

Field Report

## Carbon Sequestration Survey 2009

# Conducted for Massachusetts Institute of Technology 

Submitted to:<br>Howard Herzog<br>Principal Research Engineer<br>September 24, 2009

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| Knowledge Networks Deliverable Authorization |  |  |  |
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## Carbon Sequestration Survey

## Introduction

In September 2009, Knowledge Networks conducted a study of opinions the public's opinions about energy use and environmental issues. The primary goal of the study was to gather information on people's support for measures for reducing green house emission. The bulk of the questionnaire was previously administered to the KN panel in 2003 and 2006 and the current study was also intended to track any changes in public's feelings on the same issues.

Massachusetts Institute of Technology (MIT) provided Knowledge Networks with the survey instrument and in conjunction with MIT, Knowledge Networks revised the instrument so that it met the design requirements of the study as well as those of the MSN WebTV platform. A pretest survey was conducted to determine the survey length and verify all survey functionality worked correctly.

Once final changes to the main study had been implemented, the survey was fielded on September $10^{\text {th }}, 2009$ to 1,846 panel members age eighteen years of age or older who represented a general population sample. The completion goal was to collect a total of 1,200 qualified interviews. Table 1 below displays the field period and completion rate of the survey.

Table 1. Survey Completion Rate

| Field Start Date | Field End <br> Date | Cases <br> Fielded | Completes | Completion <br> Rate |
| :---: | :---: | :---: | :---: | :---: |
| $9 / 10 / 09$ | $9 / 22 / 09$ | 1,846 | 1,296 | $70 \%$ |

## Data File Deliverables and Descriptions

The following file has been delivered to MIT: a fully labeled SPSS data file containing the survey data including Knowledge Network's standard profile variables, which are owned by Knowledge Networks and licensed to MIT for analysis and reporting.

Table 2. Deliverable Description

|  |  |  |  |  | Inclusion of |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Standard |  |  |  |  |  |
| Delivery |  |  |  |  |  |
| Date | File |  |  |  |  |
| Type | File Name | File Size | Records | Demographics |  |
| $9 / 24 / 2009$ | SPSS | MIT_Carbon2009_Client.sav | 682 KB | $\mathrm{~N}=1296$ | Yes |

Table 3 below shows the name and description of each of the supplemental variables.
Table 3: Supplemental Variables

| Variable Name | Variable Description |
| :--- | :--- |
| CaseID | Case Identification Number |
| Weight | Final Post Stratification Weight |
| tm_start | Interview start time |
| tm_finish | Interview finish time |
| duration | Interview duration in minutes |
| Response_Order | DATA-ONLY: order of responses in Q3, QX, Q10, Q11, Q14D |
| Sample_Q14 | DATA-ONLY: Q14 section shown to respondent |
| PPAGE | Age |
| ppagecat | Age - 7 Categories |
| ppagect4 | Age - 4 Categories |
| PPEDUC | Education (Highest Degree Received) |
| PPEDUCAT | Education (Categorical) |
| PPETHM | Race / Ethnicity |
| PPGENDER | Gender |
| PPHHHEAD | Household Head |
| PPHHSIZE | Household Size |
| PPHOUSE | Housing Type |
| PPINCIMP | Household Income |
| PPMARIT | Marital Status |
| PPMSACAT | MSA Status |
| PPREG4 | Region 4 - Based on State of Residence |
| ppreg9 | Region 9 - Based on State of Residence |
| PPRENT | Ownership Status of Living Quarters |
| PPSTATEN | State |
| PPT01 | Presence of Household Members - Children 0-2 |
| PPT25 | Presence of Household Members - Children 2-5 |
| PPT612 | Presence of Household Members - Children 6-12 |
| PPT1317 | Presence of Household Members - Children 13-17 |
| PPT18OV | Presence of Household Members - Adults 18+ |
| PPWORK | Current Employment Status |
| PPNET | HH Internet Access |

## Key Personnel

Key personnel on the Carbon Sequestration Survey:
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## Knowledge Networks Methodology

## Introduction

Knowledge Networks has recruited the first online research panel that is representative of the entire U.S. population. Panel members are randomly recruited by probability-based sampling, and households are provided with access to the Internet and hardware if needed.

Knowledge Networks selects households using random-digit dial (RDD) and address-based sampling methods. Once a person is recruited to the panel, they can be contacted by e-mail (instead of by phone or mail). This permits surveys to be fielded very quickly and economically. In addition, this approach reduces the burden placed on respondents, since e-mail notification is less obtrusive than telephone calls, and most respondents find answering Web questionnaires to be more interesting and engaging than being questioned by a telephone interviewer.

## Panel Recruitment Methodology

Beginning recruitment in 1999, Knowledge Networks (KN) established the first online research panel (now called KnowledgePanel ${ }^{\circledR}$ ) based on probability sampling that covers both the online and offline populations in the U.S. The panel members are randomly recruited by telephone and by self-administered mail and web surveys. Households are provided with access to the Internet and hardware if needed. Unlike other Internet research that covers only individuals with Internet access who volunteer for research, Knowledge Networks surveys are based on a dual sampling frame that includes both listed and unlisted phone numbers, telephone and non-telephone households, and cell-phone-only households. The panel is not limited to current Web users or computer owners. All potential panelists are randomly selected to join the KnowledgePanel; unselected volunteers are not able to join.

## RDD and ABS Sample Frames

Knowledge Networks initially selects households using random digit dialing (RDD) sampling and address-based sampling (ABS) methodology. In this section, we will describe the RDDbased methodology, while the ABS methodology is described in a separate section below.

KnowledgePanel recruitment methodology uses the quality standards established by selected RDD surveys conducted for the Federal Government (such as the CDC-sponsored National Immunization Survey).

Knowledge Networks utilizes list-assisted RDD sampling techniques based on a sample frame of the U. S. residential landline telephone universe. For efficiency purposes, Knowledge Networks excludes only those banks of telephone numbers (a bank consists of 100 numbers) that have less than 2 directory listings. Additionally, an oversample is conducted among a stratum telephone exchanges that have high concentrations of African-American and Hispanic households based on

Census data. Note that recruitment sampling is done without replacement, thus numbers already fielded do not get fielded again.

A telephone number for which a valid postal address can be matched occurs in about $70 \%$ of the sample. These address-matched cases are all mailed an advance letter informing them that they have been selected to participate in KnowledgePanel. For efficiency purposes, the unmatched numbers are under-sampled at a current rate of 0.75 relative to the matched numbers. Both the oversampling mentioned above and this under-sampling of non-address households are adjusted appropriately in the panel's weighting procedures.

Following the mailings, the telephone recruitment begins for all sampled phone numbers using trained interviewer/recruiters. Cases sent to telephone interviewers are dialed for up to 90 days, with at least 14 dial attempts on cases where no one answers the phone, and on numbers known to be associated with households. Extensive refusal conversion is also performed. The recruitment interview, about 10 minutes long, begins with informing the household member that they have been selected to join KnowledgePanel. If the household does not have a computer and access to the Internet, they are told that in return for completing a short survey weekly, they will be provided with a laptop computer (previously a WebTV device was provided) and free monthly Internet access. All members in a household are then enumerated, and some initial demographic and background information on prior computer and Internet use are collected.

Households that inform interviewers that they have a home computer and Internet access are asked to take their surveys using their own equipment and Internet connection. Incentive points per survey, redeemable for cash, are given to these "PC" respondents for completing their surveys. Panel members who were provided with either a WebTV earlier or currently a laptop computer (both with free Internet access) do not participate in this per survey points incentive program. However, all panel members do receive special incentive points for select surveys to improve response rates and for all longer surveys as a modest compensation for burden.

For those panel members receiving a laptop computer (as with the former WebTV), prior to shipment, each unit is custom configured with individual email accounts, so that it is ready for immediate use by the household. Most households are able to install the hardware without additional assistance, though Knowledge Networks maintains a telephone technical support line. The Knowledge Networks Call Center contacts household members who do not respond to email and attempts to restore both contact and cooperation. PC panel members provide their own email addresses and we send their weekly surveys to that email account.

All new panel members are sent an initial survey to both welcome them as new panel members but also to familiarize them with how online survey questionnaires work. They also complete a separate profile survey that collects essential demographic information such as gender, age, race, income, and education to create a personal member profile. This information can be used to determine eligibility for specific studies, is used for weighting purposes, and operationally need not be gathered with each and every survey. This information is updated annually with each panel member. Once completed new member is "profiled," they are designated as "active" and ready to be sampled for client studies. [Note: Parental or legal guardian consent is also collected for conducting surveys with teenage panel members, ages 13-17.]

Once a household is contacted by phone-and additional household members recruited via their email address-panel members are sent surveys linked through a personalized email invitation (instead of by phone or mail). This permits surveys to be fielded quickly and economically, and also facilitates longitudinal research. In addition, this approach reduces the burden placed on respondents, since email notification is less obtrusive than telephone calls, and allows research subjects to participate in research when it is convenient for them.

## Address-Based Sampling (ABS) Methodology

When KN started KnowledgePanel panel recruitment in 1999, the state of the art in the industry was that probability-based sampling could be cost effectively carried out using a national random-digit dial (RDD) sample frame. The RDD landline frame at the time allowed access to $96 \%$ of the U.S. population. This is no longer the case. We introduced the ABS sample frame to rise to the well-chronicled changes in society and telephony in recent years. The following changes have reduced the long-term scientific viability of the landline RDD sampling methodology: declining respondent cooperation to telephone surveys; do not call lists; call screening, caller-ID devices and answering machines; dilution of the RDD sample frame as measured by the working telephone number rate; and finally, the emergence and exclusion of cell-phone-only households ( CPOHH ) because they have no landline phone.

According to the Center for Disease Control, approximately 25\% of U.S. households cannot be contacted through RDD sampling: $22 \%$ as a result of CPOHH status and $3 \%$ because they have no phone service whatsoever. Among some segments of society, the sample noncoverage is substantial: more than one-third of young adults, ages 18-24, reside in CPOHHs.

After conducting an extensive pilot project in 2008, we made the decision to add an addressbased sample (ABS) frame in response to the growing number of cell-phone only households that are outside of the RDD frame. Before conducting the ABS pilot, we also experimented with supplementing our RDD samples with cell-phone samples. However, this approach was not cost effective for you our clients and raised a number of other operational, data quality, and liability issues (e.g., calling people's cell phones while they were driving).

The key advantage of the ABS sample frame is that it allows sampling of almost all U.S. households. An estimated $98 \%$ of households are "covered" in sampling nomenclature. Regardless of household telephone status, they can be reached and contacted via the mail. Second, our ABS pilot project revealed some other advantages beyond the expected improvement in recruiting adults from CPOHHs :

- Improved sample representativeness for minority racial and ethnic groups
- Improved inclusion of lower educated and low income households
- Exclusive inclusion of CPOHHs that have neither a landline telephone nor Internet access (approximately 4\% to 6\% of US households).

ABS involves probability-based sampling of addresses from the U.S. Postal Service's Delivery Sequence File. Randomly sampled addresses are invited to join KnowledgePanel through a series of mailings and in some cases telephone follow-up calls to non-responders when a telephone number can be matched to the sampled address. Invited households can join the panel by one of several means:

- by completing and mailing back a paper form in a postage-paid envelope;
- by calling a toll-free hotline maintained by Knowledge Networks; or
- by going to a designated KN web-site and completing an online recruitment form.

After initially accepting the invitation to join the panel, respondents are then "profiled" online answering key demographic questions about themselves. This profile is maintained using the same procedures established for the RDD-recruited research subjects. Respondents not having an Internet connection are provided a laptop computer and free Internet service. Respondents sampled from ABS frame, like those from the RDD frame are provided the same privacy terms and confidentiality protections that we have developed over the years and have been reviewed by dozens of Institutional Review Boards.

Large-scale ABS sampling for our KnowledgePanel recruitment began in April, 2009. As a result, KnowledgePanel will be improving its sample coverage of CPOHHs and young adults.

Because we will have recruited panelists from two different sample frames - RDD and ABS we are taking several technical steps to merge samples sourced from these frames. Our approach preserves the representative structure of the overall panel for the selection of individual client study samples. An advantage of mixing ABS frame panel members in any KnowledgePanel sample is a reduction in the variance of the weights. ABS-sourced sample tends to align more true to the overall population demographic distributions and thus the associated adjustment weights are somewhat more uniform and less varied. This variance reduction efficaciously attenuates the sample's design effect and confirms a real advantage for study samples drawn from KnowledgePanel with its dual frame construction.

## Survey Administration

For client surveys, samples are drawn at random from among active panel members. Depending on the study, eligibility criteria will be applied or in-field screening of the sample will be carried out. Sample sizes can range widely depending on the objectives and design of the study.

Once assigned to a survey, members receive a notification email letting them know there is a new survey available for them to take. This email notification contains a link that sends them to the survey questionnaire. No login name or password is required. The field period depends on the client's needs, and can range anywhere from a few hours to several weeks.

After three days, automatic email reminders are sent to all non-responding panel members in the sample. If email reminders do not generate a sufficient response, an automated telephone
reminder call may be initiated. The usual protocol is to wait at least three-four days after the email reminder before calling. To assist panel members with their survey taking, each individual has a personalized "home page" that lists all the surveys that were assigned to that member and have yet to be completed.

Knowledge Networks also operates an ongoing, modest, incentive program to encourage participation and create member loyalty. Members can enter special raffles or can be entered into special sweepstakes with both cash and other prizes to be won.

The typical survey commitment for panel members is one survey per week or four per month with a duration of 10-15 minutes per survey. Some client surveys exceed this time and in the case of longer surveys an additional incentive may be provided.

## Survey Sampling from KnowledgePanel

Once Panel Members are recruited and profiled, they become eligible for selection for specific client surveys. In most cases, the specific survey sample represents a simple random sample from the panel, for example, a general population survey. Customized stratified random sampling based on profile data may also be conducted as required by the study design.

The general sampling rule is to assign no more than one survey per week to members. Allowing for rare weekly exceptions, this limits a member's total assignments per month to 4 or 6 surveys. In certain cases, a survey sample calls for pre-screening, that is, members are drawn from a subsample of the panel (such as, females, Republicans, grocery shoppers, etc.). In such cases, care is taken to ensure that all subsequent survey samples drawn that week are selected in such a way as to result in a sample that remains representative of the panel distributions.

For this survey, a nationally representative sample of U.S. adults (18 and over) was selected.

## Sample Weighting

The design for a KnowledgePanel ${ }^{\circledR}$ sample begins as an equal probability sample that is selfweighting with several enhancements incorporated to improve efficiency. Since any alteration in the selection process is a deviation from a pure equal probability sample design, statistical weighting adjustments are made to the data to offset known selection deviations. These adjustments are incorporated in the sample's base weight.

There are also several sources of survey error that are an inherent part of any survey process, such as non-coverage and non-response due to panel recruitment methods and to inevitable panel attrition. We address these sources of sampling and non-sampling error using a panel demographic post-stratification weight as an additional adjustment.

Lastly, a set of study-specific post-stratification weights are constructed for the study data to adjust for the study's sample design and survey non-response.
A description of these types of weights follows.

## The Base Weight

In a KnowledgePanel sample there are seven known sources of deviation from an equal probability of selection design. These are corrected in the Base Weight and are described below.

1. Under-sampling of telephone numbers unmatched to a valid mailing address

An address match is attempted on all the Random Digit Dial (RDD) generated telephone numbers in the sample after the sample has been purged of business and institutional numbers and screened for non-working numbers. The success rate for address matching is in the $60-70 \%$ range. The telephone numbers with valid addresses are sent an advance letter, notifying the household that they will be contacted by phone to join KnowledgePanel. The remaining, unmatched numbers are under-sampled as a recruitment efficiency strategy. Advance letters improve recruitment success rates. Under-sampling stopped between July 2005 and April 2007. It was resumed in May 2007 with a sampling rate of 0.75 .
2. RDD selection proportional to the number of telephone landlines reaching the household

As part of the field data collection operation, information is collected on the number of separate telephone landlines in each selected household. A multiple line household's selection probability is down weighted by the inverse of its number of landlines.
3. Some minor oversampling of Chicago and Los Angeles due to early pilot surveys

Two pilot surveys carried out in Chicago and Los Angeles when the panel was first being built increased the relative size of the sample from these two cities. With natural attrition and growth in size, the impact is disappearing over time. It remains part of our base adjustment weighting because of a small number of extant panel members from that nascent panel cohort.
4. Early oversampling the four largest states and central region states

At the time when the panel was first being built, survey demand in the four largest states (California, New York, Florida, and Texas) required over-sampling during JanuaryOctober 2000. Similarly, the central region states were over-sampled for a brief period. These now diminishing effects still remain in the panel membership and thus require weighting adjustments for these geographic areas.
5. Under-sampling of households not covered by the MSN ${ }^{\circledR}$ TV service network Certain small areas of the U.S. are not serviced by MSN ${ }^{\circledR}$, thus our MSN ${ }^{\circledR}$ TV units cannot be used for recruited non-Internet households. In some of these cases, we use other Internet Service Providers for Internet access via the member's personal computer.

Overall, the result is a small under-sample of these geographic areas thus requiring a minor weighting adjustment.

## 6. Oversampling of African- American and Hispanic telephone exchanges

As of October 2001, we began over-sampling telephone exchanges with a higher density of minority households (specifically African American and Hispanic) to increase panel membership for those groups. These exchanges are oversampled at approximately twice the rate of other exchanges. This over-sampling is corrected in the base weight.
7. Address-based sample phone match adjustment

Towards the end of 2008, Knowledge Networks began recruiting panel members using an address-based sample (ABS) frame in addition to RDD recruitment. Once recruitment through the mail, including follow-up mailings to ABS non-respondents was completed, a telephone recruitment was added. Non-responding ABS households where a landline telephone number could be matched to an address were subsequently called and a telephone recruitment initiated. This effort resulted in a slight overall disproportionate number of landline households being recruited in a given ABS sample. A base weight adjustment is applied to return the ABS recruitment panel members to the sample's correct national proportion of phone-match and no phone match households.

## The Panel Demographic Post-stratification Weight

To reduce the effects of any non-response and non-coverage bias in the overall panel membership, a post-stratification adjustment is applied using demographic distributions from the most recent data from the Current Population Survey (CPS). Benchmark distributions for Internet Access among the U.S. population of adults are obtained from KnowledgePanel recruitment data since this measurement is not collected as part of the CPS.

The post-stratification variables include:

- Gender (Male/Female)
- Age (18-29, 30-44, 45-59, and 60+)
- Race/Hispanic ethnicity (White/Non-Hispanic, Black/Non-Hispanic, Other/NonHispanic, 2+ Races/Non-Hispanic, Hispanic)
- Education (Less than High School, High School, Some College, Bachelor and beyond)
- Census Region (Northeast, Midwest, South, West)
- Metropolitan Area (Yes, No)
- Internet Access (Yes, No)

This weighting adjustment is applied prior to the selection of any client sample from KnowledgePanel. These weights constitute the starting weights for any client survey selected from the panel.

## Study-Specific Post-Stratification Weights

Once all the study data are returned from the field, we proceeded with a post-stratification process to adjust for any survey non-response and also any non-coverage due to the studyspecific sample design.

The following benchmark distributions are utilized for this post-stratification adjustment:

- Gender (Male/Female)
- Age (18-29, 30-44, 45-59, and 60+)
- Race/Hispanic ethnicity (White/Non-Hispanic, Black/Non-Hispanic, Other/NonHispanic, 2+ Races/Non-Hispanic, Hispanic)
- Education (Less than High School, High School, Some College, Bachelor and beyond)
- Census Region (Northeast, Midwest, South, West)
- Metropolitan Area (Yes, No)
- Internet Access (Yes, No)

Comparable distributions are calculated using all completed cases from the field data. Since study sample sizes are typically too small to accommodate a complete cross-tabulation of all the survey variables with the benchmark variables, an iterative proportional fitting is used for the post-stratification weighting adjustment. This procedure adjusts the sample data back to the selected benchmark proportions. Through an iterative convergence process, the weighted sample data are optimally fitted to the marginal distributions.

After this final post-stratification adjustment, the distribution of the calculated weights are examined to identify and, if necessary, trim outliers at the extreme upper and lower tails of the weight distribution. The post-stratified and trimmed weights are then scaled to the sum of the total sample size of all eligible respondents.

## APPENDIX A: QUESTIONNAIRE

## [INTRO]

This week we'd like you to participate in a survey sponsored by the Massachusetts Institute of Technology (MIT) regarding your attitudes and views on energy use and environmental concerns. Please know that participation in this research is voluntary and you may decline to answer any or all questions. You may also decline further participation at any time without adverse consequences. In addition all personal information will be kept confidential and will never be included with survey responses. We appreciate your participation in this research.

## [MP]

[Random order]
[MP, Limit to 3 answers]
Q1
Consider the following issues. What are the three most important issues facing the US today?
Select three answers
Crime
Unemployment
Environment
Poverty
Education
Federal budget deficit
Taxes
Income inequality
Family values
Economy
Health care
Social security
Drugs
Racism
Terrorism
Inflation
Abortion
Quality of government leaders
Illegal immigrants
Iraq war
Fuel/oil prices
Lack of money (credit crunch)
[SP]
[Random order]
[Prompt]

Q2A
Consider the following environmental problems. Which is the most important problem facing the US today?

Toxic waste
Ozone depletion
Endangered species
Global warming
Acid rain
Smog
Urban sprawl
Water pollution
Overpopulation
Destruction of ecosystems
[SP]
Q2B
[If At least one response to Q2A, insert:
"Of the remaining environmental problems below, which is the most important problem facing the US today?"]

## [LIST ITEMS NOT SELECTED IN Q2A]

[SP]
[Rotate order. Half of sample gets order a-d. Other half gets order d-a, Record in DOV"Normal" if a-d, "Reverse" if d-a ]
Q3
Many environmental issues involve difficult trade-offs with the economy. Which of the following statements best describes your view?
a. The highest priority should be given to protecting the environment, even if it hurts the economy.
b. Both the environment and the economy are important, but the environment should come first.
c. Both the environment and the economy are important, but the economy should come first.
d. The highest priority should be given to economic considerations such as jobs even if it hurts the environment.
[MP; "None of these"= SP]
[Random order]
Q4

Have you heard of or read about any of the following in the past year? Check all that apply.
More efficient appliances
Hybrid cars
Hydrogen cars
Nuclear energy
Bioenergy/biomass
Carbon sequestration
Solar energy
Carbon capture and storage
Wind energy
Iron fertilization
Clean coal
None of these
[SP]
[Random order]
[Prompt]
Q5A
If the US Department of Energy has $\$ 10$ billion to spend, which do you think should be the top priority?

New energy sources, such as solar, wind, or bioenergy/biomass
New oil and gas reserves
Cleaner burning coal
Nuclear power
More energy efficient cars and trucks
More energy efficient buildings
Mass transportation
Ways to remove carbon from atmosphere
Ways to better manage toxic waste
Clean drinking water
Anti-terrorism and security
Energy conservation
Hydropower
Nuclear waste disposal
[SP]
[If R didn't skip Q5A]
Q5B
Of the remaining items, which do you think should be the top priority?

## [LIST ITEMS NOT SELECTED IN Q5A]

## [Random order]

[Grid: SP Across/Down]
Q6
Please select if "carbon sequestration" or "carbon capture and storage" can reduce each of the following environmental concerns?

|  | Can reduce | Does not reduce | Not sure |
| :--- | :--- | :--- | :--- |
| Toxic waste |  |  |  |
| Ozone depletion |  |  |  |
| Global warming |  |  |  |
| Acid rain |  |  |  |
| Smog |  |  |  |
| Water pollution |  |  |  |

## [Random order]

[Grid: SP Across/Down]
Q7
There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels?

|  | Increases <br> carbon dioxide | Decreases <br> carbon dioxide | No impact | Not sure |
| :--- | :--- | :--- | :--- | :--- |
| Automobiles |  |  |  |  |
| Home heating |  |  |  |  |
| Coal burning <br> power plants |  |  |  |  |
| Nuclear power <br> plants |  |  |  |  |
| Windmills |  |  |  |  |
| Trees |  |  |  |  |
| Oceans |  |  |  |  |
| Farming (e.g. <br> wheat farms) |  |  |  |  |
| Factories (e.g. <br> steel mills) |  |  |  |  |
| Breathing |  |  |  |  |

How much was your electric bill last month?
(a) Under $\$ 10$
(b) \$10-25
(c) \$26-50
(d) \$51-75
(e) \$76-100
(f) \$101-150
(g) \$151-\$200
(h) More than \$200
(i) Don't Know
[SP]
Q9
If it solved global warming, would you be willing to pay $\$ 5$ more per month on your electricity bill?
(1) Yes
(2) No
[IF Q9=1]
[SP]
Q9A. If it solved global warming, would you be willing to pay $\$ 10$ more per month on your electricity bill?
(1) Yes
(2) No
[IF Q9a=1]
[SP]
Q9B. If it solved global warming, would you be willing to pay $\$ 25$ more per month on your electricity bill?
(1) Yes
(2) No
[IF Q9B=1]
[SP]
Q9C. If it solved global warming, would you be willing to pay $\$ 50$ more per month on your electricity bill?
(1) Yes
(2) No
[IF Q9C=1]

Q9D. If it solved global warming, would you be willing to pay $\$ 100$ more per month on your electricity bill?
(1) Yes
(2) No
[SP]
[Prompt if skip]
[Rotate order. Half of sample gets order a-e . Other half gets order e-a. Record in DOV"Normal" if a-e, "Reverse" if e-a ]
X. One way to reduce greenhouse gases is to cap emissions. This would increase the price for gasoline, heating oil, and electricity. Such caps would reduce use of oil and coal and make it easier to introduce new technologies, such as solar and wind power. A proposal would cap emissions and reduce taxes, such that the increase in fuel prices for a typical family would be offset by reduced income taxes.

This proposal would:

- Cut the income tax of a typical family by $\$ 1000$
- Increase the amount the typical family pays for electricity by $\$ 25$ per month
- Increase the price of gasoline by $60 ¢$ per gallon
- Decrease greenhouse gas emissions by $50 \%$

Would you oppose or support this proposal?
(a) Strongly support
(b) Support
(c) Neither support nor oppose
(d) Oppose
(e) Strongly oppose
[SP]
[Rotate order, e always at end. Half sample gets order a-d. Other half gets order d-a. Record in DOV-"Normal" if a-d "Reverse" if d-a]
]
$\underline{Q 10}$
From what you know about global warming, which of the following statements comes closest to your opinion?
(a) Global warming has been established as a serious problem and immediate action is necessary.
(b) There is enough evidence that global warming is taking place and some action should be taken.
(c) We don't know enough about global warming and more research is necessary before we take any actions.
(d) Concern about global warming is unwarranted.
(e) No opinion

## [SP]

Q10a. Do you think most scientists agree with one another about global warming, or do you think there is a lot of disagreement on this issue?
__Most agree
_ A lot of disagreement
__Not sure
[SP]
[Rotate order, a-e or e-a. Half sample gets order a-e. Other half gets order e-a. Record in DOV-"Normal" if a-e, "Reverse" if e-a ]
Q11
Assuming that global warming is a problem, what do you think the US is likely to do about it? Which statement comes closest to your views on how this problem will be addressed? s
(a) I believe that firms and government researchers will develop new technologies to solve the problem.
(b) I believe we will have to change our lifestyles to reduce energy consumption.
(c) I believe we will learn to live with and adapt to a warmer climate.
(d) I believe global warming is a problem but the US won't do anything about it.
(e) I believe we will do nothing since global warming is not a problem.

## [SP]

Q12. Do you think the Federal Government should do more to try to deal with global warming?
__Should do more
Should do less
__ Is doing the right amount now
[SP]
Q12A
An international treaty calls on the US and other industrialized nations to cut back on their emissions from power plants and cars in order to reduce global warming. Some people say this will hurt the economy and is based on uncertain science. Others say that this is needed to protect the environment and could create new business opportunities. What is your view- do you think
that the US should or should not join this treaty requiring less emissions from US power plants and cars?
a) Should join
b) Should not join
c) No opinion

## [Random order]

[Grid: SP Across/Down]
Q13
The following technologies have been proposed to address global warming. If you were responsible for designing a plan to address global warming, which of the following technologies would you use?

|  | Definitely <br> use | Probably <br> use | Not <br> sure | Probably <br> not use | Definitely <br> not use |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Bioenergy/biomass: Producing <br> energy from trees or agricultural <br> wastes. |  |  |  |  |  |
| Carbon sequestration: Using trees <br> to absorb carbon dioxide from the <br> atmosphere. |  |  |  |  |  |
| Carbon capture and storage: <br> Capturing carbon dioxide from <br> power plant exhaust and storing in <br> underground reservoirs. |  |  |  |  |  |
| Iron fertilization of oceans: Adding <br> iron to the ocean to increase its <br> uptake of carbon dioxide from the <br> atmosphere. |  |  |  |  |  |
| Energy efficient appliances: <br> Producing appliances that use less <br> energy to accomplish the same <br> tasks. |  |  |  |  |  |
| Energy efficient cars: Producing <br> cars that use less energy to drive <br> the same distance. |  |  |  |  |  |
| Nuclear energy: Producing energy <br> from a nuclear reaction. |  |  |  |  |  |
| Solar energy: Using the energy <br> from the sun for heating or <br> electricity production. |  |  |  |  |  |
| Wind energy: Producing electricity <br> from the wind, traditionally in a <br> windmill. |  |  |  |  |  |

[HALF SAMPLE Shown Q14A and Q14B. The other half of sample shown 14BC. RECORD IN DOV]

## [DISABLE BACK BUTTON HERE]

[SP]
Q14A
Now we would like to present some facts on electricity production and prices.
The following chart shows our reliance on fossil fuels (coal, oil and natural gas) for producing electricity.


Based on published studies, we can summarize electricity production costs as follows:

- Using coal and natural gas, the typical family pays $\$ 1,200$ per year for electricity.
- Using all nuclear power would emit no carbon dioxide and would increase electricity costs for families to $\$ 2,400$ per year.
- Using capture and storage of carbon dioxide along with coal and natural gas would reduce carbon dioxide emissions by $90 \%$ and would increase electricity costs to $\$ 2,400$ per year.
- Using renewables (solar and wind power) would emit no carbon dioxide and would increase electricity costs to $\$ 4,000$ per year.


## Q14B.

Considering these facts, how can we best address the issue of global warming as it relates to electricity production? Please click here to view the pie chart and summary information again.
(a) Do nothing. We can live with global warming.
(b) Invest in research and development. A new technology will solve global warming.
(c) Continue using fossil fuels but with capture and storage of carbon dioxide.
(d) Expand nuclear power.
(e) Expand renewables (solar and wind power).
(f) Reduce electricity consumption, even if it means lower economic growth.
( g ) Do nothing. There is no threat of global warming.

## [OTHER HALF OF SAMPLE GETS Q14BC. RECORD IN DOV]

## [Random order]

[SP]

## Q14BC

How do you feel we can best address the issue of global warming as it relates to electricity production?
(a) Do nothing. We can live with global warming.
(b) Invest in research and development. A new technology will solve global warming.
(c) Continue using fossil fuels but with capture and storage of carbon dioxide.
(d) Expand nuclear power.
(e) Expand renewables (solar and wind power).
(f) Reduce electricity consumption, even if it means lower economic growth.
( g ) Do nothing. There is no threat of global warming.
[SP]
[Rotate order, a-e or e-a. Half sample gets order a-e. Other half gets order e-a. Record in DOV-"Normal" if a-e, "Reverse" if e-a ]

## Q14D

One option to reduce greenhouse gas emissions is to capture the carbon dioxide from smokestacks and store it underground for thousands of years. The US Government has recently announced it will spend $\$ 3.4$ billion to demonstrate this technology at coal-fired power stations and other industrial facilities. What is your view of this proposal?
(a) Strongly support
(b) Support
(c) Neither support or oppose
(d) Oppose
(e) Strongly oppose
[SP]
Q15
Do you believe that we have a responsibility to look out for the interests of future generations, even if it means making ourselves worse off?
(a) Yes
(b) No
[SP]
Q16
We currently assist other nations through foreign aid and charitable donations, do you think we should increase that assistance, let it stay the same, decrease our assistance or remove it entirely?
(a) Increase
(b) Stay the same
(c) Decrease
(d) Remove it entirely
[SP]
Q17
How do you primarily heat your home?
(a) Oil
(b) Electricity
(c) Natural Gas
(d) Wood
(e) No Heating
(f) Don't Know
(g) Other
[SP]
Q19
Do you consider yourself religious?
(a) Very religious
(b) Somewhat religious
(c) Not religious

## APPENDIX B: CODEBOOK

Weighted by weight

## Frequency Tables

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Normal order | 653 | 50.4 | 50.4 | 50.4 |
|  | 2 Reverse order | 643 | 49.6 | 49.6 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |
| Sample_Q14 DATA-ONLY: Q14 section shown to respondent |  |  |  |  |  |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 1 Q14A/Q14B | 653 | 50.4 | 50.4 | 50.4 |
|  | 2 Q14C | 643 | 49.6 | 49.6 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q1_1 Consider the following issues. What are the three most important issues facing the US today?

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Crime | 19 | 1.5 | 1.5 | 1.5 |
|  | 2 Unemployment | 139 | 10.7 | 10.7 | 12.2 |
|  | 3 Environment | 36 | 2.8 | 2.8 | 15.0 |
|  | 4 Poverty | 23 | 1.8 | 1.8 | 16.8 |
|  | 5 Education | 41 | 3.2 | 3.2 | 20.0 |
|  | 6 Federal budget deficit | 82 | 6.3 | 6.3 | 26.3 |
|  | 7 Taxes | 23 | 1.8 | 1.8 | 28.1 |
|  | 8 Income inequality | 12 | . 9 | 1.0 | 29.1 |
|  | 9 Family values | 48 | 3.7 | 3.7 | 32.8 |
|  | 10 Economy | 222 | 17.1 | 17.2 | 50.0 |
|  | 11 Health care | 201 | 15.5 | 15.6 | 65.6 |
|  | 12 Social security | 38 | 3.0 | 3.0 | 68.6 |
|  | 13 Drugs | 18 | 1.4 | 1.4 | 69.9 |
|  | 14 Racism | 10 | . 7 | . 7 | 70.7 |
|  | 15 Terrorism | 56 | 4.3 | 4.3 | 75.0 |
|  | 16 Inflation | 18 | 1.4 | 1.4 | 76.3 |
|  | 17 Abortion | 16 | 1.3 | 1.3 | 77.6 |
|  | 18 Quality of government leaders | 71 | 5.5 | 5.5 | 83.1 |
|  | 19 Illegal immigrants | 79 | 6.1 | 6.2 | 89.3 |
|  | 20 Iraq war | 59 | 4.5 | 4.5 | 93.8 |
|  | 21 Fuel/oil prices | 49 | 3.8 | 3.8 | 97.6 |
|  | 22 Lack of money (credit crunch) | 31 | 2.4 | 2.4 | 100.0 |
|  | Total | 1290 | 99.6 | 100.0 |  |
| Missing | -1 Refused | 6 | . 4 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q1_2 Consider the following issues. What are the three most important issues facing the US today?

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Crime | 26 | 2.0 | 2.0 | 2.0 |
|  | 2 Unemployment | 160 | 12.4 | 12.6 | 14.6 |
|  | 3 Environment | 38 | 2.9 | 3.0 | 17.6 |
|  | 4 Poverty | 15 | 1.1 | 1.2 | 18.7 |
|  | 5 Education | 67 | 5.1 | 5.2 | 23.9 |
|  | 6 Federal budget deficit | 89 | 6.9 | 7.0 | 30.9 |
|  | 7 Taxes | 39 | 3.0 | 3.1 | 34.0 |
|  | 8 Income inequality | 13 | 1.0 | 1.0 | 35.0 |
|  | 9 Family values | 58 | 4.4 | 4.5 | 39.5 |
|  | 10 Economy | 214 | 16.5 | 16.8 | 56.3 |
|  | 11 Health care | 179 | 13.8 | 14.1 | 70.3 |
|  | 12 Social security | 35 | 2.7 | 2.7 | 73.1 |
|  | 13 Drugs | 18 | 1.4 | 1.4 | 74.5 |
|  | 14 Racism | 9 | . 7 | . 7 | 75.2 |
|  | 15 Terrorism | 51 | 3.9 | 4.0 | 79.2 |
|  | 16 Inflation | 20 | 1.5 | 1.6 | 80.7 |
|  | 17 Abortion | 8 | . 6 | . 6 | 81.4 |
|  | 18 Quality of government leaders | 60 | 4.7 | 4.7 | 86.1 |
|  | 19 Illegal immigrants | 57 | 4.4 | 4.5 | 90.6 |
|  | 20 Iraq war | 53 | 4.1 | 4.2 | 94.8 |
|  | 21 Fuel/oil prices | 37 | 2.9 | 2.9 | 97.7 |
|  | 22 Lack of money (credit crunch) | 30 | 2.3 | 2.3 | 100.0 |
|  | Total | 1276 | 98.5 | 100.0 |  |
| Missing | System | 20 | 1.5 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q1_3 Consider the following issues. What are the three most important issues facing the US today?

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Crime | 17 | 1.3 | 1.3 | 1.3 |
|  | 2 Unemployment | 168 | 13.0 | 13.3 | 14.6 |
|  | 3 Environment | 53 | 4.1 | 4.2 | 18.8 |
|  | 4 Poverty | 22 | 1.7 | 1.7 | 20.5 |
|  | 5 Education | 50 | 3.8 | 3.9 | 24.4 |
|  | 6 Federal budget deficit | 96 | 7.4 | 7.6 | 32.0 |
|  | 7 Taxes | 25 | 1.9 | 2.0 | 34.0 |
|  | 8 Income inequality | 14 | 1.1 | 1.1 | 35.1 |
|  | 9 Family values | 52 | 4.0 | 4.1 | 39.2 |
|  | 10 Economy | 216 | 16.6 | 17.0 | 56.3 |
|  | 11 Health care | 190 | 14.7 | 15.0 | 71.3 |
|  | 12 Social security | 37 | 2.9 | 2.9 | 74.2 |
|  | 13 Drugs | 13 | 1.0 | 1.0 | 75.3 |
|  | 14 Racism | 13 | 1.0 | 1.0 | 76.3 |
|  | 15 Terrorism | 45 | 3.5 | 3.6 | 79.9 |
|  | 16 Inflation | 7 | . 5 | . 5 | 80.4 |
|  | 17 Abortion | 17 | 1.3 | 1.4 | 81.8 |
|  | 18 Quality of government leaders | 57 | 4.4 | 4.5 | 86.3 |
|  | 19 Illegal immigrants | 61 | 4.7 | 4.8 | 91.1 |
|  | 20 Iraq war | 48 | 3.7 | 3.8 | 94.9 |
|  | 21 Fuel/oil prices | 39 | 3.0 | 3.1 | 97.9 |
|  | 22 Lack of money (credit crunch) | 26 | 2.0 | 2.1 | 100.0 |
|  | Total | 1265 | 97.6 | 100.0 |  |
| Missing | System | 31 | 2.4 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q2A Consider the following environmental problems. Which is the most important problem facing the US today?

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Toxic waste | 151 | 11.7 | 11.8 | 11.8 |
|  | 2 Ozone depletion | 82 | 6.3 | 6.4 | 18.2 |
|  | 3 Endangered species | 26 | 2.0 | 2.0 | 20.1 |
|  | 4 Global warming | 422 | 32.5 | 32.8 | 53.0 |
|  | 5 Acid rain | 5 | .4 | .4 | 53.4 |
|  | 6 Smog | 33 | 2.5 | 2.6 | 55.9 |
|  | 7 Urban sprawl | 66 | 5.1 | 5.2 | 61.1 |
|  | 8 Water pollution | 158 | 12.2 | 12.3 | 73.4 |
|  | 9 Overpopulation | 146 | 11.2 | 11.3 | 84.8 |
|  | 10 Destruction of ecosystems | 196 | 15.1 | 15.2 | 100.0 |
|  | Total | 1285 | 99.1 | 100.0 |  |
| Missing | (1 Refused | 11 | .9 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q2B Of the remaining environmental problems below, which is the most important problem facing the US today?

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Toxic waste | 161 | 12.4 | 12.6 | 12.6 |
|  | 2 Ozone depletion | 160 | 12.4 | 12.5 | 25.2 |
|  | 3 Endangered species | 43 | 3.3 | 3.4 | 28.6 |
|  | 4 Global warming | 194 | 15.0 | 15.2 | 43.8 |
|  | 5 Acid rain | 6 | . 5 | . 5 | 44.3 |
|  | 6 Smog | 54 | 4.2 | 4.2 | 48.5 |
|  | 7 Urban sprawl | 107 | 8.3 | 8.4 | 56.9 |
|  | 8 Water pollution | 197 | 15.2 | 15.4 | 72.3 |
|  | 9 Overpopulation | 127 | 9.8 | 10.0 | 82.2 |
|  | 10 Destruction of ecosystems | 227 | 17.5 | 17.8 | 100.0 |
|  | Total | 1277 | 98.5 | 100.0 |  |
| Missing | -1 Refused | 8 | . 6 |  |  |
|  | System | 11 | . 9 |  |  |
|  | Total | 19 | 1.5 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q3 Many environmental issues involve difficult trade-offs with the economy. Which of the following statements best describes your view?

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 The highest priority should be given to protecting the envir | 95 | 7.4 | 7.5 | 7.5 |
|  | 2 Both the environment and the economy are important, but the | 456 | 35.2 | 35.7 | 43.2 |
|  | 3 Both the environment and the economy are important, but the | 591 | 45.6 | 46.3 | 89.5 |
|  | 4 The highest priority should be given to economic considerati | 135 | 10.4 | 10.5 | 100.0 |
|  | Total | 1277 | 98.6 | 100.0 |  |
| Missing | -1 Refused | 18 | 1.4 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q4_1 Have you heard of or read about any of the following in the past year? More efficient appliances

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 0 No | 414 | 32.0 | 32.0 | 32.0 |
|  | 1 Yes | 882 | 68.0 | 68.0 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_2 Have you heard of or read about any of the following in the past year? Hybrid cars

|  |  |  | Valid |  | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Percent |
| Valid | 0 No | 174 | 13.4 | 13.4 | 13.4 |
|  | 1 Yes | 1122 | 86.6 | 86.6 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_3 Have you heard of or read about any of the following in the past year? Hydrogen cars

|  |  |  | Valid |  | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Percent |
| Valid | 0 No | 653 | 50.4 | 50.4 | 50.4 |
|  | 1 Yes | 643 | 49.6 | 49.6 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_4 Have you heard of or read about any of the following in the past year? Nuclear energy

|  |  |  |  | Valid | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Percent |
| Valid | O No | 562 | 43.4 | 43.4 | 43.4 |
|  | 1 Yes | 734 | 56.6 | 56.6 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_5 Have you heard of or read about any of the following in the past year? Bioenergy/biomass

|  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Cumulative |
| Valid | 0 No | 945 | 72.9 | 72.9 | 72.9 |
|  | 1 Yes | 351 | 27.1 | 27.1 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_6 Have you heard of or read about any of the following in the past year? Carbon sequestration

|  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Cumulative |
| Valid | 0 No | 1179 | 91.0 | 91.0 | 91.0 |
|  | 1 Yes | 117 | 9.0 | 9.0 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_7 Have you heard of or read about any of the following in the past year? Solar energy

|  |  |  | Valid |  | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Percent |
| Valid | O No | 261 | 20.2 | 20.2 | 20.2 |
|  | 1 Yes | 1035 | 79.8 | 79.8 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_8 Have you heard of or read about any of the following in the past year? Carbon capture and storage

|  |  |  |  | Valid |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Cumulative |  |
| Valid | 0 No | 1077 | 83.1 | 83.1 | 83.1 |
|  | 1 Yes | 219 | 16.9 | 16.9 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_9 Have you heard of or read about any of the following in the past year? Wind energy

|  |  |  |  | Valid | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Percent |
| Valid | 0 No | 330 | 25.5 | 25.5 | 25.5 |
|  | 1 Yes | 966 | 74.5 | 74.5 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_10 Have you heard of or read about any of the following in the past year? Iron fertilization

|  |  |  |  | Valid | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Percent |
| Valid | 0 No | 1263 | 97.5 | 97.5 | 97.5 |
|  | 1 Yes | 33 | 2.5 | 2.5 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_11 Have you heard of or read about any of the following in the past year? Clean coal

|  |  |  | Valid |  | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Percent |
| Valid | O No | 732 | 56.5 | 56.5 | 56.5 |
|  | 1 Yes | 564 | 43.5 | 43.5 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_12 Have you heard of or read about any of the following in the past year? None of these

|  |  |  |  | Valid | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Percent |
| Valid | 0 No | 1199 | 92.5 | 92.5 | 92.5 |
|  | 1 Yes | 97 | 7.5 | 7.5 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q4_13 Have you heard of or read about any of the following in the past year? Refused

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 0 No | 1291 | 99.6 | 99.6 | 99.6 |
|  | 1 Yes | 5 | . 4 | . 4 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

Q5A If the US Department of Energy has $\$ 10$ billion to spend, which do you think should be the top priority?

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 New energy sources, such as solar, wind, or bioenergy/biomas | 524 | 40.4 | 40.5 | 40.5 |
|  | 2 New oil and gas reserves | 151 | 11.6 | 11.7 | 52.2 |
|  | 3 Cleaner burning coal | 30 | 2.4 | 2.4 | 54.6 |
|  | 4 Nuclear power | 84 | 6.5 | 6.5 | 61.1 |
|  | 5 More energy efficient cars and trucks | 78 | 6.0 | 6.1 | 67.1 |
|  | 6 More energy efficient buildings | 12 | . 9 | . 9 | 68.1 |
|  | 7 Mass transportation | 41 | 3.2 | 3.2 | 71.3 |
|  | 8 Ways to remove carbon from atmosphere | 30 | 2.3 | 2.4 | 73.6 |
|  | 9 Ways to better manage toxic waste | 43 | 3.3 | 3.3 | 76.9 |
|  | 10 Clean drinking water | 68 | 5.3 | 5.3 | 82.2 |
|  | 11 Anti-terrorism and security | 115 | 8.9 | 8.9 | 91.1 |
|  | 12 Energy conservation | 83 | 6.4 | 6.4 | 97.5 |
|  | 13 Hydropower | 17 | 1.3 | 1.3 | 98.8 |
|  | 14 Nuclear waste disposal | 15 | 1.2 | 1.2 | 100.0 |
|  | Total | 1292 | 99.7 | 100.0 |  |
| Missing | -1 Refused | 4 | . 3 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q5B Of the remaining items, which do you think should be the top priority?

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 New energy sources, such as solar, wind, or bioenergy/biomas | 230 | 17.7 | 17.8 | 17.8 |
|  | 2 New oil and gas reserves | 111 | 8.6 | 8.6 | 26.4 |
|  | 3 Cleaner burning coal | 35 | 2.7 | 2.7 | 29.1 |
|  | 4 Nuclear power | 45 | 3.4 | 3.5 | 32.5 |
|  | 5 More energy efficient cars and trucks | 179 | 13.8 | 13.9 | 46.4 |
|  | 6 More energy efficient buildings | 39 | 3.0 | 3.0 | 49.4 |
|  | 7 Mass transportation | 66 | 5.1 | 5.1 | 54.5 |
|  | 8 Ways to remove carbon from atmosphere | 48 | 3.7 | 3.7 | 58.2 |
|  | 9 Ways to better manage toxic waste | 67 | 5.2 | 5.2 | 63.4 |
|  | 10 Clean drinking water | 116 | 9.0 | 9.0 | 72.4 |
|  | 11 Anti-terrorism and security | 130 | 10.1 | 10.1 | 82.5 |
|  | 12 Energy conservation | 159 | 12.3 | 12.4 | 94.9 |
|  | 13 Hydropower | 30 | 2.3 | 2.3 | 97.2 |
|  | 14 Nuclear waste disposal | 36 | 2.8 | 2.8 | 100.0 |
|  | Total | 1291 | 99.6 | 100.0 |  |
| Missing | -1 Refused | 1 | . 1 |  |  |
|  | System | 4 | . 3 |  |  |
|  | Total | 5 | . 4 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q6_1 Please select if "carbon sequestration" or "carbon capture and storage" can reduce each of the following environmental concerns? Toxic
waste:

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Can reduce | 231 | 17.8 | 18.1 | 18.1 |
|  | 2 Does not reduce | 182 | 14.1 | 14.3 | 32.5 |
|  | 3 Not sure | 860 | 66.4 | 67.5 | 100.0 |
|  | Total | 1273 | 98.3 | 100.0 |  |
| Missing | -1 Refused | 23 | 1.7 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q6_2 Please select if "carbon sequestration" or "carbon capture and storage" can reduce each of the following environmental concerns? Ozone depletion :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Can reduce | 345 | 26.6 | 27.1 | 27.1 |
|  | 2 Does not reduce | 104 | 8.0 | 8.1 | 35.2 |
|  | 3 Not sure | 827 | 63.8 | 64.8 | 100.0 |
|  | Total | 1276 | 98.4 | 100.0 |  |
| Missing | -1 Refused | 20 | 1.6 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q6_3 Please select if "carbon sequestration" or "carbon capture and storage" can reduce each of the following environmental concerns? Global warming :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Can reduce | 404 | 31.2 | 31.7 | 31.7 |
|  | 2 Does not reduce | 107 | 8.3 | 8.4 | 40.1 |
|  | 3 Not sure | 764 | 58.9 | 59.9 | 100.0 |
|  | Total | 1275 | 98.4 | 100.0 |  |
| Missing | -1 Refused | 21 | 1.6 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q6_4 Please select if "carbon sequestration" or "carbon capture and storage" can reduce each of the following environmental concerns? Acid rain :

|  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Valid | Cumulative |
| Valid | Percent | Percent |  |  |  |
|  | 2 Does not reduce | 298 | 23.0 | 23.5 | 23.5 |
|  | 3 Not sure | 112 | 8.6 | 8.8 | 32.3 |
|  | Total | 859 | 66.3 | 67.7 | 100.0 |
| Missing | -1 Refused | 1269 | 97.9 | 100.0 |  |
| Total |  | 27 | 2.1 |  |  |

Q6_5 Please select if "carbon sequestration" or "carbon capture and storage" can reduce each of the following environmental concerns? Smog :

|  |  |  | Valid <br> Percent | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Can reduce | 398 | 30.7 | 31.3 | 31.3 |
|  | 2 Does not reduce | 79 | 6.1 | 6.2 | 37.5 |
|  | 3 Not sure | 793 | 61.2 | 62.5 | 100.0 |
|  | Total | 1269 | 97.9 | 100.0 |  |
| Missing | -1 Refused | 27 | 2.1 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q6_6 Please select if "carbon sequestration" or "carbon capture and storage" can reduce each of the following environmental concerns? Water pollution :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Can reduce | 270 | 20.9 | 21.3 | 21.3 |
|  | 2 Does not reduce | 131 | 10.1 | 10.3 | 31.6 |
|  | 3 Not sure | 870 | 67.1 | 68.4 | 100.0 |
|  | Total | 1272 | 98.1 | 100.0 |  |
| Missing | -1 Refused | 24 | 1.9 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q7_1 There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels?

Automobiles:

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Increases carbon dioxide | 957 | 73.9 | 74.8 | 74.8 |
|  | 2 Decreases carbon dioxide | 48 | 3.7 | 3.8 | 78.6 |
|  | 3 No impact | 28 | 2.2 | 2.2 | 80.8 |
|  | 4 Not sure | 245 | 18.9 | 19.2 | 100.0 |
|  | Total | 1279 | 98.7 | 100.0 |  |
| Missing | -1 Refused | 17 | 1.3 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q7_2 There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels? Home heating :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Increases carbon dioxide | Prequency | Percent | 595 | 53.6 |
|  | 2 Decreases carbon dioxide | 46 | 3.6 | 34.6 |  |
|  | 3 No impact | 135 | 10.4 | 10.6 | 58.2 |
|  | 4 Not sure | 397 | 30.6 | 31.2 | 100.0 |
|  | Total | 1274 | 98.3 | 100.0 |  |
| Missing | -1 Refused | 22 | 1.7 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q7_3 There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels? Coal burning power plants :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Increases carbon dioxide | 882 | 68.1 | 68.8 | 68.8 |
|  | 2 Decreases carbon dioxide | 41 | 3.2 | 3.2 | 72.0 |
|  | 3 No impact | 37 | 2.9 | 2.9 | 74.9 |
|  | 4 Not sure | 322 | 24.8 | 25.1 | 100.0 |
|  | Total | 1282 | 98.9 | 100.0 |  |
| Missing | -1 Refused | 14 | 1.1 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q7_4 There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels? Nuclear power plants :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Increases carbon dioxide | 357 | 27.6 | 27.8 | 27.8 |
|  | 2 Decreases carbon dioxide | 152 | 11.8 | 11.9 | 39.7 |
|  | 3 No impact | 272 | 21.0 | 21.1 | 60.8 |
|  | 4 Not sure | 503 | 38.8 | 39.2 | 100.0 |
|  | Total | 1284 | 99.1 | 100.0 |  |
| Missing | -1 Refused | 12 | .9 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q7_5 There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels? Windmills :

|  |  |  | Valid | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Increases carbon dioxide | 28 | 2.2 | 2.2 | 2.2 |
|  | 2 Decreases carbon dioxide | 380 | 29.3 | 29.9 | 32.1 |
|  | 3 No impact | 529 | 40.8 | 41.6 | 73.7 |
|  | 4 Not sure | 334 | 25.8 | 26.3 | 100.0 |
|  | Total | 1271 | 98.1 | 100.0 |  |
| Missing | -1 Refused | 25 | 1.9 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q7_6 There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels? Trees:

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | Frequency | Percent | 5.9 | 5.0 | 5.0 |
|  | 2 Decreases carbon dioxide | 64 | 66.1 | 66.6 | 71.6 |
|  | 3 No impact | 856 | 9.7 | 9.8 | 81.4 |
|  | 4 Not sure | 126 | 18.5 | 18.6 | 100.0 |
|  | Total | 239 | 99.2 | 100.0 |  |
| Missing | -1 Refused | 1285 | .8 |  |  |
| Total |  | 11 | 100.0 |  |  |

Q7_7 There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels? Oceans :

|  |  |  | Valid | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Increases carbon dioxide | 58 | 4.5 | 4.6 | 4.6 |
|  | 2 Decreases carbon dioxide | 383 | 29.6 | 30.1 | 34.7 |
|  | 3 No impact | 343 | 26.4 | 27.0 | 61.7 |
|  | 4 Not sure | 487 | 37.6 | 38.3 | 100.0 |
|  | Total | 1271 | 98.1 | 100.0 |  |
| Missing | -1 Refused | 25 | 1.9 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q7_8 There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels? Farming (e. g. wheat farms) :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Increases carbon dioxide | 212 | 16.4 | 16.6 | 16.6 |
|  | 2 Decreases carbon dioxide | 326 | 25.2 | 25.5 | 42.1 |
|  | 3 No impact | 248 | 19.2 | 19.4 | 61.6 |
|  | 4 Not sure | 491 | 37.9 | 38.4 | 100.0 |
|  | Total | 1278 | 98.6 | 100.0 |  |
| Missing | -1 Refused | 18 | 1.4 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q7_9 There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels? Factories (e.g. steel mills) :'

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Increases carbon dioxide | 922 | 71.1 | 71.9 | 71.9 |
|  | 2 Decreases carbon dioxide | 44 | 3.4 | 3.4 | 75.3 |
|  | 3 No impact | 27 | 2.1 | 2.1 | 77.4 |
|  | 4 Not sure | 290 | 22.4 | 22.6 | 100.0 |
|  | Total | 1282 | 98.9 | 100.0 |  |
| Missing | -1 Refused | 14 | 1.1 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q7_10 There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels? Breathing :

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Increases carbon dioxide | 527 | 40.6 | 41.0 | 41.0 |
|  | 2 Decreases carbon dioxide | 77 | 5.9 | 6.0 | 47.0 |
|  | 3 No impact | 343 | 26.5 | 26.7 | 73.7 |
|  | 4 Not sure | 337 | 26.0 | 26.3 | 100.0 |
|  | Total | 1284 | 99.1 | 100.0 |  |
| Missing | -1 Refused | 12 | . 9 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q8 How much was your electric bill last month?

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Under \$10 | Percent | .2 | .2 | .2 |
|  | 2 \$10-25 | 3 | 3.3 | 3.3 | 3.5 |
|  | $3 \$ 26-50$ | 42 | 9.7 | 9.8 | 13.3 |
|  | 4 \$51-75 | 126 | 12.4 | 12.4 | 25.7 |
|  | 5 \$76-100 | 160 | 16.5 | 16.6 | 42.3 |
|  | 6 \$101-150 | 214 | 21.5 | 21.6 | 63.8 |
|  | 7 \$151-\$200 | 278 | 14.0 | 14.0 | 77.9 |
|  | 8 More than \$200 | 181 | 13.8 | 13.9 | 91.7 |
|  | 9 Don't Know | 179 | 8.2 | 8.3 | 100.0 |
|  | Total | 1291 | 99.6 | 100.0 |  |
| Missing | 1 Refused | 5 | .4 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q9 If it solved global warming, would you be willing to pay $\$ 5$ more per month on your electricity bill?

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Yes | 904 | 69.7 | 70.3 | 70.3 |
|  | 2 No | 381 | 29.4 | 29.7 | 100.0 |
|  | Total | 1285 | 99.1 | 100.0 |  |
| Missing | -1 Refused | 11 | .9 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q9A If it solved global warming, would you be willing to pay $\$ 10$ more per month on your electricity bill?

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Yes | 619 | 47.8 | 69.3 | 69.3 |
|  | 2 No | 274 | 21.1 | 30.7 | 100.0 |
|  | Total | 893 | 68.9 | 100.0 |  |
| Missing | -1 Refused | 10 | .8 |  |  |
|  | System | 392 | 30.3 |  |  |
|  | Total | 403 | 31.1 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q9B If it solved global warming, would you be willing to pay $\$ 25$ more per month on your electricity bill?

|  |  |  | Valid <br> Percent | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Yes | 275 | 21.2 | 44.7 | 44.7 |
|  | 2 No | 340 | 26.3 | 55.3 | 100.0 |
|  | Total | 615 | 47.5 | 100.0 |  |
| Missing | -1 Refused | 4 | .3 |  |  |
|  | System | 677 | 52.2 |  |  |
|  | Total | 681 | 52.5 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q9C If it solved global warming, would you be willing to pay $\$ 50$ more per month on your electricity bill?

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Yes | 154 | 11.9 | 56.4 | 56.4 |
|  | 2 No | 119 | 9.2 | 43.6 | 100.0 |
|  | Total | 273 | 21.1 | 100.0 |  |
| Missing | -1 Refused | 2 | .1 |  |  |
|  | System | 1021 | 78.8 |  |  |
|  | Total | 1023 | 78.9 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q9D If it solved global warming, would you be willing to pay $\$ 100$ more per month on your electricity bill?

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | Frequency | Pes | 73 | 5.6 | 48.5 |
|  | 2 No | 78 | 6.0 | 51.5 | 100.0 |
|  | Total | 151 | 11.6 | 100.0 |  |
| Missing | -1 Refused | 3 | .3 |  |  |
|  | System | 1142 | 88.1 |  |  |
|  | Total | 1145 | 88.4 |  |  |
| Total |  | 1296 | 100.0 |  |  |

QX One way to reduce greenhouse gases is to cap emissions. This would increase the price for gasoline, heating oil, and electricity. Such caps would reduce use of oil and coal and make it easier to introduce new technologies, such as solar and wind power. A

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Strongly support | 103 | 7.9 | 8.0 | 8.0 |
|  | 2 Support | 306 | 23.6 | 23.7 | 31.6 |
|  | 3 Neither support nor oppose | 436 | 33.6 | 33.7 | 65.4 |
|  | 4 Oppose | 240 | 18.5 | 18.6 | 84.0 |
|  | 5 Strongly oppose | 207 | 16.0 | 16.0 | 100.0 |
|  | Total | 1292 | 99.7 | 100.0 |  |
| Missing | -1 Refused | 4 | .3 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q10 From what you know about global warming, which of the following statements comes closest to your opinion?

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Global warming has been established as a serious problem and | 303 | 23.3 | 23.4 | 23.4 |
|  | 2 There is enough evidence that global warming is taking place | 471 | 36.4 | 36.4 | 59.8 |
|  | 3 We don't know enough about global warming and more research | 233 | 18.0 | 18.0 | 77.8 |
|  | 4 Concern about global warming is unwarranted. | 145 | 11.2 | 11.2 | 89.1 |
|  | 5 No opinion | 141 | 10.9 | 10.9 | 100.0 |
|  | Total | 1293 | 99.8 | 100.0 |  |
| Missing | -1 Refused | 3 | . 2 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q10A Do you think most scientists agree with one another about global warming, or do you think there is a lot of disagreement on this issue?

|  |  |  | Frequency | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Most agree | Cumulative <br> Percent |  |  |  |
|  | 2 A lot of disagreement | 347 | 26.8 | 26.9 | 26.9 |
|  | 3 Not sure | 686 | 52.9 | 53.2 | 80.1 |
|  | Total | 257 | 19.9 | 19.9 | 100.0 |
| Missing | -1 Refused | 1291 | 99.6 | 100.0 |  |
| Total |  | 5 | .4 |  |  |

Q11 Assuming that global warming is a problem, what do you think the US is likely to do about it? Which statement comes closest to your views on how this problem will be addressed?

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 I believe that firms and government researchers will develop | 228 | 17.6 | 18.0 | 18.0 |
|  | 2 I believe we will have to change our lifestyles to reduce en | 559 | 43.2 | 44.3 | 62.4 |
|  | 3 I believe we will learn to live with and adapt to a warmer c | 187 | 14.4 | 14.8 | 77.2 |
|  | 4 I believe global warming is a problem but the US won't do an | 166 | 12.8 | 13.2 | 90.3 |
|  | 5 I believe we will do nothing since global warming is not a $p$ | 122 | 9.4 | 9.7 | 100.0 |
|  | Total | 1262 | 97.4 | 100.0 |  |
| Missing | -1 Refused | 34 | 2.6 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q12 Do you think the Federal Government should do more to try to deal with global warming?

|  |  |  | Valid <br> Percent | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Should do more | 754 | 58.2 | 59.3 | 59.3 |
|  | 2 Should do less | 196 | 15.1 | 15.4 | 74.7 |
|  | 3 Is doing the |  |  |  |  |
| right amount now | 322 | 24.9 | 25.3 | 100.0 |  |
|  | Total | 1273 | 98.2 | 100.0 |  |
| Missing | -1 Refused | 23 | 1.8 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q12A An international treaty calls on the US and other industrialized nations to cut back on their emissions from power plants and cars in order to reduce global warming. Some people say this will hurt the economy and is based on uncertain science. Others say t

|  |  |  | Valid <br> Percent | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Should join | 633 | 48.8 | 49.1 | 49.1 |
|  | 2 Should not join | 251 | 19.4 | 19.5 | 68.5 |
|  | 3 No opinion | 406 | 31.3 | 31.5 | 100.0 |
|  | Total | 1290 | 99.5 | 100.0 |  |
| Missing | -1 Refused | 6 | .5 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q13_1 If you were responsible for designing a plan to address global warming, which of the following technologies would you use?
Bioenergy/biomass: Producing energy from trees or agricultural wastes. :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Definitely use | 381 | 29.4 | 30.0 | 30.0 |
|  | 2 Probably use | 387 | 29.9 | 30.5 | 60.5 |
|  | 3 Not sure | 412 | 31.8 | 32.5 | 93.0 |
|  | 4 Probably not use | 57 | 4.4 | 4.5 | 97.4 |
|  | 5 Definitely not use | 33 | 2.5 | 2.6 | 100.0 |
|  | Total | 1270 | 98.0 | 100.0 |  |
| Missing | -1 Refused | 26 | 2.0 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q13_2 If you were responsible for designing a plan to address global warming, which of the following technologies would you use? Carbon sequestration: Using trees to absorb carbon dioxide from the atmosphere. :

|  |  |  | Frequency | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Definitely use | Cumulative <br> Percent |  |  |  |
|  | 2 Probably use | 517 | 39.9 | 40.9 | 40.9 |
|  | 3 Not sure | 327 | 25.2 | 25.8 | 66.7 |
|  | 4 Probably not use | 363 | 28.0 | 28.7 | 95.3 |
|  | 5 Definitely not use | 35 | 2.7 | 2.8 | 98.1 |
|  | Total | 24 | 1.9 | 1.9 | 100.0 |
| Missing | -1 Refused | 1266 | 97.7 | 100.0 |  |
| Total |  | 30 | 2.3 |  |  |

Q13_3 If you were responsible for designing a plan to address global warming, which of the following technologies would you use? Carbon capture and storage: Capturing carbon dioxide from power plant exhaust and storing in underground reservoirs. :

|  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |
| Valid | 1 Definitely use | 131 | 10.1 | 10.4 | 10.4 |
|  | 2 Probably use | 218 | 16.8 | 17.2 | 27.6 |
|  | 3 Not sure | 618 | 47.7 | 48.8 | 76.4 |
|  | 4 Probably not use | 198 | 15.3 | 15.7 | 92.1 |
|  | 5 Definitely not use | 100 | 7.7 | 7.9 | 100.0 |
|  | Total | 1266 | 97.7 | 100.0 |  |
| Missing | -1 Refused | 30 | 2.3 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q13_4 If you were responsible for designing a plan to address global warming, which of the following technologies would you use? Iron fertilization of oceans: Adding iron to the ocean to increase its uptake of carbon dioxide from the atmosphere. :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Definitely use | 77 | 5.9 | 6.1 | 6.1 |
|  | 2 Probably use | 136 | 10.5 | 10.7 | 16.8 |
|  | 3 Not sure | 724 | 55.9 | 57.4 | 74.2 |
|  | 4 Probably not use | 192 | 14.8 | 15.2 | 89.4 |
|  | 5 Definitely not use | 134 | 10.3 | 10.6 | 100.0 |
|  | Total | 1263 | 97.4 | 100.0 |  |
| Missing | -1 Refused | 33 | 2.6 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q13_5 If you were responsible for designing a plan to address global warming, which of the following technologies would you use? Energy efficient appliances: Producing appliances that use less energy to accomplish the same tasks. :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Definitely use | 735 | 56.8 | 58.0 | 58.0 |
|  | 2 Probably use | 319 | 24.6 | 25.2 | 83.2 |
|  | 3 Not sure | 181 | 14.0 | 14.3 | 97.5 |
|  | 4 Probably not use | 19 | 1.5 | 1.5 | 99.0 |
|  | 5 Definitely not use | 13 | 1.0 | 1.0 | 100.0 |
|  | Total | 1268 | 97.9 | 100.0 |  |
| Missing | -1 Refused | 28 | 2.1 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q13_6 If you were responsible for designing a plan to address global warming, which of the following technologies would you use? Energy efficient cars: Producing cars that use less energy to drive the same distance. :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Definitely use | 677 | 52.3 | 53.6 | 53.6 |
|  | 2 Probably use | 344 | 26.5 | 27.2 | 80.8 |
|  | 3 Not sure | 200 | 15.4 | 15.8 | 96.7 |
|  | 4 Probably not use | 25 | 2.0 | 2.0 | 98.7 |
|  | 5 Definitely not use | 17 | 1.3 | 1.3 | 100.0 |
|  | Total | 1263 | 97.5 | 100.0 |  |
| Missing | -1 Refused | 33 | 2.5 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q13_7 If you were responsible for designing a plan to address global warming, which of the following technologies would you use? Nuclear energy: Producing energy from a nuclear reaction. :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Definitely use | 236 | 18.2 | 18.7 | 18.7 |
|  | 2 Probably use | 270 | 20.8 | 21.3 | 40.0 |
|  | 3 Not sure | 513 | 39.6 | 40.6 | 80.5 |
|  | 4 Probably not use | 151 | 11.6 | 11.9 | 92.5 |
|  | 5 Definitely not use | 95 | 7.4 | 7.5 | 100.0 |
|  | Total | 1265 | 97.7 | 100.0 |  |
| Missing | -1 Refused | 30 | 2.3 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q13_8 If you were responsible for designing a plan to address global warming, which of the following technologies would you use? Solar energy:

Using the energy from the sun for heating or electricity production. :

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Definitely use | 752 | 58.0 | 59.4 | 59.4 |
|  | 2 Probably use | 291 | 22.4 | 23.0 | 82.3 |
|  | 3 Not sure | 192 | 14.8 | 15.2 | 97.5 |
|  | 4 Probably not use | 18 | 1.4 | 1.4 | 98.9 |
|  | 5 Definitely not use | 14 | 1.0 | 1.1 | 100.0 |
|  | Total | 1266 | 97.7 | 100.0 |  |
| Missing | -1 Refused | 30 | 2.3 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q13_9 If you were responsible for designing a plan to address global warming, which of the following technologies would you use? Wind energy:

Producing electricity from the wind, traditionally in a windmill.' :

|  |  |  |  | Valid <br> Prequency | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Definitely use | 692 | 53.4 | 54.8 | 54.8 |
|  | 2 Probably use | 314 | 24.2 | 24.8 | 79.6 |
|  | 3 Not sure | 209 | 16.1 | 16.5 | 96.1 |
|  | 4 Probably not use | 34 | 2.6 | 2.7 | 98.8 |
|  | 5 Definitely not use | 16 | 1.2 | 1.2 | 100.0 |
|  | Total | 1264 | 97.6 | 100.0 |  |
| Missing | -1 Refused | 32 | 2.4 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q14B Considering these facts, how can we best address the issue of global warming as it relates to electricity production? Please click here to view the pie chart and summary information again.

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Do nothing. We can live with global warming. | 34 | 2.6 | 5.5 | 5.5 |
|  | 2 Invest in research and development. A new technology will s | 129 | 10.0 | 21.0 | 26.5 |
|  | 3 Continue using fossil fuels but with capture and storage of | 59 | 4.6 | 9.6 | 36.1 |
|  | 4 Expand nuclear power. | 61 | 4.7 | 9.9 | 46.0 |
|  | 5 Expand renewables (solar and wind power). | 215 | 16.6 | 35.0 | 80.9 |
|  | 6 Reduce electricity consumption, even if it means lower econo | 67 | 5.2 | 10.9 | 91.9 |
|  | 7 Do nothing. There is no threat of global warming. | 50 | 3.9 | 8.1 | 100.0 |
|  | Total | 616 | 47.5 | 100.0 |  |
| Missing | -1 Refused | 37 | 2.9 |  |  |
|  | System | 643 | 49.6 |  |  |
|  | Total | 680 | 52.5 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q14BC How do you feel we can best address the issue of global warming as it relates to electricity production?

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Do nothing. We can live with global warming. | 28 | 2.1 | 4.4 | 4.4 |
|  | 2 Invest in research and development. A new technology will s | 129 | 9.9 | 20.3 | 24.7 |
|  | 3 Continue using fossil fuels but with capture and storage of | 18 | 1.4 | 2.9 | 27.6 |
|  | 4 Expand nuclear power. | 67 | 5.1 | 10.5 | 38.1 |
|  | 5 Expand renewables (solar and wind power). | 299 | 23.1 | 47.2 | 85.3 |
|  | 6 Reduce electricity consumption, even if it means lower econo | 46 | 3.6 | 7.3 | 92.7 |
|  | 7 Do nothing. There is no threat of global warming. | 47 | 3.6 | 7.3 | 100.0 |
|  | Total | 633 | 48.8 | 100.0 |  |
| Missing | -1 Refused | 10 | . 8 |  |  |
|  | System | 653 | 50.4 |  |  |
|  | Total | 663 | 51.2 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q14D One option to reduce greenhouse gas emissions is to capture the carbon dioxide from smokestacks and store it underground for thousands of years. The US Government has recently announced it will spend $\$ 3.4$ billion to demonstrate this technology at coal-fir

|  |  |  |  | Valid | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Strongly support | 36 | 2.8 | 2.8 | 2.8 |
|  | 2 Support | 154 | 11.9 | 12.1 | 14.9 |
|  | 3 Neither support or oppose | 635 | 49.0 | 49.7 | 64.6 |
|  | 4 Oppose | 302 | 23.3 | 23.6 | 88.2 |
|  | 5 Strongly oppose | 151 | 11.6 | 11.8 | 100.0 |
|  | Total | 1279 | 98.7 | 100.0 |  |
| Missing | -1 Refused | 17 | 1.3 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q15 Do you believe that we have a responsibility to look out for the interests of future generations, even if it means making ourselves worse off?

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Yes | 1004 | 77.5 | 79.4 | 79.4 |
|  | 2 No | 260 | 20.1 | 20.6 | 100.0 |
|  | Total | 1265 | 97.6 | 100.0 |  |
| Missing | -1 Refused | 31 | 2.4 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q16 We currently assist other nations through foreign aid and charitable donations, do you think we should increase that assistance, let it stay the same, decrease our assistance or remove it entirely?

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Increase | 69 | 5.4 | 5.5 | 5.5 |
|  | 2 Stay the same | 448 | 34.5 | 35.2 | 40.7 |
|  | 3 Decrease | 570 | 44.0 | 44.9 | 85.5 |
|  | 4 Remove it entirely | 184 | 14.2 | 14.5 | 100.0 |
|  | Total | 1270 | 98.0 | 100.0 |  |
| Missing | -1 Refused | 26 | 2.0 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q17 How do you primarily heat your home?

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Oil | Percent | 7.7 | 7.8 | 7.8 |
|  | 2 Electricity | 459 | 35.4 | 35.7 | 43.4 |
|  | 3 Natural Gas | 564 | 43.5 | 43.8 | 87.2 |
|  | 4 Wood | 42 | 3.3 | 3.3 | 90.5 |
|  | 5 No Heating | 26 | 2.0 | 2.1 | 92.6 |
|  | 6 Don't Know | 48 | 3.7 | 3.8 | 96.3 |
|  | 7 Other | 47 | 3.7 | 3.7 | 100.0 |
|  | Total | 1288 | 99.4 | 100.0 |  |
| Missing | -1 Refused | 8 | .6 |  |  |
| Total |  | 1296 | 100.0 |  |  |

Q19 Do you consider yourself religious?

|  |  |  | Frequency | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Very religious | Cumulative <br> Percent |  |  |  |
|  | 2 Somewhat religious | 328 | 25.3 | 25.6 | 25.6 |
|  | 3 Not religious | 663 | 51.1 | 51.7 | 77.3 |
|  | Total | 291 | 22.4 | 22.7 | 100.0 |
| Missing | -1 Refused | 1281 | 98.9 | 100.0 |  |
| Total |  | 15 | 1.1 |  |  |

partyid3 DERIVED: Political party affiliation (3 categories)

|  |  |  | Valid <br> Percent | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | 39.8 | 39.8 |

partyid7 DERIVED: Political party affiliation (7 categories)

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Strong Republican | 167 | 12.9 | 12.9 | 12.9 |
|  | 2 Not Strong Republican | 143 | 11.1 | 11.1 | 24.0 |
|  | 3 Leans Republican | 205 | 15.8 | 15.8 | 39.8 |
|  | 4 Undecided/Independent/Other | 44 | 3.4 | 3.4 | 43.2 |
|  | 5 Leans Democrat | 220 | 17.0 | 17.0 | 60.2 |
|  | 6 Not Strong Democrat | 236 | 18.2 | 18.2 | 78.4 |
|  | 7 Strong Democrat | 280 | 21.6 | 21.6 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

pppa0012 Q11: In general, do you think of yourself as...

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Extremely liberal | 62 | 4.8 | 4.8 | 4.8 |
|  | 2 Liberal | 174 | 13.4 | 13.7 | 18.5 |
|  | 3 Slightly liberal | 109 | 8.4 | 8.5 | 27.0 |
|  | 4 Moderate, middle of the road | 499 | 38.5 | 39.2 | 66.2 |
|  | 5 Slightly conservative | 165 | 12.8 | 13.0 | 79.2 |
|  | 6 Conservative | 222 | 17.1 | 17.4 | 96.7 |
|  | 7 Extremely conservative | 43 | 3.3 | 3.3 | 100.0 |
|  | Total | 1274 | 98.3 | 100.0 |  |
| Missing | -1 Refused | 22 | 1.7 |  |  |
| Total |  | 1296 | 100.0 |  |  |

pppa0070 Q26: What is your religion?

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Baptist-any denomination | 225 | 17.4 | 17.5 | 17.5 |
|  | 2 Protestant (e.g., Methodist, Lutheran, Presbyterian, Episcop | 259 | 20.0 | 20.1 | 37.5 |
|  | 3 Catholic | 313 | 24.2 | 24.3 | 61.8 |
|  | 4 Mormon | 28 | 2.1 | 2.1 | 63.9 |
|  | 5 Jewish | 32 | 2.5 | 2.5 | 66.4 |
|  | 6 Muslim | 2 | . 1 | . 1 | 66.6 |
|  | 7 Hindu | 2 | . 2 | . 2 | 66.8 |
|  | 8 Buddhist | 19 | 1.4 | 1.4 | 68.2 |
|  | 9 Pentecostal | 47 | 3.6 | 3.7 | 71.9 |
|  | 10 Eastern Orthodox | 8 | . 6 | . 6 | 72.5 |
|  | 11 Other Christian | 144 | 11.1 | 11.1 | 83.6 |
|  | 12 Other non-Christian, please specify: | 27 | 2.0 | 2.1 | 85.6 |
|  | 13 None | 185 | 14.3 | 14.4 | 100.0 |
|  | Total | 1291 | 99.6 | 100.0 |  |
| Missing | -1 Refused | 5 | . 4 |  |  |
| Total |  | 1296 | 100.0 |  |  |

pppa0072 Q27: How often do you attend religious services?

|  |  |  |  | Valid | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | -2 Not asked | 190 | 14.7 | 14.7 | 14.7 |
|  | 1 More than once a week | 157 | 12.1 | 12.2 | 26.9 |
|  | 2 Once a week | 258 | 19.9 | 20.0 | 46.9 |
|  | 3 Once or twice a month | 98 | 7.5 | 7.6 | 54.4 |
|  | 4 A few times a year | 244 | 18.9 | 18.9 | 73.3 |
|  | 5 Once a year or less | 175 | 13.5 | 13.5 | 86.8 |
|  | 6 Never | 170 | 13.1 | 13.2 | 100.0 |
|  | Total | 1293 | 99.7 | 100.0 |  |
| Missing | -1 Refused | 3 | .3 |  |  |
| Total |  | 1296 | 100.0 |  |  |

PPAGE Age

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 18 | 7 | . 5 | . 5 | . 5 |
|  | 19 | 25 | 1.9 | 1.9 | 2.5 |
|  | 20 | 24 | 1.8 | 1.8 | 4.3 |
|  | 21 | 14 | 1.0 | 1.0 | 5.4 |
|  | 22 | 18 | 1.4 | 1.4 | 6.8 |
|  | 23 | 18 | 1.4 | 1.4 | 8.1 |
|  | 24 | 23 | 1.8 | 1.8 | 9.9 |
|  | 25 | 18 | 1.4 | 1.4 | 11.3 |
|  | 26 | 20 | 1.6 | 1.6 | 12.9 |
|  | 27 | 28 | 2.1 | 2.1 | 15.1 |
|  | 28 | 29 | 2.2 | 2.2 | 17.3 |
|  | 29 | 57 | 4.4 | 4.4 | 21.7 |
|  | 30 | 20 | 1.5 | 1.5 | 23.2 |
|  | 31 | 26 | 2.0 | 2.0 | 25.2 |
|  | 32 | 18 | 1.4 | 1.4 | 26.6 |
|  | 33 | 22 | 1.7 | 1.7 | 28.3 |
|  | 34 | 18 | 1.4 | 1.4 | 29.7 |
|  | 35 | 14 | 1.1 | 1.1 | 30.9 |
|  | 36 | 22 | 1.7 | 1.7 | 32.5 |
|  | 37 | 25 | 2.0 | 2.0 | 34.5 |
|  | 38 | 16 | 1.3 | 1.3 | 35.7 |
|  | 39 | 27 | 2.1 | 2.1 | 37.8 |
|  | 40 | 21 | 1.6 | 1.6 | 39.5 |
|  | 41 | 28 | 2.2 | 2.2 | 41.6 |
|  | 42 | 31 | 2.4 | 2.4 | 44.0 |
|  | 43 | 29 | 2.2 | 2.2 | 46.2 |
|  | 44 | 28 | 2.2 | 2.2 | 48.4 |
|  | 45 | 15 | 1.2 | 1.2 | 49.6 |
|  | 46 | 21 | 1.6 | 1.6 | 51.2 |
|  | 47 | 19 | 1.4 | 1.4 | 52.7 |
|  | 48 | 13 | 1.0 | 1.0 | 53.7 |
|  | 49 | 16 | 1.2 | 1.2 | 54.9 |
|  | 50 | 22 | 1.7 | 1.7 | 56.6 |
|  | 51 | 20 | 1.6 | 1.6 | 58.1 |
|  | 52 | 31 | 2.4 | 2.4 | 60.6 |
|  | 53 | 29 | 2.2 | 2.2 | 62.8 |
|  | 54 | 23 | 1.8 | 1.8 | 64.5 |
|  | 55 | 34 | 2.7 | 2.7 | 67.2 |
|  | 56 | 28 | 2.2 | 2.2 | 69.4 |
|  | 57 | 30 | 2.3 | 2.3 | 71.7 |
|  | 58 | 37 | 2.9 | 2.9 | 74.6 |
|  | 59 | 23 | 1.8 | 1.8 | 76.3 |
|  | 60 | 15 | 1.2 | 1.2 | 77.5 |
|  | 61 | 23 | 1.8 | 1.8 | 79.3 |
|  | 62 | 31 | 2.4 | 2.4 | 81.7 |
|  | 63 | 14 | 1.1 | 1.1 | 82.7 |


|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 18-24 | 129 | 9.9 | 9.9 |  | 9.9 |  |
|  | 2 25-34 | 257 | 19.8 | 19.8 |  | 29.7 |  |
|  | 3 35-44 | 242 | 18.7 | 18.7 |  | 48.4 |  |
|  | 4 45-54 | 209 | 16.1 | 16.1 |  | 64.5 |  |
|  | 5 55-64 | 256 | 19.7 | 19.7 |  | 84.2 |  |
|  | 6 65-74 | 148 | 11.4 | 11.4 |  | 95.6 |  |
|  | 7 75+ | 57 | 4.4 | 4.4 |  | 100.0 |  |
|  | Total | 1296 | 100.0 | 100.0 |  |  |  |
| ppagect4 Age-4 Categories |  |  |  |  |  |  |  |
| Frequency |  |  | Percent | Valid Cumulative <br> Percent Percent |  |  |  |
| Valid | 1 18-29 | 281 | 21.7 | 21.7 |  | 21.7 |  |
|  | 2 30-44 | 347 | 26.8 | 26.8 |  | 48.4 |  |
|  | 3 45-59 | 362 | 27.9 | 27.9 |  | 76.3 |  |
|  | 4 60+ | 307 | 23.7 | 23.7 |  | 100.0 |  |
|  | Total | 1296 | 100.0 | 100.0 |  |  |  |
| PPEDUC Education (Highest Degree Received) |  |  |  |  |  |  |  |
|  |  |  | Frequency | Percent |  | Valid Percent | Cumulative Percent |
| Valid | 1 No formal education |  | 5 |  | . 4 | . 4 | . 4 |
|  | 35 th or 6th grade |  | 8 |  | . 6 | . 6 | 1.0 |
|  | 47 th or 8th grade |  |  |  | 1.3 | 1.3 | 2.3 |
|  | 5 9th grade |  |  |  | 1.8 | 1.8 | 4.1 |
|  | 6 10th grade |  |  |  | 2.8 | 2.8 | 6.9 |
|  | 7 11th grade |  |  |  | 2.4 | 2.4 | 9.2 |
|  | 8 12th grade NO DIPLOMA |  |  |  | 3.7 | 3.7 | 12.9 |
|  | 9 HIGH <br> GRADUA <br> DIPLOM | OL <br> high school e equivalent |  |  | 31.6 | 31.6 | 44.6 |
|  | 10 Some college, no degree |  |  |  | 20.7 | 20.7 | 65.3 |
|  | 11 Associate degree |  |  |  | 7.3 | 7.3 | 72.5 |
|  | 12 Bachelors degree |  |  |  | 16.2 | 16.2 | 88.8 |
|  | 13 Masters degree |  |  |  | 7.3 | 7.3 | 96.1 |
|  | 14 Professional or Doctorate degree |  |  |  | 3.9 | 3.9 | 100.0 |
|  | Total |  |  |  | 100.0 | 100.0 |  |

PPEDUCAT Education (Categorical)

|  |  |  | Frequency | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Less than high school | 168 | 12.9 | 12.9 | 12.9 |
|  | 2 High school | 410 | 31.6 | 31.6 | 44.6 |
|  | 3 Some college | 362 | 28.0 | 28.0 | 72.5 |
|  | 4 Bachelor's degree or higher | 356 | 27.5 | 27.5 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

PPETHM Race / Ethnicity

|  |  |  | Frequency | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 White, Non-Hispanic | 891 | 68.7 | 68.7 | Cumulative <br> Percent |
|  | 2 Black, Non-Hispanic | 147 | 11.4 | 11.4 | 88.7 |
|  | 3 Other, Non-Hispanic | 67 | 5.1 | 5.1 | 80.1 |
|  | 4 Hispanic | 177 | 13.6 | 13.6 | 98.9 |
|  | 5 2+ Races, Non-Hispanic | 15 | 1.1 | 1.1 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

## PPGENDER Gender

|  |  |  |  | Valid | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Percent |
| Valid | 1 Male | 627 | 48.4 | 48.4 | 48.4 |
|  | 2 Female | 669 | 51.6 | 51.6 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

PPHHHEAD Household Head

|  |  |  |  | Valid | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Percent |
| Valid | 0 No | 282 | 21.8 | 21.8 | 21.8 |
|  | 1 Yes | 1014 | 78.2 | 78.2 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

PPHHSIZE Household Size

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 | 286 | 22.0 | 22.0 | 22.0 |
|  | 2 | 435 | 33.5 | 33.5 | 55.6 |
|  | 3 | 240 | 18.5 | 18.5 | 74.1 |
|  | 4 | 185 | 14.3 | 14.3 | 88.4 |
|  | 5 | 79 | 6.1 | 6.1 | 94.5 |
|  | 6 | 37 | 2.9 | 2.9 | 97.4 |
|  | 7 | 9 | . 7 | . 7 | 98.1 |
|  | 8 | 7 | . 6 | . 6 | 98.7 |
|  | 9 | 11 | . 8 | . 8 | 99.5 |
|  | 10 | 3 | . 2 | . 2 | 99.7 |
|  | 11 | 2 | . 1 | . 1 | 99.8 |
|  | 13 | 2 | . 2 | . 2 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

PPHOUSE Housing Type

|  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | :---: | ---: | ---: |
| Valid | 1 A one-family house detached <br> from any other house | 870 | 67.2 | 67.2 |

PPINCIMP Household Income

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Less than \$5,000 | 27 | 2.1 | 2.1 | 2.1 |
|  | 2 \$5,000 to \$7,499 | 20 | 1.5 | 1.5 | 3.6 |
|  | 3 \$7,500 to \$9,999 | 40 | 3.1 | 3.1 | 6.7 |
|  | 4 \$10,000 to \$12,499 | 45 | 3.5 | 3.5 | 10.2 |
|  | 5 \$12,500 to \$14,999 | 28 | 2.1 | 2.1 | 12.3 |
|  | 6 \$15,000 to \$19,999 | 75 | 5.8 | 5.8 | 18.1 |
|  | 7 \$20,000 to \$24,999 | 73 | 5.7 | 5.7 | 23.7 |
|  | 8 \$25,000 to \$29,999 | 78 | 6.0 | 6.0 | 29.7 |
|  | 9 \$30,000 to \$34,999 | 74 | 5.7 | 5.7 | 35.4 |
|  | 10 \$35,000 to \$39,999 | 89 | 6.8 | 6.8 | 42.3 |
|  | 11 \$40,000 to \$49,999 | 118 | 9.1 | 9.1 | 51.4 |
|  | 12 \$50,000 to \$59,999 | 118 | 9.1 | 9.1 | 60.5 |
|  | 13 \$60,000 to \$74,999 | 166 | 12.8 | 12.8 | 73.3 |
|  | 14 \$75,000 to \$84,999 | 73 | 5.6 | 5.6 | 79.0 |
|  | 15 \$85,000 to \$99,999 | 71 | 5.5 | 5.5 | 84.4 |
|  | 16 \$100,000 to \$124,999 | 97 | 7.5 | 7.5 | 91.9 |
|  | 17 \$125,000 to \$149,999 | 49 | 3.8 | 3.8 | 95.7 |
|  | 18 \$150,000 to \$174,999 | 24 | 1.8 | 1.8 | 97.5 |
|  | 19 \$175,000 or more | 32 | 2.5 | 2.5 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

PPMARIT Marital Status

|  |  |  |  | Valid | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Percent | Percent |
| Valid | 1 Married | 633 | 48.9 | 48.9 | 48.9 |
|  | 2 Widowed | 79 | 6.1 | 6.1 | 55.0 |
|  | 3 Divorced | 157 | 12.1 | 12.1 | 67.1 |
|  | 4 Separated | 29 | 2.2 | 2.2 | 69.3 |
|  | 5 Never married | 286 | 22.0 | 22.0 | 91.4 |
|  | 6 Living with partner | 112 | 8.6 | 8.6 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

PPMSACAT MSA Status

|  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Cercent | Cumulative <br> Percent |
| Valid | O Non-Metro | 212 | 16.3 | 16.3 | 16.3 |
|  | 1 Metro | 1084 | 83.7 | 83.7 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

PPNET HH Internet Access

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | 37.6 | 37.6 |

PPREG4 Region 4 - Based on State of Residence

|  |  |  |  | Valid <br> Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 Northeast | 239 | 18.5 | 18.5 | 18.5 |
|  | 2 Midwest | 284 | 21.9 | 21.9 | 40.4 |
|  | 3 South | 469 | 36.2 | 36.2 | 76.6 |
|  | 4 West | 303 | 23.4 | 23.4 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

PPRENT Ownership Status of Living Quarters

|  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Valid | 1 Owned or being bought <br> by you or someone in your <br> household | 908 | 70.1 | 70.1 | 70.1 |
| 2 Rented for cash | 355 | 27.4 | 27.4 | 97.5 |  |
|  | 3 Occupied without <br> payment of cash rent | 33 | 2.5 | 2.5 | 100.0 |
| Total | 1296 | 100.0 | 100.0 |  |  |

PPSTATEN State


PPT01 Presence of Household Members - Children 0-2

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 0 | 1208 | 93.2 | 93.2 | 93.2 |
|  | 1 | 82 | 6.4 | 6.4 | 99.6 |
|  | 2 | 5 | . 4 | . 4 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

PPT1317 Presence of Household Members - Children 13-17

|  |  |  | Valid |  | Cumulative |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 0 | 1132 | 87.4 | 87.4 | 87.4 |
|  | 1 | 127 | 9.8 | 9.8 | 97.2 |
|  | 2 | 31 | 2.4 | 2.4 | 99.6 |
|  | 3 | 2 | .2 | .2 | 99.7 |
|  | 4 | 2 | .2 | .2 | 99.9 |
|  |  | 1 | .1 | .1 | 100.0 |
|  | Percent | 1296 | 100.0 | 100.0 |  |

PPT180V Presence of Household Members - Adults 18+

|  |  |  |  | Valid |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Percent |  |  |  |  |  |\(\left.\quad \begin{array}{r}Cumulative <br>

Percent\end{array}\right]\)

| PPT25 Presence of Household Members - Children 2-5 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 0 | 1113 | 85.9 | 85.9 | 85.9 |
|  | 1 | 143 | 11.0 | 11.0 | 96.9 |
|  | 2 | 38 | 2.9 | 2.9 | 99.8 |
|  | 3 | 3 | . 2 | . 2 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |


|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 0 | 1074 | 82.9 | 82.9 | 82.9 |
|  | 1 | 146 | 11.3 | 11.3 | 94.2 |
|  | 2 | 54 | 4.2 | 4.2 | 98.3 |
|  | 3 | 21 | 1.6 | 1.6 | 99.9 |
|  | 4 | 1 | . 1 | . 1 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

PPWORK Current Employment Status

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1 Working - as a paid employee | 617 | 47.6 | 47.6 | 47.6 |
|  | 2 Working - self-employed | 81 | 6.2 | 6.2 | 53.9 |
|  | 3 Not working - on temporary layoff from a job | 18 | 1.4 | 1.4 | 55.2 |
|  | 4 Not working - looking for work | 129 | 10.0 | 10.0 | 65.2 |
|  | 5 Not working - retired | 208 | 16.1 | 16.1 | 81.2 |
|  | 6 Not working - disabled | 128 | 9.9 | 9.9 | 91.1 |
|  | 7 Not working - other | 115 | 8.9 | 8.9 | 100.0 |
|  | Total | 1296 | 100.0 | 100.0 |  |

