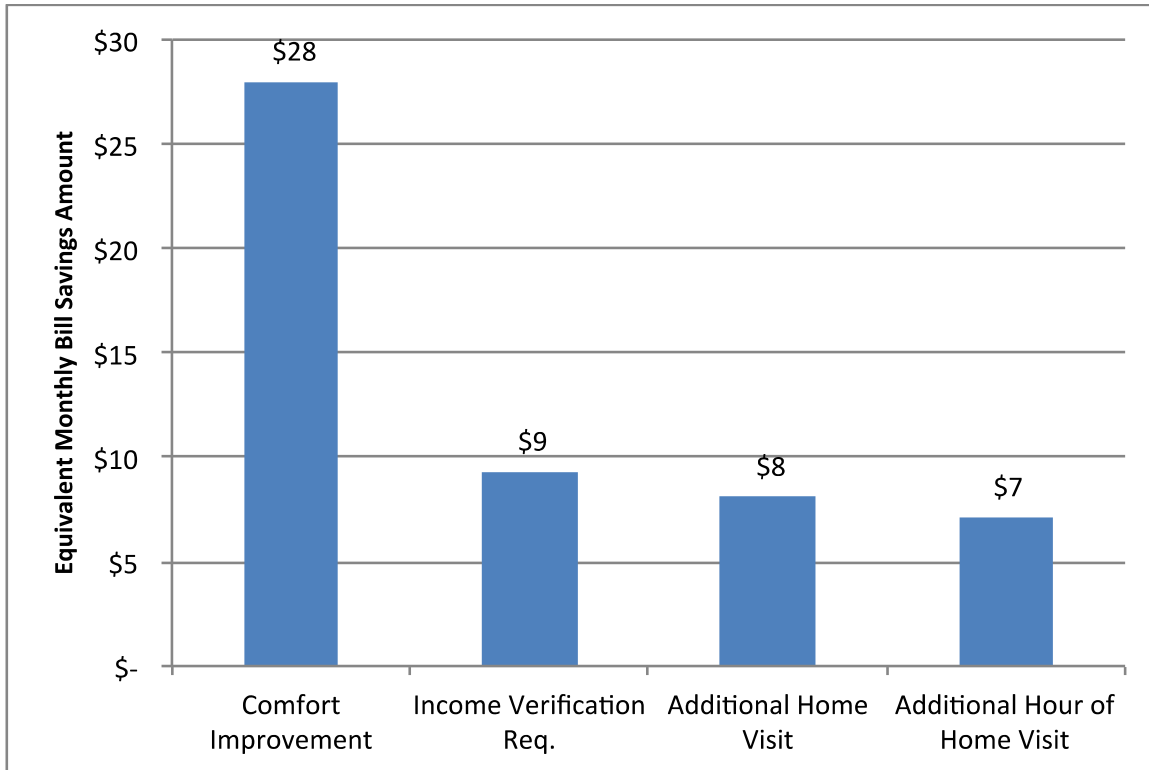


Table 480 below shows the participation scenarios for ESA Program Option 2 and the participation probability for each scenario. The first row reflects that the likelihood of participation is approximately 14 percent, meaning that 14 percent of those surveyed would be willing to participate in a program with attributes corresponding to those included in the same row. The purchase probability for the “best” participation scenario is 86 percent, and the purchase probability for the current program design is 63 percent. It is important to note that the probability values themselves are only hypothetical, because they are based on hypothetical program scenarios, but the relative magnitude of probabilities between different scenarios do reflect real customer preferences.

**Table 480: ESA Program Option 2 Participation Probabilities**

<b>Participation Scenario</b>	<b>Attribute Values</b>	<b>Purchase Probability</b>
"Worst"	Energy Savings: \$0 Number of Visits: 3 Verification: Documentation Req. Comfort: No Change Timing: Nights/Weekends Only	0.142
"Best"	Energy Savings: \$50 Number of Visits: 1 Verification: None Comfort: Improvement Timing: Days Only	0.863
Current Program Design	Energy Savings: \$10 Number of Visits: 1 Verification: Documentation Req. Comfort: Improvement Timing: Days Only	0.631

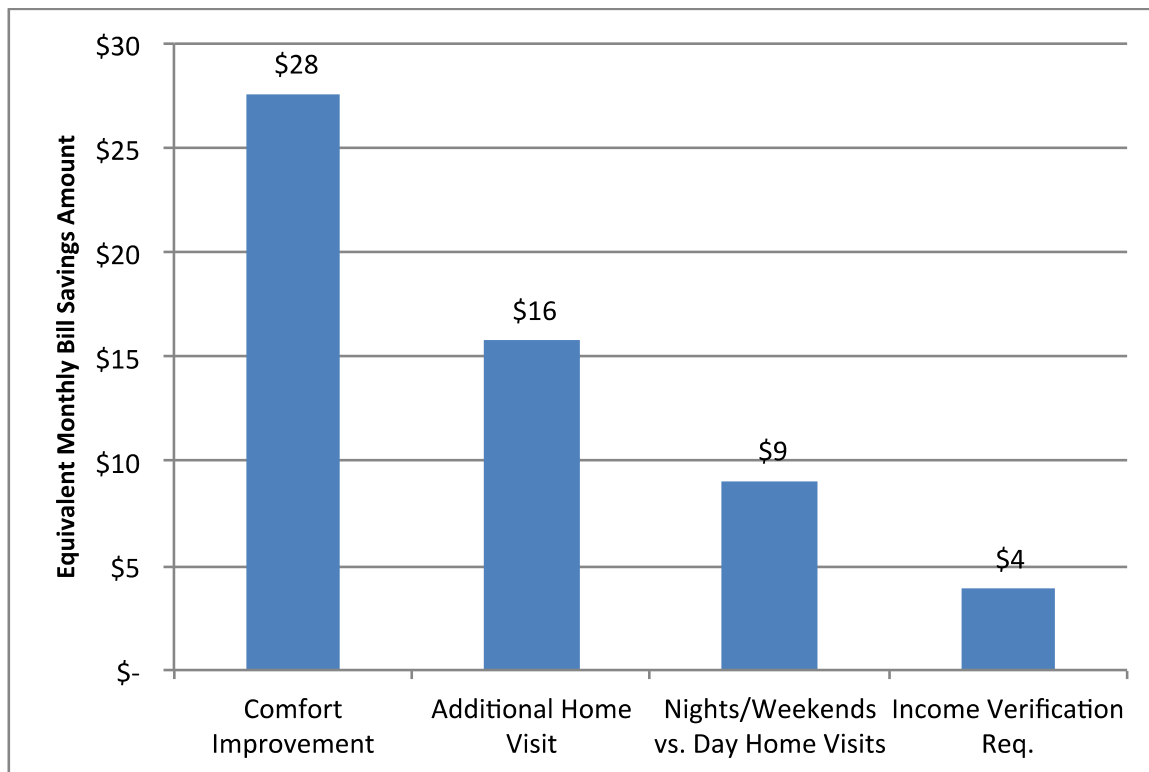
As above, we were able to calculate the monthly bill savings amount that is equivalent to:

- 1) Increasing the number of home visits by one.
- 2) Requiring income verification documentation.
- 3) Participants experiencing no change in comfort versus a significant change in comfort.
- 4) Having home visits on nights/weekends versus days only.

As shown in Figure 3, participants must realize an additional \$32 in monthly bill savings (or \$16 per visit) if the program requires three home visits instead of one and the same level of program participation is to be maintained. Moreover, a program with no change in comfort versus one in which a significant improvement in comfort is experienced is equivalent to \$28 in monthly bill savings. As in the ESA Program Option 1 scenarios, changes in comfort are much more valuable to customers than any other factor when determining program participation.



**Figure 3: Equivalent Monthly Bill Savings Amounts – ESA Program Option 1**



## 10 In-Home Interview Detail

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While our aim in conducting in-home visits was to provide actionable insights about households that are eligible for ESA but not currently participating, we would be remiss if we didn't first paint a picture of the range of households we visited and the diversity of situations in which they find themselves. We do not seek to replicate past characterization studies that cover this topic more fully, but are simply striving to provide context for the reader that we think is helpful in thinking about how the program interacts with its target population.

Perhaps one of the most important items to consider when thinking about eligible non-participants is that this population is not *one* group that ESA will seek to reach in upcoming years, but a collection of a great variety of individuals, households, housing situations, needs, circumstances, and approaches to dealing with life. The households we visited all have their own individual stories that defy stereotypes and simple classification. Before discussing the more applied aspects of our in-home research, we seek to describe this diversity by briefly presenting their characteristics and describing the stories of a few of them in more detail for illustrative purposes.

### 10.1.1 Household Types

We encountered a variety of household types comprising combinations of adults and children. Table 481 summarizes these household types.

**Table 481: Types of Households**

Household Type	Number
Adults with child(ren)	30
Single parent with child(ren)	8
Senior(s)-only	15
Adult(s) without children	16
Multiple generations –adults only	11
Multiple adult generations—with child(ren)	8

The ages of our primary interviewees ranged from about 25 to 90. Young adults, middle-aged adults, and seniors were all well-represented among eligible non-participants, as shown in Table 482.

**Table 482: Age of Primary Interviewee**

Age Category	Number
Young adult (<40)	17
Middle-aged adult (40-64)	45
Senior (65+)	26

### 10.1.2 Major Energy-Using Equipment

As part of our visit, we conducted a walk-through to assess energy-using equipment and identify the degree to which measure opportunities appear to exist among eligible non-participants. These data allow us to characterize the major energy-using systems in the home.

As shown in Table 483, the large majority of homes are heated with natural gas, either a stand-alone, central forced-air furnace (57%) and wall furnace (17%) or a package unit that combines a gas, forced air furnace and a central AC unit (11%). We encountered only three high-efficiency, condensing furnaces among the sampled homes. Nearly a third of the households reported using some form of supplementary heating, mostly electric space heaters and fireplaces.

Half of the interview sample has central air conditioning, and about a quarter has one or more room or sleeve AC units. Evaporative coolers were uncommon in the study sample. About a quarter of the sample had no air conditioning or evaporative coolers: these were nearly all in coastal areas (Climate Zones, 3, 6, 7 and 8) where a mix of homes with and without air conditioning equipment was encountered.

The large majority of homes in the sample have a conventional, gas-fired water heater. These are fairly evenly divided among units located inside, outside and in garages.

Delivered hot-water temperature at the kitchen sink ranged from 107F to 156F, with an average of 127F. About one in five homes (21%) had a measured hot-water temperature that exceeded 135F (Figure 4). The Department of Energy recommends temperature settings of 120F to save on heating energy.

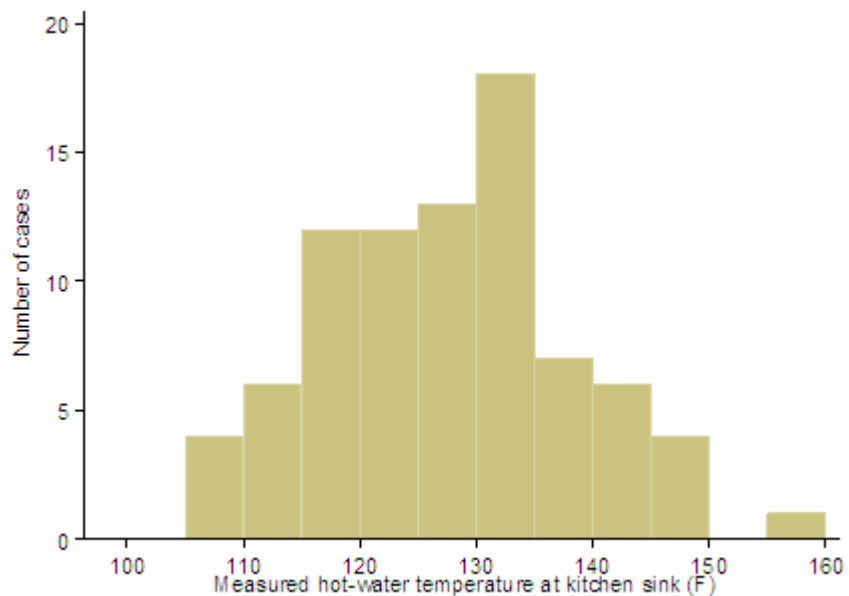
Measured flow for the primary showerhead in the home ranged from less than 1 gpm to more than 5 gpm, with an average of 1.98 gpm. About one in ten homes (12%) had a showerhead with a flow rate that exceeded 2.5 gpm, which is the current federal standard for new showerheads (Figure 5).

Most of the homes in the sample had a primary refrigerator that was manufactured after 2000 (Figure 6). Only about 6 percent of homes had a refrigerator that dated to earlier than 1992.

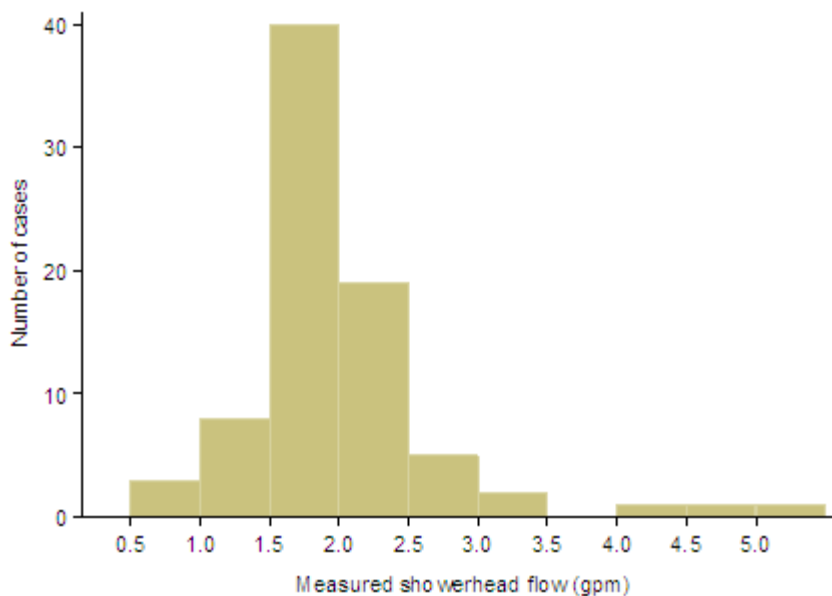
**Table 483: Selected Heating, Cooling and Water Heating Characteristics (based on 88 in-home visits)**

<b>Primary heating system</b>	<i>Type</i>	Forced-air furnace	57%
		Wall furnace	17%
		Package furnace/AC unit	11%
		Electric	8%
		Fireplace/Stove	3%
		Multifamily central heat	1%
		Unable to determine	2%
	<i>Fuel</i>	Natural gas	83%
		Electricity	8%
		Propane	3%
		Wood	2%
		Unable to determine	3%
	<i>High efficiency?</i> (for furnaces, wall furnaces and package units)	Yes	4%
No		82%	
Unable to determine		14%	
<i>Functional?</i>	Yes	90%	
	No	7%	
	Unable to determine	3%	
<b>Supplemental heat</b>	<i>Used?</i>	Yes	30%
		No	69%
		Unable to determine	1%
	<i>Type (if used)</i> (multiple sources may be present)	Electric space heater(s)	65%
		Fireplace	46%
<b>Cooling system</b>	<i>Type</i> (multiple types may be present)	Central AC	49%
		Room/sleeve AC	23%
		Central evaporative cooler	3%
		Room evaporative cooler	3%
		None	25%
		Unable to determine	1%
<b>Water heater</b>	<i>Type</i>	Tank	83%
		Tankless	3%
		Multifamily central	9%
		Unable to determine	5%
	<i>Fuel</i> (for non-central systems)	Natural Gas	85%
		Electricity	5%
		Propane	6%
		Unable to determine	4%
	<i>Location</i> (for non-central systems)	Indoors	35%
		Outdoors (or in exterior closet)	34%
Garage		28%	
Unable to determine		4%	

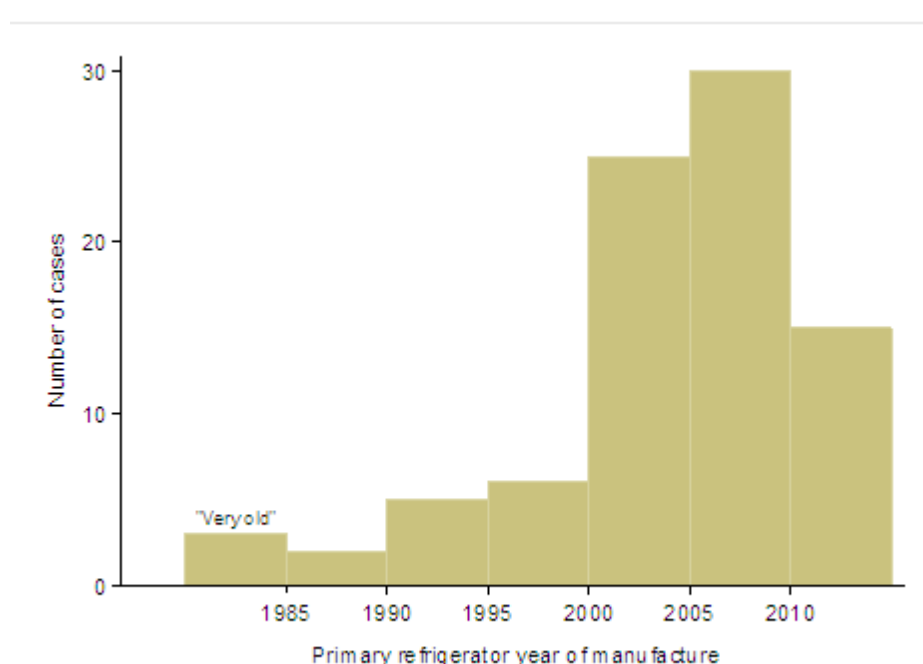
**Figure 4: Measured Hot Water Temperature at Kitchen Sink**



**Figure 5: Measured Showerhead Flow**



**Figure 6: Primary Refrigerator Age**



### 10.1.3 Selected Illustrative Profiles

We have included below the stories we heard from a few of the households we visited. These profiles are qualitative descriptions of the range of circumstances we encountered. We have changed people’s names and described their locations only very generally to protect the privacy of the households we are describing.

#### Illustrative Example: “Janet” – a frugal energy miser

Janet is an 80-year-old retired widow who lives in an apartment in a coastal (temperate) climate zone. She lives on a fixed income that qualifies her for CARE and ESA, but seems to be getting by just fine. She declined the \$100 Visa gift card we were offering for the in-home visits because she does not use credit cards and did not think she needed the funds. She is a low energy user, choosing to spend her time reading and engaging in social activities at her church. She has very few energy-using devices. Her average monthly energy bills are about \$30 for electricity and natural gas combined. While there are technical opportunities in her home—replacing incandescent light bulbs and repairing a window that does not close tightly—the savings would probably be minimal. She would decline participation because she knows her usage is low and doesn’t think she needs the help.

### Illustrative Example: “Jim” – a self-sufficiency-minded high user

Jim and his wife are raising four minor children in a large home they had built in the foothills of the Sierra Nevada before Jim suffered a neck injury. He believes in living a self-sufficient lifestyle and in neighbors helping neighbors and has mixed feelings about social programs. He is on the CARE rate, but only because his IOU contacted him to offer it. He would generally not seek out assistance on his own.

The home is highly efficient in most respects, and Jim is very well-informed about energy efficiency, having done much to make his home efficient. He has converted to LED lights, verified wall insulation with an infrared camera, and ensured that doors and windows were tight-fitting. The only remaining efficiency needs according to Jim are completing a switch to double-paned windows, which he can't afford, and fixing insulation underneath the house that he says is falling apart. Nevertheless, Jim is a high energy user whose electric bills average around \$200 per month, at least in part due to a well pump that he operates to irrigate food he grows and hydrate vegetation on his sizable property to mitigate against perennial fire danger.

Comfort is a substantial issue at times. Jim heats with wood that he manages to collect and buy. A few years ago, he was only able to acquire half the wood he would have needed and said the house dropped to freezing temperatures on occasions. Conversely, during the summer, the evaporative coolers stop cooling effectively once the temperature surpasses 100 degrees Fahrenheit. He says the family leaves the house at those times and spends time at the local creek or in air-conditioned spaces.

### Illustrative Example: “Fred” – grateful participant who can't use all the measures

Fred and his wife have lived in the same 800 square foot house in a pleasant and very temperate ocean-side neighborhood for multiple decades. They are around retirement age, and Fred has stopped working after suffering an accident that left him with a disability. They have custody of three grandchildren, and an adult son lives with them too while he is finishing his education. The large family size makes them a moderate energy user with combined monthly bills of around \$80, and the large number of dependents qualifies them for LI programs.

They appear to have participated in ESA recently after their IOU called them to offer the CARE rate and efficiency improvements. They are grateful for the measures they received, but are benefitting from only some of them. They received a new showerhead and refrigerator, which they are using although its size is a bit small for a household of six people. They also received a new “more efficient” microwave to supplement the one they still have, making their kitchen space tighter. And they

received two standing lamps with CFLs, but they have only been able to find room for one in their tight quarters. They do still have one leaky door that leaves them with drafts in the “cold season,” but they are careful not to complain since they think they live in “paradise” and don’t really experience any comfort issues.

#### Illustrative Example: “Sharon” – highly stressed “shut-in”

Sharon is a 70-year-old widow who moved to a small in-land town after her husband died to be closer to her daughter, but was surprised to find herself having very little contact with her daughter. She lives in a rented unit in a triplex and has modest energy bills that she struggles to pay on her fixed income. Other than her television set, which she runs for companionship, she tries to use energy very sparingly to save money, compromising on comfort.

Energy is only part of her struggles, however. We observed that her refrigerator was nearly completely empty, for example, probably as a result of lack of funds and lack of mobility. (She does not drive and has some medical issues that make it difficult to board the bus or walk to the grocery store.)

Even small levels of assistance would go a long way toward improving Sharon’s quality of life. A IOU contractor had already visited her about ESA three months before our in-home visit, and she was waiting for the contractor to return to install measures. Obvious opportunities included a substantial gap around one exterior door, an old refrigerator, and CFLs. (It should be noted, however, that Sharon does not think she can afford CFLs on her own, so she would be likely to return to incandescent light bulbs once CFLs burn out.)

#### Illustrative Example: “Ed” – immigrant family

Ed is an employed man in his mid-twenties who lives with his wife, two other unrelated adults and three young children (two of which are his children) in a small two bedroom rented apartment that is in a state of disrepair. They have two small room A/C units and a wall heater that they do not use because it’s old and they don’t trust it. They described comfort issues in the winter during the coldest times of year. The building management does not respond well to request for updates and upkeep of the apartment.

While there are three working adults in the household, money is continually tight. A few times throughout the year they have to defer payment on their energy bills, although they have never had their energy cut off. They do not know of ways to reduce their energy usage but would be open to anything that could help them save



money and improve their comfort in their home, including participating in ESA as long as they can schedule a time for a program visit when someone can be home. They have a secondary refrigerator, but it is full and does not seem to be needlessly running. There are many air sealing opportunities, including broken windows and door gaps large enough to allow a lizard in the house.

## 11 LI Program Review Detail

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### 11.1 Results Table

Name	Relationship to federal WAP	Statewide ratepayer-funded EE budget (2010 LIHEAP Clearinghouse )	Income eligibility limit (\$ shown is for 4-person hhd)	Target high usage hhd's	Criteria for high usage screening	Enrollment Process	Income docs/proof of other LI qualification required?	Renters: landlord approval required
<b>PECO LIURP Program</b>	Separate from WAP	\$29,881,000	200% of FPL (\$47,100)	Yes	If on CAP rate: >500 kWh, Non CAP rate electric heating: 1400 kWh. Gas: >50CCF	Referred through the Customer Assistance Program (utility rate discount program)	Yes, at time of audit	Yes
<b>MA Weatherization Assistance Program</b>	Is WAP	\$29,860,000	60% of state median income (\$60,137)	Yes	If the client receives a LIHEAP high energy benefit (highest 30% of LIHEAP population)	Call/visit weatherization agency	Need to be on the LIHEAP program	Yes
<b>NYSERDA Empower</b>	Both separate and complementary from WAP, because offer some EE measures that WAP does not.	\$27,708,000	60% of the state median income (\$49,333)	No	N/A	Application process, referrals through private contractors, LI agencies or WAP	Verification by a utility, human service organization or other approved entity. Only requested if not already verified.	No

Name	Relationship to federal WAP	Statewide ratepayer-funded EE budget (2010 LIHEAP Clearinghouse )	Income eligibility limit (\$ shown is for 4-person hhd)	Target high usage hhd's	Criteria for high usage screening	Enrollment Process	Income docs/proof of other LI qualification required?	Renters: landlord approval required
<b>New Jersey Comfort Partners</b>	Separate from WAP	\$35,300,000	225% of FPL (\$52,988)	Yes	< 600 therms, baseload measures only 600-1000: one EE measure >1000: more than 1 EE measure	Referred through the Universal Service Fund (percent of income program)	Yes, income verification may be requested	Yes
<b>Wisconsin WAP</b>	Is WAP	\$5,500,000	60% of state median income (\$46,697)	Yes	Outreach prioritized to hhd's with highest energy burden	Referred by LIHEAP program or call/visit weatherization agency		
<b>Ohio Energy Partnership Program (EPP)</b>	Complementary to WAP, as they offer electric measures which WAP does not.	\$11,900,000	150% of FPL (\$35,325)	Yes	5000 kWh annually or above.	Referred through the Percent of Income Program (PIPP)	Verification required for PIPP	
<b>CA Energy Savings Assistance Program</b>	Separate from WAP	\$231,732,000	200% of FPL (\$47,100)	No	N/A	Online and telephone enrollment. Wide range of outreach.	Yes	

(Table is continued)

Name	Eligible Measures (programmatic level)	Delivery models	Req's to implement measures?	Year prgm began	# homes treated in 2012 (# since inception)	Level of participation of MF or renters	Total # eligible households
<b>PECO LIURP Program</b>	Comprehensive (both Wx and electric)	For-profit vendor implements the audits and measures	Cost effective calculation aren't performed during audit	1992	9,100 (98,000)		
<b>MA Weatherization Assistance Program</b>	Focus on heating measures, if natural gas or oil-heated	Community action coalitions (CAC) implement the audits and measures	Savings to Investment Ratio $\geq 1.0$	1978	1,841 (130,000)	Few; state utilities fund separate LI-MF program administered by WAP network.	~180,000
<b>NYSERDA Empower</b>	Comprehensive (both Wx and electric)	Program is implemented by state-wide subcontractors and overseen by Honeywell.		2004	13,000 (79,000)	14% MF HH's. Renter percent unknown; likely higher amount than MF	
<b>New Jersey Comfort Partners</b>	Comprehensive (both Wx and electric)	Consortium of utilities that each work with a set of contractors	Follow BPI Wx protocol, do not use SIR ratio. Health and safety upgrades a priority	2001	7,897 (82,693)	Low MF. Only MF up to 12 units are eligible.	

Name	Eligible Measures (programmatic level)	Delivery models	Req's to implement measures?	Year prgm began	# homes treated in 2012 (# since inception)	Level of participation of MF or renters	Total # eligible households
<b>Wisconsin WAP</b>	Comprehensive (both Wx and electric)	CAC's implement the audits & measures	SIR Ratio $\geq 1.0$ , plus health and safety upgrades	1976	7,472 in 2013 (~102,000 since mid-1990's)	30% MF units, 39% of units were renters	
<b>Ohio Energy Partnership Program (EPP)</b>	Electric baseload	CAC's implement the audits & measures	SIR Ratio $\geq 1.0$	2001	14,155 (140,000)	Very few MF or renters	108,288 (as of July 2013)
<b>CA Energy Savings Assistance Program</b>	Comprehensive (both Wx and electric)	Contractor implementation, but varies by utility.					

## 12 Study Methods Detail

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### 12.1 Telephone Survey Detailed Methods

This subsection provides additional detail on the telephone survey sampling (the frame of which was also used for the ESA modeling), weights and call disposition.

#### 12.1.1 Sample Frame

The IOUs provided us with CARE and ESA data that we used to construct the sample frame for the telephone survey and the ESA modeling dataset:

- CARE: we received the full CARE population from PG&E, SCE and SDG&E and a 20 percent sample of CARE customers (customers enrolled on CARE anytime during the period 2010-2012) from SoCalGas;
- ESA: we received the population of premises that have had ESA treatment since 2002.

We combined the ESA and CARE data to determine which households from the CARE data had been treated by ESA. We combined the data and attempted to match premises within IOU and then across IOUs where there is overlap. We conducted the matching and developed the sample frame based on several stages of sampling.

First, we pulled a sample of 10 percent of census blocks that have IOU service territory in the state. Next, we pulled a sample of 20 percent of CARE customers for PG&E and SCE (excluding SoCalGas, which had only provided a 20 percent sample, and SDG&E, whose population is about 20 percent of the other IOUs.)

We then conducted matching of CARE and ESA customer data within census blocks. We used the premise identification number to match CARE and ESA data for a single IOU. We used address matching to match across IOUs, screening out from the ESA Non-Participant sample frame any households that were a likely match.

Finally, we pulled a sample of 20 percent of ESA recent and prior participants for PG&E, SCE and SoCalGas (we kept all of SDG&E's due to their smaller relative number of customers).

Table 484 below shows the CARE and ESA population by IOU and Table 485 the telephone survey and the ESA modeling dataset.

**Table 484: ESA and CARE Population by IOU**

	<b>CARE Participants</b>	<b>ESA Recent Participants</b>	<b>ESA Prior Participants</b>	<b>ESA Non-Participants</b>
PG&E	30,654	7,439	7,439	15,776
SCE	28,751	4,284	4,284	20,183
SoCalGas only	7,690	1,788	1,788	4113
SDG&E	30,860	6,448	6,448	17,963
<b>Total</b>	<b>97,954</b>	<b>19,595</b>	<b>19,959</b>	<b>58,035</b>

Source: IOU LI program tracking and billing data.

**Table 485: Telephone Survey Sample Frame and ESA Modeling Dataset**

	<b>CARE Participants</b>	<b>ESA Recent Participants</b>	<b>ESA Prior Participants</b>	<b>ESA Non-Participants</b>
PG&E	30,654	7,439	7,439	15,776
SCE	28,751	4,284	4,284	20,183
SoCalGas only	7,690	1,788	1,788	4113
SDG&E	30,860	6,448	6,448	17,963
<b>Total</b>	<b>97,954</b>	<b>19,595</b>	<b>19,959</b>	<b>58,035</b>

Source: IOU LI program tracking and billing data.

For the CARE modeling, we used the population (all) of census block groups based on the Athens Research data. For the second stage ESA modeling, we used the telephone survey completes, shown in Section 2.5.



### 12.1.2 Call Disposition

Table 486 shows the disposition of calls for the phone survey. 70 percent of non-participants agreed to be recruited for the in-home visits.

**Table 486: Telephone Survey Disposition of Calls**

Quota	Level	Recent Participant (2010-Present)				Prior Participant (2002-2010)				Nonparticipant or Early Participant (> 2002)			
	IOU	PG&E	SCE	SDG&E	SoCalGas Only	PG&E	SCE	SDG&E	SoCalGas Only	PG&E	SCE	SDG&E	SoCalGas Only
SCG Flag	SCG Customers	0	111	0	14	0	115	0	14	0	157	0	17
Meter Type	Master Metered	0	0	0	0	0	0	0	0	0	0	0	0
	Submetered	0	0	0	0	0	0	0	0	0	0	0	0
	Unknown Meter	111	111	61	14	114	117	59	14	156	159	79	17
Home Type	Single Family	79	83	28	9	66	89	17	6	96	94	38	8
	Multifamily	35	35	35	5	43	31	50	10	64	84	52	14
	Mobile home	4	6	4	0	10	4	1	0	3	4	4	0
	Other	3	1	1	1	2	1	2	0	6	3	0	0
Ownership	Own	69	74	31	9	64	77	15	6	77	80	42	9
	Rent	37	36	30	4	46	34	44	8	76	78	36	8
	Other	5	1	0	1	4	6	0	0	3	1	1	0
Urban	Rural	11	1	0	0	10	2	0	0	17	6	2	0
	Urban	100	110	61	14	103	115	59	14	139	153	77	17
Geography	Inland	94	74	26	9	73	88	12	11	113	106	25	11
	Coastal	17	37	35	5	41	29	47	3	43	53	54	6
Climate Zone	Climate Zone 1	5	0	0	0	5	0	0	0	6	0	0	0
	Climate Zone 2	11	0	0	0	5	0	0	0	5	0	0	0
	Climate Zone 3	12	0	0	0	36	0	0	0	37	0	0	0
	Climate Zone 4	10	0	0	0	10	0	0	0	10	0	0	0
	Climate Zone 5	0	0	0	0	0	0	0	0	0	0	0	0
	Climate Zone 6	0	6	0	0	0	3	0	0	0	9	0	0
	Climate Zone 7	0	0	35	0	0	0	47	0	0	0	54	0
	Climate Zone 8	0	31	0	5	0	26	0	3	0	44	0	6
	Climate Zone 9	0	20	0	8	0	28	0	8	0	40	0	8
	Climate Zone 10	0	27	24	1	0	29	12	2	0	26	23	3

Quota	Level	Recent Participant (2010-Present)				Prior Participant (2002-2010)				Nonparticipant or Early Participant (> 2002)			
	IOU	PG&E	SCE	SDG&E	SoCalGas Only	PG&E	SCE	SDG&E	SoCalGas Only	PG&E	SCE	SDG&E	SoCalGas Only
	Climate Zone 11	13	0	0	0	15	0	0	0	18	0	0	0
	Climate Zone 12	49	0	0	0	27	0	0	0	55	0	0	0
	Climate Zone 13	9	11	0	0	10	13	0	0	18	10	0	0
	Climate Zone 14	0	7	2	0	0	12	0	0	0	17	2	0
	Climate Zone 15	0	7	0	0	0	4	0	1	0	8	0	0
	Climate Zone 16	2	2	0	0	6	2	0	0	7	5	0	0

\*Multifamily is defined as: Duplex/Triplex/Quadplex, Apartment, Resort cottage or cabin, Townhouse or condominium, Co-op/Retirement Community

Source: Tetra Tech

(Table is continued)

Quota	Level	Overall			
	IOU	PG&E	SCE	SDG&E	SoCalGas Only
SCG Flag	SCG Customers	0	383	0	45
Meter Type	Master Metered	0	0	0	0
	Submetered	0	0	0	0
	Unknown Meter	381	387	199	45
Home Type	Single Family	241	266	83	23
	Multifamily	142	150	137	29
	Mobile home	17	14	9	0
	Other	11	5	3	1
Ownership	Own	210	231	88	24
	Rent	159	148	110	20
	Other	12	8	1	1
Urban	Rural	38	9	2	0
	Urban	342	378	197	45
Geography	Inland	280	268	63	31
	Coastal	101	119	136	14
Climate Zone	Climate Zone 1	16	0	0	0
	Climate Zone 2	21	0	0	0
	Climate Zone 3	85	0	0	0
	Climate Zone 4	30	0	0	0
	Climate Zone 5	0	0	0	0
	Climate Zone 6	0	18	0	0
	Climate Zone 7	0	0	136	0
	Climate Zone 8	0	101	0	14
	Climate Zone 9	0	88	0	24
	Climate Zone 10	0	82	59	6
	Climate Zone 11	46	0	0	0

Quota	Level	Overall			
	IOU	PG&E	SCE	SDG&E	SoCalGas Only
	Climate Zone 12	131	0	0	0
	Climate Zone 13	37	34	0	0
	Climate Zone 14	0	36	4	0
	Climate Zone 15	0	19	0	1
	Climate Zone 16	15	9	0	0

\*Multifamily is defined as: Duplex/Triplex/Quadplex, Apartment, Resort cottage or cabin, Townhouse or condominium, Co-op/Retirement Community  
Source: Tetra Tech

Table 487 isolates the disposition categories that may be classified as “unreachable”. The final row shows the percent of the total sample that was unreachable for the survey (52% of the total).

**Table 487: Disposition Categories That May Be Classified as Unreachable**

<i>Level</i>	Recent Participant (2010-2012)				Prior Participant (2002-2009)				Nonparticipant				Total
<i>IOU</i>	PG&E	SCE	SDG&E	SoCalGas	PG&E	SCE	SDG&E	SoCalGas	PGE	SCE	SDG&E	SoCalGas	
<b>Total sample provided</b>	<b>1113</b>	<b>1538</b>	<b>611</b>	<b>163</b>	<b>1024</b>	<b>1555</b>	<b>609</b>	<b>209</b>	<b>1556</b>	<b>2030</b>	<b>895</b>	<b>210</b>	11513
Not at number	204	632	128	48	203	573	126	59	375	856	186	46	3436
Fax/data line	4	19	4	0	11	20	3	2	12	33	11	2	121
Business number	5	21	2	5	3	24	3	5	5	51	5	2	131
Ineligible - Incorrect Address or Utility Information	11	23	5	4	7	14	6	1	16	66	9	3	165
Hard Refusal	8	10	8	0	12	13	2	0	19	33	10	5	120
Soft Refusal	129	95	51	17	132	119	56	16	197	118	117	13	1060
Incompletes (partial interviews)	5	4	1	0	4	0	2	0	6	2	5	0	29
Unavailable for duration	6	12	3	3	8	15	5	0	10	12	8	2	84
Incapable/incoherent	10	10	3	0	12	17	6	2	18	20	13	1	112
Language barrier - Other	22	27	18	3	42	30	33	5	50	44	19	13	306
Called out	1	1	1	0	0	0	1	0	0	445	0	0	449
Total not reachable	405	854	224	80	434	825	243	90	708	1680	383	87	6013
Percent not reachable	36%	56%	37%	49%	42%	53%	40%	43%	46%	83%	43%	41%	52%

Source: Tetra Tech

### 12.1.3 Weights

We constructed sample weights for the telephone survey based on the CARE enrollee population, the self-reported rates of ESA awareness we collected during the phone survey and using PUMs housing information on ownership/rental rates and home type,<sup>20</sup> Table 488 shows the rates of ESA awareness reported by ESA participation category and IOU. The population data was reallocated based on the percents shown in the table below.

**Table 488: ESA Awareness Rates of Population by ESA Participation Category and IOU**

IOU	Aware of ESA	Recent ESA Participants	Prior ESA Participants	Non-participants
PG&E	Yes	79%	62%	71%
	No	21%	38%	29%
SCE	Yes	79%	72%	55%
	No	21%	28%	45%
SoCalGas only	Yes	50%	62%	45%
	No	50%	38%	55%
SDG&E	Yes	81%	71%	66%
	No	19%	29%	34%

Source: Tetra Tech

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<sup>20</sup> Multi-family homes are defined as any housing structure with two or more units. This differs from the 2007 KEMA study where multi-family homes are defined as housing structures with five or more units. This also differs from the concurrent Cadmus multi-family LI study, which also defines multi-family homes as housing structures with five or more units.

Table 489 presents the population data that was used for the sample weights after it was allocated (using PUMs data as described in section 8.1) to account for home type and ownership.

**Table 489: Telephone Survey Population**

<b>IOU</b>	<b>ESA Participation</b>	<b>Home Type</b>	<b>Own</b>	<b>Rent</b>	<b>Other</b>
PG&E	ESA Non-Participant	Multi-Family	9,279	240,621	2,835
		Single-Family/Mobile	224,656	165,452	17,674
	ESA Participant	Multi-Family	11,672	302,689	3,566
		Single-Family/Mobile	282,606	208,130	22,233
SCE	ESA Non-Participant	Multi-Family	15,601	323,452	2,922
		Single-Family/Mobile	236,070	175,306	14,466
	ESA Participant	Multi-Family	12,887	267,179	2,413
		Single-Family/Mobile	194,999	144,807	11,949
SoCalGas Only	ESA Non-Participant	Multi-Family	5,216	109,388	989
		Single-Family/Mobile	78,697	59,539	4,865
	ESA Participant	Multi-Family	4,129	86,589	783
		Single-Family/Mobile	62,295	47,130	3,851
SDG&E	ESA Non-Participant	Multi-Family	2,559	46,230	305
		Single-Family/Mobile	40,861	23,667	2,139
	ESA Participant	Multi-Family	4,285	77,413	510
		Single-Family/Mobile	68,424	39,631	3,582

Source: IOU CARE program tracking and billing data for population numbers; 2011 PUMS for % home type and own versus rent.



Table 490 presents the survey participant numbers that were used for creating weights.

**Table 490: Telephone Survey Respondents**

<b>IOU</b>	<b>ESA Participation</b>	<b>Home Type</b>	<b>Own</b>	<b>Rent</b>	<b>Other</b>
PG&E	ESA Non-Participant	Multi-Family	4	52	-
		Single-Family/Mobile	78	27	-
	ESA Participant	Multi-Family	11	54	-
		Single-Family/Mobile	128	30	5
SCE	ESA Non-Participant	Multi-Family	8	49	1
		Single-Family/Mobile	72	26	-
	ESA Participant	Multi-Family	9	37	-
		Single-Family/Mobile	149	31	2
SoCalGas Only	ESA Non-Participant	Multi-Family	2	7	-
		Single-Family/Mobile	7	4	-
	ESA Participant	Multi-Family	3	13	-
		Single-Family/Mobile	13	3	-
SDG&E	ESA Non-Participant	Multi-Family	8	31	-
		Single-Family/Mobile	35	7	-
	ESA Participant	Multi-Family	11	60	-
		Single-Family/Mobile	35	16	-

Source: Telephone survey data.

Table 491 presents the sample weights that we applied by strata by combining the data from the previous two tables.

**Table 491: Telephone Survey Sample Weights**

IOU	ESA Participation	Home Type	Own	Rent	Other
PG&E	ESA Non-Participant	Multi-Family	2,320	4,627	N/A
		Single-Family/Mobile	2,880	6,128	N/A
	ESA Participant	Multi-Family	1,061	5,605	N/A
		Single-Family/Mobile	2,208	6,938	11,885
SCE	ESA Non-Participant	Multi-Family	1,950	6,601	11,885
		Single-Family/Mobile	3,279	6,743	N/A
	ESA Participant	Multi-Family	1,432	7,221	N/A
		Single-Family/Mobile	1,309	4,671	11,885
SoCalGas Only	ESA Non-Participant	Multi-Family	2,608	15,627	N/A
		Single-Family/Mobile	11,242	14,885	N/A
	ESA Participant	Multi-Family	1,376	6,661	N/A
		Single-Family/Mobile	4,792	15,710	N/A
SDG&E	ESA Non-Participant	Multi-Family	320	1,491	N/A
		Single-Family/Mobile	1,167	3,381	N/A
	ESA Participant	Multi-Family	390	1,290	N/A
		Single-Family/Mobile	1,955	2,477	N/A

## 12.2 CARE Modeling Detailed Methods

Using regression analysis, we statistically analyzed the factors that affect the rate of CARE participation and penetration by block group. Regression analysis allows us to estimate the individual impacts that demographic, economic, and program characteristics have on the likelihood (probability) that a residential customer will participate in the CARE program. The dependent variable for both the Participation and Penetration models is the “log-odds ratio of CARE participation” (or more simply as the “log-odds”).<sup>21</sup> It is instructive to both describe what the log-odds transformation is and why it was used for this study. We performed the same transformation for the same reason for both the CARE Participation and Penetration models, but we explain the how and why with respect to the CARE Participation model only.

To begin, the parameter of interest to us in the Participation model is the proportion of households in each block group enrolled in CARE, based on data provided by Athens Research.

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<sup>21</sup> This method of regression is also referred to as logit-transformed linear regression.

$$\text{CARE Participation} = \text{Count of CARE Participants} / \text{Count of Residential Customers}$$

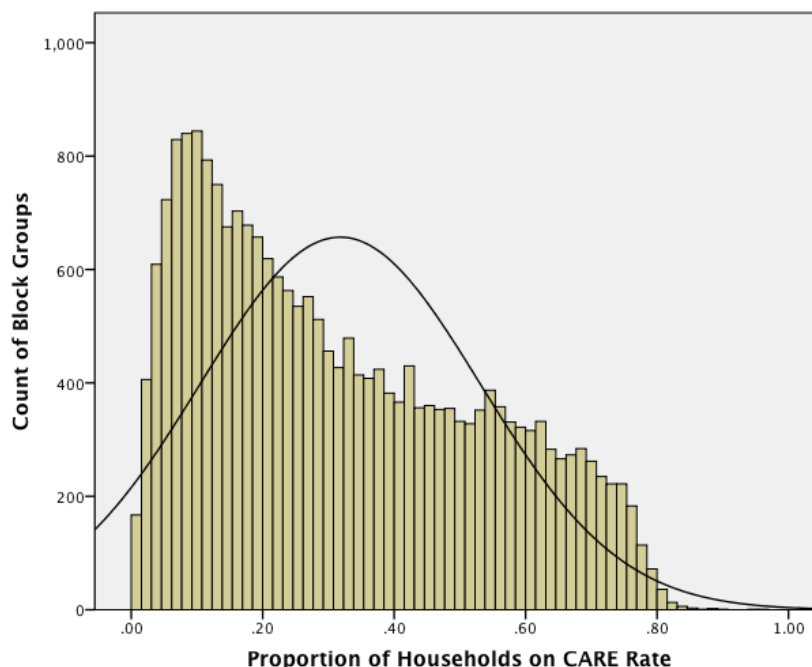
Figure 7 shows the distribution of the proportion of households on the CARE rate in 2012 for the more than 20,000 block groups in California. As the figure shows, the proportion must range between zero (no household enrolled on the CARE rate) and 1.0 (all households enrolled on the CARE rate). In practice, the CARE proportion is unlikely to be at either extreme value, however, there are many block groups with a low (less than 10 percent) proportion of households on CARE.

The fact that the variable of interest is bounded by 0 and 1 can cause problems for estimating the linear regression model. Specifically, *predicted* values of the dependent variable (proportion enrolled in CARE) are nonsensical when they are less than 0 (i.e., less than 0 percent of households are enrolled in CARE) and greater than 1 (i.e., more than 100 percent of households are enrolled in CARE).<sup>22</sup> In fact, because there are many block groups with low rates of CARE participation (less than 20 percent), there will be many predicted values of CARE participation that will be less than 0 (percent). Even if the estimated values lying outside of the 0-to-1 range are assigned the values 0 and 1, it's not useful to consider prediction outcomes where no household within a block group is enrolled in CARE or all households within a block group are enrolled in CARE.

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<sup>22</sup> In addition, the variance of the proportions gets smaller at zero and one resulting in estimation problems due to heteroskedasticity.

**Figure 7: Proportion of Households on CARE Rate by Block Group**



Source: Analysis by Evergreen Economics of Data from Athens Research.

A standard solution to the problem of a dependent variable that is a proportion (and therefore bounded by 0 and 1) is to transform the variable to the real line.<sup>23</sup> To do this, we first compute the odds ratio (the “odds”) of the proportion on CARE, which is simply the ratio of the proportion over 1 – the proportion:

$$\text{Odds of CARE Participation} = \frac{p}{(1 - p)} = \frac{\text{Proportion of Households on CARE}}{\text{Proportion of Households Not on CARE}}$$

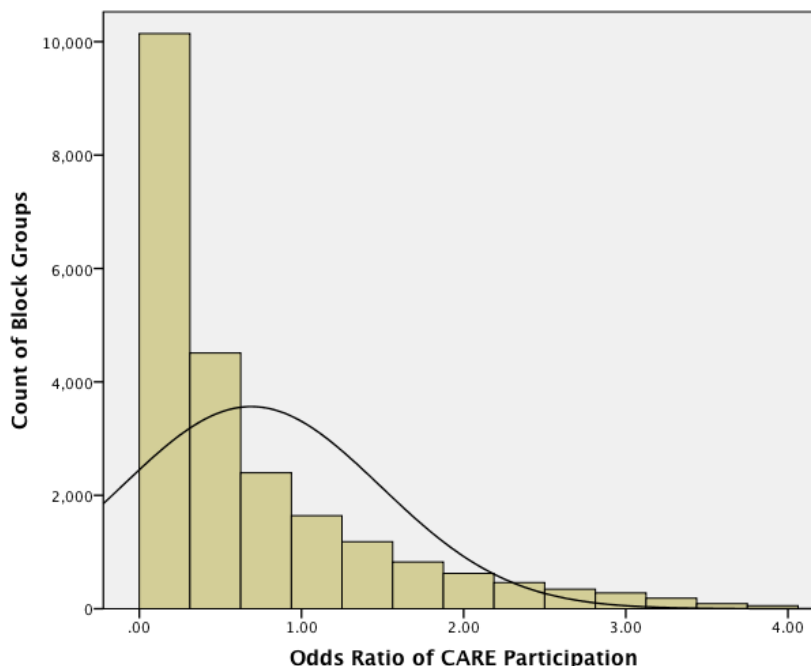
In this instance, the odds represents the probability that a household is on a CARE rate to the probability that a household is not on a CARE rate. If the proportion of households in a block group on a CARE rate is 75 percent, then the odds that a randomly drawn household from that block group is on a CARE rate is  $0.75 / (1 - 0.75) = 3$ , which is interpreted as “the odds are 3 to 1 that a household is on a CARE rate.” Alternatively, if the proportion of households in a block group on a CARE rate is 25 percent, then the odds that a randomly drawn house from that block group is on a CARE rate is  $0.25 / (1 - 0.25) = 0.33$ , which is interpreted as “the odds are 1 to 3 that a household is on a CARE rate.”

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<sup>23</sup> The real line is simply the horizontal line that extends from zero in both directions to infinity.

Figure 8 shows the distribution of odds of CARE participation computed using the data on CARE participation by block group shown in Figure 7. Unlike the proportional data, the odds are not restricted to be less than or equal to 1.0, but the odds are still restricted to be greater than zero (cannot have negative odds).

**Figure 8: Distribution of Odds of CARE Participation by Block Group**



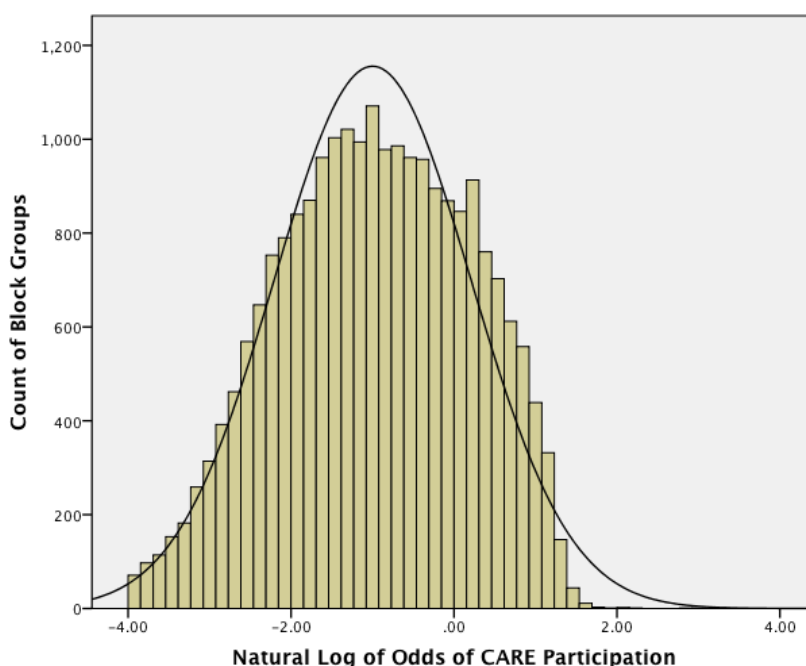
Source: Analysis by Evergreen Economics of Data from Athens Research.

The next step of the transformation is to take the log of the odds ratio (i.e., the “log-odds”) of the dependent variable.

$$\ln(\text{odds ratio}) = \ln[\text{CARE Proportion} / (1 - \text{CARE Proportion})]$$

The log- odds-ratio transformation results in a dependent variable that is continuous and no longer bounded by zero and one, though in practice, most values tend to lie within a relatively tight range. Figure 9 shows the distribution of CARE proportions altered by the log-odds transformation. Comparing Figure 7 to Figure 9, we see that the log-odds transformation not only eliminates the constraint that data lie within the 0-to-1 interval, but also redistributes the data from a distribution that is truncated at 0 and right skewed, to one that is largely normally distributed.

**Figure 9: Distribution of Log Odds of CARE Participation**



Source: Analysis by Evergreen Economics of Data from Athens Research.

While the transformation eliminates the intuitive meaning of the CARE proportion, a simple transformation of the estimated coefficients provides estimates of the impact on the odds of a household being enrolled on a CARE rate, associated with a one unit change in the value of the independent variable, holding all else constant. A slightly more complex transformation provides estimates of the impact on the proportion of households enrolled on a CARE rate associated with a one-unit change in the independent variable. For most readers, this measure of marginal impact has greater intuitive meaning. Nevertheless, all of these estimates of marginal impacts provide information on which economic, demographic, and other characteristics are associated with—or even influence—CARE participation, and how strong the relationship is.

The general form of the regression model is as follows:

$$\mathbf{Ln(odds)} = \mathbf{f(demographic, economic, housing, utility)}$$

Where:

***Ln(odds)*** is the log of the odds ratio of CARE participation ( $P(enrolled) / (1 - P(enrolled))$ );

***F(.)*** denotes “a function of”;

**demographic** are block group level demographic variables

**housing** are block group level housing characteristics

**utility** are indicator variables of electric and/or gas utility

In addition to the information provided by the individual coefficients, we use the estimated model to predict the proportion of residential households participating in the CARE program at the block group level using the following formula:

$$\text{CARE participation rate} = 1 / (1 + e^{-x})$$

Where:

$e$  is the exponential function

$x$  is the estimated regression equation

### 12.2.1 Interpreting Coefficients from a Logit Model

The coefficients from log-odds model possess little intuitive meaning. Nevertheless, the sign (negative or positive) and the magnitude (relative to zero) are important indicators of the relationship between the independent variable and either the probability that a household will be on a CARE rate or the proportion of households in a block group on a CARE rate.

When the independent variable is a continuous variable, a positive coefficient value indicates that a unit increase in the independent variable will lead to an increase in the odds that a household will be on CARE. Conversely, a negative coefficient value indicates that a unit increase in the value of the (continuous) independent variable will lead to a decrease in odds that a household will be on a CARE rate. To calculate the estimated change in the odds that a household will be on a CARE rate, the coefficient must be exponentiated (raised to the base  $e$ , also referred to as the “antilog”), which transforms the coefficient from log-odds to an odds ratio.

$$DOdds = e^{b_k} - 1$$

Where:

$DOdds$  = Change in the odds ratio

$b_k$  = Estimated coefficient on continuous variable

$e$  = is the number 2.7182...

### 12.2.2 Transforming from Proportion to Log-odds

The variable of interest, proportion of households on the CARE rate, is analogous to a probability. For example, if the proportion of households within a block group that are on a CARE rate is 60 percent, then there is a 60 percent probability that a randomly drawn household from that block group is on a CARE rate. Keeping with this same example, the proportion of households not on a CARE rate is equal to 1 minus the proportion that are on a CARE rate ( $1 - 0.60 = 0.40$  or 40 percent). This of course is also the probability that a randomly chosen house in the block group is not on a CARE rate. The ratio of these two proportions (or probabilities) is called the “odds” or the “odds ratio.”

$$\text{Odds} = \frac{p}{(1 - p)}$$

Where :

$$p = \text{Proportion on a CARE rate}$$

For our example, the odds ratio that a household in that block group is on a CARE rate is equal to  $0.6/0.4 = 1.5$ . Odds are generally expressed as an integer, therefore, we would say the odds are 3 to 2 that a randomly drawn household in that block group is on a CARE rate.<sup>24</sup>

The transformation from a proportion to an odds ratio is a monotonic transformation, which simply means that the odds increase as the proportion increases (and vice versa). While the proportion is bounded by 0 and 1, transforming the proportion into the odds eliminates the upper bound, but not the lower bound. Since both the numerator and denominator of the odds ratio are positive, the odds are always positive and is, therefore, bounded from below at zero. To remove the lower bound, the odds ratio is transformed by the natural logarithm to derive the log-odds or “logit” transformation.

The log-odds transformation results in a variable that is not bounded at either end and, like the transformation from proportion to odds, the transformation from odds to log-odds is monotonic. This is important point, because, while we need to transform the proportion due to its restricted range, we want to ensure that relationship between proportion values is preserved. Table 492 shows the relationship between a select number of proportions and their odds and log-odds transformations.

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<sup>24</sup> If the proportion of CARE households is 50 percent, then the odds are  $0.5/(1-0.5) = 1.0$ . Thus the odds that a randomly drawn household is on the CARE rate is 1 to 1 or 50 percent.



**Table 492: Relationship Between Proportions, Odds, and Log-odds**

Proportion	Odd	Log-odds (Logit)
0.05	0.05	-2.94
0.10	0.11	-2.20
0.20	0.25	-1.39
0.30	0.43	-0.85
0.40	0.67	-0.41
0.50	1.00	0.00
0.60	1.50	0.41
0.70	2.33	0.85
0.80	4.00	1.39
0.90	9.00	2.20
0.95	19.00	2.94

Proportion Range 0 to 1  
Odds Range: 0 to infinity  
Log-odds Range: negative infinity to infinity

## 12.3 ESA Modeling Detailed Methods

### 12.3.1 ESA Methods

#### *12.3.1.1 Statistical Models of ESA Participation*

We developed and estimated regression models to examine the factors that explain participation in the ESA program. Eligibility for the ESA program is based on the same income criteria as the CARE program, and to participate in the ESA program the customer must be enrolled in the CARE program. However, whereas a customer can move into and out of the CARE program, once a premise is treated—based on the income criteria of the customer—it is treated. In general, once a premise has been treated through the ESA program, it is ineligible to be treated again. Therefore, a LI customer that otherwise would be eligible to participate in ESA is not eligible to do so if the premise was treated previously when occupied by a prior CARE enrollee. Table 493 shows the counts of premises treated through the ESA program while occupied by the current resident and prior resident, as well as the count of premises occupied by CARE enrollees that have not been treated through the ESA program.

**Table 493: Counts of ESA-Treated Premises Occupied by CARE Enrollees**

IOU	Premises Occupied by CARE Enrollee Treated Through ESA Program		CARE-Occupied Premises Not Treated Through ESA	% CARE Premises Treated
	Current Resident	Prior Resident		
PG&E	5,442*	5,407	19,123	36%
SCE	3,633*	2,900	20,321	24%
SoCalGas	4,572	4,585	25,199	27%
SDG&E	4,985*	8,484	19,053	40%

\* The count of premises treated while occupied by current CARE enrollees and treated while occupied by past CARE enrollee are as follows: PG&E=46, SCE=79, SoCalGas=0, CDG&E=262.

Source: Analysis by Evergreen Economics of data provided by the California IOUs.

Separate models were developed for each of the four California investor-owned utilities (IOUs). We estimated the regression models based on household-level data provided by the IOUs, but also include data on the characteristics of the block group in which each residence is located.<sup>25</sup> The dependent variable, explained in greater detail below, is a binary variable that equals 1 if the premise received measures through the ESA program at any time between 2002 and 2012 and equals 0 if it did not.

For the SCE, SDG&E, and PG&E models, only residential customers that were on a CARE rate at any time after October 31, 2012 were included in the analysis. For the SoCalGas model, only those residential customers on a CARE rate during April 2013 were included in the analysis.<sup>26</sup>

### *12.3.1.2 Model description*

Using regression analysis, we statistically analyzed the factors that affect the probability that a CARE enrollee lives in a residence treated through the ESA program either by applying for the ESA program or by living in a premise previously treated through the ESA program.<sup>27</sup>

The dependent variable in each of the IOU-level models is a binary indicator that is equal to 1 if the premise was treated through the ESA program and 0 if it was not. We estimated the Stage 1 and Stage 2 ESA models using a logistic regression. The logistic regression model is a non-linear, S-shaped distribution function that constrains the estimated probabilities to a

<sup>25</sup> The block group-level data came from two sources: The U.S. Census Bureau; Athens Research (provided by the IOUs). A block group is a geographical designation used by the U.S. Census Bureau that consists of a cluster of census blocks having the same first digit of their four-digit identifying numbers within a census tract. Block groups generally contain between 600 and 3,000 people, with an optimum size of 1,500 people. Block groups never cross the boundaries of states, counties, or statistically equivalent entities, except for a block groups delineated by American Indian tribal authorities, and then only when tabulated within the American Indian hierarchy. Block groups never cross the boundaries of census tracts. Source: [http://www.census.gov/geo/www/geo\\_defn.html](http://www.census.gov/geo/www/geo_defn.html) [May 29, 2012]

<sup>26</sup> The alternative criteria for SoCalGas is due to the way data were pulled by the IOU.

<sup>27</sup> While exceptions may exist, an otherwise eligible customer is not eligible for ESA if they live in a premise previously treated through the ESA program.

distribution between zero and one. The logistic regression model is by far the most popular method for estimating regression models when the dependent variable is binary. This is because the logit function is mathematically straightforward to estimate (using statistical software) and the estimated probabilities are easy to calculate and fall within the zero-to-one interval (i.e., zero percent up to 100 percent chance of occurring). Mathematically, the logistic regression model is expressed as:

### Equation 2: Generalized Logistic Regression Model

$$PROB(y = 1) = \frac{e^{b'l}}{1 + e^{b'l}}$$

Where :

$PROB(y = 1)$  = is the probability that a an event occurs (e.g. a household is low-income)

$e$  = is the exponential function, equal to 2.718

$b$  = is a vector of coefficients to be estimated in the model

$l$  = is a vector of values for the covariates in the model

Empirically, the Stage 1 logistic regression models, which we estimated separately for each of the four IOUs, were specified as follows:

### Equation 3: Stage 1 Logistic Regression Model

$$ESA_i = a_0 + b_j Customer_{ij} + l_k BlockGroup_{ik} + u$$

Where :

$ESA_i$  = Indicator variable of ESA participation (1=ESA Participant; 0=not)

$Customer_j$  = Array of variables from IOUs characterizing the customer

$BlockGroup_k$  = Array of variables from Census and Athens Research characterizing the block group

$ESA$  = Indicator variable of ESA participation (1=ESA Participant; 0=not)

$a, b, l$  = Coefficients to be estimated in the model

$u$  = Random error term, assumed log-normal

We estimated the Stage 2 logistic regression model using data from the household survey and other sources of data. Because the focus of the Stage 2 model was to examine the relationship between ESA participation and information provided by the survey respondents, the Stage 2 model was based only on the 1,020 CARE enrollees that completed the telephone survey. The Stage 2 model is specified as follows:

### Equation 4: Stage 2 Logistic Regression Model

$$ESA_i = b_0 + b_1 kWh_i + b_j Survey_{ij} + b_k BlockGroup_{ik} + u_i$$

Where :

$ESA_i$  = Indicator variable of ESA participation (1=ESA Participant; 0=not)

$kWh_i$  = Array of variables from IOUs characterizing the customer

$Survey_{ij}$  = Array of variables from phone survey characterizing each customer

$BlockGroup_k$  = Array of variables from Census and Athens Research characterizing the block group

$ESA$  = Indicator variable of ESA participation (1=ESA Participant; 0=not)

$b_0, b_1, b_j, b_k$  = Coefficients to be estimated in the model

$u$  = Random error term, assumed log-normal

#### 12.3.1.3 Interpreting Coefficients from a Logit Model

The coefficients estimated in a logistic regression model possess little intuitive meaning. Nevertheless, the sign (negative or positive) and the magnitude (relative to zero) are important indicators of the relationship between, respectively, the explanatory variable and the probability that a CARE enrollee will also participate in the ESA program.

A positive coefficient value indicates that a unit increase in the explanatory variable will lead to an increase in the odds that a household will be on CARE. Conversely, a negative coefficient value indicates that a unit increase in the value of the explanatory variable will lead to a

decrease in odds that a household will be on a CARE rate. To calculate the estimated change in the *odds* that a household will be on a CARE rate, the coefficient must be exponentiated (raised to the base *e*, also referred to as the “antilog”), which transforms the coefficient from log-odds to an odds ratio.

$$DOdds = e^{b_k} - 1$$

*Where :*

*DOdds = Change in the odds ratio*

*b<sub>k</sub> = Estimated coefficient on continuous variable*

*e= is the number 2.7182...*

## 12.4 Conjoint Analysis Detailed Methods

Conjoint analysis is a stated preference survey technique that involves having respondents review and rank options that reflect different choice options. In this application, the conjoint data collection was done using a website that asked respondents to rank a series of choices relating different possible ESA program participation experiences. For the ESA scenarios, each program choice is defined by several attributes (discussed below) and respondents were asked to rank the options from most to least preferred based on these attributes. Respondents were also asked to identify which program choices they would actually be willing to participate in after they complete the ranking exercise.

Conjoint analysis has the advantage of presenting several program characteristics simultaneously, which forces the respondent to make tradeoffs between attributes. By presenting attributes simultaneously, respondents must decide which features are most important, deciding whether or not to participate in an energy efficiency program. Past experience as well as existing literature indicates that the most successful conjoint designs limit each exercise to ranking 16 choices at a time, with four to six attributes defining each choice. Including more than 16 options or additional attributes tends to overwhelm respondents and results in less reliable data.

For this conjoint exercise, respondents were provided with a general description of the ESA program:

The Energy Savings Assistance (ESA) Program is a program offered by [utility] to help LI households save money on their energy bills. This is accomplished by scheduling a home inspection to establish eligibility and identify what types of efficiency equipment should be installed, followed by additional home visits to install the equipment. Depending on the needs of the household, customers can receive a variety of things such as information on safety and ways to save energy, energy efficient light bulbs, refrigerators, attic insulation, caulking, maintenance services for some appliances, and in some areas heating and air

conditioning systems. The ESA Program pays 100 percent of the cost of the energy efficiency equipment – there is no charge to the homeowner.

With this program description as context, respondents are asked to rank eight possible options for the ESA program.<sup>28</sup> Each program option is defined as a combination of energy savings, number of home visits, income verification requirements, etc. The various attribute levels for each of these characteristics are shown in Table 494. These attribute levels are randomly assigned to create 18 possible programs that the respondent then ranked during the on-line conjoint session. Descriptions of these program attributes given to respondents during the survey are as follows:

- **Monthly Energy Savings:** Amount that households can expect to save on their monthly energy bill if they participate in the ESA program.
- **Income verification:** Whether or not customers must provide income verification such as a tax return to prove program eligibility.
- **Number of home visits:** Number of times that someone from the ESA program (both initial visit and measure installation) will visit the home, with each visit requiring some sort of scheduling and coordination on the part of the homeowner.
- **Timing of home visits:** Installation work done during the day (requiring that someone be at the home), evenings, or a combination of evenings and weekends.
- **Duration of home visits:** Total amount of time that program staff will spend at the home (both initial visit and installations).
- **Comfort:** Change in comfort level due to participation, defined as home being less drafty during cold weather and cooler during warm weather.

The values used to describe each choice option are randomly assigned, which forces the respondent to choose which attributes to focus on to rank the choices. To accomplish this, the conjoint application uses an orthogonal design, which means that there is zero correlation between each of the choice attributes. This is critical to the analysis, as correlation across attributes results in a loss of precision and makes it difficult to estimate the importance that respondents place on each attribute. For example, consider the situation where monthly energy savings and comfort are two of the characteristics being evaluated, and on each choice the monthly energy savings are high and the comfort level is also high. Since monthly energy savings and comfort are perfectly correlated, there is no way to determine from the data if a respondent is ranking the choices based on savings or comfort. For this reason, having an orthogonally designed study is essential.

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<sup>28</sup> Respondents are first given a practice conjoint exercise to complete using a non-energy example in order to get them familiar with the online conjoint ranking process.

Once all the choices are ranked, the respondent is then asked to indicate which of the eight program options (if any) they would be willing to participate in, given their current living conditions. The participation choices and the ranking information are then automatically captured on the website for analysis.

Respondents will be asked to rank two different ESA program options, defined with slightly different characteristics. The various attribute and levels for both program options are shown in Table 494.

**Table 494: ESA Program Choice Characteristics**

<b>ESA Program Option 1</b>	<b>Possible Values</b>
Monthly Energy Savings	\$0, \$25, \$60
Number of Home Visits	1,3
Income Verification	None, Documentation required
Comfort	No Change, Improvement
Total Time in Home	1 hour, 4 hours
<b>ESA Program Option 2</b>	<b>Possible Values</b>
Monthly Energy Savings	\$0, \$25, \$60
Number of Home Visits	1,3
Income Verification	None, Documentation required
Comfort	No Change, Improvement
Timing of Home Visits	Days Only, Evenings/Weekends Only

### 12.4.1 Sample Design and Recruitment

Respondents for the conjoint analysis were recruited from a phone survey of LI households currently on the CARE rate and eligible to participate in the ESA program. If the phone survey respondents were willing to take the conjoint survey, their email addresses were collected and a separate email directing them to the conjoint website was sent out. Of the 166 customers that started the survey, 33 completed the conjoint survey. Additionally, a further 20 customers completed at least the first half of the survey, and 17 of these 20 completed the entire survey as part of our onsite verification efforts. Respondents completed the conjoint survey in September 2013.

### 12.4.2 Conjoint Discrete Choice Models

Once the conjoint surveys are completed, the conjoint data will be used in a discrete choice model. Using the ranking data, a conditional logit model will be developed to estimate how the attribute levels influence the rankings for program choices using the following equation (shown for ESA Option 1):

$$Rank_i = b' Saving_i + b' Duration_i + b' Income_i + b' Time_i + b' Comfort_i + e_i$$

Where :

*Rank<sub>i</sub>* = Rank value between 1 and 18, based on respondents' relative assessment of each choice

*Saving<sub>i</sub>* = Monthly bill savings for option i

*Duration<sub>i</sub>* = Total amount of time spent in the home for option i

*Income<sub>i</sub>* = Income verification required for option i

*Time<sub>i</sub>* = Timing of home visits for option i

*Comfort<sub>i</sub>* = Change in comfort level resulting from option i

*e<sub>i</sub>* = Random error term assumed logistically distributed

*b* = Coefficient to be estimated

A second model (a binomial logit) will also be estimated to determine the influence of the attribute levels on the willingness to participate in the ESA program:

$$Participate_i = b' Saving_i + b' Duration_i + b' Income_i + b' Time_i + b' Comfort_i + e_i$$

Where :

*Participate<sub>i</sub>* = Indicator (0,1) on willingness to participate in program option i

*Saving<sub>i</sub>* = Monthly bill savings for option i

*Duration<sub>i</sub>* = Total amount of time spent in the home for option i

*Income<sub>i</sub>* = Income verification required for option i

*Time<sub>i</sub>* = Timing of home visits for option i

*Comfort<sub>i</sub>* = Change in comfort level resulting from option i

*e<sub>i</sub>* = Random error term assumed logistically distributed

*b* = Coefficient to be estimated

### 12.4.3 Relative Importance

While coefficients estimates from the logit models provide some information on the influence of the variable on total utility, it is misleading to look only at the coefficient to gauge the influence of that variable. For example, if the comfort coefficient is ten times the magnitude of the savings coefficient, this is due in part to differences in the magnitude of the variable values, where the indicator variable comfort (0,1) is only a fraction of the value of the monthly energy savings (\$ per month). Only looking at the magnitude of the coefficients would give the misleading impression that comfort is considered much more important than savings. To address this issue, “relative importance statistics” are calculated that combine both the coefficient and attribute value to get an overall measure of the influence on total utility. The relative importance statistic can be interpreted as each attribute’s contribution to total “utility”, or the perceived benefit associated with that choice. This statistic measures the



importance of one design feature, relative to that of all other design features in determining the total utility for each program option.

The total utility of each option can be calculated by inserting attribute values into the estimated regression equation:

$$Total\ Utility_i\ (U_i) = b' Saving_i + b' Duration_i + b' Income_i + b' Time_i + b' Comfort_i$$

Using the coefficient estimates and the values for the variables used in the conjoint analysis, the importance statistic is defined as:

$$Relative\ Importance_j = \frac{Du_j}{DU} = \frac{Maximum\ utility\ change\ due\ to\ attribute\ j}{Maximum\ utility\ change\ due\ to\ all\ attributes}$$

The importance statistic measures the percentage of the total maximum change in utility across all choices that is attributable to a single feature. Stated another way, the importance statistic measures each feature's contribution to the total utility based on the attributes included in the conjoint analysis.

#### 12.4.4 Participation Probabilities

To assist in the interpretation of the binomial logit models, the probability of participating in the program is calculated by combining the coefficient estimates with program attributes within the logit probability function:

$$Prob(Participate) = \frac{\exp(b'X)}{1 + \exp(b'X)},$$

where  $\beta'X$  reflects the sum of the coefficient estimates used in the conjoint analysis. By using different values for savings, comfort, home visits, and income verification to simulate different programs, this equation can be used to determine the overall effect on utility of alternative program designs. The probabilities can also be used to determine the value a respondent places on savings and timing of installation visits, for example.

We will calculate the probability of participation in ESA by using values for the variables that match the current program design as much as possible. Given that this estimate is determined using only five factors included in the conjoint, when in reality there are many other factors that are influencing this decision, the result should not be interpreted as a direct estimate of potential market share. Nevertheless, we will explore options for using the probability calculations to determine a threshold level of willingness to participate. One possibility would be to calculate the probability using the highest (i.e., most attractive) values for all variables and using the resulting value (i.e., 1-probability) as an estimate of the portion of customers that are unlikely to participate in the ESA program under any circumstances.

## 13 Research Instruments

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Phone

In-home

Contractor