

## Field Report

# Carbon Sequestration Survey 2009

Conducted for Massachusetts Institute of Technology

Submitted to:
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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<sup>th</sup>, 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 Date	Cases Fielded	Completes	Completion 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	File			Ν	Background
Date	Туре	File Name	File Size	Records	Demographics
9/24/2009	SPSS	MIT_Carbon2009_Client.sav	682KB	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
TT WORK	

## **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<sup>®</sup>) 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 RDD-based 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 address-based 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<sup>®</sup> sample begins as an equal probability sample that is self-weighting 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 January-October 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® TV service network Certain small areas of the U.S. are not serviced by MSN®, thus our MSN®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/Non-Hispanic, 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 study-specific 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/Non-Hispanic, 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] <u>O1</u>

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]

### $\mathbf{Q2A}$

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] <u>O4</u> 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] <u>Q6</u>

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]

<u>Q7</u>

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

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

[SP]
<u>Q8</u>

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] <u>Q9</u>
If it solved global warming, would you be willing to pay \$5 $\underline{\text{more}}$ per month on your electricity bill?
(1) Yes (2) No
[IF Q9=1]
[SP]
<b>Q9A.</b> 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]
<b>Q9B.</b> If it solved global warming, would you be willing to pay \$25 <u>more</u> per month on your electricity bill?
(1) Yes (2) No
[IF Q9B=1] [SP]
<b>Q9C.</b> 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]

### [SP]

**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

necessary.

(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]

Q10

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

- your opinion?
- (b) There is enough evidence that global warming is taking place and some action should be

(a) Global warming has been established as a serious problem and immediate action is

(c) We don't know enough about global warming and more research is necessary before we take any actions.

<ul><li>(d) Concern about global warming is unwarranted.</li><li>(e) No opinion</li></ul>
[SP]
<b>Q10a.</b> 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 agreeA lot of disagreementNot 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 ]  O11
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
<ul> <li>(a) I believe that firms and government researchers will develop new technologies to solve the problem.</li> <li>(b) I believe we will have to change our lifestyles to reduce energy consumption.</li> <li>(c) I believe we will learn to live with and adapt to a warmer climate.</li> <li>(d) I believe global warming is a problem but the US won't do anything about it.</li> <li>(e) I believe we will do nothing since global warming is not a problem.</li> </ul>
[SP]
<b>Q12.</b> 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] <u>Q12A</u>

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]

<u>Q13</u>

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

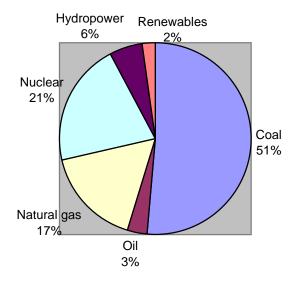
## [HALF SAMPLE Shown Q14A and Q14B. The other half of sample shown 14BC. RECORD IN DOV]

### [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.

[Random order]

[TEXT "HERE" LINKS TO CHART AND TEXT IN 14A]

### Q14B.

Considering these facts, how can we best address the issue of global warming as it relates to electricity production? Please click <a href="here">here</a> 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]

## <u>Q15</u>

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**

Response\_Order DATA-ONLY: order of responses in Q3, QX, Q10, Q11, Q14D

		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?

		Frequency	Percent	Valid Percent	Cumulative 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	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

		Frequency	Percent	Valid Percent	Cumulative 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

		Frequency	Percent	Valid Percent	Cumulative 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

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 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	Valid Percent	Cumulative Percent
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	Valid Percent	Cumulative Percent
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

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 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

		Frequency	Percent	Valid Percent	Cumulative Percent
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

		Frequency	Percent	Valid Percent	Cumulative 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

		Frequency	Percent	Valid Percent	Cumulative 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

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 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

		Frequency	Percent	Valid Percent	Cumulative 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?

				Valid	Cumulative
		Frequency	Percent	Percent	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 :

		Frequency	Percent	Valid Percent	Cumulative 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 :

		Frequency	Percent	Valid Percent	Cumulative 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:

		Frequency	Percent	Valid Percent	Cumulative 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 Percent	Cumulative Percent
Valid	1 Can reduce	298	23.0	23.5	23.5
	2 Does not reduce	112	8.6	8.8	32.3
	3 Not sure	859	66.3	67.7	100.0
	Total	1269	97.9	100.0	
Missing	-1 Refused	27	2.1		
Total		1296	100.0		

Q6\_5 Please select if "carbon sequestration" or "carbon capture and storage" can reduce each of the following environmental concerns? Smog :

		Frequency	Percent	Valid Percent	Cumulative 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:

		Frequency	Percent	Valid Percent	Cumulative 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:

		Frequency	Percent	Valid Percent	Cumulative 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:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Increases carbon dioxide	695	53.6	54.6	54.6
	2 Decreases carbon dioxide	46	3.6	3.6	58.2
	3 No impact	135	10.4	10.6	68.8
	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:

		Frequency	Percent	Valid Percent	Cumulative 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:

		Frequency	Percent	Valid Percent	Cumulative 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		

 $\rm Q7\_5\,$  There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels? Windmills :

		Frequency	Percent	Valid Percent	Cumulative 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		

 ${\sf Q7\_6}\,$  There is growing concern about increasing levels of carbon dioxide in the atmosphere. How do you think the following contribute to these levels? Trees :

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Increases carbon dioxide	64	4.9	5.0	5.0
	2 Decreases carbon dioxide	856	66.1	66.6	71.6
	3 No impact	126	9.7	9.8	81.4
	4 Not sure	239	18.5	18.6	100.0
	Total	1285	99.2	100.0	
Missing	-1 Refused	11	.8		
Total		1296	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:

		Frequency	Percent	Valid Percent	Cumulative 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):

		Frequency	Percent	Valid Percent	Cumulative 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): '

		Frequency	Percent	Valid Percent	Cumulative 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?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Under \$10	3	.2	.2	.2
	2 \$10-25	42	3.3	3.3	3.5
	3 \$26-50	126	9.7	9.8	13.3
	4 \$51-75	160	12.4	12.4	25.7
	5 \$76-100	214	16.5	16.6	42.3
	6 \$101-150	278	21.5	21.6	63.8
	7 \$151-\$200	181	14.0	14.0	77.9
	8 More than \$200	179	13.8	13.9	91.7
	9 Don't Know	107	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	Cumulative
		Frequency	Percent	Percent	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?

		Frequency	Percent	Valid Percent	Cumulative 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?

		Frequency	Percent	Valid Percent	Cumulative 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?

		Frequency	Percent	Valid Percent	Cumulative 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?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	73	5.6	48.5	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

		Frequency	Percent	Valid Percent	Cumulative 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	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 Percent	Cumulative Percent
Valid	1 Most agree	347	26.8	26.9	26.9
	2 A lot of disagreement	686	52.9	53.2	80.1
	3 Not sure	257	19.9	19.9	100.0
	Total	1291	99.6	100.0	
Missing	-1 Refused	5	.4		
Total		1296	100.0		

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?

		Frequency	Percent	Valid Percent	Cumulative 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

		Frequency	Percent	Valid Percent	Cumulative 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.:

		Frequency	Percent	Valid Percent	Cumulative 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 Percent	Cumulative Percent
Valid	1 Definitely use	517	39.9	40.9	40.9
	2 Probably use	327	25.2	25.8	66.7
	3 Not sure	363	28.0	28.7	95.3
	4 Probably not use	35	2.7	2.8	98.1
	5 Definitely not use	24	1.9	1.9	100.0
	Total	1266	97.7	100.0	
Missing	-1 Refused	30	2.3		
Total		1296	100.0		

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 Percent	Cumulative 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.:

		Frequency	Percent	Valid Percent	Cumulative 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.:

		Frequency	Percent	Valid Percent	Cumulative 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.:

		Frequency	Percent	Valid Percent	Cumulative 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.:

		Frequency	Percent	Valid Percent	Cumulative 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.:

		Frequency	Percent	Valid Percent	Cumulative 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.':

		Frequency	Percent	Valid Percent	Cumulative 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

		Frequency	Percent	Valid Percent	Cumulative 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?

		Frequency	Percent	Valid Percent	Cumulative 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?

		Frequency	Percent	Valid Percent	Cumulative 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?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Oil	100	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 Percent	Cumulative Percent
Valid	1 Very religious	328	25.3	25.6	25.6
	2 Somewhat religious	663	51.1	51.7	77.3
	3 Not religious	291	22.4	22.7	100.0
	Total	1281	98.9	100.0	
Missing	-1 Refused	15	1.1		
Total		1296	100.0		

partyid3 DERIVED: Political party affiliation (3 categories)

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1 Republican	516	39.8	39.8	39.8
	2 Other	44	3.4	3.4	43.2
	3 Democrat	736	56.8	56.8	100.0
	Total	1296	100.0	100.0	

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?

		Frequency	Percent	Valid Percent	Cumulative 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			
	64	20	1.5	1.5	84.2			

ppagecat Age - 7 Categories

		Frequency	Percent	Valid Percent	Cumulative 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 Percent	Cumulative 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
	3 5th or 6th grade	8	.6	.6	1.0
	4 7th or 8th grade	17	1.3	1.3	2.3
	5 9th grade	23	1.8	1.8	4.1
	6 10th grade	36	2.8	2.8	6.9
	7 11th grade	31	2.4	2.4	9.2
	8 12th grade NO DIPLOMA	48	3.7	3.7	12.9
	9 HIGH SCHOOL GRADUATE - high school DIPLOMA or the equivalent	410	31.6	31.6	44.6
	10 Some college, no degree	268	20.7	20.7	65.3
	11 Associate degree	94	7.3	7.3	72.5
	12 Bachelors degree	211	16.2	16.2	88.8
	13 Masters degree	94	7.3	7.3	96.1
	14 Professional or Doctorate degree	51	3.9	3.9	100.0
	Total	1296	100.0	100.0	

#### PPEDUCAT Education (Categorical)

		Frequency	Percent	Valid Percent	Cumulative 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 Percent	Cumulative Percent
Valid	1 White, Non-Hispanic	891	68.7	68.7	68.7
	2 Black, Non-Hispanic	147	11.4	11.4	80.1
	3 Other, Non-Hispanic	67	5.1	5.1	85.3
	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

		Frequency	Percent	Valid Percent	Cumulative 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

		Frequency	Percent	Valid Percent	Cumulative 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 Percent	Cumulative Percent
Valid	A one-family house detached from any other house	870	67.2	67.2	67.2
	2 A one-family house attached to one or more houses	109	8.4	8.4	75.5
	3 A building with 2 or more apartments	239	18.4	18.4	94.0
	4 A mobile home	77	5.9	5.9	99.9
	5 Boat, RV, van, etc.	2	.1	.1	100.0
	Total	1296	100.0	100.0	

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**

		Frequency	Percent	Valid Percent	Cumulative 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	Valid Percent	Cumulative Percent
Valid	0 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** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 No	487	37.6	37.6	37.6
	1 Yes	809	62.4	62.4	100.0
	Total	1296	100.0	100.0	

PPREG4 Region 4 - Based on State of Residence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Northeast	239	18.5	18.5	18.5
vallu	i Northeast	239	10.5	10.5	10.5
	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 Percent	Cumulative Percent
Valid	Owned or being bought by you or someone in your household	908	70.1	70.1	70.1
	2 Rented for cash	355	27.4	27.4	97.5
	3 Occupied without payment of cash rent	33	2.5	2.5	100.0
	Total	1296	100.0	100.0	

**PPSTATEN State** 

				Valid	Cumulative
		Frequency	Percent	Percent	Percen
/alid	11 ME	3	.2	.2	.2
	12 NH	5	.4	.4	.6
	13 VT	2	.2	.2	3.
	14 MA	25	1.9	1.9	2.7
	15 RI	1	.0	.0	2.7
	16 CT	16	1.3	1.3	4.0
	21 NY	90	6.9	6.9	10.9
	22 NJ	42	3.3	3.3	14.2
	23 PA	56	4.3	4.3	18.5
	31 OH	55	4.2	4.2	22.7
	32 IN	31	2.4	2.4	25.1
	33 IL	48	3.7	3.7	28.8
	34 MI	30	2.3	2.3	31.0
	35 WI	29	2.3	2.3	33.3
	41 MN	23	1.8	1.8	35.0
	42 IA	15	1.2	1.2	36.2
	43 MO	29	2.3	2.3	38.5
	44 ND	2	.1	.1	38.6
	45 SD	5	.4	.4	39.0
	46 NE	11	.8	.8	39.8
	47 KS	8	.6	.6	40.4
	51 DE	3	.2	.2	40.6
	52 MD	17	1.3	1.3	42.0
	53 DC	1	.1	.1	42.1
	54 VA	35	2.7	2.7	44.8
	55 WV	8	.6	.6	45.4
	56 NC	33	2.5	2.5	47.9
	57 SC	17	1.3	1.3	49.2
	58 GA	24	1.9	1.9	51.1
	59 FL	92	7.1	7.1	58.2
	61 KY	18	1.4	1.4	59.6
	62 TN	31	2.4	2.4	62.0
	63 AL	22	1.7	1.7	63.7
	64 MS	14	1.1	1.1	64.8
	71 AR	20	1.5	1.5	66.3
	72 LA	23	1.8	1.8	68.
	73 OK	23	1.8	1.8	69.8
	74 TX	88	6.8	6.8	76.6
	81 MT	4	.3	.3	77.0
	82 ID	5	.3	.3	77.3
	83 WY	1	.1	.1	77.4
	84 CO	27	2.1	2.1	79.4
	85 NM	9	.7	.7	80.1
	86 AZ	28	2.2	2.2	82.3
	87 UT	10	.8	.8	83.0
	88 NV	21	1.6	1.6	84.6
	91 WA	36	2.8	2.8	87 4

PPT01 Presence of Household Members - Children 0-2

				Valid	Cumulative
		Frequency	Percent	Percent	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

		Frequency	Percent	Valid Percent	Cumulative Percent
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
	6	1	.1	.1	100.0
	Total	1296	100.0	100.0	

PPT18OV Presence of Household Members - Adults 18+

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	328	25.3	25.3	25.3
	2	697	53.8	53.8	79.1
	3	177	13.7	13.7	92.7
	4	64	4.9	4.9	97.7
	5	15	1.1	1.1	98.8
	6	10	.8	.8	99.6
	7	5	.4	.4	100.0
	8	0	.0	.0	100.0
	Total	1296	100.0	100.0	

PPT25 Presence of Household Members - Children 2-5

				Valid	Cumulative
		Frequency	Percent	Percent	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	

PPT612 Presence of Household Members - Children 6-12

		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	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	