

# **GfK Custom Research, LLC Project Report**

## Project: 2012 Carbon Sequestration Survey

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## **Table of Contents**

CARBON SEQUESTRATION SURVEY	4
INTRODUCTION	4
TABLE 1. SURVEY COMPLETION RATE	4
DATA FILE DELIVERABLES AND DESCRIPTIONS	4
TABLE 2. DELIVERABLE DESCRIPTION         TABLE 2. SUPPLEMENTAL MADAPLES	4
TABLE 3: SUPPLEMENTAL VARIABLES         KEY PERSONNEL	5 6
KNOWLEDGEPANEL METHODOLOGY	7
INTRODUCTION	7
PANEL RECRUITMENT METHODOLOGY	8
SURVEY ADMINISTRATION	11
SURVEY SAMPLING FROM KNOWLEDGEPANEL	12
SAMPLE WEIGHTING	12
APPENDIX A: QUESTIONNAIRE	17
APPENDIX B: CODEBOOK	28

## **Carbon Sequestration Survey**

#### Introduction

In September 2012, GfK 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, 2006, and 2009 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 GfK with the survey instrument and in conjunction with MIT, GfK revised the instrument so that it met the design requirements of the study and formatted for online administration.

Once final changes to the main study had been implemented, the survey was fielded on September 21, 2012 to 2,162 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
9/21/12	10/1/12	2,162	1,336	62%

### **Data File Deliverables and Descriptions**

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

Table 2.	<b>Deliverable Description</b>
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					Inclusion of Standard
Delivery	File			Ν	Background
Date	Туре	File Name	File Size	Records	Demographics
10/3/2012	SPSS	MIT_Carbon Sequestration_Client.sav	194KB	N=1336	Yes

Table 3 below shows the name and description of each of the 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
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

## Table 3: Supplemental Variables

## **Key Personnel**

Key personnel on the study include:

Wendy Mansfield – Vice President, Government & Academic Research. W. Mansfield is based in Washington, D.C. Phone number: (202) 686-0933 Email: <u>wendy.mansfield@gfk.com</u>

Stefan Subias – Senior Project Director. Government & Academic Research. S. Subias is based in the Palo Alto office of GfK Custom Research. Phone number: (650) 289-2162 Email: <u>stefan.subias@gfk.com</u>

## KnowledgePanel Methodology

## Introduction

GfK is passionate about research in government, academia, marketing, media, health and social policy – collaborating closely with client teams throughout the research process, while applying rigor in everything we do. We specialize in innovative online research that consistently gives leaders in business, government, and academia the confidence to make important decisions. GfK delivers affordable, statistically valid online research through KnowledgePanel and leverages a variety of other assets, such as world-class advanced analytics, an industry-leading physician panel, an innovative platform for measuring online ad effectiveness, and a research-ready behavioral database of frequent supermarket and drug store shoppers.

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

GfK selects households by using address-based sampling (ABS) methods; formerly, GfK relied on random-digit dialing (RDD). Once households are recruited for the panel, they are contacted by e-mail for survey-taking, or panelists visit their online member page for survey-taking (instead of being contacted by phone or postal mail). This allows surveys to be fielded very quickly and economically. In addition, this approach reduces the burden placed on respondents, since e-mail notification is less intrusive than telephone calls, and most respondents find answering Web questionnaires more interesting and engaging than being questioned by a telephone interviewer. Furthermore, respondents have the freedom to choose what day and time of day to participate in research.

Documentation regarding KnowledgePanel sampling, data collection procedures, weighting, and IRB-bearing issues are available at the below online resources.

- http://www.knowledgenetworks.com/ganp/reviewer-info.html
- <u>http://www.knowledgenetworks.com/knpanel/index.html</u>
- http://www.knowledgenetworks.com/ganp/irbsupport/

## The GfK Group

The GfK Group offers the fundamental knowledge that government, academia, industry, retailers, services companies and the media need to make market decisions. It delivers a comprehensive range of information and consultancy services in the three business sectors: Custom Research, Retail, and Technology and Media. GfK, one of the leading market research organizations worldwide, operates in more than 100 countries and employs over 11,000 staff. In 2010, the GfK Group's sales amounted to EUR 1.29 billion.

For further information, visit our website: <u>www.gfk.com</u>. Follow us on Twitter: <u>www.twitter.com/gfk\_group</u>.

### **Panel Recruitment Methodology**

When GfK began recruiting in 1999, the company established the first online research panel (now called KnowledgePanel) based on probability sampling covering both the online and offline populations in the U.S. KnowledgePanel members are recruited through national random samples, originally by telephone and now almost entirely by postal mail. Households are provided with access to the Internet and hardware if needed. Unlike Internet convenience panels, also known as "opt-in" panels, that includes only individuals with Internet access who volunteer themselves for research, KnowledgePanel recruitment uses dual sampling frames that includes both listed and unlisted telephone numbers, telephone and non-telephone households, and cell-phone-only households, as well as households with and without Internet access. Only persons sampled through these probability-based techniques are eligible to participate on KnowledgePanel. Unless invited to do so as part of these national samples, no one on their own can volunteer to be on the panel.

## **RDD and ABS Sample Frames**

KnowledgePanel members today could have been recruited by either the former RDD sampling or the current ABS methodologies. In this section, we will describe the RDD-based methodology; the ABS methodology is described in a separate section below. To offset attrition, multiple recruitment samples are fielded evenly throughout the calendar year.

KnowledgePanel recruitment methodology has used the quality standards established by selected RDD surveys conducted for the federal government (such as the CDC-sponsored National Immunization Survey).

## **RDD Methodology**

GfK employed list-assisted RDD sampling techniques based on a sample frame of the U.S. residential landline telephone universe. For purposes of efficiency, GfK excluded only those banks of telephone numbers (a bank consists of 100 numbers) that had fewer than two directory listings. Additionally, an oversampling was conducted within a stratum of telephone exchanges that had high concentrations of African American and Hispanic households based on Census data. Recruitment sampling is done without replacement; thus, numbers already fielded do not get fielded again.

A telephone number for which a valid postal address could be matched occurred in about 67%-70% of each sample. These address-matched cases were all mailed an advance letter informing them that they had been selected to participate in KnowledgePanel. For purposes of efficiency, the unmatched numbers were most recently undersampled at a rate of 0.75 relative to the matched numbers. Both the minority oversampling mentioned above and this undersampling of non-matched-address households were adjusted appropriately in the panel's weighting procedures.

Following the mailings, telephone recruitment by trained interviewers/recruiters began for all sampled telephone numbers. Telephone numbers for cases sent to recruiters were dialed for up

to 90 days, with at least 14 dial attempts for cases in which no one answered the phone, and for numbers known to be associated with households. Extensive refusal conversion was also performed. The recruitment interview, about 10 minutes in length, began with informing the household member that the household had been selected to join KnowledgePanel. If the household did not have a computer and access to the Internet, the household member was told that in return for completing a short survey weekly, the household would be provided with free monthly Internet access and a laptop computer (in the past, the household was provided with a WebTV device). All members of the household were enumerated, and some initial demographic and background information on prior computer and Internet use was collected.

## ABS Methodology

When GfK first started panel recruitment in 1999, the conventional opinion among survey experts was that probability-based sampling could be carried out cost effectively through the use of national RDD samples. The RDD landline frame at the time allowed access to 96% of U.S. households. This is no longer the case. In 2009, GfK introduced use of the ABS sample frame to panel recruitment to reflect the considerable changes in society and telephony over recent years. Those changes that have reduced the long-term scientific viability of landline RDD sampling methodology are as follows: declining respondent cooperation in telephone surveys as reflected in "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 of cell-phone-only households (CPOHH) since such households are excluded from the RDD frame because they have no landline telephone.

According to the Centers for Disease Control and Prevention (January-June 2010), approximately 28.6% of all U.S. households cannot be contacted through RDD sampling— 26.6% as a result of CPOHH status and 2% because they have no telephone service whatsoever. Among some age segments, the RDD non-coverage would be substantial: 40% of young adults, ages 18–24, reside in CPOHHs, 51% of those ages 25–29, and 40% of those ages 30–34.<sup>1</sup>

After conducting an extensive pilot project in 2008, GfK made the decision to move toward ABS frames in response to the growing number of cell-phone-only households that are outside the RDD frame. Before conducting the ABS pilot, we also experimented with supplementing RDD samples with cell-phone samples. However, this approach would was not cost effective—and raised a number of other operational, data quality, and liability issues (for example, calling cell phones while respondents 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, those households can be reached and contacted

<sup>&</sup>lt;sup>1</sup> Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, January–June 2010. National Center for Health Statistics. December 2010. Available from: <u>http://www.cdc.gov/nchs/nhis.htm</u>.

through postal mail. Second, the GfK ABS pilot project revealed several additional advantages beyond 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 the fraction of CPOHHs that have neither a landline telephone nor Internet access (approximately four to six percent 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. Operationally, invited households have the option to join the panel by one of several ways:

- Completing and returning a paper form in a postage-paid envelope
- Calling a toll-free hotline maintained by GfK
- Going to a dedicated GfK website and completing an online recruitment form

Large-scale ABS sampling for KnowledgePanel recruitment began in April 2009. As a result, sample coverage on KnowledgePanel of CPOHHs, young adults, and non-whites has been increasing steadily since that time.

Because KnowledgePanel members have been recruited from two different sample frames, RDD and ABS, GfK implemented several technical processes to merge samples sourced from these frames. GfK's 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 samples tend to align more closely to the overall demographic distributions in the population, 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.

## Panel Member Set-Up

Households that inform recruiters that they have a home computer and Internet access are asked to take GfK surveys using their own equipment and Internet connection. Incentive points per survey, redeemable for cash, are given to these "PC" (personal computer) respondents for completing their surveys. Panel members provided with a laptop computer and 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/or for all longer surveys as a modest compensation for the extra burden of their time and participation.

For those panel members receiving a laptop computer, each unit is custom-configured prior to shipment 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, although GfK maintains a toll-free telephone line for technical support. The GfK Call Center contacts household members who do not respond to e-mail and attempts to restore both contact and participation. PC panel members provide their own e-mail addresses, and we send their weekly survey invitations to that e-mail account.

All new panel members receive an initial survey for the dual purpose of welcoming them as new panel members and introducing them to how online survey questionnaires work. New panel members 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 and is factored in for weighting purposes. Operationally, once the profile information is stored, it does not need to be re-collected as a part of each and every survey. This information is also updated annually for all panel members. Once new KnowledgePanel members have completed their profile surveys, they are designated as "active," and considered ready to be sampled for client studies. [Note: Parental or legal guardian consent is also collected for the purpose of conducting surveys with teenage panel members, aged 13 to17.]

Once a household is recruited and each household member's e-mail address is either obtained or provided, panel members are sent survey invitations linked through a personalized e-mail message (instead of by phone or postal mail). This contact method permits surveys to be fielded quickly and economically, and also facilitates longitudinal research. In addition, this approach reduces the burden placed on respondents, since e-mail notification is less intrusive than telephone calls and allows research subjects to participate in research when it is convenient for them.

Respondents are offered privacy terms and confidentiality protections that we have developed over the years and that have been reviewed by dozens of Institutional Review Boards.

## **Survey Administration**

For client surveys, samples are drawn at random from among active KnowledgePanel 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 e-mail 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 can be initiated. The usual protocol is to wait at least three to 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.

GfK also operates a modest incentive program to encourage participation and create member loyalty. Members can enter special raffles or can be entered into special sweepstakes for both cash rewards and other prizes.

The typical survey commitment for panel members is one survey per week or four per month with duration of 10 to 15 minutes per survey. Some client surveys exceed this time, and in the case of longer surveys, an additional incentive can 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 can 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 exceptions during some weeks, this limits a member's total assignments per month to four or six 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.

## Sample Weighting

The design for KnowledgePanel recruitment begins as an equal probability sample 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 by using a **panel demographic post-stratification weight** as an additional adjustment.

All the above weighting is done before the study sample is drawn. Once a study sample is finalized (all data collected and a final data set made), a set of **study-specific post-stratification weights** are constructed so that the study data can be adjusted for the study's sample design and for 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. Undersampling of telephone numbers unmatched to a valid mailing address

An address match is attempted on all the 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% to 70% range. Households having telephone numbers with valid addresses are sent an advance letter, notifying them that they will be contacted by phone to join KnowledgePanel. The remaining, unmatched numbers are undersampled as a recruitment efficiency strategy. Advance letters improve recruitment success rates. Undersampling was suspended between July 2005 and April 2007. It was resumed in May 2007, using a sampling rate of 0.75. RDD recruitment ended in July 2009.

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. The probability of selecting a multiple-line household is down-weighted by the inverse of the number of landlines. RDD recruitment ended in July 2009.

3. Some minor oversampling of Chicago and Los Angeles in early pilot surveys

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

4. Early oversampling of the four largest states and central region states

When the panel was first being built, survey demand in the four largest states (California, New York, Florida, and Texas) necessitated oversampling during January–October 2000. Similarly, the central region states were oversampled for a brief period of time.

Diminishing effects from this oversampling still remain in the panel membership and thus weighting adjustments are required for these geographic areas.

5. Undersampling of households not covered by the MSN<sup>®</sup> TV service network

Certain small areas of the U.S. are not serviced by MSN<sup>®</sup>, thus the MSN<sup>®</sup>TV units distributed to non-Internet households prior to January 2009 could not be used for those recruited non-Internet households. Overall, the result is a small residual undersample in those geographic areas which requires a minor weighting adjustment for those locations. Since January 2010, laptop computers with dial-up access are being distributed to non-Internet households, thus eliminating this under-coverage component.

6. RDD oversampling of African American and Hispanic telephone exchanges

As of October 2001, oversampling of telephone exchanges with a higher density of minority households (specifically, African American and Hispanic) was implemented to increase panel membership for those groups. These exchanges were oversampled at approximately twice the rate of other exchanges. This oversampling is corrected in the base weight. RDD recruitment ended in July 2009.

7. Address-based sample phone match adjustment

Toward the end of 2008, GfK began recruiting panel members by using an ABS frame in addition to RDD recruitment. Once mail recruitment, including follow-up mailings to ABS non-respondents, was completed, telephone recruitment was added. Non-responding ABS households where a landline telephone number could be matched to an address were subsequently called and telephone recruitment was 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.

8. ABS oversample stratification adjustment

In late 2009 the ABS sample began incorporating a geographic stratification design. Census blocks with high density minority communities were oversampled (Stratum 1), and the balance of the census blocks (Stratum 2) were relatively undersampled. The definition of high density and minority community and the relative proportion between strata differed among specific ABS samples. In 2010, the two strata were redefined to target high density Hispanic areas in Stratum 1 and all else in Stratum 2. In 2011, pre-identified ancillary information and not census block data were used to construct and target four strata as follows: Hispanic ages 18-24, Non-Hispanic ages 18-24, Hispanic ages 25+ and Non-Hispanic ages 25+. An appropriate base weight adjustment is applied to each relevant sample to correct for these stratified designs. Also in 2011, a separate sample targeting only persons ages 18-24 was fielded across the year also using predictive ancillary information. Combined with the four-stratum sample, the base weight adjustment compensates for cases from this unique young adult oversample.

## The Panel Demographic Post-stratification Weight

To reduce the effects of any non-response and non-coverage bias in the overall panel membership (<u>before the study sample is drawn</u>), a post-stratification adjustment is applied based on demographic distributions from the most recent (August 2012) data from the Current Population Survey (CPS). The benchmark distributions for Internet access among the U.S. population of adults are obtained from the most recent special CPS supplemental survey measuring Internet access (October 2010).

The overall panel 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)
- Household income (under \$10k, \$10K to <\$25k, \$25K to <\$50k, \$50K to <\$75k, \$75K to <\$100k, \$100K+)</li>
- Home ownership status (Own, Rent/Other)
- Metropolitan Area (Yes, No)
- Internet Access (Yes, No)

The Panel Demographic Post-stratification weight is applied prior to a probability proportional to size (PPS) selection of a study sample from KnowledgePanel. This weight is designed for sample selection purposes.

### **Study-Specific Post-Stratification Weights**

Once the sample has been selected and fielded, and all the study data are collected and made final, a post-stratification process is used to adjust for any survey non-response as well as any non-coverage or under- and oversampling resulting from the study-specific sample design. Demographic and geographic distributions for the non-institutionalized, civilian population ages 18+ from the most recent CPS are used as benchmarks in this adjustment. The Spanish language proficiency distributions are from the most currently available Pew Hispanic Center Survey (2007).

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, Bachelors and higher)
- Census Region (Northeast, Midwest, South, West)

- Metropolitan Area (Yes, No)
- Internet Access (Yes, No)
- Household income (under \$25k, \$25K to <\$50k, \$50K to <\$75k, \$75K+)

Comparable distributions are calculated by 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, a raking procedure is used for the post-stratification weighting adjustment. Using the base weight as the starting weight, 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>Q1</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 War in Afghanistan Fuel/oil prices Lack of money (credit crunch)

[SP] [Random order] [Prompt]

## <u>Q2A</u>

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 ] <u>Q3</u>

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] <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] 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 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				

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 more per month on your electricity bill?

(1) Yes

(2) No

## [IF Q9=1]

## [SP]

**<u>Q9A.</u>** 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]

**<u>Q9B.</u>** 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]

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

(1) Yes

(2) No

[IF Q9C=1]

## [SP]

**<u>Q9D.</u>** 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]

] Q10

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 ] <u>Q11</u>

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] <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
			sure		
Bioenergy/biomass: Producing					
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					
atmosphere					
Energy officient 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.					

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

## [DISABLE BACK BUTTON HERE]

[CHART IS NEW FOR 2012] [SP] <u>014A</u>

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]

## <u>Q14B.</u>

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

## <u>Q14D</u>

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 committed \$3.4 billion to demonstrate this technology at coal-fired power stations and other industrial facilities. What is your view of this policy?

(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] <u>Q1</u>9

Do you consider yourself religious?
(a) Very religious
(b) Somewhat religious
(c) Not religious

### [INSERT STANDARD CLOSE].

## Appendix B: Codebook

Valid

1 Crime

## Frequency Table (weighted by weight)

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	13	1.0	1.0	1.0
	1 Crime	19	1.4	1.4	2.4
	2 Unemployment	195	14.6	14.6	17.0
	3 Environment	26	1.9	1.9	18.9
	4 Poverty	19	1.4	1.4	20.3
	5 Education	72	5.4	5.4	25.7
	6 Federal budget deficit	122	9.1	9.1	34.8
	7 Taxes	48	3.6	3.6	38.4
	8 Income inequality	27	2.0	2.0	40.4
	9 Family values	50	3.8	3.8	44.2
	10 Economy	218	16.3	16.3	60.5
Valid	11 Health care	123	9.2	9.2	69.7
valid	12 Social security	39	2.9	2.9	72.6
	13 Drugs	17	1.3	1.3	73.9
	14 Racism	14	1.1	1.1	74.9
	15 Terrorism	52	3.9	3.9	78.8
	16 Inflation	12	.9	.9	79.8
	17 Abortion	15	1.1	1.1	80.9
	18 Quality of government leaders	82	6.1	6.1	87.0
	19 Illegal immigrants	50	3.7	3.7	90.8
	20 War in Afghanistan	28	2.1	2.1	92.9
	21 Fuel/oil prices	79	5.9	5.9	98.9
	22 Lack of money (credit crunch)	15	1.1	1.1	100.0
	Total	1336	100.0	100.0	

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

Q1_2 What are the thre	Q1_2 What are the three most important issues facing the US today?						
	Frequency	Percent	Valid Percent				

19

1.4

1.5

Cumulative Percent

1.5

					1
	2 Unemployment	179	13.4	14.0	15.6
	3 Environment	40	3.0	3.1	18.7
	4 Poverty	27	2.0	2.1	20.8
	5 Education	53	4.0	4.2	24.9
	6 Federal budget deficit	111	8.3	8.7	33.6
	7 Taxes	39	3.0	3.1	36.7
	8 Income inequality	34	2.6	2.7	39.4
	9 Family values	32	2.4	2.5	42.0
	10 Economy	203	15.2	16.0	57.9
	11 Health care	162	12.1	12.7	70.6
	12 Social security	24	1.8	1.9	72.5
	13 Drugs	17	1.3	1.4	73.8
	14 Racism	11	.8	.9	74.7
	15 Terrorism	53	4.0	4.2	78.9
	16 Inflation	18	1.4	1.4	80.3
	17 Abortion	5	.4	.4	80.7
	18 Quality of government leaders	77	5.8	6.1	86.8
	19 Illegal immigrants	40	3.0	3.1	89.9
	20 War in Afghanistan	25	1.9	1.9	91.9
	21 Fuel/oil prices	82	6.1	6.4	98.3
	22 Lack of money (credit crunch)	21	1.6	1.7	100.0
	Total	1273	95.3	100.0	
Missing	System	63	4.7		
Total		1336	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
	1 Crime	27	2.0	2.1	2.1
	2 Unemployment	193	14.5	15.3	17.4
	3 Environment	32	2.4	2.5	20.0
Valid	4 Poverty	29	2.1	2.3	22.2
	5 Education	69	5.2	5.5	27.7
	6 Federal budget deficit	99	7.4	7.8	35.6
	7 Taxes	32	2.4	2.6	38.1
	8 Income inequality	39	2.9	3.1	41.3

			1		1
	9 Family values	29	2.2	2.3	43.6
	10 Economy		14.4	15.3	58.8
	11 Health care	139	10.4	11.1	69.9
	12 Social security	48	3.6	3.8	73.7
	13 Drugs	18	1.3	1.4	75.1
	14 Racism	8	.6	.6	75.7
	15 Terrorism	56	4.2	4.4	80.1
	16 Inflation	9	.7	.7	80.9
	17 Abortion	5	.4	.4	81.3
	18 Quality of government leaders	83	6.2	6.6	87.8
	19 Illegal immigrants	50	3.7	4.0	91.8
	20 War in Afghanistan	25	1.9	2.0	93.8
	21 Fuel/oil prices	60	4.5	4.8	98.6
	22 Lack of money (credit crunch)	18	1.3	1.4	100.0
	Total	1261	94.4	100.0	
Missing	System	75	5.6		
Total		1336	100.0		

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

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	9	.7	.7	.7
	1 Toxic waste	118	8.8	8.8	9.5
	2 Ozone depletion	78	5.9	5.9	15.4
	3 Endangered species	31	2.3	2.3	17.7
	4 Global warming	453	33.9	33.9	51.6
	5 Acid rain	10	.7	.7	52.3
Valid	6 Smog	30	2.2	2.2	54.5
	7 Urban sprawl	63	4.7	4.7	59.3
	8 Water pollution	176	13.1	13.1	72.4
	9 Overpopulation	176	13.2	13.2	85.6
	10 Destruction of ecosystems	192	14.4	14.4	100.0
	Total	1336	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	5	.4	.4	.4
	1 Toxic waste	190	14.2	14.3	14.7
	2 Ozone depletion	179	13.4	13.5	28.2
	3 Endangered species	39	3.0	3.0	31.2
	4 Global warming	192	14.4	14.5	45.6
N7 11 1	5 Acid rain	14	1.1	1.1	46.7
Valid	6 Smog	57	4.3	4.3	51.0
	7 Urban sprawl	63	4.7	4.7	55.7
	8 Water pollution	221	16.5	16.6	72.4
	9 Overpopulation	139	10.4	10.5	82.9
	10 Destruction of ecosystems	227	17.0	17.1	100.0
	Total	1327	99.3	100.0	
Missing	System	9	.7		
Total		1336	100.0		

which of the following statements best describes your view?							
	Frequency Percent Valid Percent Cumulative						
	-1 Refused	42	3.2	3.2	3.2		
	1 The highest priority should be given						
	to protecting the environment, even if	101	7.5	7.5	10.7		
	it hurts the economy.						
	2 Both the environment and the						
	economy are important, but the	401	30.0	30.0	40.7		
Valid	environment should come first.						
valio	3 Both the environment and the						
	economy are important, but the	586	43.9	43.9	84.6		
	economy should come first.						
	4 The highest priority should be given						
	to economic considerations such as	206	15.4	15.4	100.0		
	jobs even if it hurts the environment.						
	Total	1336	100.0	100.0			

Q3	Which of the	following	statements	best descr	ibes vour v	view?
_			0101011101110		nooc your i	

Q4\_1 More efficient appliances

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	622	46.6	46.6	46.6
Valid	1 Yes	714	53.4	53.4	100.0
	Total	1336	100.0	100.0	

Q4\_2 Hybrid cars

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	292	21.8	21.8	21.8
Valid	1 Yes	1044	78.2	78.2	100.0
	Total	1336	100.0	100.0	

Q4\_3 Hydrogen cars

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	930	69.6	69.6	69.6
Valid	1 Yes	406	30.4	30.4	100.0
	Total	1336	100.0	100.0	

Q4\_4 Nuclear energy

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	637	47.7	47.7	47.7
Valid	1 Yes	699	52.3	52.3	100.0
	Total	1336	100.0	100.0	

Q4\_5 Bioenergy/biomass

		Frequency	Percent	Valid Percent	Cumulative Percent			
	0 No	1060	79.3	79.3	79.3			
Valid	1 Yes	276	20.7	20.7	100.0			
	Total	1336	100.0	100.0				

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	1219	91.2	91.2	91.2
Valid	1 Yes	117	8.8	8.8	100.0
	Total	1336	100.0	100.0	

**Q4\_6 Carbon sequestration** 

Q4\_7 Solar energy

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	372	27.8	27.8	27.8
Valid	1 Yes	964	72.2	72.2	100.0
	Total	1336	100.0	100.0	

Q4\_8 Carbon capture and storage

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	1184	88.6	88.6	88.6
Valid	1 Yes	152	11.4	11.4	100.0
	Total	1336	100.0	100.0	

Q4\_9 Wind energy

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	454	34.0	34.0	34.0
Valid	1 Yes	882	66.0	66.0	100.0
	Total	1336	100.0	100.0	

Q4\_10 Iron fertilization

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	1296	97.0	97.0	97.0
Valid	1 Yes	40	3.0	3.0	100.0
	Total	1336	100.0	100.0	

Q4\_11 Clean coal

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	880	65.8	65.8	65.8
Valid	1 Yes	456	34.2	34.2	100.0
	Total	1336	100.0	100.0	

Q4\_12 None of these

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	1177	88.1	88.1	88.1
Valid	1 Yes	159	11.9	11.9	100.0
	Total	1336	100.0	100.0	

Q4\_13 Refused

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	1313	98.3	98.3	98.3
Valid	1 Yes	23	1.7	1.7	100.0
	Total	1336	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
	-1 Refused	10	.8	.8	.8
	1 New energy sources, such as solar, wind, or bioenergy/biomass	435	32.6	32.6	33.3
	2 New oil and gas reserves	263	19.7	19.7	53.0
Valid	3 Cleaner burning coal	26	1.9	1.9	54.9
valid	4 Nuclear power	60	4.5	4.5	59.4
	5 More energy efficient cars and trucks	78	5.8	5.8	65.2
	6 More energy efficient buildings	34	2.5	2.5	67.8
	7 Mass transportation	45	3.4	3.4	71.1

8 Ways to remove carbon from atmosphere	35	2.6	2.6	73.8
9 Ways to better manage toxic waste	32	2.4	2.4	76.1
10 Clean drinking water	90	6.7	6.7	82.9
11 Anti-terrorism and security	112	8.4	8.4	91.3
12 Energy conservation	82	6.2	6.2	97.5
13 Hydropower	16	1.2	1.2	98.7
14 Nuclear waste disposal	18	1.3	1.3	100.0
Total	1336	100.0	100.0	

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

		Frequency	Percent	Valid Percent	Cumulative Percent
	1 New energy sources, such as solar, wind, or bioenergy/biomass	202	15.2	15.3	15.3
	2 New oil and gas reserves	136	10.2	10.2	25.5
	3 Cleaner burning coal	42	3.1	3.2	28.7
	4 Nuclear power	58	4.3	4.3	33.0
	5 More energy efficient cars and trucks	139	10.4	10.5	43.5
	6 More energy efficient buildings	41	3.1	3.1	46.6
	7 Mass transportation	52	3.9	4.0	50.6
Valid	8 Ways to remove carbon from atmosphere	45	3.4	3.4	54.0
	9 Ways to better manage toxic waste	75	5.6	5.6	59.6
	10 Clean drinking water	139	10.4	10.5	70.1
	11 Anti-terrorism and security	149	11.2	11.2	81.4
	12 Energy conservation	188	14.1	14.2	95.5
	13 Hydropower	29	2.2	2.2	97.7
	14 Nuclear waste disposal	30	2.3	2.3	100.0
	Total	1326	99.2	100.0	
Missing	System	10	.8		
Total		1336	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	43	3.2	3.2	3.2
	1 Can reduce	252	18.8	18.8	22.1
Valid	2 Does not reduce	152	11.4	11.4	33.5
	3 Not sure	889	66.5	66.5	100.0
	Total	1336	100.0	100.0	

Q6\_2 Ozone depletion

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	39	2.9	2.9	2.9
	1 Can reduce	338	25.3	25.3	28.2
Valid	2 Does not reduce	106	7.9	7.9	36.1
	3 Not sure	853	63.9	63.9	100.0
	Total	1336	100.0	100.0	

Q6\_3 Global warming

-		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	40	3.0	3.0	3.0
	1 Can reduce	379	28.4	28.4	31.3
Valid	2 Does not reduce	95	7.1	7.1	38.4
	3 Not sure	822	61.6	61.6	100.0
	Total	1336	100.0	100.0	

Q6\_4 Acid rain

		Frequency	Percent	Valid Percent	Cumulative Percent		
	-1 Refused	42	3.1	3.1	3.1		
	1 Can reduce	294	22.0	22.0	25.1		
Valid	2 Does not reduce	108	8.1	8.1	33.2		
	3 Not sure	893	66.8	66.8	100.0		
	Total	1336	100.0	100.0			

Q6_5 Smog								
		Frequency	Percent	Valid Percent	Cumulative Percent			
	-1 Refused	38	2.9	2.9	2.9			
	1 Can reduce	380	28.4	28.4	31.3			
Valid	2 Does not reduce	108	8.0	8.0	39.3			
	3 Not sure	811	60.7	60.7	100.0			
	Total	1336	100.0	100.0				

#### Q6\_6 Water pollution

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	37	2.8	2.8	2.8
	1 Can reduce	300	22.4	22.4	25.2
Valid	2 Does not reduce	140	10.5	10.5	35.7
	3 Not sure	859	64.3	64.3	100.0
	Total	1336	100.0	100.0	

Q7\_1 Automobiles

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	44	3.3	3.3	3.3
	1 Increases carbon dioxide	933	69.8	69.8	73.1
	2 Decreases carbon dioxide	46	3.4	3.4	76.5
valid	3 No impact	57	4.2	4.2	80.8
	4 Not sure	257	19.2	19.2	100.0
	Total	1336	100.0	100.0	

#### Q7\_2 Home heating

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	44	3.3	3.3	3.3
	1 Increases carbon dioxide	599	44.8	44.8	48.1
Valid	2 Decreases carbon dioxide	72	5.4	5.4	53.6
	3 No impact	165	12.4	12.4	65.9
	4 Not sure	455	34.1	34.1	100.0

		1		
Total	1336	100.0	100.0	

Q7\_3 Coal burning power plants

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	39	2.9	2.9	2.9
	1 Increases carbon dioxide	844	63.2	63.2	66.1
	2 Decreases carbon dioxide	60	4.5	4.5	70.6
Valid	3 No impact	58	4.4	4.4	74.9
	4 Not sure	335	25.1	25.1	100.0
	Total	1336	100.0	100.0	

Q7\_4 Nuclear power plants

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	42	3.1	3.1	3.1
	1 Increases carbon dioxide	387	29.0	29.0	32.1
	2 Decreases carbon dioxide	128	9.5	9.5	41.7
Valid	3 No impact	276	20.7	20.7	62.3
	4 Not sure	503	37.7	37.7	100.0
	Total	1336	100.0	100.0	

	Q7_5 Windmills						
		Frequency	Percent	Valid Percent	Cumulative Percent		
	-1 Refused	41	3.1	3.1	3.1		
	1 Increases carbon dioxide	48	3.6	3.6	6.7		
	2 Decreases carbon dioxide	306	22.9	22.9	29.5		
valid	3 No impact	594	44.5	44.5	74.0		
	4 Not sure	347	26.0	26.0	100.0		
	Total	1336	100.0	100.0			

Q7_6 Trees						
	Frequency	Percent	Valid Percent	Cumulative Percent		

	-1 Refused	36	2.7	2.7	2.7
	1 Increases carbon dioxide	82	6.1	6.1	8.8
Valid	2 Decreases carbon dioxide	808	60.5	60.5	69.3
valid	3 No impact	138	10.4	10.4	79.6
	4 Not sure	272	20.4	20.4	100.0
	Total	1336	100.0	100.0	

Q7\_7 Oceans

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-1 Refused	41	3.0	3.0	3.0
	1 Increases carbon dioxide	48	3.6	3.6	6.6
	2 Decreases carbon dioxide	412	30.9	30.9	37.5
	3 No impact	336	25.1	25.1	62.6
	4 Not sure	499	37.4	37.4	100.0
	Total	1336	100.0	100.0	

Q7\_8 Farming (e.g. wheat farms)

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	41	3.1	3.1	3.1
	1 Increases carbon dioxide	244	18.2	18.2	21.3
	2 Decreases carbon dioxide	343	25.7	25.7	47.0
Valid	3 No impact	218	16.3	16.3	63.3
	4 Not sure	490	36.7	36.7	100.0
	Total	1336	100.0	100.0	

Q7 9	9 Factorie	s (e.q.	steel	mills	)

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	39	2.9	2.9	2.9
	1 Increases carbon dioxide	892	66.8	66.8	69.7
Valid	2 Decreases carbon dioxide	49	3.6	3.6	73.4
	3 No impact	50	3.7	3.7	77.1
	4 Not sure	306	22.9	22.9	100.0

	Total	1336	100.0	100.0	
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Q7\_10 Breathing

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	44	3.3	3.3	3.3
	1 Increases carbon dioxide	479	35.8	35.8	39.1
	2 Decreases carbon dioxide	96	7.2	7.2	46.3
Valid	3 No impact	366	27.4	27.4	73.7
	4 Not sure	351	26.3	26.3	100.0
	Total	1336	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	23	1.7	1.7	1.7
	1 Under \$10	8	.6	.6	2.3
	2 \$10-25	36	2.7	2.7	5.0
	3 \$26-50	118	8.8	8.8	13.8
Valid	4 \$51-75	149	11.2	11.2	25.0
	5 \$76-100	193	14.4	14.4	39.4
	6 \$101-150	295	22.1	22.1	61.5
	7 \$151-\$200	203	15.2	15.2	76.7
	8 More than \$200	189	14.1	14.1	90.9
	9 Don't Know	122	9.1	9.1	100.0
	Total	1336	100.0	100.0	

Q8 How much was your electric bill last month?

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

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	26	2.0	2.0	2.0
	1 Yes	937	70.1	70.1	72.1
valid	2 No	373	27.9	27.9	100.0
	Total	1336	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	13	1.0	1.4	1.4
) ( - li -l	1 Yes	656	49.1	70.0	71.4
valid	2 No	268	20.1	28.6	100.0
	Total	937	70.1	100.0	
Missing	System	399	29.9		
Total		1336	100.0		

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

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
	-1 Refused	3	.2	.5	.5
	1 Yes	352	26.4	53.7	54.2
Valid	2 No	301	22.5	45.8	100.0
	Total	656	49.1	100.0	
Missing	System	680	50.9		
Total		1336	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
	-1 Refused	2	.1	.6	.6
	1 Yes	185	13.9	52.5	53.1
Valid	2 No	165	12.4	46.9	100.0
	Total	352	26.4	100.0	
Missing	System	984	73.6		
Total		1336	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	99	7.4	53.3	53.3
	2 No	86	6.5	46.7	100.0

	Total	185	13.9	100.0	
Missing	System	1151	86.1		
Total		1336	100.0		

# QX One way to reduce greenhouse gases is to cap emissions. This would increase the price for gasoline, heating oil, and electricity. Would you support or oppose this proposal?

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	18	1.4	1.4	1.4
	1 Strongly support	120	9.0	9.0	10.4
	2 Support	330	24.7	24.7	35.1
Valid	3 Neither support nor oppose	405	30.3	30.3	65.4
	4 Oppose	255	19.1	19.1	84.5
	5 Strongly oppose	207	15.5	15.5	100.0
	Total	1336	100.0	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
	-1 Refused	24	1.8	1.8	1.8
	1 Global warming has been				
	established as a serious problem and	298	22.3	22.3	24.1
	immediate action is necessary.				
	2 There is enough evidence that			31.7	
	global warming is taking place and	424	31.7		55.8
	some action should be taken.				
Valid	3 We don't know enough about global				
	warming and more research is	237	177	17.7	73.6
	necessary before we take any		17.7		73.0
	actions.				
	4 Concern about global warming is	165	10.2	10.2	85.0
	unwarranted.	105	12.5	12.5	05.9
	5 No opinion	188	14.1	14.1	100.0
	Total	1336	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	25	1.9	1.9	1.9
Valid	1 Most agree	382	28.6	28.6	30.4
	2 A lot of disagreement	621	46.5	46.5	76.9
	3 Not sure	309	23.1	23.1	100.0
	Total	1336	100.0	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?

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
	-1 Refused	45	3.4	3.4	3.4
	1 I believe that firms and government researchers will develop new	204	15.2	15.2	18.6
	technologies to solve the problem.				
	2 I believe we will have to change our lifestyles to reduce energy consumption.	500	37.4	37.4	56.1
Valid	3 I believe we will learn to live with and adapt to a warmer climate.	245	18.3	18.3	74.4
	4 I believe global warming is a problem but the US won't do anything about it.	196	14.6	14.6	89.0
	5 I believe we will do nothing since global warming is not a problem.	146	11.0	11.0	100.0
	Total	1336	100.0	100.0	

Q12 Do you think the Federal Government should do more to the	ry to deal with global warming?
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		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	39	2.9	2.9	2.9
Valid	1 Should do more	699	52.3	52.3	55.3
	2 Should do less	242	18.1	18.1	73.4
	3 Is doing the right amount now	356	26.6	26.6	100.0

Total	1336	100.0	100.0	

	plants and cars?						
		Frequency	Percent	Valid Percent	Cumulative Percent		
	-1 Refused	37	2.8	2.8	2.8		
	1 Should join	617	46.2	46.2	48.9		
Valid	2 Should not join	288	21.5	21.5	70.5		
	3 No opinion	395	29.5	29.5	100.0		
	Total	1336	100.0	100.0			

# Q12A Do you think that the US should or should not join this treaty requiring less emissions from US power

Q13\_1 Bioenergy/biomass: Producing energy from trees or agricultural wastes.

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	55	4.1	4.1	4.1
	1 Definitely use	350	26.2	26.2	30.3
	2 Probably use	393	29.4	29.4	59.7
Valid	3 Not sure	433	32.4	32.4	92.1
	4 Probably not use	56	4.2	4.2	96.3
	5 Definitely not use	50	3.7	3.7	100.0
	Total	1336	100.0	100.0	

#### Q13\_2 Carbon sequestration: Using trees to absorb carbon dioxide from the atmosphere.

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	59	4.4	4.4	4.4
	1 Definitely use	458	34.3	34.3	38.7
	2 Probably use	345	25.8	25.8	64.5
Valid	3 Not sure	373	27.9	27.9	92.5
	4 Probably not use	63	4.7	4.7	97.2
	5 Definitely not use	37	2.8	2.8	100.0
	Total	1336	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent	
	-1 Refused	55	4.1	4.1	4.1	
	1 Definitely use	97	7.3	7.3	11.4	
	2 Probably use	232	17.4	17.4	28.8	
Valid	3 Not sure	654	48.9	48.9	77.7	
	4 Probably not use	202	15.1	15.1	92.9	
	5 Definitely not use	95	7.1	7.1	100.0	
	Total	1336	100.0	100.0		

Q13\_3 Carbon capture and storage: Capturing carbon dioxide from power plant exhaust and storing in underground reservoirs.

## Q13\_4 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		
	-1 Refused	55	4.1	4.1	4.1		
	1 Definitely use	59	4.4	4.4	8.5		
	2 Probably use	139	10.4	10.4	18.9		
Valid	3 Not sure	699	52.3	52.3	71.2		
	4 Probably not use	213	16.0	16.0	87.2		
	5 Definitely not use	171	12.8	12.8	100.0		
	Total	1336	100.0	100.0			

#### Q13\_5 Energy efficient appliances: Producing appliances that use less energy to accomplish the same tasks.

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	66	5.0	5.0	5.0
	1 Definitely use	685	51.2	51.2	56.2
	2 Probably use	324	24.3	24.3	80.5
Valid	3 Not sure	206	15.4	15.4	95.9
	4 Probably not use	24	1.8	1.8	97.7
	5 Definitely not use	31	2.3	2.3	100.0
	Total	1336	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	55	4.1	4.1	4.1
	1 Definitely use	619	46.3	46.3	50.5
	2 Probably use	356	26.6	26.6	77.1
Valid	3 Not sure	226	16.9	16.9	94.0
	4 Probably not use	49	3.7	3.7	97.7
	5 Definitely not use	31	2.3	2.3	100.0
	Total	1336	100.0	100.0	

Q13\_6 Energy efficient cars: Producing cars that use less energy to drive the same distance.

Q13\_7 Nuclear energy: Producing energy from a nuclear reaction.

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	58	4.4	4.4	4.4
Valid	1 Definitely use	191	14.3	14.3	18.7
	2 Probably use	273	20.5	20.5	39.2
	3 Not sure	487	36.5	36.5	75.6
	4 Probably not use	188	14.0	14.0	89.7
	5 Definitely not use	138	10.3	10.3	100.0
	Total	1336	100.0	100.0	

#### Q13\_8 Solar energy: Using the energy from the sun for heating or electricity production.

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	60	4.5	4.5	4.5
Valid	1 Definitely use	669	50.1	50.1	54.6
	2 Probably use	334	25.0	25.0	79.6
	3 Not sure	207	15.5	15.5	95.1
	4 Probably not use	35	2.6	2.6	97.7
	5 Definitely not use	30	2.3	2.3	100.0
	Total	1336	100.0	100.0	

#### Q13\_9 Wind energy: Producing electricity from the wind, traditionally in a windmill.

Frequency	Percent	Valid Percent	Cumulative Percent

	-1 Refused	56	4.2	4.2	4.2
	1 Definitely use	632	47.3	47.3	51.5
	2 Probably use	308	23.1	23.1	74.6
Valid	3 Not sure	244	18.3	18.3	92.9
	4 Probably not use	54	4.1	4.1	96.9
	5 Definitely not use	41	3.1	3.1	100.0
	Total	1336	100.0	100.0	

#### Q14B Considering these facts, how can we best address the issue of global warming as it relates to electricity production?

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	36	2.7	5.5	5.5
	1 Do nothing. We can live with global warming.	35	2.6	5.4	10.9
	2 Invest in research and development. A new technology will solve global warming.	129	9.7	19.7	30.5
	3 Continue using fossil fuels but with capture and storage of carbon dioxide.	68	5.1	10.3	40.8
Valid	4 Expand nuclear power.	68	5.1	10.3	51.2
	5 Expand renewables (solar and wind power).	213	15.9	32.3	83.5
	6 Reduce electricity consumption, even if it means lower economic growth.	56	4.2	8.4	91.9
	7 Do nothing. There is no threat of global warming.	53	4.0	8.1	100.0
	Total	659	49.3	100.0	
Missing	System	677	50.7		
Total		1336	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 Refused	24	1.8	3.5	3.5

				1	1
	1 Do nothing. We can live with global	31	2.3	4.6	8.1
	wanning.				
	2 Invest in research and				
	development. A new technology will	105	7.9	15.5	23.6
	solve global warming.				
	3 Continue using fossil fuels but with				
	capture and storage of carbon	30	2.3	4.5	28.1
	dioxide.				
	4 Expand nuclear power.	56	4.2	8.2	36.3
	5 Expand renewables (solar and wind	047	00.0	40.0	
	power).	317	23.8	46.9	83.2
	6 Reduce electricity consumption,				
	even if it means lower economic	59	4.4	8.7	91.9
	growth.				
	7 Do nothing. There is no threat of	55	A 4	0 1	100.0
	global warming.	55	4.1	0.1	100.0
	Total	677	50.7	100.0	
Missing	System	659	49.3		
Total		1336	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. What is your view on this policy?

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	36	2.7	2.7	2.7
	1 Strongly support	31	2.3	2.3	5.1
	2 Support	163	12.2	12.2	17.3
Valid	3 Neither support or oppose	707	52.9	52.9	70.2
	4 Oppose	259	19.4	19.4	89.6
	5 Strongly oppose	139	10.4	10.4	100.0
	Total	1336	100.0	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
i requerie)	1 010011	Valia i electric	Carraiative i crecint

Valid	-1 Refused	54	4.0	4.0	4.0
	1 Yes	1044	78.2	78.2	82.2
	2 No	238	17.8	17.8	100.0
	Total	1336	100.0	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
	-1 Refused	42	3.1	3.1	3.1
	1 Increase	73	5.5	5.5	8.6
	2 Stay the same	421	31.5	31.5	40.1
valid	3 Decrease	586	43.8	43.8	84.0
	4 Remove it entirely	214	16.0	16.0	100.0
	Total	1336	100.0	100.0	

Q17 How do you primarily heat your home?

		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	26	1.9	1.9	1.9
	1 Oil	75	5.6	5.6	7.5
	2 Electricity	439	32.9	32.9	40.4
	3 Natural Gas	581	43.5	43.5	83.8
Valid	4 Wood	57	4.3	4.3	88.1
	5 No Heating	49	3.7	3.7	91.8
	6 Don't Know	59	4.4	4.4	96.2
	7 Other	51	3.8	3.8	100.0
	Total	1336	100.0	100.0	

Q19 Do you consider	yourself religious?
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		Frequency	Percent	Valid Percent	Cumulative Percent
	-1 Refused	35	2.6	2.6	2.6
Valid	1 Very religious	316	23.7	23.7	26.3
	2 Somewhat religious	607	45.5	45.5	71.8

3 Not religious	377	28.2	28.2	100.0
Total	1336	100.0	100.0	

	1			
	Frequency	Percent	Valid Percent	Cumulative Percent
18	17	1.3	1.3	1.3
19	16	1.2	1.2	2.5
20	29	2.2	2.2	4.7
21	24	1.8	1.8	6.5
22	14	1.0	1.0	7.5
23	22	1.6	1.6	9.1
24	24	1.8	1.8	10.9
25	15	1.1	1.1	12.1
26	27	2.0	2.0	14.1
27	36	2.7	2.7	16.8
28	34	2.6	2.6	19.3
29	22	1.7	1.7	21.0
30	19	1.4	1.4	22.4
31	28	2.1	2.1	24.5
Valid 32	28	2.1	2.1	26.6
33	16	1.2	1.2	27.9
34	32	2.4	2.4	30.2
35	14	1.1	1.1	31.3
36	23	1.7	1.7	33.0
37	20	1.5	1.5	34.5
38	25	1.8	1.8	36.4
39	29	2.1	2.1	38.5
40	23	1.7	1.7	40.2
41	22	1.7	1.7	41.9
42	29	2.2	2.2	44.1
43	14	1.1	1.1	45.2
44	21	1.6	1.6	46.8
45	12	.9	.9	47.6
46	12	.9	.9	48.6

PPAGE Age

		1		
47	32	2.4	2.4	51.0
48	31	2.3	2.3	53.3
49	14	1.1	1.1	54.3
50	35	2.6	2.6	56.9
51	24	1.8	1.8	58.8
52	17	1.3	1.3	60.0
53	32	2.4	2.4	62.4
54	28	2.1	2.1	64.5
55	25	1.9	1.9	66.3
56	31	2.3	2.3	68.6
57	23	1.8	1.8	70.4
58	30	2.2	2.2	72.6
59	23	1.7	1.7	74.3
60	26	2.0	2.0	76.3
61	25	1.8	1.8	78.2
62	16	1.2	1.2	79.3
63	22	1.7	1.7	81.0
64	22	1.6	1.6	82.6
65	24	1.8	1.8	84.4
66	18	1.4	1.4	85.8
67	23	1.7	1.7	87.5
68	17	1.2	1.2	88.8
69	17	1.3	1.3	90.0
70	20	1.5	1.5	91.5
71	11	.9	.9	92.4
72	15	1.1	1.1	93.5
73	10	.7	.7	94.2
74	11	.8	.8	95.0
75	4	.3	.3	95.3
76	9	.7	.7	96.0
77	7	.5	.5	96.5
78	8	.6	.6	97.1
79	1	.0	.0	97.2
80	6	.4	.4	97.6
81	12	.9	.9	98.5

0.0		4	4	08.6
82	۷	.1	.1	98.6
83	5	.4	.4	99.0
84	2	.1	.1	99.2
85	1	.1	.1	99.2
86	7	.6	.6	99.8
88	1	.1	.1	99.9
89	1	.1	.1	99.9
90	0	.0	.0	99.9
92	1	.1	.1	100.0
Total	1336	100.0	100.0	

ppagecat Age - 7 Categories

		Frequency	Percent	Valid Percent	Cumulative Percent
	1 18-24	146	10.9	10.9	10.9
	2 25-34	258	19.3	19.3	30.2
	3 35-44	221	16.5	16.5	46.8
	4 45-54	237	17.7	17.7	64.5
Valid	5 55-64	243	18.2	18.2	82.6
	6 65-74	165	12.4	12.4	95.0
	7 75+	67	5.0	5.0	100.0
	Total	1336	100.0	100.0	

ppagect4 Age - 4 Categories

		Frequency	Percent	Valid Percent	Cumulative Percent
	1 18-29	281	21.0	21.0	21.0
	2 30-44	344	25.8	25.8	46.8
Valid	3 45-59	368	27.6	27.6	74.3
	4 60+	343	25.7	25.7	100.0
	Total	1336	100.0	100.0	

PPEDUC Education (Highest Degree Received)

Frequency Percent Valid Percent Cumulative Percent	······································							
		Frequency	Percent	Valid Percent	Cumulative Percent			

	1 No formal education	18	1.3	1.3	1.3
	3 5th or 6th grade	2	.2	.2	1.5
	4 7th or 8th grade	12	.9	.9	2.4
	5 9th grade	23	1.7	1.7	4.1
	6 10th grade	27	2.0	2.0	6.2
	7 11th grade	26	1.9	1.9	8.1
	8 12th grade NO DIPLOMA	56	4.2	4.2	12.3
Valid	9 HIGH SCHOOL GRADUATE - high				
vanu	school DIPLOMA or the equivalent	403	30.1	30.1	42.4
	(GED)				
	10 Some college, no degree	276	20.7	20.7	63.1
	11 Associate degree	106	7.9	7.9	71.1
	12 Bachelors degree	245	18.3	18.3	89.4
	13 Masters degree	98	7.3	7.3	96.7
	14 Professional or Doctorate degree	44	3.3	3.3	100.0
	Total	1336	100.0	100.0	

## PPEDUCAT Education (Categorical)

		Frequency	Percent	Valid Percent	Cumulative Percent
	1 Less than high school	164	12.3	12.3	12.3
	2 High school	403	30.1	30.1	42.4
Valid	3 Some college	383	28.6	28.6	71.1
	4 Bachelor's degree or higher	387	28.9	28.9	100.0
	Total	1336	100.0	100.0	

#### **PPETHM Race / Ethnicity**

		Frequency	Percent	Valid Percent	Cumulative Percent
	1 White, Non-Hispanic	891	66.7	66.7	66.7
	2 Black, Non-Hispanic	154	11.6	11.6	78.3
	3 Other, Non-Hispanic	81	6.1	6.1	84.4
valid	4 Hispanic	191	14.3	14.3	98.7
	5 2+ Races, Non-Hispanic	17	1.3	1.3	100.0
	Total	1336	100.0	100.0	

#### PPGENDER Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
	1 Male	644	48.2	48.2	48.2
Valid	2 Female	692	51.8	51.8	100.0
	Total	1336	100.0	100.0	

PPHHHEAD Household Head

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 No	291	21.8	21.8	21.8
Valid	1 Yes	1045	78.2	78.2	100.0
	Total	1336	100.0	100.0	

PPHHSIZE Household Size

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	266	19.9	19.9	19.9
	2	483	36.1	36.1	56.0
	3	258	19.3	19.3	75.3
	4	186	13.9	13.9	89.3
	5	89	6.7	6.7	96.0
.,	6	35	2.7	2.7	98.6
Valid	7	10	.7	.7	99.3
	8	4	.3	.3	99.6
	9	1	.1	.1	99.7
	10	3	.2	.2	99.9
	11	1	.1	.1	100.0
	Total	1336	100.0	100.0	

PPHOUSE Housing Type

_	_		
Frequency	Percent	Valid Percent	Cumulative Percent
rioquonoy	1 010011	valia i oroonit	ournalative r broom

	1 A one-family house detached from any other house	871	65.2	65.2	65.2
	2 A one-family house attached to one or more houses	109	8.2	8.2	73.4
Valid	3 A building with 2 or more apartments	271	20.3	20.3	93.7
	4 A mobile home	75	5.6	5.6	99.4
	5 Boat, RV, van, etc.	8	.6	.6	100.0
	Total	1336	100.0	100.0	

PPINCIMP Household Income

-		Frequency	Percent	Valid Percent	Cumulative Percent
	1 Less than \$5,000	42	3.2	3.2	3.2
	2 \$5,000 to \$7,499	20	1.5	1.5	4.7
	3 \$7,500 to \$9,999	21	1.6	1.6	6.2
	4 \$10,000 to \$12,499	46	3.4	3.4	9.7
	5 \$12,500 to \$14,999	27	2.0	2.0	11.7
	6 \$15,000 to \$19,999	43	3.2	3.2	14.9
	7 \$20,000 to \$24,999	59	4.4	4.4	19.4
	8 \$25,000 to \$29,999	57	4.2	4.2	23.6
	9 \$30,000 to \$34,999	73	5.5	5.5	29.1
Valid	10 \$35,000 to \$39,999	81	6.1	6.1	35.1
valid	11 \$40,000 to \$49,999	99	7.4	7.4	42.5
	12 \$50,000 to \$59,999	119	8.9	8.9	51.4
	13 \$60,000 to \$74,999	135	10.1	10.1	61.5
	14 \$75,000 to \$84,999	95	7.1	7.1	68.6
	15 \$85,000 to \$99,999	92	6.9	6.9	75.5
	16 \$100,000 to \$124,999	151	11.3	11.3	86.8
	17 \$125,000 to \$149,999	81	6.1	6.1	92.9
	18 \$150,000 to \$174,999	36	2.7	2.7	95.6
	19 \$175,000 or more	59	4.4	4.4	100.0
	Total	1336	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
	1 Married	684	51.2	51.2	51.2
	2 Widowed	56	4.2	4.2	55.3
	3 Divorced	145	10.8	10.8	66.2
Valid	4 Separated	34	2.5	2.5	68.7
	5 Never married	308	23.1	23.1	91.8
	6 Living with partner	110	8.2	8.2	100.0
	Total	1336	100.0	100.0	

#### **PPMARIT Marital Status**

#### **PPMSACAT MSA Status**

		Frequency	Percent	Valid Percent	Cumulative Percent
	0 Non-Metro	210	15.7	15.7	15.7
Valid	1 Metro	1126	84.3	84.3	100.0
	Total	1336	100.0	100.0	

PPREG4 Region 4 - Based on State of Residence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Northeast	243	18.2	18.2	18.2
	2 Midwest	289	21.6	21.6	39.8
	3 South	493	36.9	36.9	76.8
	4 West	310	23.2	23.2	100.0
	Total	1336	100.0	100.0	

#### ppreg9 Region 9 - Based on State of Residence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 New England	58	4.3	4.3	4.3
	2 Mid-Atlantic	185	13.9	13.9	18.2
	3 East-North Central	192	14.4	14.4	32.6
	4 West-North Central	97	7.2	7.2	39.8
	5 South Atlantic	272	20.4	20.4	60.2
	6 East-South Central	73	5.5	5.5	65.7

7 West-South Central	148	11.1	11.1	76.8
8 Mountain	94	7.0	7.0	83.8
9 Pacific	216	16.2	16.2	100.0
Total	1336	100.0	100.0	

PPRENT Ownership Status of Living Quarters

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Owned or being bought by you or someone in your household	916	68.6	68.6	68.6
	2 Rented for cash	386	28.9	28.9	97.4
	3 Occupied without payment of cash rent	34	2.6	2.6	100.0
	Total	1336	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
	11 ME	8	.6	.6	.6
	12 NH	3	.2	.2	.8
	13 VT	2	.2	.2	1.0
	14 MA	33	2.5	2.5	3.4
	15 RI	1	.0	.0	3.5
	16 CT	11	.9	.9	4.3
	21 NY	92	6.9	6.9	11.3
	22 NJ	37	2.8	2.8	14.0
Valid	23 PA	56	4.2	4.2	18.2
	31 OH	49	3.6	3.6	21.8
	32 IN	30	2.3	2.3	24.1
	33 IL	53	3.9	3.9	28.1
	34 MI	41	3.1	3.1	31.1
	35 W I	20	1.5	1.5	32.6
	41 MN	27	2.1	2.1	34.7
	42 IA	14	1.0	1.0	35.7
	43 MO	26	1.9	1.9	37.6

		1		
44 ND	3	.2	.2	37.8
45 SD	5	.4	.4	38.2
46 NE	9	.6	.6	38.9
47 KS	13	1.0	1.0	39.8
51 DE	1	.1	.1	39.9
52 MD	17	1.2	1.2	41.2
53 DC	2	.2	.2	41.3
54 VA	48	3.6	3.6	44.9
55 WV	14	1.0	1.0	46.0
56 NC	30	2.3	2.3	48.3
57 SC	24	1.8	1.8	50.0
58 GA	34	2.6	2.6	52.6
59 FL	102	7.6	7.6	60.2
61 KY	16	1.2	1.2	61.4
62 TN	31	2.3	2.3	63.7
63 AL	20	1.5	1.5	65.2
64 MS	6	.5	.5	65.7
71 AR	12	.9	.9	66.5
72 LA	13	1.0	1.0	67.5
73 OK	15	1.1	1.1	68.6
74 TX	109	8.1	8.1	76.8
81 MT	9	.6	.6	77.4
82 ID	10	.7	.7	78.1
83 W Y	1	.1	.1	78.2
84 CO	16	1.2	1.2	79.5
85 NM	7	.5	.5	80.0
86 AZ	22	1.6	1.6	81.6
87 UT	8	.6	.6	82.2
88 NV	21	1.6	1.6	83.8
91 WA	40	3.0	3.0	86.8
92 OR	18	1.3	1.3	88.2
93 CA	151	11.3	11.3	99.5
94 AK	4	.3	.3	99.7
95 HI	4	.3	.3	100.0
Total	1336	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
	0	1257	94.1	94.1	94.1
	1	76	5.7	5.7	99.8
Valid	2	3	.2	.2	100.0
	Total	1336	100.0	100.0	

PPT01 Presence of Household Members - Children 0-1

PPT25 Presence of Household Members - Children 2-5

-		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1201	89.9	89.9	89.9
	1	106	7.9	7.9	97.8
	2	24	1.8	1.8	99.6
	3	5	.4	.4	100.0
	Total	1336	100.0	100.0	

PPT612 Presence of Household Members - Children 6-12

		Frequency	Percent	Valid Percent	Cumulative Percent
	0	1172	87.7	87.7	87.7
	1	106	7.9	7.9	95.7
	2	47	3.5	3.5	99.1
Valid	3	11	.8	.8	99.9
	4	1	.0	.0	100.0
	5	0	.0	.0	100.0
	Total	1336	100.0	100.0	

PPT1317 Presence of Household Members - Children 13-17

		Frequency	Percent	Valid Percent	Cumulative Percent
	0	1152	86.2	86.2	86.2
Valid	1	140	10.4	10.4	96.7
	2	39	2.9	2.9	99.6

3	6	.4	.4	100.0
Total	1336	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	305	22.8	22.8	22.8
	2	705	52.7	52.7	75.5
	3	214	16.0	16.0	91.6
	4	93	6.9	6.9	98.5
	5	10	.8	.8	99.3
	6	8	.6	.6	99.9
	7	1	.1	.1	100.0
	Total	1336	100.0	100.0	

#### PPWORK Current Employment Status

		Frequency	Percent	Valid Percent	Cumulative Percent
	1 Working - as a paid employee	635	47.5	47.5	47.5
Valid	2 Working - self-employed	97	7.3	7.3	54.8
	3 Not working - on temporary layoff from a job	20	1.5	1.5	56.3
	4 Not working - looking for work	125	9.4	9.4	65.7
	5 Not working - retired	240	17.9	17.9	83.6
	6 Not working - disabled	103	7.7	7.7	91.3
	7 Not working - other	116	8.7	8.7	100.0
	Total	1336	100.0	100.0	

#### **PPNET HH Internet Access**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 No	332	24.9	24.9	24.9
	1 Yes	1004	75.1	75.1	100.0
	Total	1336	100.0	100.0	