

STUDY SERIES
(Survey Methodology #2010-10)

**Data Reliability Indicator Based on the Coefficient
of Variation: Report for the Third Round
of Usability Testing**

Kathleen T. Ashenfelter
Victor Quach

Statistical Research Division
U.S. Census Bureau
Washington, D.C. 20233

Report Issued: September 16, 2010

Disclaimer: This report is released to inform interested parties of research and to encourage discussion. The views expressed are those of the authors and not necessarily those of the U.S. Census Bureau.

U S C E N S U S B U R E A U

Statistical Research Division

Usability Laboratory

Washington, D.C. 20233

Date: September 16, 2010

To: DSSD Data Reliability Indicator Team: Anthony Tersine, Jennifer Tancreto

From: Kathleen T. Ashenfelter and Victor Quach, SRD Human Factors and Usability Research Group

Subject: Data Reliability Indicator Based on the Coefficient of Variation: Report for the Third Round of Usability Testing

1 Executive Summary

This study compared different versions of American Community Survey data tables with a data reliability indicator based on the coefficient of variation. The tables differed in terms of whether the data reliability legend was displayed above the table or behind a link, “Reliable” or “Not Very Reliable” was listed first, or whether it was color-coded. There were few key differences between the tables in terms of user accuracy in finding answers to the tasks. The usability goals were met for accuracy of responses and users satisfaction for all of the conditions (although the goal was not met for all data products). However, the efficiency goal was not met for several of the table types. As with previous tests, key usability issues were confusion about the meaning of “reliability” and what the cut-offs for the different levels of reliability were. Evidence from an analysis of efficiency and task difficulty ratings indicated that including the data reliability indicator above the table may have a slightly negative impact.

2 Abstract

This study was the third round of usability testing for the Data Reliability Indicator for American Community Survey (ACS) data tables proposed by the sponsor team. Sixteen prototype tables with a data reliability indicator based on an estimate’s coefficient of variation were tested. Each reliability indicator had three levels: “Reliable,” “Somewhat Reliable,” and “Not Very Reliable.” We tested whether the location of the data reliability legend, whether the indicator was color-coded or plain text, and whether the “Reliable” or “Not

Very Reliable” level was listed first in the legend made a difference in the accuracy, efficiency, or user satisfaction of data users in responding to the tasks.

The usability goals for response accuracy and user satisfaction were met for all of the conditions, but the goal for efficiency was not met for several conditions, mostly for easy and medium-difficulty tasks.

More detailed results and potential usability issues are discussed.

Key Words: data reliability indicator, coefficient of variation, color-coded data tables, usability

3 Introduction

This was the third round in a series of usability tests of the proposed data reliability indicator (Ashenfelter, Beck, & Murphy, 2009; Ashenfelter, 2010). A group of American Community Survey (ACS) data users from both inside and outside of the Census Bureau were recruited as participants for this round of testing. Findings from this third round of testing will inform the design-and-development team on areas of user satisfaction and success as well as areas where the participants struggled while using the data.

3.1 Background

This project aimed to address an issue that arises with the ACS data tables because the estimates have varying levels of reliability. Some of the data, especially some single-year estimates, have high coefficients of variation (CVs). Some users may use the estimates without taking into account their reliability (i.e., ignoring or misunderstanding the margin of error currently provided with the ACS estimates) (Tersine, 2010).¹ The goal of this project is help data users more easily detect potential reliability issues as measured by the CV (although the decision of whether or not to use the estimate is ultimately the data user’s).

The proposed method for addressing the presentation of the reliability of the estimate was to color-code a reliability indicator for each estimate with the appropriate level of reliability along with an associated word (e.g., “Reliable” or “Not Very Reliable”), as measured by the coefficient of variation (Whitford & Weinberg, 2008). The choice of CV as the estimate of sampling error to be tested was based on the goal to produce a standardized measure of reliability that might be easier for users to interpret. Although the margin of error (MOE) is currently provided with each estimate, ACS data users often ignore the MOE.

As a starting point, a categorization based on the coefficient of variation was proposed by the sponsoring team in the Decennial Statistical Studies Division (DSSD) (Tersine, 2010; Whitford & Weinberg, 2008). The idea was to color-code the estimate according to its reliability, as evaluated by its associated CV. “Reliable” was defined as $CV \leq 0.15$, “Somewhat

¹Although estimates of lower reliability are still useful in many applications.

Reliable” was defined as $0.15 < CV \leq 0.35$, and “Not Very Reliable” was defined as $CV > 0.35$ (or zero estimates). A color-coded data reliability column was added to the tables for the prototypes since Section 508 standards prevent the color-coding of the estimate. Consistent with the first two rounds of testing, a red color indicates a low-reliability estimate and green indicates a reliable estimate. However, the number of levels to include in the indicator was not tested in this round, since the decision was made to test only a three-level indicator further after the first and second rounds of testing. For this round, versions of the tables that did not have color-coding associated with the reliability indicator were also tested. Mid-range reliability is indicated by yellow coding. The prototypes that were tested in this third-round evaluation of the ACS data reliability indicators are included in Appendix A.

The tasks that participants completed for the third round of testing are provided as Appendix B. These tasks were kept as similar as possible to those used in the previous round of usability testing, but they were updated to incorporate findings from the prior testing as well as feedback from team members and the Census Bureau’s Methodology and Standards Council.

3.2 Research Goals

The usability goals for this study were defined in three categories: user accuracy, efficiency, and satisfaction.

Goal 1: To achieve a high level of accuracy in completing the given tasks using the data tables. The goal for the third round of testing was set at 80% accuracy. A related sub-goal was to evaluate whether the color-coded and text-only data reliability indicators would prompt users to pay attention to and report an estimate’s reliability.

Goal 2: To achieve a high level of efficiency in using the data tables. It was decided that the participants should be able to complete the tasks in an efficient manner taking no longer than 3 minutes for a harder task, 2 minutes for a medium task, and 1 minute for an easier task.

Goal 3: For the users to experience a moderate to high level of satisfaction from their experience with the data tables. A tailored version of the University of Maryland’s Questionnaire for User Interaction Satisfaction (QUIS) (Chin, Diehl, & Norman, 1988) was implemented. The overall mean of the QUIS ratings for the data tables should be above the mean (above 5 on a nine-point scale, where 1 is the lowest rating and 9 is the highest rating). The same should hold true for the individual QUIS items.

3.3 Scope

A specific set of user interactions with the tables (as portrayed in the prototypes provided by the sponsor) was within the scope of the usability evaluation. The user interface was not tested for compliance with Section 508 regulations, although members of the Systems Support Division (SSD) did consult with the usability and sponsor team about potential accessibility issues associated with color-coding data tables before the first round of usability

testing took place. Before the table tables can be accessed through a government Web site, they must comply with Section 508 regulations or obtain a waiver.

3.4 Assumptions

- Participants had at least one year of prior Internet and computer experience.
- Participants had prior knowledge of how to navigate a Web site.
- Participants had some prior familiarity with the ACS and/or survey data.
- Participants had no known disabilities, but were screened for color blindness.

4 Method

4.1 Participants

The original goal for this study was to recruit forty participants from the metro Washington, D.C. area from a list of local ACS data users to come to the SRD Usability Laboratory in Suitland, MD for testing. However, the usability staff encountered difficulty with recruiting participants and only 21 people participated in the study. Participants were recruited from email lists including the Association of Public Data Users (APDU), Census Information Centers (CIC), State Data Centers (SDC), the Census Advisory Committee, and the D.C. chapter of the American Association for Public Opinion Research (AAPOR). The goal for the CIC, SDC, and Advisory Committee participants was to recruit the constituents of these organizations, but we also accepted the members themselves. Local teachers and graduate students were recruited through Craigslist and emails sent to the principals of the schools and Universities.

Each participant had at least one year of prior experience in navigating different Web sites. Participants varied in their levels of familiarity with the ACS and ACS data tables, but all were at least aware of the American Community Survey data products. The amount of time that participants reported using ACS data products or tabulations ranged from two years to the very beginning of the ACS. The average age of the participants was 38.2, with a minimum of 23 and a maximum of 70.

Observers from the Decennial Statistical Studies Division (DSSD) Data Reliability Indicator team were invited to watch the usability tests on television screens in a separate room from the participant and test administrator.

4.2 Facilities and Equipment

Testing Facilities

The participant sat in a small room (5K512), facing a one-way glass and a wall camera, in front of an LCD monitor equipped with an eye-tracking machine that is placed on a table at standard desktop height. The participant and test administrator were in the same room for the reading of the general protocol, the think-aloud practice, and eye-tracking calibration. The test administrator then went into the control room for the usability testing segment of the session and returned to sit in the same room as the participant for the debriefing segment.

Computing Environment

The participant's workstation consisted of a Dell personal computer, a 17-inch Tobii LCD monitor (Tobii model T120) equipped with cameras for eye tracking, a standard keyboard, and a standard mouse with a wheel. The operating system was Windows XP for all participants.

Audio and Video Recording

Video of the application on the participant's monitor was fed through a PC Video Hyper-converter Gold Scan Converter, mixed in a picture-in-picture format with the camera video, and recorded via a Sony DSR-20 digital Videocassette Recorder on 124-minute, Sony PDV metal-evaporated digital videocassette tape. Audio for the videotape was picked up from one desk and one ceiling microphone near the participant. The audio sources are mixed in a Shure audio system, eliminating feedback, and fed to the videocassette recorder.

Eye-Tracking

The participant's eye movements were recorded during the usability test using a trial version of Tobii Studio Enterprise Edition (Tobii Technology, 2008). The Tobii eye-tracking device monitors the participant's eye movements and records eye-gaze data. The data recorded represent the physical position of the eye as measured by the reflection of a near-infrared beam off of the pupil. The horizontal and physical position of the pupil are recorded for both eyes at a rate of 120 Hz (e.g., 120 samples per second) on this eye tracker model. This type of eye-tracking requires the calibration of each eye. Data collected from the eye-tracking device includes eye-gaze position, timing for each data point, eye position, and areas of interest. The Tobii eye tracker records data at a rate of 120 Hz. When a participant looks away or blinks, or if the eye tracker loses track of the participant's pupil, this data is recorded as missing data and this does not stop the data recording. Often, the eye tracker will regain tracking status of the participant's pupil and data recording will begin again within a few

seconds following a glance away from the computer screen.

4.3 Materials

Usability testing required the use of various testing materials. Testing materials included the following items provided in the appendices. There were sixteen different prototypes corresponding to different possible ways of displaying the data reliability indicator and different ACS data products. For this round of testing, the following ACS data products were tested: Data Profile, Selected Population Profile, Subject Table, Detailed Table, and Geographic Comparison. Versions of these prototypes are available in Appendix A. Following the initial probe item (i.e., “What is the first thing that that you noticed about this table?”), the tasks for each prototype were tailored to the geography and type of table being tested (see Appendix B).

Prototypes

Sixteen tables with different versions of a three-level data reliability indicator were tested in this third-round investigation. Some tables had a data reliability indicator legend above the table and some had the legend located behind a “View Table Notes” link. This comparison was made because a meeting with members of the Census Bureau’s Data Access and Dissemination System Office (DADSO) revealed that because of lack of free space on the ACS data tables currently available through American Factfinder (AFF), the legend may have to be placed behind this link in order to implement the data reliability indicator. Also, some prototypes used color-coding in the the data reliability indicator, while some used only text without color. Some prototype tables had “Reliable” listed first in the reliability indicator legend, while some had “Not Very Reliable” listed first in order to test the “stoplight” analogy associated with the data reliability indicators. That is, we wanted to see whether participants would have trouble understanding and using the indicator if the order of the colors was reversed from a traditional stoplight. The prototypes from this round of testing can be found in Appendix A.

Tasks

Members of the ACS data-reliability indicator team created the tasks, which can be found in Appendix B. The tasks are designed to capture the participant’s interaction with, and reactions to, the design and functionality of the ACS data reliability indicators. The first question asked of the participants is not a task in the traditional sense because it asks them to report the first thing that they notice about the tables, so it is called the “initial probe” question and is not considered an official task. The rest of the tasks were designed so that the participant would look for estimates that were located in different areas of the table.

General Protocol

Each participant was read a general protocol, which can be found in Appendix C. The test administrator read some background material and explained several key points about the

session. The general protocol emphasizes that the participant's skills and abilities are not being tested, but that the participant is helping in an evaluation of the data table's overall usability.

Consent Form

Prior to beginning the usability test, the participants completed a general consent form supplied in Appendix D. The consent form documents the participant's agreement to permit videotaping of the testing session and states that the study is authorized under Title 13 of the U.S. Code.

Questionnaire on Statistical Experience, Computer Use and Internet Experience

Prior to the usability test, the participant completed this questionnaire, which gathered information on the participant's demographics, experience using statistics, computer use, and Internet experience (Appendix E). This information helped us determine whether there is a relationship between these three experience factors and performance and preference scores found during testing.

Questionnaire for User Interaction Satisfaction (QUIS)

The original version of the QUIS includes dozens of items related to user satisfaction with a user interface (Chin et al., 1988). In a usability test at the Census Bureau, SRD typically uses 10 to 12 items that the usability team has tailored to the particular user interface being evaluated. This study used a modified version that includes items worded for the ACS data-reliability indicators context (Appendix F). The experimenter handed the QUIS to the participant at the same time as the task-difficulty rating questionnaire (below).

Task-Difficulty Rating Questionnaire

Participants were asked to provide a difficulty rating for each task, which was used for validation of the "medium" versus "hard" designation during analysis. This short survey can be found in Appendix G.

Debriefing Questions

After completing the tasks, the experimenter read aloud debriefing questions to the participants about their overall experience using the prototype ACS Data Reliability Indicator (Appendix H). The debriefing questions included an inquiry about each participant's color vision. These questions are included in the debriefing segment of the protocol following testing and not included in the survey administered to the participants before testing so as not to prime them to focus intentionally on color during testing.

Procedure

Each participant was escorted to the usability lab at the U.S. Census Bureau headquarters building in Suitland, Maryland. Upon arriving, the participant was seated with the test

administrator in the testing room (5K512). The test administrator greeted the participant, thanked him or her for his or her time, and read the general introduction. Next, the participant read and signed the consent form. After signing the consent form, the participant completed the questionnaire on demographics, experience with statistics, computer use and Internet experience.

Since this test used the eye-tracking device, the participant's eyes were calibrated after the general protocol was read and the consent form was signed. Calibration was usually completed in about fifteen to twenty seconds by having the participant look at a dot moving across the computer screen. Once calibration was completed, the test administrator exited the room and continued the testing process from the control room (5K509).

Following calibration, the participant began to complete the tasks on the ACS data reliability indicators prototype. At the start of each task, the participant read the task aloud. While completing the task, the participants were encouraged to think aloud and share what they were thinking about the task. This interaction was not intended to be a conversation. If at any time the participant became quiet, the test administrator probed the participant about what they were looking for in the table. The content of the so-called "think-aloud" protocol allows us to gain a greater understanding on how the participant is completing the task and to identify issues with the tables. In order to make sure that the participants understood what was expected by the instruction to think aloud, they engaged in a practice think-aloud task where they walk through their thought process while performing a task using a commonly accessed Web page (the end of Appendix C).

At the conclusion of each task, the participant stated a "final answer" to the task. During the task or while watching the tapes of the sessions at a later time, the test administrator noted any observable struggles or other noteworthy behaviors, including comments and body language. After the participant completes all tasks, the eye-tracking device was stopped, the test administrator returned to the testing room, and the video recording continued. The participant then completed the modified QUIS and task-difficulty rating questionnaire silently. When the participant completed the two paper forms, the test administrator asked the participant a series of debriefing questions (Appendix H). At the conclusion of the usability evaluation, the video recording was stopped. Overall, the usability session ran between 45 and 60 minutes.

5 Results

5.1 Accuracy

Table 1 shows the average accuracy scores by table type and whether Usability Goal 1 of 80% correct responses was met. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color-coding. The location of the legend was manipulated for the Data Profile, Selected Population Profile, Subject, and Geographic Comparison tables. The order of the colors in the data reliability legend was manipulated for the Selected Population Profile and Geographic Comparison tables. Whether or not the tables were color-coded was manipulated for the Data Profiles and the Detailed Tables. Responses were considered correct if the participant reported the correct estimate from the table. Table 1 shows that the usability goal was met for each of the different conditions. This provides some evidence that the data reliability indicator has about the same level of impact across these different methods of displaying it. However, the goal was not met for all data products; the Selected Population Profile tables had an accuracy score of 72% and the Detailed Tables had a score of just 67%.

Table 1: **Accuracy Scores by Table Type**

Table Type	Tasks	Average Score	Goal Met?
Legend Above Table	73	86%	Yes
Legend Behind Link	60	90%	Yes
No Color	35	83%	Yes
Color	42	83%	Yes
Red First	32	90%	Yes
Green First	32	81%	Yes
Data Profile	49	88%	Yes
Selected Pop. Profile	32	72%	No
Subject Table	14	93%	Yes
Detailed Table	21	67%	No
Geographic Comparison	27	100%	Yes

5.2 Efficiency

The start and stop times for the different tasks were obtained from the time stamps on the eye-tracking data in order to calculate average completion times for the tasks. The tasks were rated by the usability staff and the sponsor team before testing began as being easy, medium, or hard in difficulty. The average efficiency score for the easy tasks for across all participants and all tables was 2.3 minutes, the average score for the medium tasks was 2.0 minutes, and the average efficiency score for the hard tasks was 2.4 minutes. The goal was for participants to take 1 minute for an easier task, 2 minutes for a medium task, and 3 minutes for a harder task. The goal was met for the medium and hard tasks, but not for the easy tasks. This finding may be related to participants having difficulty using the different data products in general and may not be directly related to the data reliability indicator itself.

Table 2 shows the efficiency scores by condition and whether or not the efficiency goal for the easy, medium, and hard tasks were met for that condition. Efficiency averages were only calculated for the tables where each condition was specifically manipulated. The efficiency goals were not met for the easy tasks when the legend was behind the “View Table Notes” link, the easy and medium tasks when the legend was above the table, the easy tasks for both color orders, the easy tasks for the black and white table, or the easy and medium tasks for the tables with a color-coded data reliability indicator.

Table 2: **Average Efficiency Scores by Difficulty Rating**

Condition	Difficulty	Average Eff. (min)	Goal Met?
Legend Above Table	Easy	2.4	No
	Medium	2.3	No
	Hard	2.7	Yes
Legend Behind Link	Easy	2.5	No
	Medium	1.6	Yes
	Hard	2.0	Yes
No Color	Easy	2.1	No
	Medium	1.9	Yes
	Hard	2.1	Yes
Color	Easy	2.1	No
	Medium	2.1	No
	Hard	2.7	Yes
Red First	Easy	2.1	No
	Medium	2.4	No
	Hard	2.3	Yes
Green First	Easy	2.4	No
	Medium	3.0	No
	Hard	1.9	Yes

The efficiency goal for the easy tasks was not met by any of the conditions, although it was met for the hard tasks for all of the conditions. Since ACS users in the field would

presumably be more likely to consult the data reliability indicator for harder problems, the fact that the goal was met for the harder tasks is a positive result. The easy and medium tasks may have been more difficult than anticipated.

Table 3 shows the average efficiency scores for easy, medium, and hard tasks broken down by table type and whether or not the usability goal for efficiency was met.

The usability goal for efficiency was not met for the easy or medium–difficulty tasks for the Data Profile tables, any of the tasks for the Selected Population Profile tables, the easy tasks for the Subject Tables, the easy tasks for the Detailed Tables, or the easy tasks for the Geographical Comparison tables.

The efficiency goal set for the easy tasks was not met for any of the table types, and there was no table type that met the goal for all the easy, medium, and hard tasks. The medium tasks for the data profiles had the highest completion times. Again, both of these results could indicate that the tasks, especially the easy and medium–difficulty tasks, were more difficult than anticipated. Also, this may reflect that using ACS data tables overall is more difficult than originally thought. Another possibility is that the participants were inexperienced with using this type of table.

Table 3: **Average Efficiency Scores by Difficulty Rating**

Table Type	Difficulty	Average Eff. (min)	Goal Met?
Data Profile	Easy	2.4	No
	Medium	5.0	No
	Hard	2.4	Yes
Selected Pop. Profile	Easy	2.9	No
	Medium	3.1	No
	Hard	3.2	No
Subject Table	Easy	1.6	No
	Medium	1.4	Yes
	Hard	2.7	Yes
Detailed Table	Easy	1.1	No
	Medium	2.0	Yes
	Hard	2.5	Yes
Geographic Comparison	Easy	2.4	No
	Medium	1.3	Yes
	Hard	1.2	Yes

Table 4 shows the average efficiency scores in minutes by table type and across all easy, medium, and hard tasks. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color–coding. It is noteworthy that the participants using tables with the legend above the table took 30 seconds longer (i.e., 25 % longer) to complete tasks than did participants using tables with the legend behind the link. It is possible that including the legend could be distracting to participants and

increases the amount of time they take to complete the tasks. Overall, there were several conditions where the efficiency goal was not met for this round of testing. Since the last two rounds of testing showed no differences between efficiency performance when participants have a data reliability indicator versus when they are using a table without one (Ashenfelter et al., 2009; Ashenfelter, 2010), it is likely that the failure to meet the efficiency goals for the easy tasks is related to the table complexity and not to the data reliability indicator itself. Although they are similar, the tasks and tables used in this round of testing are not the same as in previous rounds and may have been more difficult.

Table 4: **Efficiency Scores by Table Type**

Table Type	Tasks	Average Eff. (min)
Above Table	76	2.5
Behind Link	61	2.0
No Color	39	2.1
Color	46	2.3
Red First	30	2.5
Green First	29	2.2
Data Profile	56	2.1
Selected Pop. Profile	31	3.0
Subject Table	14	1.8
Detailed Table	21	2.0
Geographic Comparison	28	1.6

Looking at the efficiency results by table type, the key result is that the participants using tables with the reliability legend above the table took 30 seconds longer to complete the tasks than those with the legend behind a link. It is possible the legend could have a slightly negative impact on efficiency, possibly being a distracting element. Also, participants in the Selected Population Profile condition took about twice as long to complete their tasks as did the participants in the Geographic Comparison condition.² The Selected Population Profile tables are the longest tables vertically and require the most scrolling, which could have impacted the participants' efficiency scores.

5.3 Satisfaction

The overall mean of the satisfaction scores for this round of testing with 21 participants was 6.23, which is above Usability Goal 3 of having at least a score of 5 on the scale. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color-coding. The mean satisfaction score for tables with the

²A one-way ANOVA ($F(4, 145) = 6.60, p < 0.001$) revealed at least one significant difference between the tables. Post-hoc Tukey's test showed that the Selected Population table had significantly longer efficiency scores than the Data Profiles tables (Mean Difference=55 seconds, $p = 0.005$), the Subject Tables (Mean Difference=71 seconds, $p = 0.014$), the Detailed Tables (Mean Difference=64 seconds, $p = 0.010$), and the Geographic Comparison tables (Mean Difference=86 seconds, $p < 0.001$).

reliability legend above the table was 6.1 (n=78)³ and the mean score for table with the reliability legend behind the “View Table Notes” link was 6.1 (n=62).

The mean satisfaction score for the tables with color-coding was 6.7 (n=40) and the mean score for tables with no color-coding was 5.9 (n=40). This is a somewhat large difference in score and indicates that there was more overall satisfaction for the color-coded indicator and is consistent with several participants making the comment that they liked the colors.

The mean satisfaction score for the tables where the red/unreliable indicator came first (i.e., was on “top”) on the indicator legend was 5.1 (n=31). The mean score for the tables where green/reliable was first was 6.8 (n=31).

The Detailed Tables had a mean satisfaction score of 6.0 (n=63), the Selected Population Profile tables had a mean score of 6.3 (n=31), the Subject Tables had a mean score of 6.9 (n=15), the Data Profiles had a mean score of 7.1, and the Geographic Comparison tables had a mean score of 5.6.

The participants met the usability satisfaction goal of at least a 5 on on a 9-point scale for every condition.

The participants were allowed to write in open-ended comments for the last item of the satisfaction survey. Here are the comments received along with the table assigned to the participant that were directly related to the data reliability indicator. All comments that pertain to the tables themselves and not to the indicator can be found in Appendix I.

Data Profiles

- A3: location of reliability. Column affected ease of reading estimate and % estimate. Would prefer to see reliability column on left or right margin rather than in [the] middle.

Subject Tables

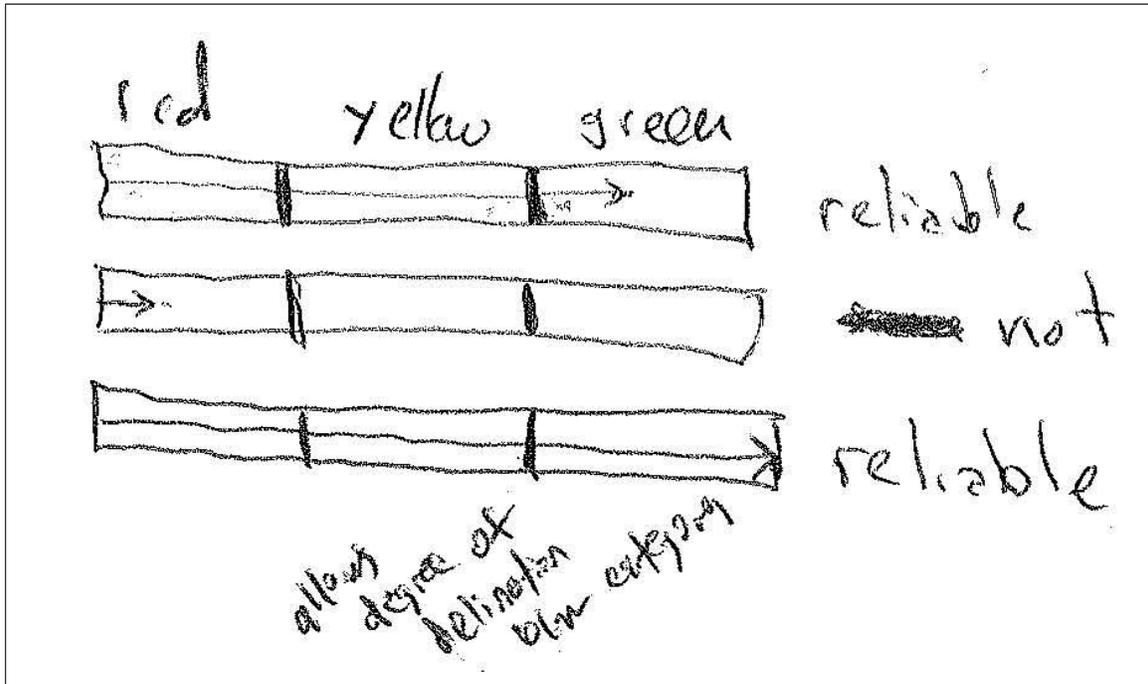
- C2: I didn’t even look at the definition of reliability. Sorry about that. I found the table mostly easy to read. I would however recommend that the need for scrolling be reduced if possible.

Geographical Comparisons

- E1: 1) It would be useful to have an * describing & defining: % (percent), reliability, m.o.e (i.e. is margin of error + or - the percent? Or is it linked to reliability?). 2) could the reliability be something like this: [see graphic drawn by participant 12 in Figure 1]. The red & green are pretty distracting. *Note: The legend was behind the link for this participant.*

³Where n is the number of satisfaction questions completed across all participants who saw this table.

Figure 1: Participant Suggested Indicator Revision



E2: It would have been helpful to have a definition for the reliability categories. Why was some data listed as reliable and others 'somewhat' or 'not at all' particularly if the information was ultimately coming from the same source. *Note: The legend was behind the link for this participant.*

E3: I think I might've noticed the reliability def. in the upper right corner but I didn't read it - it didn't really stand out.

5.4 Task Difficulty

Participants completed a task difficulty rating scale after they completed them. Difficulty was rated on a scale from 1 to 9, with 1 being very easy and 9 being very difficult. Table 5 shows the average task difficulty score for each data product tested.

Table 5: Overall Task Difficulty by Data Product

Table Type	Tasks	Average Eff. (min)
Behind Link	61	2.0
Above Table	76	2.5
No Color	39	2.1
Color	46	2.3
Red First	30	2.5
Green First	29	2.2
Data Profile	56	2.1
Selected Pop. Profile	31	3.0
Subject Table	14	1.8
Detailed Table	21	2.0
Geographic Comparison	28	1.6

Table 6 shows the average task difficulty for each task broken down by whether the data reliability indicator legend was displayed above the table, or behind the “View Table Notes” link. Although the average task difficulty for the tables with the data reliability indicator legend above the table was equal to the that of the tables with the legend behind a link for the Selected Population Profiles, it was considerably higher for the other data products. This key finding may indicate that adding a legend that is constantly visible above the table may make completing the tasks more difficult. This is consistent with the finding that tables with the legend above the table were also associated with longer efficiency time. It is possible. that showing the legend above the table could potentially have a negative impact on users’ interaction with the table. If that is the case, having the legend behind the link would likely not be problematic. However, usability best practices would suggest that the legend be present somewhere so that data users who are searching for this information can find it.

Table 6: Task Difficulty Scores by Location of the Data Reliability Legend

Table Type	Task	Above Table	Behind Link	Initial Rating
Data Profile	1	3.2	2.3	Easy
	2	4.2	2.3	Easy
	3	3.6	3.0	Medium
	4	5.0	2.0	Hard
	5	4.8	3.0	Medium
	6	5.8	3.0	Medium
	7	5.4	3.0	Medium
	8	<u>8.0</u>	<u>3.7</u>	Hard
	mean	5.0	2.8	
Selected Pop. Profile	1	1.0	8.0	Easy
	2	2.5	1.0	Easy
	3	1.0	1.0	Easy
	4	4.5	1.0	Hard
	5	4.0	4.0	Hard
	6	2.5	1.0	Medium
	7	1.0	1.0	Medium
	8	<u>3.0</u>	<u>1.0</u>	Hard
	mean	2.1	2.1	
Subject Table	1	2.0	2.0	Easy
	2	4.0	1.0	Medium
	3	1.0	3.0	Easy
	4	2.0	2.0	Hard
	5	6.0	1.0	Medium
	6	7.0	1.0	Hard
	7	<u>4.0</u>	<u>1.0</u>	Medium
	mean	3.7	1.6	
Geographic Comparison	1	1.0	1.5	Easy
	2	4.5	2.5	Medium
	3	7.0	2.5	Hard
	4	3.0	2.0	Medium
	5	4.5	2.0	Medium
	6	7.0	3.5	Hard
	7	<u>4.5</u>	<u>4.5</u>	Easy
	mean	4.5	2.6	

There were several instances when the average difficulty rating was at odds with its original difficulty categorization. For instance, task 1 for the Selected Population Profiles had an average task difficulty rating of 8.0 out of 9.0 points for the tables where the legend was behind the “View Table Notes” link, which indicates that that this task was not considered easy by the participant who saw this table. This question was “The National Organization for Young Adults is considering opening a chapter in Anytown, USA. They first want to know what the estimate for the number of people in Anytown that are ages 18 to 34 is. What would you tell them? ” This question may need to be revised to be more clear and specific if used in future rounds of testing.

Table 7 shows the average difficulty scores broken down by whether the green/reliable or red/not very reliable category was listed first in the data reliability indicator legend.

Table 7: Task Difficulty Scores by the Order of the Levels of the Reliability Legend

Table Type	Task	Red First	Green First	Initial Rating
Selected Pop. Profile	1	1.0	4.5	Easy
	2	4.0	1.0	Easy
	3	1.0	1.0	Easy
	4	8.0	1.0	Hard
	5	7.0	2.5	Hard
	6	1.0	2.5	Medium
	7	1.0	1.0	Medium
	8	<u>5.0</u>	<u>1.0</u>	Hard
	mean	3.2	1.8	
Geographic Comparison	1	1.5	2.0	Easy
	2	3.0	4.0	Medium
	3	4.0	5.5	Hard
	4	3.5	2.0	Medium
	5	4.5	2.0	Medium
	6	5.0	5.5	Hard
	7	<u>3.1</u>	<u>3.4</u>	Easy
	mean	4.5	2.6	

Table 8 shows the average difficulty rating broken down by whether the table was color-coded or not.

Table 8: Task Difficulty Scores by Whether the Reliability Indicator was Color-Coded

Table Type	Task	No Color	Color	Initial Rating
Data Profile	1	3.8	2.0	Easy
	2	4.5	2.5	Easy
	3	4.0	2.8	Medium
	4	5.3	2.5	Hard
	5	4.5	3.8	Medium
	6	5.5	4.0	Medium
	7	6.0	3.0	Medium
	8	<u>6.5</u>	<u>6.3</u>	Hard
	mean	4.8	3.3	
Detailed Tables	1	2.0	3.5	Easy
	2	4.0	3.5	Easy
	3	1.0	6.5	Hard
	4	3.0	3.0	Hard
	5	2.0	3.5	Medium
	6	2.0	4.5	Medium
	7	<u>8.0</u>	<u>3.5</u>	Hard
	mean	3.1	3.8	

5.5 Usability Findings

Successes

Although usability testing often reveals usability issues, it also can highlight the strengths of the data product being tested. The data reliability indicator had several strengths that came through during the sessions.

- Easily understood stoplight analogy

Although participants may not have understood exactly what was meant by statistical reliability, they did pick up on the relative meaning of the color-coded indicator. This meaning was supported by analogy with a red-yellow-green traffic stoplight. Just as in prior rounds of testing, some participants specifically mentioned a stoplight when commenting. Participant 5 said, “Well now thinking about it, they seem to correlate with streetlights, green being go ahead, it’s very positive. Yellow is somewhat mediocre, and red is not at all good or stop. So I guess that makes intuitive sense to me.” Participant 7 made the remark, “I would assume red is bad and green is good, and yellow is neutral.”

- Attractiveness of Added Color

Eye-tracking analysis from all three rounds of testing showed that participants’ eyes were drawn to the color-coded reliability column. Participant 14 commented during the initial probe question about what they noticed first about the tables, “Um, I guess the reliability column because it’s really bright and sort of stands out.” Participant 7 commented during the initial probe question, “The first thing I notice would be the color scheme, red, yellow, and green shaded boxes.”

Many participants commented that they liked the colors themselves because they added a splash of color and aesthetic appeal to the tables. Participant 6 said that colors are good to use to convey information because they are universal and “I love the colors, I’m a color person. I love it.” Participant 7 commented, “I think the use of color is always good in terms of making things clear and helping people focus. So it quickly alerts you to I guess the type of info like how good the information is. I honestly looked at that before I even saw what the table was for.”

- Participant Use of the Data Reliability Indicator

The data reliability indicator was successful in that participants did use it. It is possible that this indicator would be very helpful to statistical novices and they may use the indicator even though they would not normally use the MOE or another measure of error. Participant 12 said during the first task, “I’m not looking at the MOE or the percent. I’m just letting the reliability column do the thinking for me.” Participant 18 understood the general meaning of the indicator, but said that when the indicator shows not very reliable, that you can’t really use estimate. This is evidence that although the participant used the indicator, they saw the “Not Very Reliable” as an instruction not to use the estimate rather than to carefully consider the context of its use.

Usability Issues

Results reported include all identified usability issues and resolutions recommended by the team. Additional Comments by participants can be found in Appendix I. Identified issues are prioritized based on the following criteria:

- **High:** This problem brought the participant to a stand still. He or she was not able to complete the task. For this study, a high-priority issue can also be one where the data reliability indicator was not being applied correctly or there was a fundamental misunderstanding of its meaning.
- **Moderate:** This problem caused some difficulty or confusion, but the participant was able to complete the task.
- **Low:** This problem caused minor annoyance but does not interfere with the flow of the tasks.

High-Priority Issues

- Confusion of Statistical Reliability with Lack of Confidence in the Source or Quality of the Data

Some participants made comments that showed that they associated the “Not Very Reliable” indicator with low-quality data or data that came from an unreliable source (i.e., “good” versus “bad” data). Participant 7 said, ‘It says red is not very reliable so I assume the source of the data is not the best.’ When probed about what the meaning of the colors was, Participant 10 said it was “just good data versus bad data or the strength of the information.” Participant 13 said, “So reliable means to me that the data is very reliable, somewhat reliable there’s a margin of error, and not very reliable means no that data’s not very reliable at all.” Later, the same participant was probed about what she thought the definition of reliability was and responded, “I would expect um reliable to say, reliable means 100 percent of the data is consistent or factual. Somewhat reliable being 90 percent of the data 80 percent of the data is factual, and not very reliable so I would like to see some type of number associated with the ranges of reliability and not very reliable.”

- Vagueness of “Somewhat Reliable”

Several participants commented that they were not sure what “somewhat reliable” meant. Without a clear definition or the inclusion of information about the cutoff CV values, the meaning of this middle category may not be straightforward to users. As a result, they may not use an estimate that would have been appropriate to use in the context of their goals. Participants who made this comment did make the correct

assumption that this category was between “reliable” and “not very reliable” in terms of statistical reliability. However, a few people also made the comment that they were uncertain about whether or not to use an estimate as the answer to a task because they were unsure how large the difference between “reliable” and “somewhat reliable” was. Some participants also said they could justify the use of “not very reliable” data if they could tell if it were near the threshold for “somewhat reliable.” Participant 12 said, “I would not recommend [the reliability indicator] because I don’t understand um how close um the somewhat reliable versus the reliable um are, in relation to one another.” Participant 7 made a detailed comment:

“The transportation data is not very reliable and the education data is somewhat reliable but it’s difficult to use it to make any determination about the answer they’re both pretty subjective, I don’t know the threshold between somewhat and not very or what that means in terms of numbers, especially when the two numbers are close together. Oh I guess I can say, well I guess that’s why, the transportation data has a higher margin of error, I guess that’s why it’s not very versus somewhat. But I’m still not exactly sure about what type of index or what those numbers mean in later columns for margin of error oppose to beginning where it seems to be a whole number.”

It did not seem to make a difference whether the participants saw the indicator legend or not. During debriefing, participants who did not see the legend by clicking on the “View Table Notes” link were shown the legend and asked if it would have been helpful. The majority of participants said that it did not contain enough information about what reliability meant to be of much use.

- Unintuitive Nature of Legend Without Color Where Reliable is Listed First

Related to the usability strength of the intuitive stoplight analogy described above, two participants commented that the analogy does not hold when the color is removed. The dry run participant saw this type of legend and said she was surprised to see “Not Very Reliable” listed first and had to “reverse it in her head” in order to make sense of it. Participant 7 saw a legend with the color-coding and “Not Very Reliable” listed first and also thought having this category first was not intuitive. This participant recommended placing “reliable first because without color it doesn’t make sense to people.”

While this may not be an issue for users who have accessed the tables before and are familiar with their layout, it may be a problem for the novice data user. This is another issue with the table itself and not necessarily with the data reliability indicator, but the data reliability indicator is likely not to be used correctly if the correct estimate is not found.

Medium–Priority Issues

- Uninformative Nature of Reliability Legend

Several participants commented that there was not enough information about the CV, the cutoff values used for the indicator levels, and the definition of reliability. Although some participants never even saw the legend, it did not seem to impact their ability or inclination to use the reliability indicators when compared to the sessions where the participants saw and read the legend. Participant 4 said “If I could click on something, just to read why, why is this reliable?” During debriefing, Participant 4 also said, “I did, I also tried to click on reliability. Cause sometimes, especially when it’s blue I thought that I would be able to sort based on that. Um, and I thought that maybe there would be a pop up saying ‘Reliability is this’.” Participant 5 commented, “Yeah, I mean I like it [reliability], but I didn’t know what it actually meant.” Participant 7 remarked, “I guess.. it seems subjective, so if there were some of key or index that had even if it was a numeric range like things with a MOE of zero to five are considered reliable, even though I don’t necessarily know what that means. But it would give it some sort of qualifying description; it seems like anyone could’ve just drawn a line and say that’s reliable and that’s not reliable and I have no idea where that line is drawn or how or why.” Participant 13 said, “I’m a little confused as to what the reliability factor pertains to.” The experimenter asked the probe question “What are you confused about?” The participant continued, “The reliability of what? The data itself? What being reliable as far as the percentages, are we looking at the margin of error, like what does the reliability factor pertain to, that data is not very reliable based on what, or it’s very reliable but what are we basing that on, the reliability factor?” Participant 19 remarked that there should be numerical values defining the reliability categories, “Again, I don’t really know what that reliability means, I don’t know if there’s a p-value you can put in there or what not, um, test of significance, but I guess I would say it is that score but how reliable. I don’t know what that metric means. Except I know it lists some legend, but again there’s no numerical values attached to it.”

A related issue is that it is unclear how the estimate, percent, MOE, and reliability columns are related to one another. Participant 12 said, “On all of them [tasks] I just find myself going percent, margin of error, not really understanding how they relate to reliable.” Participant 15 used the MOE and reliability indicator interchangeably and called the Margins of Error “reliabilities.”

- Small Font Size

A majority of the participants across all of the conditions remarked that the font size was small. Several had difficulty reading the table contents. However, this problem may have been an artifact of the manner in which the tables were converted to HTML files for testing. The tables were embedded as images into Web screens. If the tables were fully functional as they would be in American Fact Finder (AFF), the tables

would have the ability to be adjusted to fit a user’s preferences more readily.

Low Priority Issues

- View Table Notes

Twenty of the twenty-one participants never clicked on the “View Table Notes” above the upper right corner of the table. Participant 10 actually looked for a legend and did not find it behind the link. Participant 13 said, “As I’m reading through this, by clicking on that link [view table notes], that still would not have given me a better understanding of what a reliability the reliability columns really refers to.”

This issue was especially clear in the wide subject tables (C1 and C2), since participants could potentially never scroll the browser to the point where they could see it. However, since there was no significant difference in performance whether they saw the legend or not, this issue becomes low-priority.

The dry run participant said that she would have clicked on the MOE row header to look for information about reliability. Duplicate links on the MOE and Reliability column headers could help users find the table notes more easily. Participant 19 also said that he would prefer if he could click or mouse over the column headers for more information about the MOE and Reliability.

When shown the reliability legend during debriefing, Participant 4 said, “Maybe it’s just the title, ‘view table notes.’ Maybe if it were like ‘view table definitions’ or something like that, that would make me think that, ok, this means they are explaining something on the table. A table note makes me think that, oh, it’s just something like I can save my notes.” During debriefing, Participant 5 made a similar comment, “I wouldn’t have gone to view table notes to learn about reliability.”

- The Color Coding is Potentially Distracting

As with the previous round of testing, a participant commented that the colors were distracting while completing the tasks. Participant 12 commented that colors distract from reading title; “Oh, you know what, since the colors are so dramatic, I’m just realizing that I didn’t even read the title on this page which is pretty bad” and “I guess it just shows you jump to reading things that pop out.” Participant 16 was drawn to the reliability indicator and did not notice the MOE column. Participant 16 said, “You’ve got these lovely green, yellow, red categories defining reliability instead of giving margins of errors.” When shown a color-coded table and legend after completing the tasks for a table with no color-coding, Participant 21 said that she would prefer the table without color-coding because the “color is intense.”

6 Eye–Tracking Results

6.1 Fixation Durations on Areas of Interest

Location of Data Reliability Indicator Legend

Table 13 shows the fixation durations for the tables where the data reliability indicator legend was above the table versus behind a link. Most notably, the participants who saw tables with the legend above the table looked at the Data Description (row name) for 17.72 seconds on average, which is much longer than the average of 7.43 for the participants who saw tables with a legend behind the link name.

Table 9: Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Data Profiles

AOI	Legend Above Table (A3,A4)	Legend Behind Link (A1,A2)
Column Headers	0.77	0.69
Data Description	17.72	7.43
Estimate	7.84	5.61
Estimate MOE	5.02	2.70
Estimate MOE Link	0.10	0.05
Estimate Reliability Link	0.10	0.13
Information Icon	0.00	0.01
Percent	5.05	3.23
Percent MOE	1.13	1.53
Percent Reliability	1.39	1.89
Percent MOE Link	0.07	0.10
Percent Reliability Link	0.14	0.07
Table Information	0.90	0.35
Table Source	0.12	0.01
Top Links	0.24	0.14
Top Tabs	0.10	0.15
View Table Notes	0.13	0.04
Reliability Legend	1.51	Not Applicable
Legend Levels	0.62	Not Applicable
Legend Text	1.03	Not Applicable

Table 10 shows the average fixation durations. for the tables where the data reliability indicator legend was above the table, versus behind a link. The most striking differences were that participants looked at the Two or More Races Estimate column for the tables with the legend behind a link, compared to 4.98 for the tables with the legend above the table. Similarly, participants looked at the Total Population estimate column for an average or 15 seconds for the Behind Link condition, while they only looked at this column for an average of 8.52 seconds. Participants looked at the Total Population Reliability column an average 11.73 seconds for the Legend Behind Link tables, but only 2.45 seconds for the Legend Above Table condition. This could be evidence that

participants’s eyes are drawn to the colorful reliability column itself more so than if the colorful reliability legend were also present.

Table 10: **Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Selected Population Tables**

AOI	Legend Above Table (B3,B4)	Legend Behind Link (B1,B2)
Data Description	30.42	35.83
Column Headers	0.91	2.09
Two or More Races Estimate	4.98	10.42
Two or More Races MOE	0.94	1.35
Two or More Races Reliability	1.10	1.35
Total Population Estimate	8.52	15.00
Total Population MOE	2.48	4.81
Total Population Reliability	2.45	11.73
Information Icon	2.96	3.39
Table Information	0.03	0.00
Table Source	0.03	0.00
Top Links	0.79	0.63
Top Tabs	0.45	0.32
View Table Notes	0.06	0.14
Reliability Legend	2.14	Not Applicable
Legend Levels	0.64	Not Applicable
Legend Text	0.83	Not Applicable

Table 11 shows the average fixation durations for the tables where the data reliability indicator legend was above the table versus behind a link for the Subject Tables. The largest difference between the table prototypes in terms of fixation duration was that participants looked at the Data Description column for an average 17.86 seconds for the Legend Above Table condition compared to an average 6.37 seconds for the Legend Behind Link condition. There were longer fixations on the Management, Management MOE, Management Reliability, and Service MOE for the Behind Link tables, but overall the fixation durations were fairly similar.

Table 11: **Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Subject Tables**

AOI	Legend Above Table (C2)	Legend Behind Link (C1)
Column Headers	10.08	11.86
Data Description	17.86	6.37
Information Icon	0.00	0.00
Construction	0.06	0.00
Construction MOE	0.00	0.00
Construction Reliability	0.09	0.20
Farming	0.31	0.30
Farming MOE	0.06	0.23
Farming Reliability	0.15	0.07
Management	2.13	4.52
Management MOE	1.00	3.65
Management Reliability	1.69	2.48
Production	0.00	0.00
Production MOE	0.06	0.00
Production Reliability	0.00	0.00
Sales	2.28	6.40
Sales MOE	0.22	1.64
Sales Reliability	1.09	0.94
Service	2.27	1.84
Service MOE	0.54	2.01
Service Reliability	1.26	0.46
Table Source	0.15	0.22
Table Information	0.74	1.33
Top Links	0.79	0.13
Top Tabs	0.75	0.94
Reliability Legend	Not Applicable	0.33
Legend Levels	Not Applicable	0.13
Legend Text	Not Applicable	0.13

Table 12 shows that there is a large difference in the amount of time spent looking at the Percent and Reliability columns in these tables. In fact, participants looked at every AOI longer in the Legend Behind Link condition than the Above Table condition. When the reliability legend is present, it may reduce the amount of time participants need to look at the reliability column itself while interpreting its meaning. On the contrary, participants may spend more time reading and cognitively processing the reliability column when the legend is absent.

Table 12: Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Geographic Comparison Tables

AOI	Above Table (E3,E4)	Behind Link (E1,E2)
Geographical Area	2.52	8.28
Column Headings	0.80	2.05
Information Icon	0.02	0.03
MOE	3.88	7.98
Percent	3.40	11.85
Reliability	8.54	23.92
Table Information	2.56	2.62
Table Source	0.00	0.16
Top Links	0.89	0.91
Top Tabs	0.28	0.43
View Table Notes	0.61	0.86
Reliability Legend	2.23	NA
Legend Colors	0.31	NA
Legend Text	1.37	NA

The information icon may not be very helpful, since it was hardly looked at.

Color vs. No Color

Table 13 presents the fixation durations for the tables with a color-coded data reliability indicator as compared to the tables with a plain text indicator with no color for the Data Profile Tables. For this analysis, the location of the legend was removed from the analysis, since no one saw the legend for the tables where it was behind the “View Table Notes” link. The largest difference in fixation duration between the two conditions was that participants looked at the Data Description column for an average of 16.30 for the color-coded tables, but only an average of 11.40 for the tables without color. Overall, the fixation durations on the AOIs were similar for the two prototypes.

Table 13: **Fixation Durations (in seconds): Color vs. No Color for Data Profile Tables**

AOI	Color (A1,A3)	No Color (A2,A4)
Column Headers	0.91	0.73
Data Description	16.30	11.40
Estimate	7.12	5.93
Estimate MOE	4.07	3.35
Estimate MOE Link	0.09	0.20
Estimate Reliability Link	0.10	0.13
Information Icon	0.01	0.00
Percent	4.69	4.31
Percent MOE	1.38	1.56
Percent Reliability	1.76	1.85
Percent MOE Link	0.10	0.12
Percent Reliability Link	0.03	0.19
Table Information	0.84	0.37
Table Source	0.05	0.06
Top Links	0.21	0.16
Top Tabs	0.10	0.11
View Table Notes	0.14	0.05

Table 14 shows the fixation durations for the tables with a color-coded data reliability indicator as compared to the tables with a plain text indicator with no color for the Detailed Tables. The most notable differences in the fixation durations for the two prototypes are that participants looked at the Data description column for an average of 12.28 in the Color condition versus only 6.64 for the No Color condition. Participants also fixated on the Apple County Reliability Column for 7.88 seconds on average for the Color tables as compared to only 3.96 seconds for the No Color tables. Since Apple County is the first county that appears at the left-hand side of the table, this may be evidence that participants’s eyes were initially drawn to the most colorful part of the screen. Participants looked at the Cherry County Reliability column almost twice as long for the No Color tables as they did for the Color tables, and this is the last and right-most county displayed in the table. This is consistent with participants becoming accustomed to the color-coded table.

Table 14: **Fixation Durations (in seconds): Color vs. No Color for Detailed Tables**

AOI	Color (D1)	No Color (D2)
Geography Headers	0.42	1.89
Data Description	6.64	12.28
Apple County Estimate	2.79	1.89
Apple County Estimate MOE	2.06	1.10
Apple County Reliability	7.88	3.96
Birch County Estimate	4.21	3.07
Birch County MOE	1.00	1.60
Birch County Reliability	3.67	4.56
Cherry County Estimate	1.46	2.57
Cherry County MOE	0.00	0.05
Cherry County Reliability	0.88	1.66
Information Icon	0.02	0.00
Table Information	0.92	0.47
Table Source	0.22	0.26
Top Links	0.60	0.49
Top Tabs	0.18	0.33
View Table Notes	0.04	0.07

Order of the Legend Levels

Table 15 shows the average fixation durations for the tables with the Red/“Not Very Reliable” level presented at the top of the reliability legend and the tables where the Green/“Reliable” level was displayed first for the Selected Population Profile tables. The reliability legend AOIs were removed because the tables with the legends behind the “View Table Notes” link did not have a visible AOI legend. Although the fixation durations are similar overall, participants with the Green First tables looked at the Column Headers and Total Population Estimate columns longer on average than the participants with the Red First tables. Participants in the Green First condition looked at the Two or More Races Estimate column longer on average than participants in the Red First condition.

Table 15: **Fixation Durations (sec): Red/Not Very Reliable First Versus Green/Reliable in Legend for Selected Population Profiles**

AOI	Red First (B1,B3)	Green First (B2,B4)
Data Description	33.24	32.49
Column Headers	0.71	2.33
Two or More Races Estimate	9.12	5.82
Two or More Races MOE	1.77	0.42
Two or More Races Reliability	4.64	5.07
Total Population Estimate	9.66	13.80
Total Population MOE	4.27	2.88
Total Population Reliability	6.52	7.72
Information Icon	0.00	0.07
Table Information	1.41	3.75
Table Source	0.02	0.00
Top Links	0.83	0.54
Top Tabs	0.43	0.30
View Table Notes	0.05	0.15

Table 16 shows the average fixation durations for the tables with the Red/“Not Very Reliable” level presented at the top of the reliability legend and the tables where the Green/“Reliable” level was displayed first for the Geographic Comparison tables. The fixation durations were similar overall.

Table 16: **Fixation Durations (sec): Red/Not Very Reliable First Versus Green/Reliable in Legend for Geographic Comparison Tables**

AOI	Red First (E1,E3)	Green First (E2,E4)
Geographical Area	4.71	6.10
Column Headings	1.51	1.34
Information Icon	0.00	0.05
MOE	6.17	5.68
Percent	7.30	8.25
Reliability	16.81	15.65
Table Information	2.11	3.07
Table Source	0.01	0.16
Top Links	0.79	1.01
Top Tabs	0.38	0.33
View Table Notes	0.65	0.82

6.2 Heatmaps

Heatmaps are visualization tools that show where participants looked most often on a stimulus, in this case the data tables. This section provides a heatmap for each of the tables. Overall, participants’ eyes are drawn most to the color-coded columns and row descriptions (data descriptions).⁴

Data Profile Tables

For tables A1, A3, and A4, the participants looked at the column headers, but the participants who saw the A4 table did not read them very carefully. The participant who saw the A2 table did not read the table’s title, while the participants in every other Data Profile Table condition did. This may be due to individual differences, since only one person saw the A2 table.

Figure 2 shows the heatmap for Table A1, Figure 3 shows the heatmap for Table A2, Figure 4 shows the heatmap for Table A3, and Figure 5 shows the heatmap for Table A4. Comparing Tables A1 and A2, the heatmap for A1 shows that participants look at the margin of error more than in the heatmap for A2, especially in the Ancestry section at the end of the table. The color-coded reliability indicator may have been attracting additional attention to the right side of the table. Participants looked at the relationship section more for table A2 than in A1 (e.g., the section is “hotter”). The color-coded reliability column could have helped participants track the rows across, requiring the participants with the A2 table to more carefully follow the row. Participants for Table A2 also looked at the column headers more than those for A1.

Comparing Tables A3 and A4, the heatmap of the columns near the color-coded reliability column in A3 appear “hotter” than those in A4, which also occurred in Table A1 more than Table A2. Again, the colors may attract additional attention to that section of the table.

Participants did appear to read the Data Reliability Indicator description in the legend. Similar reading patterns were found for tables A3, A4, B4, C2, E3, and to a certain extent, B3 and E4.

⁴It is important to note that some tables only had one participant view them. Therefore, strong conclusions about differences in the heatmaps cannot be made.

Figure 2: Heatmap for Table A1, Two Participants



Figure 4: Heatmap for Table A3, Three Participants

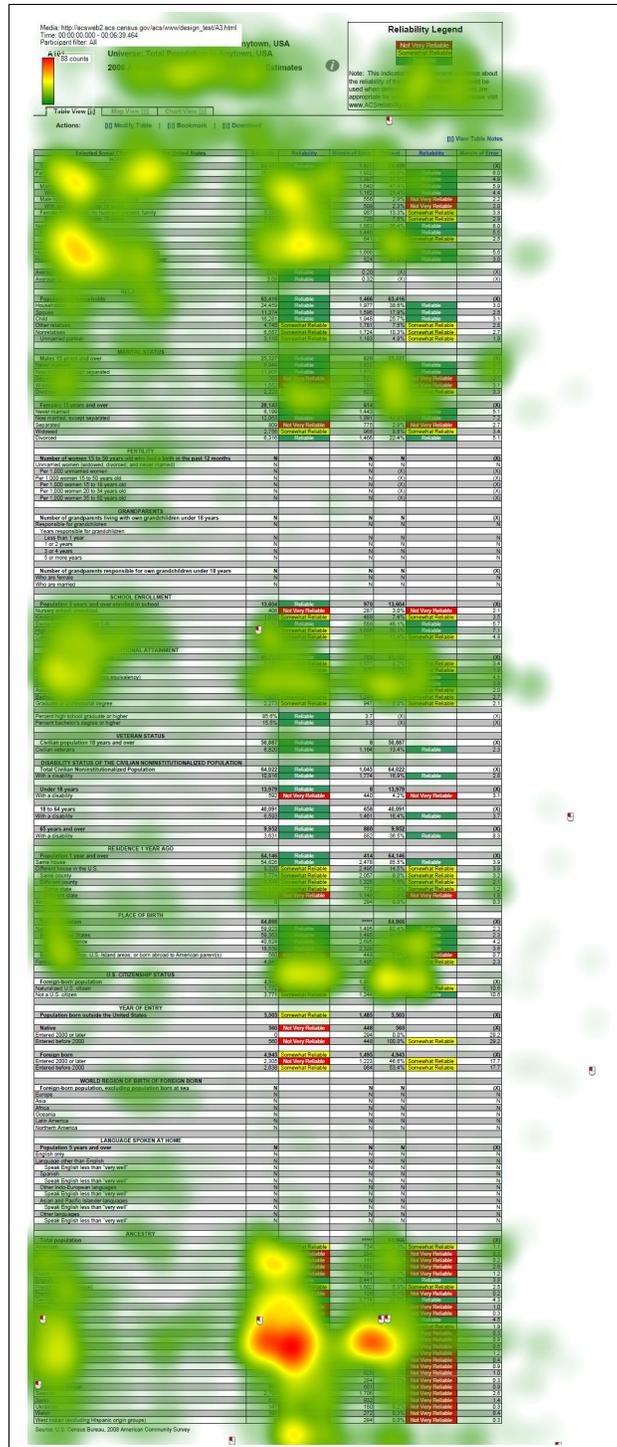
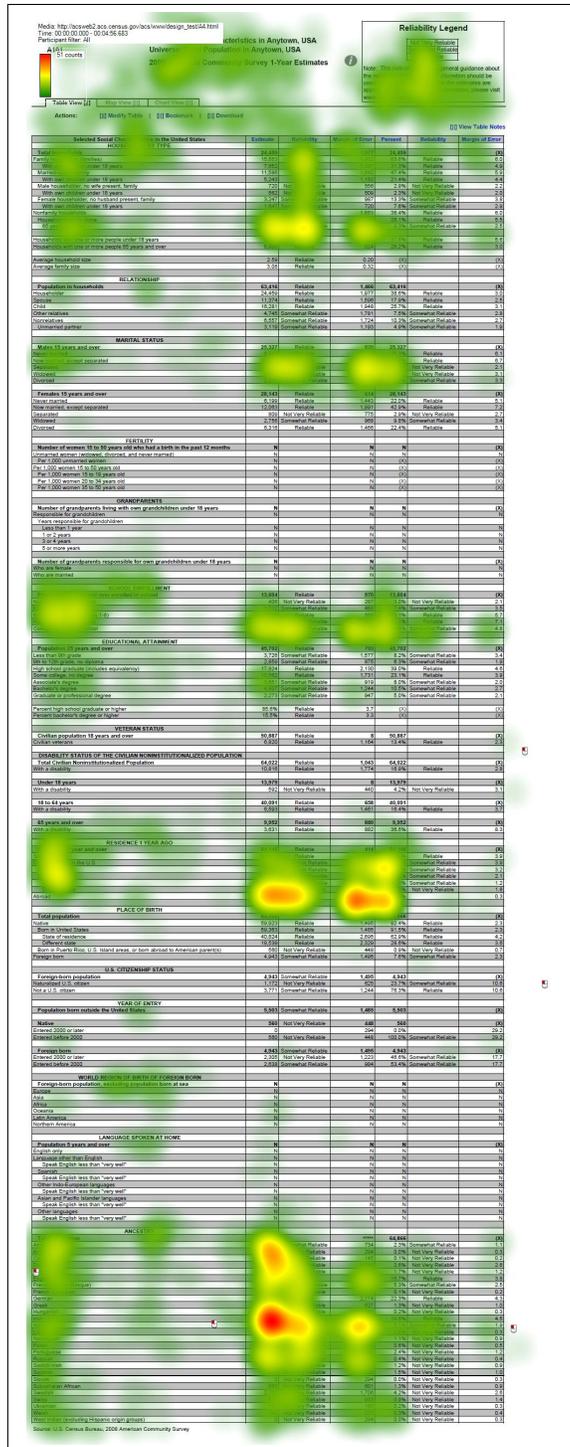


Figure 5: Heatmap for Table A4, Two Participants



Selected Population Profile Tables

Figure 6 shows the heatmap for Table B1, Figure 7 displays the heatmap for Table B2, Figure 8 shows the heatmap for Table B3, and Figure 9 displays the heatmap for Table B4. Across all of the conditions but B4, the participants looked at the column headers. The participant who did not read the column headers could have had greater confusion during the session during the tasks that require a response from the “Two or More Races” column.

Figure 6: Heatmap for Table B1, One Participant



Figure 7: Heatmap for Table B2, One Participant

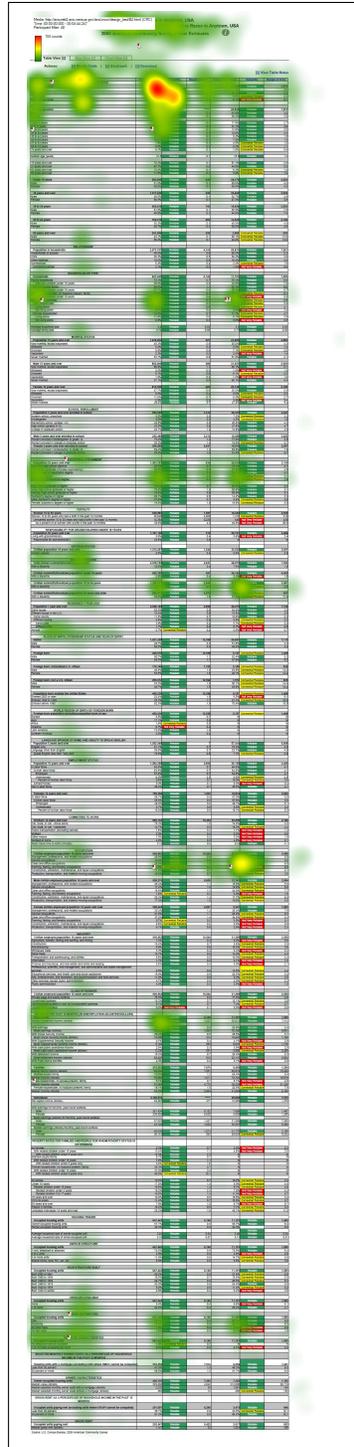


Figure 8: Heatmap for Table B3, One Participant

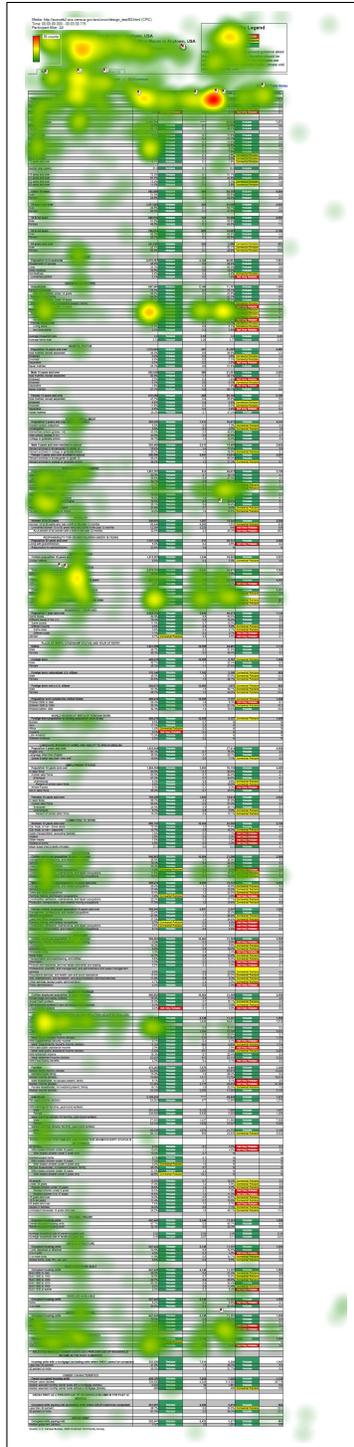
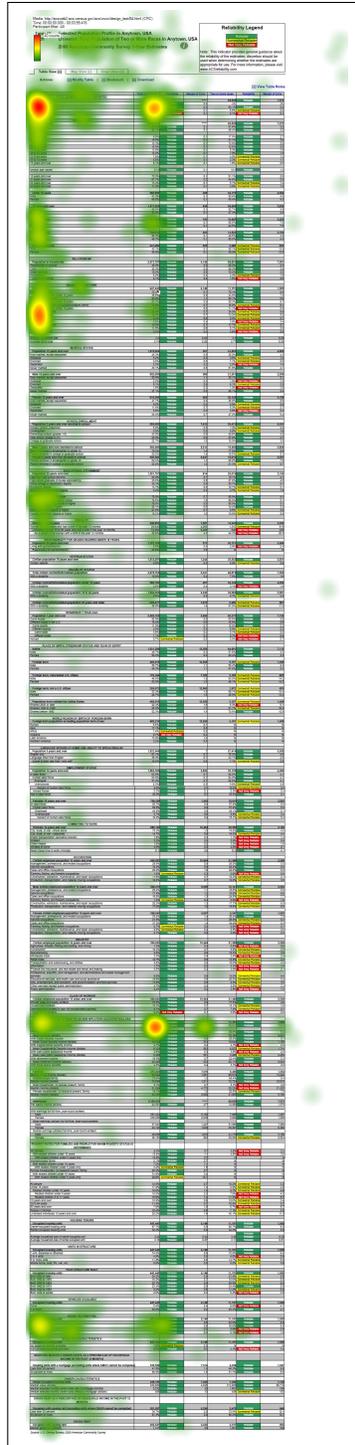


Figure 9: Heatmap for Table B4, One Participant



Subject Tables

The participants who saw the wide Subject Tables did not read the right side of the table. In order to see this area, participants would have had to scroll horizontally to the right. The requirement of horizontal scrolling goes against the commonly held usability principle to avoid horizontal scrolling whenever possible.

Figure 10: Heatmap for Table C1, One Participant

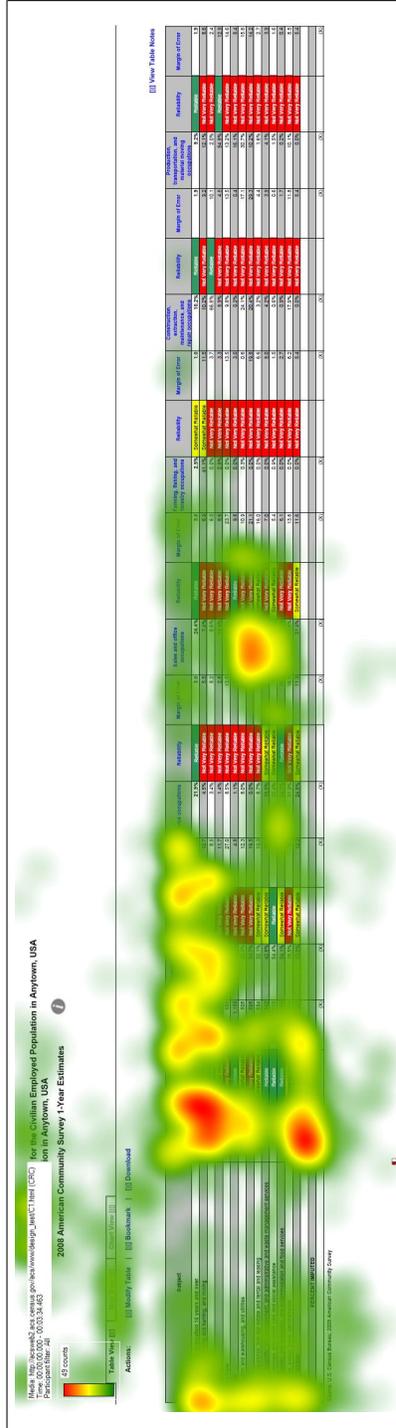
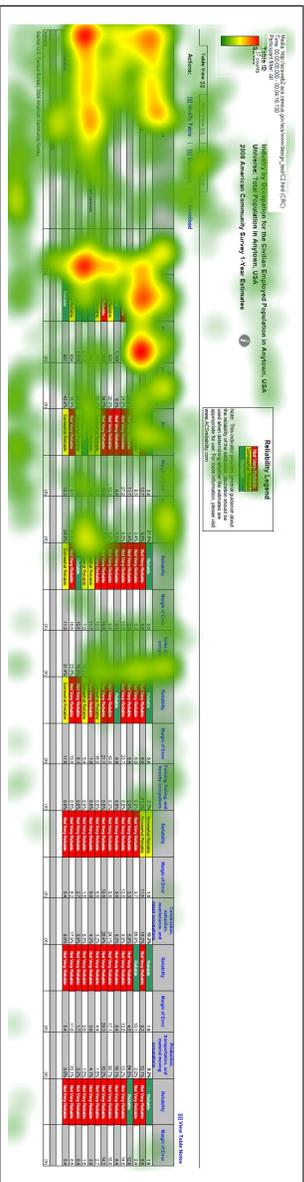


Figure 11: Heatmap for Table C2, One Participant



Detailed Tables

There were similar fixation patterns for both D1 and D2, which indicates that the participants who saw these tables interacted with them in a similar fashion. The main difference was that the color-coded reliability columns drew more fixations to the estimate columns in D1 than the non-color coded estimate columns in D2.

Figure 12: Heatmap for Table D1, Two Participants



Figure 13: Heatmap for Table D2, One Participant



Geographical Comparison Tables

Overall, the fixation patterns were similar for all of the Geographical Comparison Tables. The participant in E3 did not look at the margin of error often, but participants across the conditions and tables differed widely when looking at the margin of error. Differences in duration of fixation on margin of error may also depend on how long they spent trying to identify what the reliability or margin of error was determined by.

Figure 14: Heatmap for Table E1, One Participant

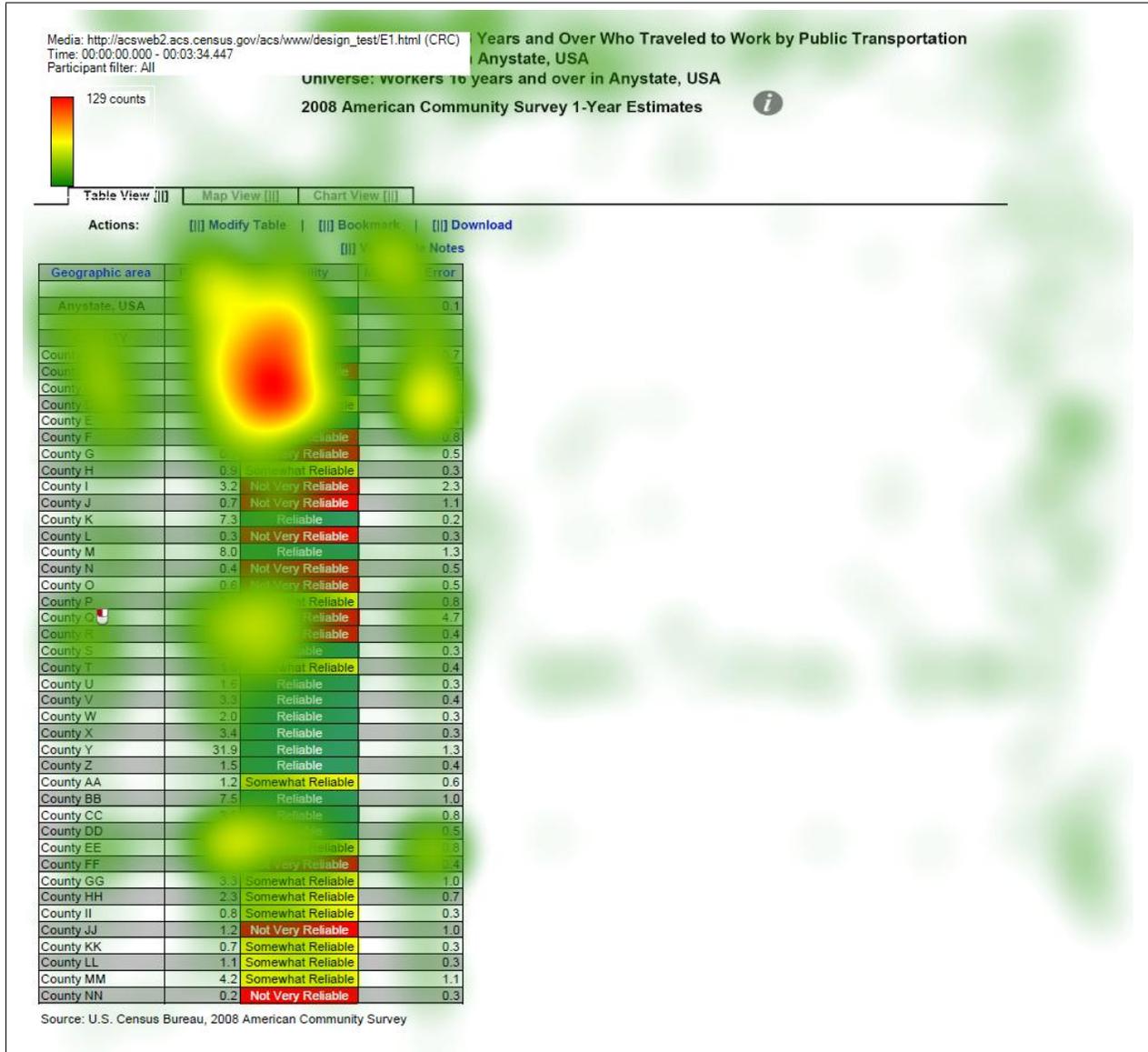


Figure 15: Heatmap for Table E2, One Participant

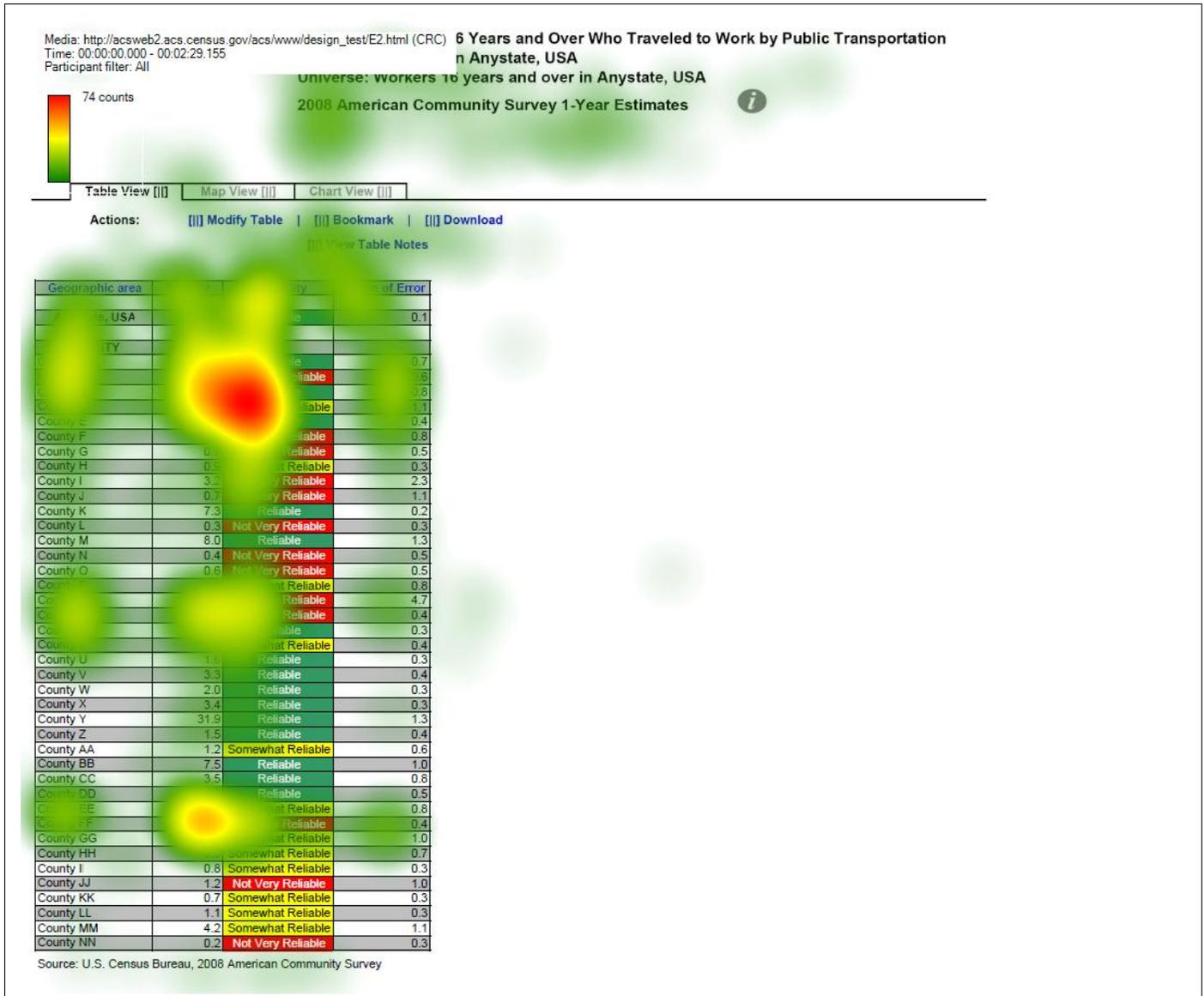
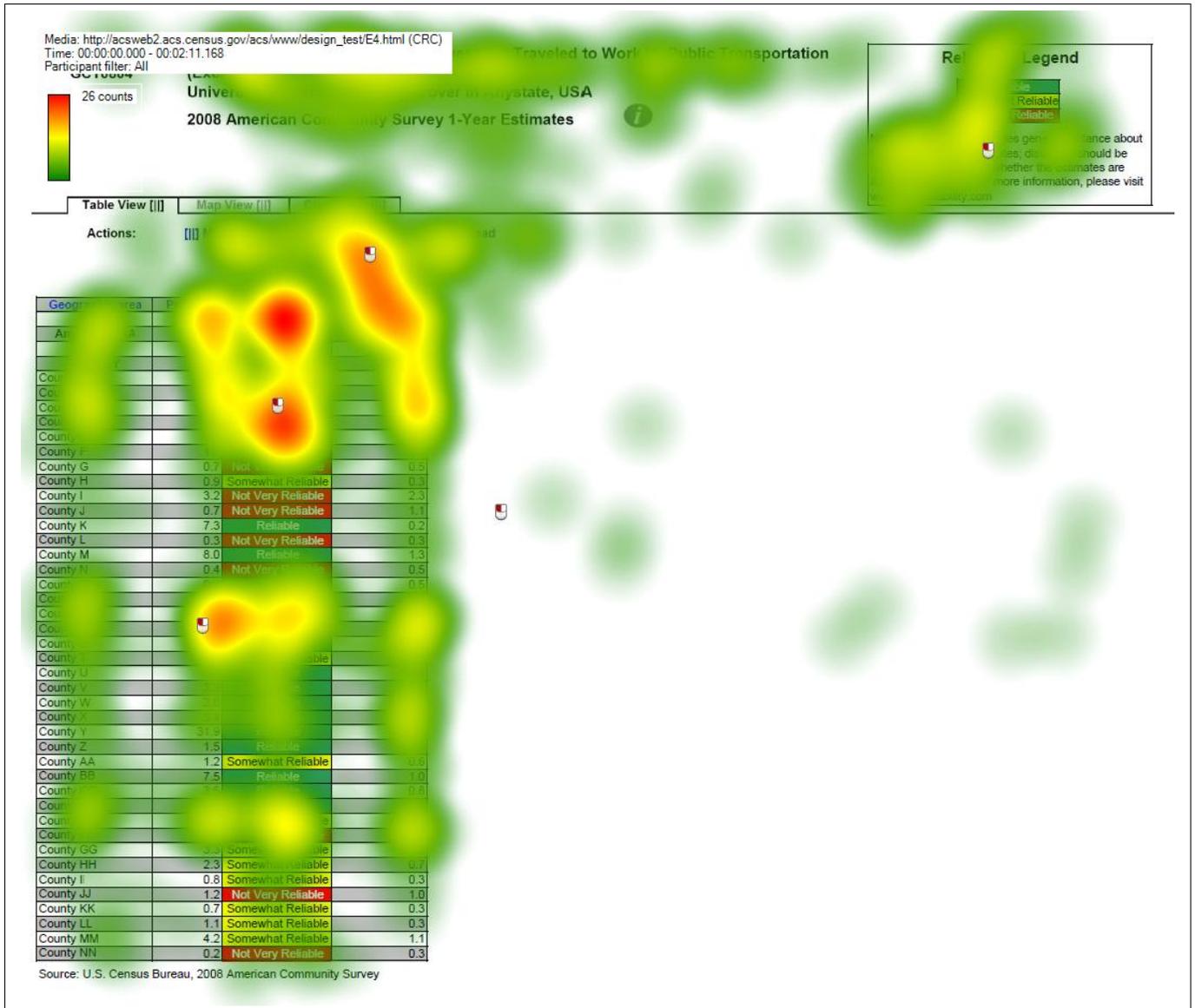


Figure 17: Heatmap for Table E4, One Participant



6.3 Summary

The participants' response to the data reliability indicators was mostly positive, as it was for the first two rounds of testing. However, there was some confusion about the indicator. For instance, some participants confused the concept of statistical reliability with a lack of confidence in the source or quality of the data or had trouble interpreting what "Somewhat Reliable" really meant.

In terms of whether the data reliability legend is displayed above the table or behind a link, "Reliable" or "Not Very Reliable" is listed first, or whether it is color-coded, the usability goals were met for accuracy of responses and users satisfaction for all of the conditions (although the goal was not met for all data products). However, the efficiency goal was not met for several of the table types.

Overall, it appears that participants can use the tables equally well whether or not the indicator has color-coding, has a legend above the table or behind a link, or whether the "Reliable" or "Not Very Reliable" indicator is listed first in the legend. Participants can use the tables with about equal efficiency whether it is color-coded or not and whether "Reliable" or "Not Very Reliable" is listed first. However, the tables with the legend placed above the table had scores that were 30 seconds longer than the scores for the tables with the legend placed behind a hyperlink.

when asked for their preference during debriefing, most participants in the text-only (i.e., no color-coding) conditions indicated that they would prefer the color-coded version .

Many participants had trouble tracking estimates across the table, reading the small text, and interpreting the meaning of "Somewhat Reliable."

As with the previous rounds of testing, there was a general sense of confusion about the meaning of "reliability" and what the cut-offs for the different levels of reliability were. Since none of the participants with the legend behind the link actually clicked on the link during testing, none of these participants saw the legend.⁵ It is unclear whether this would have been beneficial to them or not.

⁵One participant with the legend located above the table clicked on this link.

References

- Ashenfelter, K. T. (2010). Data reliability indicator based on the coefficient of variation: Results from the second round of testing. *Statistical Research Division Research Report Series*.
- Ashenfelter, K. T., Beck, J., & Murphy, E. D. (2009). Final report for first-round usability testing of data-reliability indicator prototypes. *Statistical Research Division Report Series, Report SSM2009/01*. Available from <http://www.census.gov/srd/papers/pdf/ssm2009-01.pdf>
- Chin, J. P., Diehl, V., & Norman, K. L. (1988). Development of an instrument measuring user satisfaction of the human-computer interface. *Proceedings of CHI 88: Human Factors in Computing Systems*, 213-218.
- Tersine, A. (2010). Proposal to apply a reliability indicator to ACS estimates. *U.S. Census Bureau Document: Prepared for the 2010 Census Advisory Committee and the Census Scientific Advisory Committee*.
- Tobii Technology, I. (2008). *Tobii studio enterprise edition software*.
- Whitford, D., & Weinberg, D. (2008). Proposal to highlight american community survey data with a data confidence indicator. *U.S. Census Bureau Document*.

7 Appendix A: Tables

The longer tables that scrolled down vertically have been broken up into three sections (called Top, Middle, and Bottom for the relative vertical position of the sections) for increased legibility.

Figure 18: Data Profile Table with Color-Coding and the Legend Behind a Link (A1): Top

Table ID	Selected Social Characteristics in Anytown, USA					
A101	Universe: Total Population in Anytown, USA					
	2008 American Community Survey 1-Year Estimates					
Table View Map View Chart View						
Actions: Modify Table Bookmark Download						
View Table Notes						
Selected Social Characteristics in the United States	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
HOUSEHOLDS BY TYPE						
Total households	24,459	Reliable	1,977	24.459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,598	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,182	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	558	2.9%	Not Very Reliable	2.2
With own children under 18 years	562	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.8%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,188	Reliable	1,686	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	924	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63.416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,596	17.8%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,745	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25.327		(X)
Never married	8,944	Reliable	1,833	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28.143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,063	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.0%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren	N		N	N		N
Less than 1 year	N		N	N		N

Figure 19: Data Profile Table with Color-Coding and the Legend Behind a Link (A1): Middle

GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren						
Less than 1 year	N		N	N		N
1 or 2 years	N		N	N		N
3 or 4 years	N		N	N		N
5 or more years	N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years	N		N	N		(X)
Who are female	N		N	N		N
Who are married	N		N	N		N
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	13,604	Reliable	970	13,604		(X)
Nursery school, preschool	406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten	1,012	Somewhat Reliable	488	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)	6,285	Reliable	556	46.1%	Reliable	5.7
High school (grades 9-12)	4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school	1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT						
Population 25 years and over	45,702	Reliable	703	45,702		(X)
Less than 9th grade	3,726	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma	2,858	Somewhat Reliable	675	6.3%	Somewhat Reliable	1.9
High school graduate (includes equivalency)	17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree	10,562	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree	3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree	4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree	2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher	85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher	15.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS						
Civilian population 18 years and over	50,887	Reliable	8	50,887		(X)
Civilian veterans	6,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION						
Total Civilian Noninstitutionalized Population	64,022	Reliable	1,043	64,022		(X)
With a disability	10,516	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years	13,979	Reliable	8	13,979		(X)
With a disability	592	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years	40,091	Reliable	658	40,091		(X)
With a disability	6,583	Reliable	1,461	16.4%	Reliable	3.7
65 years and over	9,952	Reliable	880	9,952		(X)
With a disability	3,631	Reliable	882	36.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO						
Population 1 year and over	64,146	Reliable	414	64,146		(X)
Same house	54,826	Reliable	2,478	85.5%	Reliable	3.9
Different house in the U.S.	9,320	Somewhat Reliable	2,495	14.5%	Somewhat Reliable	3.9
Same county	5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county	3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state	1,668	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state	1,878	Not Very Reliable	1,149	2.9%	Not Very Reliable	1.8
Abroad	0		294	0.0%		0.3
PLACE OF BIRTH						
Total population	64,866		64,866			(X)
Native	59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	82.9%	Reliable	4.2
Different state	18,539	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	580	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)

Figure 20: Data Profile Table with Color-Coding and the Legend Behind a Link (A1):
Bottom

Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	53.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable	2.6
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,467	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	769	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	883	Not Very Reliable	601	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable	2.6
Swiss	815	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	150	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 21: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):
Top

Table ID A101		Selected Social Characteristics in Anytown, USA Universe: Total Population in Anytown, USA		2008 American Community Survey 1-Year Estimates			
Table View 		Map View 		Chart View 			
Actions:		 Modify Table		 Bookmark		 Download	
							 View Table Notes
Selected Social Characteristics in the United States							
HOUSEHOLDS BY TYPE							
	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error	
Total households	24,459	Reliable	1,977	24,459			(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable		6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable		4.9
Married-couple family	11,590	Reliable	1,640	47.4%	Reliable		5.9
With own children under 18 years	5,243	Reliable	1,182	21.4%	Reliable		4.4
Male householder, no wife present, family	720	Not Very Reliable	556	2.9%	Not Very Reliable		2.2
With own children under 18 years	582	Not Very Reliable	508	2.3%	Not Very Reliable		2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable		3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable		2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable		6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable		5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable		2.5
Households with one or more people under 18 years	9,186	Reliable	1,666	37.6%	Reliable		5.6
Households with one or more people 65 years and over	6,906	Reliable	924	20.2%	Reliable		3.9
Average household size	2.59	Reliable	0.20	(X)			(X)
Average family size	3.08	Reliable	0.32	(X)			(X)
RELATIONSHIP							
Population in households	63,416	Reliable	1,466	63,416			(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable		3.0
Spouse	11,374	Reliable	1,596	17.9%	Reliable		2.5
Child	16,281	Reliable	1,948	25.7%	Reliable		3.1
Other relatives	4,746	Somewhat Reliable	1,781	7.5%	Somewhat Reliable		2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable		2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable		1.9
MARITAL STATUS							
Males 15 years and over	25,327	Reliable	820	25,327			(X)
Never married	8,944	Reliable	1,633	35.3%	Reliable		6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable		6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable		2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable		3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable		3.3
Females 15 years and over	28,143	Reliable	614	28,143			(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable		5.1
Now married, except separated	12,063	Reliable	1,991	42.9%	Reliable		7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable		2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable		3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable		5.1
FERTILITY							
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N			(X)
Unmarried women (widowed, divorced, and never married)	N		N	N			N
Per 1,000 unmarried women	N		N	(X)			(X)
Per 1,000 women 15 to 50 years old	N		N	(X)			(X)

Figure 22: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):Middle

Different state	18,539	Reliable	2,329	28.6%	Reliable	3.8
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.8%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.8
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.8
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	48.8%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	63.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 3 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,889	2.6%	Not Very Reliable	2.8
Dutch	1,099	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,467	Somewhat Reliable	1,802	5.3%	Somewhat Reliable	2.5
French Canadian	78	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.8%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	883	Not Very Reliable	601	1.3%	Not Very Reliable	0.8
Swedish	2,705	Not Very Reliable	1,708	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 23: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):
Bottom

Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	62.9%	Reliable	4.2
Different state	18,836	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.6
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	63.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable	2.6
Dutch	1,086	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,487	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	890	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Nonwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	670	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	863	Not Very Reliable	601	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,708	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 24: Data Profile Table with Color-Coding and the Legend Above the Table (A3):Top

Selected Social Characteristics in the United States	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
HOUSEHOLDS BY TYPE						
Total households	24,459	Reliable	1,977	24,459		(X)
Family households (families)	15,563	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,586	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,162	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	556	2.9%	Not Very Reliable	2.2
With own children under 18 years	562	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,186	Reliable	1,666	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	824	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63,416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,586	17.9%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,746	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,183	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25,327		(X)
Never married	8,944	Reliable	1,633	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	621	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28,143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,083	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						

Reliability Legend

Not Very Reliable
Somewhat Reliable
Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View [] | Map View [] | Chart View []

Actions: [] Modify Table | [] Bookmark | [] Download

[] View Table Notes

Figure 25: Data Profile Table with Color-Coding and the Legend Above the Table (A3): Middle

Per 1,000 women 20 to 34 years old		N		N	(X)		(X)
Per 1,000 women 35 to 50 years old		N		N	(X)		(X)
GRANDPARENTS							
Number of grandparents living with own grandchildren under 18 years		N		N	N		(X)
Responsible for grandchildren		N		N	N		N
Years responsible for grandchildren							
Less than 1 year		N		N	N		N
1 or 2 years		N		N	N		N
3 or 4 years		N		N	N		N
5 or more years		N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years		N		N	N		(X)
Who are female		N		N	N		N
Who are married		N		N	N		N
SCHOOL ENROLLMENT							
Population 3 years and over enrolled in school		13,604	Reliable	970	13,604		(X)
Nursery school, preschool		406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten		1,012	Somewhat Reliable	488	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)		6,265	Reliable	556	46.1%	Reliable	5.7
High school (grades 9-12)		4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school		1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT							
Population 25 years and over		45,702	Reliable	703	45,702		(X)
Less than 9th grade		3,728	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma		2,859	Somewhat Reliable	875	6.3%	Somewhat Reliable	1.8
High school graduate (includes equivalency)		17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree		10,662	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree		3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree		4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree		2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher		85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher		15.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS							
Civilian population 18 years and over		50,887	Reliable	8	50,887		(X)
Civilian veterans		6,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION							
Total Civilian Noninstitutionalized Population		64,022	Reliable	1,043	64,022		(X)
With a disability		10,818	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years		13,979	Reliable	8	13,979		(X)
With a disability		582	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years		40,091	Reliable	658	40,091		(X)
With a disability		6,593	Reliable	1,461	16.4%	Reliable	3.7
65 years and over		9,952	Reliable	880	9,952		(X)
With a disability		3,631	Reliable	882	36.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO							
Population 1 year and over		64,146	Reliable	414	64,146		(X)
Same house		54,828	Reliable	2,478	85.5%	Reliable	3.9
Different house in the U.S.		9,320	Somewhat Reliable	2,495	14.5%	Somewhat Reliable	3.9
Same county		5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county		3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state		1,868	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state		1,878	Not Very Reliable	1,149	2.9%	Not Very Reliable	1.8
Abroad		0		294	0.0%		0.3
PLACE OF BIRTH							
Total population		64,866		****	64,866		(X)
Native		59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States		59,369	Reliable	1,485	91.5%	Reliable	2.3
State of residence		40,824	Reliable	2,695	62.9%	Reliable	4.2
Different state		18,539	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)		560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born		4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS							
Foreign-born population		4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen		1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.8

Figure 26: Data Profile Table with Color-Coding and the Legend Above the Table (A3): Bottom

YEAR OF ENTRY					
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503	
Native	560	Not Very Reliable	448	560	
Entered 2000 or later	0		294	0.0%	
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable
Foreign born	4,943	Somewhat Reliable	1,495	4,943	
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable
Entered before 2000	2,638	Somewhat Reliable	984	53.4%	Somewhat Reliable
WORLD REGION OF BIRTH OF FOREIGN BORN					
Foreign-born population, excluding population born at sea	N		N	N	
Europe	N		N	N	
Asia	N		N	N	
Africa	N		N	N	
Oceania	N		N	N	
Latin America	N		N	N	
Northern America	N		N	N	
LANGUAGE SPOKEN AT HOME					
Population 5 years and over	N		N	N	
English only	N		N	N	
Language other than English	N		N	N	
Speak English less than "very well"	N		N	N	
Spanish	N		N	N	
Speak English less than "very well"	N		N	N	
Other Indo-European languages	N		N	N	
Speak English less than "very well"	N		N	N	
Asian and Pacific Islander languages	N		N	N	
Speak English less than "very well"	N		N	N	
Other languages	N		N	N	
Speak English less than "very well"	N		N	N	
ANCESTRY					
Total population	64,866		****	64,866	
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable
English	10,824	Reliable	2,441	16.7%	Reliable
French (except Basque)	3,467	Somewhat Reliable	1,602	5.3%	Somewhat Reliable
French Canadian	78	Not Very Reliable	126	0.1%	Not Very Reliable
German	14,479	Reliable	2,774	22.3%	Reliable
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable
Irish	12,714	Reliable	2,912	19.6%	Reliable
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable
Polish	358	Not Very Reliable	363	0.6%	Not Very Reliable
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable
Scotch-Irish	769	Not Very Reliable	570	1.2%	Not Very Reliable
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable
Subsaharan African	863	Not Very Reliable	601	1.3%	Not Very Reliable
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 27: Data Profile Table with No Color-Coding and the Legend Above the Table (A4):
Top

Table ID		Selected Social Characteristics in Anytown, USA		Reliability Legend		
A101		Universe: Total Population in Anytown, USA		<div style="border: 1px solid black; padding: 2px; display: inline-block;">Not Very Reliable</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Somewhat Reliable</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Reliable</div>		
		2008 American Community Survey 1-Year Estimates		Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com		
Table View Map View Chart View		Actions: Modify Table Bookmark Download				
View Table Notes						
Selected Social Characteristics in the United States						
	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
HOUSEHOLDS BY TYPE						
Total households	24,459	Reliable	1,977	24,459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,586	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,162	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	558	2.9%	Not Very Reliable	2.2
With own children under 18 years	582	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,188	Reliable	1,666	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	824	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63,416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,596	17.9%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,745	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25,327		(X)
Never married	9,944	Reliable	1,633	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28,143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,083	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)

Figure 28: Data Profile Table with No Color-Coding and the Legend Above the Table (A4): Middle

Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren						
Less than 1 year	N		N	N		N
1 or 2 years	N		N	N		N
3 or 4 years	N		N	N		N
5 or more years	N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years	N		N	N		(X)
Who are female	N		N	N		N
Who are married	N		N	N		N
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	13,604	Reliable	970	13,604		(X)
Nursery school, preschool	406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten	1,012	Somewhat Reliable	498	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)	6,265	Reliable	556	48.1%	Reliable	5.7
High school (grades 9-12)	4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school	1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT						
Population 25 years and over	45,702	Reliable	703	45,702		(X)
Less than 9th grade	3,726	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma	2,859	Somewhat Reliable	875	8.3%	Somewhat Reliable	1.9
High school graduate (includes equivalency)	17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree	10,562	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree	3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree	4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree	2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher	85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher	16.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS						
Civilian population 18 years and over	50,887	Reliable	8	50,887		(X)
Civilian veterans	8,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION						
Total Civilian Noninstitutionalized Population	64,022	Reliable	1,043	64,022		(X)
With a disability	10,816	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years	13,979	Reliable	8	13,979		(X)
With a disability	592	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years	40,091	Reliable	658	40,091		(X)
With a disability	6,593	Reliable	1,481	16.4%	Reliable	3.7
65 years and over	9,952	Reliable	880	9,952		(X)
With a disability	3,631	Reliable	882	38.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO						
Population 1 year and over	64,146	Reliable	414	64,146		(X)
Same house	54,826	Reliable	2,478	85.5%	Reliable	3.9
Different house in the U.S.	9,320	Somewhat Reliable	2,495	14.5%	Somewhat Reliable	3.9
Same county	5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county	3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state	1,888	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state	1,878	Not Very Reliable	1,149	2.8%	Not Very Reliable	1.8
Abroad	0		294	0.0%		0.3
PLACE OF BIRTH						
Total population	64,866		****	64,866		(X)
Native	59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,874	Reliable	2,895	87.9%	Reliable	4.7

Figure 29: Data Profile Table with No Color-Coding and the Legend Above the Table (A4):
Bottom

Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	82.9%	Reliable	4.2
Different state	18,539	Reliable	2,329	28.6%	Reliable	3.8
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.6
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native						
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born						
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	994	53.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		***	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,889	2.8%	Not Very Reliable	2.8
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,487	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	368	Not Very Reliable	363	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	280	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	893	Not Very Reliable	801	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	632	0.6%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Figure 30: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Top

Table ID
S201

Selected Population Profile in Anytown, USA
Universe: Total Population of Two or More Races in Anytown, USA
2008 American Community Survey 1-Year Estimates



Table View [X]		Map View [X]		Chart View [X]		
Actions: [X] Modify Table [X] Bookmark [X] Download						
[X] View Table Notes						
Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,516		****	65,838	Reliable	7,573
One race	96.7%	Reliable	0.4	(X)		(X)
Two races	3.1%	Reliable	0.3	53.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.8%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,516		****	65,838	Reliable	7,573
Male	49.3%	Reliable	0.1	51.6%	Reliable	3.2
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.8%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.8%	Reliable	2.0
25 to 34 years	16.3%	Reliable	0.1	12.6%	Reliable	2.5
35 to 44 years	13.5%	Reliable	0.1	9.3%	Reliable	1.5
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.5
55 to 64 years	7.8%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6
Median age (years)	31.8	Reliable	0.1	18.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
52 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,890	Reliable	438	34,170	Reliable	4,554
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.3
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.3
18 years and over	1,517,626	Reliable	438	35,668	Reliable	3,938
Male	49.2%	Reliable	0.1	52.7%	Reliable	4.3
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.3
18 to 34 years	565,916	Reliable	743	18,456	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.8%	Reliable	0.1	44.6%	Reliable	7.3
35 to 64 years	706,014	Reliable	593	14,523	Reliable	2,106
Male	50.3%	Reliable	0.1	45.5%	Reliable	4.9
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.9
65 years and over	241,696	Reliable	535	2,689	Somewhat Reliable	933
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9
RELATIONSHIP						
Population in households	2,073,707	Reliable	4,145	68,831	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	10.5%	Reliable	0.6	10.2%	Reliable	2.5
Nonrelatives	8.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.5
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.7	75.1%	Reliable	8.8
With own children under 18 years	39.5%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.0%	Reliable	1.1	52.1%	Reliable	8.0
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5
Nonfamily households	25.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.8
Male householder	12.5%	Reliable	0.7	13.2%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.8%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.20	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.74	Reliable	0.05	3.77	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,618,004	Reliable	547	41,893	Reliable	4,865
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	8.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4
Divorced	9.5%	Reliable	0.5	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,509	Reliable	588	21,551	Reliable	2,959
Now married, except separated	50.3%	Reliable	1.1	35.1%	Reliable	5.1

Figure 31: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Top Middle

Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,939
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.6
Separated	1.5%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	455	26,142	Reliable	3,188
Now married, except separated	47.7%	Reliable	0.4	35.0%	Reliable	5.5
Widowed	8.5%	Reliable	0.2	5.6%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	583,029	Reliable	7,412	30,472	Reliable	4,341
Nursery school, preschool	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Kindergarten	5.0%	Reliable	0.5	4.8%	Somewhat Reliable	1.8
Elementary school (grades 1-5)	43.5%	Reliable	0.9	40.6%	Reliable	4.2
High school (grades 9-12)	23.8%	Reliable	0.6	27.8%	Reliable	4.7
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,469	Reliable	5,212	15,454	Reliable	2,822
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.6%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	300,560	Reliable	5,647	15,016	Reliable	2,597
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	69.0%	Reliable	7.2
Percent enrolled in college or graduate school	28.2%	Reliable	1.2	21.3%	Somewhat Reliable	6.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,797	Reliable	814	26,013	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.8%	Reliable	0.8	27.9%	Reliable	4.8
Some college or associate's degree	32.1%	Reliable	0.8	38.7%	Reliable	5.1
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.6
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	76.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.0%	Reliable	0.7	9.5%	Somewhat Reliable	3.0
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,893	Reliable	1,587	16,343	Reliable	2,920
Women 15 to 50 years who had a birth in the past 12 months	38,646	Reliable	4,060	1,310	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	12,364	Reliable	54	54	Not Very Reliable	436
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable	26.5
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,128	Reliable	912	20,721	Reliable	2,688
Living with grandchild(ren)	5.3%	Reliable	0.2	2.4%	Not Very Reliable	1.1
Responsible for grandchild(ren)	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,521
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.8
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,875	Reliable	7,552
With a disability	10.5%	Reliable	0.4	7.8%	Reliable	1.8
Civilian noninstitutionalized population under 18 years	582,753	Reliable	497	34,142	Reliable	4,553
With a disability	2.5%	Reliable	0.4	3.1%	Not Very Reliable	1.6
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,045	32,083	Reliable	3,581
With a disability	8.5%	Reliable	0.5	8.7%	Somewhat Reliable	2.8
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,072	2,650	Somewhat Reliable	907
With a disability	38.5%	Reliable	1.6	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,169	Reliable	2,868	66,272	Reliable	7,138
Same house	82.9%	Reliable	0.8	83.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	15.9%	Reliable	2.9
Same county	11.5%	Reliable	0.7	10.0%	Reliable	2.2
Different county	4.9%	Reliable	0.5	5.9%	Somewhat Reliable	2.5
Same state	3.5%	Reliable	0.4	6.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.6
Abroad	0.7%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,298	Reliable	12,558	64,681	Reliable	7,113
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.3
Foreign born	469,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.6%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,146	Reliable	7,182	3,188	Somewhat Reliable	825
Male	46.5%	Reliable	1.9	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.5	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	293,072	Reliable	12,962	1,972	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	469,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Entered 2000 or later	22.4%	Reliable	1.6	8.3%	Not Very Reliable	6.1
Entered 1990 to 1999	25.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.2
Entered before 1990	52.3%	Reliable	1.5	70.6%	Reliable	10.3
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	468,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Europe	5.5%	Reliable	0.7	N	N	N

Figure 32: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Bottom Middle

Asia	17.3%	Reliable	0.8	N		N
Africa	1.4%	Somewhat Reliable	0.9	N		N
Oceania	0.7%	Not Very Reliable	0.4	N		N
Latin America	7.3%	Reliable	1.0	N		N
Northern America	2.2%	Reliable	0.2	N		N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 5 years and over	1,532,940	Reliable	7	57.41%	Reliable	6,600
English only	61.3%	Reliable	0.7	76.3%	Reliable	4.8
Language other than English	38.9%	Reliable	0.7	23.7%	Reliable	4.8
Speak English less than "very well"	16.6%	Reliable	0.6	7.1%	Somewhat Reliable	2.0
EMPLOYMENT STATUS						
Population 16 years and over	1,584,308	Reliable	2,804	39.15%	Reliable	4,460
In labor force	63.2%	Reliable	0.7	64.5%	Reliable	4.1
Civilian labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1
Employed	57.2%	Reliable	0.7	54.6%	Reliable	4.1
Unemployed	6.3%	Reliable	0.0	9.6%	Somewhat Reliable	2.1
Percent of civilian labor force	9.2%	Reliable	0.0	15.0%	Somewhat Reliable	3.8
Armed Forces	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4
Not in labor force	36.2%	Reliable	0.7	35.5%	Reliable	4.1
Females 16 years and over	798,658	Reliable	1,263	18.81%	Reliable	2,843
In labor force	55.7%	Reliable	0.9	57.3%	Reliable	5.0
Civilian labor force	55.6%	Reliable	0.9	57.9%	Reliable	5.1
Employed	49.9%	Reliable	0.9	49.1%	Reliable	5.1
Unemployed	5.7%	Reliable	0.0	8.8%	Somewhat Reliable	3.4
Percent of civilian labor force	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3
COMMUTING TO WORK						
Workers 16 years and over	880,102	Reliable	10,454	20.35%	Reliable	2,160
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable	4.5
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.2%	Somewhat Reliable	4.4
Public transportation (excluding taxicab)	1.5%	Reliable	0.2	1.1%	Not Very Reliable	1.2
Walked	2.0%	Reliable	0.2	0.3%	Not Very Reliable	0.8
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.8
Worked at home	4.9%	Reliable	0.8	4.0%	Not Very Reliable	2.1
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.5	Reliable	4.1
OCCUPATION						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21.38%	Reliable	2,500
Management, professional, and related occupations	25.4%	Reliable	0.3	24.0%	Reliable	5.0
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable	5.2
Sales and office occupations	26.9%	Reliable	1.0	29.0%	Reliable	6.0
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.0%	Not Very Reliable	0.8
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable	4.1
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable	3.8
Male civilian employed population 16 years and over	506,218	Reliable	8,085	12.14%	Reliable	2,004
Management, professional, and related occupations	25.4%	Reliable	1.1	18.5%	Somewhat Reliable	5.8
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.8
Sales and office occupations	18.6%	Reliable	1.3	24.3%	Somewhat Reliable	7.7
Farming, fishing, and forestry occupations	1.2%	Reliable	0.4	0.0%	Not Very Reliable	1.6
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	16.6%	Somewhat Reliable	5.8
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9.24%	Reliable	1,623
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.9
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable	8.3
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3
Farming, fishing, and forestry occupations	0.2%	Somewhat Reliable	0.2	0.0%	Not Very Reliable	2.3
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.6%	Not Very Reliable	2.3
INDUSTRY						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21.38%	Reliable	2,500
Agriculture, forestry, fishing and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction	10.4%	Reliable	0.7	5.5%	Somewhat Reliable	2.5
Manufacturing	9.9%	Reliable	0.8	10.2%	Somewhat Reliable	3.8
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4
Retail trade	12.7%	Reliable	0.6	14.9%	Somewhat Reliable	4.3
Transportation and warehousing, and utilities	6.4%	Reliable	0.5	10.0%	Somewhat Reliable	4.4
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable	1.8
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable	2.1
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.6	13.0%	Somewhat Reliable	4.4
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable	5.2
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.8
Other services (except public administration)	4.7%	Reliable	0.3	5.0%	Somewhat Reliable	2.3
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.8
CLASS OF WORKER						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21.38%	Reliable	2,500
Private wage and salary workers	76.5%	Reliable	0.9	77.5%	Reliable	4.8
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.8
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable	2.7
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.5
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)						
Households	647,448	Reliable	6,148	11.19%	Reliable	1,898
Median household income (dollars)	57,752	Reliable	1,233	52,012	Reliable	7,812
With earnings	79.9%	Reliable	0.8	83.8%	Reliable	5.4
Mean earnings (dollars)	72,948	Reliable	1,364	70,186	Reliable	9,631
With Social Security income	28.4%	Reliable	0.5	25.5%	Reliable	4.1
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable	1,169
With Supplemental Security income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9
Mean Supplemental Security income (dollars)	8,124	Reliable	563	6,003	Somewhat Reliable	1,718
With cash public assistance income	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.9
Mean cash public assistance income (dollars)	6,330	Reliable	851	5,908	Somewhat Reliable	2,459
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	5.3
Mean retirement income (dollars)	22,425	Reliable	912	21,116	Reliable	5,928
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable	2.0
Families	473,263	Reliable	7,070	8.49%	Reliable	1,354
Median family income (dollars)	64,543	Reliable	1,551	63,619	Reliable	13,424
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable	8.4
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable	10,818
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.0
Median income (dollars)	51,268	Reliable	4,778	28,202	Not Very Reliable	21,328
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable	7.9
Median income (dollars)	34,335	Reliable	2,904	41,065	Reliable	5,184
Individuals	2,109,516	Reliable	69,838	69.83%	Reliable	7,573
Per capita income (dollars)	24,301	Reliable	471	12,968	Reliable	1,378

Figure 33: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Bottom

With earnings for full-time, year-round workers:						
Male	361,434	Reliable	8,152	7,606	Reliable	1,467
Female	238,605	Reliable	6,630	5,609	Reliable	1,298
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,966	Reliable	7,569
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,636	Reliable	1,074	41,770	Reliable	3,198
Female	36,153	Reliable	693	29,939	Somewhat Reliable	6,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.9
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.0	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.4
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	16.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 24 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
25 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	6.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.15	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.9%	Reliable	6.4
2 to 4 units	4.9%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.6
Mobile home, boat, RV, van, etc.	8.6%	Reliable	0.5	8.5%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	26.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.3%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.8	63.5%	Reliable	6.9
Electricity	17.9%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOC cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.8	46.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.8	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	438,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,252	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	455	Reliable	13	459	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRPI cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	848
Less than 30 percent	38.7%	Reliable	2.0	33.9%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	189

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 34: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Top

Table ID S201 Selected Population Profile in Anytown, USA
 Universe: Total Population of Two or More Races in Anytown, USA
 2008 American Community Survey 1-Year Estimates

Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,518	Reliable	65,838	Reliable	7,373	
One race	96.7%	Reliable	0.4	0%	0%	
Two races	3.1%	Reliable	0.3	83.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.9%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,518	Reliable	65,838	Reliable	7,373	
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.2
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.3%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.6%	Reliable	2.0
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.5
35 to 44 years	13.5%	Reliable	0.1	9.3%	Reliable	1.6
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.5
55 to 64 years	7.8%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.4%	Somewhat Reliable	0.6
Median age (years)	31.0	Reliable	0.1	16.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.3
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
52 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,890	Reliable	438	34,170	Reliable	4,594
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.6
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.6
18 years and over	1,517,628	Reliable	438	35,668	Reliable	3,999
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.6
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.6
18 to 34 years	569,310	Reliable	743	18,456	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.8%	Reliable	0.1	44.5%	Reliable	7.5
35 to 64 years	706,014	Reliable	693	14,523	Reliable	2,106
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.6
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.6
65 years and over	241,694	Reliable	539	2,689	Somewhat Reliable	333
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9
RELATIONSHIP						
Population in households	2,075,707	Reliable	4,145	68,631	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	16.5%	Reliable	0.6	10.2%	Reliable	2.6
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.6
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.6
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.7	75.1%	Reliable	6.8
With own children under 18 years	38.8%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.0%	Reliable	1.1	52.1%	Reliable	8.0
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5
Nonfamily households	26.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.6
Male householder	12.9%	Reliable	0.7	13.3%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.6%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7
Living alone	11.5%	Reliable	0.6	9.1%	Somewhat Reliable	3.5
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.7	Reliable	0.05	3.7	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,616,004	Reliable	547	41,635	Reliable	4,885
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	5.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4
Divorced	9.9%	Reliable	0.6	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,959
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	6.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.6
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	463	20,142	Reliable	3,188
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.5
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4

Figure 35: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Top Middle

Widowed	2.2%	Reliable	0.31	1.5%	Not Very Reliable	1.31
Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	8.9	56.1%	Reliable	5.4
Female 15 years and over	815,355	Reliable	483	20,142	Reliable	3,188
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	6.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	3.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	5.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	693,022	Reliable	7,412	30,472	Reliable	4,241
Nursery school, preschool, kindergarten	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Elementary school (grades 1-5)	43.5%	Reliable	0.8	40.8%	Reliable	4.2
High school (grades 9-12)	23.9%	Reliable	0.6	27.8%	Reliable	4.7
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,452	Reliable	5,212	15,452	Reliable	2,622
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.8%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	396,566	Reliable	5,647	15,018	Reliable	2,587
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	68.2%	Reliable	7.2
Percent enrolled in college or graduate school	25.2%	Reliable	1.2	21.3%	Somewhat Reliable	6.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,757	Reliable	814	26,015	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.8%	Reliable	0.8	27.9%	Reliable	4.6
Some college or associate's degree	32.1%	Reliable	0.8	38.7%	Reliable	5.1
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.5
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	76.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.0%	Reliable	0.7	9.5%	Somewhat Reliable	3.2
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,893	Reliable	1,587	16,343	Reliable	2,520
Women 15 to 50 years who had a birth in the past 12 months	38,646	Reliable	4,050	1,310	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	16,384	Reliable	2,226	544	Not Very Reliable	438
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable	25.4
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,124	Reliable	312	20,721	Reliable	2,686
Living with grandchildren	5.9%	Reliable	0.4	2.6%	Not Very Reliable	2.4
Responsible for grandchildren	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,521
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.6
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,878	Reliable	7,552
With a disability	10.6%	Reliable	0.4	7.8%	Reliable	1.6
Civilian noninstitutionalized population under 18 years	582,753	Reliable	497	34,142	Reliable	4,593
With a disability	2.9%	Reliable	0.4	3.1%	Not Very Reliable	1.6
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,045	32,083	Reliable	3,581
With a disability	8.9%	Reliable	0.5	8.7%	Somewhat Reliable	2.5
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,673	2,650	Somewhat Reliable	907
With a disability	38.5%	Reliable	1.6	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,162	Reliable	2,868	66,273	Reliable	7,134
Same house	82.9%	Reliable	0.8	83.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	15.9%	Reliable	2.9
Same county	11.5%	Reliable	0.7	10.2%	Reliable	2.4
Different county	4.9%	Reliable	0.8	5.9%	Somewhat Reliable	2.3
Same state	3.8%	Reliable	0.4	5.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.6
Abroad	0.7%	Somewhat Reliable	0.2	0.8%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,298	Reliable	12,558	64,681	Reliable	7,118
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.3
Foreign born	459,216	Reliable	12,558	5,157	Somewhat Reliable	1,488
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.8%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,144	Reliable	7,182	3,185	Somewhat Reliable	825
Male	46.5%	Reliable	1.5	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.5	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	283,072	Reliable	12,960	1,972	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	459,216	Reliable	12,558	5,157	Somewhat Reliable	1,488
Entered 2000 or later	22.4%	Reliable	1.6	9.3%	Not Very Reliable	6.1
Entered 1990 to 1999	26.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.6
Entered before 1990	51.3%	Reliable	1.5	70.6%	Reliable	10.5
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	459,216	Reliable	12,558	5,157	Somewhat Reliable	1,488
Europe	5.5%	Reliable	0.7	N	N	N
Asia	17.1%	Reliable	0.8	N	N	N
Africa	1.4%	Somewhat Reliable	0.5	N	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N	N
Latin America	73.0%	Reliable	1.0	N	N	N
Northern America	2.2%	Reliable	0.4	N	N	N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 3 years and over	1,832,948	Reliable	7	57,414	Reliable	6,598
English only	81.1%	Reliable	0.7	79.3%	Reliable	4.8
Language other than English	33.9%	Reliable	0.7	23.7%	Reliable	4.5
Speak English less than "very well"	16.9%	Reliable	0.6	7.1%	Somewhat Reliable	2.0

Figure 36: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Bottom Middle

In labor force	63.8%	Reliable	0.7	64.5%	Reliable	4.1
Civilian labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1
Employed	57.2%	Reliable	0.7	54.6%	Reliable	4.1
Unemployed	6.3%	Reliable	0.5	9.6%	Somewhat Reliable	2.6
Percent of civilian labor force	9.8%	Reliable	0.7	15.0%	Somewhat Reliable	3.5
Armed Forces	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4
Not in labor force	36.2%	Reliable	0.7	35.5%	Reliable	4.1
Females 16 years and over	798,558	Reliable	1,909	18,816	Reliable	2,645
In labor force	55.7%	Reliable	0.9	57.9%	Reliable	5.5
Civilian labor force	55.6%	Reliable	0.9	57.9%	Reliable	5.5
Employed	49.9%	Reliable	0.9	49.1%	Reliable	5.1
Unemployed	5.7%	Reliable	0.6	8.8%	Somewhat Reliable	3.4
Percent of civilian labor force	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3
COMMUTING TO WORK						
Workers 16 years and over	880,102	Reliable	10,454	20,350	Reliable	2,160
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable	4.5
Car, truck, or van - carpool	14.7%	Reliable	0.8	16.2%	Somewhat Reliable	4.4
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable	1.4
Walked	2.0%	Reliable	0.6	0.3%	Not Very Reliable	0.8
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.5
Worked at home	4.9%	Reliable	0.6	4.0%	Not Very Reliable	2.1
Mean travel time to work (minutes)	31.9	Reliable	0.6	33.9	Reliable	4.1
OCCUPATION						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable	5.0
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable	5.2
Sales and office occupations	26.9%	Reliable	1.0	29.0%	Reliable	6.0
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable	4.1
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable	3.5
Male civilian employed population 16 years and over	508,219	Reliable	8,009	12,141	Reliable	2,004
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable	5.5
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.6
Sales and office occupations	19.6%	Reliable	1.3	24.8%	Somewhat Reliable	7.1
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable	1.6
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	19.6%	Somewhat Reliable	5.5
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9,247	Reliable	1,893
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.9
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable	6.3
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3
Farming, fishing, and forestry occupations	0.7%	Somewhat Reliable	0.2	0.0%	Not Very Reliable	2.1
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8
Production, transportation, and material moving occupations	6.1%	Reliable	0.6	2.6%	Not Very Reliable	2.3
INDUSTRY						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Agriculture, forestry, fishing, and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable	7.1
Manufacturing	9.9%	Reliable	0.6	10.2%	Somewhat Reliable	3.8
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4
Retail trade	12.7%	Reliable	0.8	14.9%	Somewhat Reliable	4.3
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable	4.4
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable	1.5
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable	2.1
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.5	13.0%	Somewhat Reliable	4.4
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable	5.2
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.5
Other services (except public administration)	4.7%	Reliable	0.5	5.0%	Somewhat Reliable	2.3
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.5
CLASS OF WORKER						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Private wage and salary workers	76.5%	Reliable	0.8	77.5%	Reliable	4.8
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.5
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable	2.7
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.9
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)						
Households	647,445	Reliable	6,148	11,191	Reliable	1,505
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable	7,512
With earnings	79.9%	Reliable	0.6	83.8%	Reliable	5.4
Mean earnings (dollars)	72,948	Reliable	1,364	70,155	Reliable	9,631
With Social Security income	26.4%	Reliable	0.5	25.5%	Reliable	5.7
Mean Social Security income (dollars)	19,590	Reliable	314	10,542	Reliable	1,169
With Supplemental Security Income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9
Mean Supplemental Security Income (dollars)	9,124	Reliable	563	6,033	Somewhat Reliable	1,716
With cash public assistance income	2.9%	Reliable	0.3	3.8%	Not Very Reliable	2.9
Mean cash public assistance income (dollars)	5,330	Reliable	551	5,906	Somewhat Reliable	2,459
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	5.3
Mean retirement income (dollars)	22,425	Reliable	912	22,115	Reliable	5,024
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable	2.0
Families						
Families	473,263	Reliable	7,070	8,403	Reliable	1,354
Median family income (dollars)	64,594	Reliable	1,551	65,819	Reliable	13,424
Married-couple family	73.9%	Reliable	1.3	69.4%	Reliable	8.4
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable	10,818
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.6
Median income (dollars)	51,269	Reliable	4,778	28,233	Not Very Reliable	21,320
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable	7.9
Median income (dollars)	34,335	Reliable	2,904	41,063	Reliable	5,194
Individuals						
Individuals	2,100,518	Reliable	4,777	69,838	Reliable	7,573
Per capita income (dollars)	24,301	Reliable	477	12,993	Reliable	1,370
With earnings for full-time, year-round workers:						

Figure 37: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Bottom

With earnings for full-time, year-round workers:						
Male	381,434	Reliable	8,152	7,608	Reliable	1,467
Female	238,808	Reliable	6,630	5,609	Reliable	1,298
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,968	Reliable	7,568
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,836	Reliable	1,074	41,770	Reliable	3,199
Female	36,153	Reliable	893	29,930	Somewhat Reliable	8,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.9
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.8	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.6
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	8.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.16	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
1-unit, detached or attached	74.5%	Reliable	0.9	72.9%	Reliable	6.4
2 to 4 units	4.9%	Reliable	0.5	4.9%	Not Very Reliable	2.8
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.8
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.6	8.5%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Built 2000 or later	26.2%	Reliable	0.8	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.9
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.6
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Gas	79.5%	Reliable	0.8	63.5%	Reliable	6.9
Electricity	17.9%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.8	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOG cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	49.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.3
OWNER CHARACTERISTICS						
Owner-occupied housing units	458,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,233	Reliable	38	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	456	Reliable	13	456	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRPI cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	36.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 38: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Top

Table ID	Selected Population Profile in Anytown, USA		Reliability Legend			
S201	Universe: Total Population of Two or More Races in Anytown, USA		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: red; color: white; padding: 2px;">Not Very Reliable</div> <div style="background-color: orange; color: white; padding: 2px;">Somewhat Reliable</div> <div style="background-color: green; color: white; padding: 2px;">Reliable</div> </div>			
2008 American Community Survey 1-Year Estimates			Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACStreliability.com			
Table View Map View Chart View						
Actions: Modify Table Bookmark Download			View Table Notes			
Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,518	Reliable	****	69,838	Reliable	7,573
One race	96.7%	Reliable	0.4	1%	Reliable	2.2
Two races	3.1%	Reliable	0.3	93.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.6%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,518	Reliable	****	69,838	Reliable	7,573
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.0
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.8%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.9%	Reliable	2.0
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.8
35 to 44 years	13.6%	Reliable	0.1	9.3%	Reliable	1.9
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.8
55 to 64 years	7.6%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6
Median age (years)	31.8	Reliable	0.1	18.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
62 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,690	Reliable	438	34,170	Reliable	4,554
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.3
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.8
18 years and over	1,517,628	Reliable	438	35,668	Reliable	3,938
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.0
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.8
18 to 34 years	589,916	Reliable	743	18,458	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	49.8%	Reliable	0.1	44.8%	Reliable	7.8
35 to 64 years	706,614	Reliable	639	14,523	Reliable	2,108
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.0
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.8
65 years and over	241,698	Reliable	539	2,688	Somewhat Reliable	933
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.8
RELATIONSHIP						
Population in households	2,073,707	Reliable	4,144	68,831	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.8	28.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	10.8%	Reliable	0.6	10.2%	Reliable	2.9
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.5
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.1	75.1%	Reliable	6.8
With own children under 18 years	38.6%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.9%	Reliable	1.1	52.3%	Reliable	9.8
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.0
Nonfamily households	26.9%	Reliable	0.1	24.9%	Somewhat Reliable	6.8
Male householder	12.9%	Reliable	0.7	13.2%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.8%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.3%	Somewhat Reliable	4.9
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.74	Reliable	0.05	3.77	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,618,004	Reliable	547	41,823	Reliable	4,885
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	5.4%	Reliable	0.3	3.6%	Somewhat Reliable	1.4
Divorced	9.2%	Reliable	0.4	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.8%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.6%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,950
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	8.1%	Reliable	0.4	6.3%	Somewhat Reliable	2.8
Separated	1.6%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	469	20,242	Reliable	3,168
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.6%	Reliable	0.4	5.6%	Somewhat Reliable	2.9
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4

Figure 39: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Top Middle

Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.6	56.1%	Reliable	5.4
Female 15 years and over	815,339	Reliable	465	20,142	Reliable	3,158
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.3%	Not Very Reliable	2.6
Never married	29.2%	Reliable	0.7	47.2%	Reliable	5.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	593,029	Reliable	7,412	30,472	Reliable	4,341
Nursery school, preschool kindergarten	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Elementary school (grades 1-8)	43.5%	Reliable	0.8	4.5%	Somewhat Reliable	1.6
High school (grades 9-12)	23.9%	Reliable	0.6	27.8%	Reliable	4.2
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,463	Reliable	5,213	15,459	Reliable	2,822
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.6%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	300,566	Reliable	5,647	15,013	Reliable	2,519
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	68.0%	Reliable	7.5
Percent enrolled in college or graduate school	25.2%	Reliable	1.2	21.3%	Somewhat Reliable	5.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,797	Reliable	814	26,015	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.9%	Reliable	0.8	27.9%	Reliable	4.6
Some college or associate's degree	32.1%	Reliable	0.8	33.7%	Reliable	5.3
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.8
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	76.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.5%	Reliable	0.7	9.8%	Somewhat Reliable	3.0
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,833	Reliable	1,587	16,343	Reliable	2,320
Women 15 to 50 years who had a birth in the past 12 months	38.64%	Reliable	4,060	1,311	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	12.35%	Reliable	2,226	648	Not Very Reliable	438
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable	26.5
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,126	Reliable	912	20,721	Reliable	2,686
Living with grandchild(ren)	9.5%	Reliable	0.4	2.6%	Not Very Reliable	2.4
Responsible for grandchild(ren)	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,321
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.8
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,875	Reliable	7,552
With a disability	10.6%	Reliable	0.4	7.8%	Reliable	1.6
Civilian noninstitutionalized population under 18 years	582,750	Reliable	491	34,142	Reliable	4,583
With a disability	2.5%	Reliable	0.4	3.1%	Not Very Reliable	1.8
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,043	32,083	Reliable	3,581
With a disability	9.9%	Reliable	0.5	6.7%	Somewhat Reliable	2.8
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,073	2,650	Somewhat Reliable	907
With a disability	38.6%	Reliable	1.8	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,165	Reliable	2,868	65,273	Reliable	7,136
Came to house	62.9%	Reliable	0.8	53.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	16.9%	Reliable	2.8
Same county	11.5%	Reliable	0.7	10.0%	Reliable	2.2
Different county	4.9%	Reliable	0.5	5.9%	Somewhat Reliable	2.3
Same state	3.5%	Reliable	0.4	5.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.8
Abroad	0.7%	Somewhat Reliable	0.2	0.6%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,298	Reliable	12,558	64,681	Reliable	7,113
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.8
Foreign born	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.6%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,146	Reliable	7,182	3,185	Somewhat Reliable	825
Male	46.5%	Reliable	1.5	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.8	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	293,072	Reliable	12,960	1,372	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Entered 2000 or later	22.4%	Reliable	1.8	8.3%	Not Very Reliable	6.1
Entered 1990 to 1999	25.3%	Reliable	1.3	21.1%	Somewhat Reliable	10.8
Entered before 1990	52.3%	Reliable	1.9	70.6%	Reliable	10.8
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Europe	5.5%	Reliable	0.6	N	N	N
Asia	17.1%	Reliable	0.8	N	N	N
Africa	1.4%	Somewhat Reliable	0.4	N	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N	N
Latin America	73.0%	Reliable	1.0	N	N	N
Northern America	2.2%	Reliable	0.4	N	N	N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 5 years and over	1,532,948	Reliable	7	57,414	Reliable	6,608
English only	61.1%	Reliable	0.7	76.3%	Reliable	4.9
Language other than English	38.9%	Reliable	0.7	23.7%	Reliable	4.5
Language spoken at home and ability to speak English	12.9%	Reliable	0.4	18.0%	Somewhat Reliable	5.8

Figure 40: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Bottom Middle

COMMUTERS TO WORK					
Workers 16 years and over	680,102	Reliable	10,454	20,350	Reliable
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.2%	Somewhat Reliable
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable
Walked	2.0%	Reliable	0.5	0.9%	Not Very Reliable
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable
Worked at home	4.9%	Reliable	0.5	4.0%	Not Very Reliable
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.9	Reliable
OCCUPATION					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable
Sales and office occupations	25.9%	Reliable	1.0	23.0%	Reliable
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.3%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable
Male civilian employed population 16 years and over	508,219	Reliable	8,009	12,141	Reliable
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable
Sales and office occupations	18.6%	Reliable	1.3	24.8%	Somewhat Reliable
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	19.6%	Somewhat Reliable
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9,247	Reliable
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable
Farming, fishing, and forestry occupations	0.7%	Somewhat Reliable	0.2	0.0%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.6%	Not Very Reliable
INDUSTRY					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Agriculture, forestry, fishing and hunting, and mining	1.3%	Reliable	0.3	0.2%	Not Very Reliable
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable
Manufacturing	9.8%	Reliable	0.6	10.2%	Somewhat Reliable
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable
Retail trade	12.7%	Reliable	0.6	14.9%	Somewhat Reliable
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.6	13.0%	Somewhat Reliable
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable
Other services (except public administration)	4.7%	Reliable	0.5	5.0%	Somewhat Reliable
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable
CLASS OF WORKER					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Private wage and salary workers	75.9%	Reliable	0.9	77.5%	Reliable
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)					
Households	647,443	Reliable	6,148	11,191	Reliable
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable
With earnings	79.9%	Reliable	0.6	83.8%	Reliable
Mean earnings (dollars)	72,948	Reliable	1,364	70,185	Reliable
With Social Security income	26.4%	Reliable	0.5	25.5%	Reliable
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable
With Supplemental Security income	4.1%	Reliable	0.4	4.1%	Not Very Reliable
Mean Supplemental Security income (dollars)	9,124	Reliable	563	6,033	Somewhat Reliable
With cash public assistance income	2.9%	Reliable	0.3	3.8%	Not Very Reliable
Mean cash public assistance income (dollars)	5,330	Reliable	551	5,905	Somewhat Reliable
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable
Mean retirement income (dollars)	22,425	Reliable	912	22,115	Reliable
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable
Families	473,263	Reliable	7,070	8,405	Reliable
Median family income (dollars)	64,594	Reliable	1,551	65,619	Reliable
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable
Median income (dollars)	51,269	Reliable	4,775	28,235	Not Very Reliable
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable
Median income (dollars)	34,335	Reliable	2,904	41,065	Reliable
Individuals	2,100,516	****	477	69,638	Reliable
Per capita income (dollars)	24,301	Reliable	477	12,985	Reliable
With earnings for full-time, year-round workers:					
Male	381,434	Reliable	8,152	7,605	Reliable
Female	238,805	Reliable	6,530	5,605	Reliable
Mean earnings (dollars) for full-time, year-round workers:					
Male	57,693	Reliable	1,427	51,966	Reliable
Female	43,122	Reliable	1,032	35,327	Reliable
Median earnings (dollars) full-time, year-round workers:					
Male	46,836	Reliable	1,074	41,770	Reliable
Female	36,153	Reliable	893	29,939	Somewhat Reliable
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED					
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable

Figure 41: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Bottom

All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.5
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.6
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	8.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.16	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.6%	Reliable	6.4
2 to 4 units	4.9%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.8
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.5	8.8%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	25.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.8	63.5%	Reliable	5.8
Electricity	17.9%	Reliable	0.6	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOG cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	48.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	438,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,232	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	455	Reliable	13	458	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRAP cannot be computed)	201,897	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	38.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 42: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Top

Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
Table ID S201 Selected Population Profile in Anytown, USA						
Universe: Total Population of Two or More Races in Anytown, USA						
2008 American Community Survey 1-Year Estimates						
<div style="display: flex; justify-content: space-between; align-items: center;"> <div> <p>Table View [] [] Map View [] [] Chart View [] []</p> <p>Actions: [] [] Modify Table [] [] Bookmark [] [] Download</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>Reliability Legend</p> <p>Reliable</p> <p>Somewhat Reliable</p> <p>Not Very Reliable</p> <p>Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com</p> </div> </div>						
[] [] View Table Notes						
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,516	Reliable	0.4	65,836	Reliable	7,573
One race	95.7%	Reliable	0.4	0%	Reliable	0%
Two races	3.1%	Reliable	0.3	93.1%	Reliable	2.9
Three races	0.2%	Somewhat Reliable	0.1	6.6%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,516	Reliable	0.4	65,836	Reliable	7,573
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.2
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.5%	Reliable	2.7
5 to 17 years	19.9%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.5%	Reliable	2.0
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.6
35 to 44 years	13.6%	Reliable	0.1	9.3%	Reliable	1.8
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.8
55 to 64 years	7.5%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.8%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6
Median age (years)	31.8	Reliable	0.1	16.5	Reliable	1.2
15 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
25 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.8
35 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
45 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,830	Reliable	438	34,170	Reliable	4,564
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.5
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.5
18 years and over	1,517,626	Reliable	438	35,668	Reliable	3,988
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.8
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.8
18 to 34 years	589,916	Reliable	743	18,455	Reliable	2,538
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.8%	Reliable	0.1	44.5%	Reliable	7.5
35 to 64 years	706,014	Reliable	633	14,523	Reliable	2,106
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.9
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.9
65 years and over	241,636	Reliable	633	2,688	Somewhat Reliable	933
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9
RELATIONSHIP						
Population in households	2,073,707	Reliable	4,145	68,831	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	10.8%	Reliable	0.8	10.2%	Reliable	2.9
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.6
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,146	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.7	75.1%	Reliable	6.8
With own children under 18 years	33.5%	Reliable	0.5	43.0%	Reliable	7.2
Married-couple family	54.9%	Reliable	1.1	52.1%	Reliable	6.0
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5
Nonfamily households	26.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.8
Male householder	12.9%	Reliable	0.7	13.2%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.8	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.9%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.7	Reliable	0.05	3.77	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,518,004	Reliable	547	41,693	Reliable	4,885
Now married, except separated	49.3%	Reliable	0.6	35.0%	Reliable	4.3
Widowed	5.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4
Divorced	9.5%	Reliable	0.5	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,959
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	465	20,142	Reliable	3,158
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.6%	Reliable	0.4	5.6%	Somewhat Reliable	2.6
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	9.9%	Reliable	0.3	3.9%	Not Very Reliable	3.2

Figure 43: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Top Middle

Population 15 years and over					
Now married, except separated	1,618,004	Reliable	54%	41,639	Reliable
Widowed	49.3%	Reliable	0.9	35.0%	Reliable
Divorced	5.4%	Reliable	0.3	3.9%	Somewhat Reliable
Separated	3.9%	Reliable	0.5	7.1%	Somewhat Reliable
Never married	2.3%	Reliable	0.2	2.8%	Not Very Reliable
	33.1%	Reliable	0.6	51.8%	Reliable
Male 15 years and over					
Now married, except separated	862,609	Reliable	58%	21,551	Reliable
Widowed	25.0%	Reliable	0.3	35.1%	Reliable
Divorced	2.2%	Reliable	0.3	1.5%	Not Very Reliable
Separated	8.1%	Reliable	0.8	6.1%	Somewhat Reliable
Never married	1.8%	Reliable	0.3	1.2%	Not Very Reliable
	37.1%	Reliable	0.8	56.1%	Reliable
Female 15 years and over					
Now married, except separated	815,595	Reliable	46%	20,146	Reliable
Widowed	47.7%	Reliable	0.9	35.0%	Reliable
Divorced	8.5%	Reliable	0.4	5.6%	Somewhat Reliable
Separated	11.6%	Reliable	0.7	8.2%	Somewhat Reliable
Never married	2.9%	Reliable	0.3	3.9%	Not Very Reliable
	29.2%	Reliable	0.7	47.2%	Reliable
SCHOOL ENROLLMENT					
Population 3 years and over enrolled in school					
Nursery school, preschool	582,029	Reliable	7.41%	30,472	Reliable
Kindergarten	4.9%	Reliable	0.2	7.9%	Somewhat Reliable
Elementary school (grades 1-6)	5.0%	Reliable	0.5	4.5%	Somewhat Reliable
High school (grades 7-12)	43.5%	Reliable	0.8	40.6%	Reliable
College or graduate school	23.2%	Reliable	0.8	27.8%	Reliable
	22.7%	Reliable	1.0	19.9%	Reliable
Male 3 years and over enrolled in school					
Percent enrolled in kindergarten to grade 12	292,465	Reliable	5.21%	15,455	Reliable
Percent enrolled in college or graduate school	75.2%	Reliable	1.4	77.6%	Reliable
	20.2%	Reliable	1.4	19.5%	Somewhat Reliable
Female 3 years and over enrolled in school					
Percent enrolled in kindergarten to grade 12	300,560	Reliable	5.64%	15,014	Reliable
Percent enrolled in college or graduate school	69.4%	Reliable	1.3	65.0%	Reliable
	29.5%	Reliable	1.2	21.3%	Somewhat Reliable
EDUCATIONAL ATTAINMENT					
Population 25 years and over					
Less than high school diploma	1,361,751	Reliable	61%	26,015	Reliable
High school graduate (includes equivalency)	22.0%	Reliable	0.7	19.1%	Reliable
Some college or associate's degree	25.8%	Reliable	0.8	27.9%	Reliable
Bachelor's degree	30.1%	Reliable	0.9	36.7%	Reliable
Graduate or professional degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable
	6.4%	Reliable	0.3	3.7%	Somewhat Reliable
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable
Male, high school graduate or higher	74.5%	Reliable	1.0	69.9%	Reliable
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable
Male, bachelor's degree or higher	21.0%	Reliable	0.9	9.9%	Somewhat Reliable
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable
FERTILITY					
Women 15 to 50 years					
Women 15 to 50 years who had a birth in the past 12 months	548,893	Reliable	1.58%	16,543	Reliable
Unmarried women 15 to 50 years who had a birth in the past 12 months	33,640	Reliable	4.0%	1,311	Somewhat Reliable
As a percent of all women with a birth in the past 12 months	6.1%	Reliable	2.2%	6.4%	Not Very Reliable
	32.0%	Reliable	4.3	49.3%	Not Very Reliable
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS					
Population 30 years and over					
Living with grandchildren	1,167,124	Reliable	91%	20,721	Reliable
Responsible for grandchildren	5.5%	Reliable	0.4	3.4%	Not Very Reliable
	33.6%	Reliable	3.8	N	N
VETERAN STATUS					
Civilian population 18 years and over					
Civilian veteran	1,513,207	Reliable	1,244	35,552	Reliable
	9.0%	Reliable	0.4	6.9%	Somewhat Reliable
DISABILITY STATUS					
Total civilian noninstitutionalized population					
With a disability	2,016,743	Reliable	2,641	68.8%	Reliable
	10.6%	Reliable	0.4	7.8%	Reliable
Civilian noninstitutionalized population under 18 years					
With a disability	583,735	Reliable	43%	34.14	Reliable
	2.5%	Reliable	0.4	3.1%	Not Very Reliable
Civilian noninstitutionalized population 18 to 64 years					
With a disability	1,284,531	Reliable	2,045	32.0%	Reliable
	8.9%	Reliable	0.3	6.7%	Somewhat Reliable
Civilian noninstitutionalized population 65 years and older					
With a disability	220,477	Reliable	1,072	2,656	Somewhat Reliable
	38.8%	Reliable	1.6	57.0%	Somewhat Reliable
RESIDENCE 1 YEAR AGO					
Population 1 year and over					
Same house	2,063,165	Reliable	2,868	66,273	Reliable
Different house in the U.S.	42.3%	Reliable	0.5	63.6%	Reliable
Same county	16.4%	Reliable	0.8	16.9%	Reliable
Different county	11.8%	Reliable	0.7	10.0%	Reliable
Same state	4.9%	Reliable	0.4	5.9%	Somewhat Reliable
Different state	3.5%	Reliable	0.4	5.1%	Somewhat Reliable
Abroad	1.1%	Reliable	0.2	0.7%	Not Very Reliable
	0.7%	Somewhat Reliable	0.2	0.5%	Not Very Reliable
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY					
Native					
Male	1,631,228	Reliable	12,558	64,681	Reliable
Female	49.7%	Reliable	0.3	51.6%	Reliable
	50.2%	Reliable	0.3	48.4%	Reliable
Foreign born					
Male	469,218	Reliable	12,558	6,157	Somewhat Reliable
Female	59.7%	Reliable	1.1	52.4%	Reliable
	49.2%	Reliable	0.9	47.6%	Reliable
Foreign born, naturalized U.S. citizen					
Male	178,144	Reliable	7,182	3,188	Somewhat Reliable
Female	49.5%	Reliable	1.5	53.9%	Somewhat Reliable
	53.9%	Reliable	1.5	46.1%	Somewhat Reliable
Foreign born, not a U.S. citizen					
Male	283,072	Reliable	12,964	1,972	Somewhat Reliable
Female	53.3%	Reliable	1.5	50.1%	Somewhat Reliable
	48.2%	Reliable	1.2	49.9%	Somewhat Reliable
Population born outside the United States					
Entered 2003 or later	465,216	Reliable	12,558	5,157	Somewhat Reliable
Entered 1990 to 1999	22.4%	Reliable	1.6	3.3%	Not Very Reliable
Entered before 1990	35.3%	Reliable	1.7	21.1%	Somewhat Reliable
	52.3%	Reliable	1.6	70.6%	Reliable
WORLD REGION OF BIRTH OF FOREIGN BORN					
Foreign-born population excluding population born in Asia					
Europe	485,218	Reliable	12,558	5,157	Somewhat Reliable
Asia	6.5%	Reliable	0.7	N	N
Africa	17.1%	Reliable	0.8	N	N
Oceania	1.4%	Somewhat Reliable	0.5	N	N
Latin America	0.7%	Not Very Reliable	0.4	N	N
North America	73.0%	Reliable	1.0	N	N
	2.5%	Reliable	0.6	N	N
LANGUAGES SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH					
Population 5 years and over					
English only	1,532,944	Reliable	7	57,414	Reliable
Language other than English	61.1%	Reliable	0.5	76.3%	Reliable
Speak English less than "very well"	18.5%	Reliable	0.7	23.7%	Reliable
	19.5%	Reliable	0.8	7.1%	Somewhat Reliable
EMPLOYMENT STATUS					
Population 16 years and over					
In labor force	1,584,308	Reliable	2,806	38,155	Reliable
Civilian labor force	63.6%	Reliable	0.7	64.2%	Reliable
Employed	57.2%	Reliable	0.9	54.6%	Reliable

Figure 44: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Bottom Middle

Female	52.3%	Reliable	1.9	46.1%	Somewhat Reliable	16.4
Foreign born, not a U.S. citizen	253,272	Reliable	12,363	1,972	Somewhat Reliable	633
Male	23.3%	Reliable	1.2	26.1%	Somewhat Reliable	12.1
Female	46.7%	Reliable	1.5	49.3%	Somewhat Reliable	14.4
Population born outside the United States	469,216	Reliable	12,556	5,167	Somewhat Reliable	1,468
Entered 2000 or later	22.4%	Reliable	1.6	8.3%	Not Very Reliable	6.1
Entered 1990 to 1999	28.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.9
Entered before 1990	52.3%	Reliable	1.6	70.6%	Reliable	10.3
WORLD REGION OF BIRTH OF FOREIGN BORN	469,216	Reliable	12,556	5,167	Somewhat Reliable	1,468
Foreign-born population excluding population born at sea						
Europe	5.5%	Reliable	0.7	N	N	N
Asia	17.1%	Reliable	0.8	N	N	N
Africa	1.4%	Somewhat Reliable	0.2	N	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N	N
Latin America	73.0%	Reliable	1.0	0.3%	Reliable	N
Northern America	2.2%	Reliable	0.2	N	N	N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 5 years and over	1,932,348	Reliable	7	57,414	Reliable	6,000
English only	61.1%	Reliable	5.7	76.3%	Reliable	4.5
Language other than English	38.9%	Reliable	6.7	23.7%	Reliable	4.0
Speak English less than "very well"	16.9%	Reliable	8.6	7.1%	Somewhat Reliable	2.6
EMPLOYMENT STATUS						
Population 16 years and over	1,584,308	Reliable	2,894	39,133	Reliable	4,480
In labor force	63.6%	Reliable	0.7	64.2%	Reliable	4.1
Civilian labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1
Employed	57.2%	Reliable	0.7	54.4%	Reliable	4.1
Unemployed	6.3%	Reliable	0.2	9.6%	Somewhat Reliable	2.1
Percent of civilian labor force						
Armed Forces	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4
Not in labor force	36.2%	Reliable	0.7	35.5%	Reliable	4.1
Families 16 years and over	786,558	Reliable	1,262	16,816	Reliable	2,843
In labor force	49.7%	Reliable	1.5	57.0%	Reliable	5.5
Civilian labor force	55.6%	Reliable	0.9	57.3%	Reliable	5.9
Employed	49.9%	Reliable	0.9	45.1%	Reliable	5.1
Unemployed	6.7%	Reliable	0.6	8.8%	Somewhat Reliable	3.6
Percent of civilian labor force						
	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3
COMMUTING TO WORK						
Workers 16 years and over	680,102	Reliable	10,454	20,350	Reliable	2,169
Car, truck, or van - drove alone	79.3%	Reliable	1.0	74.6%	Reliable	4.5
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.3%	Somewhat Reliable	4.6
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable	1.4
Walked	2.0%	Reliable	0.2	0.9%	Not Very Reliable	0.8
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.5
Worked at home	4.9%	Reliable	0.2	4.0%	Not Very Reliable	2.1
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.9	Reliable	4.1
OCCUPATION						
Civilian employed population 16 years and over	506,622	Reliable	10,664	21,388	Reliable	2,508
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable	5.0
Service occupations	19.3%	Reliable	0.8	16.3%	Somewhat Reliable	5.2
Sales and office occupations	25.9%	Reliable	1.0	25.0%	Reliable	6.0
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.0%	Not Very Reliable	0.8
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.2	10.3%	Somewhat Reliable	4.1
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.3%	Somewhat Reliable	3.8
Male civilian employed population 16 years and over	506,219	Reliable	8,009	12,141	Reliable	2,004
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable	5.5
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.6
Sales and office occupations	19.4%	Reliable	1.3	24.1%	Somewhat Reliable	7.2
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable	1.6
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	19.8%	Somewhat Reliable	6.5
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9,247	Reliable	1,639
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.5
Service occupations	21.9%	Reliable	1.1	26.9%	Somewhat Reliable	8.3
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3
Farming, fishing, and forestry occupations	0.6%	Somewhat Reliable	0.2	0.0%	Not Very Reliable	2.3
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.6%	Not Very Reliable	2.3
INDUSTRY						
Civilian employed population 16 years and over	506,622	Reliable	10,664	21,388	Reliable	2,508
Agriculture, forestry, fishing, and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.8
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable	2.5
Manufacturing	9.9%	Reliable	0.6	10.2%	Somewhat Reliable	3.8
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4
Retail trade	12.7%	Reliable	0.8	14.9%	Somewhat Reliable	4.3
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable	4.4
Information	1.0%	Reliable	0.2	2.1%	Not Very Reliable	1.8
Finance and insurance, and real estate and rental and leasing	5.1%	Reliable	0.4	4.0%	Not Very Reliable	2.1
Professional, scientific, and management, and administrative and waste management services	9.8%	Reliable	0.6	10.0%	Somewhat Reliable	4.4
Educational services, and health care and social assistance	19.9%	Reliable	0.9	10.6%	Somewhat Reliable	5.2
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.3
Other services (except public administration)	4.7%	Reliable	0.3	5.0%	Somewhat Reliable	2.8
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.5
CLASS OF WORKER						
Civilian employed population 16 years and over	506,622	Reliable	10,664	21,388	Reliable	2,508
Private wage and salary workers	76.5%	Reliable	0.9	77.5%	Reliable	4.6
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.9
Self-employed workers in own not incorporated business	8.1%	Reliable	1.2	7.4%	Somewhat Reliable	2.8
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.9
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)						
Households	647,443	Reliable	6,146	11,191	Reliable	1,509
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable	7,512
With earnings	79.9%	Reliable	0.6	83.5%	Reliable	5.4
Mean earnings (dollars)	72,648	Reliable	1,364	70,188	Reliable	9,631
With Social Security income	26.4%	Reliable	0.3	25.0%	Reliable	5.7
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable	1,189
With Supplemental Security Income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9
Mean Supplemental Security Income (dollars)	9,104	Reliable	563	6,633	Somewhat Reliable	1,718
With cash public assistance income	2.9%	Reliable	0.3	3.0%	Not Very Reliable	2.1
Mean cash public assistance income (dollars)	5,330	Reliable	851	5,900	Somewhat Reliable	2,499
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	6.3
Mean retirement income (dollars)	22,425	Reliable	312	23,115	Reliable	5,026
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable	2.0
Families	473,263	Reliable	7,070	8,405	Reliable	1,354
Median family income (dollars)	64,594	Reliable	1,551	65,619	Reliable	13,426
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable	6.4
Median income (dollars)	76,856	Reliable	1,511	72,724	Reliable	10,818
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.6
Median income (dollars)	51,269	Reliable	4,775	28,235	Not Very Reliable	21,320

Figure 45: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Bottom

Male	381,434	Reliable	8,152	7,604	Reliable	1,467
Female	238,205	Reliable	6,630	5,609	Reliable	1,299
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,966	Reliable	7,568
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,836	Reliable	1,074	41,770	Reliable	3,199
Female	36,153	Reliable	893	29,939	Somewhat Reliable	8,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.2%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.5%	Not Very Reliable	3.5
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.5%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.6
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.5%	Reliable	0.8	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	8.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.15	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.8%	Reliable	6.4
2 to 4 units	2.5%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.6
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.5	8.6%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	26.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.5%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1970 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1969	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.7	63.5%	Reliable	6.8
Electricity	17.5%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1 D1 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOC cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	48.3%	Reliable	8.8
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	436,193	Reliable	7,265	7,352	Reliable	1,128
Median value (dollars)	329,000	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,232	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	456	Reliable	13	458	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRAP1 cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	38.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,347	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 48: Detailed Table with Color-Coding (D1)

Table ID C02003		Race in the United States Universe: Total Population in the United States 2008 American Community Survey 1-Year Estimates								
Table View (11) Map View (11) Chart View (11)										
Actions: Modify Table Bookmark Download		View Table Notes								
	Apple County, USA			Birch County, USA			Cherry County, USA			
	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error	
Total:	149,518	*****	64,866	*****	9,862,049	*****				
Population of one race:	145,799	Reliable	1,285	62,279	Reliable	830	9,558,835	Reliable	11,282	
White	108,310	Reliable	3,943	56,795	Reliable	1,432	5,193,451	Reliable	41,862	
Black or African American	11,519	Reliable	704	1,437	Reliable	248	866,596	Reliable	6,204	
American Indian and Alaska Native	2,432	Somewhat Reliable	602	1,817	Somewhat Reliable	745	61,347	Reliable	6,416	
Asian alone	4,875	Reliable	634	66	Not Very Reliable	122	1,275,136	Reliable	6,674	
Native Hawaiian and Other Pacific Islander	39	Not Very Reliable	65	151	Not Very Reliable	273	27,049	Reliable	2,239	
Some other race	18,564	Reliable	3,779	2,013	Not Very Reliable	1,414	2,135,056	Reliable	40,114	
Population of two or more races:	3,749	Somewhat Reliable	1,285	2,587	Somewhat Reliable	830	303,414	Reliable	11,282	
Two races including Some other race	875	Not Very Reliable	472	121	Not Very Reliable	194	104,722	Reliable	8,166	
Two races excluding Some other race, and three or more races	2,874	Somewhat Reliable	1,198	2,466	Somewhat Reliable	827	198,692	Reliable	9,075	
Population of two races:	3,257	Somewhat Reliable	1,105	2,587	Somewhat Reliable	830	281,478	Reliable	11,462	
White; Black or African American	812	Not Very Reliable	605	359	Not Very Reliable	248	33,577	Reliable	4,247	
White; American Indian and Alaska Native	522	Not Very Reliable	465	1,416	Somewhat Reliable	664	41,180	Reliable	4,166	
White; Asian	725	Not Very Reliable	467	273	Not Very Reliable	408	69,715	Reliable	5,780	
Black or African American; American Indian and Alaska Native	40	Not Very Reliable	65	418	Somewhat Reliable	200	11,670	Somewhat Reliable	3,770	
All other two race combinations	1,158	Not Very Reliable	599	121	Not Very Reliable	194	125,334	Reliable	8,350	
Population of three races	451	Not Very Reliable	523	0	Not Very Reliable	264	20,428	Reliable	3,232	
Population of four or more races	41	Not Very Reliable	67	0	Not Very Reliable	264	1,510	Not Very Reliable	839	

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 49: Detailed Table with No Color-Coding (D2)

Table ID C02003	Race in the United States Universe: Total Population in the United States 2008 American Community Survey 1-Year Estimates								
i									
Table View Map View Chart View									
Actions: Modify Table Bookmark Download									
View Table Notes									
	Apple County, USA			Birch County, USA			Cherry County, USA		
	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error
Total:	149,518		*****	64,866		*****	9,862,049		*****
Population of one race:	145,799	Reliable	1,285	62,279	Reliable	830	9,558,635	Reliable	11,282
White	108,310	Reliable	3,943	56,795	Reliable	1,432	5,193,451	Reliable	41,862
Black or African American	11,519	Reliable	704	1,437	Reliable	248	866,696	Reliable	6,204
American Indian and Alaska Native	2,432	Somewhat Reliable	602	1,817	Somewhat Reliable	745	61,347	Reliable	6,419
Asian alone	4,875	Reliable	634	66	Not Very Reliable	122	1,276,138	Reliable	6,674
Native Hawaiian and Other Pacific Islander	39	Not Very Reliable	65	151	Not Very Reliable	273	27,049	Reliable	2,239
Some other race	18,594	Reliable	3,779	2,013	Not Very Reliable	1,414	2,136,056	Reliable	40,114
Population of two or more races:	3,749	Somewhat Reliable	1,285	2,587	Somewhat Reliable	830	303,414	Reliable	11,282
Two races including Some other race	875	Not Very Reliable	472	121	Not Very Reliable	194	104,722	Reliable	8,156
Two races excluding Some other race, and three or more races	2,874	Somewhat Reliable	1,198	2,466	Somewhat Reliable	827	198,692	Reliable	9,075
Population of two races:	3,257	Somewhat Reliable	1,105	2,587	Somewhat Reliable	830	281,476	Reliable	11,482
White; Black or African American	812	Not Very Reliable	605	359	Not Very Reliable	248	33,577	Reliable	4,247
White; American Indian and Alaska Native	522	Not Very Reliable	465	1,416	Somewhat Reliable	664	41,180	Reliable	4,166
White; Asian	725	Not Very Reliable	467	273	Not Very Reliable	408	69,715	Reliable	5,780
Black or African American; American Indian and Alaska Native	40	Not Very Reliable	65	418	Somewhat Reliable	200	11,670	Somewhat Reliable	3,770
All other two race combinations	1,158	Not Very Reliable	599	121	Not Very Reliable	194	125,334	Reliable	8,350
Population of three races	451	Not Very Reliable	523	0	Not Very Reliable	294	20,428	Reliable	3,232
Population of four or more races	41	Not Very Reliable	67	0	Not Very Reliable	294	1,510	Not Very Reliable	839

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 50: Geographical Comparison Table with Legend Behind Link and Red First in the Legend (E1)

Geographic area	Percent	Reliability	Margin of Error
Anystate, USA	5.3	Reliable	0.1
COUNTY			
County A	11.6	Reliable	0.7
County B	1.0	Not Very Reliable	0.6
County C	9.6	Reliable	0.8
County D	2.2	Somewhat Reliable	1.1
County E	1.5	Reliable	0.4
County F	1.1	Not Very Reliable	0.8
County G	0.7	Not Very Reliable	0.5
County H	0.9	Somewhat Reliable	0.3
County I	3.2	Not Very Reliable	2.3
County J	0.7	Not Very Reliable	1.1
County K	7.3	Reliable	0.2
County L	0.3	Not Very Reliable	0.3
County M	8.0	Reliable	1.3
County N	0.4	Not Very Reliable	0.5
County O	0.6	Not Very Reliable	0.5
County P	3.0	Somewhat Reliable	0.8
County Q	3.7	Not Very Reliable	4.7
County R	0.0	Not Very Reliable	0.4
County S	3.3	Reliable	0.3
County T	1.0	Somewhat Reliable	0.4
County U	1.6	Reliable	0.3
County V	3.3	Reliable	0.4
County W	2.0	Reliable	0.3
County X	3.4	Reliable	0.3
County Y	31.9	Reliable	1.3
County Z	1.5	Reliable	0.4
County AA	1.2	Somewhat Reliable	0.6
County BB	7.5	Reliable	1.0
County CC	3.5	Reliable	0.8
County DD	3.7	Reliable	0.5
County EE	2.5	Somewhat Reliable	0.8
County FF	0.4	Not Very Reliable	0.4
County GG	3.3	Somewhat Reliable	1.0
County HH	2.3	Somewhat Reliable	0.7
County II	0.8	Somewhat Reliable	0.3
County JJ	1.2	Not Very Reliable	1.0
County KK	0.7	Somewhat Reliable	0.3
County LL	1.1	Somewhat Reliable	0.3
County MM	4.2	Somewhat Reliable	1.1
County NN	0.2	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 51: Geographical Comparison Table with Legend Behind Link and Green First in the Legend (E2)

Table ID
GCT0804

Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation
(Excluding Taxicab) in Anystate, USA
Universe: Workers 16 years and over in Anystate, USA
2008 American Community Survey 1-Year Estimates 

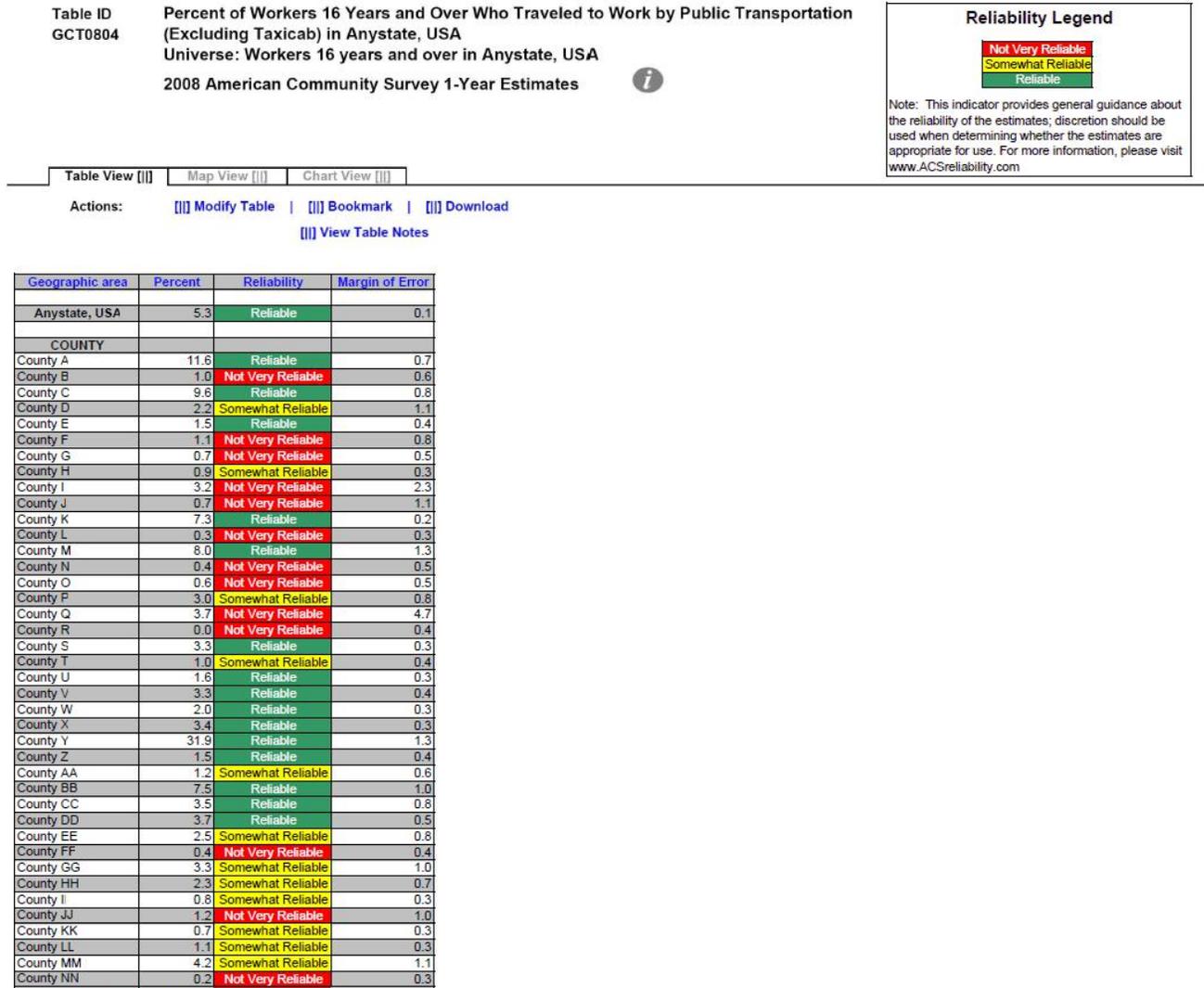
Table View  | Map View  | Chart View 

Actions: [Modify Table](#) | [Bookmark](#) | [Download](#)
[View Table Notes](#)

Geographic area	Percent	Reliability	Margin of Error
Anystate, USA	5.3	Reliable	0.1
COUNTY			
County A	11.6	Reliable	0.7
County B	1.0	Not Very Reliable	0.6
County C	9.6	Reliable	0.8
County D	2.2	Somewhat Reliable	1.1
County E	1.5	Reliable	0.4
County F	1.1	Not Very Reliable	0.8
County G	0.7	Not Very Reliable	0.5
County H	0.9	Somewhat Reliable	0.3
County I	3.2	Not Very Reliable	2.3
County J	0.7	Not Very Reliable	1.1
County K	7.3	Reliable	0.2
County L	0.3	Not Very Reliable	0.3
County M	8.0	Reliable	1.3
County N	0.4	Not Very Reliable	0.5
County O	0.6	Not Very Reliable	0.5
County P	3.0	Somewhat Reliable	0.8
County Q	3.7	Not Very Reliable	4.7
County R	0.0	Not Very Reliable	0.4
County S	3.3	Reliable	0.3
County T	1.0	Somewhat Reliable	0.4
County U	1.6	Reliable	0.3
County V	3.3	Reliable	0.4
County W	2.0	Reliable	0.3
County X	3.4	Reliable	0.3
County Y	31.9	Reliable	1.3
County Z	1.5	Reliable	0.4
County AA	1.2	Somewhat Reliable	0.6
County BB	7.5	Reliable	1.0
County CC	3.5	Reliable	0.8
County DD	3.7	Reliable	0.5
County EE	2.5	Somewhat Reliable	0.8
County FF	0.4	Not Very Reliable	0.4
County GG	3.3	Somewhat Reliable	1.0
County HH	2.3	Somewhat Reliable	0.7
County II	0.8	Somewhat Reliable	0.3
County JJ	1.2	Not Very Reliable	1.0
County KK	0.7	Somewhat Reliable	0.3
County LL	1.1	Somewhat Reliable	0.3
County MM	4.2	Somewhat Reliable	1.1
County NN	0.2	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 52: Geographical Comparison Table with Legend Above Table and Red First in the Legend (E3)



Source: U.S. Census Bureau, 2008 American Community Survey

Table ID: GCT0804
 Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation (Excluding Taxicab) in Anystate, USA
 Universe: Workers 16 years and over in Anystate, USA
 2008 American Community Survey 1-Year Estimates

Reliability Legend

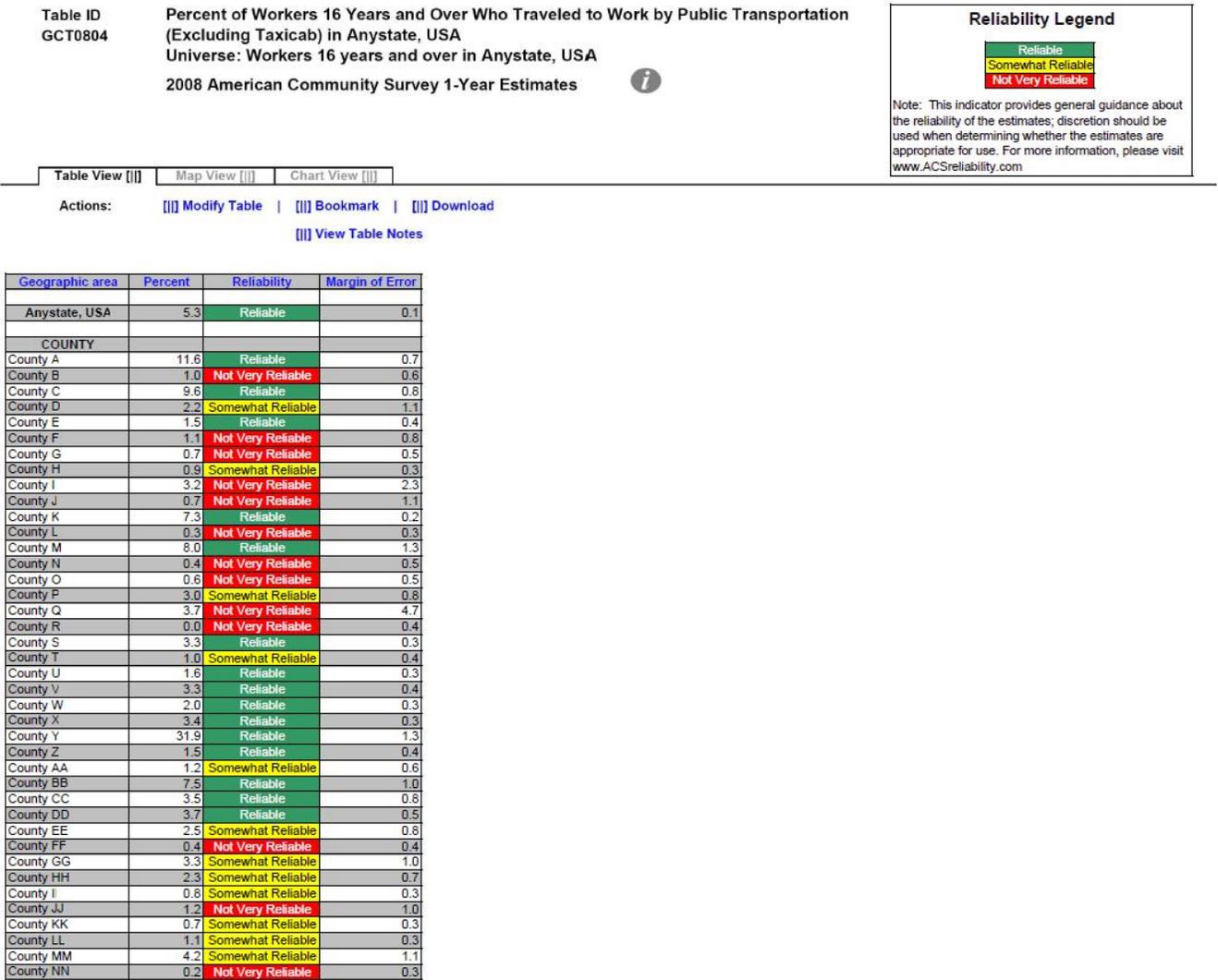
Not Very Reliable
 Somewhat Reliable
 Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View | Map View | Chart View

Actions: | Modify Table | Bookmark | Download | View Table Notes

Figure 53: Geographical Comparison Table with Legend Above Table and Green First in the Legend (E4)



Source: U.S. Census Bureau, 2008 American Community Survey

Table ID: GCT0804
 Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation (Excluding Taxicab) in Anystate, USA
 Universe: Workers 16 years and over in Anystate, USA
 2008 American Community Survey 1-Year Estimates

Reliability Legend

Reliable
 Somewhat Reliable
 Not Very Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View [] | Map View [] | Chart View []

Actions: [] Modify Table | [] Bookmark | [] Download

[] View Table Notes

8 Appendix B: Tasks for All Tables

The tasks and their associated answers are included below.

Figure 54: Tasks Part 1

A – Data Profiles tasks

1. What is the first thing that you noticed about this table?
[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
 - Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 -
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. A company offering cleaning services to senior citizens living alone is looking for potential customers. They want to know the estimate of householders ages 65 or older living alone in Anytown, USA. What would you tell them?

ANSWER:

2,266, Somewhat Reliable, +/- 641, or 9.3% (+/- 2.5%) somewhat reliable

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: easy

3. The Irish Embassy wants to know how many people in Anytown, USA might be interested in an open-house. What is the estimate and percentage estimate of people of Irish ancestry in Anytown, USA? Would you use either of these estimates?

Figure 55: Tasks Part 2

ANSWER:

12,714, Reliable, +/- 2,912

19.6%, Reliable, +/- 4.5%

Yes, Estimates are both Reliable

Difficulty: easy

4. A tutoring provider would like to teach courses that prepare students for standardized tests in Anytown, USA. They want to know the estimate and percentage estimate for school enrollment for high school (grades 9-12). What would you tell them?

ANSWER: 4,100, Reliable, +/- 1,086,

30.1%, Somewhat Reliable, +/- 7.1%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: Under "School Enrollment" heading, not "Educational Attainment", the reliability is different for the estimate and the percent.

DIFFICULTY: medium

5. The Danish Embassy is reporting that they have more people of Danish decent in Anytown than those of Portuguese decent. Is this true?

ANSWER: Danish, 1,700 +/- 1,689, Not Very Reliable, 2.6% +/- 2.6%, Not very reliable

Portuguese, 1,543, +/- 802, Not very Reliable, 2.4% +/- 1.2, Not Very reliable

No, not true. Estimates are not significantly different, and both estimates are not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: U.S. Citizenship status estimates and percents have different reliabilities.

DIFFICULTY: hard

6. GetYourDegree Community College is interested in opening a branch in Anytown, USA; however, their corporate mandate stipulates that there must be at least 14,000 students who have completed some college, but did not get their degree. You are responsible for reporting whether Anytown, USA, has met the mandate. What is your recommendation?

ANSWER: 10,562, Reliable, +/- 1,731

Do not open branch. With the MOE, the estimate could be as high as 12,293, but does not approach 14,000.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

Figure 56: Tasks Part 3

7. The mayor of Anytown, USA wants to know if the town should continue to fund a welcome wagon program for people who move from other states. If at least 5.0% percent of the population in Anytown, USA lived in a different state 1 year ago, he will keep the program. Based on the data, what would you tell him?

ANSWER: 2.9%, Not Very Reliable, +/-1.8%
Do not fund program. With MOE, estimate is at most 4.7%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

8. You are a demographer working for a local university conducting research about the population's heritage. What do you think about the Ancestry data in this table?

ANSWER: Most of the estimates are not very reliable, may look for another data source.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

9. In 2007, the percent of people who were separated in Anytown, USA was 1.9% (+/- .3%) and that estimate was considered "reliable". The Bureau for Family Affairs is now reporting that, based on 2008 ACS data, the percentage of people who were separated increased from 2007. Do you agree?

ANSWER: Disagree
2008 estimate is 2.9% (+/-2.7) – not very reliable, which is not significantly different than 1.9%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: hard

Figure 57: Tasks Part 4

B – Selected Pop Profiles tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. The National Organization for Young Adults is considering opening a chapter in Anytown, USA. They first want to know what the estimate for the number of people in Anytown that are ages 18 to 34. What would you tell them?

ANSWER: 569,916, Reliable, +/- 743

DIFFICULTY: Easy

3. The National Education Association wants to know what percentage of those who reported two or more races have a bachelor's degree? What would you tell the National Education Association?

ANSWER: 10.7%, Somewhat Reliable, +/- 3.1%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

NOTES: Under Educational Attainment

Figure 58: Tasks Part 5

4. A green company wants to know the percentage of households, where the householder reported having two or more races, which use a fuel other than gas or electricity to heat their home. What is the percentage?

ANSWER: 3.8%, Not Very Reliable, +/- 2.9%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

5. Your boss wants to know whether the percent of nonfamily households is higher for the total population or the population of housing units where the householder reported two or more races. What would you tell her?

ANSWERS: Total Population, 26.9%, Reliable, +/- 0.7%

Two or more races, 24.9%, Somewhat Reliable, +/- 6.8%

Using only the point estimates, Total population appears higher; but the estimates are not significantly different, and one may be less reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: Under Households by Type

DIFFICULTY: Hard

6. Find the civilian non-institutionalized population of 18 to 64 years who have a disability for both the total population and for the two or more race subcategory. If you were asked if the two estimates were different, what would you say?

ANSWER: Total Pop: 8.8%, Reliable, +/- 0.5%

Two or More Races: 8.7%, Somewhat Reliable, +/- 2.5%

They are not significantly different, Two or more races is less reliable than total pop.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

7. The mayor of Anytown, USA wants to know if the town should continue to fund a public telephone line for households with no telephone service available. If at least 2.0% percent of the population in Anytown doesn't have telephone service, she will keep the program. Based on the data, what would you tell her?

ANSWER: 1.0%, Somewhat Reliable, +/-0.3%

Discontinue the program, because the percentage does not approach 2.0%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

Figure 59: Tasks Part 6

8. Anytown, USA will be designated as a high income earning town if the median household income is at least \$55,000 in 2008. Will they get this designation?

ANSWER: Yes, 57,792, Reliable, +/- 1,233
Yes, the estimate and the range are above 55,000.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

9. Part of a new job creation program was designed to see how jobs were spread out across the population. What is percentage of the civilian employed population of two or more races who work in Farming, fishing, and forestry occupations?

ANSWER: 0.0%, Not Very Reliable, +/- 0.9%
No people were reported to work in these occupations, but the estimate may be inaccurate since it is not very reliable

DIFFICULTY: Hard

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: 0 estimate

Figure 60: Tasks Part 7

C – Subject Tables tasks

Note that “industries” are rows, “occupations” are columns.

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

(Starting out respondents with easier tasks because this is a large table)

2. What is the total number of people working in the Construction industry?

ANSWER: 5,334, Reliable, +/- 1,127

DIFFICULTY: easy

3. A technology association wants to know the amount of people who works in “Information” industries, with a goal of 1,800. Did they meet their goal?

ANSWER: 900, Not Very Reliable, +/- 595,

No. 1,800 is not within the MOE range of the estimate, but the estimate may be inaccurate since it is not very reliable

DIFFICULTY: Medium

Figure 61: Tasks Part 8

4. Of those working in the “Arts, entertainment, and recreation, and accommodation and food services” industry, what percent are in service occupations?

ANSWER: 64.7%, Reliable, +/- 10.6%

DIFFICULTY: easy

5. Of those working in the Construction industry, how many are in Farming, fishing, and forestry occupations?

ANSWER: 0.0%, Not Very Reliable, +/-3.7%

No one is reported to work in that industry and occupation combination, but the estimate may be inaccurate since it is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: 0 estimate

DIFFICULTY: hard

6. A company wants to know if at least 3,000 total people are working in public administration in Anytown, USA. What would you tell them?

ANSWER: 3,623, Reliable, +/- 807.

Yes. The point estimate is over 3,000 and the estimate is Reliable, so over 3,000 people work in public administration.

DIFFICULTY: Medium

7. Your boss wants to know which industry has more people in “Sales and office occupations”: “Educational services, and health care and social assistance” or “Transportation and warehousing, and utilities”? What would you tell him?

ANSWER: Educational, 16.2%, Somewhat Reliable, +/- 5.4%

Transportation, 16.5%, Not Very Reliable, +/- 10.9%

They are not significantly different, “Educational” is less reliable than total pop, and the estimate may be inaccurate.

DIFFICULTY: Hard

8. You are writing a grant proposal to secure funding for a research project focused on increasing the workforce in the “educational services, and health care, and social assistance” industry. You need the percent of people in this industry working in “service occupations”. What would you say in your grant proposal?

ANSWER: 26.4%, +/- 7.0%, somewhat reliable

Figure 62: Tasks Part 9

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

Figure 63: Tasks Part 10

D – Detailed Tables tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. There is consideration for expanding an outreach program if there are at least 30,000 Native Hawaiian and Other Pacific Islanders in Cherry County. What is your recommendation to the program directors?

ANSWER: 27,049, Reliable, +/- 2,239
Not enough to expand the program.

DIFFICULTY: Medium

3. Your boss wants to know the estimate of the number of people of two or more races in Apple County. What would you tell him?

ANSWER: 3,749, Somewhat Reliable, +/- 1,285

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

Figure 64: Tasks Part 11

4. For a grant proposal, you need an estimate of the number of people of four or more races in Birch County. What would you say in your proposal?

ANSWER: 0, Not Very Reliable, +/- 294

No one reported to have four or more races, but the estimate may be inaccurate since it is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

NOTES: 0 estimate

5. The Mayor of Birch County wants to know the estimate of the number of people of one race in Birch County. What would you tell the mayor?

ANSWER: 62,279, Reliable, +/- 830

DIFFICULTY: Easy

6. You are a reporter for a newspaper, and are writing an article about the amount of people who report one race as "some other race." Specifically for Birch County, you want to know if the estimate for the "some other race" group for those reporting only one race is higher than the estimate of American Indian and Alaska Native group. What is your finding?

ANSWER: American Indian and Alaska Native, 1,817, Somewhat Reliable, +/- 745

Some other group, 2,013, Not Very Reliable, +/- 1,414

Yes the group reporting "some other race" is higher than the group reporting American Indian and Alaska Native.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

7. Looking at the estimates of the Black or African American subpopulation in Apple County and Birch County, which estimate is more accurate?

ANSWER: Apple, 11,519, Reliable, +/- 704

Birch, 1,437, Reliable, +/- 248

Based on reliability, they have the same accuracy. Apple County has a smaller relative MOE, it could be considered more accurate.

DIFFICULTY: Medium

8. A local newspaper reports that Apple County has more people reported as having three or more races than Birch County. Do you agree?

Figure 65: Tasks Part 12

ANSWER: 451 in Apple county (+/-523), Not very reliable
0 in Birch County (+/-294), not very reliable.
No, Not statistically different, and both estimates are not very reliable.

DIFFICULTY: Hard

Figure 66: Tasks Part 13

E – Geographic Comparison Table tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.] make changes noted above.

- Probe if indicator is mentioned: What do the colors represent?
 - IF quality/reliability: How is quality measured here or what measure is used to determine the level of quality?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the colors in the tables? What do the colors represent?
 - IF quality: How is quality measured here or what measure is used to determine the level of quality?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. a. The Anystate government will be publishing a report in which it highlights various counties and the degree to which they use public transportation to get to work. They only want to include counties where they are confident that the data would not likely be contested.

Which counties would you use?

ANSWER: Any counties of "Reliable" (or "somewhat reliable")

DIFFICULTY: easy

b. Anystate, USA wants to warn the county planners in counties where the data on public transportation use may not be very accurate.

Which counties do you think Anystate should warn?

ANSWER: Any counties of "Not Very Reliable"

DIFFICULTY: easy

Figure 67: Tasks Part 14

3. Counties D and E, which share a border, would like to tell the local newspaper about the success of their combined public transportation system. They want to calculate the total percent of people using public transportation to get to work by adding the percent in each county together. Would you recommend they do this?

ANSWER: County D has 2.2%, Somewhat Reliable, and +/- 1.1%
County E has 1.5%, Reliable, and 0.4%
OK to do this, but want to mention differences in reliability.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

4. Counties Q and U used two different approaches towards their public transportation systems. County Q would like to say that they had a higher percentage that traveled to work using public transportation compared to County U. Is this true?

ANSWER: County Q, 3.7%, Not Very Reliable, +/- 4.7%
County U, 1.6%, Reliable, +/- 0.3%
No, Not statistically different, and County Q estimate is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: hard

5. County Y is a very urbanized area. The county is eligible for a green initiative award if at least 30% of its citizens used public transportation to get to work. Should they get the award?

ANSWER: County Y, 31.9%, Reliable, 1.3%
Yes, they should get the award.

DIFFICULTY: Medium

6. County A wants to say that over 10% of people used public transportation to travel to work. Is this true?

ANSWER: 11.6%, Reliable, +/- 0.7%
Yes, over 10%

DIFFICULTY: Medium

7. In an effort to raise awareness of the county's under-used bus system, County R says that absolutely no one in the county uses public transportation to travel to work. Is this true?

ANSWER: No, not necessarily, 0.0%, +/- 0.4%, not very reliable

Figure 68: Tasks Part 15

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

8. What is the percentage of people in County FF who use public transportation to travel to work?

ANSWER 0.4%, Not Very Reliable, +/-0.4%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

9 Appendix C: General Protocol

Figure 69: Protocol Part 1

General Introduction

Thank you for your time today. My name is <Name>, and I will be working with you today. We will be evaluating a new design of the new ACS data table format by having you work on several tasks. Your experience with the table is an essential part of our work. We are going to use your comments to give feedback to the developers of the table. Your comments and thoughts may help the developers make changes to improve the table. I did not create the site, so please do not feel like you have to hold back on your thoughts to be polite. Please share both your positive and negative reactions to the site. And remember, we are not evaluating you or your skills, but rather you are helping us see how well the table works.

First, I would like to ask you to read and sign this consent form. It explains the purpose of the session and informs you that we would like to videotape the session, with your permission. Only those of us connected with the project will review the tape. We will use it mainly as a memory aid. We are going to do some eye tracking as well as have you work on some task scenarios that I will give you. There is also a short background survey that we would like you to complete. If you don't want to answer any of the questions, please feel free to skip them.

[Hand consent form and background survey; give time to read and sign; sign own name and date if you have not already done so.]

During the session, I will ask you to work on several tasks. I would like you to tell me your impressions and thoughts about the Tables as you work through the tasks. I would like you to "think aloud" and talk to me about your decisions. So if you expect something to happen, tell me what you expect. If you expect to see some piece of information, tell me about what you expect. This means that as you work on a task, talk to me about what you are doing, what you are going to do, and why. Talk to me about why you clicked on a link or where you expect the link to take you.

Finally, during the session, I will remind you to talk to me if you get quiet, not to interrupt your thought process simply to remind you to talk to me. Please focus on verbalizing what you are thinking and expecting to happen. We are interested in the reasoning behind your actions, not just what you are doing.

I ask that each time you start a task, please read the task out loud, and once you have found the information you are looking for please state your answer aloud. For example, say, "My answer is ---" or "This is my final answer." After each task, I will save the eye-tracking data and close the table. I will return you to the table and let you know when you can begin the next task.

Please remember to begin each task by reading the task question aloud as well as stating the final answer. As you work, please remember think aloud.

[Pull up a Web site in Firefox, such as www.wtop.com or www.espn.com, etc.]

Before we get started, let's practice thinking aloud. Say that you had a minute or two to kill and came to this Web site. Describe your thought process as you navigate through a Web site looking for something interesting to read

Figure 70: Protocol Part 2

Now I am going to calibrate your eyes for the eye-tracking. I am going to have you position yourself in front of the screen so that you can see your nose in the reflection at the bottom of the monitor. To calibrate your eyes, please follow the [red/blue] dot across the screen with your eyes.

[Do Calibration]

Now that we have your eyes calibrated, we are ready to begin.

[If Calibration Fails]

It seems that we are having some technical difficulties with our equipment and need to continue without the eye tracker.

[Continue with Test]

I am going to leave you here in the test room, but we will still be able to communicate through a series of microphones and speakers. I will let you know when to begin the first task by reading it aloud from the folder near you. Do you have any questions?

[After the last task]

I will come back to the testing room to discuss your experience with the ACS data tables with you.

[Have them complete the Satisfaction and Task Difficulty Forms, then walk through the Debriefing Questions]

10 Appendix D: Consent Form

Figure 71: Consent Form



Consent Form
Usability Study of the ACS Data Tables

Each year the Census Bureau conducts many different usability evaluations. For example, the Census Bureau routinely tests the wording, layout and behavior of products, such as Web sites and online surveys, in order to obtain the best information possible from respondents.

You have volunteered to take part in a study to improve the usability of the ACS data tables. In order to have a complete record of your comments, your usability session will be videotaped. We plan to use the tapes to improve the design of the product. Staff directly involved in the usable design research project will have access to the tapes. Your participation is voluntary and your answers will remain strictly confidential.

This usability study is being conducted under the authority of Title 13 USC. The OMB control number for this study is 0607-0725. This valid approval number legally certifies this information collection.

I have volunteered to participate in this Census Bureau usability study, and I give permission for my tapes to be used for the purposes stated above.

Participant's Name: _____

Participant's Signature: _____ Date: _____

Researcher's Name: _____

Researcher's Signature: _____ Date: _____

11 Appendix E: Questionnaire on Statistical Experience, Computer Use and Internet Experience

Figure 72: Questionnaire on Statistical Experience, Computer Use and Internet Experience Part 1

Questionnaire on Statistical Background, Computer Use, Internet Experience

YOUR ANSWERS ARE CONFIDENTIAL

Demographics

1. What is your age? _____

2. Are you male or female? _____

3. What is your level of education?

- grade school
- some high school
- high school degree
- some college
- 2-year college degree
- 4-year college degree
- some postgraduate study (e.g., M.A., M.B.A., J.D., Ph.D., M.D., programs)
- postgraduate degree (e.g., M.A., M.B.A., J.D., Ph.D., M.D.)

4. How long have you been using ACS data products?

5. How often do you use ACS data products?

- Daily
- Weekly
- Monthly
- Less than once a month
- Do not use

6. For what purpose do you usually use ACS data products? (e.g., to write reports, news articles, make decisions, etc.)

7. What statistics courses have you completed?

- Advanced graduate-level statistics
- Advanced undergraduate/beginning level graduate statistics courses only
- Introductory statistics courses only
- No statistics courses completed

8. Rate your level of expertise with statistics.

- Novice (Just beginning to use statistics or rarely use them)
- Intermediate (Moderate experience with statistics)
- Expert (A great deal of experience with and/or frequent use of statistics)

Figure 73: Questionnaire on Statistical Experience, Computer Use and Internet Experience
Part 2

Computer Experience

1. Do you use a computer at home, at work, or both?

(Check all that apply.)

- Home
- Work
- Somewhere else, such as school, library, etc.

2. If you have a computer at home,

a. What kind of modem do you use at home?

- Dial-up
- Cable
- DSL
- Wireless (Wi-Fi)
- Other _____
- Don't know _____

b. Which browser do you typically use at home? Please indicate the version if you can recall it.

- Firefox
- Internet Explorer
- Netscape
- Other _____
- Don't know _____

c. What operating system does your home computer run in?

- MAC OS
- Windows 95
- Windows 2000
- Windows XP
- Windows Vista
- Other _____
- Don't know _____

3. On average, about how many hours do you spend on the Internet per day?

- 0 hours
- 1-3 hours
- 4-6 hours
- 7 or more hours

4. Please rate your overall experience with the following:

Circle one number.

	No experience					Very experienced			
Computers	1	2	3	4	5	6	7	8	9
Internet	1	2	4	5	5	6	7	8	9

12 Appendix F: Satisfaction Questionnaire (QUIS)

Figure 74: Satisfaction Questionnaire

Questionnaire for User Interaction Satisfaction (QUIS)

Please circle the numbers that most appropriately reflect your impressions about using the new ACS data tables.

1. Overall reaction to the new ACS data tables:	terrible 1 2 3 4 5 6 7 8 9	wonderful 7 8 9	not applicable
2. Definition of reliability:	confusing 1 2 3 4 5 6 7 8 9	clear 7 8 9	not applicable
3. Use of terminology throughout the tables:	inconsistent 1 2 3 4 5 6 7 8 9	consistent 7 8 9	not applicable
4. Information displayed in the tables:	inadequate 1 2 3 4 5 6 7 8 9	adequate 7 8 9	not applicable
5. Arrangement of information in the tables:	illogical 1 2 3 4 5 6 7 8 9	logical 7 8 9	not applicable
6. Tasks can be performed in a straight-forward manner:	never 1 2 3 4 5 6 7 8 9	always 7 8 9	not applicable
7. Reliability indicator for the tables:	confusing 1 2 3 4 5 6 7 8 9	clear 7 8 9	not applicable
8. Overall experience of finding information:	difficult 1 2 3 4 5 6 7 8 9	easy 7 8 9	not applicable
9. Additional Comments:			

13 Appendix G: Task Difficulty Survey

The task difficulty survey was tailored for each type of table. Only the task difficulty survey for the Data Profiles Tables are shown here to conserve space.

Figure 75: Data Profiles Task Difficulty Part 1

Task Difficulty Rating Questionnaire

On a scale of 1-10 with 1 being extremely easy and 10 being extremely difficult, please rate the difficulty of each task.

A. What is the first thing that you noticed about this table?

Extremely Easy											Extremely Difficult
1	2	3	4	5	6	7	8	9	10		

1. A company offering cleaning services to senior citizens living alone is looking for potential customers. They want to know the estimate of householders ages 65 or older living alone in Anytown, USA. What would you tell them?

Extremely Easy											Extremely Difficult
1	2	3	4	5	6	7	8	9	10		

2. The Irish Embassy wants to know how many people in Anytown, USA might be interested in an open-house. What is the estimate and percentage estimate of people of Irish ancestry in Anytown, USA? Would you use either of these estimates?

Extremely Easy											Extremely Difficult
1	2	3	4	5	6	7	8	9	10		

3. A tutoring provider would like to teach courses that prepare students for standardized tests in Anytown, USA. They want to know the estimate and percentage estimate for school enrollment for high school (grades 9-12). What would you tell them?

Extremely Easy											Extremely Difficult
1	2	3	4	5	6	7	8	9	10		

4. The Danish Embassy is reporting that they have more people of Danish decent in Anytown than those of Portuguese decent. Is this true?

Extremely Easy											Extremely Difficult
1	2	3	4	5	6	7	8	9	10		

Figure 76: Data Profiles Task Difficulty Part 2

5. GetYourDegree Community College is interested in opening a branch in Anytown, USA; however, their corporate mandate stipulates that there must be at least 14,000 students who have completed some college, but did not get their degree. You are responsible for reporting whether Anytown, USA, has met the mandate. What is your recommendation?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

6. The mayor of Anytown, USA wants to know if the town should continue to fund a welcome wagon program for people who move from other states. If at least 5.0% percent of the population in Anytown, USA lived in a different state 1 year ago, he will keep the program. Based on the data, what would you tell him?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

7. You are a demographer working for a local university conducting research about the population's heritage. What do you think about the Ancestry data in this table?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

8. In 2007, the percent of people who were separated in Anytown, USA was 1.9% (+/- .3%) and that estimate was considered "reliable". The Bureau for Family Affairs is now reporting that, based on 2008 ACS data, the percentage of people who were separated increased from 2007. Do you agree?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

14 Appendix H: Debriefing Questions

Figure 77: Debriefing Questions

Data Reliability Indicator Round 3 Debriefing Questions

1. Can you walk me through your thinking on why you marked (a particular QUIS item) especially low/high? (Do this for several low/high QUIS ratings; also, do this for easy/difficult ratings).
2. Do you think the new data reliability indicator helped you to find information quickly? Did you think the color-coding made it take longer or seem more difficult to find information?

FOR VERSIONS WITH THE LEGEND BEHIND THE LINK ONLY: *If they did not click on the "View table notes" link to open the legend: At any point during the testing, did you look for a legend to explain the data reliability indicator?*

Click on the link to bring up the legend. There is a legend located in the table notes. Do you think this legend would have been useful for completing the tasks or not?

Open the version of the same table with the legend above the table. We are also testing another version of the table you saw that has the indicator legend located above the table. Which version do you prefer – the one that you used or this one? Which do you think would be easier to use and why?

FOR VERSIONS WITHOUT COLOR ONLY: *Open the color-coded version of the same table.* We are also testing another version of the table you saw that has a color-coded data reliability indicator. Which version would you prefer to use? Which do you think would be easier to use and why?

3. Because of the color-coding used in these tables, they may appear differently to different people. In order to examine this issue, we are asking participants whether they are color-blind or not. Are you color-blind?

4. Is there anything else about the tables that we have not discussed that you would like to mention?

15 Appendix I: Satisfaction Questionnaire Comments, Usability Issues with the ACS Tables, and Participant Comments

Comments about the ACS Data Tables from QUIS Satisfaction Survey

Data Profiles

- A1: Typeface too small, need down arrow (scroll arrow) on the right.
- A2: It would be useful to have the column names frozen so they still appear on the screen when you scroll down.
- A3: Too much data on one table, font size too small.
- A4: The tables are very small for data recognition , they should be enlarged to make the data easier to see. I do like the fact that each line is an alternating gray white, that makes it easier to decipher each line of data.
- A4: Get rid of tables all together. Use search options. Google seems to be able to do this, why can't the government?
- A4: Grey/White is boring - blue lines or color shift when shift (color bar) when shift categories [note: participant meant the bolded row headers].

Selected Population Profiles

- B4: Print on screen was very small. Persons with not so good visual acuity may have difficulty locating column data. Otherwise, I would use the ACS Tables for future work/research.

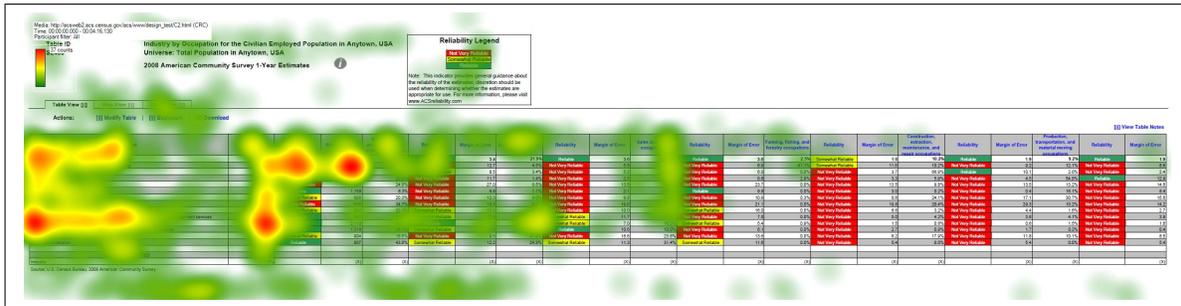
Subject Tables

- C1: Should include an index or key that describes what the column headings mean, particularly those w/ the same name and different information (e.g., margin of error being presented in seemingly different ways). *Note: The legend was behind the link for this participant.*

Detailed Tables

- D1: It takes more than a few moments to become acclimated to the layout of the information to ascertain what is where. Otherwise it was an okay read.
- D2: Clearly, a learning curve will occur and help.

Figure 79: Heat Map of Subject Table with the Legend Above the Table (C2)



column for this category. Participant 4 commented halfway through the testing session, “Oh I just saw it, the two or more races column.” Participant 5 said, “So now I’m reading over the table heading again, selected populations profile in Anytown USA, the total population of two or more races. I’m finding that confusing because the table has the total population which presumably refers to the total population of Anytown, and then in the fourth column two or more races.” Participant 6 did not see the separate column until the last task (Task 8) and then said, “I see two or more races here now at the top.”

Comments are paraphrased unless they appear in quotation marks.

15.1 Dry Run

The short descriptions used in this section refer to the tasks that can be found in Appendix B.

Get Your Degree: “See, I have to keep scrolling up this column ’cause I don’t know what this is. Margin of error, percent. There’s two margin of errors, and reliability, I have no clue.”

Irish embassy question: “I think this is the reliability column.”

“I’m trying to figure out why there’s two reliability and margin of error columns. I don’t know if I’m looking at the right thing.”

Danish embassy question: “I don’t know what kind of scale this is on. Not reliable somewhat reliable, whatever.”

What do you think about the ancestry data: “I’m seeing a lot of not very reliable notes right here, so I’m thinking that the information located here isn’t really reliable. I would probably be reluctant to accept the estimates that are given here.”

Comments: *Do you think it's an obvious place where people would look for a legend under table notes?* “No I would've clicked here [on margin of error column header].”

“These [row headers] aren't really distinct”

“If I scroll down here, I can't remember what the column headings were, so that was annoying, 'cause then I have to scroll back up and then figure out where I was at before and come back down here. So it would've been nice if the column headings were still there.”

“And then I can't figure out how it's organized [talking about indentations]. I see total households, and then it's like indented, and I've been trying to figure out this goes with this, and does this go under this, and these both go underneath here? I don't know, the organization is really not that clear, as far as the subcategories. And then there's a space here. I guess this is still under households by type, why is there a blank line,? Why are these separated?”

“I didn't know what kind of scale it [reliability] was on.”

“These headings don't really pop out, so I think just making these distinct, grouping them together, some kind of bolded box around it. I wasn't able to easily distinguish between different categories listed here.”

15.2 Participant 1 - A1

“It's a little blurry 'cause my eyes aren't the best.”

Irish Ancestry question: “The column labels are gone so I need to scroll back up to see what they are.”

Demographer at a local university: “For the most part it doesn't look very reliable, in terms of, because of the red um boxes.”

“Though I guess what I'm thinking is that I would like to know a little bit more about how they came up with the reliability statistics, just to confirm that it would be in a similar way I would make that assessment.”

Danish embassy question: “I would probably visit that ACS Reliability.com website to learn more about it [reliability].”

Mayor question: “The estimate is not very reliable, yeah that red box is really getting me.”

Comments: “There isn’t a definition of how they constructed it, and so my confidence in my own ability to interpret data um makes me think maybe they include something else in their reliability measure that just isn’t standard affair.”

15.3 Participant 2-A3

“I don’t know how I feel about it, as someone who understand generally statistics, it’s nice to have something that’s color coded, so I don’t have to think about this. But it’s a simple mathematic formula, I guess your doing standard deviation / mean.”

15.4 Participant 3-A4

“ I don’t know exactly what that MOE is, I’m assuming +/- 641.”

“And that the MOE is 2.5, now I don’t know if that’s a percentage, I assume that’s a percentage, could be + or -”

“Probably, I think that I would be more inclined to tell them if the data looked to be not very or not reliable. Somewhat reliable to reliable I would probably mention it in passing. I trust what’s shown on the computers, so I’m probably a bit over-trusting when it comes to data.”

“I think a lot of the top tables need to be carried down with it all the way to the bottom of the table so you don’t have to scroll back and forth to see what your data is.”

“The table is going make me go cross-eyed eventually, it’s very small.”

“In terms of reliability it seems there’s a lot of unreliability data, but it’s useless.”

“Unreliable stuff makes life more difficult.”

“Ooh I like that better, mostly because it’s easier to read.” [when shown a color table]

“And it shows red, not very reliable it makes it a lot faster.” [when talking about the ancestry Danish vs. Portuguese question]..

15.5 Participant 4-B1

“The font size is really small.”

“I see the colors.”

Fuel, Two or More Races: “Oh I just saw it, the two or more races column.”

“The way it’s pulled out, the two or more races column, you wouldn’t think it would be in that column, because it’s also a row. I wouldn’t think to find it in a column.”

P4, Task 4. “What differs reliable and somewhat reliable? Scale needed on the bottom.”

Boss wants to know: “Yeah I would say it’s that the data is much more reliable, well I don’t know if it’s much more reliable, but the data is considered reliable. And it’s only somewhat reliable. Still now that I think about it , it seems really vague, like what does that mean? Somewhat reliable? What makes it reliable versus somewhat reliable? It would nice if there was some type of range, to give me an idea what that really means. A scale or something, at the bottom. I can’t really have much confidence in saying something is somewhat reliable or not very reliable in this case.”

P4, Task 5. Row with percents is confusing with numbers.

Reliability table is confusing.

Disability, two or more races: “Ok, so it’s under disability status.” [thought it was somewhere else]

“The list what the disability, it makes me think that, the line above it is not the disability, but it’s the same number, the one below it is just a percent of the population. That’s confusing.”

“And the data is reliable for this case, but I look at the percent and the percent for two or more races is somewhat reliable, isn’t it just the calculation from the base of the population? So that’s confusing.”

“The reliability column is confusing.”

P4, Task 7. "I would want to click on something to read why is this reliable."

High Income: "If I could click on something, just to read why, why is this reliable?"

Comments:

"I did, I also tried to click on reliability. 'Cause sometimes, especially when it's blue I thought that I would be able to sort based on that. Um, and I thought that maybe there would be a pop up saying 'reliability is this.'"

"Maybe It's just the title, view table notes. Maybe if it were like view table definitions or something like that. That would make me think that, ok, this means they are explaining something on the table. A table note, makes me think that oh it's just something like I can save my notes."

"I rated it as a 5 because it's usable, but honestly I don't think my I don't think this would've been any different than opening a book."

"This use hasn't been enhanced by the Web at all."

"It was hard to find [the definition of reliability]."

"Make the headings stand out more. I know it's in all caps but some starts to blur after a while. I mean it's not consistent, sometimes its gray."

"Can't tell how reliability is measured."

Don't know what they base that on. Recommends having a general sentence about statistical reliability followed by more detailed information for statistics experts.

Novices may not care, but understand what reliable means in a general sense if next to a statistical cue.

Somewhat reliable is too vague.

15.6 Participant 5-B2

P5, Task 0: “The font on the table is really small.”

“The second thing I notice are the reliability indicators and the different colors that are highlighted. And I’m not sure if I like that or not. I guess I do find that to be helpful.”

“Just because it jumps out at you right at the beginning, and so I don’t see the data first. It’s like I don’t have to look at the data to determine myself if it’s reliable. Like someone else is just telling me that. Which is good for the average user I guess. But the colors did jump out at me.”

“Well now thinking about it, they seem to correlate with streetlights, green being go ahead, it’s very positive. Yellow is somewhat mediocre, and red is not at all good or stop. So I guess that makes intuitive sense to me.”

“It’s difficult to look at the table because it’s so long and the subject headings besides being capitalized aren’t really emphasized or highlighted in anyway so it’s hard to tell when your looking at a new piece of data. I think, for me it would be easier if the subject headings were highlighted in a different color. And if you can search within the table or a subject specifically.”

P5, Task 2: “This is where I would like to have a find search so I could immediate scroll to education, or be immediately be taken to it as opposed to having to scroll through the whole document.”

“And then now I’m looking next to reliable, it says this number is .6 and I think that’s the margin of error but again I would have to scroll all the way up to the top of the table to find that. Which I find to be rather annoying. Oh no see I gave you the wrong answer because I was looking at the 13 percent was the total population, so I actually need to be looking in the 4th column.”

“I would prefer to see on the table is the uh, column headings to scroll down the table as I scroll down the table so I don’t make that same kind of mistake again by reading the wrong column.”

P5, Task 3: Table title is misleading/confusing: Total population and 2 or more races.

“So now I’m reading over the table heading again, selected populations profile in Anytown USA, the total population of two or more races. I’m finding that confusing because the table has the total population which presumably refers to the total population of Anytown, and then in the fourth column two or more races.” *Note: P5 mixed up two or more reliability column with total population, as well as estimate with percent occasionally.*

Comments: “Font was too small, too much information on the table, had to scroll down so much.”

“I would want the subject headings ..*participant read column headers* scroll down with you or at least have them at the top of every subject, like sex and age so you remember what your looking at in each of the columns.”

“I wouldn’t have gone to view table notes to learn about reliability.”

“I think the reliability thing is important enough to have it as a separate thing. The casual observer probably doesn’t need to know +/- parentheses but they would want to know what the definition of reliability is or at least that would help them analyze the data.”

“So I guess I would expect to see it somewhere on the top, and I would prefer to have it not be something you would have to click on.”

“One thing I would like to see, just for usability purposes to be able to minimize some of these columns if you don’t need them or want to look at them.’

“Yeah, I mean I like It [reliability], but I didn’t know what it actually meant.”

“I guess they had a high enough response rate to know that it would be a consistent statistic.”

“But then again that’s why I think reliability should be defined just right on top as opposed to something you have to click on.”

“Not very reliable [indicator] is most helpful.”

15.7 Participant 6-B4

P6 had trouble finding two or more races column (kept referring to the two or more races row value which is 3.1 percent). As a result many of the participant’s responses are incorrect.

Task 8: “I see two or more races here now at the top.”

Colors are universal, “I love the colors, I’m a color person. I love it.”

Comments:

Had some difficulty understanding logic of the problem

Public should be able to use this table, color coding helps.

15.8 Participant 7-C1

P7, Task 0. *The two reliability columns confused the participant.* Labeled the same not sure what the difference is.

“The first thing I notice would be the color scheme, red, yellow, and green shaded boxes.”

“I would assume red is bad and green is good, and yellow is neutral. And by looking at it that’s somewhat right cause it says red is not very reliable so I assume the source of the data is not the best.”

“Although it is a little confusing that there’s two different columns for reliability that don’t have the same information. I guess one’s a percentage and one’s a...Actually I’m not sure what the difference is.”

Task 4. “So it’s kinda difficult with such a long with so many columns to keep track of, which row you want to focus on.”

P7, Task 6. *in reference to table width.* “...difficult to go back and forth here with the way this is setup.”

“The transportation data is not very reliable and the education data is somewhat reliable but it’s difficult to use it to make any determination about the answer they’re both pretty subjective, I don’t know the threshold between somewhat and not very or what that means in terms of numbers, especially when the two numbers are close together. Oh I guess I can saywell I guess that’s why, the transportation data has a higher margin of error, I guess that’s why it’s not very versus somewhat. But I’m still not exactly sure about what type of index or what those numbers mean in later columns for margin of error oppose to beginning where it seems to be a whole number.”

Comments: “I think the use of color is always good in terms of making things clear and helping people focus. So it quickly alerts you to I guess the type of info like how good the information is. I honestly looked at that before I even saw what the table was for.”

“This is the way I would expect this type of data to be displayed.”

“I guess.. it seems subjective, so if there were some of key or index that had even if it was a numeric range like things with a MOE of 0 to 5 are considered reliable, even though I don’t necessarily know what that means. But it would give it some sort of qualifying description,

it seems like anyone could've just drawn a line and say that's reliable and that's not reliable and I have no idea where that line is drawn or how or why."

"They seem to represent different things with the same column heading" (referring to headers like MOE, or reliability).

Perhaps adding an abbreviated description could add some clarification.

Explain columns like MOE.

"When looking at it without any other information I don't know what that means."

Recommended placing "reliable first because w/o color it doesn't make sense to people."

15.9 Participant 8-C2

P8, Task 0. Looking at areas that are highlighted, then subjects, then industry. Thinking about what this is telling me.

P8, Task 3. Did not realize that table scrolled horizontally.

P8, Task 6. Looked for way to modify it so she didn't have to keep scrolling. Tried "modify it" and other links.

15.10 Participant 9-B3

P9, Task 1, Would Control+F and look for 18-24.

P9, Task 3. After clicking on view table notes the P commented that there was no discussion of household or individuals.

Tried clicking on the 2 or more races column.

P9, Task 4. Mentioned having to scroll back up to find column.

P9, Task 5. “I lost track of my columns again” “I wonder if there’s a way to highlight the row” to find out where I am suppose to be.

Comments: Scrolling columns, width too much, heading disappears, too wide and too long.

Subheadings don’t jump out that much.

15.11 Participant 10-D1

P10, Task 0. Did not mention color/reliability.

Comments: Looked for legend, something to make sense.

15.12 Participant 11-D2

P11, Task 0. “Print is fairly small.”

P11, Task 4. “Trouble tracking rows across”.

P11, Task 5. “Would probably use the mouse to help me stay on a horizontal plane.”

15.13 Participant 12-E1

P12, Task 0: “The first thing that my eyes are drawn to is the coloring.” probe: what do you think the colors represented: “Just good data versus bad data or the strength of the information.”

“I was just thinking that um might be uh if it is suppose to represent the strength then maybe uh like a bar or uh a color code expressing intensity more linearly instead of just color coding.”

P12, Task 1: “I’m not looking at the MOE or the percent. I’m just letting the reliability column do the thinking for me.”

“Actually, now I...I’m just thinking through this, I actually don’t know if the percent column has to do with the reliability. But if it did I would take County A and County Y” Because I would make an arbitrary cut-off, like above 10 percent. But again I’m not sure what that percent column has to do with” (Don’t know what percent column has to do with reliability [participant seems to think percent is related to reliability, not the estimate.]

“Oh you know what, since the colors are so dramatic, I’m just realizing that I didn’t even read the title on this page which is pretty bad” [non verbal behavior: shaking head]

“I guess it just shows you jump to reading things that pop out.”

“I’m not sure I’d have that so colorful then um maybe it’s my.. just looking at the title.”

P12, Task 2: “I think that I would probably not recommend this but something that would be useful to see again would be um the strength represented as a percentage or something. So that I could um kind of see whether or not.”

“I think on this page it would be helpful to have a descriptive of the margin of error for um as a refresher for people who haven’t had statistics in a while.”

“I would not recommend because I don’t understand um how close um the somewhat reliable versus the reliable um are, in relation to one another.”

Comments:

“This could be the way I look at things, I was so distracted by like getting into this and looking at the red, and green, and yellow, and those being almost so obvious I actually didn’t even look at what the title was first thing.”

“I would probably need.. I think I put this in my notes, just a description of like almost what each of the columns mean, related to the entire ...”

“I don’t know why I did not [click on View Table Notes].. it’s like I thought about it but then I just thought oh they’re not clickable.”

“I don’t really see anywhere else that it says anything else about this [the reliability legend].”

“On all of them [tasks] I just find myself going percent, margin of error, not really understanding how they relate to reliable.”

15.14 Participant 13-E2

Task 0, “I’m a little confused as to what the reliability factor pertains to.” *Probe: What are you confused about?* “The reliability of what? The data itself? What being reliable as far as the percentages, are we looking at the margin of error, like what does the reliability factor

pertain to, that data is not very reliable based on what, or it's very reliable but what are we basing that on, the reliability factor?"

Task 2, "Looking at counties D and E on the table, county D indicates their data is somewhat reliable, and county E indicates their data is very reliable, based on these two factors I would recommend that they add the percentages together, because again the reliability factor for D, although it is somewhat reliable, I would be confident enough to know that average or that percentage does have, as the table indicates, a small margin of error."

Comments: "So reliable means to me that the data is very reliable, somewhat reliable there's a margin of error, and not very reliable means no that data's not very reliable at all."

"I thought it would've be useful to have a definition for the reliable, the not very reliable, and the somewhat reliable. It makes it a little bit difficult to understand if all the data is being pulled from the same source what makes.. or my assumption is all the data is being pulled from the same source, what makes one category more reliable than another."

"As I'm reading through this, by clicking on that link [view table notes], that still would not have given me a better understanding of what a reliability the reliability columns really refers to."

Probe: What would you expect to see define reliability? "I would expect um reliable to say, reliable means 100 percent of the data is consistent or factual. Somewhat reliable being 90 percent of the data 80 percent of the data is factual, and not very reliable so I would like to see some type of number associated with the ranges of reliability and not very reliable."

"I felt to me that the margin of error was a little bit confusing as far as how it related to let's say for example the reliability factor. So when I'm looking at one of the categories or one of the columns that specifically says that this is not very reliable, however there's a 50 percent margin of error, that doesn't really give me a good indication as to whether or not that data is indeed very reliable at all or there's that... there's a little bit of interpretation that could be made on that. So I don't really think the margin of error column is that useful to be honest with you."

"I think it all goes back to the reliability column, it's very difficult to determine whether or not this data is accurate, and if it's not accurate, the not very reliable column meaning what? So those percentages aren't accurate at all? So therefore, why are they even there? "

"And how are we differentiating between reliable and not very reliable, what is the source of that data?"

15.15 Participant 14-E3

P14, Task 0: “Um, I guess the reliability column because it’s really bright and sort of stands out.”

“I’m assuming this means um how reliable the estimates are, given the uh...I guess given the standard errors.”

P14, Task 6. “And it says that 0 percent travel to work by public transportation, but it also says that the estimate is not very reliable, so I guess I’m not sure um I guess you can’t really tell by the table without knowing why the estimate isn’t reliable, so that’s my final answer that I don’t know.”

Comments: “I noticed, I just wrote down I remember seeing that there was a reliability definition like up here somewhere, but I didn’t really use it, I guess it would’ve helped.”

Why do you think it didn’t stand out? “I don’t know, because I felt like that the focus was here [the columns] maybe if there was an asterisk next to the reliability column, maybe I’m just lazy. It just seems like it’s so far away, even the title seems disconnected.”

15.16 Participant 15-E4

P15, Task 0. Would go to website to learn more about reliability.

P15, Task 1A. Generally want reliable data, somewhat reliable data if more information was given.

P15, Task 2. Reliabilities are close enough to include together.

P15, Task 3. *The participant seemed to equate MOE with reliability.* “MOE is very small so it’s very reliable.” (The participant also went out of bounds for this question, mentioning that the two counties could be using two different forms of public transportation).

Note: For Task 4 and Task 5, the participant subtracted the estimate from the MOE to confirm it met the requirement for the answer, despite the estimate being reliable.

Comment: Dunno how confident because there’s no info on what reliability means

15.17 Participant 16-A2

P16, Task 0. It’s detailed

P16, Task 2. Helpful if names of fields [column headers] were pushed down so she didn't have to keep scrolling.

P16, Task 4. The participant reported true, but not very reliable [report w/ a caveat]. The correct response on this task was not true.

Comments: Reliability legend behind link "no, not really helpful."

Wanted more information about MOE.

15.18 Participant 17-A1

P17, Task 0. Typeface too small.

"You've got these lovely green, yellow, red categories defining reliability instead of giving margins of errors."

P17, Task 2. "I can't see the [column] heading here so I don't know."

"I should be able to see these headers no matter how far down I go, ok?"

Comments:

"I didn't look at the definition of reliability but I know the definition of reliability. I don't see the definition of reliability here [looking at table, clicked reliable column heading] it's not there."

"Type face is too small."

"I don't think the definition of what's defined as reliable, somewhat, and not very. I want to know statistically what it is, before I decide whether I use it."

"For what I sometimes call library users, casual users, this is probably a good idea, but it's making decisions for the users, where as I like to make my own decisions, I'm not typical, far more experienced with advanced statistics than the average person."

Probe: But for the average person do you think it would be helpful? "Yeah, it's better than margin of error, they don't understand that. It just confuses them. But the definition should be you know readily available."

“I know what margin of error, sampling error is, but I don’t know what’s being considered reliable versus somewhat versus not very here. And the other thing is that it’s better to collapse categories than make the reliability higher, cause the level of detail is beyond what most people need anyhow.”

15.19 Participant 18-A3

P18, Task 0. Trusts in Census that it [data] is reliable. -¿ Green is reliable -¿ Reliability is near MOE?

When it shows not very reliable you can’t really use estimate.

Small font, hard to read.

A lot of colors.

Looks like an excel table with small font.

Now looking at what it is [ACS survey]

P18, Task 2. Looked at US citizenship and Language spoken first before settling on ancestry data (*Expected to see Ancestry data there?*)

Note: Participant had to re-check column headers to make sure he was looking at the percentage column.

P18, Task 7. The thing that stands out is all the red.

So many numbers for heritage that are not reliable.

Could also look at somewhat reliable [data], could use for research if reliability is kept in mind.

Comments about the overall table (at this point):

Would’ve brought glasses if he knew table font is this small.

Shades of gray and white are helpful.

Color stands out.

P18, Task 8. Estimates say true but reliability and MOE says no.

Would report no, or yes with reliability warning. Can't draw conclusions based on estimate.

Comment:

Not familiar with CV, stat class was ages ago.

Not visually appealing.

Legend doesn't define what not very reliable means.

Most people wouldn't visit ACS reliable website.

Clear definition of what each reliability is.

15.20 Participant 19-A4

P19, Task 0. Noticed reliability legend, keywords, reliable, not reliable estimates, and lots of replications in columns.

“There's a lot of replication in terms of columns.” [referring to column headers for estimates and percentages]

Task1: “Oh I'm sorry this is Anytown, the total population of Anytown, that is one thing I missed before so, I wasn't actually sure what this city was, but yeah I would, since it is Anytown.”

P19, Task 2. “That's one thing that is really actually a little annoying is that you have the titles of the chart at the top, but if I scroll down then I might not actually remember every single title for every single column and so I have to go all the way back up to see estimate and what not.”

P19, Task 3. “Again I don’t really know what that reliability means, I don’t know if there’s a p-value you can put in there or what not, um test of significance but I guess I would say it is that score but how reliable I don’t know what that metric means. Except I know it lists some legend, but again there’s no numerical values attached to it.”

“I think before I gave you high school graduate, I mis-read the columns they’re so small they kinda float together.”

P19, Task 4. *Subject had trouble reading across rows, which resulted in him giving the wrong number (Gave Dutch percentage, not Danish)*

“But again we don’t know how reliable that is.”

Task 6. “I would probably just look at different county, and look at percentage which is 5.5 percent, somewhat reliable, we have a margin of error of 2.1, I’d say we could probably do it but again it depends on what somewhat reliable means.”

P19, Task 7. Very busy (search through a list of ancestries).

Would search through the table using Ctrl + F.

Suggest: Drop down menu where you could choose [ancestries].

Noted estimates, reliable or not, MOE. But in the end stated “Nothing stands out.”

“Honestly, nothing stands out with it, I see the numbers there, it’s just really clunky, and very very, yeah it’s just clunky so nothing really stands out.”

P19, Task 8. “What I’m thinking is again I guess I hate to say this but it’s extremely extremely clunky, so I’m thinking why can’t I just do CTRL+F and search or why isn’t there a search box where I can actually have it pull up. Um I have to go through piece by piece and find this, and quite frankly it’s just wasting time. And maybe it’s because I’m a child of Google, but I don’t like searching step by step. I don’t like charts at all, I rather have it the computer tell me where it’s at. Not to be too harsh on you here.”

“Yeah I would agree with that, well no actually I would not agree with that, it’s not reliable. But again the first thing I’m looking at is percentages, I look at that not reliable thing secondly, and I really don’t know what that means, so quite frankly I ignore it for most of the time. So I’m going guess that you know if I was quickly looking for something unless this was like something in terms of a masters thesis or a paper I’m writing I probably wouldn’t really dig to much into that not reliable, not very reliable, and I actually might just take the 2.8 percent for face value because it is from the Census Bureau.”

Comments:

“Make this into separate sections with some white space between it, because here’s the thing I’m looking so quickly and there’s so much information coming at me both for a project I might be working on using the ACS but also with other projects I’m working on or maybe an idea hits and I open up another browser and look at something for example, that easily and I do this all the time I’m looking at average family size and I’m accidentally looking at that.”

“There’s a lot depth here but it’s not parsimonious.”

Participant was shown an alternate version of the with color-coding. “That’s a little bit better actually, that’s a lot better, just having those colors. But again I don’t know what that [reliability] means and if I’m doing a study I don’t want to have to go to ACSreliability.com and again that’s more work for me to have to go through..someone should have a quick link that has a breakdown of it.

15.21 Participant 20-D1

Comments:

Color coding helps.

Locating information was easy, but had difficulty in interpreting the answer.

View table notes is not helpful (P found link during post-test interview).

Legend sticks out, but not helpful.

Going to link [ACS reliability website] “implies passing the buck.”

Would want to mouse-over or click column [headers].

15.22 Participant 21-A4

P21, Task 0. Noticed gray and white stripes [rows].

Then read title, and noticed reliability legend.

No clue as to what it tells me, it indicates a spectrum.

Then saw the reliability columns.

Would have to go to ACS reliability website to see how it's measured.

P21, Task 1. Would have to explain what reliability meant to company.

P21, Task 2. Have to think about what are the different columns (P had to remember what column headers were?) Would give both estimates but say "we're confident at whatever level."

P21, Task 3. Somewhat reliable makes P wonder why they have somewhat reliable [data].

Comments:

Have a color bar when switching between [row] heading categories.

Should have a footnote of reliability with a notice to see footnote.

Legend indicates reliability matters, but how did you fit things into categories? What does it mean and what is the cutoff?

Not sure what N means.

Scrolled down and lost top [header] columns.

Put percent sign in MOE percent column."

Preferred no color in the reliability indicator, "color is intense".

U S C E N S U S B U R E A U

Statistical Research Division

Usability Laboratory

Washington, D.C. 20233

Date: September 16, 2010

To: DSSD Data Reliability Indicator Team: Anthony Tersine, Jennifer Tancreto

From: Kathleen T. Ashenfelter and Victor Quach, SRD Human Factors and Usability Research Group

Subject: Data Reliability Indicator Based on the Coefficient of Variation: Report for the Third Round of Usability Testing

1 Executive Summary

This study compared different versions of American Community Survey data tables with a data reliability indicator based on the coefficient of variation. The tables differed in terms of whether the data reliability legend was displayed above the table or behind a link, “Reliable” or “Not Very Reliable” was listed first, or whether it was color-coded. There were few key differences between the tables in terms of user accuracy in finding answers to the tasks. The usability goals were met for accuracy of responses and users satisfaction for all of the conditions (although the goal was not met for all data products). However, the efficiency goal was not met for several of the table types. As with previous tests, key usability issues were confusion about the meaning of “reliability” and what the cut-offs for the different levels of reliability were. Evidence from an analysis of efficiency and task difficulty ratings indicated that including the data reliability indicator above the table may have a slightly negative impact.

2 Abstract

This study was the third round of usability testing for the Data Reliability Indicator for American Community Survey (ACS) data tables proposed by the sponsor team. Sixteen prototype tables with a data reliability indicator based on an estimate’s coefficient of variation were tested. Each reliability indicator had three levels: “Reliable,” “Somewhat Reliable,” and “Not Very Reliable.” We tested whether the location of the data reliability legend, whether the indicator was color-coded or plain text, and whether the “Reliable” or “Not

Very Reliable” level was listed first in the legend made a difference in the accuracy, efficiency, or user satisfaction of data users in responding to the tasks.

The usability goals for response accuracy and user satisfaction were met for all of the conditions, but the goal for efficiency was not met for several conditions, mostly for easy and medium–difficulty tasks.

More detailed results and potential usability issues are discussed.

Key Words: data reliability indicator, coefficient of variation, color-coded data tables, usability

3 Introduction

This was the third round in a series of usability tests of the proposed data reliability indicator (Ashenfelter, Beck, & Murphy, 2009; Ashenfelter, 2010). A group of American Community Survey (ACS) data users from both inside and outside of the Census Bureau were recruited as participants for this round of testing. Findings from this third round of testing will inform the design-and-development team on areas of user satisfaction and success as well as areas where the participants struggled while using the data.

3.1 Background

This project aimed to address an issue that arises with the ACS data tables because the estimates have varying levels of reliability. Some of the data, especially some single-year estimates, have high coefficients of variation (CVs). Some users may use the estimates without taking into account their reliability (i.e., ignoring or misunderstanding the margin of error currently provided with the ACS estimates) (Tersine, 2010).¹ The goal of this project is help data users more easily detect potential reliability issues as measured by the CV (although the decision of whether or not to use the estimate is ultimately the data user’s).

The proposed method for addressing the presentation of the reliability of the estimate was to color-code a reliability indicator for each estimate with the appropriate level of reliability along with an associated word (e.g., “Reliable” or “Not Very Reliable”), as measured by the coefficient of variation (Whitford & Weinberg, 2008). The choice of CV as the estimate of sampling error to be tested was based on the goal to produce a standardized measure of reliability that might be easier for users to interpret. Although the margin of error (MOE) is currently provided with each estimate, ACS data users often ignore the MOE.

As a starting point, a categorization based on the coefficient of variation was proposed by the sponsoring team in the Decennial Statistical Studies Division (DSSD) (Tersine, 2010; Whitford & Weinberg, 2008). The idea was to color-code the estimate according to its reliability, as evaluated by its associated CV. “Reliable” was defined as $CV \leq 0.15$, “Somewhat

¹Although estimates of lower reliability are still useful in many applications.

Reliable” was defined as $0.15 < CV \leq 0.35$, and “Not Very Reliable” was defined as $CV > 0.35$ (or zero estimates). A color-coded data reliability column was added to the tables for the prototypes since Section 508 standards prevent the color-coding of the estimate. Consistent with the first two rounds of testing, a red color indicates a low-reliability estimate and green indicates a reliable estimate. However, the number of levels to include in the indicator was not tested in this round, since the decision was made to test only a three-level indicator further after the first and second rounds of testing. For this round, versions of the tables that did not have color-coding associated with the reliability indicator were also tested. Mid-range reliability is indicated by yellow coding. The prototypes that were tested in this third-round evaluation of the ACS data reliability indicators are included in Appendix A.

The tasks that participants completed for the third round of testing are provided as Appendix B. These tasks were kept as similar as possible to those used in the previous round of usability testing, but they were updated to incorporate findings from the prior testing as well as feedback from team members and the Census Bureau’s Methodology and Standards Council.

3.2 Research Goals

The usability goals for this study were defined in three categories: user accuracy, efficiency, and satisfaction.

Goal 1: To achieve a high level of accuracy in completing the given tasks using the data tables. The goal for the third round of testing was set at 80% accuracy. A related sub-goal was to evaluate whether the color-coded and text-only data reliability indicators would prompt users to pay attention to and report an estimate’s reliability.

Goal 2: To achieve a high level of efficiency in using the data tables. It was decided that the participants should be able to complete the tasks in an efficient manner taking no longer than 3 minutes for a harder task, 2 minutes for a medium task, and 1 minute for an easier task.

Goal 3: For the users to experience a moderate to high level of satisfaction from their experience with the data tables. A tailored version of the University of Maryland’s Questionnaire for User Interaction Satisfaction (QUIS) (Chin, Diehl, & Norman, 1988) was implemented. The overall mean of the QUIS ratings for the data tables should be above the mean (above 5 on a nine-point scale, where 1 is the lowest rating and 9 is the highest rating). The same should hold true for the individual QUIS items.

3.3 Scope

A specific set of user interactions with the tables (as portrayed in the prototypes provided by the sponsor) was within the scope of the usability evaluation. The user interface was not tested for compliance with Section 508 regulations, although members of the Systems Support Division (SSD) did consult with the usability and sponsor team about potential accessibility issues associated with color-coding data tables before the first round of usability

testing took place. Before the table tables can be accessed through a government Web site, they must comply with Section 508 regulations or obtain a waiver.

3.4 Assumptions

- Participants had at least one year of prior Internet and computer experience.
- Participants had prior knowledge of how to navigate a Web site.
- Participants had some prior familiarity with the ACS and/or survey data.
- Participants had no known disabilities, but were screened for color blindness.

4 Method

4.1 Participants

The original goal for this study was to recruit forty participants from the metro Washington, D.C. area from a list of local ACS data users to come to the SRD Usability Laboratory in Suitland, MD for testing. However, the usability staff encountered difficulty with recruiting participants and only 21 people participated in the study. Participants were recruited from email lists including the Association of Public Data Users (APDU), Census Information Centers (CIC), State Data Centers (SDC), the Census Advisory Committee, and the D.C. chapter of the American Association for Public Opinion Research (AAPOR). The goal for the CIC, SDC, and Advisory Committee participants was to recruit the constituents of these organizations, but we also accepted the members themselves. Local teachers and graduate students were recruited through Craigslist and emails sent to the principals of the schools and Universities.

Each participant had at least one year of prior experience in navigating different Web sites. Participants varied in their levels of familiarity with the ACS and ACS data tables, but all were at least aware of the American Community Survey data products. The amount of time that participants reported using ACS data products or tabulations ranged from two years to the very beginning of the ACS. The average age of the participants was 38.2, with a minimum of 23 and a maximum of 70.

Observers from the Decennial Statistical Studies Division (DSSD) Data Reliability Indicator team were invited to watch the usability tests on television screens in a separate room from the participant and test administrator.

4.2 Facilities and Equipment

Testing Facilities

The participant sat in a small room (5K512), facing a one-way glass and a wall camera, in front of an LCD monitor equipped with an eye-tracking machine that is placed on a table at standard desktop height. The participant and test administrator were in the same room for the reading of the general protocol, the think-aloud practice, and eye-tracking calibration. The test administrator then went into the control room for the usability testing segment of the session and returned to sit in the same room as the participant for the debriefing segment.

Computing Environment

The participant's workstation consisted of a Dell personal computer, a 17-inch Tobii LCD monitor (Tobii model T120) equipped with cameras for eye tracking, a standard keyboard, and a standard mouse with a wheel. The operating system was Windows XP for all participants.

Audio and Video Recording

Video of the application on the participant's monitor was fed through a PC Video Hyper-converter Gold Scan Converter, mixed in a picture-in-picture format with the camera video, and recorded via a Sony DSR-20 digital Videocassette Recorder on 124-minute, Sony PDV metal-evaporated digital videocassette tape. Audio for the videotape was picked up from one desk and one ceiling microphone near the participant. The audio sources are mixed in a Shure audio system, eliminating feedback, and fed to the videocassette recorder.

Eye-Tracking

The participant's eye movements were recorded during the usability test using a trial version of Tobii Studio Enterprise Edition (Tobii Technology, 2008). The Tobii eye-tracking device monitors the participant's eye movements and records eye-gaze data. The data recorded represent the physical position of the eye as measured by the reflection of a near-infrared beam off of the pupil. The horizontal and physical position of the pupil are recorded for both eyes at a rate of 120 Hz (e.g., 120 samples per second) on this eye tracker model. This type of eye-tracking requires the calibration of each eye. Data collected from the eye-tracking device includes eye-gaze position, timing for each data point, eye position, and areas of interest. The Tobii eye tracker records data at a rate of 120 Hz. When a participant looks away or blinks, or if the eye tracker loses track of the participant's pupil, this data is recorded as missing data and this does not stop the data recording. Often, the eye tracker will regain tracking status of the participant's pupil and data recording will begin again within a few

seconds following a glance away from the computer screen.

4.3 Materials

Usability testing required the use of various testing materials. Testing materials included the following items provided in the appendices. There were sixteen different prototypes corresponding to different possible ways of displaying the data reliability indicator and different ACS data products. For this round of testing, the following ACS data products were tested: Data Profile, Selected Population Profile, Subject Table, Detailed Table, and Geographic Comparison. Versions of these prototypes are available in Appendix A. Following the initial probe item (i.e., “What is the first thing that that you noticed about this table?”), the tasks for each prototype were tailored to the geography and type of table being tested (see Appendix B).

Prototypes

Sixteen tables with different versions of a three-level data reliability indicator were tested in this third-round investigation. Some tables had a data reliability indicator legend above the table and some had the legend located behind a “View Table Notes” link. This comparison was made because a meeting with members of the Census Bureau’s Data Access and Dissemination System Office (DADSO) revealed that because of lack of free space on the ACS data tables currently available through American Factfinder (AFF), the legend may have to be placed behind this link in order to implement the data reliability indicator. Also, some prototypes used color-coding in the the data reliability indicator, while some used only text without color. Some prototype tables had “Reliable” listed first in the reliability indicator legend, while some had “Not Very Reliable” listed first in order to test the “stoplight” analogy associated with the data reliability indicators. That is, we wanted to see whether participants would have trouble understanding and using the indicator if the order of the colors was reversed from a traditional stoplight. The prototypes from this round of testing can be found in Appendix A.

Tasks

Members of the ACS data-reliability indicator team created the tasks, which can be found in Appendix B. The tasks are designed to capture the participant’s interaction with, and reactions to, the design and functionality of the ACS data reliability indicators. The first question asked of the participants is not a task in the traditional sense because it asks them to report the first thing that they notice about the tables, so it is called the “initial probe” question and is not considered an official task. The rest of the tasks were designed so that the participant would look for estimates that were located in different areas of the table.

General Protocol

Each participant was read a general protocol, which can be found in Appendix C. The test administrator read some background material and explained several key points about the

session. The general protocol emphasizes that the participant’s skills and abilities are not being tested, but that the participant is helping in an evaluation of the data table’s overall usability.

Consent Form

Prior to beginning the usability test, the participants completed a general consent form supplied in Appendix D. The consent form documents the participant’s agreement to permit videotaping of the testing session and states that the study is authorized under Title 13 of the U.S. Code.

Questionnaire on Statistical Experience, Computer Use and Internet Experience

Prior to the usability test, the participant completed this questionnaire, which gathered information on the participant’s demographics, experience using statistics, computer use, and Internet experience (Appendix E). This information helped us determine whether there is a relationship between these three experience factors and performance and preference scores found during testing.

Questionnaire for User Interaction Satisfaction (QUIS)

The original version of the QUIS includes dozens of items related to user satisfaction with a user interface (Chin et al., 1988). In a usability test at the Census Bureau, SRD typically uses 10 to 12 items that the usability team has tailored to the particular user interface being evaluated. This study used a modified version that includes items worded for the ACS data-reliability indicators context (Appendix F). The experimenter handed the QUIS to the participant at the same time as the task-difficulty rating questionnaire (below).

Task-Difficulty Rating Questionnaire

Participants were asked to provide a difficulty rating for each task, which was used for validation of the “medium” versus “hard” designation during analysis. This short survey can be found in Appendix G.

Debriefing Questions

After completing the tasks, the experimenter read aloud debriefing questions to the participants about their overall experience using the prototype ACS Data Reliability Indicator (Appendix H). The debriefing questions included an inquiry about each participant’s color vision. These questions are included in the debriefing segment of the protocol following testing and not included in the survey administered to the participants before testing so as not to prime them to focus intentionally on color during testing.

Procedure

Each participant was escorted to the usability lab at the U.S. Census Bureau headquarters building in Suitland, Maryland. Upon arriving, the participant was seated with the test

administrator in the testing room (5K512). The test administrator greeted the participant, thanked him or her for his or her time, and read the general introduction. Next, the participant read and signed the consent form. After signing the consent form, the participant completed the questionnaire on demographics, experience with statistics, computer use and Internet experience.

Since this test used the eye-tracking device, the participant's eyes were calibrated after the general protocol was read and the consent form was signed. Calibration was usually completed in about fifteen to twenty seconds by having the participant look at a dot moving across the computer screen. Once calibration was completed, the test administrator exited the room and continued the testing process from the control room (5K509).

Following calibration, the participant began to complete the tasks on the ACS data reliability indicators prototype. At the start of each task, the participant read the task aloud. While completing the task, the participants were encouraged to think aloud and share what they were thinking about the task. This interaction was not intended to be a conversation. If at any time the participant became quiet, the test administrator probed the participant about what they were looking for in the table. The content of the so-called "think-aloud" protocol allows us to gain a greater understanding on how the participant is completing the task and to identify issues with the tables. In order to make sure that the participants understood what was expected by the instruction to think aloud, they engaged in a practice think-aloud task where they walk through their thought process while performing a task using a commonly accessed Web page (the end of Appendix C).

At the conclusion of each task, the participant stated a "final answer" to the task. During the task or while watching the tapes of the sessions at a later time, the test administrator noted any observable struggles or other noteworthy behaviors, including comments and body language. After the participant completes all tasks, the eye-tracking device was stopped, the test administrator returned to the testing room, and the video recording continued. The participant then completed the modified QUIS and task-difficulty rating questionnaire silently. When the participant completed the two paper forms, the test administrator asked the participant a series of debriefing questions (Appendix H). At the conclusion of the usability evaluation, the video recording was stopped. Overall, the usability session ran between 45 and 60 minutes.

5 Results

5.1 Accuracy

Table 1 shows the average accuracy scores by table type and whether Usability Goal 1 of 80% correct responses was met. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color-coding. The location of the legend was manipulated for the Data Profile, Selected Population Profile, Subject, and Geographic Comparison tables. The order of the colors in the data reliability legend was manipulated for the Selected Population Profile and Geographic Comparison tables. Whether or not the tables were color-coded was manipulated for the Data Profiles and the Detailed Tables. Responses were considered correct if the participant reported the correct estimate from the table. Table 1 shows that the usability goal was met for each of the different conditions. This provides some evidence that the data reliability indicator has about the same level of impact across these different methods of displaying it. However, the goal was not met for all data products; the Selected Population Profile tables had an accuracy score of 72% and the Detailed Tables had a score of just 67%.

Table 1: **Accuracy Scores by Table Type**

Table Type	Tasks	Average Score	Goal Met?
Legend Above Table	73	86%	Yes
Legend Behind Link	60	90%	Yes
No Color	35	83%	Yes
Color	42	83%	Yes
Red First	32	90%	Yes
Green First	32	81%	Yes
Data Profile	49	88%	Yes
Selected Pop. Profile	32	72%	No
Subject Table	14	93%	Yes
Detailed Table	21	67%	No
Geographic Comparison	27	100%	Yes

5.2 Efficiency

The start and stop times for the different tasks were obtained from the time stamps on the eye-tracking data in order to calculate average completion times for the tasks. The tasks were rated by the usability staff and the sponsor team before testing began as being easy, medium, or hard in difficulty. The average efficiency score for the easy tasks for across all participants and all tables was 2.3 minutes, the average score for the medium tasks was 2.0 minutes, and the average efficiency score for the hard tasks was 2.4 minutes. The goal was for participants to take 1 minute for an easier task, 2 minutes for a medium task, and 3 minutes for a harder task. The goal was met for the medium and hard tasks, but not for the easy tasks. This finding may be related to participants having difficulty using the different data products in general and may not be directly related to the data reliability indicator itself.

Table 2 shows the efficiency scores by condition and whether or not the efficiency goal for the easy, medium, and hard tasks were met for that condition. Efficiency averages were only calculated for the tables where each condition was specifically manipulated. The efficiency goals were not met for the easy tasks when the legend was behind the “View Table Notes” link, the easy and medium tasks when the legend was above the table, the easy tasks for both color orders, the easy tasks for the black and white table, or the easy and medium tasks for the tables with a color-coded data reliability indicator.

Table 2: **Average Efficiency Scores by Difficulty Rating**

Condition	Difficulty	Average Eff. (min)	Goal Met?
Legend Above Table	Easy	2.4	No
	Medium	2.3	No
	Hard	2.7	Yes
Legend Behind Link	Easy	2.5	No
	Medium	1.6	Yes
	Hard	2.0	Yes
No Color	Easy	2.1	No
	Medium	1.9	Yes
	Hard	2.1	Yes
Color	Easy	2.1	No
	Medium	2.1	No
	Hard	2.7	Yes
Red First	Easy	2.1	No
	Medium	2.4	No
	Hard	2.3	Yes
Green First	Easy	2.4	No
	Medium	3.0	No
	Hard	1.9	Yes

The efficiency goal for the easy tasks was not met by any of the conditions, although it was met for the hard tasks for all of the conditions. Since ACS users in the field would

presumably be more likely to consult the data reliability indicator for harder problems, the fact that the goal was met for the harder tasks is a positive result. The easy and medium tasks may have been more difficult than anticipated.

Table 3 shows the average efficiency scores for easy, medium, and hard tasks broken down by table type and whether or not the usability goal for efficiency was met.

The usability goal for efficiency was not met for the easy or medium–difficulty tasks for the Data Profile tables, any of the tasks for the Selected Population Profile tables, the easy tasks for the Subject Tables, the easy tasks for the Detailed Tables, or the easy tasks for the Geographical Comparison tables.

The efficiency goal set for the easy tasks was not met for any of the table types, and there was no table type that met the goal for all the easy, medium, and hard tasks. The medium tasks for the data profiles had the highest completion times. Again, both of these results could indicate that the tasks, especially the easy and medium–difficulty tasks, were more difficult than anticipated. Also, this may reflect that using ACS data tables overall is more difficult than originally thought. Another possibility is that the participants were inexperienced with using this type of table.

Table 3: **Average Efficiency Scores by Difficulty Rating**

Table Type	Difficulty	Average Eff. (min)	Goal Met?
Data Profile	Easy	2.4	No
	Medium	5.0	No
	Hard	2.4	Yes
Selected Pop. Profile	Easy	2.9	No
	Medium	3.1	No
	Hard	3.2	No
Subject Table	Easy	1.6	No
	Medium	1.4	Yes
	Hard	2.7	Yes
Detailed Table	Easy	1.1	No
	Medium	2.0	Yes
	Hard	2.5	Yes
Geographic Comparison	Easy	2.4	No
	Medium	1.3	Yes
	Hard	1.2	Yes

Table 4 shows the average efficiency scores in minutes by table type and across all easy, medium, and hard tasks. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color–coding. It is noteworthy that the participants using tables with the legend above the table took 30 seconds longer (i.e., 25 % longer) to complete tasks than did participants using tables with the legend behind the link. It is possible that including the legend could be distracting to participants and

increases the amount of time they take to complete the tasks. Overall, there were several conditions where the efficiency goal was not met for this round of testing. Since the last two rounds of testing showed no differences between efficiency performance when participants have a data reliability indicator versus when they are using a table without one (Ashenfelter et al., 2009; Ashenfelter, 2010), it is likely that the failure to meet the efficiency goals for the easy tasks is related to the table complexity and not to the data reliability indicator itself. Although they are similar, the tasks and tables used in this round of testing are not the same as in previous rounds and may have been more difficult.

Table 4: **Efficiency Scores by Table Type**

Table Type	Tasks	Average Eff. (min)
Above Table	76	2.5
Behind Link	61	2.0
No Color	39	2.1
Color	46	2.3
Red First	30	2.5
Green First	29	2.2
Data Profile	56	2.1
Selected Pop. Profile	31	3.0
Subject Table	14	1.8
Detailed Table	21	2.0
Geographic Comparison	28	1.6

Looking at the efficiency results by table type, the key result is that the participants using tables with the reliability legend above the table took 30 seconds longer to complete the tasks than those with the legend behind a link. It is possible the legend could have a slightly negative impact on efficiency, possibly being a distracting element. Also, participants in the Selected Population Profile condition took about twice as long to complete their tasks as did the participants in the Geographic Comparison condition.² The Selected Population Profile tables are the longest tables vertically and require the most scrolling, which could have impacted the participants’ efficiency scores.

5.3 Satisfaction

The overall mean of the satisfaction scores for this round of testing with 21 participants was 6.23, which is above Usability Goal 3 of having at least a score of 5 on the scale. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color-coding. The mean satisfaction score for tables with the

²A one-way ANOVA ($F(4, 145) = 6.60, p < 0.001$) revealed at least one significant difference between the tables. Post-hoc Tukey’s test showed that the Selected Population table had significantly longer efficiency scores than the Data Profiles tables (Mean Difference=55 seconds, $p = 0.005$), the Subject Tables (Mean Difference=71 seconds, $p = 0.014$), the Detailed Tables (Mean Difference=64 seconds, $p = 0.010$), and the Geographic Comparison tables (Mean Difference=86 seconds, $p < 0.001$).

reliability legend above the table was 6.1 (n=78)³ and the mean score for table with the reliability legend behind the “View Table Notes” link was 6.1 (n=62).

The mean satisfaction score for the tables with color-coding was 6.7 (n=40) and the mean score for tables with no color-coding was 5.9 (n=40). This is a somewhat large difference in score and indicates that there was more overall satisfaction for the color-coded indicator and is consistent with several participants making the comment that they liked the colors.

The mean satisfaction score for the tables where the red/unreliable indicator came first (i.e., was on “top”) on the indicator legend was 5.1 (n=31). The mean score for the tables where green/reliable was first was 6.8 (n=31).

The Detailed Tables had a mean satisfaction score of 6.0 (n=63), the Selected Population Profile tables had a mean score of 6.3 (n=31), the Subject Tables had a mean score of 6.9 (n=15), the Data Profiles had a mean score of 7.1, and the Geographic Comparison tables had a mean score of 5.6.

The participants met the usability satisfaction goal of at least a 5 on on a 9-point scale for every condition.

The participants were allowed to write in open-ended comments for the last item of the satisfaction survey. Here are the comments received along with the table assigned to the participant that were directly related to the data reliability indicator. All comments that pertain to the tables themselves and not to the indicator can be found in Appendix I.

Data Profiles

- A3: location of reliability. Column affected ease of reading estimate and % estimate. Would prefer to see reliability column on left or right margin rather than in [the] middle.

Subject Tables

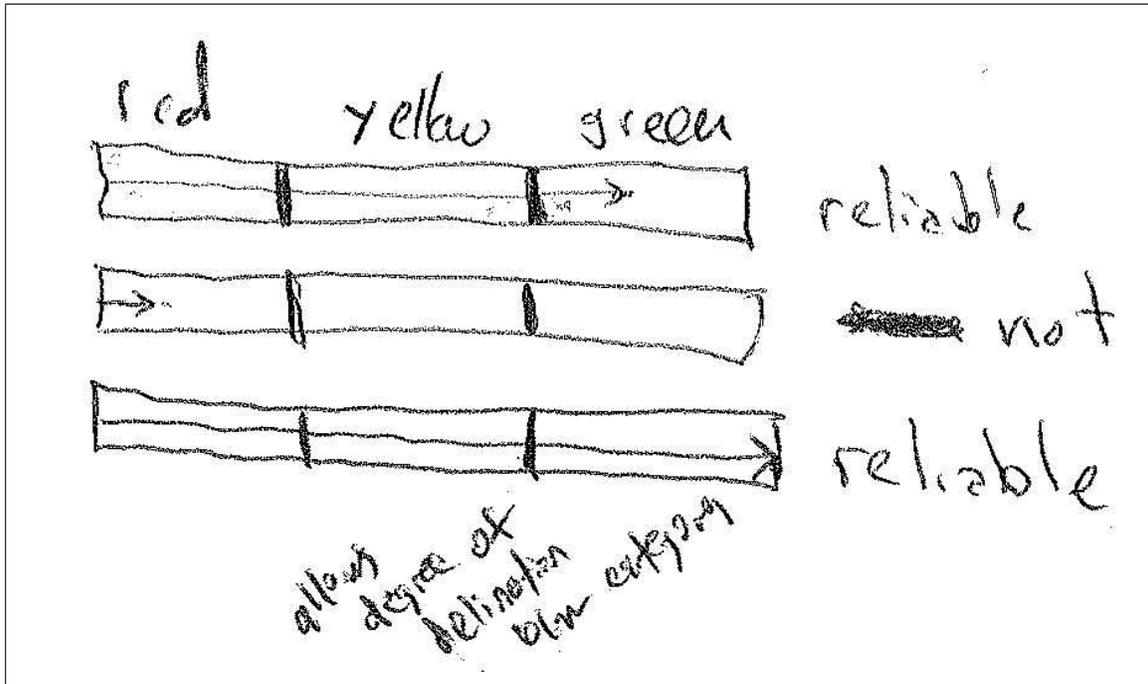
- C2: I didn’t even look at the definition of reliability. Sorry about that. I found the table mostly easy to read. I would however recommend that the need for scrolling be reduced if possible.

Geographical Comparisons

- E1: 1) It would be useful to have an * describing & defining: % (percent), reliability, m.o.e (i.e. is margin of error + or - the percent? Or is it linked to reliability?). 2) could the reliability be something like this: [see graphic drawn by participant 12 in Figure 1]. The red & green are pretty distracting. *Note: The legend was behind the link for this participant.*

³Where n is the number of satisfaction questions completed across all participants who saw this table.

Figure 1: Participant Suggested Indicator Revision



E2: It would have been helpful to have a definition for the reliability categories. Why was some data listed as reliable and others 'somewhat' or 'not at all' particularly if the information was ultimately coming from the same source. *Note: The legend was behind the link for this participant.*

E3: I think I might've noticed the reliability def. in the upper right corner but I didn't read it - it didn't really stand out.

5.4 Task Difficulty

Participants completed a task difficulty rating scale after they completed them. Difficulty was rated on a scale from 1 to 9, with 1 being very easy and 9 being very difficult. Table 5 shows the average task difficulty score for each data product tested.

Table 5: **Overall Task Difficulty by Data Product**

Table Type	Tasks	Average Eff. (min)
Behind Link	61	2.0
Above Table	76	2.5
No Color	39	2.1
Color	46	2.3
Red First	30	2.5
Green First	29	2.2
Data Profile	56	2.1
Selected Pop. Profile	31	3.0
Subject Table	14	1.8
Detailed Table	21	2.0
Geographic Comparison	28	1.6

Table 6 shows the average task difficulty for each task broken down by whether the data reliability indicator legend was displayed above the table, or behind the “View Table Notes” link. Although the average task difficulty for the tables with the data reliability indicator legend above the table was equal to the that of the tables with the legend behind a link for the Selected Population Profiles, it was considerably higher for the other data products. This key finding may indicate that adding a legend that is constantly visible above the table may make completing the tasks more difficult. This is consistent with the finding that tables with the legend above the table were also associated with longer efficiency time. It is possible. that showing the legend above the table could potentially have a negative impact on users’ interaction with the table. If that is the case, having the legend behind the link would likely not be problematic. However, usability best practices would suggest that the legend be present somewhere so that data users who are searching for this information can find it.

Table 6: Task Difficulty Scores by Location of the Data Reliability Legend

Table Type	Task	Above Table	Behind Link	Initial Rating
Data Profile	1	3.2	2.3	Easy
	2	4.2	2.3	Easy
	3	3.6	3.0	Medium
	4	5.0	2.0	Hard
	5	4.8	3.0	Medium
	6	5.8	3.0	Medium
	7	5.4	3.0	Medium
	8	<u>8.0</u>	<u>3.7</u>	Hard
	mean	5.0	2.8	
Selected Pop. Profile	1	1.0	8.0	Easy
	2	2.5	1.0	Easy
	3	1.0	1.0	Easy
	4	4.5	1.0	Hard
	5	4.0	4.0	Hard
	6	2.5	1.0	Medium
	7	1.0	1.0	Medium
	8	<u>3.0</u>	<u>1.0</u>	Hard
	mean	2.1	2.1	
Subject Table	1	2.0	2.0	Easy
	2	4.0	1.0	Medium
	3	1.0	3.0	Easy
	4	2.0	2.0	Hard
	5	6.0	1.0	Medium
	6	7.0	1.0	Hard
	7	<u>4.0</u>	<u>1.0</u>	Medium
	mean	3.7	1.6	
Geographic Comparison	1	1.0	1.5	Easy
	2	4.5	2.5	Medium
	3	7.0	2.5	Hard
	4	3.0	2.0	Medium
	5	4.5	2.0	Medium
	6	7.0	3.5	Hard
	7	<u>4.5</u>	<u>4.5</u>	Easy
	mean	4.5	2.6	

There were several instances when the average difficulty rating was at odds with its original difficulty categorization. For instance, task 1 for the Selected Population Profiles had an average task difficulty rating of 8.0 out of 9.0 points for the tables where the legend was behind the “View Table Notes” link, which indicates that that this task was not considered easy by the participant who saw this table. This question was “The National Organization for Young Adults is considering opening a chapter in Anytown, USA. They first want to know what the estimate for the number of people in Anytown that are ages 18 to 34 is. What would you tell them? ” This question may need to be revised to be more clear and specific if used in future rounds of testing.

Table 7 shows the average difficulty scores broken down by whether the green/reliable or red/not very reliable category was listed first in the data reliability indicator legend.

Table 7: Task Difficulty Scores by the Order of the Levels of the Reliability Legend

Table Type	Task	Red First	Green First	Initial Rating
Selected Pop. Profile	1	1.0	4.5	Easy
	2	4.0	1.0	Easy
	3	1.0	1.0	Easy
	4	8.0	1.0	Hard
	5	7.0	2.5	Hard
	6	1.0	2.5	Medium
	7	1.0	1.0	Medium
	8	<u>5.0</u>	<u>1.0</u>	Hard
	mean	3.2	1.8	
Geographic Comparison	1	1.5	2.0	Easy
	2	3.0	4.0	Medium
	3	4.0	5.5	Hard
	4	3.5	2.0	Medium
	5	4.5	2.0	Medium
	6	5.0	5.5	Hard
	7	<u>3.1</u>	<u>3.4</u>	Easy
	mean	4.5	2.6	

Table 8 shows the average difficulty rating broken down by whether the table was color-coded or not.

Table 8: Task Difficulty Scores by Whether the Reliability Indicator was Color-Coded

Table Type	Task	No Color	Color	Initial Rating
Data Profile	1	3.8	2.0	Easy
	2	4.5	2.5	Easy
	3	4.0	2.8	Medium
	4	5.3	2.5	Hard
	5	4.5	3.8	Medium
	6	5.5	4.0	Medium
	7	6.0	3.0	Medium
	8	<u>6.5</u>	<u>6.3</u>	Hard
	mean	4.8	3.3	
Detailed Tables	1	2.0	3.5	Easy
	2	4.0	3.5	Easy
	3	1.0	6.5	Hard
	4	3.0	3.0	Hard
	5	2.0	3.5	Medium
	6	2.0	4.5	Medium
	7	<u>8.0</u>	<u>3.5</u>	Hard
	mean	3.1	3.8	

5.5 Usability Findings

Successes

Although usability testing often reveals usability issues, it also can highlight the strengths of the data product being tested. The data reliability indicator had several strengths that came through during the sessions.

- Easily understood stoplight analogy

Although participants may not have understood exactly what was meant by statistical reliability, they did pick up on the relative meaning of the color-coded indicator. This meaning was supported by analogy with a red-yellow-green traffic stoplight. Just as in prior rounds of testing, some participants specifically mentioned a stoplight when commenting. Participant 5 said, “Well now thinking about it, they seem to correlate with streetlights, green being go ahead, it’s very positive. Yellow is somewhat mediocre, and red is not at all good or stop. So I guess that makes intuitive sense to me.” Participant 7 made the remark, “I would assume red is bad and green is good, and yellow is neutral.”

- Attractiveness of Added Color

Eye-tracking analysis from all three rounds of testing showed that participants’ eyes were drawn to the color-coded reliability column. Participant 14 commented during the initial probe question about what they noticed first about the tables, “Um, I guess the reliability column because it’s really bright and sort of stands out.” Participant 7 commented during the initial probe question, “The first thing I notice would be the color scheme, red, yellow, and green shaded boxes.”

Many participants commented that they liked the colors themselves because they added a splash of color and aesthetic appeal to the tables. Participant 6 said that colors are good to use to convey information because they are universal and “I love the colors, I’m a color person. I love it.” Participant 7 commented, “I think the use of color is always good in terms of making things clear and helping people focus. So it quickly alerts you to I guess the type of info like how good the information is. I honestly looked at that before I even saw what the table was for.”

- Participant Use of the Data Reliability Indicator

The data reliability indicator was successful in that participants did use it. It is possible that this indicator would be very helpful to statistical novices and they may use the indicator even though they would not normally use the MOE or another measure of error. Participant 12 said during the first task, “I’m not looking at the MOE or the percent. I’m just letting the reliability column do the thinking for me.” Participant 18 understood the general meaning of the indicator, but said that when the indicator shows not very reliable, that you can’t really use estimate. This is evidence that although the participant used the indicator, they saw the “Not Very Reliable” as an instruction not to use the estimate rather than to carefully consider the context of its use.

Usability Issues

Results reported include all identified usability issues and resolutions recommended by the team. Additional Comments by participants can be found in Appendix I. Identified issues are prioritized based on the following criteria:

- **High:** This problem brought the participant to a stand still. He or she was not able to complete the task. For this study, a high-priority issue can also be one where the data reliability indicator was not being applied correctly or there was a fundamental misunderstanding of its meaning.
- **Moderate:** This problem caused some difficulty or confusion, but the participant was able to complete the task.
- **Low:** This problem caused minor annoyance but does not interfere with the flow of the tasks.

High-Priority Issues

- Confusion of Statistical Reliability with Lack of Confidence in the Source or Quality of the Data

Some participants made comments that showed that they associated the “Not Very Reliable” indicator with low-quality data or data that came from an unreliable source (i.e., “good” versus “bad” data). Participant 7 said, ‘It says red is not very reliable so I assume the source of the data is not the best.’ When probed about what the meaning of the colors was, Participant 10 said it was “just good data versus bad data or the strength of the information.” Participant 13 said, “So reliable means to me that the data is very reliable, somewhat reliable there’s a margin of error, and not very reliable means no that data’s not very reliable at all.” Later, the same participant was probed about what she thought the definition of reliability was and responded, “I would expect um reliable to say, reliable means 100 percent of the data is consistent or factual. Somewhat reliable being 90 percent of the data 80 percent of the data is factual, and not very reliable so I would like to see some type of number associated with the ranges of reliability and not very reliable.”

- Vagueness of “Somewhat Reliable”

Several participants commented that they were not sure what “somewhat reliable” meant. Without a clear definition or the inclusion of information about the cutoff CV values, the meaning of this middle category may not be straightforward to users. As a result, they may not use an estimate that would have been appropriate to use in the context of their goals. Participants who made this comment did make the correct

assumption that this category was between “reliable” and “not very reliable” in terms of statistical reliability. However, a few people also made the comment that they were uncertain about whether or not to use an estimate as the answer to a task because they were unsure how large the difference between “reliable” and “somewhat reliable” was. Some participants also said they could justify the use of “not very reliable” data if they could tell if it were near the threshold for “somewhat reliable.” Participant 12 said, “I would not recommend [the reliability indicator] because I don’t understand um how close um the somewhat reliable versus the reliable um are, in relation to one another.” Participant 7 made a detailed comment:

“The transportation data is not very reliable and the education data is somewhat reliable but it’s difficult to use it to make any determination about the answer they’re both pretty subjective, I don’t know the threshold between somewhat and not very or what that means in terms of numbers, especially when the two numbers are close together. Oh I guess I can say, well I guess that’s why, the transportation data has a higher margin of error, I guess that’s why it’s not very versus somewhat. But I’m still not exactly sure about what type of index or what those numbers mean in later columns for margin of error oppose to beginning where it seems to be a whole number.”

It did not seem to make a difference whether the participants saw the indicator legend or not. During debriefing, participants who did not see the legend by clicking on the “View Table Notes” link were shown the legend and asked if it would have been helpful. The majority of participants said that it did not contain enough information about what reliability meant to be of much use.

- Unintuitive Nature of Legend Without Color Where Reliable is Listed First

Related to the usability strength of the intuitive stoplight analogy described above, two participants commented that the analogy does not hold when the color is removed. The dry run participant saw this type of legend and said she was surprised to see “Not Very Reliable” listed first and had to “reverse it in her head” in order to make sense of it. Participant 7 saw a legend with the color-coding and “Not Very Reliable” listed first and also thought having this category first was not intuitive. This participant recommended placing “reliable first because without color it doesn’t make sense to people.”

While this may not be an issue for users who have accessed the tables before and are familiar with their layout, it may be a problem for the novice data user. This is another issue with the table itself and not necessarily with the data reliability indicator, but the data reliability indicator is likely not to be used correctly if the correct estimate is not found.

Medium–Priority Issues

- Uninformative Nature of Reliability Legend

Several participants commented that there was not enough information about the CV, the cutoff values used for the indicator levels, and the definition of reliability. Although some participants never even saw the legend, it did not seem to impact their ability or inclination to use the reliability indicators when compared to the sessions where the participants saw and read the legend. Participant 4 said “If I could click on something, just to read why, why is this reliable?” During debriefing, Participant 4 also said, “I did, I also tried to click on reliability. Cause sometimes, especially when it’s blue I thought that I would be able to sort based on that. Um, and I thought that maybe there would be a pop up saying ‘Reliability is this’.” Participant 5 commented, “Yeah, I mean I like it [reliability], but I didn’t know what it actually meant.” Participant 7 remarked, “I guess.. it seems subjective, so if there were some of key or index that had even if it was a numeric range like things with a MOE of zero to five are considered reliable, even though I don’t necessarily know what that means. But it would give it some sort of qualifying description; it seems like anyone could’ve just drawn a line and say that’s reliable and that’s not reliable and I have no idea where that line is drawn or how or why.” Participant 13 said, “I’m a little confused as to what the reliability factor pertains to.” The experimenter asked the probe question “What are you confused about?” The participant continued, “The reliability of what? The data itself? What being reliable as far as the percentages, are we looking at the margin of error, like what does the reliability factor pertain to, that data is not very reliable based on what, or it’s very reliable but what are we basing that on, the reliability factor?” Participant 19 remarked that there should be numerical values defining the reliability categories, “Again, I don’t really know what that reliability means, I don’t know if there’s a p-value you can put in there or what not, um, test of significance, but I guess I would say it is that score but how reliable. I don’t know what that metric means. Except I know it lists some legend, but again there’s no numerical values attached to it.”

A related issue is that it is unclear how the estimate, percent, MOE, and reliability columns are related to one another. Participant 12 said, “On all of them [tasks] I just find myself going percent, margin of error, not really understanding how they relate to reliable.” Participant 15 used the MOE and reliability indicator interchangeably and called the Margins of Error “reliabilities.”

- Small Font Size

A majority of the participants across all of the conditions remarked that the font size was small. Several had difficulty reading the table contents. However, this problem may have been an artifact of the manner in which the tables were converted to HTML files for testing. The tables were embedded as images into Web screens. If the tables were fully functional as they would be in American Fact Finder (AFF), the tables

would have the ability to be adjusted to fit a user's preferences more readily.

Low Priority Issues

- View Table Notes

Twenty of the twenty-one participants never clicked on the “View Table Notes” above the upper right corner of the table. Participant 10 actually looked for a legend and did not find it behind the link. Participant 13 said, “As I’m reading through this, by clicking on that link [view table notes], that still would not have given me a better understanding of what a reliability the reliability columns really refers to.”

This issue was especially clear in the wide subject tables (C1 and C2), since participants could potentially never scroll the browser to the point where they could see it. However, since there was no significant difference in performance whether they saw the legend or not, this issue becomes low-priority.

The dry run participant said that she would have clicked on the MOE row header to look for information about reliability. Duplicate links on the MOE and Reliability column headers could help users find the table notes more easily. Participant 19 also said that he would prefer if he could click or mouse over the column headers for more information about the MOE and Reliability.

When shown the reliability legend during debriefing, Participant 4 said, “Maybe it’s just the title, ‘view table notes.’ Maybe if it were like ‘view table definitions’ or something like that, that would make me think that, ok, this means they are explaining something on the table. A table note makes me think that, oh, it’s just something like I can save my notes.” During debriefing, Participant 5 made a similar comment, “I wouldn’t have gone to view table notes to learn about reliability.”

- The Color Coding is Potentially Distracting

As with the previous round of testing, a participant commented that the colors were distracting while completing the tasks. Participant 12 commented that colors distract from reading title; “Oh, you know what, since the colors are so dramatic, I’m just realizing that I didn’t even read the title on this page which is pretty bad” and “I guess it just shows you jump to reading things that pop out.” Participant 16 was drawn to the reliability indicator and did not notice the MOE column. Participant 16 said, “You’ve got these lovely green, yellow, red categories defining reliability instead of giving margins of errors.” When shown a color-coded table and legend after completing the tasks for a table with no color-coding, Participant 21 said that she would prefer the table without color-coding because the “color is intense.”

6 Eye–Tracking Results

6.1 Fixation Durations on Areas of Interest

Location of Data Reliability Indicator Legend

Table 13 shows the fixation durations for the tables where the data reliability indicator legend was above the table versus behind a link. Most notably, the participants who saw tables with the legend above the table looked at the Data Description (row name) for 17.72 seconds on average, which is much longer than the average of 7.43 for the participants who saw tables with a legend behind the link name.

Table 9: Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Data Profiles

AOI	Legend Above Table (A3,A4)	Legend Behind Link (A1,A2)
Column Headers	0.77	0.69
Data Description	17.72	7.43
Estimate	7.84	5.61
Estimate MOE	5.02	2.70
Estimate MOE Link	0.10	0.05
Estimate Reliability Link	0.10	0.13
Information Icon	0.00	0.01
Percent	5.05	3.23
Percent MOE	1.13	1.53
Percent Reliability	1.39	1.89
Percent MOE Link	0.07	0.10
Percent Reliability Link	0.14	0.07
Table Information	0.90	0.35
Table Source	0.12	0.01
Top Links	0.24	0.14
Top Tabs	0.10	0.15
View Table Notes	0.13	0.04
Reliability Legend	1.51	Not Applicable
Legend Levels	0.62	Not Applicable
Legend Text	1.03	Not Applicable

Table 10 shows the average fixation durations. for the tables where the data reliability indicator legend was above the table, versus behind a link. The most striking differences were that participants looked at the Two or More Races Estimate column for the tables with the legend behind a link, compared to 4.98 for the tables with the legend above the table. Similarly, participants looked at the Total Population estimate column for an average of 15 seconds for the Behind Link condition, while they only looked at this column for an average of 8.52 seconds. Participants looked at the Total Population Reliability column an average 11.73 seconds for the Legend Behind Link tables, but only 2.45 seconds for the Legend Above Table condition. This could be evidence that

participants’s eyes are drawn to the colorful reliability column itself more so than if the colorful reliability legend were also present.

Table 10: **Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Selected Population Tables**

AOI	Legend Above Table (B3,B4)	Legend Behind Link (B1,B2)
Data Description	30.42	35.83
Column Headers	0.91	2.09
Two or More Races Estimate	4.98	10.42
Two or More Races MOE	0.94	1.35
Two or More Races Reliability	1.10	1.35
Total Population Estimate	8.52	15.00
Total Population MOE	2.48	4.81
Total Population Reliability	2.45	11.73
Information Icon	2.96	3.39
Table Information	0.03	0.00
Table Source	0.03	0.00
Top Links	0.79	0.63
Top Tabs	0.45	0.32
View Table Notes	0.06	0.14
Reliability Legend	2.14	Not Applicable
Legend Levels	0.64	Not Applicable
Legend Text	0.83	Not Applicable

Table 11 shows the average fixation durations for the tables where the data reliability indicator legend was above the table versus behind a link for the Subject Tables. The largest difference between the table prototypes in terms of fixation duration was that participants looked at the Data Description column for an average 17.86 seconds for the Legend Above Table condition compared to an average 6.37 seconds for the Legend Behind Link condition. There were longer fixations on the Management, Management MOE, Management Reliability, and Service MOE for the Behind Link tables, but overall the fixation durations were fairly similar.

Table 11: **Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Subject Tables**

AOI	Legend Above Table (C2)	Legend Behind Link (C1)
Column Headers	10.08	11.86
Data Description	17.86	6.37
Information Icon	0.00	0.00
Construction	0.06	0.00
Construction MOE	0.00	0.00
Construction Reliability	0.09	0.20
Farming	0.31	0.30
Farming MOE	0.06	0.23
Farming Reliability	0.15	0.07
Management	2.13	4.52
Management MOE	1.00	3.65
Management Reliability	1.69	2.48
Production	0.00	0.00
Production MOE	0.06	0.00
Production Reliability	0.00	0.00
Sales	2.28	6.40
Sales MOE	0.22	1.64
Sales Reliability	1.09	0.94
Service	2.27	1.84
Service MOE	0.54	2.01
Service Reliability	1.26	0.46
Table Source	0.15	0.22
Table Information	0.74	1.33
Top Links	0.79	0.13
Top Tabs	0.75	0.94
Reliability Legend	Not Applicable	0.33
Legend Levels	Not Applicable	0.13
Legend Text	Not Applicable	0.13

Table 12 shows that there is a large difference in the amount of time spent looking at the Percent and Reliability columns in these tables. In fact, participants looked at every AOI longer in the Legend Behind Link condition than the Above Table condition. When the reliability legend is present, it may reduce the amount of time participants need to look at the reliability column itself while interpreting its meaning. On the contrary, participants may spend more time reading and cognitively processing the reliability column when the legend is absent.

Table 12: Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Geographic Comparison Tables

AOI	Above Table (E3,E4)	Behind Link (E1,E2)
Geographical Area	2.52	8.28
Column Headings	0.80	2.05
Information Icon	0.02	0.03
MOE	3.88	7.98
Percent	3.40	11.85
Reliability	8.54	23.92
Table Information	2.56	2.62
Table Source	0.00	0.16
Top Links	0.89	0.91
Top Tabs	0.28	0.43
View Table Notes	0.61	0.86
Reliability Legend	2.23	NA
Legend Colors	0.31	NA
Legend Text	1.37	NA

The information icon may not be very helpful, since it was hardly looked at.

Color vs. No Color

Table 13 presents the fixation durations for the tables with a color-coded data reliability indicator as compared to the tables with a plain text indicator with no color for the Data Profile Tables. For this analysis, the location of the legend was removed from the analysis, since no one saw the legend for the tables where it was behind the “View Table Notes” link. The largest difference in fixation duration between the two conditions was that participants looked at the Data Description column for an average of 16.30 for the color-coded tables, but only an average of 11.40 for the tables without color. Overall, the fixation durations on the AOIs were similar for the two prototypes.

Table 13: **Fixation Durations (in seconds): Color vs. No Color for Data Profile Tables**

AOI	Color (A1,A3)	No Color (A2,A4)
Column Headers	0.91	0.73
Data Description	16.30	11.40
Estimate	7.12	5.93
Estimate MOE	4.07	3.35
Estimate MOE Link	0.09	0.20
Estimate Reliability Link	0.10	0.13
Information Icon	0.01	0.00
Percent	4.69	4.31
Percent MOE	1.38	1.56
Percent Reliability	1.76	1.85
Percent MOE Link	0.10	0.12
Percent Reliability Link	0.03	0.19
Table Information	0.84	0.37
Table Source	0.05	0.06
Top Links	0.21	0.16
Top Tabs	0.10	0.11
View Table Notes	0.14	0.05

Table 14 shows the fixation durations for the tables with a color-coded data reliability indicator as compared to the tables with a plain text indicator with no color for the Detailed Tables. The most notable differences in the fixation durations for the two prototypes are that participants looked at the Data description column for an average of 12.28 in the Color condition versus only 6.64 for the No Color condition. Participants also fixated on the Apple County Reliability Column for 7.88 seconds on average for the Color tables as compared to only 3.96 seconds for the No Color tables. Since Apple County is the first county that appears at the left-hand side of the table, this may be evidence that participants’s eyes were initially drawn to the most colorful part of the screen. Participants looked at the Cherry County Reliability column almost twice as long for the No Color tables as they did for the Color tables, and this is the last and right-most county displayed in the table. This is consistent with participants becoming accustomed to the color-coded table.

Table 14: **Fixation Durations (in seconds): Color vs. No Color for Detailed Tables**

AOI	Color (D1)	No Color (D2)
Geography Headers	0.42	1.89
Data Description	6.64	12.28
Apple County Estimate	2.79	1.89
Apple County Estimate MOE	2.06	1.10
Apple County Reliability	7.88	3.96
Birch County Estimate	4.21	3.07
Birch County MOE	1.00	1.60
Birch County Reliability	3.67	4.56
Cherry County Estimate	1.46	2.57
Cherry County MOE	0.00	0.05
Cherry County Reliability	0.88	1.66
Information Icon	0.02	0.00
Table Information	0.92	0.47
Table Source	0.22	0.26
Top Links	0.60	0.49
Top Tabs	0.18	0.33
View Table Notes	0.04	0.07

Order of the Legend Levels

Table 15 shows the average fixation durations for the tables with the Red/“Not Very Reliable” level presented at the top of the reliability legend and the tables where the Green/“Reliable” level was displayed first for the Selected Population Profile tables. The reliability legend AOIs were removed because the tables with the legends behind the “View Table Notes” link did not have a visible AOI legend. Although the fixation durations are similar overall, participants with the Green First tables looked at the Column Headers and Total Population Estimate columns longer on average than the participants with the Red First tables. Participants in the Green First condition looked at the Two or More Races Estimate column longer on average than participants in the Red First condition.

Table 15: **Fixation Durations (sec): Red/Not Very Reliable First Versus Green/Reliable in Legend for Selected Population Profiles**

AOI	Red First (B1,B3)	Green First (B2,B4)
Data Description	33.24	32.49
Column Headers	0.71	2.33
Two or More Races Estimate	9.12	5.82
Two or More Races MOE	1.77	0.42
Two or More Races Reliability	4.64	5.07
Total Population Estimate	9.66	13.80
Total Population MOE	4.27	2.88
Total Population Reliability	6.52	7.72
Information Icon	0.00	0.07
Table Information	1.41	3.75
Table Source	0.02	0.00
Top Links	0.83	0.54
Top Tabs	0.43	0.30
View Table Notes	0.05	0.15

Table 16 shows the average fixation durations for the tables with the Red/“Not Very Reliable” level presented at the top of the reliability legend and the tables where the Green/“Reliable” level was displayed first for the Geographic Comparison tables. The fixation durations were similar overall.

Table 16: **Fixation Durations (sec): Red/Not Very Reliable First Versus Green/Reliable in Legend for Geographic Comparison Tables**

AOI	Red First (E1,E3)	Green First (E2,E4)
Geographical Area	4.71	6.10
Column Headings	1.51	1.34
Information Icon	0.00	0.05
MOE	6.17	5.68
Percent	7.30	8.25
Reliability	16.81	15.65
Table Information	2.11	3.07
Table Source	0.01	0.16
Top Links	0.79	1.01
Top Tabs	0.38	0.33
View Table Notes	0.65	0.82

6.2 Heatmaps

Heatmaps are visualization tools that show where participants looked most often on a stimulus, in this case the data tables. This section provides a heatmap for each of the tables. Overall, participants’ eyes are drawn most to the color-coded columns and row descriptions (data descriptions).⁴

Data Profile Tables

For tables A1, A3, and A4, the participants looked at the column headers, but the participants who saw the A4 table did not read them very carefully. The participant who saw the A2 table did not read the table’s title, while the participants in every other Data Profile Table condition did. This may be due to individual differences, since only one person saw the A2 table.

Figure 2 shows the heatmap for Table A1, Figure 3 shows the heatmap for Table A2, Figure 4 shows the heatmap for Table A3, and Figure 5 shows the heatmap for Table A4. Comparing Tables A1 and A2, the heatmap for A1 shows that participants look at the margin of error more than in the heatmap for A2, especially in the Ancestry section at the end of the table. The color-coded reliability indicator may have been attracting additional attention to the right side of the table. Participants looked at the relationship section more for table A2 than in A1 (e.g., the section is “hotter”). The color-coded reliability column could have helped participants track the rows across, requiring the participants with the A2 table to more carefully follow the row. Participants for Table A2 also looked at the column headers more than those for A1.

Comparing Tables A3 and A4, the heatmap of the columns near the color-coded reliability column in A3 appear “hotter” than those in A4, which also occurred in Table A1 more than Table A2. Again, the colors may attract additional attention to that section of the table.

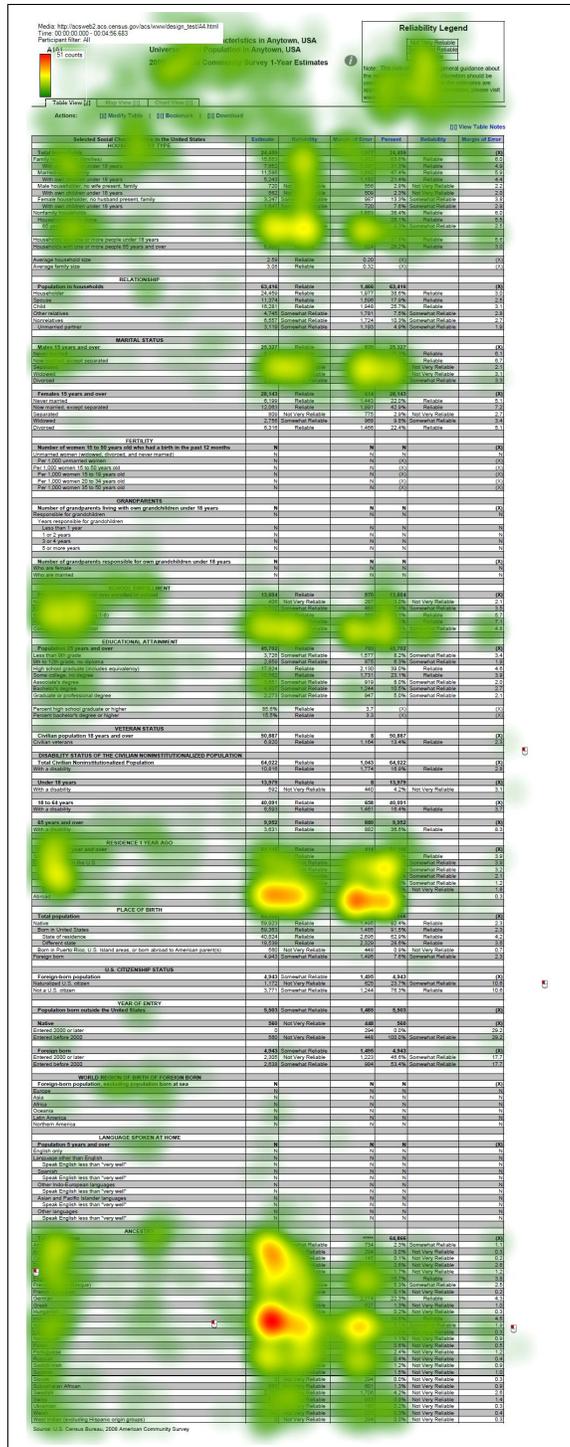
Participants did appear to read the Data Reliability Indicator description in the legend. Similar reading patterns were found for tables A3, A4, B4, C2, E3, and to a certain extent, B3 and E4.

⁴It is important to note that some tables only had one participant view them. Therefore, strong conclusions about differences in the heatmaps cannot be made.

Figure 4: Heatmap for Table A3, Three Participants



Figure 5: Heatmap for Table A4, Two Participants



Selected Population Profile Tables

Figure 6 shows the heatmap for Table B1, Figure 7 displays the heatmap for Table B2, Figure 8 shows the heatmap for Table B3, and Figure 9 displays the heatmap for Table B4. Across all of the conditions but B4, the participants looked at the column headers. The participant who did not read the column headers could have had greater confusion during the session during the tasks that require a response from the “Two or More Races” column.

Figure 6: Heatmap for Table B1, One Participant



Figure 7: Heatmap for Table B2, One Participant

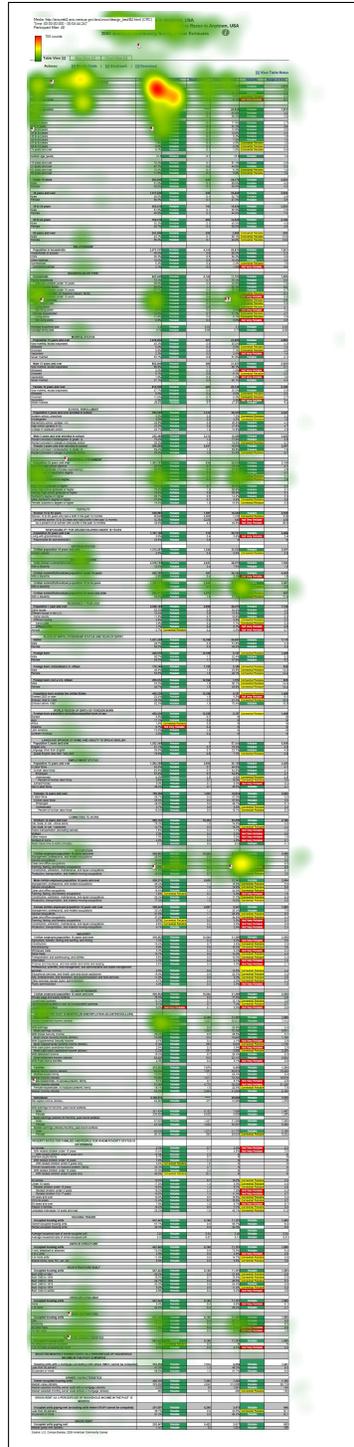


Figure 8: Heatmap for Table B3, One Participant

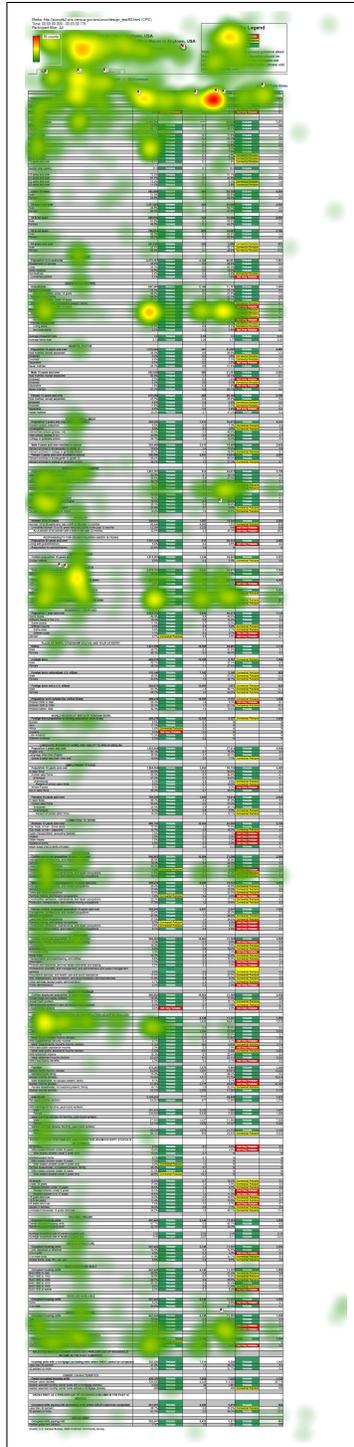
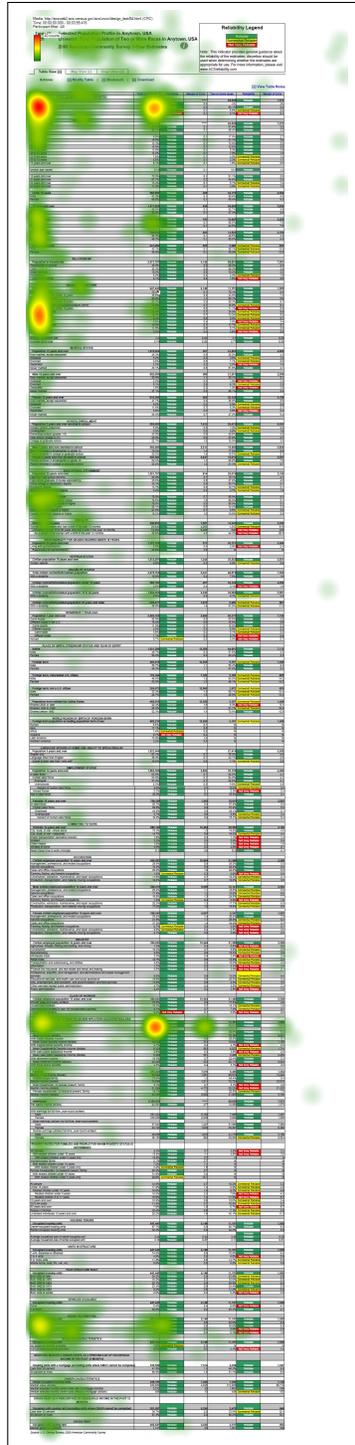


Figure 9: Heatmap for Table B4, One Participant



Subject Tables

The participants who saw the wide Subject Tables did not read the right side of the table. In order to see this area, participants would have had to scroll horizontally to the right. The requirement of horizontal scrolling goes against the commonly held usability principle to avoid horizontal scrolling whenever possible.

Figure 10: Heatmap for Table C1, One Participant

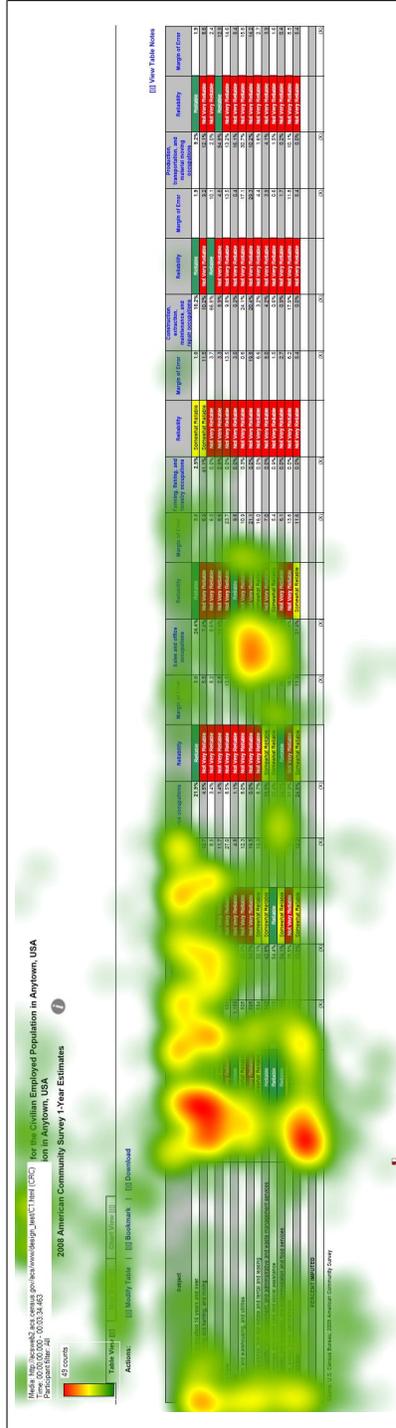
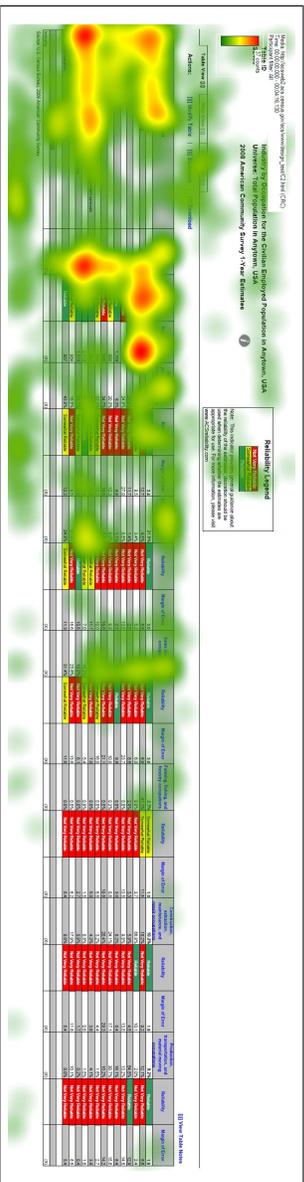


Figure 11: Heatmap for Table C2, One Participant



Detailed Tables

There were similar fixation patterns for both D1 and D2, which indicates that the participants who saw these tables interacted with them in a similar fashion. The main difference was that the color-coded reliability columns drew more fixations to the estimate columns in D1 than the non-color coded estimate columns in D2.

Figure 12: Heatmap for Table D1, Two Participants



Figure 13: Heatmap for Table D2, One Participant



Geographical Comparison Tables

Overall, the fixation patterns were similar for all of the Geographical Comparison Tables. The participant in E3 did not look at the margin of error often, but participants across the conditions and tables differed widely when looking at the margin of error. Differences in duration of fixation on margin of error may also depend on how long they spent trying to identify what the reliability or margin of error was determined by.

Figure 14: Heatmap for Table E1, One Participant

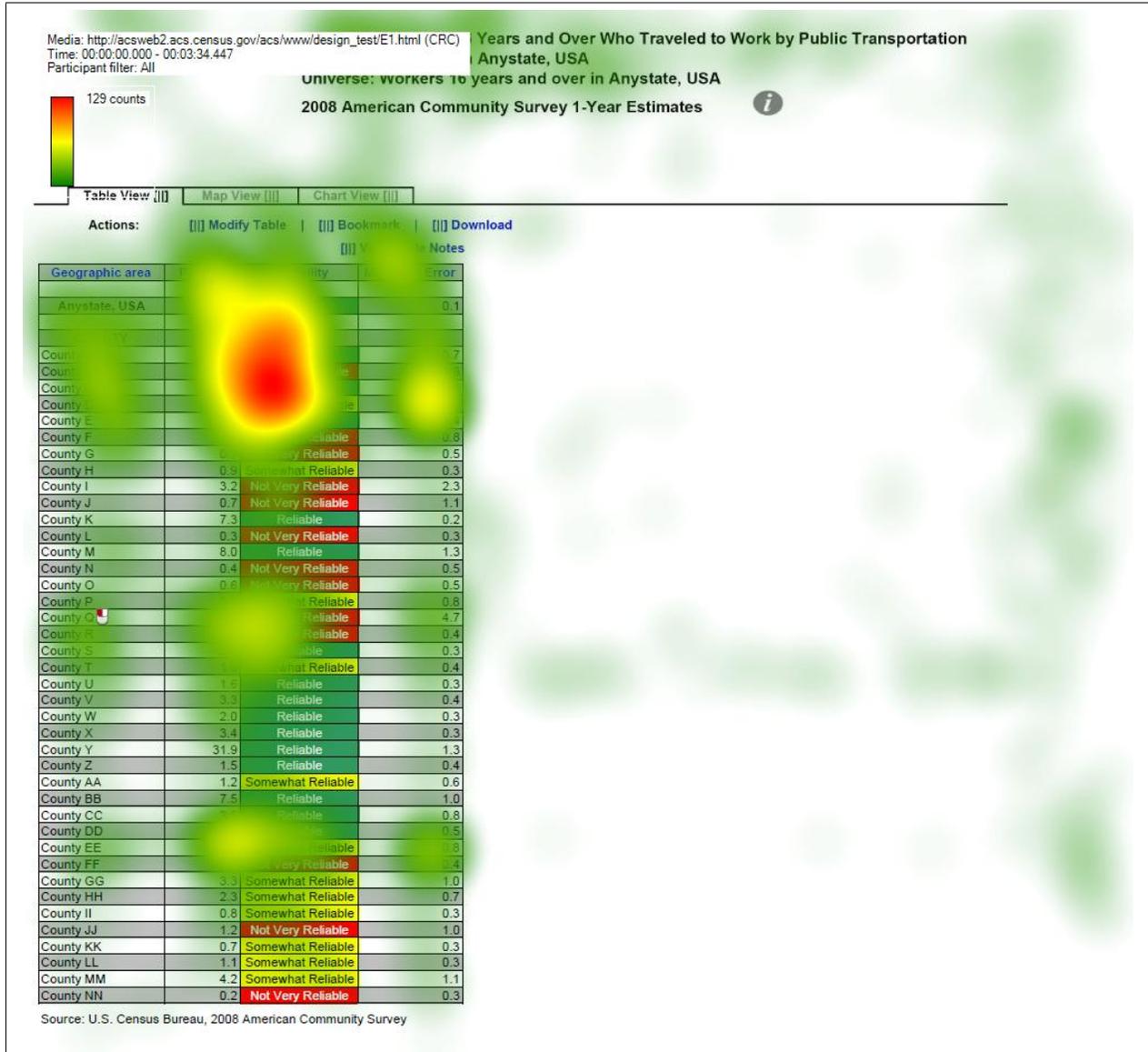
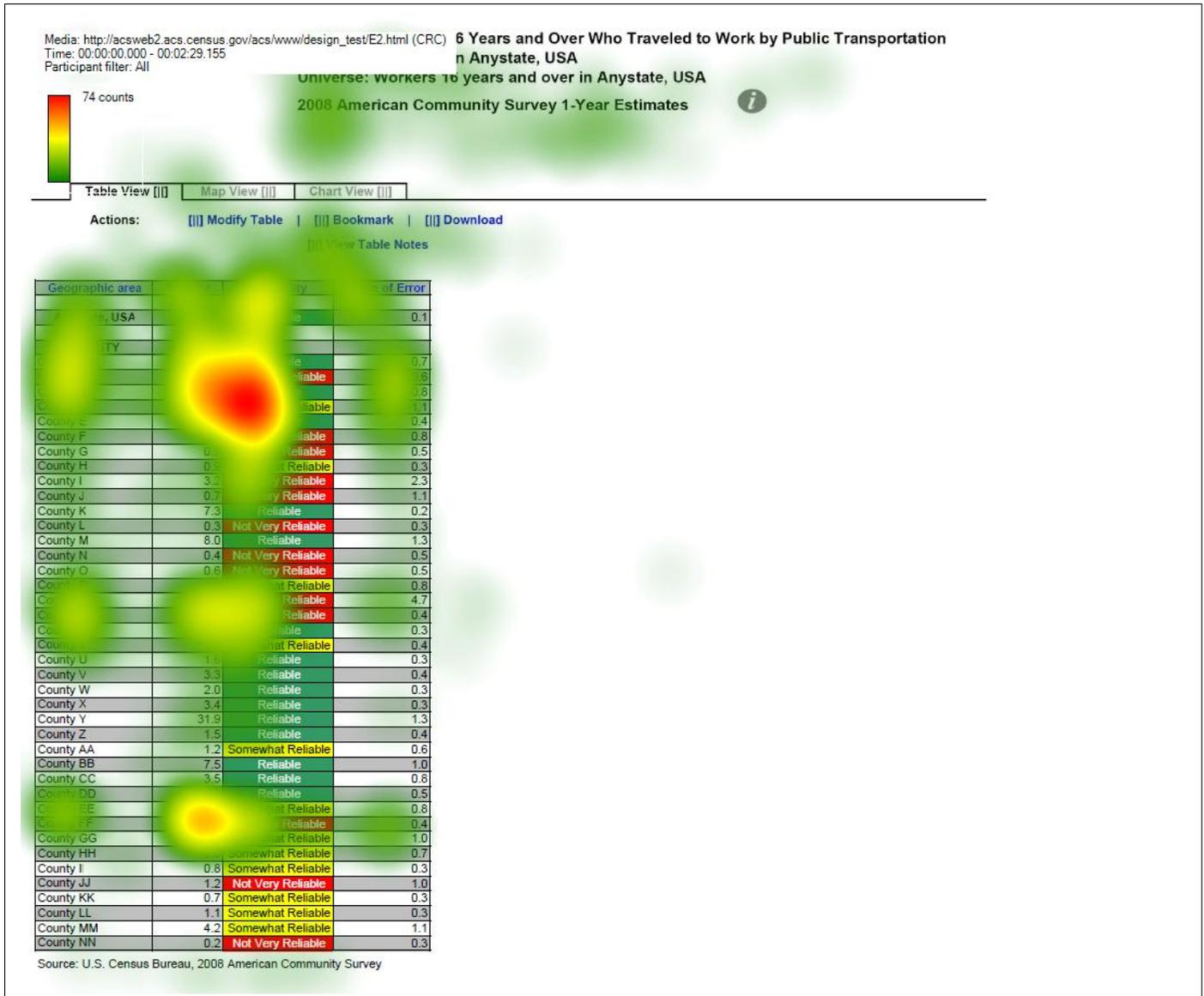


Figure 15: Heatmap for Table E2, One Participant



6.3 Summary

The participants' response to the data reliability indicators was mostly positive, as it was for the first two rounds of testing. However, there was some confusion about the indicator. For instance, some participants confused the concept of statistical reliability with a lack of confidence in the source or quality of the data or had trouble interpreting what "Somewhat Reliable" really meant.

In terms of whether the data reliability legend is displayed above the table or behind a link, "Reliable" or "Not Very Reliable" is listed first, or whether it is color-coded, the usability goals were met for accuracy of responses and users satisfaction for all of the conditions (although the goal was not met for all data products). However, the efficiency goal was not met for several of the table types.

Overall, it appears that participants can use the tables equally well whether or not the indicator has color-coding, has a legend above the table or behind a link, or whether the "Reliable" or "Not Very Reliable" indicator is listed first in the legend. Participants can use the tables with about equal efficiency whether it is color-coded or not and whether "Reliable" or "Not Very Reliable" is listed first. However, the tables with the legend placed above the table had scores that were 30 seconds longer than the scores for the tables with the legend placed behind a hyperlink.

when asked for their preference during debriefing, most participants in the text-only (i.e., no color-coding) conditions indicated that they would prefer the color-coded version .

Many participants had trouble tracking estimates across the table, reading the small text, and interpreting the meaning of "Somewhat Reliable."

As with the previous rounds of testing, there was a general sense of confusion about the meaning of "reliability" and what the cut-offs for the different levels of reliability were. Since none of the participants with the legend behind the link actually clicked on the link during testing, none of these participants saw the legend.⁵ It is unclear whether this would have been beneficial to them or not.

⁵One participant with the legend located above the table clicked on this link.

References

- Ashenfelter, K. T. (2010). Data reliability indicator based on the coefficient of variation: Results from the second round of testing. *Statistical Research Division Research Report Series*.
- Ashenfelter, K. T., Beck, J., & Murphy, E. D. (2009). Final report for first-round usability testing of data-reliability indicator prototypes. *Statistical Research Division Report Series, Report SSM2009/01*. Available from <http://www.census.gov/srd/papers/pdf/ssm2009-01.pdf>
- Chin, J. P., Diehl, V., & Norman, K. L. (1988). Development of an instrument measuring user satisfaction of the human-computer interface. *Proceedings of CHI 88: Human Factors in Computing Systems*, 213-218.
- Tersine, A. (2010). Proposal to apply a reliability indicator to ACS estimates. *U.S. Census Bureau Document: Prepared for the 2010 Census Advisory Committee and the Census Scientific Advisory Committee*.
- Tobii Technology, I. (2008). *Tobii studio enterprise edition software*.
- Whitford, D., & Weinberg, D. (2008). Proposal to highlight american community survey data with a data confidence indicator. *U.S. Census Bureau Document*.

7 Appendix A: Tables

The longer tables that scrolled down vertically have been broken up into three sections (called Top, Middle, and Bottom for the relative vertical position of the sections) for increased legibility.

Figure 18: Data Profile Table with Color-Coding and the Legend Behind a Link (A1): Top

Table ID	Selected Social Characteristics in Anytown, USA					
A101	Universe: Total Population in Anytown, USA					
	2008 American Community Survey 1-Year Estimates					
Table View Map View Chart View						
Actions: Modify Table Bookmark Download						
View Table Notes						
Selected Social Characteristics in the United States	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
HOUSEHOLDS BY TYPE						
Total households	24,459	Reliable	1,977	24.459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,598	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,182	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	558	2.9%	Not Very Reliable	2.2
With own children under 18 years	562	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.8%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,188	Reliable	1,686	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	924	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63.416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,596	17.8%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,745	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25.327		(X)
Never married	8,944	Reliable	1,833	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28.143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,063	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.0%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren	N		N	N		N
Less than 1 year	N		N	N		N

Figure 19: Data Profile Table with Color-Coding and the Legend Behind a Link (A1): Middle

GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren						
Less than 1 year	N		N	N		N
1 or 2 years	N		N	N		N
3 or 4 years	N		N	N		N
5 or more years	N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years	N		N	N		(X)
Who are female	N		N	N		N
Who are married	N		N	N		N
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	13,604	Reliable	970	13,604		(X)
Nursery school, preschool	406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten	1,012	Somewhat Reliable	488	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)	6,285	Reliable	556	46.1%	Reliable	5.7
High school (grades 9-12)	4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school	1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT						
Population 25 years and over	45,702	Reliable	703	45,702		(X)
Less than 9th grade	3,726	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma	2,858	Somewhat Reliable	675	6.3%	Somewhat Reliable	1.9
High school graduate (includes equivalency)	17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree	10,562	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree	3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree	4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree	2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher	85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher	15.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS						
Civilian population 18 years and over	50,887	Reliable	8	50,887		(X)
Civilian veterans	6,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION						
Total Civilian Noninstitutionalized Population	64,022	Reliable	1,043	64,022		(X)
With a disability	10,516	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years	13,979	Reliable	8	13,979		(X)
With a disability	592	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years	40,091	Reliable	658	40,091		(X)
With a disability	6,583	Reliable	1,461	16.4%	Reliable	3.7
65 years and over	9,952	Reliable	880	9,952		(X)
With a disability	3,631	Reliable	882	36.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO						
Population 1 year and over	64,146	Reliable	414	64,146		(X)
Same house	54,826	Reliable	2,478	85.5%	Reliable	3.9
Different house in the U.S.	9,320	Somewhat Reliable	2,495	14.5%	Somewhat Reliable	3.9
Same county	5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county	3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state	1,668	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state	1,878	Not Very Reliable	1,149	2.9%	Not Very Reliable	1.8
Abroad	0		294	0.0%		0.3
PLACE OF BIRTH						
Total population	64,866		64,866			(X)
Native	59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	82.9%	Reliable	4.2
Different state	18,539	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	580	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)

Figure 20: Data Profile Table with Color-Coding and the Legend Behind a Link (A1):
Bottom

Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	53.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable	2.6
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,467	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	769	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	883	Not Very Reliable	601	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable	2.6
Swiss	815	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	150	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 21: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):
Top

Table ID A101		Selected Social Characteristics in Anytown, USA Universe: Total Population in Anytown, USA		2008 American Community Survey 1-Year Estimates			
Table View 		Map View 		Chart View 			
Actions:		 Modify Table		 Bookmark		 Download	
							 View Table Notes
Selected Social Characteristics in the United States							
HOUSEHOLDS BY TYPE							
	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error	
Total households	24,459	Reliable	1,977	24,459			(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable		6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable		4.9
Married-couple family	11,590	Reliable	1,640	47.4%	Reliable		5.9
With own children under 18 years	5,243	Reliable	1,182	21.4%	Reliable		4.4
Male householder, no wife present, family	720	Not Very Reliable	556	2.9%	Not Very Reliable		2.2
With own children under 18 years	582	Not Very Reliable	508	2.3%	Not Very Reliable		2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable		3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable		2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable		6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable		5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable		2.5
Households with one or more people under 18 years	9,186	Reliable	1,666	37.6%	Reliable		5.6
Households with one or more people 65 years and over	6,906	Reliable	924	20.2%	Reliable		3.9
Average household size	2.59	Reliable	0.20	(X)			(X)
Average family size	3.08	Reliable	0.32	(X)			(X)
RELATIONSHIP							
Population in households	63,416	Reliable	1,466	63,416			(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable		3.0
Spouse	11,374	Reliable	1,596	17.9%	Reliable		2.5
Child	16,281	Reliable	1,948	25.7%	Reliable		3.1
Other relatives	4,746	Somewhat Reliable	1,781	7.5%	Somewhat Reliable		2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable		2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable		1.9
MARITAL STATUS							
Males 15 years and over	25,327	Reliable	820	25,327			(X)
Never married	8,944	Reliable	1,633	35.3%	Reliable		6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable		6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable		2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable		3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable		3.3
Females 15 years and over	28,143	Reliable	614	28,143			(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable		5.1
Now married, except separated	12,063	Reliable	1,991	42.9%	Reliable		7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable		2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable		3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable		5.1
FERTILITY							
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N			(X)
Unmarried women (widowed, divorced, and never married)	N		N	N			N
Per 1,000 unmarried women	N		N	(X)			(X)
Per 1,000 women 15 to 50 years old	N		N	(X)			(X)

Figure 22: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):Middle

Different state	18,539	Reliable	2,329	28.6%	Reliable	3.8
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.8%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.8
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.8
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	48.8%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	63.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 3 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,889	2.6%	Not Very Reliable	2.8
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,467	Somewhat Reliable	1,802	5.3%	Somewhat Reliable	2.5
French Canadian	78	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	880	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.8%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	883	Not Very Reliable	601	1.3%	Not Very Reliable	0.8
Swedish	2,705	Not Very Reliable	1,708	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 23: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):
Bottom

Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	62.9%	Reliable	4.2
Different state	18,836	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.6
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	63.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable	2.6
Dutch	1,086	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,487	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	800	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Nonwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	670	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	863	Not Very Reliable	601	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,708	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 24: Data Profile Table with Color-Coding and the Legend Above the Table (A3):Top

Selected Social Characteristics in the United States	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
HOUSEHOLDS BY TYPE						
Total households	24,459	Reliable	1,977	24,459		(X)
Family households (families)	15,563	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,586	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,162	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	556	2.9%	Not Very Reliable	2.2
With own children under 18 years	562	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,186	Reliable	1,666	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	824	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63,416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,586	17.9%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,746	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,183	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25,327		(X)
Never married	8,944	Reliable	1,633	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	621	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28,143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,083	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						

Reliability Legend

Not Very Reliable
Somewhat Reliable
Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View [] | Map View [] | Chart View []

Actions: [] Modify Table | [] Bookmark | [] Download

[] View Table Notes

Figure 25: Data Profile Table with Color-Coding and the Legend Above the Table (A3): Middle

Per 1,000 women 20 to 34 years old		N		N	(X)		(X)
Per 1,000 women 35 to 50 years old		N		N	(X)		(X)
GRANDPARENTS							
Number of grandparents living with own grandchildren under 18 years		N		N	N		(X)
Responsible for grandchildren		N		N	N		N
Years responsible for grandchildren							
Less than 1 year		N		N	N		N
1 or 2 years		N		N	N		N
3 or 4 years		N		N	N		N
5 or more years		N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years		N		N	N		(X)
Who are female		N		N	N		N
Who are married		N		N	N		N
SCHOOL ENROLLMENT							
Population 3 years and over enrolled in school		13,604	Reliable	970	13,604		(X)
Nursery school, preschool		406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten		1,012	Somewhat Reliable	488	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)		6,265	Reliable	556	46.1%	Reliable	5.7
High school (grades 9-12)		4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school		1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT							
Population 25 years and over		45,702	Reliable	703	45,702		(X)
Less than 9th grade		3,728	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma		2,859	Somewhat Reliable	875	6.3%	Somewhat Reliable	1.8
High school graduate (includes equivalency)		17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree		10,662	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree		3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree		4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree		2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher		85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher		15.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS							
Civilian population 18 years and over		50,887	Reliable	8	50,887		(X)
Civilian veterans		6,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION							
Total Civilian Noninstitutionalized Population		64,022	Reliable	1,043	64,022		(X)
With a disability		10,818	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years		13,979	Reliable	8	13,979		(X)
With a disability		582	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years		40,091	Reliable	658	40,091		(X)
With a disability		6,593	Reliable	1,461	16.4%	Reliable	3.7
65 years and over		9,952	Reliable	880	9,952		(X)
With a disability		3,631	Reliable	882	36.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO							
Population 1 year and over		64,146	Reliable	414	64,146		(X)
Same house		54,828	Reliable	2,478	85.6%	Reliable	3.9
Different house in the U.S.		9,320	Somewhat Reliable	2,495	14.8%	Somewhat Reliable	3.9
Same county		5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county		3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state		1,868	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state		1,878	Not Very Reliable	1,149	2.9%	Not Very Reliable	1.8
Abroad		0		294	0.0%		0.3
PLACE OF BIRTH							
Total population		64,866		****	64,866		(X)
Native		59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States		59,369	Reliable	1,485	91.5%	Reliable	2.3
State of residence		40,824	Reliable	2,695	62.9%	Reliable	4.2
Different state		18,539	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)		560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born		4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS							
Foreign-born population		4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen		1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.8

Figure 26: Data Profile Table with Color-Coding and the Legend Above the Table (A3): Bottom

YEAR OF ENTRY					
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503	
Native	560	Not Very Reliable	448	560	
Entered 2000 or later	0		294	0.0%	
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable
Foreign born	4,943	Somewhat Reliable	1,495	4,943	
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable
Entered before 2000	2,638	Somewhat Reliable	984	53.4%	Somewhat Reliable
WORLD REGION OF BIRTH OF FOREIGN BORN					
Foreign-born population, excluding population born at sea	N		N	N	
Europe	N		N	N	
Asia	N		N	N	
Africa	N		N	N	
Oceania	N		N	N	
Latin America	N		N	N	
Northern America	N		N	N	
LANGUAGE SPOKEN AT HOME					
Population 5 years and over	N		N	N	
English only	N		N	N	
Language other than English	N		N	N	
Speak English less than "very well"	N		N	N	
Spanish	N		N	N	
Speak English less than "very well"	N		N	N	
Other Indo-European languages	N		N	N	
Speak English less than "very well"	N		N	N	
Asian and Pacific Islander languages	N		N	N	
Speak English less than "very well"	N		N	N	
Other languages	N		N	N	
Speak English less than "very well"	N		N	N	
ANCESTRY					
Total population	64,866		****	64,866	
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable
English	10,824	Reliable	2,441	16.7%	Reliable
French (except Basque)	3,467	Somewhat Reliable	1,602	5.3%	Somewhat Reliable
French Canadian	78	Not Very Reliable	126	0.1%	Not Very Reliable
German	14,479	Reliable	2,774	22.3%	Reliable
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable
Irish	12,714	Reliable	2,912	19.6%	Reliable
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable
Polish	358	Not Very Reliable	363	0.6%	Not Very Reliable
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable
Scotch-Irish	769	Not Very Reliable	570	1.2%	Not Very Reliable
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable
Subsaharan African	863	Not Very Reliable	601	1.3%	Not Very Reliable
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 27: Data Profile Table with No Color-Coding and the Legend Above the Table (A4):
Top

Table ID	Selected Social Characteristics in Anytown, USA		Reliability Legend			
A101	Universe: Total Population in Anytown, USA		<div style="border: 1px solid black; padding: 2px; display: inline-block;">Not Very Reliable</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Somewhat Reliable</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Reliable</div>			
		2008 American Community Survey 1-Year Estimates		<small>Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com</small>		
<div style="display: flex; justify-content: space-between; align-items: center;"> Table View [i] Map View [i] Chart View [i] </div>						
<div style="display: flex; justify-content: space-between; align-items: center;"> Actions: [i] Modify Table [i] Bookmark [i] Download [i] View Table Notes </div>						
Selected Social Characteristics in the United States						
HOUSEHOLDS BY TYPE						
Total households	24,459	Reliable	1,977	24,459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,586	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,162	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	558	2.9%	Not Very Reliable	2.2
With own children under 18 years	582	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,188	Reliable	1,666	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	824	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63,416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,596	17.9%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,745	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25,327		(X)
Never married	9,944	Reliable	1,633	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28,143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,083	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)

Figure 28: Data Profile Table with No Color-Coding and the Legend Above the Table (A4): Middle

Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren						
Less than 1 year	N		N	N		N
1 or 2 years	N		N	N		N
3 or 4 years	N		N	N		N
5 or more years	N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years	N		N	N		(X)
Who are female	N		N	N		N
Who are married	N		N	N		N
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	13,604	Reliable	970	13,604		(X)
Nursery school, preschool	406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten	1,012	Somewhat Reliable	498	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)	6,265	Reliable	556	48.1%	Reliable	5.7
High school (grades 9-12)	4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school	1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT						
Population 25 years and over	45,702	Reliable	703	45,702		(X)
Less than 9th grade	3,726	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma	2,859	Somewhat Reliable	875	8.3%	Somewhat Reliable	1.9
High school graduate (includes equivalency)	17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree	10,562	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree	3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree	4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree	2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher	85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher	16.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS						
Civilian population 18 years and over	50,887	Reliable	8	50,887		(X)
Civilian veterans	8,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION						
Total Civilian Noninstitutionalized Population	64,022	Reliable	1,043	64,022		(X)
With a disability	10,816	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years	13,979	Reliable	8	13,979		(X)
With a disability	592	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years	40,091	Reliable	658	40,091		(X)
With a disability	6,593	Reliable	1,481	16.4%	Reliable	3.7
65 years and over	9,952	Reliable	880	9,952		(X)
With a disability	3,631	Reliable	882	38.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO						
Population 1 year and over	64,146	Reliable	414	64,146		(X)
Same house	54,826	Reliable	2,478	85.5%	Reliable	3.9
Different house in the U.S.	9,320	Somewhat Reliable	2,495	14.5%	Somewhat Reliable	3.9
Same county	5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county	3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state	1,888	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state	1,878	Not Very Reliable	1,149	2.8%	Not Very Reliable	1.8
Abroad	0		294	0.0%		0.3
PLACE OF BIRTH						
Total population	64,866		****	64,866		(X)
Native	59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,874	Reliable	2,895	87.9%	Reliable	4.7

Figure 29: Data Profile Table with No Color-Coding and the Legend Above the Table (A4):
Bottom

Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	82.9%	Reliable	4.2
Different state	18,539	Reliable	2,329	28.6%	Reliable	3.8
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.6
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native						
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born						
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	994	53.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		***	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,889	2.8%	Not Very Reliable	2.8
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,487	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	368	Not Very Reliable	363	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	280	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	893	Not Very Reliable	801	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	632	0.6%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Figure 30: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Top

Table ID
S201

Selected Population Profile in Anytown, USA
Universe: Total Population of Two or More Races in Anytown, USA
2008 American Community Survey 1-Year Estimates



Table View [X]		Map View [X]		Chart View [X]		
Actions: [X] Modify Table [X] Bookmark [X] Download						
[X] View Table Notes						
Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,516		****	65,838	Reliable	7,573
One race	96.7%	Reliable	0.4	(X)		(X)
Two races	3.1%	Reliable	0.3	53.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.8%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,516		****	65,838	Reliable	7,573
Male	49.3%	Reliable	0.1	51.6%	Reliable	3.2
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.8%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.8%	Reliable	2.0
25 to 34 years	16.3%	Reliable	0.1	12.6%	Reliable	2.5
35 to 44 years	13.5%	Reliable	0.1	9.3%	Reliable	1.5
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.5
55 to 64 years	7.8%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6
Median age (years)	31.8	Reliable	0.1	18.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
52 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,890	Reliable	438	34,170	Reliable	4,554
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.3
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.3
18 years and over	1,517,626	Reliable	438	35,668	Reliable	3,938
Male	49.2%	Reliable	0.1	52.7%	Reliable	4.3
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.3
18 to 34 years	565,916	Reliable	743	18,456	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.8%	Reliable	0.1	44.6%	Reliable	7.3
35 to 64 years	706,014	Reliable	593	14,523	Reliable	2,106
Male	50.3%	Reliable	0.1	45.5%	Reliable	4.9
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.9
65 years and over	241,696	Reliable	535	2,689	Somewhat Reliable	933
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9
RELATIONSHIP						
Population in households	2,073,707	Reliable	4,145	68,831	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	10.5%	Reliable	0.6	10.2%	Reliable	2.5
Nonrelatives	8.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.5
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.7	75.1%	Reliable	8.8
With own children under 18 years	38.5%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.0%	Reliable	1.1	52.1%	Reliable	8.0
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5
Nonfamily households	25.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.8
Male householder	12.5%	Reliable	0.7	13.2%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.8%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.20	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.74	Reliable	0.05	3.77	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,618,004	Reliable	547	41,893	Reliable	4,865
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	8.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4
Divorced	9.5%	Reliable	0.5	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,509	Reliable	588	21,551	Reliable	2,959
Now married, except separated	50.3%	Reliable	1.1	35.1%	Reliable	5.1

Figure 31: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Top Middle

Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,939
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.6
Separated	1.5%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	455	26,142	Reliable	3,188
Now married, except separated	47.7%	Reliable	0.4	35.0%	Reliable	5.5
Widowed	8.5%	Reliable	0.2	5.6%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	583,029	Reliable	7,412	30,472	Reliable	4,341
Nursery school, preschool	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Kindergarten	5.0%	Reliable	0.5	4.8%	Somewhat Reliable	1.8
Elementary school (grades 1-5)	43.5%	Reliable	0.9	40.6%	Reliable	4.2
High school (grades 9-12)	23.8%	Reliable	0.6	27.8%	Reliable	4.7
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,469	Reliable	5,212	15,454	Reliable	2,822
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.6%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	300,560	Reliable	5,647	15,016	Reliable	2,597
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	69.0%	Reliable	7.4
Percent enrolled in college or graduate school	25.2%	Reliable	1.2	21.3%	Somewhat Reliable	6.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,797	Reliable	814	26,015	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.8%	Reliable	0.8	27.9%	Reliable	4.8
Some college or associate's degree	32.1%	Reliable	0.8	38.7%	Reliable	5.1
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.6
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	76.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.0%	Reliable	0.7	9.5%	Somewhat Reliable	3.9
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,893	Reliable	1,587	16,343	Reliable	2,920
Women 15 to 50 years who had a birth in the past 12 months	38,646	Reliable	4,060	1,310	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	12,364	Reliable	54	54	Not Very Reliable	436
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable	26.5
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,128	Reliable	912	20,721	Reliable	2,688
Living with grandchild(ren)	5.3%	Reliable	0.2	2.4%	Not Very Reliable	N
Responsible for grandchild(ren)	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,521
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.8
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,875	Reliable	7,552
With a disability	10.5%	Reliable	0.4	7.8%	Reliable	1.8
Civilian noninstitutionalized population under 18 years	582,753	Reliable	497	34,142	Reliable	4,553
With a disability	2.5%	Reliable	0.4	3.1%	Not Very Reliable	1.6
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,045	32,083	Reliable	3,581
With a disability	8.5%	Reliable	0.5	8.7%	Somewhat Reliable	2.8
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,072	2,650	Somewhat Reliable	907
With a disability	38.5%	Reliable	1.6	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,169	Reliable	2,868	66,272	Reliable	7,138
Same house	82.9%	Reliable	0.8	83.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	15.9%	Reliable	2.9
Same county	11.5%	Reliable	0.7	10.0%	Reliable	2.2
Different county	4.9%	Reliable	0.5	5.9%	Somewhat Reliable	2.5
Same state	3.5%	Reliable	0.4	6.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.6
Abroad	0.7%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,298	Reliable	12,558	64,681	Reliable	7,113
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.3
Foreign born	469,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.6%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,146	Reliable	7,182	3,188	Somewhat Reliable	825
Male	46.5%	Reliable	1.9	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.5	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	293,072	Reliable	12,962	1,972	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	469,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Entered 2000 or later	22.4%	Reliable	1.6	8.3%	Not Very Reliable	6.1
Entered 1990 to 1999	25.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.2
Entered before 1990	52.3%	Reliable	1.5	70.6%	Reliable	10.9
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	468,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Europe	5.5%	Reliable	0.7	N	N	N

Figure 32: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Bottom Middle

Asia	17.3%	Reliable	0.8	N		N
Africa	1.4%	Somewhat Reliable	0.9	N		N
Oceania	0.7%	Not Very Reliable	0.4	N		N
Latin America	73.0%	Reliable	1.0	N		N
Northern America	2.2%	Reliable	0.2	N		N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 5 years and over	1,532,940	Reliable	7	57.41%	Reliable	6,600
English only	61.3%	Reliable	0.7	76.3%	Reliable	4.8
Language other than English	38.9%	Reliable	0.7	23.7%	Reliable	4.8
Speak English less than "very well"	16.6%	Reliable	0.6	7.1%	Somewhat Reliable	2.0
EMPLOYMENT STATUS						
Population 16 years and over	1,584,308	Reliable	2,804	39,15%	Reliable	4,460
In labor force	63.2%	Reliable	0.7	64.5%	Reliable	4.1
Civilian labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1
Employed	57.2%	Reliable	0.7	54.8%	Reliable	4.1
Unemployed	6.3%	Reliable	0.0	6.6%	Somewhat Reliable	2.1
Percent of civilian labor force	9.2%	Reliable	0.0	15.0%	Somewhat Reliable	3.8
Armed Forces	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4
Not in labor force	36.2%	Reliable	0.7	35.5%	Reliable	4.1
Females 16 years and over	798,658	Reliable	1,263	18.81%	Reliable	2,843
In labor force	55.7%	Reliable	0.9	57.3%	Reliable	5.0
Civilian labor force	55.6%	Reliable	0.9	57.9%	Reliable	5.1
Employed	49.9%	Reliable	0.9	49.1%	Reliable	5.1
Unemployed	5.7%	Reliable	0.0	6.0%	Somewhat Reliable	3.4
Percent of civilian labor force	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3
COMMUTING TO WORK						
Workers 16 years and over	880,102	Reliable	10,454	20,350	Reliable	2,160
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable	4.5
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.2%	Somewhat Reliable	4.4
Public transportation (excluding taxicab)	1.5%	Reliable	0.2	1.1%	Not Very Reliable	1.2
Walked	2.0%	Reliable	0.2	0.3%	Not Very Reliable	0.8
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.8
Worked at home	4.9%	Reliable	0.8	4.0%	Not Very Reliable	2.1
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.5	Reliable	4.1
OCCUPATION						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,500
Management, professional, and related occupations	25.4%	Reliable	0.3	24.0%	Reliable	5.0
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable	5.2
Sales and office occupations	26.9%	Reliable	1.0	29.0%	Reliable	6.0
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.0%	Not Very Reliable	0.8
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable	4.1
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable	3.8
Male civilian employed population 16 years and over	506,218	Reliable	8,085	12,141	Reliable	2,004
Management, professional, and related occupations	25.4%	Reliable	1.1	18.5%	Somewhat Reliable	5.8
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.8
Sales and office occupations	18.6%	Reliable	1.3	24.3%	Somewhat Reliable	7.7
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable	1.6
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	16.6%	Somewhat Reliable	5.8
Female civilian employed population 16 years and over	398,644	Reliable	6,657	9,247	Reliable	1,623
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.9
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable	8.3
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3
Farming, fishing, and forestry occupations	0.2%	Somewhat Reliable	0.2	0.0%	Not Very Reliable	2.3
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.6%	Not Very Reliable	2.3
INDUSTRY						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,500
Agriculture, forestry, fishing and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction	10.4%	Reliable	0.7	5.5%	Somewhat Reliable	2.5
Manufacturing	9.9%	Reliable	0.8	10.2%	Somewhat Reliable	3.8
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4
Retail trade	12.7%	Reliable	0.6	14.9%	Somewhat Reliable	4.3
Transportation and warehousing, and utilities	6.4%	Reliable	0.5	10.0%	Somewhat Reliable	4.4
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable	1.8
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable	2.1
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.6	13.0%	Somewhat Reliable	4.4
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable	5.2
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.8
Other services (except public administration)	4.7%	Reliable	0.3	5.0%	Somewhat Reliable	2.3
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.8
CLASS OF WORKER						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,500
Private wage and salary workers	76.5%	Reliable	0.9	77.5%	Reliable	4.8
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.8
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable	2.7
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.9
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)						
Households	647,448	Reliable	6,148	13,181	Reliable	1,898
Median household income (dollars)	57,752	Reliable	1,233	52,012	Reliable	7,812
With earnings	79.9%	Reliable	0.8	83.8%	Reliable	5.4
Mean earnings (dollars)	72,948	Reliable	1,364	70,186	Reliable	9,631
With Social Security income	28.4%	Reliable	0.5	25.5%	Reliable	4.1
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable	1,169
With Supplemental Security income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9
Mean Supplemental Security income (dollars)	8,124	Reliable	563	6,003	Somewhat Reliable	1,718
With cash public assistance income	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.9
Mean cash public assistance income (dollars)	6,330	Reliable	851	5,908	Somewhat Reliable	2,459
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	5.3
Mean retirement income (dollars)	22,425	Reliable	912	22,116	Reliable	9,328
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable	2.0
Families	473,263	Reliable	7,070	8,499	Reliable	1,354
Median family income (dollars)	64,543	Reliable	1,551	63,619	Reliable	13,424
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable	8.4
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable	10,818
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.0
Median income (dollars)	51,268	Reliable	4,778	28,202	Not Very Reliable	21,328
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable	7.9
Median income (dollars)	34,335	Reliable	2,904	41,065	Reliable	5,184
Individuals	2,109,516	Reliable	4,771	69,838	Reliable	7,573
Per capita income (dollars)	24,301	Reliable	471	12,968	Reliable	1,378

Figure 33: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Bottom

With earnings for full-time, year-round workers:						
Male	361,434	Reliable	8,152	7,606	Reliable	1,467
Female	238,605	Reliable	6,630	5,609	Reliable	1,298
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,966	Reliable	7,569
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,636	Reliable	1,074	41,770	Reliable	3,198
Female	36,153	Reliable	693	29,939	Somewhat Reliable	6,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.9
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.0	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.4
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	16.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	6.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.15	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.9%	Reliable	6.4
2 to 4 units	4.9%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.6
Mobile home, boat, RV, van, etc.	8.6%	Reliable	0.5	8.5%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	26.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.3%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.8	63.5%	Reliable	6.9
Electricity	17.9%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOC cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.8	46.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.8	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	438,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,252	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	455	Reliable	13	459	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRPI cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	848
Less than 30 percent	38.7%	Reliable	2.0	33.9%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	189

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 34: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Top

Table ID S201 Selected Population Profile in Anytown, USA
 Universe: Total Population of Two or More Races in Anytown, USA
 2008 American Community Survey 1-Year Estimates

Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,518	Reliable	65,838	Reliable	7,373	
One race	96.7%	Reliable	0.4	0%	0.1	
Two races	3.1%	Reliable	0.3	83.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.9%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,518	Reliable	65,838	Reliable	7,373	
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.2
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.3%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.6%	Reliable	2.0
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.5
35 to 44 years	13.5%	Reliable	0.1	9.3%	Reliable	1.6
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.5
55 to 64 years	7.8%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.4%	Somewhat Reliable	0.6
Median age (years)	31.0	Reliable	0.1	16.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.3
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
52 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,890	Reliable	438	34,170	Reliable	4,594
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.5
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.5
18 years and over	1,517,628	Reliable	438	35,698	Reliable	3,999
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.6
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.6
18 to 34 years	569,310	Reliable	743	18,456	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.8%	Reliable	0.1	44.5%	Reliable	7.5
35 to 64 years	706,014	Reliable	693	14,523	Reliable	2,106
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.5
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.9
65 years and over	241,694	Reliable	539	2,689	Somewhat Reliable	333
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9
RELATIONSHIP						
Population in households	2,075,707	Reliable	4,145	68,631	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	16.5%	Reliable	0.6	10.2%	Reliable	2.6
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.6
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.6
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.7	75.1%	Reliable	6.8
With own children under 18 years	38.8%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.0%	Reliable	1.1	52.1%	Reliable	8.0
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5
Nonfamily households	26.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.6
Male householder	12.9%	Reliable	0.7	13.3%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.6%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7
Living alone	11.5%	Reliable	0.6	9.1%	Somewhat Reliable	3.5
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.7	Reliable	0.05	3.7	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,616,004	Reliable	547	41,633	Reliable	4,885
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	5.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4
Divorced	9.9%	Reliable	0.6	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,959
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	6.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.6
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	463	20,142	Reliable	3,188
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.5
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4

Figure 35: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Top Middle

Widowed	2.2%	Reliable	0.31	1.5%	Not Very Reliable	1.31
Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	8.9	56.1%	Reliable	5.4
Female 15 years and over	815,359	Reliable	483	20,142	Reliable	3,188
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	6.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	3.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	5.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	693,022	Reliable	7,412	30,472	Reliable	4,241
Nursery school, preschool, kindergarten	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Elementary school (grades 1-5)	43.5%	Reliable	0.8	40.8%	Reliable	4.2
High school (grades 9-12)	23.9%	Reliable	0.6	27.9%	Reliable	4.7
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,452	Reliable	5,212	15,452	Reliable	2,622
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.8%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	396,569	Reliable	5,647	15,018	Reliable	2,587
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	68.2%	Reliable	7.2
Percent enrolled in college or graduate school	25.2%	Reliable	1.2	21.3%	Somewhat Reliable	6.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,757	Reliable	814	26,015	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.8%	Reliable	0.8	27.9%	Reliable	4.6
Some college or associate's degree	32.1%	Reliable	0.8	38.7%	Reliable	5.3
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.5
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	76.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.0%	Reliable	0.7	9.5%	Somewhat Reliable	3.2
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,893	Reliable	1,587	16,343	Reliable	2,520
Women 15 to 50 years who had a birth in the past 12 months	38,646	Reliable	4,050	1,310	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	16,384	Reliable	2,226	544	Not Very Reliable	438
As a percent of all women with a birth in the past 12 months	39.0%	Reliable	4.3	49.3%	Not Very Reliable	25.4
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,124	Reliable	312	20,721	Reliable	2,686
Living with grandchildren	5.9%	Reliable	0.4	2.6%	Not Very Reliable	2.4
Responsible for grandchildren	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,521
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.6
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,878	Reliable	7,552
With a disability	10.6%	Reliable	0.4	7.8%	Reliable	1.6
Civilian noninstitutionalized population under 18 years	582,753	Reliable	497	34,142	Reliable	4,593
With a disability	2.9%	Reliable	0.4	3.1%	Not Very Reliable	1.6
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,045	32,083	Reliable	3,581
With a disability	8.9%	Reliable	0.5	8.7%	Somewhat Reliable	2.5
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,673	2,650	Somewhat Reliable	907
With a disability	38.5%	Reliable	1.6	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,162	Reliable	2,868	66,273	Reliable	7,134
Same house	82.9%	Reliable	0.8	83.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	15.9%	Reliable	2.9
Same county	11.5%	Reliable	0.7	10.2%	Reliable	2.4
Different county	4.9%	Reliable	0.8	5.9%	Somewhat Reliable	2.3
Same state	3.8%	Reliable	0.4	5.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.6
Abroad	0.7%	Somewhat Reliable	0.2	0.8%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,298	Reliable	12,558	64,681	Reliable	7,118
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.3
Foreign born	459,218	Reliable	12,558	5,157	Somewhat Reliable	1,488
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.8%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,144	Reliable	7,182	3,185	Somewhat Reliable	829
Male	46.5%	Reliable	1.5	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.5	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	283,072	Reliable	12,960	1,972	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	459,218	Reliable	12,558	5,157	Somewhat Reliable	1,488
Entered 2000 or later	22.4%	Reliable	1.6	9.3%	Not Very Reliable	6.1
Entered 1990 to 1999	26.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.6
Entered before 1990	51.3%	Reliable	1.5	70.6%	Reliable	10.5
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	459,218	Reliable	12,558	5,157	Somewhat Reliable	1,488
Europe	5.5%	Reliable	0.7	N	N	N
Asia	17.1%	Reliable	0.8	N	N	N
Africa	1.4%	Somewhat Reliable	0.5	N	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N	N
Latin America	73.0%	Reliable	1.0	N	N	N
Northern America	2.2%	Reliable	0.4	N	N	N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 3 years and over	1,832,948	Reliable	7	57,414	Reliable	6,598
English only	81.1%	Reliable	0.7	79.3%	Reliable	4.8
Language other than English	33.9%	Reliable	0.7	23.7%	Reliable	4.5
Speak English less than "very well"	16.9%	Reliable	0.6	7.1%	Somewhat Reliable	2.0

Figure 36: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Bottom Middle

In labor force	63.8%	Reliable	0.7	64.5%	Reliable	4.1
Civilian labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1
Employed	57.2%	Reliable	0.7	54.6%	Reliable	4.1
Unemployed	6.3%	Reliable	0.5	9.6%	Somewhat Reliable	2.6
Percent of civilian labor force	9.8%	Reliable	0.7	15.0%	Somewhat Reliable	3.5
Armed Forces	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4
Not in labor force	36.2%	Reliable	0.7	35.5%	Reliable	4.1
Females 16 years and over	798,558	Reliable	1,909	18,816	Reliable	2,645
In labor force	55.7%	Reliable	0.9	57.9%	Reliable	5.5
Civilian labor force	55.6%	Reliable	0.9	57.9%	Reliable	5.5
Employed	49.9%	Reliable	0.9	49.1%	Reliable	5.1
Unemployed	5.7%	Reliable	0.6	8.8%	Somewhat Reliable	3.4
Percent of civilian labor force	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3
COMMUTING TO WORK						
Workers 16 years and over	880,102	Reliable	10,454	20,350	Reliable	2,160
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable	4.5
Car, truck, or van - carpool	14.7%	Reliable	0.8	16.2%	Somewhat Reliable	4.4
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable	1.4
Walked	2.0%	Reliable	0.6	0.3%	Not Very Reliable	0.8
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.5
Worked at home	4.9%	Reliable	0.6	4.0%	Not Very Reliable	2.1
Mean travel time to work (minutes)	31.9	Reliable	0.6	33.9	Reliable	4.1
OCCUPATION						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable	5.0
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable	5.2
Sales and office occupations	26.9%	Reliable	1.0	29.0%	Reliable	6.0
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable	4.1
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable	3.5
Male civilian employed population 16 years and over	508,219	Reliable	8,009	12,141	Reliable	2,004
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable	5.5
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.6
Sales and office occupations	19.6%	Reliable	1.3	24.8%	Somewhat Reliable	7.1
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable	1.6
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	19.6%	Somewhat Reliable	5.5
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9,247	Reliable	1,893
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.9
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable	6.3
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3
Farming, fishing, and forestry occupations	0.7%	Somewhat Reliable	0.2	0.0%	Not Very Reliable	2.1
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8
Production, transportation, and material moving occupations	6.1%	Reliable	0.6	2.6%	Not Very Reliable	2.3
INDUSTRY						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Agriculture, forestry, fishing, and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable	7.1
Manufacturing	9.9%	Reliable	0.6	10.2%	Somewhat Reliable	3.8
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4
Retail trade	12.7%	Reliable	0.8	14.9%	Somewhat Reliable	4.3
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable	4.4
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable	1.5
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable	2.1
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.6	13.0%	Somewhat Reliable	4.4
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable	5.2
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.5
Other services (except public administration)	4.7%	Reliable	0.6	5.0%	Somewhat Reliable	2.3
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.5
CLASS OF WORKER						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Private wage and salary workers	76.5%	Reliable	0.9	77.5%	Reliable	4.8
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.5
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable	2.7
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.9
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)						
Households	647,445	Reliable	6,148	11,191	Reliable	1,505
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable	7,512
With earnings	79.9%	Reliable	0.6	83.8%	Reliable	5.4
Mean earnings (dollars)	72,948	Reliable	1,364	70,155	Reliable	9,631
With Social Security income	26.4%	Reliable	0.5	25.5%	Reliable	5.7
Mean Social Security income (dollars)	19,590	Reliable	314	10,542	Reliable	1,169
With Supplemental Security Income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9
Mean Supplemental Security Income (dollars)	9,124	Reliable	563	6,033	Somewhat Reliable	1,716
With cash public assistance income	2.9%	Reliable	0.3	3.8%	Not Very Reliable	2.9
Mean cash public assistance income (dollars)	5,330	Reliable	551	5,906	Somewhat Reliable	2,459
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	5.3
Mean retirement income (dollars)	22,425	Reliable	912	22,115	Reliable	5,024
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable	2.0
Families						
Families	473,263	Reliable	7,070	8,403	Reliable	1,354
Median family income (dollars)	64,594	Reliable	1,551	65,819	Reliable	13,424
Married-couple family	73.9%	Reliable	1.3	69.4%	Reliable	8.4
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable	10,818
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.6
Median income (dollars)	51,269	Reliable	4,778	28,233	Not Very Reliable	21,320
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable	7.9
Median income (dollars)	34,335	Reliable	2,904	41,063	Reliable	5,194
Individuals						
Individuals	2,100,518	Reliable	4,777	69,838	Reliable	7,573
Per capita income (dollars)	24,301	Reliable	477	12,993	Reliable	1,370
With earnings for full-time, year-round workers:						

Figure 37: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Bottom

With earnings for full-time, year-round workers:						
Male	381,434	Reliable	8,152	7,608	Reliable	1,467
Female	238,808	Reliable	6,630	5,609	Reliable	1,298
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,968	Reliable	7,568
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,836	Reliable	1,074	41,770	Reliable	3,199
Female	36,153	Reliable	893	29,930	Somewhat Reliable	8,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.9
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.8	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.8
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	8.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.16	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
1-unit, detached or attached	74.5%	Reliable	0.9	72.9%	Reliable	6.4
2 to 4 units	4.3%	Reliable	0.5	4.0%	Not Very Reliable	2.8
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.8
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.6	8.5%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Built 2000 or later	26.2%	Reliable	0.8	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.9
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.6
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Gas	79.5%	Reliable	0.8	63.5%	Reliable	6.9
Electricity	17.9%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.8	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOG cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	49.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.3
OWNER CHARACTERISTICS						
Owner-occupied housing units	458,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,233	Reliable	38	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	458	Reliable	13	458	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRPI cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	36.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 38: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Top

Table ID	Selected Population Profile in Anytown, USA		Reliability Legend			
S201	Universe: Total Population of Two or More Races in Anytown, USA		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: red; color: white; padding: 2px;">Not Very Reliable</div> <div style="background-color: orange; color: white; padding: 2px;">Somewhat Reliable</div> <div style="background-color: green; color: white; padding: 2px;">Reliable</div> </div>			
2008 American Community Survey 1-Year Estimates			<small>Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACStreliability.com</small>			
Table View Map View Chart View						
Actions: Modify Table Bookmark Download			View Table Notes			
Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,518	Reliable	****	69,838	Reliable	7,573
One race	96.7%	Reliable	0.4	1%	Reliable	2.2
Two races	3.1%	Reliable	0.3	93.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.6%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,518	Reliable	****	69,838	Reliable	7,573
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.0
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.8%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.9%	Reliable	2.0
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.8
35 to 44 years	13.6%	Reliable	0.1	9.3%	Reliable	1.9
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.8
55 to 64 years	7.6%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6
Median age (years)	31.8	Reliable	0.1	18.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
62 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,690	Reliable	438	34,170	Reliable	4,554
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.3
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.8
18 years and over	1,517,628	Reliable	438	35,668	Reliable	3,938
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.0
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.8
18 to 34 years	589,916	Reliable	743	18,458	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	49.8%	Reliable	0.1	44.8%	Reliable	7.8
35 to 64 years	706,614	Reliable	639	14,523	Reliable	2,108
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.0
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.8
65 years and over	241,698	Reliable	539	2,688	Somewhat Reliable	933
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.8
RELATIONSHIP						
Population in households	2,073,707	Reliable	4,144	68,831	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.8	28.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	10.8%	Reliable	0.6	10.2%	Reliable	2.9
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.5
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.1	75.1%	Reliable	6.8
With own children under 18 years	38.6%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.9%	Reliable	1.1	52.1%	Reliable	9.8
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.0
Nonfamily households	26.9%	Reliable	0.1	24.9%	Somewhat Reliable	6.8
Male householder	12.9%	Reliable	0.1	13.2%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.8%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.1	11.7%	Somewhat Reliable	4.9
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.74	Reliable	0.05	3.77	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,618,004	Reliable	547	41,823	Reliable	4,885
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	5.4%	Reliable	0.3	3.6%	Somewhat Reliable	1.4
Divorced	9.2%	Reliable	0.4	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.6%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.6%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,950
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	8.1%	Reliable	0.4	6.3%	Somewhat Reliable	2.8
Separated	1.6%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	469	20,242	Reliable	3,168
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.6%	Reliable	0.4	5.6%	Somewhat Reliable	2.9
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4

Figure 39: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Top Middle

Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.6	56.1%	Reliable	5.4
Female 15 years and over	815,339	Reliable	465	20,142	Reliable	3,158
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.3%	Not Very Reliable	2.6
Never married	29.2%	Reliable	0.7	47.2%	Reliable	5.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	593,029	Reliable	7,412	30,472	Reliable	4,341
Nursery school, preschool kindergarten	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Elementary school (grades 1-8)	43.5%	Reliable	0.8	40.5%	Reliable	4.2
High school (grades 9-12)	23.8%	Reliable	0.6	27.8%	Reliable	4.2
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,463	Reliable	5,212	15,459	Reliable	2,822
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.6%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	300,566	Reliable	5,647	15,013	Reliable	2,520
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	68.0%	Reliable	7.5
Percent enrolled in college or graduate school	25.2%	Reliable	1.2	21.3%	Somewhat Reliable	5.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,797	Reliable	814	26,015	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.9%	Reliable	0.8	27.9%	Reliable	4.6
Some college or associate's degree	32.1%	Reliable	0.8	33.7%	Reliable	5.3
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.8
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	75.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.5%	Reliable	0.7	9.8%	Somewhat Reliable	3.0
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,833	Reliable	1,587	16,342	Reliable	2,320
Women 15 to 50 years who had a birth in the past 12 months	38.64%	Reliable	4,060	1,311	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	12.35%	Reliable	2,228	648	Not Very Reliable	438
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable	26.5
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,126	Reliable	912	20,721	Reliable	2,686
Living with grandchild(ren)	9.5%	Reliable	0.4	2.6%	Not Very Reliable	2.4
Responsible for grandchild(ren)	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,321
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.8
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,875	Reliable	7,552
With a disability	10.6%	Reliable	0.4	7.8%	Reliable	1.6
Civilian noninstitutionalized population under 18 years	582,750	Reliable	491	34,142	Reliable	4,583
With a disability	2.5%	Reliable	0.4	3.1%	Not Very Reliable	1.8
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,043	32,083	Reliable	3,581
With a disability	9.9%	Reliable	0.8	6.7%	Somewhat Reliable	2.8
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,073	2,650	Somewhat Reliable	907
With a disability	38.6%	Reliable	1.8	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,165	Reliable	2,868	65,273	Reliable	7,136
Came to house	62.9%	Reliable	0.8	53.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	16.9%	Reliable	2.8
Same county	11.5%	Reliable	0.7	10.0%	Reliable	2.2
Different county	4.9%	Reliable	0.5	5.9%	Somewhat Reliable	2.3
Same state - different county	3.5%	Reliable	0.4	5.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.8
Abroad	0.7%	Somewhat Reliable	0.2	0.6%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,298	Reliable	12,558	64,681	Reliable	7,113
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.8
Foreign born	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.6%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,146	Reliable	7,182	3,185	Somewhat Reliable	825
Male	46.5%	Reliable	1.5	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.8	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	293,072	Reliable	12,960	1,372	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Entered 2000 or later	22.4%	Reliable	1.8	8.3%	Not Very Reliable	6.1
Entered 1990 to 1999	25.3%	Reliable	1.3	21.1%	Somewhat Reliable	10.8
Entered before 1990	52.3%	Reliable	1.9	70.6%	Reliable	10.8
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Europe	5.5%	Reliable	0.6	N	N	N
Asia	17.1%	Reliable	0.8	N	N	N
Africa	1.4%	Somewhat Reliable	0.4	N	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N	N
Latin America	73.0%	Reliable	1.0	N	N	N
Northern America	2.2%	Reliable	0.4	N	N	N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 5 years and over	1,532,948	Reliable	7	57,414	Reliable	6,608
English only	61.1%	Reliable	0.7	76.3%	Reliable	4.9
Language other than English	38.9%	Reliable	0.7	23.7%	Reliable	4.5
Language spoken at home and ability to speak English	12.9%	Reliable	0.4	18.0%	Somewhat Reliable	5.8

Figure 40: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Bottom Middle

COMMUTERS TO WORK					
Workers 16 years and over	680,102	Reliable	10,454	20,350	Reliable
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.2%	Somewhat Reliable
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable
Walked	2.0%	Reliable	0.5	0.9%	Not Very Reliable
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable
Worked at home	4.9%	Reliable	0.5	4.0%	Not Very Reliable
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.9	Reliable
OCCUPATION					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable
Sales and office occupations	25.9%	Reliable	1.0	23.0%	Reliable
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.3%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable
Male civilian employed population 16 years and over	508,219	Reliable	8,009	12,141	Reliable
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable
Sales and office occupations	18.6%	Reliable	1.3	24.8%	Somewhat Reliable
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	19.6%	Somewhat Reliable
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9,247	Reliable
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable
Farming, fishing, and forestry occupations	0.7%	Somewhat Reliable	0.2	0.0%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.6%	Not Very Reliable
INDUSTRY					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Agriculture, forestry, fishing and hunting, and mining	1.3%	Reliable	0.3	0.3%	Not Very Reliable
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable
Manufacturing	9.8%	Reliable	0.6	10.2%	Somewhat Reliable
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable
Retail trade	12.7%	Reliable	0.6	14.9%	Somewhat Reliable
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.6	13.0%	Somewhat Reliable
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable
Other services (except public administration)	4.7%	Reliable	0.5	5.0%	Somewhat Reliable
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable
CLASS OF WORKER					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Private wage and salary workers	75.9%	Reliable	0.9	77.5%	Reliable
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)					
Households	647,443	Reliable	6,148	11,191	Reliable
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable
With earnings	79.9%	Reliable	0.6	83.8%	Reliable
Mean earnings (dollars)	72,948	Reliable	1,364	70,185	Reliable
With Social Security income	26.4%	Reliable	0.5	25.5%	Reliable
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable
With Supplemental Security income	4.1%	Reliable	0.4	4.1%	Not Very Reliable
Mean Supplemental Security Income (dollars)	9,124	Reliable	563	6,033	Somewhat Reliable
With cash public assistance income	2.9%	Reliable	0.3	3.8%	Not Very Reliable
Mean cash public assistance income (dollars)	5,330	Reliable	551	5,905	Somewhat Reliable
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable
Mean retirement income (dollars)	22,425	Reliable	912	22,115	Reliable
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable
Families	473,263	Reliable	7,070	8,405	Reliable
Median family income (dollars)	64,594	Reliable	1,551	65,619	Reliable
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable
Median income (dollars)	51,269	Reliable	4,775	28,235	Not Very Reliable
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable
Median income (dollars)	34,335	Reliable	2,904	41,065	Reliable
Individuals	2,100,516	****	477	69,638	Reliable
Per capita income (dollars)	24,301	Reliable	477	12,985	Reliable
With earnings for full-time, year-round workers:					
Male	381,434	Reliable	8,152	7,605	Reliable
Female	238,805	Reliable	6,530	5,605	Reliable
Mean earnings (dollars) for full-time, year-round workers:					
Male	57,693	Reliable	1,427	51,966	Reliable
Female	43,122	Reliable	1,032	35,327	Reliable
Median earnings (dollars) full-time, year-round workers:					
Male	46,836	Reliable	1,074	41,770	Reliable
Female	36,153	Reliable	893	29,939	Somewhat Reliable
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED					
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable

Figure 41: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Bottom

All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.5
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.6
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	8.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.16	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.6%	Reliable	6.4
2 to 4 units	4.9%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.8
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.5	8.8%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	25.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.8	63.5%	Reliable	5.8
Electricity	17.9%	Reliable	0.6	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOG cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	48.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	438,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,232	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	455	Reliable	13	458	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRAP cannot be computed)	201,897	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	38.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 42: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Top

Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
Table ID S201 Selected Population Profile in Anytown, USA						
Universe: Total Population of Two or More Races in Anytown, USA						
2008 American Community Survey 1-Year Estimates						
<div style="display: flex; justify-content: space-between; align-items: center;"> <div> <p>Table View [] [] Map View [] [] Chart View [] []</p> <p>Actions: [] [] Modify Table [] [] Bookmark [] [] Download</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>Reliability Legend</p> <p>Reliable</p> <p>Somewhat Reliable</p> <p>Not Very Reliable</p> <p>Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com</p> </div> </div>						
[] [] View Table Notes						
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,516	Reliable	0.4	65,836	Reliable	7,573
One race	95.7%	Reliable	0.4	0%	Reliable	0%
Two races	3.1%	Reliable	0.3	93.1%	Reliable	2.9
Three races	0.2%	Somewhat Reliable	0.1	6.6%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,516	Reliable	0.4	65,836	Reliable	7,573
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.2
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.5%	Reliable	2.7
5 to 17 years	19.9%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.9%	Reliable	2.0
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.6
35 to 44 years	13.6%	Reliable	0.1	9.3%	Reliable	1.8
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.8
55 to 64 years	7.5%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.8%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6
Median age (years)	31.8	Reliable	0.1	16.5	Reliable	1.2
15 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
25 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.8
35 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
45 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,830	Reliable	438	34,170	Reliable	4,564
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.5
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.5
18 years and over	1,517,626	Reliable	438	35,628	Reliable	3,885
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.8
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.8
18 to 34 years	589,916	Reliable	743	18,455	Reliable	2,538
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.8%	Reliable	0.1	44.5%	Reliable	7.5
35 to 64 years	706,014	Reliable	633	14,523	Reliable	2,106
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.9
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.9
65 years and over	241,636	Reliable	633	2,688	Somewhat Reliable	933
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9
RELATIONSHIP						
Population in households	2,073,707	Reliable	4,145	68,831	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	10.8%	Reliable	0.8	10.2%	Reliable	2.9
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.6
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,146	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.7	75.1%	Reliable	6.8
With own children under 18 years	33.5%	Reliable	0.5	43.0%	Reliable	7.2
Married-couple family	54.0%	Reliable	1.1	52.1%	Reliable	6.0
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5
Nonfamily households	26.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.8
Male householder	12.9%	Reliable	0.7	13.2%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.8	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.9%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.7	Reliable	0.05	3.77	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,518,004	Reliable	547	41,693	Reliable	4,885
Now married, except separated	49.3%	Reliable	0.6	35.0%	Reliable	4.3
Widowed	5.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4
Divorced	9.5%	Reliable	0.5	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,959
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	9.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	465	20,142	Reliable	3,158
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.6%	Reliable	0.4	5.6%	Somewhat Reliable	2.6
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	9.9%	Reliable	0.3	3.9%	Not Very Reliable	3.2

Figure 43: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Top Middle

Population 15 years and over					
Now married, except separated	1,618,004	Reliable	54%	41,639	Reliable
Now married, except separated	49.3%	Reliable	0.0	35.0%	Reliable
Widowed	54%	Reliable	0.3	3.9%	Somewhat Reliable
Divorced	9.5%	Reliable	0.5	7.1%	Somewhat Reliable
Separated	2.3%	Reliable	0.2	2.8%	Not Very Reliable
Never married	33.1%	Reliable	0.6	8.8%	Reliable
Male 15 years and over					
Now married, except separated	862,609	Reliable	58%	21,551	Reliable
Now married, except separated	50.9%	Reliable	0.3	35.1%	Reliable
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable
Divorced	8.1%	Reliable	0.8	6.1%	Somewhat Reliable
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable
Never married	37.1%	Reliable	0.8	56.1%	Reliable
Female 15 years and over					
Now married, except separated	815,595	Reliable	46%	20,146	Reliable
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable
Widowed	8.2%	Reliable	0.4	5.6%	Somewhat Reliable
Divorced	11.6%	Reliable	0.7	8.2%	Somewhat Reliable
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable
Never married	29.2%	Reliable	0.7	47.2%	Reliable
SCHOOL ENROLLMENT					
Population 3 years and over enrolled in school					
Nursery school, preschool	585,029	Reliable	7.4%	30,472	Reliable
Nursery school, preschool	5.0%	Reliable	0.5	7.9%	Somewhat Reliable
Kindergarten	5.0%	Reliable	0.5	4.5%	Somewhat Reliable
Elementary school (grades 1-6)	43.5%	Reliable	0.8	40.6%	Reliable
High school (grades 7-12)	33.8%	Reliable	0.8	27.8%	Reliable
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable
Male 3 years and over enrolled in school					
Percent enrolled in kindergarten to grade 12	252,465	Reliable	5.2%	15,455	Reliable
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.6%	Reliable
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	15.9%	Somewhat Reliable
Female 3 years and over enrolled in school					
Percent enrolled in kindergarten to grade 12	300,560	Reliable	5.4%	15,014	Reliable
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	65.0%	Reliable
Percent enrolled in college or graduate school	25.2%	Reliable	1.2	21.3%	Somewhat Reliable
EDUCATIONAL ATTAINMENT					
Population 25 years and over					
Less than high school diploma	1,361,751	Reliable	61%	26,015	Reliable
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable
High school graduate (includes equivalency)	25.9%	Reliable	0.8	27.9%	Reliable
Some college or associate's degree	30.1%	Reliable	0.9	36.7%	Reliable
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable
Graduate or professional degree	8.4%	Reliable	0.3	3.7%	Somewhat Reliable
High school graduate or higher					
Male, high school graduate or higher	78.9%	Reliable	0.7	80.9%	Reliable
Male, high school graduate or higher	78.5%	Reliable	1.0	80.9%	Reliable
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable
Male, bachelor's degree or higher	21.0%	Reliable	0.7	9.9%	Somewhat Reliable
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable
FERTILITY					
Women 15 to 50 years					
Women 15 to 50 years who had a birth in the past 12 months	548,893	Reliable	1.5%	16,543	Reliable
Unmarried women 15 to 50 years who had a birth in the past 12 months	33,640	Reliable	2.0%	1,310	Somewhat Reliable
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS					
Population 30 years and over					
Living with grandchildren	1,167,124	Reliable	91%	20,721	Not Very Reliable
Responsible for grandchildren	9.5%	Reliable	3.8	N	N
VETERAN STATUS					
Civilian population 18 years and over					
Civilian veteran	1,513,207	Reliable	1,244	35,552	Reliable
Civilian veteran	9.0%	Reliable	0.4	6.9%	Somewhat Reliable
DISABILITY STATUS					
Total civilian noninstitutionalized population					
With a disability	2,018,743	Reliable	2,641	68.8%	Reliable
With a disability	10.6%	Reliable	0.4	7.8%	Reliable
Civilian noninstitutionalized population under 18 years					
With a disability	583,735	Reliable	43	34.14	Reliable
With a disability	2.5%	Reliable	0.4	3.1%	Not Very Reliable
Civilian noninstitutionalized population 18 to 64 years					
With a disability	1,284,531	Reliable	2,045	32.0%	Reliable
With a disability	9.8%	Reliable	0.3	6.7%	Somewhat Reliable
Civilian noninstitutionalized population 65 years and older					
With a disability	229,477	Reliable	1,072	2,656	Somewhat Reliable
With a disability	38.9%	Reliable	1.6	57.0%	Somewhat Reliable
RESIDENCE 1 YEAR AGO					
Population 1 year and over					
Same house	2,068,165	Reliable	2,868	66,273	Reliable
Same house	62.3%	Reliable	0.5	63.6%	Reliable
Different house in the U.S.	16.4%	Reliable	0.8	16.9%	Reliable
Same county	11.8%	Reliable	0.7	10.0%	Reliable
Different county	4.9%	Reliable	0.4	5.9%	Somewhat Reliable
Same state	3.5%	Reliable	0.4	5.1%	Somewhat Reliable
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable
Abroad	0.7%	Somewhat Reliable	0.2	0.5%	Not Very Reliable
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY					
Native					
Male	1,631,228	Reliable	12,558	64,681	Reliable
Male	49.7%	Reliable	0.3	51.6%	Reliable
Female	80.2%	Reliable	0.3	48.4%	Reliable
Foreign born					
Male	469,218	Reliable	12,558	6,157	Somewhat Reliable
Male	59.7%	Reliable	1.1	52.4%	Reliable
Female	49.3%	Reliable	0.3	47.6%	Reliable
Foreign born, naturalized U.S. citizen					
Male	178,144	Reliable	7,182	3,188	Somewhat Reliable
Male	49.5%	Reliable	1.5	53.9%	Somewhat Reliable
Female	53.9%	Reliable	1.5	46.1%	Somewhat Reliable
Foreign born, not a U.S. citizen					
Male	293,072	Reliable	12,964	1,972	Somewhat Reliable
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable
Female	48.2%	Reliable	1.2	49.9%	Somewhat Reliable
Population born outside the United States					
Entered 2003 or later	465,216	Reliable	12,558	5,157	Somewhat Reliable
Entered 1990 to 1999	22,454	Reliable	1.6	3.3%	Not Very Reliable
Entered before 1990	35.3%	Reliable	1.7	21.1%	Somewhat Reliable
Entered before 1990	52.3%	Reliable	1.6	70.6%	Reliable
WORLD REGION OF BIRTH OF FOREIGN BORN					
Foreign-born population excluding population born in Asia					
Europe	485,218	Reliable	12,558	5,157	Somewhat Reliable
Europe	8.5%	Reliable	0.7	N	N
Asia	17.1%	Reliable	0.8	N	N
Africa	1.4%	Somewhat Reliable	0.5	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N
Latin America	72.0%	Reliable	1.0	N	N
North America	2.2%	Reliable	0.6	N	N
LANGUAGES SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH					
Population 5 years and over					
English only	1,532,944	Reliable	7	57,414	Reliable
English only	61.1%	Reliable	0.5	76.3%	Reliable
Language other than English	28.3%	Reliable	0.7	23.7%	Reliable
Speak English less than "very well"	19.5%	Reliable	0.6	7.1%	Somewhat Reliable
EMPLOYMENT STATUS					
Population 16 years and over					
In labor force	1,584,308	Reliable	2,806	38,155	Reliable
In labor force	63.6%	Reliable	0.7	64.2%	Reliable
Civilian labor force	61.5%	Reliable	0.7	64.2%	Reliable
Employed	57.2%	Reliable	0.7	54.6%	Reliable

Figure 44: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Bottom Middle

Characteristic	Percentage	Reliability	Value	Reliability	Value	Reliability	Value
Foreign born, not a U.S. citizen	253,272	Reliable	12,363	1,972	Somewhat Reliable	633	
Male	23.3%	Reliable	1.2	26.1%	Somewhat Reliable	12.1	
Female	45.7%	Reliable	1.5	49.3%	Somewhat Reliable	14.4	
Population born outside the United States	469,218	Reliable	12,558	5,167	Somewhat Reliable	1,408	
Entered 2000 or later	22.4%	Reliable	1.6	8.3%	Not Very Reliable	6.1	
Entered 1990 to 1999	28.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.9	
Entered before 1990	52.3%	Reliable	1.6	70.5%	Reliable	10.3	
WORLD REGION OF BIRTH OF FOREIGN BORN	469,218	Reliable	12,558	5,167	Somewhat Reliable	1,408	
Europe	5.5%	Reliable	0.7	N	N	N	
Asia	17.1%	Reliable	0.8	N	N	N	
Africa	1.4%	Somewhat Reliable	0.2	N	N	N	
Oceania	0.7%	Not Very Reliable	0.4	N	N	N	
Latin America	73.0%	Reliable	1.0	0.3%	N	N	
Northern America	2.2%	Reliable	0.2	N	N	N	
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH	1,932,348	Reliable	7	57,414	Reliable	6,000	
Population 5 years and over	61.1%	Reliable	5.7	76.3%	Reliable	4.5	
English only	38.9%	Reliable	6.1	23.7%	Reliable	4.0	
Language other than English	16.9%	Reliable	8.6	7.1%	Somewhat Reliable	2.6	
Speak English less than "very well"							
EMPLOYMENT STATUS	1,584,308	Reliable	2,894	39,133	Reliable	4,480	
Population 16 years and over	63.6%	Reliable	0.7	64.2%	Reliable	4.1	
In labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1	
Civilian labor force	57.2%	Reliable	0.7	64.2%	Reliable	4.1	
Employed	6.3%	Reliable	0.2	9.6%	Somewhat Reliable	2.8	
Unemployed	9.9%	Reliable	0.7	15.0%	Somewhat Reliable	3.9	
Percent of civilian labor force	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4	
Armed Forces	36.2%	Reliable	0.7	35.5%	Reliable	4.1	
Not in labor force							
Families 16 years and over	786,558	Reliable	1,262	16,816	Reliable	2,843	
In labor force	59.7%	Reliable	0.9	57.0%	Reliable	5.5	
Civilian labor force	55.6%	Reliable	0.9	57.3%	Reliable	5.9	
Employed	49.9%	Reliable	0.9	45.1%	Reliable	5.1	
Unemployed	6.7%	Reliable	0.6	8.8%	Somewhat Reliable	3.6	
Percent of civilian labor force	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3	
COMMUTING TO WORK							
Workers 16 years and over	680,102	Reliable	10,454	20,350	Reliable	2,160	
Car, truck, or van - drove alone	78.3%	Reliable	1.0	74.6%	Reliable	4.5	
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.3%	Somewhat Reliable	4.6	
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable	1.4	
Walked	2.0%	Reliable	0.2	0.9%	Not Very Reliable	0.8	
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.5	
Worked at home	4.9%	Reliable	0.2	4.0%	Not Very Reliable	2.1	
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.9	Reliable	4.1	
OCCUPATION							
Civilian employed population 16 years and over	906,622	Reliable	10,664	21,388	Reliable	2,508	
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable	5.0	
Service occupations	19.3%	Reliable	0.8	20.0%	Somewhat Reliable	5.9	
Sales and office occupations	25.9%	Reliable	1.0	25.0%	Reliable	6.0	
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.0%	Not Very Reliable	0.8	
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.2	10.3%	Somewhat Reliable	4.1	
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.3%	Somewhat Reliable	3.8	
Male civilian employed population 16 years and over	508,218	Reliable	8,009	12,141	Reliable	2,004	
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable	5.5	
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.6	
Sales and office occupations	19.4%	Reliable	1.3	24.1%	Somewhat Reliable	7.4	
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable	1.6	
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9	
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	16.8%	Somewhat Reliable	6.8	
Female civilian employed population 16 years and over	398,404	Reliable	6,857	9,247	Reliable	1,639	
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.5	
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable	8.3	
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3	
Farming, fishing, and forestry occupations	0.0%	Somewhat Reliable	0.0	0.0%	Not Very Reliable	2.3	
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8	
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.8%	Not Very Reliable	2.3	
INDUSTRY							
Civilian employed population 16 years and over	906,622	Reliable	10,664	21,388	Reliable	2,508	
Agriculture, forestry, fishing, and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.8	
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable	2.5	
Manufacturing	9.9%	Reliable	0.6	10.2%	Somewhat Reliable	3.8	
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4	
Retail trade	12.7%	Reliable	0.8	14.9%	Somewhat Reliable	4.3	
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable	4.4	
Information	1.0%	Reliable	0.2	2.1%	Not Very Reliable	1.8	
Finance and insurance, and real estate and rental and leasing	5.1%	Reliable	0.4	4.0%	Not Very Reliable	2.1	
Professional, scientific, and management, and administrative and waste management	9.8%	Reliable	0.6	10.0%	Somewhat Reliable	4.4	
Education, health care, and social assistance	19.9%	Reliable	0.9	10.6%	Somewhat Reliable	5.2	
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.3	
Other services (except public administration)	4.7%	Reliable	0.3	5.0%	Somewhat Reliable	2.8	
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.8	
CLASS OF WORKER							
Civilian employed population 16 years and over	906,622	Reliable	10,664	21,388	Reliable	2,508	
Private wage and salary workers	76.5%	Reliable	0.9	77.5%	Reliable	4.6	
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.9	
Self-employed workers in own not incorporated business	8.1%	Reliable	1.2	7.4%	Somewhat Reliable	2.8	
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.9	
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)							
Households	647,443	Reliable	6,146	11,191	Reliable	1,508	
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable	7,512	
With earnings	79.9%	Reliable	0.6	83.5%	Reliable	5.4	
Mean earnings (dollars)	72,648	Reliable	1,364	70,188	Reliable	9,631	
With Social Security income	26.4%	Reliable	0.3	25.0%	Reliable	5.7	
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable	1,189	
With Supplemental Security Income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9	
Mean Supplemental Security Income (dollars)	9,104	Reliable	563	6,633	Somewhat Reliable	1,718	
With cash public assistance income	2.9%	Reliable	0.3	3.0%	Not Very Reliable	2.1	
Mean cash public assistance income (dollars)	5,330	Reliable	851	5,900	Somewhat Reliable	2,489	
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	6.3	
Mean retirement income (dollars)	22,425	Reliable	312	23,115	Reliable	5,026	
With Food Stamp benefits	4.3%	Reliable	0.2	3.1%	Not Very Reliable	2.0	
Families	473,263	Reliable	7,070	8,405	Reliable	1,354	
Median family income (dollars)	64,594	Reliable	1,551	65,619	Reliable	13,426	
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable	8.4	
Median income (dollars)	76,856	Reliable	1,511	72,724	Reliable	10,818	
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.6	
Median income (dollars)	51,289	Reliable	4,775	28,235	Not Very Reliable	21,320	

Figure 45: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Bottom

Male	381,434	Reliable	8,152	7,604	Reliable	1,467
Female	238,205	Reliable	6,630	5,609	Reliable	1,299
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,966	Reliable	7,568
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,836	Reliable	1,074	41,770	Reliable	3,199
Female	36,153	Reliable	893	29,939	Somewhat Reliable	8,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.2%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.5%	Not Very Reliable	3.5
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.5%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.6
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.5%	Reliable	0.8	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	8.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.15	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.8%	Reliable	6.4
2 to 4 units	2.5%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.6
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.5	8.6%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	26.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.5%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1970 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1969	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.7	63.5%	Reliable	6.8
Electricity	17.5%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1 D1 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOC cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	48.3%	Reliable	8.8
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	436,193	Reliable	7,265	7,352	Reliable	1,128
Median value (dollars)	329,000	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,232	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	456	Reliable	13	458	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRPI cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	38.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,347	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 47: Subject Table with the Legend Above the Table (C2)

Table ID
34905

Industry by Occupation for the Civilians Employed Population in Anytown, USA
Universe: Total Population in Anytown, USA

2008 American Community Survey 1-Year Estimates

Table View | **Map View** | **Ready State** | **Bookmark** | **Download**

Reliability Legend

Reliable Coverage of 20% or less No Very Reliable No Very Unreliable

Note: This indicator provides general guidance about the quality of the estimates. Direction should be appropriate for use. For more information, please visit www.census.gov/ipeds/data/r2008/relleg.html.

Subject	Total	Manufacturing and construction		Retail and trade		Transportation and warehousing		Information		Finance, insurance, and real estate		Health care and social assistance		Education, arts, and recreation		Professional, scientific, and technical services		Management of companies and enterprises		Administrative and support and waste management and remediation services		Other services (except food services)		Arts, entertainment, and recreation		Accommodation and food services		Unemployed		Total			
		Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability	Margin of Error	Reliability		
Civilians employed population 16 years and over	58,474	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable
Manufacturing, mining, and construction	4,576	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable
Retail and trade	13,024	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable	3.24	Reliable
Transportation and warehousing	4,576	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable	1.15	Reliable
Information	1,024	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable
Finance, insurance, and real estate	1,024	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable
Health care and social assistance	1,024	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable
Education, arts, and recreation	1,024	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable
Professional, scientific, and technical services	1,024	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable
Management of companies and enterprises	1,024	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable
Administrative and support and waste management and remediation services	1,024	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable
Other services (except food services)	1,024	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable
Arts, entertainment, and recreation	1,024	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable
Accommodation and food services	1,024	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable
Unemployed	1,024	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable	0.26	Reliable
TOTAL	58,474	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable	3.98	Reliable

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 48: Detailed Table with Color-Coding (D1)

Table ID C02003		Race in the United States Universe: Total Population in the United States 2008 American Community Survey 1-Year Estimates								
Table View (11) Map View (11) Chart View (11)										
Actions: Modify Table Bookmark Download		View Table Notes								
	Apple County, USA			Birch County, USA			Cherry County, USA			
	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error	
Total:	149,518	*****	64,866	*****	9,862,049	*****				
Population of one race:	145,799	Reliable	1,285	62,279	Reliable	830	9,558,835	Reliable	11,282	
White	108,310	Reliable	3,943	56,795	Reliable	1,432	5,193,451	Reliable	41,862	
Black or African American	11,519	Reliable	704	1,437	Reliable	248	866,596	Reliable	6,204	
American Indian and Alaska Native	2,432	Somewhat Reliable	602	1,817	Somewhat Reliable	745	61,347	Reliable	6,416	
Asian alone	4,875	Reliable	634	66	Not Very Reliable	122	1,275,136	Reliable	6,674	
Native Hawaiian and Other Pacific Islander	39	Not Very Reliable	65	151	Not Very Reliable	273	27,049	Reliable	2,239	
Some other race	18,564	Reliable	3,779	2,013	Not Very Reliable	1,414	2,135,056	Reliable	40,114	
Population of two or more races:	3,749	Somewhat Reliable	1,285	2,587	Somewhat Reliable	830	303,414	Reliable	11,282	
Two races including Some other race	875	Not Very Reliable	472	121	Not Very Reliable	194	104,722	Reliable	8,166	
Two races excluding Some other race, and three or more races	2,874	Somewhat Reliable	1,198	2,466	Somewhat Reliable	827	198,692	Reliable	9,075	
Population of two races:	3,257	Somewhat Reliable	1,105	2,587	Somewhat Reliable	830	281,478	Reliable	11,462	
White; Black or African American	812	Not Very Reliable	605	359	Not Very Reliable	248	33,577	Reliable	4,247	
White; American Indian and Alaska Native	522	Not Very Reliable	465	1,416	Somewhat Reliable	664	41,180	Reliable	4,166	
White; Asian	725	Not Very Reliable	467	273	Not Very Reliable	408	69,715	Reliable	5,780	
Black or African American; American Indian and Alaska Native	40	Not Very Reliable	65	418	Somewhat Reliable	200	11,670	Somewhat Reliable	3,770	
All other two race combinations	1,158	Not Very Reliable	599	121	Not Very Reliable	194	125,334	Reliable	8,350	
Population of three races	451	Not Very Reliable	523	0	Not Very Reliable	264	20,428	Reliable	3,232	
Population of four or more races	41	Not Very Reliable	67	0	Not Very Reliable	264	1,510	Not Very Reliable	839	

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 49: Detailed Table with No Color-Coding (D2)

Table ID C02003	Race in the United States Universe: Total Population in the United States 2008 American Community Survey 1-Year Estimates								
i									
Table View Map View Chart View									
Actions: Modify Table Bookmark Download									
View Table Notes									
	Apple County, USA			Birch County, USA			Cherry County, USA		
	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error
Total:	149,518		*****	64,866		*****	9,862,049		*****
Population of one race:	145,799	Reliable	1,285	62,279	Reliable	830	9,558,635	Reliable	11,282
White	108,310	Reliable	3,943	56,795	Reliable	1,432	5,193,451	Reliable	41,862
Black or African American	11,519	Reliable	704	1,437	Reliable	248	866,696	Reliable	6,204
American Indian and Alaska Native	2,432	Somewhat Reliable	602	1,817	Somewhat Reliable	745	61,347	Reliable	6,419
Asian alone	4,875	Reliable	634	66	Not Very Reliable	122	1,276,138	Reliable	6,674
Native Hawaiian and Other Pacific Islander	39	Not Very Reliable	65	151	Not Very Reliable	273	27,049	Reliable	2,239
Some other race	18,594	Reliable	3,779	2,013	Not Very Reliable	1,414	2,136,056	Reliable	40,114
Population of two or more races:	3,749	Somewhat Reliable	1,285	2,587	Somewhat Reliable	830	303,414	Reliable	11,282
Two races including Some other race	875	Not Very Reliable	472	121	Not Very Reliable	194	104,722	Reliable	8,166
Two races excluding Some other race, and three or more races	2,874	Somewhat Reliable	1,198	2,466	Somewhat Reliable	827	198,692	Reliable	9,075
Population of two races:	3,257	Somewhat Reliable	1,105	2,587	Somewhat Reliable	830	281,478	Reliable	11,482
White; Black or African American	812	Not Very Reliable	605	359	Not Very Reliable	248	33,577	Reliable	4,247
White; American Indian and Alaska Native	522	Not Very Reliable	465	1,416	Somewhat Reliable	664	41,180	Reliable	4,166
White; Asian	725	Not Very Reliable	467	273	Not Very Reliable	408	69,715	Reliable	5,780
Black or African American; American Indian and Alaska Native	40	Not Very Reliable	65	418	Somewhat Reliable	200	11,670	Somewhat Reliable	3,770
All other two race combinations	1,158	Not Very Reliable	599	121	Not Very Reliable	194	125,334	Reliable	8,350
Population of three races	451	Not Very Reliable	523	0	Not Very Reliable	294	20,428	Reliable	3,232
Population of four or more races	41	Not Very Reliable	67	0	Not Very Reliable	294	1,510	Not Very Reliable	839

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 50: Geographical Comparison Table with Legend Behind Link and Red First in the Legend (E1)

Geographic area	Percent	Reliability	Margin of Error
Anystate, USA	5.3	Reliable	0.1
COUNTY			
County A	11.6	Reliable	0.7
County B	1.0	Not Very Reliable	0.6
County C	9.6	Reliable	0.8
County D	2.2	Somewhat Reliable	1.1
County E	1.5	Reliable	0.4
County F	1.1	Not Very Reliable	0.8
County G	0.7	Not Very Reliable	0.5
County H	0.9	Somewhat Reliable	0.3
County I	3.2	Not Very Reliable	2.3
County J	0.7	Not Very Reliable	1.1
County K	7.3	Reliable	0.2
County L	0.3	Not Very Reliable	0.3
County M	8.0	Reliable	1.3
County N	0.4	Not Very Reliable	0.5
County O	0.6	Not Very Reliable	0.5
County P	3.0	Somewhat Reliable	0.8
County Q	3.7	Not Very Reliable	4.7
County R	0.0	Not Very Reliable	0.4
County S	3.3	Reliable	0.3
County T	1.0	Somewhat Reliable	0.4
County U	1.6	Reliable	0.3
County V	3.3	Reliable	0.4
County W	2.0	Reliable	0.3
County X	3.4	Reliable	0.3
County Y	31.9	Reliable	1.3
County Z	1.5	Reliable	0.4
County AA	1.2	Somewhat Reliable	0.6
County BB	7.5	Reliable	1.0
County CC	3.5	Reliable	0.8
County DD	3.7	Reliable	0.5
County EE	2.5	Somewhat Reliable	0.8
County FF	0.4	Not Very Reliable	0.4
County GG	3.3	Somewhat Reliable	1.0
County HH	2.3	Somewhat Reliable	0.7
County II	0.8	Somewhat Reliable	0.3
County JJ	1.2	Not Very Reliable	1.0
County KK	0.7	Somewhat Reliable	0.3
County LL	1.1	Somewhat Reliable	0.3
County MM	4.2	Somewhat Reliable	1.1
County NN	0.2	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 51: Geographical Comparison Table with Legend Behind Link and Green First in the Legend (E2)

Table ID
GCT0804

Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation
(Excluding Taxicab) in Anystate, USA
Universe: Workers 16 years and over in Anystate, USA
2008 American Community Survey 1-Year Estimates 

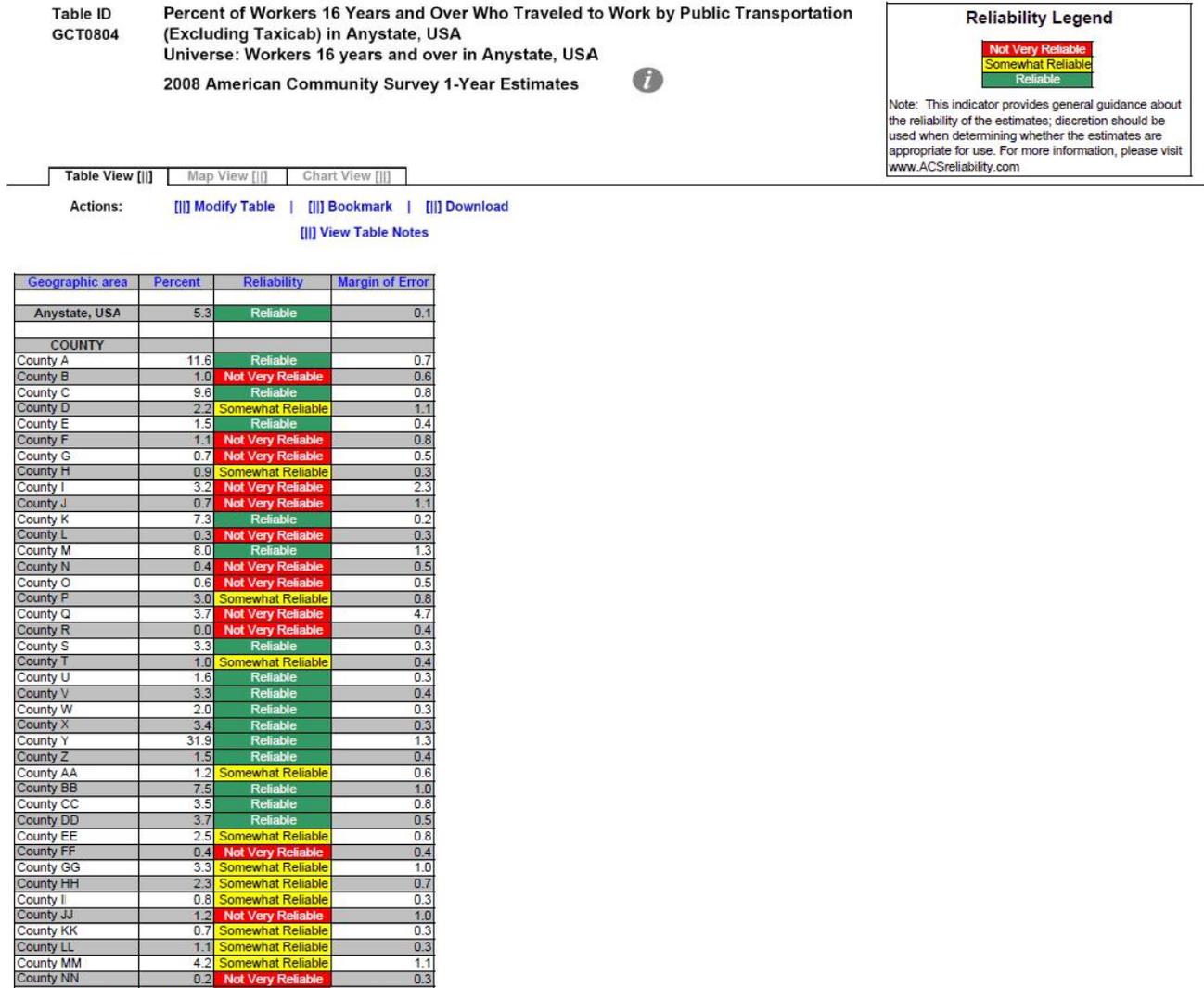
Table View  | Map View  | Chart View 

Actions: [Modify Table](#) | [Bookmark](#) | [Download](#)
[View Table Notes](#)

Geographic area	Percent	Reliability	Margin of Error
Anystate, USA	5.3	Reliable	0.1
COUNTY			
County A	11.6	Reliable	0.7
County B	1.0	Not Very Reliable	0.6
County C	9.6	Reliable	0.8
County D	2.2	Somewhat Reliable	1.1
County E	1.5	Reliable	0.4
County F	1.1	Not Very Reliable	0.8
County G	0.7	Not Very Reliable	0.5
County H	0.9	Somewhat Reliable	0.3
County I	3.2	Not Very Reliable	2.3
County J	0.7	Not Very Reliable	1.1
County K	7.3	Reliable	0.2
County L	0.3	Not Very Reliable	0.3
County M	8.0	Reliable	1.3
County N	0.4	Not Very Reliable	0.5
County O	0.6	Not Very Reliable	0.5
County P	3.0	Somewhat Reliable	0.8
County Q	3.7	Not Very Reliable	4.7
County R	0.0	Not Very Reliable	0.4
County S	3.3	Reliable	0.3
County T	1.0	Somewhat Reliable	0.4
County U	1.6	Reliable	0.3
County V	3.3	Reliable	0.4
County W	2.0	Reliable	0.3
County X	3.4	Reliable	0.3
County Y	31.9	Reliable	1.3
County Z	1.5	Reliable	0.4
County AA	1.2	Somewhat Reliable	0.6
County BB	7.5	Reliable	1.0
County CC	3.5	Reliable	0.8
County DD	3.7	Reliable	0.5
County EE	2.5	Somewhat Reliable	0.8
County FF	0.4	Not Very Reliable	0.4
County GG	3.3	Somewhat Reliable	1.0
County HH	2.3	Somewhat Reliable	0.7
County II	0.8	Somewhat Reliable	0.3
County JJ	1.2	Not Very Reliable	1.0
County KK	0.7	Somewhat Reliable	0.3
County LL	1.1	Somewhat Reliable	0.3
County MM	4.2	Somewhat Reliable	1.1
County NN	0.2	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 52: Geographical Comparison Table with Legend Above Table and Red First in the Legend (E3)



Source: U.S. Census Bureau, 2008 American Community Survey

Table ID: GCT0804
 Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation (Excluding Taxicab) in Anystate, USA
 Universe: Workers 16 years and over in Anystate, USA
 2008 American Community Survey 1-Year Estimates

Reliability Legend

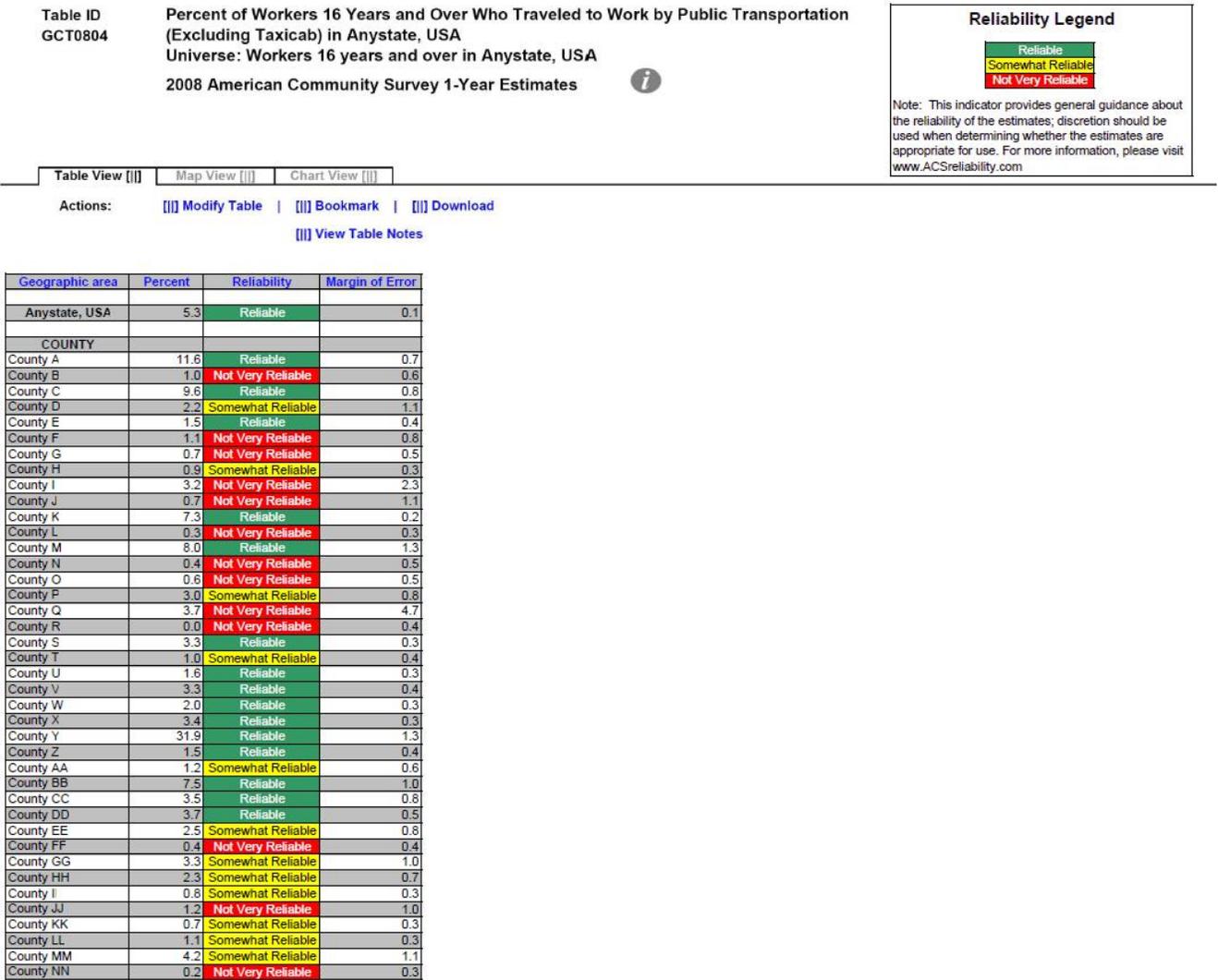
Not Very Reliable
 Somewhat Reliable
 Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View | Map View | Chart View

Actions: | Modify Table | Bookmark | Download | View Table Notes

Figure 53: Geographical Comparison Table with Legend Above Table and Green First in the Legend (E4)



Source: U.S. Census Bureau, 2008 American Community Survey

Table ID
GCT0804

Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation (Excluding Taxicab) in Anystate, USA
Universe: Workers 16 years and over in Anystate, USA
2008 American Community Survey 1-Year Estimates



Reliability Legend

Reliable
Somewhat Reliable
Not Very Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View [] | Map View [] | Chart View []

Actions: [] Modify Table | [] Bookmark | [] Download
[] View Table Notes

8 Appendix B: Tasks for All Tables

The tasks and their associated answers are included below.

Figure 54: Tasks Part 1

A – Data Profiles tasks

1. What is the first thing that you noticed about this table?
[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
 -
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 -
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. A company offering cleaning services to senior citizens living alone is looking for potential customers. They want to know the estimate of householders ages 65 or older living alone in Anytown, USA. What would you tell them?

ANSWER:
2,266, Somewhat Reliable, +/- 641, or 9.3% (+/- 2.5%) somewhat reliable

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: easy

3. The Irish Embassy wants to know how many people in Anytown, USA might be interested in an open-house. What is the estimate and percentage estimate of people of Irish ancestry in Anytown, USA? Would you use either of these estimates?

Figure 55: Tasks Part 2

ANSWER:

12,714, Reliable, +/- 2,912

19.6%, Reliable, +/- 4.5%

Yes, Estimates are both Reliable

Difficulty: easy

4. A tutoring provider would like to teach courses that prepare students for standardized tests in Anytown, USA. They want to know the estimate and percentage estimate for school enrollment for high school (grades 9-12). What would you tell them?

ANSWER: 4,100, Reliable, +/- 1,086,

30.1%, Somewhat Reliable, +/- 7.1%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: Under "School Enrollment" heading, not "Educational Attainment", the reliability is different for the estimate and the percent.

DIFFICULTY: medium

5. The Danish Embassy is reporting that they have more people of Danish decent in Anytown than those of Portuguese decent. Is this true?

ANSWER: Danish, 1,700 +/- 1,689, Not Very Reliable, 2.6% +/- 2.6%, Not very reliable

Portuguese, 1,543, +/- 802, Not very Reliable, 2.4% +/- 1.2, Not Very reliable

No, not true. Estimates are not significantly different, and both estimates are not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: U.S. Citizenship status estimates and percents have different reliabilities.

DIFFICULTY: hard

6. GetYourDegree Community College is interested in opening a branch in Anytown, USA; however, their corporate mandate stipulates that there must be at least 14,000 students who have completed some college, but did not get their degree. You are responsible for reporting whether Anytown, USA, has met the mandate. What is your recommendation?

ANSWER: 10,562, Reliable, +/- 1,731

Do not open branch. With the MOE, the estimate could be as high as 12,293, but does not approach 14,000.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

Figure 56: Tasks Part 3

7. The mayor of Anytown, USA wants to know if the town should continue to fund a welcome wagon program for people who move from other states. If at least 5.0% percent of the population in Anytown, USA lived in a different state 1 year ago, he will keep the program. Based on the data, what would you tell him?

ANSWER: 2.9%, Not Very Reliable, +/-1.8%
Do not fund program. With MOE, estimate is at most 4.7%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

8. You are a demographer working for a local university conducting research about the population's heritage. What do you think about the Ancestry data in this table?

ANSWER: Most of the estimates are not very reliable, may look for another data source.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

9. In 2007, the percent of people who were separated in Anytown, USA was 1.9% (+/- .3%) and that estimate was considered "reliable". The Bureau for Family Affairs is now reporting that, based on 2008 ACS data, the percentage of people who were separated increased from 2007. Do you agree?

ANSWER: Disagree
2008 estimate is 2.9% (+/-2.7) – not very reliable, which is not significantly different than 1.9%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: hard

Figure 57: Tasks Part 4

B – Selected Pop Profiles tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. The National Organization for Young Adults is considering opening a chapter in Anytown, USA. They first want to know what the estimate for the number of people in Anytown that are ages 18 to 34. What would you tell them?

ANSWER: 569,916, Reliable, +/- 743

DIFFICULTY: Easy

3. The National Education Association wants to know what percentage of those who reported two or more races have a bachelor's degree? What would you tell the National Education Association?

ANSWER: 10.7%, Somewhat Reliable, +/- 3.1%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

NOTES: Under Educational Attainment

Figure 58: Tasks Part 5

4. A green company wants to know the percentage of households, where the householder reported having two or more races, which use a fuel other than gas or electricity to heat their home. What is the percentage?

ANSWER: 3.8%, Not Very Reliable, +/- 2.9%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

5. Your boss wants to know whether the percent of nonfamily households is higher for the total population or the population of housing units where the householder reported two or more races. What would you tell her?

ANSWERS: Total Population, 26.9%, Reliable, +/- 0.7%

Two or more races, 24.9%, Somewhat Reliable, +/- 6.8%

Using only the point estimates, Total population appears higher; but the estimates are not significantly different, and one may be less reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: Under Households by Type

DIFFICULTY: Hard

6. Find the civilian non-institutionalized population of 18 to 64 years who have a disability for both the total population and for the two or more race subcategory. If you were asked if the two estimates were different, what would you say?

ANSWER: Total Pop: 8.8%, Reliable, +/- 0.5%

Two or More Races: 8.7%, Somewhat Reliable, +/- 2.5%

They are not significantly different, Two or more races is less reliable than total pop.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

7. The mayor of Anytown, USA wants to know if the town should continue to fund a public telephone line for households with no telephone service available. If at least 2.0% percent of the population in Anytown doesn't have telephone service, she will keep the program. Based on the data, what would you tell her?

ANSWER: 1.0%, Somewhat Reliable, +/-0.3%

Discontinue the program, because the percentage does not approach 2.0%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

Figure 59: Tasks Part 6

8. Anytown, USA will be designated as a high income earning town if the median household income is at least \$55,000 in 2008. Will they get this designation?

ANSWER: Yes, 57,792, Reliable, +/- 1,233
Yes, the estimate and the range are above 55,000.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

9. Part of a new job creation program was designed to see how jobs were spread out across the population. What is percentage of the civilian employed population of two or more races who work in Farming, fishing, and forestry occupations?

ANSWER: 0.0%, Not Very Reliable, +/- 0.9%
No people were reported to work in these occupations, but the estimate may be inaccurate since it is not very reliable

DIFFICULTY: Hard

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: 0 estimate

Figure 60: Tasks Part 7

C – Subject Tables tasks

Note that “industries” are rows, “occupations” are columns.

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

(Starting out respondents with easier tasks because this is a large table)

2. What is the total number of people working in the Construction industry?

ANSWER: 5,334, Reliable, +/- 1,127

DIFFICULTY: easy

3. A technology association wants to know the amount of people who works in “Information” industries, with a goal of 1,800. Did they meet their goal?

ANSWER: 900, Not Very Reliable, +/- 595,

No. 1,800 is not within the MOE range of the estimate, but the estimate may be inaccurate since it is not very reliable

DIFFICULTY: Medium

Figure 61: Tasks Part 8

4. Of those working in the “Arts, entertainment, and recreation, and accommodation and food services” industry, what percent are in service occupations?

ANSWER: 64.7%, Reliable, +/- 10.6%

DIFFICULTY: easy

5. Of those working in the Construction industry, how many are in Farming, fishing, and forestry occupations?

ANSWER: 0.0%, Not Very Reliable, +/-3.7%

No one is reported to work in that industry and occupation combination, but the estimate may be inaccurate since it is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: 0 estimate

DIFFICULTY: hard

6. A company wants to know if at least 3,000 total people are working in public administration in Anytown, USA. What would you tell them?

ANSWER: 3,623, Reliable, +/- 807.

Yes. The point estimate is over 3,000 and the estimate is Reliable, so over 3,000 people work in public administration.

DIFFICULTY: Medium

7. Your boss wants to know which industry has more people in “Sales and office occupations”: “Educational services, and health care and social assistance” or “Transportation and warehousing, and utilities”? What would you tell him?

ANSWER: Educational, 16.2%, Somewhat Reliable, +/- 5.4%

Transportation, 16.5%, Not Very Reliable, +/- 10.9%

They are not significantly different, “Educational” is less reliable than total pop, and the estimate may be inaccurate.

DIFFICULTY: Hard

8. You are writing a grant proposal to secure funding for a research project focused on increasing the workforce in the “educational services, and health care, and social assistance” industry. You need the percent of people in this industry working in “service occupations”. What would you say in your grant proposal?

ANSWER: 26.4%, +/- 7.0%, somewhat reliable

Figure 62: Tasks Part 9

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

Figure 63: Tasks Part 10

D – Detailed Tables tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. There is consideration for expanding an outreach program if there are at least 30,000 Native Hawaiian and Other Pacific Islanders in Cherry County. What is your recommendation to the program directors?

ANSWER: 27,049, Reliable, +/- 2,239
Not enough to expand the program.

DIFFICULTY: Medium

3. Your boss wants to know the estimate of the number of people of two or more races in Apple County. What would you tell him?

ANSWER: 3,749, Somewhat Reliable, +/- 1,285

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

Figure 64: Tasks Part 11

4. For a grant proposal, you need an estimate of the number of people of four or more races in Birch County. What would you say in your proposal?

ANSWER: 0, Not Very Reliable, +/- 294

No one reported to have four or more races, but the estimate may be inaccurate since it is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

NOTES: 0 estimate

5. The Mayor of Birch County wants to know the estimate of the number of people of one race in Birch County. What would you tell the mayor?

ANSWER: 62,279, Reliable, +/- 830

DIFFICULTY: Easy

6. You are a reporter for a newspaper, and are writing an article about the amount of people who report one race as "some other race." Specifically for Birch County, you want to know if the estimate for the "some other race" group for those reporting only one race is higher than the estimate of American Indian and Alaska Native group. What is your finding?

ANSWER: American Indian and Alaska Native, 1,817, Somewhat Reliable, +/- 745

Some other group, 2,013, Not Very Reliable, +/- 1,414

Yes the group reporting "some other race" is higher than the group reporting American Indian and Alaska Native.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

7. Looking at the estimates of the Black or African American subpopulation in Apple County and Birch County, which estimate is more accurate?

ANSWER: Apple, 11,519, Reliable, +/- 704

Birch, 1,437, Reliable, +/- 248

Based on reliability, they have the same accuracy. Apple County has a smaller relative MOE, it could be considered more accurate.

DIFFICULTY: Medium

8. A local newspaper reports that Apple County has more people reported as having three or more races than Birch County. Do you agree?

Figure 65: Tasks Part 12

ANSWER: 451 in Apple county (+/-523), Not very reliable
0 in Birch County (+/-294), not very reliable.
No, Not statistically different, and both estimates are not very reliable.

DIFFICULTY: Hard

Figure 66: Tasks Part 13

E – Geographic Comparison Table tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.] make changes noted above.

- Probe if indicator is mentioned: What do the colors represent?
 - IF quality/reliability: How is quality measured here or what measure is used to determine the level of quality?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the colors in the tables? What do the colors represent?
 - IF quality: How is quality measured here or what measure is used to determine the level of quality?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. a. The Anystate government will be publishing a report in which it highlights various counties and the degree to which they use public transportation to get to work. They only want to include counties where they are confident that the data would not likely be contested.

Which counties would you use?

ANSWER: Any counties of "Reliable" (or "somewhat reliable")

DIFFICULTY: easy

b. Anystate, USA wants to warn the county planners in counties where the data on public transportation use may not be very accurate.

Which counties do you think Anystate should warn?

ANSWER: Any counties of "Not Very Reliable"

DIFFICULTY: easy

Figure 67: Tasks Part 14

3. Counties D and E, which share a border, would like to tell the local newspaper about the success of their combined public transportation system. They want to calculate the total percent of people using public transportation to get to work by adding the percent in each county together. Would you recommend they do this?

ANSWER: County D has 2.2%, Somewhat Reliable, and +/- 1.1%
County E has 1.5%, Reliable, and 0.4%
OK to do this, but want to mention differences in reliability.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

4. Counties Q and U used two different approaches towards their public transportation systems. County Q would like to say that they had a higher percentage that traveled to work using public transportation compared to County U. Is this true?

ANSWER: County Q, 3.7%, Not Very Reliable, +/- 4.7%
County U, 1.6%, Reliable, +/- 0.3%
No, Not statistically different, and County Q estimate is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: hard

5. County Y is a very urbanized area. The county is eligible for a green initiative award if at least 30% of its citizens used public transportation to get to work. Should they get the award?

ANSWER: County Y, 31.9%, Reliable, 1.3%
Yes, they should get the award.

DIFFICULTY: Medium

6. County A wants to say that over 10% of people used public transportation to travel to work. Is this true?

ANSWER: 11.6%, Reliable, +/- 0.7%
Yes, over 10%

DIFFICULTY: Medium

7. In an effort to raise awareness of the county's under-used bus system, County R says that absolutely no one in the county uses public transportation to travel to work. Is this true?

ANSWER: No, not necessarily, 0.0%, +/- 0.4%, not very reliable

Figure 68: Tasks Part 15

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

8. What is the percentage of people in County FF who use public transportation to travel to work?

ANSWER 0.4%, Not Very Reliable, +/-0.4%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

9 Appendix C: General Protocol

Figure 69: Protocol Part 1

General Introduction

Thank you for your time today. My name is <Name>, and I will be working with you today. We will be evaluating a new design of the new ACS data table format by having you work on several tasks. Your experience with the table is an essential part of our work. We are going to use your comments to give feedback to the developers of the table. Your comments and thoughts may help the developers make changes to improve the table. I did not create the site, so please do not feel like you have to hold back on your thoughts to be polite. Please share both your positive and negative reactions to the site. And remember, we are not evaluating you or your skills, but rather you are helping us see how well the table works.

First, I would like to ask you to read and sign this consent form. It explains the purpose of the session and informs you that we would like to videotape the session, with your permission. Only those of us connected with the project will review the tape. We will use it mainly as a memory aid. We are going to do some eye tracking as well as have you work on some task scenarios that I will give you. There is also a short background survey that we would like you to complete. If you don't want to answer any of the questions, please feel free to skip them.

[Hand consent form and background survey; give time to read and sign; sign own name and date if you have not already done so.]

During the session, I will ask you to work on several tasks. I would like you to tell me your impressions and thoughts about the Tables as you work through the tasks. I would like you to "think aloud" and talk to me about your decisions. So if you expect something to happen, tell me what you expect. If you expect to see some piece of information, tell me about what you expect. This means that as you work on a task, talk to me about what you are doing, what you are going to do, and why. Talk to me about why you clicked on a link or where you expect the link to take you.

Finally, during the session, I will remind you to talk to me if you get quiet, not to interrupt your thought process simply to remind you to talk to me. Please focus on verbalizing what you are thinking and expecting to happen. We are interested in the reasoning behind your actions, not just what you are doing.

I ask that each time you start a task, please read the task out loud, and once you have found the information you are looking for please state your answer aloud. For example, say, "My answer is ---" or "This is my final answer." After each task, I will save the eye-tracking data and close the table. I will return you to the table and let you know when you can begin the next task.

Please remember to begin each task by reading the task question aloud as well as stating the final answer. As you work, please remember think aloud.

[Pull up a Web site in Firefox, such as www.wtop.com or www.espn.com, etc.]

Before we get started, let's practice thinking aloud. Say that you had a minute or two to kill and came to this Web site. Describe your thought process as you navigate through a Web site looking for something interesting to read

Figure 70: Protocol Part 2

Now I am going to calibrate your eyes for the eye-tracking. I am going to have you position yourself in front of the screen so that you can see your nose in the reflection at the bottom of the monitor. To calibrate your eyes, please follow the [red/blue] dot across the screen with your eyes.

[Do Calibration]

Now that we have your eyes calibrated, we are ready to begin.

[If Calibration Fails]

It seems that we are having some technical difficulties with our equipment and need to continue without the eye tracker.

[Continue with Test]

I am going to leave you here in the test room, but we will still be able to communicate through a series of microphones and speakers. I will let you know when to begin the first task by reading it aloud from the folder near you. Do you have any questions?

[After the last task]

I will come back to the testing room to discuss your experience with the ACS data tables with you.

[Have them complete the Satisfaction and Task Difficulty Forms, then walk through the Debriefing Questions]

10 Appendix D: Consent Form

Figure 71: Consent Form



Consent Form
Usability Study of the ACS Data Tables

Each year the Census Bureau conducts many different usability evaluations. For example, the Census Bureau routinely tests the wording, layout and behavior of products, such as Web sites and online surveys, in order to obtain the best information possible from respondents.

You have volunteered to take part in a study to improve the usability of the ACS data tables. In order to have a complete record of your comments, your usability session will be videotaped. We plan to use the tapes to improve the design of the product. Staff directly involved in the usable design research project will have access to the tapes. Your participation is voluntary and your answers will remain strictly confidential.

This usability study is being conducted under the authority of Title 13 USC. The OMB control number for this study is 0607-0725. This valid approval number legally certifies this information collection.

I have volunteered to participate in this Census Bureau usability study, and I give permission for my tapes to be used for the purposes stated above.

Participant's Name: _____

Participant's Signature: _____ Date: _____

Researcher's Name: _____

Researcher's Signature: _____ Date: _____

11 Appendix E: Questionnaire on Statistical Experience, Computer Use and Internet Experience

Figure 72: Questionnaire on Statistical Experience, Computer Use and Internet Experience Part 1

Questionnaire on Statistical Background, Computer Use, Internet Experience

YOUR ANSWERS ARE CONFIDENTIAL

Demographics

1. What is your age? _____

2. Are you male or female? _____

3. What is your level of education?

- grade school
- some high school
- high school degree
- some college
- 2-year college degree
- 4-year college degree
- some postgraduate study (e.g., M.A., M.B.A., J.D., Ph.D., M.D., programs)
- postgraduate degree (e.g., M.A., M.B.A., J.D., Ph.D., M.D.)

4. How long have you been using ACS data products?

5. How often do you use ACS data products?

- Daily
- Weekly
- Monthly
- Less than once a month
- Do not use

6. For what purpose do you usually use ACS data products? (e.g., to write reports, news articles, make decisions, etc.)

7. What statistics courses have you completed?

- Advanced graduate-level statistics
- Advanced undergraduate/beginning level graduate statistics courses only
- Introductory statistics courses only
- No statistics courses completed

8. Rate your level of expertise with statistics.

- Novice (Just beginning to use statistics or rarely use them)
- Intermediate (Moderate experience with statistics)
- Expert (A great deal of experience with and/or frequent use of statistics)

Figure 73: Questionnaire on Statistical Experience, Computer Use and Internet Experience
Part 2

Computer Experience

1. Do you use a computer at home, at work, or both?

(Check all that apply.)

- Home
- Work
- Somewhere else, such as school, library, etc.

2. If you have a computer at home,

a. What kind of modem do you use at home?

- Dial-up
- Cable
- DSL
- Wireless (Wi-Fi)
- Other _____
- Don't know _____

b. Which browser do you typically use at home? Please indicate the version if you can recall it.

- Firefox
- Internet Explorer
- Netscape
- Other _____
- Don't know _____

c. What operating system does your home computer run in?

- MAC OS
- Windows 95
- Windows 2000
- Windows XP
- Windows Vista
- Other _____
- Don't know _____

3. On average, about how many hours do you spend on the Internet per day?

- 0 hours
- 1-3 hours
- 4-6 hours
- 7 or more hours

4. Please rate your overall experience with the following:

Circle one number.

	No experience					Very experienced			
Computers	1	2	3	4	5	6	7	8	9
Internet	1	2	4	5	5	6	7	8	9

12 Appendix F: Satisfaction Questionnaire (QUIS)

Figure 74: Satisfaction Questionnaire

Questionnaire for User Interaction Satisfaction (QUIS)

Please circle the numbers that most appropriately reflect your impressions about using the new ACS data tables.

1. Overall reaction to the new ACS data tables:	terrible 1 2 3 4 5 6 7 8 9	wonderful 7 8 9	not applicable
2. Definition of reliability:	confusing 1 2 3 4 5 6 7 8 9	clear 7 8 9	not applicable
3. Use of terminology throughout the tables:	inconsistent 1 2 3 4 5 6 7 8 9	consistent 7 8 9	not applicable
4. Information displayed in the tables:	inadequate 1 2 3 4 5 6 7 8 9	adequate 7 8 9	not applicable
5. Arrangement of information in the tables:	illogical 1 2 3 4 5 6 7 8 9	logical 7 8 9	not applicable
6. Tasks can be performed in a straight-forward manner:	never 1 2 3 4 5 6 7 8 9	always 7 8 9	not applicable
7. Reliability indicator for the tables:	confusing 1 2 3 4 5 6 7 8 9	clear 7 8 9	not applicable
8. Overall experience of finding information:	difficult 1 2 3 4 5 6 7 8 9	easy 7 8 9	not applicable
9. Additional Comments:			

13 Appendix G: Task Difficulty Survey

The task difficulty survey was tailored for each type of table. Only the task difficulty survey for the Data Profiles Tables are shown here to conserve space.

Figure 75: Data Profiles Task Difficulty Part 1

Task Difficulty Rating Questionnaire

On a scale of 1-10 with 1 being extremely easy and 10 being extremely difficult, please rate the difficulty of each task.

A. What is the first thing that you noticed about this table?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

1. A company offering cleaning services to senior citizens living alone is looking for potential customers. They want to know the estimate of householders ages 65 or older living alone in Anytown, USA. What would you tell them?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

2. The Irish Embassy wants to know how many people in Anytown, USA might be interested in an open-house. What is the estimate and percentage estimate of people of Irish ancestry in Anytown, USA? Would you use either of these estimates?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

3. A tutoring provider would like to teach courses that prepare students for standardized tests in Anytown, USA. They want to know the estimate and percentage estimate for school enrollment for high school (grades 9-12). What would you tell them?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

4. The Danish Embassy is reporting that they have more people of Danish decent in Anytown than those of Portuguese decent. Is this true?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

Figure 76: Data Profiles Task Difficulty Part 2

5. GetYourDegree Community College is interested in opening a branch in Anytown, USA; however, their corporate mandate stipulates that there must be at least 14,000 students who have completed some college, but did not get their degree. You are responsible for reporting whether Anytown, USA, has met the mandate. What is your recommendation?

Extremely Easy											Extremely Difficult
1	2	3	4	5	6	7	8	9	10		

6. The mayor of Anytown, USA wants to know if the town should continue to fund a welcome wagon program for people who move from other states. If at least 5.0% percent of the population in Anytown, USA lived in a different state 1 year ago, he will keep the program. Based on the data, what would you tell him?

Extremely Easy											Extremely Difficult
1	2	3	4	5	6	7	8	9	10		

7. You are a demographer working for a local university conducting research about the population's heritage. What do you think about the Ancestry data in this table?

Extremely Easy											Extremely Difficult
1	2	3	4	5	6	7	8	9	10		

8. In 2007, the percent of people who were separated in Anytown, USA was 1.9% (+/- .3%) and that estimate was considered "reliable". The Bureau for Family Affairs is now reporting that, based on 2008 ACS data, the percentage of people who were separated increased from 2007. Do you agree?

Extremely Easy											Extremely Difficult
1	2	3	4	5	6	7	8	9	10		

14 Appendix H: Debriefing Questions

Figure 77: Debriefing Questions

Data Reliability Indicator Round 3 Debriefing Questions

1. Can you walk me through your thinking on why you marked (a particular QUIS item) especially low/high? (Do this for several low/high QUIS ratings; also, do this for easy/difficult ratings).
2. Do you think the new data reliability indicator helped you to find information quickly? Did you think the color-coding made it take longer or seem more difficult to find information?

FOR VERSIONS WITH THE LEGEND BEHIND THE LINK ONLY: *If they did not click on the "View table notes" link to open the legend: At any point during the testing, did you look for a legend to explain the data reliability indicator?*

Click on the link to bring up the legend. There is a legend located in the table notes. Do you think this legend would have been useful for completing the tasks or not?

Open the version of the same table with the legend above the table. We are also testing another version of the table you saw that has the indicator legend located above the table. Which version do you prefer – the one that you used or this one? Which do you think would be easier to use and why?

FOR VERSIONS WITHOUT COLOR ONLY: *Open the color-coded version of the same table.* We are also testing another version of the table you saw that has a color-coded data reliability indicator. Which version would you prefer to use? Which do you think would be easier to use and why?

3. Because of the color-coding used in these tables, they may appear differently to different people. In order to examine this issue, we are asking participants whether they are color-blind or not. Are you color-blind?

4. Is there anything else about the tables that we have not discussed that you would like to mention?

15 Appendix I: Satisfaction Questionnaire Comments, Usability Issues with the ACS Tables, and Participant Comments

Comments about the ACS Data Tables from QUIS Satisfaction Survey

Data Profiles

- A1: Typeface too small, need down arrow (scroll arrow) on the right.
- A2: It would be useful to have the column names frozen so they still appear on the screen when you scroll down.
- A3: Too much data on one table, font size too small.
- A4: The tables are very small for data recognition , they should be enlarged to make the data easier to see. I do like the fact that each line is an alternating gray white, that makes it easier to decipher each line of data.
- A4: Get rid of tables all together. Use search options. Google seems to be able to do this, why can't the government?
- A4: Grey/White is boring - blue lines or color shift when shift (color bar) when shift categories [note: participant meant the bolded row headers].

Selected Population Profiles

- B4: Print on screen was very small. Persons with not so good visual acuity may have difficulty locating column data. Otherwise, I would use the ACS Tables for future work/research.

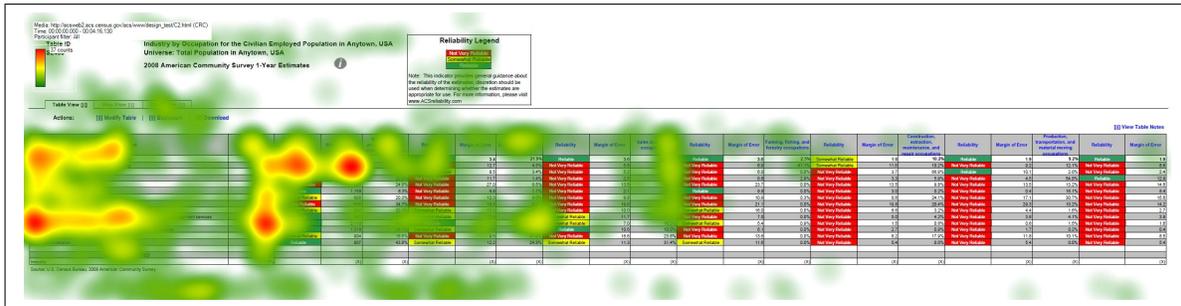
Subject Tables

- C1: Should include an index or key that describes what the column headings mean, particularly those w/ the same name and different information (e.g., margin of error being presented in seemingly different ways). *Note: The legend was behind the link for this participant.*

Detailed Tables

- D1: It takes more than a few moments to become acclimated to the layout of the information to ascertain what is where. Otherwise it was an okay read.
- D2: Clearly, a learning curve will occur and help.

Figure 79: Heat Map of Subject Table with the Legend Above the Table (C2)



column for this category. Participant 4 commented halfway through the testing session, “Oh I just saw it, the two or more races column.” Participant 5 said, “So now I’m reading over the table heading again, selected populations profile in Anytown USA, the total population of two or more races. I’m finding that confusing because the table has the total population which presumably refers to the total population of Anytown, and then in the fourth column two or more races.” Participant 6 did not see the separate column until the last task (Task 8) and then said, “I see two or more races here now at the top.”

Comments are paraphrased unless they appear in quotation marks.

15.1 Dry Run

The short descriptions used in this section refer to the tasks that can be found in Appendix B.

Get Your Degree: “See, I have to keep scrolling up this column ’cause I don’t know what this is. Margin of error, percent. There’s two margin of errors, and reliability, I have no clue.”

Irish embassy question: “I think this is the reliability column.”

“I’m trying to figure out why there’s two reliability and margin of error columns. I don’t know if I’m looking at the right thing.”

Danish embassy question: “I don’t know what kind of scale this is on. Not reliable somewhat reliable, whatever.”

What do you think about the ancestry data: “I’m seeing a lot of not very reliable notes right here, so I’m thinking that the information located here isn’t really reliable. I would probably be reluctant to accept the estimates that are given here.”

Comments: *Do you think it's an obvious place where people would look for a legend under table notes?* “No I would've clicked here [on margin of error column header].”

“These [row headers] aren't really distinct”

“If I scroll down here, I can't remember what the column headings were, so that was annoying, 'cause then I have to scroll back up and then figure out where I was at before and come back down here. So it would've been nice if the column headings were still there.”

“And then I can't figure out how it's organized [talking about indentations]. I see total households, and then it's like indented, and I've been trying to figure out this goes with this, and does this go under this, and these both go underneath here? I don't know, the organization is really not that clear, as far as the subcategories. And then there's a space here. I guess this is still under households by type, why is there a blank line,? Why are these separated?”

“I didn't know what kind of scale it [reliability] was on.”

“These headings don't really pop out, so I think just making these distinct, grouping them together, some kind of bolded box around it. I wasn't able to easily distinguish between different categories listed here.”

15.2 Participant 1 - A1

“It's a little blurry 'cause my eyes aren't the best.”

Irish Ancestry question: “The column labels are gone so I need to scroll back up to see what they are.”

Demographer at a local university: “For the most part it doesn't look very reliable, in terms of, because of the red um boxes.”

“Though I guess what I'm thinking is that I would like to know a little bit more about how they came up with the reliability statistics, just to confirm that it would be in a similar way I would make that assessment.”

Danish embassy question: “I would probably visit that ACS Reliability.com website to learn more about it [reliability].”

Mayor question: “The estimate is not very reliable, yeah that red box is really getting me.”

Comments: “There isn’t a definition of how they constructed it, and so my confidence in my own ability to interpret data um makes me think maybe they include something else in their reliability measure that just isn’t standard affair.”

15.3 Participant 2-A3

“I don’t know how I feel about it, as someone who understand generally statistics, it’s nice to have something that’s color coded, so I don’t have to think about this. But it’s a simple mathematic formula, I guess your doing standard deviation / mean.”

15.4 Participant 3-A4

“ I don’t know exactly what that MOE is, I’m assuming +/- 641.”

“And that the MOE is 2.5, now I don’t know if that’s a percentage, I assume that’s a percentage, could be + or -”

“Probably, I think that I would be more inclined to tell them if the data looked to be not very or not reliable. Somewhat reliable to reliable I would probably mention it in passing. I trust what’s shown on the computers, so I’m probably a bit over-trusting when it comes to data.”

“I think a lot of the top tables need to be carried down with it all the way to the bottom of the table so you don’t have to scroll back and forth to see what your data is.”

“The table is going make me go cross-eyed eventually, it’s very small.”

“In terms of reliability it seems there’s a lot of unreliability data, but it’s useless.”

“Unreliable stuff makes life more difficult.”

“Ooh I like that better, mostly because it’s easier to read.” [when shown a color table]

“And it shows red, not very reliable it makes it a lot faster.” [when talking about the ancestry Danish vs. Portuguese question]..

15.5 Participant 4-B1

“The font size is really small.”

“I see the colors.”

Fuel, Two or More Races: “Oh I just saw it, the two or more races column.”

“The way it’s pulled out, the two or more races column, you wouldn’t think it would be in that column, because it’s also a row. I wouldn’t think to find it in a column.”

P4, Task 4. “What differs reliable and somewhat reliable? Scale needed on the bottom.”

Boss wants to know: “Yeah I would say it’s that the data is much more reliable, well I don’t know if it’s much more reliable, but the data is considered reliable. And it’s only somewhat reliable. Still now that I think about it , it seems really vague, like what does that mean? Somewhat reliable? What makes it reliable versus somewhat reliable? It would nice if there was some type of range, to give me an idea what that really means. A scale or something, at the bottom. I can’t really have much confidence in saying something is somewhat reliable or not very reliable in this case.”

P4, Task 5. Row with percents is confusing with numbers.

Reliability table is confusing.

Disability, two or more races: “Ok, so it’s under disability status.” [thought it was somewhere else]

“The list what the disability, it makes me think that, the line above it is not the disability, but it’s the same number, the one below it is just a percent of the population. That’s confusing.”

“And the data is reliable for this case, but I look at the percent and the percent for two or more races is somewhat reliable, isn’t it just the calculation from the base of the population? So that’s confusing.”

“The reliability column is confusing.”

P4, Task 7. "I would want to click on something to read why is this reliable."

High Income: "If I could click on something, just to read why, why is this reliable?"

Comments:

"I did, I also tried to click on reliability. 'Cause sometimes, especially when it's blue I thought that I would be able to sort based on that. Um, and I thought that maybe there would be a pop up saying 'reliability is this.'"

"Maybe It's just the title, view table notes. Maybe if it were like view table definitions or something like that. That would make me think that, ok, this means they are explaining something on the table. A table note, makes me think that oh it's just something like I can save my notes."

"I rated it as a 5 because it's usable, but honestly I don't think my I don't think this would've been any different than opening a book."

"This use hasn't been enhanced by the Web at all."

"It was hard to find [the definition of reliability]."

"Make the headings stand out more. I know it's in all caps but some starts to blur after a while. I mean it's not consistent, sometimes its gray."

"Can't tell how reliability is measured."

Don't know what they base that on. Recommends having a general sentence about statistical reliability followed by more detailed information for statistics experts.

Novices may not care, but understand what reliable means in a general sense if next to a statistical cue.

Somewhat reliable is too vague.

15.6 Participant 5-B2

P5, Task 0: “The font on the table is really small.”

“The second thing I notice are the reliability indicators and the different colors that are highlighted. And I’m not sure if I like that or not. I guess I do find that to be helpful.”

“Just because it jumps out at you right at the beginning, and so I don’t see the data first. It’s like I don’t have to look at the data to determine myself if it’s reliable. Like someone else is just telling me that. Which is good for the average user I guess. But the colors did jump out at me.”

“Well now thinking about it, they seem to correlate with streetlights, green being go ahead, it’s very positive. Yellow is somewhat mediocre, and red is not at all good or stop. So I guess that makes intuitive sense to me.”

“It’s difficult to look at the table because it’s so long and the subject headings besides being capitalized aren’t really emphasized or highlighted in anyway so it’s hard to tell when your looking at a new piece of data. I think, for me it would be easier if the subject headings were highlighted in a different color. And if you can search within the table or a subject specifically.”

P5, Task 2: “This is where I would like to have a find search so I could immediate scroll to education, or be immediately be taken to it as opposed to having to scroll through the whole document.”

“And then now I’m looking next to reliable, it says this number is .6 and I think that’s the margin of error but again I would have to scroll all the way up to the top of the table to find that. Which I find to be rather annoying. Oh no see I gave you the wrong answer because I was looking at the 13 percent was the total population, so I actually need to be looking in the 4th column.”

“I would prefer to see on the table is the uh, column headings to scroll down the table as I scroll down the table so I don’t make that same kind of mistake again by reading the wrong column.”

P5, Task 3: Table title is misleading/confusing: Total population and 2 or more races.

“So now I’m reading over the table heading again, selected populations profile in Anytown USA, the total population of two or more races. I’m finding that confusing because the table has the total population which presumably refers to the total population of Anytown, and then in the fourth column two or more races.” *Note: P5 mixed up two or more reliability column with total population, as well as estimate with percent occasionally.*

Comments: “Font was too small, too much information on the table, had to scroll down so much.”

“I would want the subject headings ..*participant read column headers* scroll down with you or at least have them at the top of every subject, like sex and age so you remember what your looking at in each of the columns.”

“I wouldn’t have gone to view table notes to learn about reliability.”

“I think the reliability thing is important enough to have it as a separate thing. The casual observer probably doesn’t need to know +/- parentheses but they would want to know what the definition of reliability is or at least that would help them analyze the data.”

“So I guess I would expect to see it somewhere on the top, and I would prefer to have it not be something you would have to click on.”

“One thing I would like to see, just for usability purposes to be able to minimize some of these columns if you don’t need them or want to look at them.’

“Yeah, I mean I like It [reliability], but I didn’t know what it actually meant.”

“I guess they had a high enough response rate to know that it would be a consistent statistic.”

“But then again that’s why I think reliability should be defined just right on top as opposed to something you have to click on.”

“Not very reliable [indicator] is most helpful.”

15.7 Participant 6-B4

P6 had trouble finding two or more races column (kept referring to the two or more races row value which is 3.1 percent). As a result many of the participant’s responses are incorrect.

Task 8: “I see two or more races here now at the top.”

Colors are universal, “I love the colors, I’m a color person. I love it.”

Comments:

Had some difficulty understanding logic of the problem

Public should be able to use this table, color coding helps.

15.8 Participant 7-C1

P7, Task 0. *The two reliability columns confused the participant.* Labeled the same not sure what the difference is.

“The first thing I notice would be the color scheme, red, yellow, and green shaded boxes.”

“I would assume red is bad and green is good, and yellow is neutral. And by looking at it that’s somewhat right cause it says red is not very reliable so I assume the source of the data is not the best.”

“Although it is a little confusing that there’s two different columns for reliability that don’t have the same information. I guess one’s a percentage and one’s a...Actually I’m not sure what the difference is.”

Task 4. “So it’s kinda difficult with such a long with so many columns to keep track of, which row you want to focus on.”

P7, Task 6. *in reference to table width.* “...difficult to go back and forth here with the way this is setup.”

“The transportation data is not very reliable and the education data is somewhat reliable but it’s difficult to use it to make any determination about the answer they’re both pretty subjective, I don’t know the threshold between somewhat and not very or what that means in terms of numbers, especially when the two numbers are close together. Oh I guess I can saywell I guess that’s why, the transportation data has a higher margin of error, I guess that’s why it’s not very versus somewhat. But I’m still not exactly sure about what type of index or what those numbers mean in later columns for margin of error oppose to beginning where it seems to be a whole number.”

Comments: “I think the use of color is always good in terms of making things clear and helping people focus. So it quickly alerts you to I guess the type of info like how good the information is. I honestly looked at that before I even saw what the table was for.”

“This is the way I would expect this type of data to be displayed.”

“I guess.. it seems subjective, so if there were some of key or index that had even if it was a numeric range like things with a MOE of 0 to 5 are considered reliable, even though I don’t necessarily know what that means. But it would give it some sort of qualifying description,

it seems like anyone could've just drawn a line and say that's reliable and that's not reliable and I have no idea where that line is drawn or how or why."

"They seem to represent different things with the same column heading" (referring to headers like MOE, or reliability).

Perhaps adding an abbreviated description could add some clarification.

Explain columns like MOE.

"When looking at it without any other information I don't know what that means."

Recommended placing "reliable first because w/o color it doesn't make sense to people."

15.9 Participant 8-C2

P8, Task 0. Looking at areas that are highlighted, then subjects, then industry. Thinking about what this is telling me.

P8, Task 3. Did not realize that table scrolled horizontally.

P8, Task 6. Looked for way to modify it so she didn't have to keep scrolling. Tried "modify it" and other links.

15.10 Participant 9-B3

P9, Task 1, Would Control+F and look for 18-24.

P9, Task 3. After clicking on view table notes the P commented that there was no discussion of household or individuals.

Tried clicking on the 2 or more races column.

P9, Task 4. Mentioned having to scroll back up to find column.

P9, Task 5. “I lost track of my columns again” “I wonder if there’s a way to highlight the row” to find out where I am suppose to be.

Comments: Scrolling columns, width too much, heading disappears, too wide and too long.

Subheadings don’t jump out that much.

15.11 Participant 10-D1

P10, Task 0. Did not mention color/reliability.

Comments: Looked for legend, something to make sense.

15.12 Participant 11-D2

P11, Task 0. “Print is fairly small.”

P11, Task 4. “Trouble tracking rows across”.

P11, Task 5. “Would probably use the mouse to help me stay on a horizontal plane.”

15.13 Participant 12-E1

P12, Task 0: “The first thing that my eyes are drawn to is the coloring.” probe: what do you think the colors represented: “Just good data versus bad data or the strength of the information.”

“I was just thinking that um might be uh if it is suppose to represent the strength then maybe uh like a bar or uh a color code expressing intensity more linearly instead of just color coding.”

P12, Task 1: “I’m not looking at the MOE or the percent. I’m just letting the reliability column do the thinking for me.”

“Actually, now I...I’m just thinking through this, I actually don’t know if the percent column has to do with the reliability. But if it did I would take County A and County Y” Because I would make an arbitrary cut-off, like above 10 percent. But again I’m not sure what that percent column has to do with” (Don’t know what percent column has to do with reliability [participant seems to think percent is related to reliability, not the estimate.]

“Oh you know what, since the colors are so dramatic, I’m just realizing that I didn’t even read the title on this page which is pretty bad” [non verbal behavior: shaking head]

“I guess it just shows you jump to reading things that pop out.”

“I’m not sure I’d have that so colorful then um maybe it’s my.. just looking at the title.”

P12, Task 2: “I think that I would probably not recommend this but something that would be useful to see again would be um the strength represented as a percentage or something. So that I could um kind of see whether or not.”

“I think on this page it would be helpful to have a descriptive of the margin of error for um as a refresher for people who haven’t had statistics in a while.”

“I would not recommend because I don’t understand um how close um the somewhat reliable versus the reliable um are, in relation to one another.”

Comments:

“This could be the way I look at things, I was so distracted by like getting into this and looking at the red, and green, and yellow, and those being almost so obvious I actually didn’t even look at what the title was first thing.”

“I would probably need.. I think I put this in my notes, just a description of like almost what each of the columns mean, related to the entire ...”

“I don’t know why I did not [click on View Table Notes].. it’s like I thought about it but then I just thought oh they’re not clickable.”

“I don’t really see anywhere else that it says anything else about this [the reliability legend].”

“On all of them [tasks] I just find myself going percent, margin of error, not really understanding how they relate to reliable.”

15.14 Participant 13-E2

Task 0, “I’m a little confused as to what the reliability factor pertains to.” *Probe: What are you confused about?* “The reliability of what? The data itself? What being reliable as far as the percentages, are we looking at the margin of error, like what does the reliability factor

pertain to, that data is not very reliable based on what, or it's very reliable but what are we basing that on, the reliability factor?"

Task 2, "Looking at counties D and E on the table, county D indicates their data is somewhat reliable, and county E indicates their data is very reliable, based on these two factors I would recommend that they add the percentages together, because again the reliability factor for D, although it is somewhat reliable, I would be confident enough to know that average or that percentage does have, as the table indicates, a small margin of error."

Comments: "So reliable means to me that the data is very reliable, somewhat reliable there's a margin of error, and not very reliable means no that data's not very reliable at all."

"I thought it would've be useful to have a definition for the reliable, the not very reliable, and the somewhat reliable. It makes it a little bit difficult to understand if all the data is being pulled from the same source what makes.. or my assumption is all the data is being pulled from the same source, what makes one category more reliable than another."

"As I'm reading through this, by clicking on that link [view table notes], that still would not have given me a better understanding of what a reliability the reliability columns really refers to."

Probe: What would you expect to see define reliability? "I would expect um reliable to say, reliable means 100 percent of the data is consistent or factual. Somewhat reliable being 90 percent of the data 80 percent of the data is factual, and not very reliable so I would like to see some type of number associated with the ranges of reliability and not very reliable."

"I felt to me that the margin of error was a little bit confusing as far as how it related to let's say for example the reliability factor. So when I'm looking at one of the categories or one of the columns that specifically says that this is not very reliable, however there's a 50 percent margin of error, that doesn't really give me a good indication as to whether or not that data is indeed very reliable at all or there's that... there's a little bit of interpretation that could be made on that. So I don't really think the margin of error column is that useful to be honest with you."

"I think it all goes back to the reliability column, it's very difficult to determine whether or not this data is accurate, and if it's not accurate, the not very reliable column meaning what? So those percentages aren't accurate at all? So therefore, why are they even there? "

"And how are we differentiating between reliable and not very reliable, what is the source of that data?"

15.15 Participant 14-E3

P14, Task 0: “Um, I guess the reliability column because it’s really bright and sort of stands out.”

“I’m assuming this means um how reliable the estimates are, given the uh...I guess given the standard errors.”

P14, Task 6. “And it says that 0 percent travel to work by public transportation, but it also says that the estimate is not very reliable, so I guess I’m not sure um I guess you can’t really tell by the table without knowing why the estimate isn’t reliable, so that’s my final answer that I don’t know.”

Comments: “I noticed, I just wrote down I remember seeing that there was a reliability definition like up here somewhere, but I didn’t really use it, I guess it would’ve helped.”

Why do you think it didn’t stand out? “I don’t know, because I felt like that the focus was here [the columns] maybe if there was an asterisk next to the reliability column, maybe I’m just lazy. It just seems like it’s so far away, even the title seems disconnected.”

15.16 Participant 15-E4

P15, Task 0. Would go to website to learn more about reliability.

P15, Task 1A. Generally want reliable data, somewhat reliable data if more information was given.

P15, Task 2. Reliabilities are close enough to include together.

P15, Task 3. *The participant seemed to equate MOE with reliability.* “MOE is very small so it’s very reliable.” (The participant also went out of bounds for this question, mentioning that the two counties could be using two different forms of public transportation).

Note: For Task 4 and Task 5, the participant subtracted the estimate from the MOE to confirm it met the requirement for the answer, despite the estimate being reliable.

Comment: Dunno how confident because there’s no info on what reliability means

15.17 Participant 16-A2

P16, Task 0. It’s detailed

P16, Task 2. Helpful if names of fields [column headers] were pushed down so she didn't have to keep scrolling.

P16, Task 4. The participant reported true, but not very reliable [report w/ a caveat]. The correct response on this task was not true.

Comments: Reliability legend behind link "no, not really helpful."

Wanted more information about MOE.

15.18 Participant 17-A1

P17, Task 0. Typeface too small.

"You've got these lovely green, yellow, red categories defining reliability instead of giving margins of errors."

P17, Task 2. "I can't see the [column] heading here so I don't know."

"I should be able to see these headers no matter how far down I go, ok?"

Comments:

"I didn't look at the definition of reliability but I know the definition of reliability. I don't see the definition of reliability here [looking at table, clicked reliable column heading] it's not there."

"Type face is too small."

"I don't think the definition of what's defined as reliable, somewhat, and not very. I want to know statistically what it is, before I decide whether I use it."

"For what I sometimes call library users, casual users, this is probably a good idea, but it's making decisions for the users, where as I like to make my own decisions, I'm not typical, far more experienced with advanced statistics than the average person."

Probe: But for the average person do you think it would be helpful? "Yeah, it's better than margin of error, they don't understand that. It just confuses them. But the definition should be you know readily available."

“I know what margin of error, sampling error is, but I don’t know what’s being considered reliable versus somewhat versus not very here. And the other thing is that it’s better to collapse categories than make the reliability higher, cause the level of detail is beyond what most people need anyhow.”

15.19 Participant 18-A3

P18, Task 0. Trusts in Census that it [data] is reliable. -¿ Green is reliable -¿ Reliability is near MOE?

When it shows not very reliable you can’t really use estimate.

Small font, hard to read.

A lot of colors.

Looks like an excel table with small font.

Now looking at what it is [ACS survey]

P18, Task 2. Looked at US citizenship and Language spoken first before settling on ancestry data (*Expected to see Ancestry data there?*)

Note: Participant had to re-check column headers to make sure he was looking at the percentage column.

P18, Task 7. The thing that stands out is all the red.

So many numbers for heritage that are not reliable.

Could also look at somewhat reliable [data], could use for research if reliability is kept in mind.

Comments about the overall table (at this point):

Would’ve brought glasses if he knew table font is this small.

Shades of gray and white are helpful.

Color stands out.

P18, Task 8. Estimates say true but reliability and MOE says no.

Would report no, or yes with reliability warning. Can't draw conclusions based on estimate.

Comment:

Not familiar with CV, stat class was ages ago.

Not visually appealing.

Legend doesn't define what not very reliable means.

Most people wouldn't visit ACS reliable website.

Clear definition of what each reliability is.

15.20 Participant 19-A4

P19, Task 0. Noticed reliability legend, keywords, reliable, not reliable estimates, and lots of replications in columns.

“There's a lot of replication in terms of columns.” [referring to column headers for estimates and percentages]

Task1: “Oh I'm sorry this is Anytown, the total population of Anytown, that is one thing I missed before so, I wasn't actually sure what this city was, but yeah I would, since it is Anytown.”

P19, Task 2. “That's one thing that is really actually a little annoying is that you have the titles of the chart at the top, but if I scroll down then I might not actually remember every single title for every single column and so I have to go all the way back up to see estimate and what not.”

P19, Task 3. “Again I don’t really know what that reliability means, I don’t know if there’s a p-value you can put in there or what not, um test of significance but I guess I would say it is that score but how reliable I don’t know what that metric means. Except I know it lists some legend, but again there’s no numerical values attached to it.”

“I think before I gave you high school graduate, I mis-read the columns they’re so small they kinda float together.”

P19, Task 4. *Subject had trouble reading across rows, which resulted in him giving the wrong number (Gave Dutch percentage, not Danish)*

“But again we don’t know how reliable that is.”

Task 6. “I would probably just look at different county, and look at percentage which is 5.5 percent, somewhat reliable, we have a margin of error of 2.1, I’d say we could probably do it but again it depends on what somewhat reliable means.”

P19, Task 7. Very busy (search through a list of ancestries).

Would search through the table using Ctrl + F.

Suggest: Drop down menu where you could choose [ancestries].

Noted estimates, reliable or not, MOE. But in the end stated “Nothing stands out.”

“Honestly, nothing stands out with it, I see the numbers there, it’s just really clunky, and very very, yeah it’s just clunky so nothing really stands out.”

P19, Task 8. “What I’m thinking is again I guess I hate to say this but it’s extremely extremely clunky, so I’m thinking why can’t I just do CTRL+F and search or why isn’t there a search box where I can actually have it pull up. Um I have to go through piece by piece and find this, and quite frankly it’s just wasting time. And maybe it’s because I’m a child of Google, but I don’t like searching step by step. I don’t like charts at all, I rather have it the computer tell me where it’s at. Not to be too harsh on you here.”

“Yeah I would agree with that, well no actually I would not agree with that, it’s not reliable. But again the first thing I’m looking at is percentages, I look at that not reliable thing secondly, and I really don’t know what that means, so quite frankly I ignore it for most of the time. So I’m going guess that you know if I was quickly looking for something unless this was like something in terms of a masters thesis or a paper I’m writing I probably wouldn’t really dig to much into that not reliable, not very reliable, and I actually might just take the 2.8 percent for face value because it is from the Census Bureau.”

Comments:

“Make this into separate sections with some white space between it, because here’s the thing I’m looking so quickly and there’s so much information coming at me both for a project I might be working on using the ACS but also with other projects I’m working on or maybe an idea hits and I open up another browser and look at something for example, that easily and I do this all the time I’m looking at average family size and I’m accidentally looking at that.”

“There’s a lot depth here but it’s not parsimonious.”

Participant was shown an alternate version of the with color-coding. “That’s a little bit better actually, that’s a lot better, just having those colors. But again I don’t know what that [reliability] means and if I’m doing a study I don’t want to have to go to ACSreliability.com and again that’s more work for me to have to go through..someone should have a quick link that has a breakdown of it.

15.21 Participant 20-D1

Comments:

Color coding helps.

Locating information was easy, but had difficulty in interpreting the answer.

View table notes is not helpful (P found link during post-test interview).

Legend sticks out, but not helpful.

Going to link [ACS reliability website] “implies passing the buck.”

Would want to mouse-over or click column [headers].

15.22 Participant 21-A4

P21, Task 0. Noticed gray and white stripes [rows].

Then read title, and noticed reliability legend.

No clue as to what it tells me, it indicates a spectrum.

Then saw the reliability columns.

Would have to go to ACS reliability website to see how it's measured.

P21, Task 1. Would have to explain what reliability meant to company.

P21, Task 2. Have to think about what are the different columns (P had to remember what column headers were?) Would give both estimates but say "we're confident at whatever level."

P21, Task 3. Somewhat reliable makes P wonder why they have somewhat reliable [data].

Comments:

Have a color bar when switching between [row] heading categories.

Should have a footnote of reliability with a notice to see footnote.

Legend indicates reliability matters, but how did you fit things into categories? What does it mean and what is the cutoff?

Not sure what N means.

Scrolled down and lost top [header] columns.

Put percent sign in MOE percent column."

Preferred no color in the reliability indicator, "color is intense".

U S C E N S U S B U R E A U

Statistical Research Division

Usability Laboratory

Washington, D.C. 20233

Date: September 16, 2010

To: DSSD Data Reliability Indicator Team: Anthony Tersine, Jennifer Tancreto

From: Kathleen T. Ashenfelter and Victor Quach, SRD Human Factors and Usability Research Group

Subject: Data Reliability Indicator Based on the Coefficient of Variation: Report for the Third Round of Usability Testing

1 Executive Summary

This study compared different versions of American Community Survey data tables with a data reliability indicator based on the coefficient of variation. The tables differed in terms of whether the data reliability legend was displayed above the table or behind a link, “Reliable” or “Not Very Reliable” was listed first, or whether it was color-coded. There were few key differences between the tables in terms of user accuracy in finding answers to the tasks. The usability goals were met for accuracy of responses and users satisfaction for all of the conditions (although the goal was not met for all data products). However, the efficiency goal was not met for several of the table types. As with previous tests, key usability issues were confusion about the meaning of “reliability” and what the cut-offs for the different levels of reliability were. Evidence from an analysis of efficiency and task difficulty ratings indicated that including the data reliability indicator above the table may have a slightly negative impact.

2 Abstract

This study was the third round of usability testing for the Data Reliability Indicator for American Community Survey (ACS) data tables proposed by the sponsor team. Sixteen prototype tables with a data reliability indicator based on an estimate’s coefficient of variation were tested. Each reliability indicator had three levels: “Reliable,” “Somewhat Reliable,” and “Not Very Reliable.” We tested whether the location of the data reliability legend, whether the indicator was color-coded or plain text, and whether the “Reliable” or “Not

Very Reliable” level was listed first in the legend made a difference in the accuracy, efficiency, or user satisfaction of data users in responding to the tasks.

The usability goals for response accuracy and user satisfaction were met for all of the conditions, but the goal for efficiency was not met for several conditions, mostly for easy and medium-difficulty tasks.

More detailed results and potential usability issues are discussed.

Key Words: data reliability indicator, coefficient of variation, color-coded data tables, usability

3 Introduction

This was the third round in a series of usability tests of the proposed data reliability indicator (Ashenfelter, Beck, & Murphy, 2009; Ashenfelter, 2010). A group of American Community Survey (ACS) data users from both inside and outside of the Census Bureau were recruited as participants for this round of testing. Findings from this third round of testing will inform the design-and-development team on areas of user satisfaction and success as well as areas where the participants struggled while using the data.

3.1 Background

This project aimed to address an issue that arises with the ACS data tables because the estimates have varying levels of reliability. Some of the data, especially some single-year estimates, have high coefficients of variation (CVs). Some users may use the estimates without taking into account their reliability (i.e., ignoring or misunderstanding the margin of error currently provided with the ACS estimates) (Tersine, 2010).¹ The goal of this project is help data users more easily detect potential reliability issues as measured by the CV (although the decision of whether or not to use the estimate is ultimately the data user’s).

The proposed method for addressing the presentation of the reliability of the estimate was to color-code a reliability indicator for each estimate with the appropriate level of reliability along with an associated word (e.g., “Reliable” or “Not Very Reliable”), as measured by the coefficient of variation (Whitford & Weinberg, 2008). The choice of CV as the estimate of sampling error to be tested was based on the goal to produce a standardized measure of reliability that might be easier for users to interpret. Although the margin of error (MOE) is currently provided with each estimate, ACS data users often ignore the MOE.

As a starting point, a categorization based on the coefficient of variation was proposed by the sponsoring team in the Decennial Statistical Studies Division (DSSD) (Tersine, 2010; Whitford & Weinberg, 2008). The idea was to color-code the estimate according to its reliability, as evaluated by its associated CV. “Reliable” was defined as $CV \leq 0.15$, “Somewhat

¹Although estimates of lower reliability are still useful in many applications.

Reliable” was defined as $0.15 < CV \leq 0.35$, and “Not Very Reliable” was defined as $CV > 0.35$ (or zero estimates). A color-coded data reliability column was added to the tables for the prototypes since Section 508 standards prevent the color-coding of the estimate. Consistent with the first two rounds of testing, a red color indicates a low-reliability estimate and green indicates a reliable estimate. However, the number of levels to include in the indicator was not tested in this round, since the decision was made to test only a three-level indicator further after the first and second rounds of testing. For this round, versions of the tables that did not have color-coding associated with the reliability indicator were also tested. Mid-range reliability is indicated by yellow coding. The prototypes that were tested in this third-round evaluation of the ACS data reliability indicators are included in Appendix A.

The tasks that participants completed for the third round of testing are provided as Appendix B. These tasks were kept as similar as possible to those used in the previous round of usability testing, but they were updated to incorporate findings from the prior testing as well as feedback from team members and the Census Bureau’s Methodology and Standards Council.

3.2 Research Goals

The usability goals for this study were defined in three categories: user accuracy, efficiency, and satisfaction.

Goal 1: To achieve a high level of accuracy in completing the given tasks using the data tables. The goal for the third round of testing was set at 80% accuracy. A related sub-goal was to evaluate whether the color-coded and text-only data reliability indicators would prompt users to pay attention to and report an estimate’s reliability.

Goal 2: To achieve a high level of efficiency in using the data tables. It was decided that the participants should be able to complete the tasks in an efficient manner taking no longer than 3 minutes for a harder task, 2 minutes for a medium task, and 1 minute for an easier task.

Goal 3: For the users to experience a moderate to high level of satisfaction from their experience with the data tables. A tailored version of the University of Maryland’s Questionnaire for User Interaction Satisfaction (QUIS) (Chin, Diehl, & Norman, 1988) was implemented. The overall mean of the QUIS ratings for the data tables should be above the mean (above 5 on a nine-point scale, where 1 is the lowest rating and 9 is the highest rating). The same should hold true for the individual QUIS items.

3.3 Scope

A specific set of user interactions with the tables (as portrayed in the prototypes provided by the sponsor) was within the scope of the usability evaluation. The user interface was not tested for compliance with Section 508 regulations, although members of the Systems Support Division (SSD) did consult with the usability and sponsor team about potential accessibility issues associated with color-coding data tables before the first round of usability

testing took place. Before the table tables can be accessed through a government Web site, they must comply with Section 508 regulations or obtain a waiver.

3.4 Assumptions

- Participants had at least one year of prior Internet and computer experience.
- Participants had prior knowledge of how to navigate a Web site.
- Participants had some prior familiarity with the ACS and/or survey data.
- Participants had no known disabilities, but were screened for color blindness.

4 Method

4.1 Participants

The original goal for this study was to recruit forty participants from the metro Washington, D.C. area from a list of local ACS data users to come to the SRD Usability Laboratory in Suitland, MD for testing. However, the usability staff encountered difficulty with recruiting participants and only 21 people participated in the study. Participants were recruited from email lists including the Association of Public Data Users (APDU), Census Information Centers (CIC), State Data Centers (SDC), the Census Advisory Committee, and the D.C. chapter of the American Association for Public Opinion Research (AAPOR). The goal for the CIC, SDC, and Advisory Committee participants was to recruit the constituents of these organizations, but we also accepted the members themselves. Local teachers and graduate students were recruited through Craigslist and emails sent to the principals of the schools and Universities.

Each participant had at least one year of prior experience in navigating different Web sites. Participants varied in their levels of familiarity with the ACS and ACS data tables, but all were at least aware of the American Community Survey data products. The amount of time that participants reported using ACS data products or tabulations ranged from two years to the very beginning of the ACS. The average age of the participants was 38.2, with a minimum of 23 and a maximum of 70.

Observers from the Decennial Statistical Studies Division (DSSD) Data Reliability Indicator team were invited to watch the usability tests on television screens in a separate room from the participant and test administrator.

4.2 Facilities and Equipment

Testing Facilities

The participant sat in a small room (5K512), facing a one-way glass and a wall camera, in front of an LCD monitor equipped with an eye-tracking machine that is placed on a table at standard desktop height. The participant and test administrator were in the same room for the reading of the general protocol, the think-aloud practice, and eye-tracking calibration. The test administrator then went into the control room for the usability testing segment of the session and returned to sit in the same room as the participant for the debriefing segment.

Computing Environment

The participant's workstation consisted of a Dell personal computer, a 17-inch Tobii LCD monitor (Tobii model T120) equipped with cameras for eye tracking, a standard keyboard, and a standard mouse with a wheel. The operating system was Windows XP for all participants.

Audio and Video Recording

Video of the application on the participant's monitor was fed through a PC Video Hyper-converter Gold Scan Converter, mixed in a picture-in-picture format with the camera video, and recorded via a Sony DSR-20 digital Videocassette Recorder on 124-minute, Sony PDV metal-evaporated digital videocassette tape. Audio for the videotape was picked up from one desk and one ceiling microphone near the participant. The audio sources are mixed in a Shure audio system, eliminating feedback, and fed to the videocassette recorder.

Eye-Tracking

The participant's eye movements were recorded during the usability test using a trial version of Tobii Studio Enterprise Edition (Tobii Technology, 2008). The Tobii eye-tracking device monitors the participant's eye movements and records eye-gaze data. The data recorded represent the physical position of the eye as measured by the reflection of a near-infrared beam off of the pupil. The horizontal and physical position of the pupil are recorded for both eyes at a rate of 120 Hz (e.g., 120 samples per second) on this eye tracker model. This type of eye-tracking requires the calibration of each eye. Data collected from the eye-tracking device includes eye-gaze position, timing for each data point, eye position, and areas of interest. The Tobii eye tracker records data at a rate of 120 Hz. When a participant looks away or blinks, or if the eye tracker loses track of the participant's pupil, this data is recorded as missing data and this does not stop the data recording. Often, the eye tracker will regain tracking status of the participant's pupil and data recording will begin again within a few

seconds following a glance away from the computer screen.

4.3 Materials

Usability testing required the use of various testing materials. Testing materials included the following items provided in the appendices. There were sixteen different prototypes corresponding to different possible ways of displaying the data reliability indicator and different ACS data products. For this round of testing, the following ACS data products were tested: Data Profile, Selected Population Profile, Subject Table, Detailed Table, and Geographic Comparison. Versions of these prototypes are available in Appendix A. Following the initial probe item (i.e., “What is the first thing that that you noticed about this table?”), the tasks for each prototype were tailored to the geography and type of table being tested (see Appendix B).

Prototypes

Sixteen tables with different versions of a three-level data reliability indicator were tested in this third-round investigation. Some tables had a data reliability indicator legend above the table and some had the legend located behind a “View Table Notes” link. This comparison was made because a meeting with members of the Census Bureau’s Data Access and Dissemination System Office (DADSO) revealed that because of lack of free space on the ACS data tables currently available through American Factfinder (AFF), the legend may have to be placed behind this link in order to implement the data reliability indicator. Also, some prototypes used color-coding in the the data reliability indicator, while some used only text without color. Some prototype tables had “Reliable” listed first in the reliability indicator legend, while some had “Not Very Reliable” listed first in order to test the “stoplight” analogy associated with the data reliability indicators. That is, we wanted to see whether participants would have trouble understanding and using the indicator if the order of the colors was reversed from a traditional stoplight. The prototypes from this round of testing can be found in Appendix A.

Tasks

Members of the ACS data-reliability indicator team created the tasks, which can be found in Appendix B. The tasks are designed to capture the participant’s interaction with, and reactions to, the design and functionality of the ACS data reliability indicators. The first question asked of the participants is not a task in the traditional sense because it asks them to report the first thing that they notice about the tables, so it is called the “initial probe” question and is not considered an official task. The rest of the tasks were designed so that the participant would look for estimates that were located in different areas of the table.

General Protocol

Each participant was read a general protocol, which can be found in Appendix C. The test administrator read some background material and explained several key points about the

session. The general protocol emphasizes that the participant’s skills and abilities are not being tested, but that the participant is helping in an evaluation of the data table’s overall usability.

Consent Form

Prior to beginning the usability test, the participants completed a general consent form supplied in Appendix D. The consent form documents the participant’s agreement to permit videotaping of the testing session and states that the study is authorized under Title 13 of the U.S. Code.

Questionnaire on Statistical Experience, Computer Use and Internet Experience

Prior to the usability test, the participant completed this questionnaire, which gathered information on the participant’s demographics, experience using statistics, computer use, and Internet experience (Appendix E). This information helped us determine whether there is a relationship between these three experience factors and performance and preference scores found during testing.

Questionnaire for User Interaction Satisfaction (QUIS)

The original version of the QUIS includes dozens of items related to user satisfaction with a user interface (Chin et al., 1988). In a usability test at the Census Bureau, SRD typically uses 10 to 12 items that the usability team has tailored to the particular user interface being evaluated. This study used a modified version that includes items worded for the ACS data-reliability indicators context (Appendix F). The experimenter handed the QUIS to the participant at the same time as the task-difficulty rating questionnaire (below).

Task-Difficulty Rating Questionnaire

Participants were asked to provide a difficulty rating for each task, which was used for validation of the “medium” versus “hard” designation during analysis. This short survey can be found in Appendix G.

Debriefing Questions

After completing the tasks, the experimenter read aloud debriefing questions to the participants about their overall experience using the prototype ACS Data Reliability Indicator (Appendix H). The debriefing questions included an inquiry about each participant’s color vision. These questions are included in the debriefing segment of the protocol following testing and not included in the survey administered to the participants before testing so as not to prime them to focus intentionally on color during testing.

Procedure

Each participant was escorted to the usability lab at the U.S. Census Bureau headquarters building in Suitland, Maryland. Upon arriving, the participant was seated with the test

administrator in the testing room (5K512). The test administrator greeted the participant, thanked him or her for his or her time, and read the general introduction. Next, the participant read and signed the consent form. After signing the consent form, the participant completed the questionnaire on demographics, experience with statistics, computer use and Internet experience.

Since this test used the eye-tracking device, the participant's eyes were calibrated after the general protocol was read and the consent form was signed. Calibration was usually completed in about fifteen to twenty seconds by having the participant look at a dot moving across the computer screen. Once calibration was completed, the test administrator exited the room and continued the testing process from the control room (5K509).

Following calibration, the participant began to complete the tasks on the ACS data reliability indicators prototype. At the start of each task, the participant read the task aloud. While completing the task, the participants were encouraged to think aloud and share what they were thinking about the task. This interaction was not intended to be a conversation. If at any time the participant became quiet, the test administrator probed the participant about what they were looking for in the table. The content of the so-called "think-aloud" protocol allows us to gain a greater understanding on how the participant is completing the task and to identify issues with the tables. In order to make sure that the participants understood what was expected by the instruction to think aloud, they engaged in a practice think-aloud task where they walk through their thought process while performing a task using a commonly accessed Web page (the end of Appendix C).

At the conclusion of each task, the participant stated a "final answer" to the task. During the task or while watching the tapes of the sessions at a later time, the test administrator noted any observable struggles or other noteworthy behaviors, including comments and body language. After the participant completes all tasks, the eye-tracking device was stopped, the test administrator returned to the testing room, and the video recording continued. The participant then completed the modified QUIS and task-difficulty rating questionnaire silently. When the participant completed the two paper forms, the test administrator asked the participant a series of debriefing questions (Appendix H). At the conclusion of the usability evaluation, the video recording was stopped. Overall, the usability session ran between 45 and 60 minutes.

5 Results

5.1 Accuracy

Table 1 shows the average accuracy scores by table type and whether Usability Goal 1 of 80% correct responses was met. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color-coding. The location of the legend was manipulated for the Data Profile, Selected Population Profile, Subject, and Geographic Comparison tables. The order of the colors in the data reliability legend was manipulated for the Selected Population Profile and Geographic Comparison tables. Whether or not the tables were color-coded was manipulated for the Data Profiles and the Detailed Tables. Responses were considered correct if the participant reported the correct estimate from the table. Table 1 shows that the usability goal was met for each of the different conditions. This provides some evidence that the data reliability indicator has about the same level of impact across these different methods of displaying it. However, the goal was not met for all data products; the Selected Population Profile tables had an accuracy score of 72% and the Detailed Tables had a score of just 67%.

Table 1: **Accuracy Scores by Table Type**

Table Type	Tasks	Average Score	Goal Met?
Legend Above Table	73	86%	Yes
Legend Behind Link	60	90%	Yes
No Color	35	83%	Yes
Color	42	83%	Yes
Red First	32	90%	Yes
Green First	32	81%	Yes
Data Profile	49	88%	Yes
Selected Pop. Profile	32	72%	No
Subject Table	14	93%	Yes
Detailed Table	21	67%	No
Geographic Comparison	27	100%	Yes

5.2 Efficiency

The start and stop times for the different tasks were obtained from the time stamps on the eye-tracking data in order to calculate average completion times for the tasks. The tasks were rated by the usability staff and the sponsor team before testing began as being easy, medium, or hard in difficulty. The average efficiency score for the easy tasks for across all participants and all tables was 2.3 minutes, the average score for the medium tasks was 2.0 minutes, and the average efficiency score for the hard tasks was 2.4 minutes. The goal was for participants to take 1 minute for an easier task, 2 minutes for a medium task, and 3 minutes for a harder task. The goal was met for the medium and hard tasks, but not for the easy tasks. This finding may be related to participants having difficulty using the different data products in general and may not be directly related to the data reliability indicator itself.

Table 2 shows the efficiency scores by condition and whether or not the efficiency goal for the easy, medium, and hard tasks were met for that condition. Efficiency averages were only calculated for the tables where each condition was specifically manipulated. The efficiency goals were not met for the easy tasks when the legend was behind the “View Table Notes” link, the easy and medium tasks when the legend was above the table, the easy tasks for both color orders, the easy tasks for the black and white table, or the easy and medium tasks for the tables with a color-coded data reliability indicator.

Table 2: **Average Efficiency Scores by Difficulty Rating**

Condition	Difficulty	Average Eff. (min)	Goal Met?
Legend Above Table	Easy	2.4	No
	Medium	2.3	No
	Hard	2.7	Yes
Legend Behind Link	Easy	2.5	No
	Medium	1.6	Yes
	Hard	2.0	Yes
No Color	Easy	2.1	No
	Medium	1.9	Yes
	Hard	2.1	Yes
Color	Easy	2.1	No
	Medium	2.1	No
	Hard	2.7	Yes
Red First	Easy	2.1	No
	Medium	2.4	No
	Hard	2.3	Yes
Green First	Easy	2.4	No
	Medium	3.0	No
	Hard	1.9	Yes

The efficiency goal for the easy tasks was not met by any of the conditions, although it was met for the hard tasks for all of the conditions. Since ACS users in the field would

presumably be more likely to consult the data reliability indicator for harder problems, the fact that the goal was met for the harder tasks is a positive result. The easy and medium tasks may have been more difficult than anticipated.

Table 3 shows the average efficiency scores for easy, medium, and hard tasks broken down by table type and whether or not the usability goal for efficiency was met.

The usability goal for efficiency was not met for the easy or medium–difficulty tasks for the Data Profile tables, any of the tasks for the Selected Population Profile tables, the easy tasks for the Subject Tables, the easy tasks for the Detailed Tables, or the easy tasks for the Geographical Comparison tables.

The efficiency goal set for the easy tasks was not met for any of the table types, and there was no table type that met the goal for all the easy, medium, and hard tasks. The medium tasks for the data profiles had the highest completion times. Again, both of these results could indicate that the tasks, especially the easy and medium–difficulty tasks, were more difficult than anticipated. Also, this may reflect that using ACS data tables overall is more difficult than originally thought. Another possibility is that the participants were inexperienced with using this type of table.

Table 3: **Average Efficiency Scores by Difficulty Rating**

Table Type	Difficulty	Average Eff. (min)	Goal Met?
Data Profile	Easy	2.4	No
	Medium	5.0	No
	Hard	2.4	Yes
Selected Pop. Profile	Easy	2.9	No
	Medium	3.1	No
	Hard	3.2	No
Subject Table	Easy	1.6	No
	Medium	1.4	Yes
	Hard	2.7	Yes
Detailed Table	Easy	1.1	No
	Medium	2.0	Yes
	Hard	2.5	Yes
Geographic Comparison	Easy	2.4	No
	Medium	1.3	Yes
	Hard	1.2	Yes

Table 4 shows the average efficiency scores in minutes by table type and across all easy, medium, and hard tasks. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color–coding. It is noteworthy that the participants using tables with the legend above the table took 30 seconds longer (i.e., 25 % longer) to complete tasks than did participants using tables with the legend behind the link. It is possible that including the legend could be distracting to participants and

increases the amount of time they take to complete the tasks. Overall, there were several conditions where the efficiency goal was not met for this round of testing. Since the last two rounds of testing showed no differences between efficiency performance when participants have a data reliability indicator versus when they are using a table without one (Ashenfelter et al., 2009; Ashenfelter, 2010), it is likely that the failure to meet the efficiency goals for the easy tasks is related to the table complexity and not to the data reliability indicator itself. Although they are similar, the tasks and tables used in this round of testing are not the same as in previous rounds and may have been more difficult.

Table 4: **Efficiency Scores by Table Type**

Table Type	Tasks	Average Eff. (min)
Above Table	76	2.5
Behind Link	61	2.0
No Color	39	2.1
Color	46	2.3
Red First	30	2.5
Green First	29	2.2
Data Profile	56	2.1
Selected Pop. Profile	31	3.0
Subject Table	14	1.8
Detailed Table	21	2.0
Geographic Comparison	28	1.6

Looking at the efficiency results by table type, the key result is that the participants using tables with the reliability legend above the table took 30 seconds longer to complete the tasks than those with the legend behind a link. It is possible the legend could have a slightly negative impact on efficiency, possibly being a distracting element. Also, participants in the Selected Population Profile condition took about twice as long to complete their tasks as did the participants in the Geographic Comparison condition.² The Selected Population Profile tables are the longest tables vertically and require the most scrolling, which could have impacted the participants' efficiency scores.

5.3 Satisfaction

The overall mean of the satisfaction scores for this round of testing with 21 participants was 6.23, which is above Usability Goal 3 of having at least a score of 5 on the scale. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color-coding. The mean satisfaction score for tables with the

²A one-way ANOVA ($F(4, 145) = 6.60, p < 0.001$) revealed at least one significant difference between the tables. Post-hoc Tukey's test showed that the Selected Population table had significantly longer efficiency scores than the Data Profiles tables (Mean Difference=55 seconds, $p = 0.005$), the Subject Tables (Mean Difference=71 seconds, $p = 0.014$), the Detailed Tables (Mean Difference=64 seconds, $p = 0.010$), and the Geographic Comparison tables (Mean Difference=86 seconds, $p < 0.001$).

reliability legend above the table was 6.1 (n=78)³ and the mean score for table with the reliability legend behind the “View Table Notes” link was 6.1 (n=62).

The mean satisfaction score for the tables with color-coding was 6.7 (n=40) and the mean score for tables with no color-coding was 5.9 (n=40). This is a somewhat large difference in score and indicates that there was more overall satisfaction for the color-coded indicator and is consistent with several participants making the comment that they liked the colors.

The mean satisfaction score for the tables where the red/unreliable indicator came first (i.e., was on “top”) on the indicator legend was 5.1 (n=31). The mean score for the tables where green/reliable was first was 6.8 (n=31).

The Detailed Tables had a mean satisfaction score of 6.0 (n=63), the Selected Population Profile tables had a mean score of 6.3 (n=31), the Subject Tables had a mean score of 6.9 (n=15), the Data Profiles had a mean score of 7.1, and the Geographic Comparison tables had a mean score of 5.6.

The participants met the usability satisfaction goal of at least a 5 on a 9-point scale for every condition.

The participants were allowed to write in open-ended comments for the last item of the satisfaction survey. Here are the comments received along with the table assigned to the participant that were directly related to the data reliability indicator. All comments that pertain to the tables themselves and not to the indicator can be found in Appendix I.

Data Profiles

- A3: location of reliability. Column affected ease of reading estimate and % estimate. Would prefer to see reliability column on left or right margin rather than in [the] middle.

Subject Tables

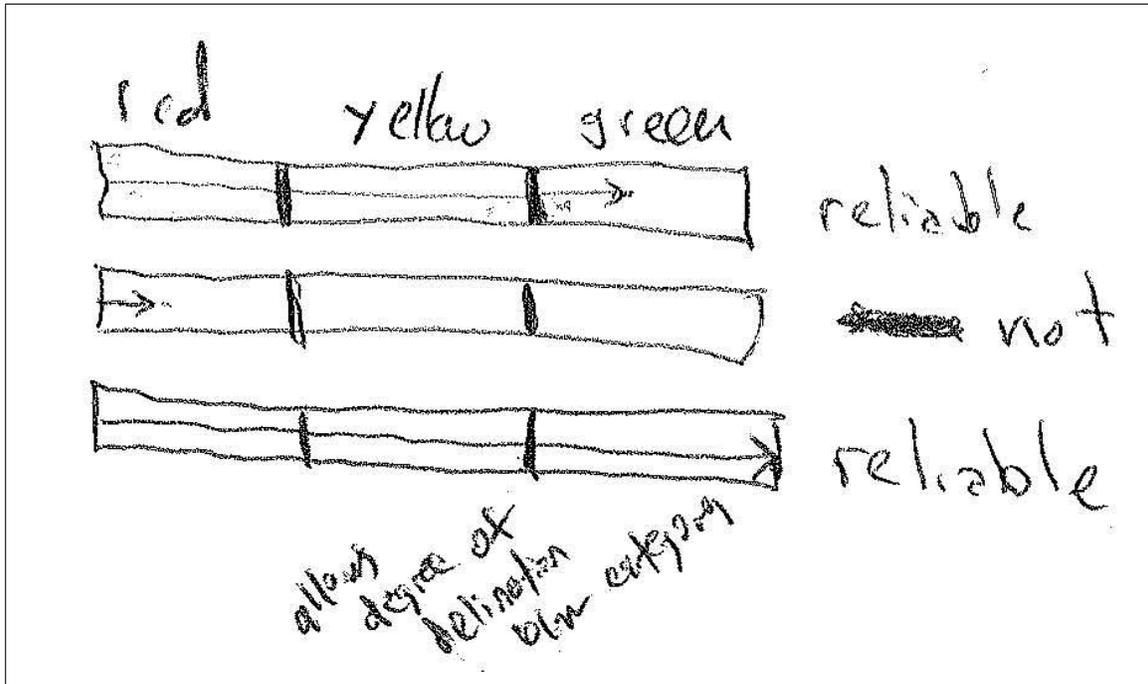
- C2: I didn’t even look at the definition of reliability. Sorry about that. I found the table mostly easy to read. I would however recommend that the need for scrolling be reduced if possible.

Geographical Comparisons

- E1: 1) It would be useful to have an * describing & defining: % (percent), reliability, m.o.e (i.e. is margin of error + or - the percent? Or is it linked to reliability?). 2) could the reliability be something like this: [see graphic drawn by participant 12 in Figure 1]. The red & green are pretty distracting. *Note: The legend was behind the link for this participant.*

³Where n is the number of satisfaction questions completed across all participants who saw this table.

Figure 1: Participant Suggested Indicator Revision



E2: It would have been helpful to have a definition for the reliability categories. Why was some data listed as reliable and others 'somewhat' or 'not at all' particularly if the information was ultimately coming from the same source. *Note: The legend was behind the link for this participant.*

E3: I think I might've noticed the reliability def. in the upper right corner but I didn't read it - it didn't really stand out.

5.4 Task Difficulty

Participants completed a task difficulty rating scale after they completed them. Difficulty was rated on a scale from 1 to 9, with 1 being very easy and 9 being very difficult. Table 5 shows the average task difficulty score for each data product tested.

Table 5: **Overall Task Difficulty by Data Product**

Table Type	Tasks	Average Eff. (min)
Behind Link	61	2.0
Above Table	76	2.5
No Color	39	2.1
Color	46	2.3
Red First	30	2.5
Green First	29	2.2
Data Profile	56	2.1
Selected Pop. Profile	31	3.0
Subject Table	14	1.8
Detailed Table	21	2.0
Geographic Comparison	28	1.6

Table 6 shows the average task difficulty for each task broken down by whether the data reliability indicator legend was displayed above the table, or behind the “View Table Notes” link. Although the average task difficulty for the tables with the data reliability indicator legend above the table was equal to the that of the tables with the legend behind a link for the Selected Population Profiles, it was considerably higher for the other data products. This key finding may indicate that adding a legend that is constantly visible above the table may make completing the tasks more difficult. This is consistent with the finding that tables with the legend above the table were also associated with longer efficiency time. It is possible. that showing the legend above the table could potentially have a negative impact on users’ interaction with the table. If that is the case, having the legend behind the link would likely not be problematic. However, usability best practices would suggest that the legend be present somewhere so that data users who are searching for this information can find it.

Table 6: Task Difficulty Scores by Location of the Data Reliability Legend

Table Type	Task	Above Table	Behind Link	Initial Rating
Data Profile	1	3.2	2.3	Easy
	2	4.2	2.3	Easy
	3	3.6	3.0	Medium
	4	5.0	2.0	Hard
	5	4.8	3.0	Medium
	6	5.8	3.0	Medium
	7	5.4	3.0	Medium
	8	<u>8.0</u>	<u>3.7</u>	Hard
	mean	5.0	2.8	
Selected Pop. Profile	1	1.0	8.0	Easy
	2	2.5	1.0	Easy
	3	1.0	1.0	Easy
	4	4.5	1.0	Hard
	5	4.0	4.0	Hard
	6	2.5	1.0	Medium
	7	1.0	1.0	Medium
	8	<u>3.0</u>	<u>1.0</u>	Hard
	mean	2.1	2.1	
Subject Table	1	2.0	2.0	Easy
	2	4.0	1.0	Medium
	3	1.0	3.0	Easy
	4	2.0	2.0	Hard
	5	6.0	1.0	Medium
	6	7.0	1.0	Hard
	7	<u>4.0</u>	<u>1.0</u>	Medium
	mean	3.7	1.6	
Geographic Comparison	1	1.0	1.5	Easy
	2	4.5	2.5	Medium
	3	7.0	2.5	Hard
	4	3.0	2.0	Medium
	5	4.5	2.0	Medium
	6	7.0	3.5	Hard
	7	<u>4.5</u>	<u>4.5</u>	Easy
	mean	4.5	2.6	

There were several instances when the average difficulty rating was at odds with its original difficulty categorization. For instance, task 1 for the Selected Population Profiles had an average task difficulty rating of 8.0 out of 9.0 points for the tables where the legend was behind the “View Table Notes” link, which indicates that that this task was not considered easy by the participant who saw this table. This question was “The National Organization for Young Adults is considering opening a chapter in Anytown, USA. They first want to know what the estimate for the number of people in Anytown that are ages 18 to 34 is. What would you tell them? ” This question may need to be revised to be more clear and specific if used in future rounds of testing.

Table 7 shows the average difficulty scores broken down by whether the green/reliable or red/not very reliable category was listed first in the data reliability indicator legend.

Table 7: Task Difficulty Scores by the Order of the Levels of the Reliability Legend

Table Type	Task	Red First	Green First	Initial Rating
Selected Pop. Profile	1	1.0	4.5	Easy
	2	4.0	1.0	Easy
	3	1.0	1.0	Easy
	4	8.0	1.0	Hard
	5	7.0	2.5	Hard
	6	1.0	2.5	Medium
	7	1.0	1.0	Medium
	8	<u>5.0</u>	<u>1.0</u>	Hard
	mean	3.2	1.8	
Geographic Comparison	1	1.5	2.0	Easy
	2	3.0	4.0	Medium
	3	4.0	5.5	Hard
	4	3.5	2.0	Medium
	5	4.5	2.0	Medium
	6	5.0	5.5	Hard
	7	<u>3.1</u>	<u>3.4</u>	Easy
	mean	4.5	2.6	

Table 8 shows the average difficulty rating broken down by whether the table was color-coded or not.

Table 8: Task Difficulty Scores by Whether the Reliability Indicator was Color-Coded

Table Type	Task	No Color	Color	Initial Rating
Data Profile	1	3.8	2.0	Easy
	2	4.5	2.5	Easy
	3	4.0	2.8	Medium
	4	5.3	2.5	Hard
	5	4.5	3.8	Medium
	6	5.5	4.0	Medium
	7	6.0	3.0	Medium
	8	<u>6.5</u>	<u>6.3</u>	Hard
	mean	4.8	3.3	
Detailed Tables	1	2.0	3.5	Easy
	2	4.0	3.5	Easy
	3	1.0	6.5	Hard
	4	3.0	3.0	Hard
	5	2.0	3.5	Medium
	6	2.0	4.5	Medium
	7	<u>8.0</u>	<u>3.5</u>	Hard
	mean	3.1	3.8	

5.5 Usability Findings

Successes

Although usability testing often reveals usability issues, it also can highlight the strengths of the data product being tested. The data reliability indicator had several strengths that came through during the sessions.

- Easily understood stoplight analogy

Although participants may not have understood exactly what was meant by statistical reliability, they did pick up on the relative meaning of the color-coded indicator. This meaning was supported by analogy with a red-yellow-green traffic stoplight. Just as in prior rounds of testing, some participants specifically mentioned a stoplight when commenting. Participant 5 said, “Well now thinking about it, they seem to correlate with streetlights, green being go ahead, it’s very positive. Yellow is somewhat mediocre, and red is not at all good or stop. So I guess that makes intuitive sense to me.” Participant 7 made the remark, “I would assume red is bad and green is good, and yellow is neutral.”

- Attractiveness of Added Color

Eye-tracking analysis from all three rounds of testing showed that participants’ eyes were drawn to the color-coded reliability column. Participant 14 commented during the initial probe question about what they noticed first about the tables, “Um, I guess the reliability column because it’s really bright and sort of stands out.” Participant 7 commented during the initial probe question, “The first thing I notice would be the color scheme, red, yellow, and green shaded boxes.”

Many participants commented that they liked the colors themselves because they added a splash of color and aesthetic appeal to the tables. Participant 6 said that colors are good to use to convey information because they are universal and “I love the colors, I’m a color person. I love it.” Participant 7 commented, “I think the use of color is always good in terms of making things clear and helping people focus. So it quickly alerts you to I guess the type of info like how good the information is. I honestly looked at that before I even saw what the table was for.”

- Participant Use of the Data Reliability Indicator

The data reliability indicator was successful in that participants did use it. It is possible that this indicator would be very helpful to statistical novices and they may use the indicator even though they would not normally use the MOE or another measure of error. Participant 12 said during the first task, “I’m not looking at the MOE or the percent. I’m just letting the reliability column do the thinking for me.” Participant 18 understood the general meaning of the indicator, but said that when the indicator shows not very reliable, that you can’t really use estimate. This is evidence that although the participant used the indicator, they saw the “Not Very Reliable” as an instruction not to use the estimate rather than to carefully consider the context of its use.

Usability Issues

Results reported include all identified usability issues and resolutions recommended by the team. Additional Comments by participants can be found in Appendix I. Identified issues are prioritized based on the following criteria:

- **High:** This problem brought the participant to a stand still. He or she was not able to complete the task. For this study, a high-priority issue can also be one where the data reliability indicator was not being applied correctly or there was a fundamental misunderstanding of its meaning.
- **Moderate:** This problem caused some difficulty or confusion, but the participant was able to complete the task.
- **Low:** This problem caused minor annoyance but does not interfere with the flow of the tasks.

High-Priority Issues

- Confusion of Statistical Reliability with Lack of Confidence in the Source or Quality of the Data

Some participants made comments that showed that they associated the “Not Very Reliable” indicator with low-quality data or data that came from an unreliable source (i.e., “good” versus “bad” data). Participant 7 said, ‘It says red is not very reliable so I assume the source of the data is not the best.’ When probed about what the meaning of the colors was, Participant 10 said it was “just good data versus bad data or the strength of the information.” Participant 13 said, “So reliable means to me that the data is very reliable, somewhat reliable there’s a margin of error, and not very reliable means no that data’s not very reliable at all.” Later, the same participant was probed about what she thought the definition of reliability was and responded, “I would expect um reliable to say, reliable means 100 percent of the data is consistent or factual. Somewhat reliable being 90 percent of the data 80 percent of the data is factual, and not very reliable so I would like to see some type of number associated with the ranges of reliability and not very reliable.”

- Vagueness of “Somewhat Reliable”

Several participants commented that they were not sure what “somewhat reliable” meant. Without a clear definition or the inclusion of information about the cutoff CV values, the meaning of this middle category may not be straightforward to users. As a result, they may not use an estimate that would have been appropriate to use in the context of their goals. Participants who made this comment did make the correct

assumption that this category was between “reliable” and “not very reliable” in terms of statistical reliability. However, a few people also made the comment that they were uncertain about whether or not to use an estimate as the answer to a task because they were unsure how large the difference between “reliable” and “somewhat reliable” was. Some participants also said they could justify the use of “not very reliable” data if they could tell if it were near the threshold for “somewhat reliable.” Participant 12 said, “I would not recommend [the reliability indicator] because I don’t understand um how close um the somewhat reliable versus the reliable um are, in relation to one another.” Participant 7 made a detailed comment:

“The transportation data is not very reliable and the education data is somewhat reliable but it’s difficult to use it to make any determination about the answer they’re both pretty subjective, I don’t know the threshold between somewhat and not very or what that means in terms of numbers, especially when the two numbers are close together. Oh I guess I can say, well I guess that’s why, the transportation data has a higher margin of error, I guess that’s why it’s not very versus somewhat. But I’m still not exactly sure about what type of index or what those numbers mean in later columns for margin of error oppose to beginning where it seems to be a whole number.”

It did not seem to make a difference whether the participants saw the indicator legend or not. During debriefing, participants who did not see the legend by clicking on the “View Table Notes” link were shown the legend and asked if it would have been helpful. The majority of participants said that it did not contain enough information about what reliability meant to be of much use.

- Unintuitive Nature of Legend Without Color Where Reliable is Listed First

Related to the usability strength of the intuitive stoplight analogy described above, two participants commented that the analogy does not hold when the color is removed. The dry run participant saw this type of legend and said she was surprised to see “Not Very Reliable” listed first and had to “reverse it in her head” in order to make sense of it. Participant 7 saw a legend with the color-coding and “Not Very Reliable” listed first and also thought having this category first was not intuitive. This participant recommended placing “reliable first because without color it doesn’t make sense to people.”

While this may not be an issue for users who have accessed the tables before and are familiar with their layout, it may be a problem for the novice data user. This is another issue with the table itself and not necessarily with the data reliability indicator, but the data reliability indicator is likely not to be used correctly if the correct estimate is not found.

Medium–Priority Issues

- Uninformative Nature of Reliability Legend

Several participants commented that there was not enough information about the CV, the cutoff values used for the indicator levels, and the definition of reliability. Although some participants never even saw the legend, it did not seem to impact their ability or inclination to use the reliability indicators when compared to the sessions where the participants saw and read the legend. Participant 4 said “If I could click on something, just to read why, why is this reliable?” During debriefing, Participant 4 also said, “I did, I also tried to click on reliability. Cause sometimes, especially when it’s blue I thought that I would be able to sort based on that. Um, and I thought that maybe there would be a pop up saying ‘Reliability is this’.” Participant 5 commented, “Yeah, I mean I like it [reliability], but I didn’t know what it actually meant.” Participant 7 remarked, “I guess.. it seems subjective, so if there were some of key or index that had even if it was a numeric range like things with a MOE of zero to five are considered reliable, even though I don’t necessarily know what that means. But it would give it some sort of qualifying description; it seems like anyone could’ve just drawn a line and say that’s reliable and that’s not reliable and I have no idea where that line is drawn or how or why.” Participant 13 said, “I’m a little confused as to what the reliability factor pertains to.” The experimenter asked the probe question “What are you confused about?” The participant continued, “The reliability of what? The data itself? What being reliable as far as the percentages, are we looking at the margin of error, like what does the reliability factor pertain to, that data is not very reliable based on what, or it’s very reliable but what are we basing that on, the reliability factor?” Participant 19 remarked that there should be numerical values defining the reliability categories, “Again, I don’t really know what that reliability means, I don’t know if there’s a p-value you can put in there or what not, um, test of significance, but I guess I would say it is that score but how reliable. I don’t know what that metric means. Except I know it lists some legend, but again there’s no numerical values attached to it.”

A related issue is that it is unclear how the estimate, percent, MOE, and reliability columns are related to one another. Participant 12 said, “On all of them [tasks] I just find myself going percent, margin of error, not really understanding how they relate to reliable.” Participant 15 used the MOE and reliability indicator interchangeably and called the Margins of Error “reliabilities.”

- Small Font Size

A majority of the participants across all of the conditions remarked that the font size was small. Several had difficulty reading the table contents. However, this problem may have been an artifact of the manner in which the tables were converted to HTML files for testing. The tables were embedded as images into Web screens. If the tables were fully functional as they would be in American Fact Finder (AFF), the tables

would have the ability to be adjusted to fit a user's preferences more readily.

Low Priority Issues

- View Table Notes

Twenty of the twenty-one participants never clicked on the “View Table Notes” above the upper right corner of the table. Participant 10 actually looked for a legend and did not find it behind the link. Participant 13 said, “As I’m reading through this, by clicking on that link [view table notes], that still would not have given me a better understanding of what a reliability the reliability columns really refers to.”

This issue was especially clear in the wide subject tables (C1 and C2), since participants could potentially never scroll the browser to the point where they could see it. However, since there was no significant difference in performance whether they saw the legend or not, this issue becomes low-priority.

The dry run participant said that she would have clicked on the MOE row header to look for information about reliability. Duplicate links on the MOE and Reliability column headers could help users find the table notes more easily. Participant 19 also said that he would prefer if he could click or mouse over the column headers for more information about the MOE and Reliability.

When shown the reliability legend during debriefing, Participant 4 said, “Maybe it’s just the title, ‘view table notes.’ Maybe if it were like ‘view table definitions’ or something like that, that would make me think that, ok, this means they are explaining something on the table. A table note makes me think that, oh, it’s just something like I can save my notes.” During debriefing, Participant 5 made a similar comment, “I wouldn’t have gone to view table notes to learn about reliability.”

- The Color Coding is Potentially Distracting

As with the previous round of testing, a participant commented that the colors were distracting while completing the tasks. Participant 12 commented that colors distract from reading title; “Oh, you know what, since the colors are so dramatic, I’m just realizing that I didn’t even read the title on this page which is pretty bad” and “I guess it just shows you jump to reading things that pop out.” Participant 16 was drawn to the reliability indicator and did not notice the MOE column. Participant 16 said, “You’ve got these lovely green, yellow, red categories defining reliability instead of giving margins of errors.” When shown a color-coded table and legend after completing the tasks for a table with no color-coding, Participant 21 said that she would prefer the table without color-coding because the “color is intense.”

6 Eye–Tracking Results

6.1 Fixation Durations on Areas of Interest

Location of Data Reliability Indicator Legend

Table 13 shows the fixation durations for the tables where the data reliability indicator legend was above the table versus behind a link. Most notably, the participants who saw tables with the legend above the table looked at the Data Description (row name) for 17.72 seconds on average, which is much longer than the average of 7.43 for the participants who saw tables with a legend behind the link name.

Table 9: Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Data Profiles

AOI	Legend Above Table (A3,A4)	Legend Behind Link (A1,A2)
Column Headers	0.77	0.69
Data Description	17.72	7.43
Estimate	7.84	5.61
Estimate MOE	5.02	2.70
Estimate MOE Link	0.10	0.05
Estimate Reliability Link	0.10	0.13
Information Icon	0.00	0.01
Percent	5.05	3.23
Percent MOE	1.13	1.53
Percent Reliability	1.39	1.89
Percent MOE Link	0.07	0.10
Percent Reliability Link	0.14	0.07
Table Information	0.90	0.35
Table Source	0.12	0.01
Top Links	0.24	0.14
Top Tabs	0.10	0.15
View Table Notes	0.13	0.04
Reliability Legend	1.51	Not Applicable
Legend Levels	0.62	Not Applicable
Legend Text	1.03	Not Applicable

Table 10 shows the average fixation durations. for the tables where the data reliability indicator legend was above the table, versus behind a link. The most striking differences were that participants looked at the Two or More Races Estimate column for the tables with the legend behind a link, compared to 4.98 for the tables with the legend above the table. Similarly, participants looked at the Total Population estimate column for an average or 15 seconds for the Behind Link condition, while they only looked at this column for an average of 8.52 seconds. Participants looked at the Total Population Reliability column an average 11.73 seconds for the Legend Behind Link tables, but only 2.45 seconds for the Legend Above Table condition. This could be evidence that

participants’s eyes are drawn to the colorful reliability column itself more so than if the colorful reliability legend were also present.

Table 10: **Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Selected Population Tables**

AOI	Legend Above Table (B3,B4)	Legend Behind Link (B1,B2)
Data Description	30.42	35.83
Column Headers	0.91	2.09
Two or More Races Estimate	4.98	10.42
Two or More Races MOE	0.94	1.35
Two or More Races Reliability	1.10	1.35
Total Population Estimate	8.52	15.00
Total Population MOE	2.48	4.81
Total Population Reliability	2.45	11.73
Information Icon	2.96	3.39
Table Information	0.03	0.00
Table Source	0.03	0.00
Top Links	0.79	0.63
Top Tabs	0.45	0.32
View Table Notes	0.06	0.14
Reliability Legend	2.14	Not Applicable
Legend Levels	0.64	Not Applicable
Legend Text	0.83	Not Applicable

Table 11 shows the average fixation durations for the tables where the data reliability indicator legend was above the table versus behind a link for the Subject Tables. The largest difference between the table prototypes in terms of fixation duration was that participants looked at the Data Description column for an average 17.86 seconds for the Legend Above Table condition compared to an average 6.37 seconds for the Legend Behind Link condition. There were longer fixations on the Management, Management MOE, Management Reliability, and Service MOE for the Behind Link tables, but overall the fixation durations were fairly similar.

Table 11: **Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Subject Tables**

AOI	Legend Above Table (C2)	Legend Behind Link (C1)
Column Headers	10.08	11.86
Data Description	17.86	6.37
Information Icon	0.00	0.00
Construction	0.06	0.00
Construction MOE	0.00	0.00
Construction Reliability	0.09	0.20
Farming	0.31	0.30
Farming MOE	0.06	0.23
Farming Reliability	0.15	0.07
Management	2.13	4.52
Management MOE	1.00	3.65
Management Reliability	1.69	2.48
Production	0.00	0.00
Production MOE	0.06	0.00
Production Reliability	0.00	0.00
Sales	2.28	6.40
Sales MOE	0.22	1.64
Sales Reliability	1.09	0.94
Service	2.27	1.84
Service MOE	0.54	2.01
Service Reliability	1.26	0.46
Table Source	0.15	0.22
Table Information	0.74	1.33
Top Links	0.79	0.13
Top Tabs	0.75	0.94
Reliability Legend	Not Applicable	0.33
Legend Levels	Not Applicable	0.13
Legend Text	Not Applicable	0.13

Table 12 shows that there is a large difference in the amount of time spent looking at the Percent and Reliability columns in these tables. In fact, participants looked at every AOI longer in the Legend Behind Link condition than the Above Table condition. When the reliability legend is present, it may reduce the amount of time participants need to look at the reliability column itself while interpreting its meaning. On the contrary, participants may spend more time reading and cognitively processing the reliability column when the legend is absent.

Table 12: Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Geographic Comparison Tables

AOI	Above Table (E3,E4)	Behind Link (E1,E2)
Geographical Area	2.52	8.28
Column Headings	0.80	2.05
Information Icon	0.02	0.03
MOE	3.88	7.98
Percent	3.40	11.85
Reliability	8.54	23.92
Table Information	2.56	2.62
Table Source	0.00	0.16
Top Links	0.89	0.91
Top Tabs	0.28	0.43
View Table Notes	0.61	0.86
Reliability Legend	2.23	NA
Legend Colors	0.31	NA
Legend Text	1.37	NA

The information icon may not be very helpful, since it was hardly looked at.

Color vs. No Color

Table 13 presents the fixation durations for the tables with a color-coded data reliability indicator as compared to the tables with a plain text indicator with no color for the Data Profile Tables. For this analysis, the location of the legend was removed from the analysis, since no one saw the legend for the tables where it was behind the “View Table Notes” link. The largest difference in fixation duration between the two conditions was that participants looked at the Data Description column for an average of 16.30 for the color-coded tables, but only an average of 11.40 for the tables without color. Overall, the fixation durations on the AOIs were similar for the two prototypes.

Table 13: **Fixation Durations (in seconds): Color vs. No Color for Data Profile Tables**

AOI	Color (A1,A3)	No Color (A2,A4)
Column Headers	0.91	0.73
Data Description	16.30	11.40
Estimate	7.12	5.93
Estimate MOE	4.07	3.35
Estimate MOE Link	0.09	0.20
Estimate Reliability Link	0.10	0.13
Information Icon	0.01	0.00
Percent	4.69	4.31
Percent MOE	1.38	1.56
Percent Reliability	1.76	1.85
Percent MOE Link	0.10	0.12
Percent Reliability Link	0.03	0.19
Table Information	0.84	0.37
Table Source	0.05	0.06
Top Links	0.21	0.16
Top Tabs	0.10	0.11
View Table Notes	0.14	0.05

Table 14 shows the fixation durations for the tables with a color-coded data reliability indicator as compared to the tables with a plain text indicator with no color for the Detailed Tables. The most notable differences in the fixation durations for the two prototypes are that participants looked at the Data description column for an average of 12.28 in the Color condition versus only 6.64 for the No Color condition. Participants also fixated on the Apple County Reliability Column for 7.88 seconds on average for the Color tables as compared to only 3.96 seconds for the No Color tables. Since Apple County is the first county that appears at the left-hand side of the table, this may be evidence that participants’s eyes were initially drawn to the most colorful part of the screen. Participants looked at the Cherry County Reliability column almost twice as long for the No Color tables as they did for the Color tables, and this is the last and right-most county displayed in the table. This is consistent with participants becoming accustomed to the color-coded table.

Table 14: **Fixation Durations (in seconds): Color vs. No Color for Detailed Tables**

AOI	Color (D1)	No Color (D2)
Geography Headers	0.42	1.89
Data Description	6.64	12.28
Apple County Estimate	2.79	1.89
Apple County Estimate MOE	2.06	1.10
Apple County Reliability	7.88	3.96
Birch County Estimate	4.21	3.07
Birch County MOE	1.00	1.60
Birch County Reliability	3.67	4.56
Cherry County Estimate	1.46	2.57
Cherry County MOE	0.00	0.05
Cherry County Reliability	0.88	1.66
Information Icon	0.02	0.00
Table Information	0.92	0.47
Table Source	0.22	0.26
Top Links	0.60	0.49
Top Tabs	0.18	0.33
View Table Notes	0.04	0.07

Order of the Legend Levels

Table 15 shows the average fixation durations for the tables with the Red/“Not Very Reliable” level presented at the top of the reliability legend and the tables where the Green/“Reliable” level was displayed first for the Selected Population Profile tables. The reliability legend AOIs were removed because the tables with the legends behind the “View Table Notes” link did not have a visible AOI legend. Although the fixation durations are similar overall, participants with the Green First tables looked at the Column Headers and Total Population Estimate columns longer on average than the participants with the Red First tables. Participants in the Green First condition looked at the Two or More Races Estimate column longer on average than participants in the Red First condition.

Table 15: **Fixation Durations (sec): Red/Not Very Reliable First Versus Green/Reliable in Legend for Selected Population Profiles**

AOI	Red First (B1,B3)	Green First (B2,B4)
Data Description	33.24	32.49
Column Headers	0.71	2.33
Two or More Races Estimate	9.12	5.82
Two or More Races MOE	1.77	0.42
Two or More Races Reliability	4.64	5.07
Total Population Estimate	9.66	13.80
Total Population MOE	4.27	2.88
Total Population Reliability	6.52	7.72
Information Icon	0.00	0.07
Table Information	1.41	3.75
Table Source	0.02	0.00
Top Links	0.83	0.54
Top Tabs	0.43	0.30
View Table Notes	0.05	0.15

Table 16 shows the average fixation durations for the tables with the Red/“Not Very Reliable” level presented at the top of the reliability legend and the tables where the Green/“Reliable” level was displayed first for the Geographic Comparison tables. The fixation durations were similar overall.

Table 16: Fixation Durations (sec): Red/Not Very Reliable First Versus Green/Reliable in Legend for Geographic Comparison Tables

AOI	Red First (E1,E3)	Green First (E2,E4)
Geographical Area	4.71	6.10
Column Headings	1.51	1.34
Information Icon	0.00	0.05
MOE	6.17	5.68
Percent	7.30	8.25
Reliability	16.81	15.65
Table Information	2.11	3.07
Table Source	0.01	0.16
Top Links	0.79	1.01
Top Tabs	0.38	0.33
View Table Notes	0.65	0.82

6.2 Heatmaps

Heatmaps are visualization tools that show where participants looked most often on a stimulus, in this case the data tables. This section provides a heatmap for each of the tables. Overall, participants’ eyes are drawn most to the color-coded columns and row descriptions (data descriptions).⁴

Data Profile Tables

For tables A1, A3, and A4, the participants looked at the column headers, but the participants who saw the A4 table did not read them very carefully. The participant who saw the A2 table did not read the table’s title, while the participants in every other Data Profile Table condition did. This may be due to individual differences, since only one person saw the A2 table.

Figure 2 shows the heatmap for Table A1, Figure 3 shows the heatmap for Table A2, Figure 4 shows the heatmap for Table A3, and Figure 5 shows the heatmap for Table A4. Comparing Tables A1 and A2, the heatmap for A1 shows that participants look at the margin of error more than in the heatmap for A2, especially in the Ancestry section at the end of the table. The color-coded reliability indicator may have been attracting additional attention to the right side of the table. Participants looked at the relationship section more for table A2 than in A1 (e.g., the section is “hotter”). The color-coded reliability column could have helped participants track the rows across, requiring the participants with the A2 table to more carefully follow the row. Participants for Table A2 also looked at the column headers more than those for A1.

Comparing Tables A3 and A4, the heatmap of the columns near the color-coded reliability column in A3 appear “hotter” than those in A4, which also occurred in Table A1 more than Table A2. Again, the colors may attract additional attention to that section of the table.

Participants did appear to read the Data Reliability Indicator description in the legend. Similar reading patterns were found for tables A3, A4, B4, C2, E3, and to a certain extent, B3 and E4.

⁴It is important to note that some tables only had one participant view them. Therefore, strong conclusions about differences in the heatmaps cannot be made.

Figure 2: Heatmap for Table A1, Two Participants



Figure 4: Heatmap for Table A3, Three Participants



Selected Population Profile Tables

Figure 6 shows the heatmap for Table B1, Figure 7 displays the heatmap for Table B2, Figure 8 shows the heatmap for Table B3, and Figure 9 displays the heatmap for Table B4. Across all of the conditions but B4, the participants looked at the column headers. The participant who did not read the column headers could have had greater confusion during the session during the tasks that require a response from the “Two or More Races” column.

Figure 6: Heatmap for Table B1, One Participant



Figure 7: Heatmap for Table B2, One Participant



Figure 8: Heatmap for Table B3, One Participant

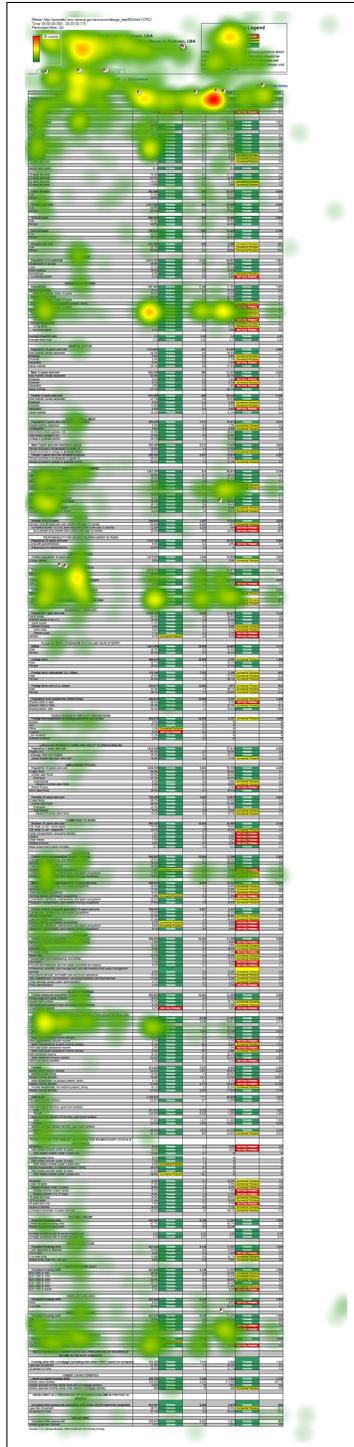
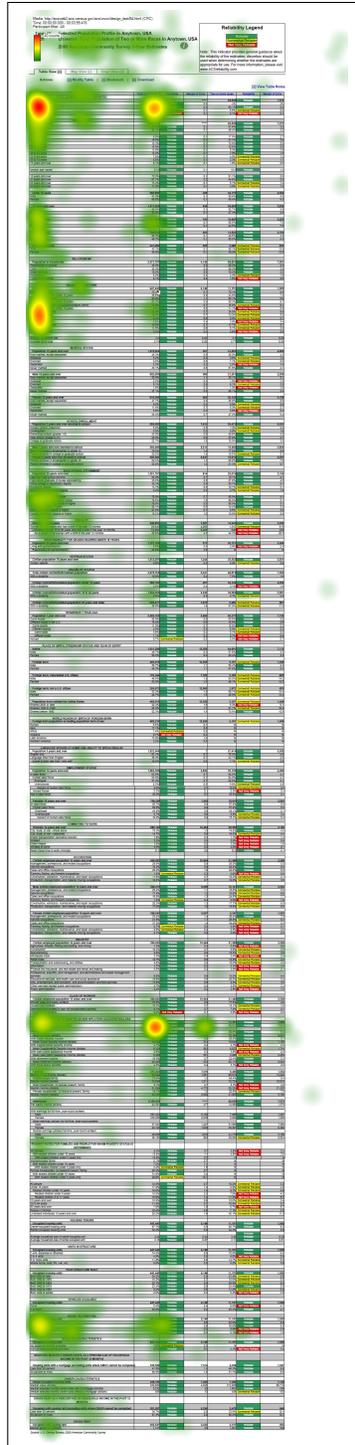


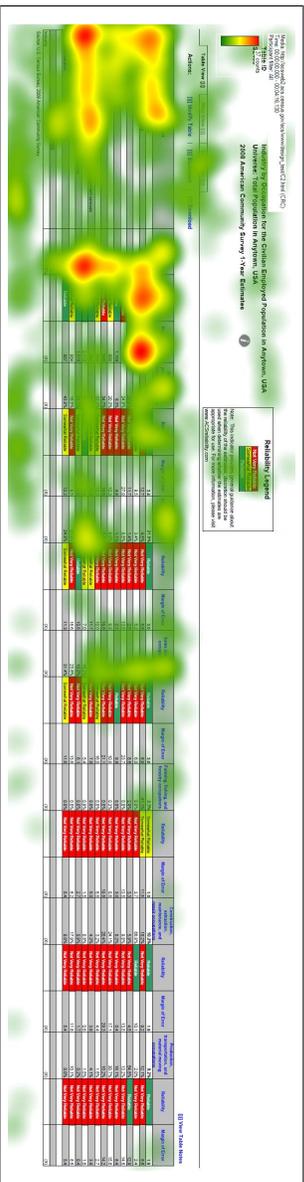
Figure 9: Heatmap for Table B4, One Participant



Subject Tables

The participants who saw the wide Subject Tables did not read the right side of the table. In order to see this area, participants would have had to scroll horizontally to the right. The requirement of horizontal scrolling goes against the commonly held usability principle to avoid horizontal scrolling whenever possible.

Figure 11: Heatmap for Table C2, One Participant



Detailed Tables

There were similar fixation patterns for both D1 and D2, which indicates that the participants who saw these tables interacted with them in a similar fashion. The main difference was that the color-coded reliability columns drew more fixations to the estimate columns in D1 than the non-color coded estimate columns in D2.

Figure 12: Heatmap for Table D1, Two Participants



Figure 13: Heatmap for Table D2, One Participant



Geographical Comparison Tables

Overall, the fixation patterns were similar for all of the Geographical Comparison Tables. The participant in E3 did not look at the margin of error often, but participants across the conditions and tables differed widely when looking at the margin of error. Differences in duration of fixation on margin of error may also depend on how long they spent trying to identify what the reliability or margin of error was determined by.

Figure 14: Heatmap for Table E1, One Participant

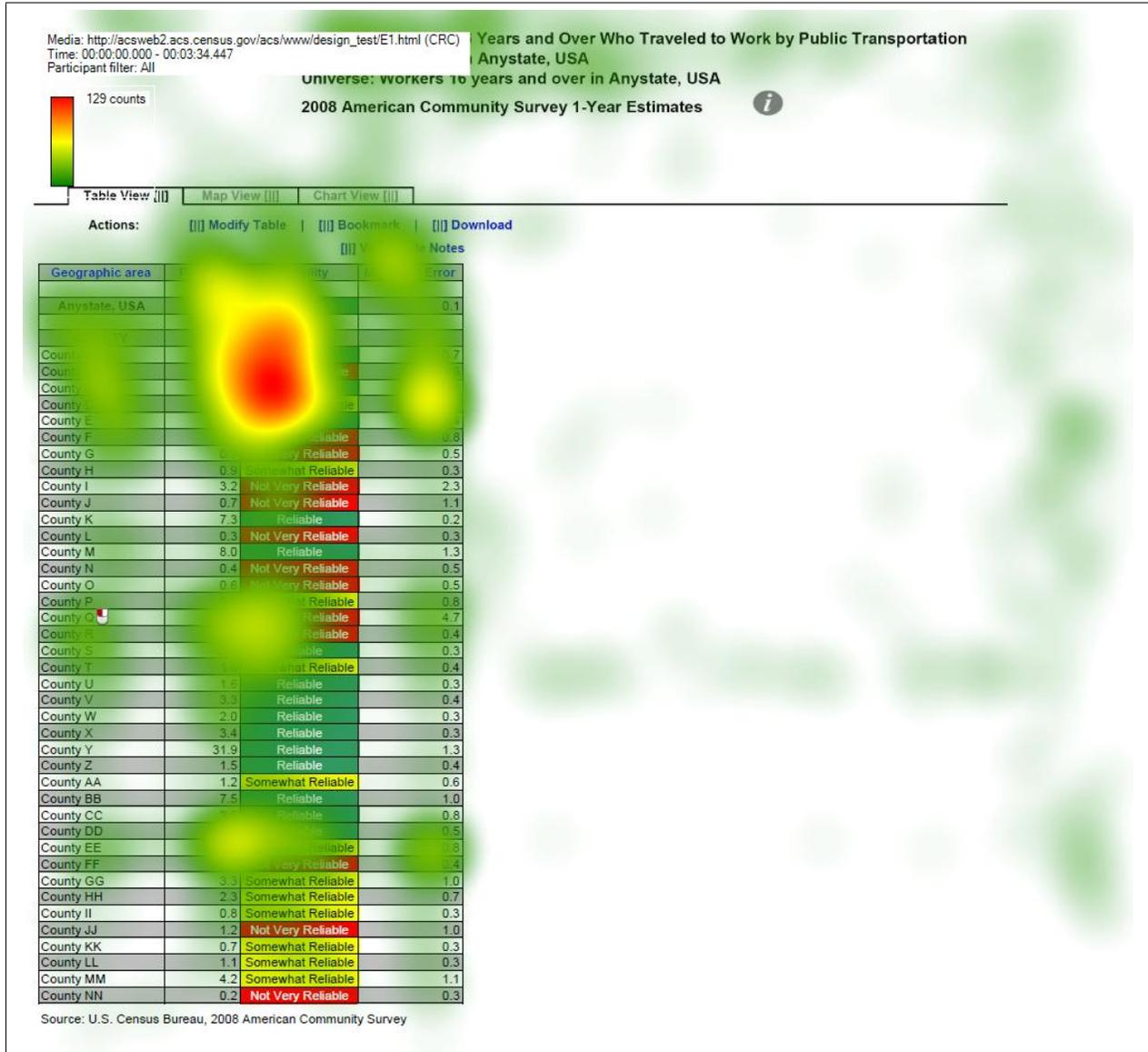


Figure 15: Heatmap for Table E2, One Participant

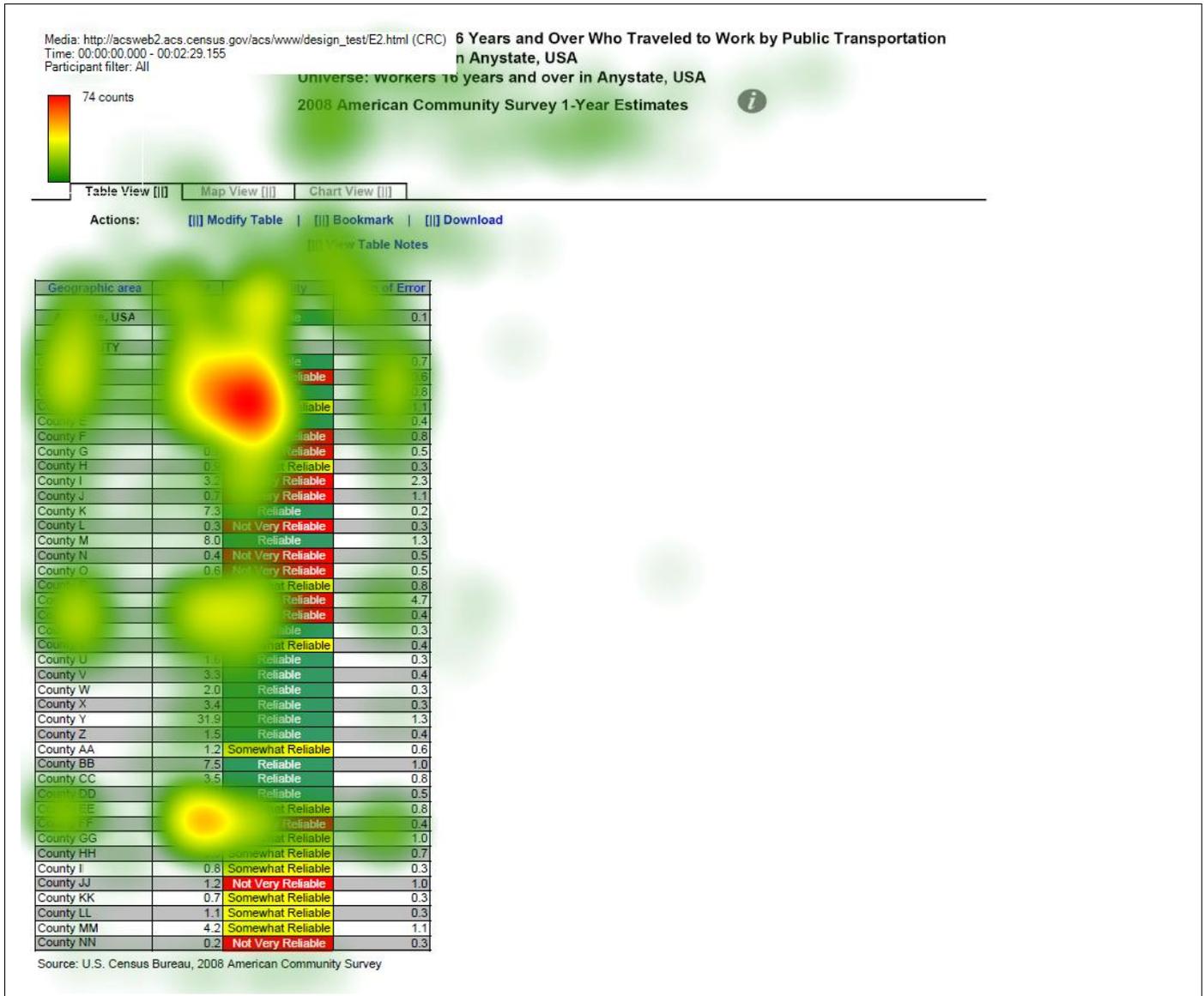


Figure 17: Heatmap for Table E4, One Participant



6.3 Summary

The participants' response to the data reliability indicators was mostly positive, as it was for the first two rounds of testing. However, there was some confusion about the indicator. For instance, some participants confused the concept of statistical reliability with a lack of confidence in the source or quality of the data or had trouble interpreting what "Somewhat Reliable" really meant.

In terms of whether the data reliability legend is displayed above the table or behind a link, "Reliable" or "Not Very Reliable" is listed first, or whether it is color-coded, the usability goals were met for accuracy of responses and users satisfaction for all of the conditions (although the goal was not met for all data products). However, the efficiency goal was not met for several of the table types.

Overall, it appears that participants can use the tables equally well whether or not the indicator has color-coding, has a legend above the table or behind a link, or whether the "Reliable" or "Not Very Reliable" indicator is listed first in the legend. Participants can use the tables with about equal efficiency whether it is color-coded or not and whether "Reliable" or "Not Very Reliable" is listed first. However, the tables with the legend placed above the table had scores that were 30 seconds longer than the scores for the tables with the legend placed behind a hyperlink.

when asked for their preference during debriefing, most participants in the text-only (i.e., no color-coding) conditions indicated that they would prefer the color-coded version .

Many participants had trouble tracking estimates across the table, reading the small text, and interpreting the meaning of "Somewhat Reliable."

As with the previous rounds of testing, there was a general sense of confusion about the meaning of "reliability" and what the cut-offs for the different levels of reliability were. Since none of the participants with the legend behind the link actually clicked on the link during testing, none of these participants saw the legend.⁵ It is unclear whether this would have been beneficial to them or not.

⁵One participant with the legend located above the table clicked on this link.

References

- Ashenfelter, K. T. (2010). Data reliability indicator based on the coefficient of variation: Results from the second round of testing. *Statistical Research Division Research Report Series*.
- Ashenfelter, K. T., Beck, J., & Murphy, E. D. (2009). Final report for first-round usability testing of data-reliability indicator prototypes. *Statistical Research Division Report Series, Report SSM2009/01*. Available from <http://www.census.gov/srd/papers/pdf/ssm2009-01.pdf>
- Chin, J. P., Diehl, V., & Norman, K. L. (1988). Development of an instrument measuring user satisfaction of the human-computer interface. *Proceedings of CHI 88: Human Factors in Computing Systems*, 213-218.
- Tersine, A. (2010). Proposal to apply a reliability indicator to ACS estimates. *U.S. Census Bureau Document: Prepared for the 2010 Census Advisory Committee and the Census Scientific Advisory Committee*.
- Tobii Technology, I. (2008). *Tobii studio enterprise edition software*.
- Whitford, D., & Weinberg, D. (2008). Proposal to highlight american community survey data with a data confidence indicator. *U.S. Census Bureau Document*.

7 Appendix A: Tables

The longer tables that scrolled down vertically have been broken up into three sections (called Top, Middle, and Bottom for the relative vertical position of the sections) for increased legibility.

Figure 18: Data Profile Table with Color-Coding and the Legend Behind a Link (A1): Top

Table ID	Selected Social Characteristics in Anytown, USA					
A101	Universe: Total Population in Anytown, USA					
	2008 American Community Survey 1-Year Estimates					
Table View Map View Chart View						
Actions: Modify Table Bookmark Download						
View Table Notes						
Selected Social Characteristics in the United States	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
HOUSEHOLDS BY TYPE						
Total households	24,459	Reliable	1,977	24.459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,598	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,182	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	558	2.9%	Not Very Reliable	2.2
With own children under 18 years	562	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.8%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,188	Reliable	1,686	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	924	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63.416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,596	17.8%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,745	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25.327		(X)
Never married	8,944	Reliable	1,833	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28.143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,063	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.0%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren	N		N	N		N
Less than 1 year	N		N	N		N

Figure 19: Data Profile Table with Color-Coding and the Legend Behind a Link (A1): Middle

GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren						
Less than 1 year	N		N	N		N
1 or 2 years	N		N	N		N
3 or 4 years	N		N	N		N
5 or more years	N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years	N		N	N		(X)
Who are female	N		N	N		N
Who are married	N		N	N		N
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	13,604	Reliable	970	13,604		(X)
Nursery school, preschool	406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten	1,012	Somewhat Reliable	488	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)	6,285	Reliable	556	46.1%	Reliable	5.7
High school (grades 9-12)	4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school	1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT						
Population 25 years and over	45,702	Reliable	703	45,702		(X)
Less than 9th grade	3,726	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma	2,858	Somewhat Reliable	675	6.3%	Somewhat Reliable	1.9
High school graduate (includes equivalency)	17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree	10,562	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree	3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree	4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree	2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher	85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher	15.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS						
Civilian population 18 years and over	50,887	Reliable	8	50,887		(X)
Civilian veterans	6,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION						
Total Civilian Noninstitutionalized Population	64,022	Reliable	1,043	64,022		(X)
With a disability	10,516	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years	13,979	Reliable	8	13,979		(X)
With a disability	592	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years	40,091	Reliable	658	40,091		(X)
With a disability	6,583	Reliable	1,461	16.4%	Reliable	3.7
65 years and over	9,952	Reliable	880	9,952		(X)
With a disability	3,631	Reliable	882	36.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO						
Population 1 year and over	64,146	Reliable	414	64,146		(X)
Same house	54,826	Reliable	2,478	85.5%	Reliable	3.9
Different house in the U.S.	9,320	Somewhat Reliable	2,495	14.5%	Somewhat Reliable	3.9
Same county	5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county	3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state	1,668	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state	1,878	Not Very Reliable	1,149	2.9%	Not Very Reliable	1.8
Abroad	0		294	0.0%		0.3
PLACE OF BIRTH						
Total population	64,866		64,866			(X)
Native	59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	82.9%	Reliable	4.2
Different state	18,539	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	580	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)

Figure 20: Data Profile Table with Color-Coding and the Legend Behind a Link (A1):
Bottom

Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	53.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable	2.6
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,467	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	769	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	883	Not Very Reliable	601	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable	2.6
Swiss	815	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	150	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 21: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):
Top

Table ID A101		Selected Social Characteristics in Anytown, USA Universe: Total Population in Anytown, USA		2008 American Community Survey 1-Year Estimates		
Table View Map View Chart View						
Actions: Modify Table Bookmark Download		View Table Notes				
Selected Social Characteristics in the United States						
HOUSEHOLDS BY TYPE						
	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
Total households	24,459	Reliable	1,977	24,459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,590	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,182	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	556	2.9%	Not Very Reliable	2.2
With own children under 18 years	582	Not Very Reliable	508	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,186	Reliable	1,666	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	924	28.2%	Reliable	3.9
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63,416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,596	17.9%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,746	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25,327		(X)
Never married	8,944	Reliable	1,633	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28,143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,063	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)

Figure 22: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):Middle

Different state	18,539	Reliable	2,329	28.6%	Reliable	3.8
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.8%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.8
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.8
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	48.8%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	63.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 3 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,889	2.6%	Not Very Reliable	2.8
Dutch	1,099	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,467	Somewhat Reliable	1,802	5.3%	Somewhat Reliable	2.5
French Canadian	78	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.8%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	883	Not Very Reliable	601	1.3%	Not Very Reliable	0.8
Swedish	2,705	Not Very Reliable	1,708	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 23: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):
Bottom

Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	62.9%	Reliable	4.2
Different state	18,836	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.6
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	63.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable	2.6
Dutch	1,086	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,487	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	800	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Nonwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	670	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	863	Not Very Reliable	601	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,708	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 24: Data Profile Table with Color-Coding and the Legend Above the Table (A3):Top

Selected Social Characteristics in the United States	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
HOUSEHOLDS BY TYPE						
Total households	24,459	Reliable	1,977	24,459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,586	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,162	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	556	2.9%	Not Very Reliable	2.2
With own children under 18 years	562	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,186	Reliable	1,666	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	824	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63,416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,586	17.9%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,746	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,183	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25,327		(X)
Never married	8,944	Reliable	1,633	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	621	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28,143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,083	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						

Reliability Legend

Not Very Reliable
Somewhat Reliable
Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View [] | Map View [] | Chart View []

Actions: [] Modify Table | [] Bookmark | [] Download

[] View Table Notes

Figure 25: Data Profile Table with Color-Coding and the Legend Above the Table (A3): Middle

Per 1,000 women 20 to 34 years old		N		N	(X)		(X)
Per 1,000 women 35 to 50 years old		N		N	(X)		(X)
GRANDPARENTS							
Number of grandparents living with own grandchildren under 18 years		N		N	N		(X)
Responsible for grandchildren		N		N	N		N
Years responsible for grandchildren							
Less than 1 year		N		N	N		N
1 or 2 years		N		N	N		N
3 or 4 years		N		N	N		N
5 or more years		N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years		N		N	N		(X)
Who are female		N		N	N		N
Who are married		N		N	N		N
SCHOOL ENROLLMENT							
Population 3 years and over enrolled in school		13,604	Reliable	970	13,604		(X)
Nursery school, preschool		406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten		1,012	Somewhat Reliable	488	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)		6,265	Reliable	556	46.1%	Reliable	5.7
High school (grades 9-12)		4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school		1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT							
Population 25 years and over		45,702	Reliable	703	45,702		(X)
Less than 9th grade		3,728	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma		2,859	Somewhat Reliable	875	6.3%	Somewhat Reliable	1.8
High school graduate (includes equivalency)		17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree		10,662	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree		3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree		4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree		2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher		85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher		15.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS							
Civilian population 18 years and over		50,887	Reliable	8	50,887		(X)
Civilian veterans		6,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION							
Total Civilian Noninstitutionalized Population		64,022	Reliable	1,043	64,022		(X)
With a disability		10,818	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years		13,979	Reliable	8	13,979		(X)
With a disability		582	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years		40,091	Reliable	658	40,091		(X)
With a disability		6,593	Reliable	1,461	16.4%	Reliable	3.7
65 years and over		9,952	Reliable	880	9,952		(X)
With a disability		3,631	Reliable	882	36.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO							
Population 1 year and over		64,146	Reliable	414	64,146		(X)
Same house		54,828	Reliable	2,478	85.5%	Reliable	3.9
Different house in the U.S.		9,320	Somewhat Reliable	2,495	14.5%	Somewhat Reliable	3.9
Same county		5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county		3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state		1,868	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state		1,878	Not Very Reliable	1,149	2.9%	Not Very Reliable	1.8
Abroad		0		294	0.0%		0.3
PLACE OF BIRTH							
Total population		64,866		****	64,866		(X)
Native		59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States		59,369	Reliable	1,485	91.5%	Reliable	2.3
State of residence		40,824	Reliable	2,695	62.9%	Reliable	4.2
Different state		18,539	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)		560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born		4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS							
Foreign-born population		4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen		1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.8

Figure 26: Data Profile Table with Color-Coding and the Legend Above the Table (A3): Bottom

YEAR OF ENTRY					
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503	
Native	560	Not Very Reliable	448	560	
Entered 2000 or later	0		294	0.0%	
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable
Foreign born	4,943	Somewhat Reliable	1,495	4,943	
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable
Entered before 2000	2,638	Somewhat Reliable	984	53.4%	Somewhat Reliable
WORLD REGION OF BIRTH OF FOREIGN BORN					
Foreign-born population, excluding population born at sea	N		N	N	
Europe	N		N	N	
Asia	N		N	N	
Africa	N		N	N	
Oceania	N		N	N	
Latin America	N		N	N	
Northern America	N		N	N	
LANGUAGE SPOKEN AT HOME					
Population 5 years and over	N		N	N	
English only	N		N	N	
Language other than English	N		N	N	
Speak English less than "very well"	N		N	N	
Spanish	N		N	N	
Speak English less than "very well"	N		N	N	
Other Indo-European languages	N		N	N	
Speak English less than "very well"	N		N	N	
Asian and Pacific Islander languages	N		N	N	
Speak English less than "very well"	N		N	N	
Other languages	N		N	N	
Speak English less than "very well"	N		N	N	
ANCESTRY					
Total population	64,866		****	64,866	
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable
English	10,824	Reliable	2,441	16.7%	Reliable
French (except Basque)	3,467	Somewhat Reliable	1,602	5.3%	Somewhat Reliable
French Canadian	78	Not Very Reliable	126	0.1%	Not Very Reliable
German	14,479	Reliable	2,774	22.3%	Reliable
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable
Irish	12,714	Reliable	2,912	19.6%	Reliable
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable
Polish	358	Not Very Reliable	363	0.6%	Not Very Reliable
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable
Scotch-Irish	769	Not Very Reliable	570	1.2%	Not Very Reliable
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable
Subsaharan African	863	Not Very Reliable	601	1.3%	Not Very Reliable
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 27: Data Profile Table with No Color-Coding and the Legend Above the Table (A4):
Top

Table ID		Selected Social Characteristics in Anytown, USA		Reliability Legend		
A101		Universe: Total Population in Anytown, USA		<div style="border: 1px solid black; padding: 2px; display: inline-block;">Not Very Reliable</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Somewhat Reliable</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Reliable</div>		
		2008 American Community Survey 1-Year Estimates		Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com		
Table View Map View Chart View		Actions: Modify Table Bookmark Download				
View Table Notes						
Selected Social Characteristics in the United States						
	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
HOUSEHOLDS BY TYPE						
Total households	24,459	Reliable	1,977	24,459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,586	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,162	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	558	2.9%	Not Very Reliable	2.2
With own children under 18 years	582	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,188	Reliable	1,666	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	824	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63,416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,596	17.9%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,745	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25,327		(X)
Never married	9,944	Reliable	1,633	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28,143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,083	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)

Figure 28: Data Profile Table with No Color-Coding and the Legend Above the Table (A4): Middle

Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren						
Less than 1 year	N		N	N		N
1 or 2 years	N		N	N		N
3 or 4 years	N		N	N		N
5 or more years	N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years	N		N	N		(X)
Who are female	N		N	N		N
Who are married	N		N	N		N
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	13,604	Reliable	970	13,604		(X)
Nursery school, preschool	406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten	1,012	Somewhat Reliable	498	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)	6,265	Reliable	556	48.1%	Reliable	5.7
High school (grades 9-12)	4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school	1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT						
Population 25 years and over	45,702	Reliable	703	45,702		(X)
Less than 9th grade	3,726	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma	2,859	Somewhat Reliable	875	8.3%	Somewhat Reliable	1.9
High school graduate (includes equivalency)	17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree	10,562	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree	3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree	4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree	2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher	85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher	16.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS						
Civilian population 18 years and over	50,887	Reliable	8	50,887		(X)
Civilian veterans	8,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION						
Total Civilian Noninstitutionalized Population	64,022	Reliable	1,043	64,022		(X)
With a disability	10,816	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years	13,979	Reliable	8	13,979		(X)
With a disability	592	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years	40,091	Reliable	658	40,091		(X)
With a disability	6,593	Reliable	1,481	16.4%	Reliable	3.7
65 years and over	9,952	Reliable	880	9,952		(X)
With a disability	3,631	Reliable	882	38.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO						
Population 1 year and over	64,146	Reliable	414	64,146		(X)
Same house	54,826	Reliable	2,478	85.5%	Reliable	3.9
Different house in the U.S.	9,320	Somewhat Reliable	2,495	14.5%	Somewhat Reliable	3.9
Same county	5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county	3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state	1,888	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state	1,878	Not Very Reliable	1,149	2.8%	Not Very Reliable	1.8
Abroad	0		294	0.0%		0.3
PLACE OF BIRTH						
Total population	64,866		****	64,866		(X)
Native	59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States	59,383	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,874	Reliable	2,895	87.9%	Reliable	4.7

Figure 29: Data Profile Table with No Color-Coding and the Legend Above the Table (A4):
Bottom

Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	82.9%	Reliable	4.2
Different state	18,539	Reliable	2,329	28.6%	Reliable	3.8
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.6
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native						
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born						
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	994	53.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		***	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,889	2.8%	Not Very Reliable	2.8
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,487	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	368	Not Very Reliable	363	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	280	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	893	Not Very Reliable	801	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	632	0.6%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Figure 30: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Top

Table ID
S201

Selected Population Profile in Anytown, USA
Universe: Total Population of Two or More Races in Anytown, USA
2008 American Community Survey 1-Year Estimates



Table View [X]		Map View [X]		Chart View [X]		
Actions: [X] Modify Table [X] Bookmark [X] Download						
[X] View Table Notes						
Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,516		****	65,838	Reliable	7,573
One race	96.7%	Reliable	0.4	(X)		(X)
Two races	3.1%	Reliable	0.3	53.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.8%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,516		****	65,838	Reliable	7,573
Male	49.3%	Reliable	0.1	51.6%	Reliable	3.2
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.8%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.8%	Reliable	2.0
25 to 34 years	16.3%	Reliable	0.1	12.6%	Reliable	2.5
35 to 44 years	13.5%	Reliable	0.1	9.3%	Reliable	1.5
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.5
55 to 64 years	7.8%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6
Median age (years)	31.8	Reliable	0.1	18.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
52 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,890	Reliable	438	34,170	Reliable	4,554
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.3
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.3
18 years and over	1,517,626	Reliable	438	35,668	Reliable	3,938
Male	49.2%	Reliable	0.1	52.7%	Reliable	4.3
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.3
18 to 34 years	565,916	Reliable	743	18,456	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.8%	Reliable	0.1	44.6%	Reliable	7.3
35 to 64 years	706,014	Reliable	593	14,523	Reliable	2,106
Male	50.3%	Reliable	0.1	45.5%	Reliable	4.9
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.9
65 years and over	241,696	Reliable	535	2,689	Somewhat Reliable	933
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9
RELATIONSHIP						
Population in households	2,073,707	Reliable	4,145	68,831	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	10.5%	Reliable	0.6	10.2%	Reliable	2.5
Nonrelatives	8.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.5
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.7	75.1%	Reliable	8.8
With own children under 18 years	38.5%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.0%	Reliable	1.1	52.1%	Reliable	8.0
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5
Nonfamily households	25.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.8
Male householder	12.5%	Reliable	0.7	13.2%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.8%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.20	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.74	Reliable	0.05	3.77	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,618,004	Reliable	547	41,893	Reliable	4,865
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	8.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4
Divorced	9.5%	Reliable	0.5	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,509	Reliable	588	21,551	Reliable	2,959
Now married, except separated	50.3%	Reliable	1.1	35.1%	Reliable	5.1

Figure 31: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Top Middle

Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,939
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.6
Separated	1.5%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	455	26,142	Reliable	3,188
Now married, except separated	47.7%	Reliable	0.4	35.0%	Reliable	5.5
Widowed	8.5%	Reliable	0.2	5.6%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	583,029	Reliable	7,412	30,472	Reliable	4,341
Nursery school, preschool	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Kindergarten	5.0%	Reliable	0.5	4.8%	Somewhat Reliable	1.8
Elementary school (grades 1-5)	43.5%	Reliable	0.9	40.6%	Reliable	4.2
High school (grades 9-12)	23.8%	Reliable	0.6	27.8%	Reliable	4.7
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,469	Reliable	5,212	15,454	Reliable	2,822
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.6%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	300,560	Reliable	5,647	15,016	Reliable	2,597
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	69.0%	Reliable	7.2
Percent enrolled in college or graduate school	28.2%	Reliable	1.2	21.3%	Somewhat Reliable	6.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,797	Reliable	814	26,015	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.8%	Reliable	0.8	27.9%	Reliable	4.8
Some college or associate's degree	32.1%	Reliable	0.8	38.7%	Reliable	5.1
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.6
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	76.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.0%	Reliable	0.7	9.5%	Somewhat Reliable	3.9
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,893	Reliable	1,587	16,343	Reliable	2,920
Women 15 to 50 years who had a birth in the past 12 months	38,646	Reliable	4,060	1,310	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	12,364	Reliable	54	54	Not Very Reliable	436
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable	26.5
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,128	Reliable	912	20,721	Reliable	2,688
Living with grandchild(ren)	5.3%	Reliable	0.2	2.4%	Not Very Reliable	1.1
Responsible for grandchild(ren)	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,521
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.8
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,875	Reliable	7,552
With a disability	10.5%	Reliable	0.4	7.8%	Reliable	1.8
Civilian noninstitutionalized population under 18 years	582,753	Reliable	497	34,142	Reliable	4,553
With a disability	2.5%	Reliable	0.4	3.1%	Not Very Reliable	1.6
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,045	32,083	Reliable	3,581
With a disability	8.5%	Reliable	0.5	8.7%	Somewhat Reliable	2.8
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,072	2,650	Somewhat Reliable	907
With a disability	38.5%	Reliable	1.6	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,169	Reliable	2,868	66,272	Reliable	7,138
Same house	82.9%	Reliable	0.8	83.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	15.9%	Reliable	2.9
Same county	11.5%	Reliable	0.7	10.0%	Reliable	2.2
Different county	4.9%	Reliable	0.5	5.9%	Somewhat Reliable	2.5
Same state	3.5%	Reliable	0.4	6.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.6
Abroad	0.7%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,298	Reliable	12,558	64,681	Reliable	7,113
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.3
Foreign born	469,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.6%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,146	Reliable	7,182	3,188	Somewhat Reliable	825
Male	46.5%	Reliable	1.9	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.5	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	293,072	Reliable	12,962	1,972	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	469,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Entered 2000 or later	22.4%	Reliable	1.6	8.3%	Not Very Reliable	6.1
Entered 1990 to 1999	25.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.2
Entered before 1990	52.3%	Reliable	1.5	70.6%	Reliable	10.9
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	468,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Europe	5.5%	Reliable	0.7	N	N	N

Figure 32: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Bottom Middle

Asia	17.3%	Reliable	0.8	N		N
Africa	1.4%	Somewhat Reliable	0.9	N		N
Oceania	0.7%	Not Very Reliable	0.4	N		N
Latin America	7.3%	Reliable	1.0	N		N
Northern America	2.2%	Reliable	0.2	N		N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 5 years and over	1,532,940	Reliable	7	57.41%	Reliable	6,600
English only	61.3%	Reliable	0.7	76.3%	Reliable	4.8
Language other than English	38.9%	Reliable	0.7	23.7%	Reliable	4.8
Speak English less than "very well"	16.6%	Reliable	0.6	7.1%	Somewhat Reliable	2.0
EMPLOYMENT STATUS						
Population 16 years and over	1,584,308	Reliable	2,804	39.15%	Reliable	4,460
In labor force	63.2%	Reliable	0.7	64.5%	Reliable	4.1
Civilian labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1
Employed	57.2%	Reliable	0.7	54.6%	Reliable	4.1
Unemployed	6.3%	Reliable	0.0	6.6%	Somewhat Reliable	2.1
Percent of civilian labor force	9.2%	Reliable	0.0	15.0%	Somewhat Reliable	3.8
Armed Forces	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4
Not in labor force	36.2%	Reliable	0.7	35.5%	Reliable	4.1
Females 16 years and over	798,658	Reliable	1,263	18.81%	Reliable	2,843
In labor force	55.7%	Reliable	0.9	57.3%	Reliable	5.0
Civilian labor force	55.6%	Reliable	0.9	57.9%	Reliable	5.1
Employed	49.9%	Reliable	0.9	49.1%	Reliable	5.1
Unemployed	5.7%	Reliable	0.0	6.0%	Somewhat Reliable	3.4
Percent of civilian labor force	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3
COMMUTING TO WORK						
Workers 16 years and over	880,102	Reliable	10,454	20.350	Reliable	2,160
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable	4.5
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.2%	Somewhat Reliable	4.4
Public transportation (excluding taxicab)	1.5%	Reliable	0.2	1.1%	Not Very Reliable	1.2
Walked	2.0%	Reliable	0.2	0.3%	Not Very Reliable	0.8
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.8
Worked at home	4.9%	Reliable	0.8	4.0%	Not Very Reliable	2.1
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.5	Reliable	4.1
OCCUPATION						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21.388	Reliable	2,508
Management, professional, and related occupations	25.4%	Reliable	0.3	24.0%	Reliable	5.0
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable	5.2
Sales and office occupations	26.9%	Reliable	1.0	29.0%	Reliable	6.0
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.0%	Not Very Reliable	0.8
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable	4.1
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable	3.8
Male civilian employed population 16 years and over	506,218	Reliable	8,085	12.141	Reliable	2,004
Management, professional, and related occupations	25.4%	Reliable	1.1	18.5%	Somewhat Reliable	5.8
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.8
Sales and office occupations	18.6%	Reliable	1.3	24.3%	Somewhat Reliable	7.7
Farming, fishing, and forestry occupations	1.2%	Reliable	0.4	0.0%	Not Very Reliable	1.6
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	16.6%	Somewhat Reliable	5.8
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9.247	Reliable	1,623
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.9
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable	8.3
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3
Farming, fishing, and forestry occupations	0.2%	Somewhat Reliable	0.2	0.0%	Not Very Reliable	2.3
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.6%	Not Very Reliable	2.3
INDUSTRY						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21.388	Reliable	2,508
Agriculture, forestry, fishing and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction	10.4%	Reliable	0.7	5.5%	Somewhat Reliable	2.5
Manufacturing	9.9%	Reliable	0.8	10.2%	Somewhat Reliable	3.8
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4
Retail trade	12.7%	Reliable	0.6	14.9%	Somewhat Reliable	4.3
Transportation and warehousing, and utilities	6.4%	Reliable	0.5	10.0%	Somewhat Reliable	4.4
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable	1.8
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable	2.1
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.6	13.0%	Somewhat Reliable	4.4
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable	5.2
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.8
Other services (except public administration)	4.7%	Reliable	0.3	5.0%	Somewhat Reliable	2.3
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.8
CLASS OF WORKER						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21.388	Reliable	2,508
Private wage and salary workers	76.5%	Reliable	0.9	77.5%	Reliable	4.8
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.8
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable	2.7
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.5
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)						
Households	647,448	Reliable	6,148	11.181	Reliable	1,898
Median household income (dollars)	57,752	Reliable	1,233	52,012	Reliable	7,812
With earnings	79.9%	Reliable	0.8	83.8%	Reliable	5.4
Mean earnings (dollars)	72,948	Reliable	1,364	70,186	Reliable	9,631
With Social Security income	28.4%	Reliable	0.5	25.5%	Reliable	4.1
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable	1,169
With Supplemental Security income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9
Mean Supplemental Security income (dollars)	8,124	Reliable	563	6,003	Somewhat Reliable	1,718
With cash public assistance income	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.9
Mean cash public assistance income (dollars)	6,330	Reliable	851	5,908	Somewhat Reliable	2,459
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	5.3
Mean retirement income (dollars)	22,425	Reliable	912	21,116	Reliable	5,928
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable	2.0
Families	473,263	Reliable	7,070	8,499	Reliable	1,354
Median family income (dollars)	64,543	Reliable	1,551	63,619	Reliable	13,424
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable	8.4
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable	10,818
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.0
Median income (dollars)	51,268	Reliable	4,778	28,202	Not Very Reliable	21,328
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable	7.9
Median income (dollars)	34,335	Reliable	2,904	41,065	Reliable	5,184
Individuals	2,109,516	Reliable	69,838	69,838	Reliable	7,573
Per capita income (dollars)	24,301	Reliable	471	12,968	Reliable	1,378

Figure 33: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Bottom

With earnings for full-time, year-round workers:						
Male	361,434	Reliable	8,152	7,606	Reliable	1,467
Female	238,605	Reliable	6,630	5,609	Reliable	1,298
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,966	Reliable	7,569
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,636	Reliable	1,074	41,770	Reliable	3,198
Female	36,153	Reliable	693	29,939	Somewhat Reliable	6,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.9
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.0	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.4
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	16.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.6%	Reliable	1.0	6.7%	Not Very Reliable	6.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.15	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.9%	Reliable	6.4
2 to 4 units	4.9%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.6
Mobile home, boat, RV, van, etc.	8.6%	Reliable	0.5	8.5%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	26.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.3%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.8	63.5%	Reliable	6.9
Electricity	17.9%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOC cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.8	46.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.8	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	438,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,252	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	455	Reliable	13	459	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRPI cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	848
Less than 30 percent	38.7%	Reliable	2.0	33.9%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	189

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 34: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Top

Table ID S201 Selected Population Profile in Anytown, USA
 Universe: Total Population of Two or More Races in Anytown, USA
 2008 American Community Survey 1-Year Estimates

Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,518	Reliable	65,838	Reliable	7,373	
One race	96.7%	Reliable	0.4	0%	0.1	
Two races	3.1%	Reliable	0.3	83.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.9%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,518	Reliable	65,838	Reliable	7,373	
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.2
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.8%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.6%	Reliable	2.0
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.5
35 to 44 years	13.5%	Reliable	0.1	9.3%	Reliable	1.6
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.5
55 to 64 years	7.8%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.4%	Somewhat Reliable	0.6
Median age (years)	31.0	Reliable	0.1	16.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
52 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,890	Reliable	438	34,170	Reliable	4,594
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.6
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.6
18 years and over	1,517,628	Reliable	438	35,668	Reliable	3,999
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.6
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.6
18 to 34 years	569,810	Reliable	743	18,456	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.8%	Reliable	0.1	44.5%	Reliable	7.5
35 to 64 years	706,014	Reliable	693	14,523	Reliable	2,106
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.6
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.6
65 years and over	241,694	Reliable	539	2,689	Somewhat Reliable	333
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9
RELATIONSHIP						
Population in households	2,075,707	Reliable	4,145	68,631	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	16.5%	Reliable	0.6	10.2%	Reliable	2.6
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.6
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.6
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.7	75.1%	Reliable	6.8
With own children under 18 years	38.8%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.0%	Reliable	1.1	52.1%	Reliable	8.0
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5
Nonfamily households	26.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.6
Male householder	12.9%	Reliable	0.7	13.3%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.6%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7
Living alone	11.5%	Reliable	0.6	9.1%	Somewhat Reliable	3.5
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.7	Reliable	0.05	3.7	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,616,004	Reliable	547	41,635	Reliable	4,885
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	5.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4
Divorced	9.9%	Reliable	0.6	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,959
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	6.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.6
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	463	20,142	Reliable	3,188
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.5
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4

Figure 35: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Top Middle

Widowed	2.2%	Reliable	0.31	1.5%	Not Very Reliable	1.31
Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	8.9	56.1%	Reliable	5.4
Female 15 years and over	815,355	Reliable	483	20,142	Reliable	3,188
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	6.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	3.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	5.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	693,022	Reliable	7,412	30,472	Reliable	4,241
Nursery school, preschool, kindergarten	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Elementary school (grades 1-5)	43.5%	Reliable	0.8	40.8%	Reliable	4.2
High school (grades 9-12)	23.9%	Reliable	0.6	27.9%	Reliable	4.7
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,452	Reliable	5,212	15,452	Reliable	2,622
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.8%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	396,566	Reliable	5,647	15,018	Reliable	2,587
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	68.2%	Reliable	7.2
Percent enrolled in college or graduate school	25.2%	Reliable	1.2	21.3%	Somewhat Reliable	6.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,757	Reliable	814	26,015	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.8%	Reliable	0.8	27.9%	Reliable	4.6
Some college or associate's degree	32.1%	Reliable	0.8	38.7%	Reliable	5.3
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.5
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	76.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	23.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.0%	Reliable	0.7	9.5%	Somewhat Reliable	3.2
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,893	Reliable	1,587	16,343	Reliable	2,520
Women 15 to 50 years who had a birth in the past 12 months	38,646	Reliable	4,260	1,310	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	16,384	Reliable	2,226	544	Not Very Reliable	436
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable	25.4
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,124	Reliable	312	20,721	Reliable	2,686
Living with grandchildren	5.9%	Reliable	0.4	2.6%	Not Very Reliable	2.4
Responsible for grandchildren	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,521
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.6
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,878	Reliable	7,552
With a disability	10.6%	Reliable	0.4	7.8%	Reliable	1.6
Civilian noninstitutionalized population under 18 years	582,753	Reliable	497	34,142	Reliable	4,593
With a disability	2.9%	Reliable	0.4	3.1%	Not Very Reliable	1.6
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,045	32,083	Reliable	3,581
With a disability	8.9%	Reliable	0.5	8.7%	Somewhat Reliable	2.5
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,673	2,650	Somewhat Reliable	907
With a disability	38.5%	Reliable	1.6	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,165	Reliable	2,868	66,273	Reliable	7,134
Same house	82.9%	Reliable	0.8	83.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	15.9%	Reliable	2.9
Same county	11.5%	Reliable	0.7	10.2%	Reliable	2.4
Different county	4.9%	Reliable	0.8	5.9%	Somewhat Reliable	2.3
Same state	3.8%	Reliable	0.4	5.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.6
Abroad	0.7%	Somewhat Reliable	0.2	0.8%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,298	Reliable	12,558	64,681	Reliable	7,118
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.3
Foreign born	459,216	Reliable	12,558	5,157	Somewhat Reliable	1,488
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.8%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,144	Reliable	7,182	3,185	Somewhat Reliable	825
Male	46.5%	Reliable	1.5	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.5	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	283,072	Reliable	12,960	1,972	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	459,216	Reliable	12,558	5,157	Somewhat Reliable	1,488
Entered 2000 or later	22.4%	Reliable	1.6	9.3%	Not Very Reliable	6.1
Entered 1990 to 1999	26.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.6
Entered before 1990	51.3%	Reliable	1.5	70.6%	Reliable	10.5
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	459,216	Reliable	12,558	5,157	Somewhat Reliable	1,488
Europe	5.5%	Reliable	0.7	N	N	N
Asia	17.1%	Reliable	0.8	N	N	N
Africa	1.4%	Somewhat Reliable	0.5	N	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N	N
Latin America	73.0%	Reliable	1.0	N	N	N
Northern America	2.2%	Reliable	0.4	N	N	N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 3 years and over	1,832,948	Reliable	7	57,414	Reliable	6,598
English only	81.1%	Reliable	0.7	79.3%	Reliable	4.8
Language other than English	33.9%	Reliable	0.7	23.7%	Reliable	4.5
Speak English less than "very well"	16.9%	Reliable	0.6	7.1%	Somewhat Reliable	2.0

Figure 36: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Bottom Middle

In labor force	63.8%	Reliable	0.7	64.5%	Reliable	4.1
Civilian labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1
Employed	57.2%	Reliable	0.7	54.6%	Reliable	4.1
Unemployed	6.3%	Reliable	0.5	9.6%	Somewhat Reliable	2.6
Percent of civilian labor force	9.8%	Reliable	0.7	15.0%	Somewhat Reliable	3.5
Armed Forces	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4
Not in labor force	36.2%	Reliable	0.7	35.5%	Reliable	4.1
Females 16 years and over	798,558	Reliable	1,909	18,816	Reliable	2,645
In labor force	55.7%	Reliable	0.9	57.9%	Reliable	5.5
Civilian labor force	55.6%	Reliable	0.9	57.9%	Reliable	5.5
Employed	49.9%	Reliable	0.9	49.1%	Reliable	5.1
Unemployed	5.7%	Reliable	0.6	8.8%	Somewhat Reliable	3.4
Percent of civilian labor force	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3
COMMUTING TO WORK						
Workers 16 years and over	880,102	Reliable	10,454	20,350	Reliable	2,160
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable	4.5
Car, truck, or van - carpool	14.7%	Reliable	0.8	16.2%	Somewhat Reliable	4.4
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable	1.4
Walked	2.0%	Reliable	0.6	0.3%	Not Very Reliable	0.8
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.5
Worked at home	4.9%	Reliable	0.6	4.0%	Not Very Reliable	2.1
Mean travel time to work (minutes)	31.9	Reliable	0.6	33.9	Reliable	4.1
OCCUPATION						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable	5.0
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable	5.2
Sales and office occupations	26.9%	Reliable	1.0	29.0%	Reliable	6.0
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable	4.1
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable	3.5
Male civilian employed population 16 years and over	508,219	Reliable	8,009	12,141	Reliable	2,004
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable	5.5
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.6
Sales and office occupations	19.6%	Reliable	1.3	24.8%	Somewhat Reliable	7.1
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable	1.6
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	19.6%	Somewhat Reliable	5.5
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9,247	Reliable	1,893
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.9
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable	6.3
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3
Farming, fishing, and forestry occupations	0.7%	Somewhat Reliable	0.2	0.0%	Not Very Reliable	2.1
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8
Production, transportation, and material moving occupations	6.1%	Reliable	0.6	2.6%	Not Very Reliable	2.3
INDUSTRY						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Agriculture, forestry, fishing, and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable	7.1
Manufacturing	9.9%	Reliable	0.6	10.2%	Somewhat Reliable	3.8
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4
Retail trade	12.7%	Reliable	0.8	14.9%	Somewhat Reliable	4.3
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable	4.4
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable	1.5
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable	2.1
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.5	13.0%	Somewhat Reliable	4.4
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable	5.2
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.5
Other services (except public administration)	4.7%	Reliable	0.5	5.0%	Somewhat Reliable	2.3
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.5
CLASS OF WORKER						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Private wage and salary workers	76.5%	Reliable	0.9	77.5%	Reliable	4.8
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.5
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable	2.7
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.9
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)						
Households	647,445	Reliable	6,148	11,191	Reliable	1,505
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable	7,512
With earnings	79.9%	Reliable	0.6	83.8%	Reliable	5.4
Mean earnings (dollars)	72,948	Reliable	1,364	70,155	Reliable	9,631
With Social Security income	26.4%	Reliable	0.5	25.5%	Reliable	5.7
Mean Social Security income (dollars)	19,590	Reliable	314	10,542	Reliable	1,169
With Supplemental Security Income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9
Mean Supplemental Security Income (dollars)	9,124	Reliable	563	6,033	Somewhat Reliable	1,716
With cash public assistance income	2.9%	Reliable	0.3	3.8%	Not Very Reliable	2.9
Mean cash public assistance income (dollars)	5,330	Reliable	551	5,906	Somewhat Reliable	2,459
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	5.3
Mean retirement income (dollars)	22,425	Reliable	912	22,115	Reliable	5,024
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable	2.0
Families						
Families	473,263	Reliable	7,070	8,403	Reliable	1,354
Median family income (dollars)	64,594	Reliable	1,531	65,819	Reliable	13,424
Married-couple family	73.9%	Reliable	1.3	69.4%	Reliable	8.4
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable	10,818
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.6
Median income (dollars)	51,269	Reliable	4,778	28,233	Not Very Reliable	21,320
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable	7.9
Median income (dollars)	34,335	Reliable	2,904	41,063	Reliable	5,194
Individuals						
Individuals	2,100,518	Reliable	4,777	69,838	Reliable	7,573
Per capita income (dollars)	24,301	Reliable	477	12,993	Reliable	1,370
With earnings for full-time, year-round workers:						

Figure 37: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Bottom

With earnings for full-time, year-round workers:						
Male	381,434	Reliable	8,152	7,608	Reliable	1,467
Female	238,808	Reliable	6,630	5,609	Reliable	1,298
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,968	Reliable	7,568
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,836	Reliable	1,074	41,770	Reliable	3,199
Female	36,153	Reliable	893	29,930	Somewhat Reliable	8,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.9
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.8	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.6
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	8.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.16	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
1-unit, detached or attached	74.5%	Reliable	0.9	72.9%	Reliable	6.4
2 to 4 units	4.3%	Reliable	0.5	4.0%	Not Very Reliable	2.8
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.8
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.6	8.5%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Built 2000 or later	26.2%	Reliable	0.8	21.4%	Somewhat Reliable	5.6
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.9
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.6
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Gas	79.5%	Reliable	0.8	63.5%	Reliable	6.9
Electricity	17.9%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.8	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOG cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	49.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.3
OWNER CHARACTERISTICS						
Owner-occupied housing units	458,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,233	Reliable	38	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	456	Reliable	13	456	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRPI cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	36.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 38: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Top

Table ID	Selected Population Profile in Anytown, USA		Reliability Legend			
S201	Universe: Total Population of Two or More Races in Anytown, USA		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: red; color: white; padding: 2px;">Not Very Reliable</div> <div style="background-color: orange; color: white; padding: 2px;">Somewhat Reliable</div> <div style="background-color: green; color: white; padding: 2px;">Reliable</div> </div>			
2008 American Community Survey 1-Year Estimates			Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACStreliability.com			
Table View Map View Chart View						
Actions: Modify Table Bookmark Download			View Table Notes			
Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,518	Reliable	****	69,838	Reliable	7,573
One race	96.7%	Reliable	0.4	1%	Reliable	2.2
Two races	3.1%	Reliable	0.3	93.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.6%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,518	Reliable	****	69,838	Reliable	7,573
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.0
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.8%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.9%	Reliable	2.0
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.8
35 to 44 years	13.6%	Reliable	0.1	9.3%	Reliable	1.9
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.8
55 to 64 years	7.6%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6
Median age (years)	31.8	Reliable	0.1	18.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
62 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,890	Reliable	438	34,170	Reliable	4,554
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.3
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.8
18 years and over	1,517,628	Reliable	438	35,668	Reliable	3,338
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.0
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.8
18 to 34 years	589,916	Reliable	743	18,458	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.9%	Reliable	0.1	44.8%	Reliable	7.8
35 to 64 years	706,614	Reliable	639	14,523	Reliable	2,108
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.0
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.9
65 years and over	241,690	Reliable	539	2,688	Somewhat Reliable	933
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.8
RELATIONSHIP						
Population in households	2,073,707	Reliable	4,144	68,831	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.8	28.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	10.8%	Reliable	0.6	10.2%	Reliable	2.9
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.5
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.1	75.1%	Reliable	6.8
With own children under 18 years	38.6%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.9%	Reliable	1.1	52.1%	Reliable	9.8
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.0
Nonfamily households	26.9%	Reliable	0.1	24.9%	Somewhat Reliable	6.8
Male householder	12.9%	Reliable	0.7	13.2%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.8%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.9
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.74	Reliable	0.05	3.77	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,618,004	Reliable	547	41,823	Reliable	4,885
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	5.4%	Reliable	0.3	3.6%	Somewhat Reliable	1.4
Divorced	9.2%	Reliable	0.4	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.6%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.6%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,950
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	8.1%	Reliable	0.4	6.3%	Somewhat Reliable	2.8
Separated	1.6%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	469	20,242	Reliable	3,168
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.6%	Reliable	0.4	5.6%	Somewhat Reliable	2.9
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4

Figure 39: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Top Middle

Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.6	56.1%	Reliable	5.4
Female 15 years and over	815,339	Reliable	465	20,142	Reliable	3,158
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.3%	Not Very Reliable	2.6
Never married	29.2%	Reliable	0.7	47.2%	Reliable	5.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	593,029	Reliable	7,412	30,472	Reliable	4,341
Nursery school, preschool	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Kindergarten	5.0%	Reliable	0.6	4.5%	Somewhat Reliable	1.6
Elementary school (grades 1-8)	43.5%	Reliable	0.8	40.5%	Reliable	4.2
High school (grades 9-12)	23.8%	Reliable	0.6	27.8%	Reliable	4.2
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,463	Reliable	5,212	15,459	Reliable	2,822
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.6%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	300,566	Reliable	5,647	15,013	Reliable	2,527
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	68.0%	Reliable	7.5
Percent enrolled in college or graduate school	25.2%	Reliable	1.2	21.3%	Somewhat Reliable	5.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,797	Reliable	814	26,019	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.9%	Reliable	0.8	27.9%	Reliable	4.6
Some college or associate's degree	32.1%	Reliable	0.8	33.7%	Reliable	5.3
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.8
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	75.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.5%	Reliable	0.7	9.8%	Somewhat Reliable	3.0
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,893	Reliable	1,587	16,342	Reliable	2,320
Women 15 to 50 years who had a birth in the past 12 months	38.64%	Reliable	4,060	1,310	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	12.35%	Reliable	2,226	646	Not Very Reliable	438
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable	26.5
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,126	Reliable	912	20,721	Reliable	2,686
Living with grandchild(ren)	5.5%	Reliable	0.4	2.6%	Not Very Reliable	2.4
Responsible for grandchild(ren)	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,321
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.8
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,879	Reliable	7,552
With a disability	10.6%	Reliable	0.4	7.8%	Reliable	1.6
Civilian noninstitutionalized population under 18 years	582,750	Reliable	491	34,142	Reliable	4,583
With a disability	2.5%	Reliable	0.4	3.1%	Not Very Reliable	1.8
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,043	32,083	Reliable	3,581
With a disability	9.5%	Reliable	0.5	6.7%	Somewhat Reliable	2.8
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,073	2,650	Somewhat Reliable	907
With a disability	38.6%	Reliable	1.8	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,165	Reliable	2,868	65,273	Reliable	7,136
Came to house	62.9%	Reliable	0.8	53.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	16.9%	Reliable	2.8
Same county	11.5%	Reliable	0.7	10.0%	Reliable	2.2
Different county	4.9%	Reliable	0.5	5.9%	Somewhat Reliable	2.3
Same state - different state	3.5%	Reliable	0.4	5.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.8
Abroad	0.7%	Somewhat Reliable	0.2	0.6%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,298	Reliable	12,558	64,681	Reliable	7,113
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.8
Foreign born	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.6%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,146	Reliable	7,182	3,185	Somewhat Reliable	825
Male	46.5%	Reliable	1.5	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.8	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	293,072	Reliable	12,960	1,372	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Entered 2000 or later	22.4%	Reliable	1.8	8.3%	Not Very Reliable	6.1
Entered 1990 to 1999	25.3%	Reliable	1.3	21.1%	Somewhat Reliable	10.8
Entered before 1990	52.3%	Reliable	1.9	70.6%	Reliable	10.8
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Europe	5.5%	Reliable	0.6	N	N	N
Asia	17.1%	Reliable	0.8	N	N	N
Africa	1.4%	Somewhat Reliable	0.4	N	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N	N
Latin America	73.0%	Reliable	1.0	N	N	N
Northern America	2.2%	Reliable	0.4	N	N	N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 5 years and over	1,532,948	Reliable	7	57,414	Reliable	6,608
English only	61.1%	Reliable	0.7	76.3%	Reliable	4.9
Language other than English	38.9%	Reliable	0.7	23.7%	Reliable	4.5
Language spoken at home and ability to speak English	12.9%	Reliable	0.4	18.0%	Somewhat Reliable	5.8

Figure 40: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Bottom Middle

COMMUTERS TO WORK					
Workers 16 years and over	680,102	Reliable	10,454	20,350	Reliable
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.2%	Somewhat Reliable
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable
Walked	2.0%	Reliable	0.5	0.9%	Not Very Reliable
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable
Worked at home	4.9%	Reliable	0.5	4.0%	Not Very Reliable
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.9	Reliable
OCCUPATION					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable
Sales and office occupations	25.9%	Reliable	1.0	23.0%	Reliable
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.3%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable
Male civilian employed population 16 years and over	508,219	Reliable	8,009	12,141	Reliable
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable
Sales and office occupations	18.6%	Reliable	1.3	24.8%	Somewhat Reliable
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	19.6%	Somewhat Reliable
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9,247	Reliable
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable
Farming, fishing, and forestry occupations	0.7%	Somewhat Reliable	0.2	0.0%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.6%	Not Very Reliable
INDUSTRY					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Agriculture, forestry, fishing and hunting, and mining	1.3%	Reliable	0.3	0.3%	Not Very Reliable
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable
Manufacturing	9.8%	Reliable	0.6	10.2%	Somewhat Reliable
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable
Retail trade	12.7%	Reliable	0.6	14.9%	Somewhat Reliable
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.6	13.0%	Somewhat Reliable
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable
Other services (except public administration)	4.7%	Reliable	0.5	5.0%	Somewhat Reliable
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable
CLASS OF WORKER					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Private wage and salary workers	75.9%	Reliable	0.9	77.5%	Reliable
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)					
Households	647,443	Reliable	6,148	11,191	Reliable
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable
With earnings	79.9%	Reliable	0.6	83.8%	Reliable
Mean earnings (dollars)	72,948	Reliable	1,364	70,185	Reliable
With Social Security income	26.4%	Reliable	0.5	25.5%	Reliable
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable
With Supplemental Security income	4.1%	Reliable	0.4	4.1%	Not Very Reliable
Mean Supplemental Security income (dollars)	9,124	Reliable	563	6,033	Somewhat Reliable
With cash public assistance income	2.9%	Reliable	0.3	3.8%	Not Very Reliable
Mean cash public assistance income (dollars)	5,330	Reliable	551	5,905	Somewhat Reliable
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable
Mean retirement income (dollars)	22,425	Reliable	912	22,115	Reliable
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable
Families	473,263	Reliable	7,070	8,405	Reliable
Median family income (dollars)	64,594	Reliable	1,551	65,619	Reliable
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable
Median income (dollars)	51,269	Reliable	4,775	28,235	Not Very Reliable
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable
Median income (dollars)	34,335	Reliable	2,904	41,065	Reliable
Individuals	2,100,516	****	477	69,638	Reliable
Per capita income (dollars)	24,301	Reliable	477	12,985	Reliable
With earnings for full-time, year-round workers:					
Male	381,434	Reliable	8,152	7,605	Reliable
Female	238,805	Reliable	6,530	5,605	Reliable
Mean earnings (dollars) for full-time, year-round workers:					
Male	57,693	Reliable	1,427	51,966	Reliable
Female	43,122	Reliable	1,032	35,327	Reliable
Median earnings (dollars) full-time, year-round workers:					
Male	46,836	Reliable	1,074	41,770	Reliable
Female	36,153	Reliable	893	29,939	Somewhat Reliable
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED					
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable

Figure 41: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Bottom

All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.5
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.6
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	8.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.16	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.6%	Reliable	6.4
2 to 4 units	4.9%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.8
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.5	8.8%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	25.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.8	63.5%	Reliable	6.8
Electricity	17.9%	Reliable	0.6	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOG cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	48.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	438,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,232	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	455	Reliable	13	458	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRAP cannot be computed)	201,697	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	38.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 42: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Top

Table ID S201		Selected Population Profile in Anytown, USA Universe: Total Population of Two or More Races in Anytown, USA 2008 American Community Survey 1-Year Estimates		Reliability Legend			
				<div style="display: flex; justify-content: space-around;"> <div style="background-color: #90EE90; padding: 2px;">Reliable</div> <div style="background-color: #FFD700; padding: 2px;">Somewhat Reliable</div> <div style="background-color: #FF0000; padding: 2px;">Not Very Reliable</div> </div> <p>Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com</p>			
Table View []		Map View []		Chart View []			
Actions:		[] Modify Table		[] Bookmark		[] Download	
				[] View Table Notes			
Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error	
TOTAL NUMBER OF RACES REPORTED							
Total population	2,100,516		****	65,836	Reliable	7,573	
One race	95.7%	Reliable	0.4	0%	Reliable	0.1	
Two races	3.1%	Reliable	0.3	93.1%	Reliable	2.9	
Three races	0.2%	Somewhat Reliable	0.1	6.6%	Somewhat Reliable	2.2	
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1	
SEX AND AGE							
Total population	2,100,516		****	65,836	Reliable	7,573	
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.2	
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2	
Under 5 years	8.0%	Reliable	0.1	17.5%	Reliable	2.7	
5 to 17 years	19.9%	Reliable	0.1	31.1%	Reliable	3.0	
18 to 24 years	10.3%	Reliable	0.1	13.5%	Reliable	2.0	
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.6	
35 to 44 years	13.6%	Reliable	0.1	9.3%	Reliable	1.8	
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.8	
55 to 64 years	7.5%	Reliable	0.1	4.5%	Somewhat Reliable	1.2	
65 to 74 years	5.8%	Reliable	0.1	2.3%	Somewhat Reliable	1.1	
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6	
Median age (years)	31.8	Reliable	0.1	16.5	Reliable	1.2	
15 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8	
25 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.8	
35 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4	
45 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2	
Under 18 years	582,830	Reliable	438	34,170	Reliable	4,564	
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.5	
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.5	
18 years and over	1,517,626	Reliable	438	35,628	Reliable	3,988	
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.8	
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.8	
18 to 34 years	589,916	Reliable	743	18,455	Reliable	2,538	
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5	
Female	48.8%	Reliable	0.1	44.5%	Reliable	7.5	
35 to 64 years	706,014	Reliable	633	14,523	Reliable	2,106	
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.9	
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.9	
65 years and over	241,636	Reliable	633	2,688	Somewhat Reliable	933	
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9	
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9	
RELATIONSHIP							
Population in households	2,073,707	Reliable	4,145	68,831	Reliable	7,561	
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3	
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6	
Other relatives	10.8%	Reliable	0.8	10.2%	Reliable	2.9	
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.6	
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8	
HOUSEHOLDS BY TYPE							
Households	647,443	Reliable	6,146	11,191	Reliable	1,505	
Family households	73.1%	Reliable	0.7	75.1%	Reliable	6.8	
With own children under 18 years	33.5%	Reliable	0.5	43.0%	Reliable	7.2	
Married-couple family	54.0%	Reliable	1.1	52.1%	Reliable	6.0	
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7	
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1	
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5	
Nonfamily households	26.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.8	
Male householder	12.9%	Reliable	0.7	13.2%	Somewhat Reliable	5.2	
Living alone	9.4%	Reliable	0.8	9.4%	Somewhat Reliable	4.1	
Not living alone	3.5%	Reliable	0.4	3.9%	Not Very Reliable	3.4	
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7	
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9	
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8	
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29	
Average family size	3.7	Reliable	0.05	3.77	Reliable	0.30	
MARITAL STATUS							
Population 15 years and over	1,518,004	Reliable	547	41,693	Reliable	4,885	
Now married, except separated	49.3%	Reliable	0.6	35.0%	Reliable	4.3	
Widowed	5.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4	
Divorced	9.5%	Reliable	0.5	7.1%	Somewhat Reliable	2.0	
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4	
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1	
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,959	
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1	
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3	
Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8	
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0	
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4	
Female 15 years and over	815,395	Reliable	465	20,142	Reliable	3,158	
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9	
Widowed	8.6%	Reliable	0.4	5.6%	Somewhat Reliable	2.6	
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7	
Separated	9.9%	Reliable	0.5	3.9%	Not Very Reliable	3.2	

Figure 43: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Top Middle

Population 15 years and over					
Now married, except separated	1,618,004	Reliable	54%	41,639	Reliable
Widowed	49.3%	Reliable	0.9	35.0%	Reliable
Divorced	5.4%	Reliable	0.3	3.9%	Somewhat Reliable
Separated	3.9%	Reliable	0.5	7.1%	Somewhat Reliable
Never married	2.3%	Reliable	0.2	2.8%	Not Very Reliable
	33.1%	Reliable	0.6	51.8%	Reliable
Male 15 years and over					
Now married, except separated	862,609	Reliable	58%	21,551	Reliable
Widowed	25.0%	Reliable	0.3	35.1%	Reliable
Divorced	2.2%	Reliable	0.3	1.5%	Not Very Reliable
Separated	8.1%	Reliable	0.8	6.1%	Somewhat Reliable
Never married	1.8%	Reliable	0.3	1.2%	Not Very Reliable
	37.1%	Reliable	0.8	56.1%	Reliable
Female 15 years and over					
Now married, except separated	815,595	Reliable	46%	20,146	Reliable
Widowed	47.7%	Reliable	0.9	35.0%	Reliable
Divorced	8.2%	Reliable	0.4	5.6%	Somewhat Reliable
Separated	11.6%	Reliable	0.7	8.2%	Somewhat Reliable
Never married	2.9%	Reliable	0.3	3.9%	Not Very Reliable
	29.2%	Reliable	0.7	47.2%	Reliable
SCHOOL ENROLLMENT					
Population 3 years and over enrolled in school					
Nursery school, preschool	582,029	Reliable	7.4%	30,472	Reliable
Kindergarten	4.9%	Reliable	0.2	7.9%	Somewhat Reliable
Elementary school (grades 1-6)	5.0%	Reliable	0.5	4.5%	Somewhat Reliable
High school (grades 7-12)	43.2%	Reliable	0.8	40.6%	Reliable
College or graduate school	23.2%	Reliable	0.8	27.8%	Reliable
	22.7%	Reliable	1.0	19.9%	Reliable
Male 3 years and over enrolled in school					
Percent enrolled in kindergarten to grade 12	292,465	Reliable	5.2%	15,455	Reliable
Percent enrolled in college or graduate school	75.2%	Reliable	1.4	77.6%	Reliable
	20.2%	Reliable	1.4	19.5%	Somewhat Reliable
Female 3 years and over enrolled in school					
Percent enrolled in kindergarten to grade 12	300,560	Reliable	5.4%	15,014	Reliable
Percent enrolled in college or graduate school	69.4%	Reliable	1.3	65.0%	Reliable
	29.5%	Reliable	1.2	21.3%	Somewhat Reliable
EDUCATIONAL ATTAINMENT					
Population 25 years and over					
Less than high school diploma	1,361,751	Reliable	61%	26,015	Reliable
High school graduate (includes equivalency)	22.0%	Reliable	0.7	19.1%	Reliable
Some college or associate's degree	25.8%	Reliable	0.8	27.9%	Reliable
Bachelor's degree	30.1%	Reliable	0.9	36.7%	Reliable
Graduate or professional degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable
	6.4%	Reliable	0.3	3.7%	Somewhat Reliable
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable
Male, high school graduate or higher	74.5%	Reliable	1.0	69.9%	Reliable
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable
Male, bachelor's degree or higher	21.0%	Reliable	0.9	9.9%	Somewhat Reliable
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable
FERTILITY					
Women 15 to 50 years					
Women 15 to 50 years who had a birth in the past 12 months	548,893	Reliable	1.5%	16,543	Reliable
Unmarried women 15 to 50 years who had a birth in the past 12 months	33,640	Reliable	4.0%	1,311	Somewhat Reliable
As a percent of all women with a birth in the past 12 months	6.1%	Reliable	2.2%	6.4%	Not Very Reliable
	32.0%	Reliable	4.3	49.3%	Not Very Reliable
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS					
Population 30 years and over					
Living with grandchildren	1,167,124	Reliable	91%	20,721	Reliable
Responsible for grandchildren	5.5%	Reliable	0.4	3.4%	Not Very Reliable
	33.6%	Reliable	3.8	N	N
VETERAN STATUS					
Civilian population 18 years and over					
Civilian veteran	1,513,207	Reliable	1,244	35,552	Reliable
	9.0%	Reliable	0.4	6.9%	Somewhat Reliable
DISABILITY STATUS					
Total civilian noninstitutionalized population					
With a disability	2,016,743	Reliable	2,641	68.8%	Reliable
	10.6%	Reliable	0.4	7.8%	Reliable
Civilian noninstitutionalized population under 18 years					
With a disability	583,735	Reliable	43	34.14	Reliable
	2.5%	Reliable	0.4	3.1%	Not Very Reliable
Civilian noninstitutionalized population 18 to 64 years					
With a disability	1,284,521	Reliable	2,045	32.0%	Reliable
	9.8%	Reliable	0.3	6.7%	Somewhat Reliable
Civilian noninstitutionalized population 65 years and older					
With a disability	229,477	Reliable	1,072	2,656	Somewhat Reliable
	38.8%	Reliable	1.6	57.0%	Somewhat Reliable
RESIDENCE 1 YEAR AGO					
Population 1 year and over					
Same house	2,063,165	Reliable	2,628	66,273	Reliable
Different house in the U.S.	42.3%	Reliable	0.5	53.5%	Reliable
Same county	16.4%	Reliable	0.8	16.9%	Reliable
Different county	11.8%	Reliable	0.7	10.0%	Reliable
Same state	4.9%	Reliable	0.4	5.9%	Somewhat Reliable
Different state	3.5%	Reliable	0.4	5.1%	Somewhat Reliable
Abroad	1.1%	Reliable	0.2	0.7%	Not Very Reliable
	0.7%	Somewhat Reliable	0.2	0.5%	Not Very Reliable
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY					
Native					
Male	1,631,228	Reliable	12,558	64,681	Reliable
Female	49.7%	Reliable	0.3	51.6%	Reliable
	50.2%	Reliable	0.3	48.4%	Reliable
Foreign born					
Male	469,218	Reliable	12,558	6,157	Somewhat Reliable
Female	59.7%	Reliable	1.1	52.4%	Reliable
	49.2%	Reliable	0.9	47.6%	Reliable
Foreign born, naturalized U.S. citizen					
Male	178,144	Reliable	7,182	3,188	Somewhat Reliable
Female	49.5%	Reliable	1.5	53.9%	Somewhat Reliable
	53.9%	Reliable	1.5	46.1%	Somewhat Reliable
Foreign born, not a U.S. citizen					
Male	283,072	Reliable	12,964	1,972	Somewhat Reliable
Female	53.3%	Reliable	1.5	50.1%	Somewhat Reliable
	48.2%	Reliable	1.2	49.9%	Somewhat Reliable
Population born outside the United States					
Entered 2003 or later	465,216	Reliable	12,558	5,157	Somewhat Reliable
Entered 1990 to 1999	22.4%	Reliable	1.6	3.3%	Not Very Reliable
Entered before 1990	35.3%	Reliable	1.7	21.1%	Somewhat Reliable
	52.3%	Reliable	1.6	70.6%	Reliable
WORLD REGION OF BIRTH OF FOREIGN BORN					
Foreign-born population excluding population born in Asia					
Europe	465,216	Reliable	12,558	5,157	Somewhat Reliable
Asia	6.5%	Reliable	0.7	N	N
Africa	17.1%	Reliable	0.8	N	N
Oceania	1.4%	Somewhat Reliable	0.5	N	N
Latin America	0.7%	Not Very Reliable	0.4	N	N
North America	73.0%	Reliable	1.0	N	N
	2.5%	Reliable	0.6	N	N
LANGUAGES SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH					
Population 5 years and over					
English only	1,532,944	Reliable	7	57,414	Reliable
Language other than English	61.1%	Reliable	0.5	76.3%	Reliable
Speak English less than "very well"	18.3%	Reliable	0.7	23.7%	Reliable
	19.5%	Reliable	0.8	7.1%	Somewhat Reliable
EMPLOYMENT STATUS					
Population 16 years and over					
In labor force	1,584,308	Reliable	2,806	38,155	Reliable
Civilian labor force	63.6%	Reliable	0.7	64.2%	Reliable
Employed	57.2%	Reliable	0.9	54.6%	Reliable

Figure 44: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Bottom Middle

Female	52.3%	Reliable	1.9	46.1%	Not Very Reliable	16.4
Foreign born, not a U.S. citizen	253,272	Reliable	12,363	1,972	Somewhat Reliable	633
Male	23.3%	Reliable	1.2	26.1%	Somewhat Reliable	12.1
Female	46.7%	Reliable	1.5	49.3%	Somewhat Reliable	14.4
Population born outside the United States	469,216	Reliable	12,556	5,167	Somewhat Reliable	1,468
Entered 2000 or later	22.4%	Reliable	1.6	8.3%	Not Very Reliable	6.1
Entered 1990 to 1999	28.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.9
Entered before 1990	52.3%	Reliable	1.6	70.6%	Reliable	10.3
WORLD REGION OF BIRTH OF FOREIGN BORN	469,216	Reliable	12,556	5,167	Somewhat Reliable	1,468
Foreign-born population excluding population born at sea						
Europe	5.5%	Reliable	0.7	N	N	N
Asia	17.1%	Reliable	0.8	N	N	N
Africa	1.4%	Somewhat Reliable	0.2	N	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N	N
Latin America	73.0%	Reliable	1.0	0.3%	Reliable	N
Northern America	2.2%	Reliable	0.2	N	N	N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 5 years and over	1,932,348	Reliable	7	57,414	Reliable	6,600
English only	61.1%	Reliable	5.7	76.3%	Reliable	4.5
Language other than English	38.9%	Reliable	6.7	23.7%	Reliable	4.2
Speak English less than "very well"	16.9%	Reliable	8.6	7.1%	Somewhat Reliable	2.6
EMPLOYMENT STATUS						
Population 16 years and over	1,584,308	Reliable	2,894	39,133	Reliable	4,480
In labor force	63.6%	Reliable	0.7	64.2%	Reliable	4.1
Civilian labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1
Employed	57.2%	Reliable	0.7	54.4%	Reliable	4.1
Unemployed	6.3%	Reliable	0.2	9.6%	Somewhat Reliable	2.1
Percent of civilian labor force	9.6%	Reliable	0.7	15.0%	Somewhat Reliable	3.9
Armed Forces	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4
Not in labor force	36.2%	Reliable	0.7	35.5%	Reliable	4.1
Families 16 years and over	786,558	Reliable	1,262	16,816	Reliable	2,843
In labor force	49.7%	Reliable	1.5	57.0%	Reliable	5.5
Civilian labor force	55.6%	Reliable	0.9	57.3%	Reliable	5.9
Employed	49.9%	Reliable	0.9	45.1%	Reliable	5.1
Unemployed	6.7%	Reliable	0.6	8.8%	Somewhat Reliable	3.6
Percent of civilian labor force	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3
COMMUTING TO WORK						
Workers 16 years and over	680,102	Reliable	10,454	20,350	Reliable	2,169
Car, truck, or van - drove alone	78.3%	Reliable	1.0	74.6%	Reliable	4.5
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.3%	Somewhat Reliable	4.6
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable	1.4
Walked	2.0%	Reliable	0.2	0.9%	Not Very Reliable	0.8
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.5
Worked at home	4.9%	Reliable	0.2	4.0%	Not Very Reliable	2.1
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.9	Reliable	4.1
OCCUPATION						
Civilian employed population 16 years and over	506,622	Reliable	10,664	21,388	Reliable	2,508
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable	5.0
Service occupations	19.3%	Reliable	0.8	16.3%	Somewhat Reliable	5.2
Sales and office occupations	25.9%	Reliable	1.0	25.0%	Reliable	6.0
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.6%	Not Very Reliable	0.8
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.2	10.3%	Somewhat Reliable	4.1
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.3%	Somewhat Reliable	3.8
Male civilian employed population 16 years and over	506,219	Reliable	8,009	12,141	Reliable	2,004
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable	5.5
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.6
Sales and office occupations	19.4%	Reliable	1.3	24.1%	Somewhat Reliable	7.2
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable	1.6
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	16.8%	Somewhat Reliable	6.5
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9,247	Reliable	1,639
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.5
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable	8.3
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3
Farming, fishing, and forestry occupations	0.6%	Somewhat Reliable	0.2	0.0%	Not Very Reliable	2.3
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.6%	Not Very Reliable	2.3
INDUSTRY						
Civilian employed population 16 years and over	506,622	Reliable	10,664	21,388	Reliable	2,508
Agriculture, forestry, fishing, and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.6
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable	2.5
Manufacturing	9.9%	Reliable	0.6	10.2%	Somewhat Reliable	3.8
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4
Retail trade	12.7%	Reliable	0.8	14.9%	Somewhat Reliable	4.3
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable	4.4
Information	1.0%	Reliable	0.2	2.1%	Not Very Reliable	1.8
Finance and insurance, and real estate and leasing	5.1%	Reliable	0.4	4.0%	Not Very Reliable	2.1
Professional, scientific, and management, and administrative and waste management services	9.8%	Reliable	0.6	10.0%	Somewhat Reliable	4.4
Educational services, and health care and social assistance	19.9%	Reliable	0.9	10.6%	Somewhat Reliable	5.2
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.3
Other services (except public administration)	4.7%	Reliable	0.3	5.0%	Somewhat Reliable	2.8
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.5
CLASS OF WORKER						
Civilian employed population 16 years and over	506,622	Reliable	10,664	21,388	Reliable	2,508
Private wage and salary workers	76.5%	Reliable	0.9	77.5%	Reliable	4.6
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.9
Self-employed workers in own not incorporated business	8.1%	Reliable	1.2	7.4%	Somewhat Reliable	2.8
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.9
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)						
Households	647,443	Reliable	6,146	11,191	Reliable	1,509
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable	7,512
With earnings	79.9%	Reliable	0.6	83.5%	Reliable	5.4
Mean earnings (dollars)	72,648	Reliable	1,364	70,188	Reliable	9,631
With Social Security income	26.4%	Reliable	0.3	25.0%	Reliable	5.7
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable	1,189
With Supplemental Security Income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9
Mean Supplemental Security Income (dollars)	9,104	Reliable	563	6,633	Somewhat Reliable	1,718
With cash public assistance income	2.9%	Reliable	0.3	3.0%	Not Very Reliable	2.1
Mean cash public assistance income (dollars)	5,330	Reliable	851	5,900	Somewhat Reliable	2,489
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	6.3
Mean retirement income (dollars)	22,425	Reliable	312	23,115	Reliable	5,026
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable	2.0
Families	473,263	Reliable	7,070	8,405	Reliable	1,354
Median family income (dollars)	64,594	Reliable	1,551	65,619	Reliable	13,426
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable	6.4
Median income (dollars)	76,856	Reliable	1,511	72,724	Reliable	10,818
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.6
Median income (dollars)	51,269	Reliable	4,775	28,235	Not Very Reliable	21,320

Figure 45: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Bottom

Male	381,434	Reliable	8,152	7,604	Reliable	1,467
Female	238,205	Reliable	6,630	5,609	Reliable	1,299
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,966	Reliable	7,568
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,836	Reliable	1,074	41,770	Reliable	3,199
Female	36,153	Reliable	893	29,939	Somewhat Reliable	8,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.2%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.5%	Not Very Reliable	3.5
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.5%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.6
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.5%	Reliable	0.8	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	6.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.15	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.8%	Reliable	6.4
2 to 4 units	2.5%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.6
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.5	8.6%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	26.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.5%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.7	63.5%	Reliable	6.8
Electricity	17.5%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1 D1 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOC cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	48.3%	Reliable	8.8
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	436,193	Reliable	7,265	7,352	Reliable	1,128
Median value (dollars)	329,000	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,232	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	456	Reliable	13	458	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRAP1 cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	38.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 48: Detailed Table with Color-Coding (D1)

Table ID C02003		Race in the United States Universe: Total Population in the United States 2008 American Community Survey 1-Year Estimates								
Table View (11) Map View (11) Chart View (11)										
Actions: Modify Table Bookmark Download		View Table Notes								
	Apple County, USA			Birch County, USA			Cherry County, USA			
	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error	
Total:	149,518	*****	64,866	*****	9,862,049	*****				
Population of one race:	145,799	Reliable	1,285	62,279	Reliable	830	9,558,835	Reliable	11,282	
White	108,310	Reliable	3,943	56,795	Reliable	1,432	5,193,451	Reliable	41,862	
Black or African American	11,519	Reliable	704	1,437	Reliable	248	866,596	Reliable	6,204	
American Indian and Alaska Native	2,432	Somewhat Reliable	602	1,817	Somewhat Reliable	745	61,347	Reliable	6,416	
Asian alone	4,875	Reliable	634	66	Not Very Reliable	122	1,275,136	Reliable	6,674	
Native Hawaiian and Other Pacific Islander	39	Not Very Reliable	65	151	Not Very Reliable	273	27,049	Reliable	2,239	
Some other race	18,564	Reliable	3,779	2,013	Not Very Reliable	1,414	2,135,056	Reliable	40,114	
Population of two or more races:	3,749	Somewhat Reliable	1,285	2,587	Somewhat Reliable	830	303,414	Reliable	11,282	
Two races including Some other race	875	Not Very Reliable	472	121	Not Very Reliable	194	104,722	Reliable	8,166	
Two races excluding Some other race, and three or more races	2,874	Somewhat Reliable	1,198	2,466	Somewhat Reliable	827	198,692	Reliable	9,075	
Population of two races:	3,257	Somewhat Reliable	1,105	2,587	Somewhat Reliable	830	281,478	Reliable	11,462	
White; Black or African American	812	Not Very Reliable	605	359	Not Very Reliable	248	33,577	Reliable	4,247	
White; American Indian and Alaska Native	522	Not Very Reliable	465	1,416	Somewhat Reliable	664	41,180	Reliable	4,166	
White; Asian	725	Not Very Reliable	467	273	Not Very Reliable	408	69,715	Reliable	5,780	
Black or African American; American Indian and Alaska Native	40	Not Very Reliable	65	418	Somewhat Reliable	200	11,670	Somewhat Reliable	3,770	
All other two race combinations	1,158	Not Very Reliable	599	121	Not Very Reliable	194	125,334	Reliable	8,350	
Population of three races	451	Not Very Reliable	523	0	Not Very Reliable	264	20,428	Reliable	3,232	
Population of four or more races	41	Not Very Reliable	67	0	Not Very Reliable	264	1,510	Not Very Reliable	839	

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 49: Detailed Table with No Color-Coding (D2)

Table ID C02003	Race in the United States Universe: Total Population in the United States 2008 American Community Survey 1-Year Estimates								
i									
Table View Map View Chart View									
Actions: Modify Table Bookmark Download									
View Table Notes									
	Apple County, USA			Birch County, USA			Cherry County, USA		
	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error
Total:	149,518		*****	64,866		*****	9,862,049		*****
Population of one race:	145,799	Reliable	1,285	62,279	Reliable	830	9,558,635	Reliable	11,282
White	108,310	Reliable	3,943	56,795	Reliable	1,432	5,193,451	Reliable	41,862
Black or African American	11,519	Reliable	704	1,437	Reliable	248	866,696	Reliable	6,204
American Indian and Alaska Native	2,432	Somewhat Reliable	602	1,817	Somewhat Reliable	745	61,347	Reliable	6,419
Asian alone	4,875	Reliable	634	66	Not Very Reliable	122	1,276,138	Reliable	6,674
Native Hawaiian and Other Pacific Islander	39	Not Very Reliable	65	151	Not Very Reliable	273	27,049	Reliable	2,239
Some other race	18,594	Reliable	3,779	2,013	Not Very Reliable	1,414	2,135,056	Reliable	40,114
Population of two or more races:	3,749	Somewhat Reliable	1,285	2,587	Somewhat Reliable	830	303,414	Reliable	11,282
Two races including Some other race	875	Not Very Reliable	472	121	Not Very Reliable	194	104,722	Reliable	8,156
Two races excluding Some other race, and three or more races	2,874	Somewhat Reliable	1,198	2,466	Somewhat Reliable	827	198,692	Reliable	9,075
Population of two races:	3,257	Somewhat Reliable	1,105	2,587	Somewhat Reliable	830	281,476	Reliable	11,482
White; Black or African American	812	Not Very Reliable	605	359	Not Very Reliable	248	33,577	Reliable	4,247
White; American Indian and Alaska Native	522	Not Very Reliable	465	1,416	Somewhat Reliable	664	41,180	Reliable	4,166
White; Asian	725	Not Very Reliable	467	273	Not Very Reliable	408	69,715	Reliable	5,780
Black or African American; American Indian and Alaska Native	40	Not Very Reliable	65	418	Somewhat Reliable	200	11,670	Somewhat Reliable	3,770
All other two race combinations	1,158	Not Very Reliable	599	121	Not Very Reliable	194	125,334	Reliable	8,350
Population of three races	451	Not Very Reliable	523	0	Not Very Reliable	294	20,428	Reliable	3,232
Population of four or more races	41	Not Very Reliable	67	0	Not Very Reliable	294	1,510	Not Very Reliable	839

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 50: Geographical Comparison Table with Legend Behind Link and Red First in the Legend (E1)

Geographic area	Percent	Reliability	Margin of Error
Anystate, USA	5.3	Reliable	0.1
COUNTY			
County A	11.6	Reliable	0.7
County B	1.0	Not Very Reliable	0.6
County C	9.6	Reliable	0.8
County D	2.2	Somewhat Reliable	1.1
County E	1.5	Reliable	0.4
County F	1.1	Not Very Reliable	0.8
County G	0.7	Not Very Reliable	0.5
County H	0.9	Somewhat Reliable	0.3
County I	3.2	Not Very Reliable	2.3
County J	0.7	Not Very Reliable	1.1
County K	7.3	Reliable	0.2
County L	0.3	Not Very Reliable	0.3
County M	8.0	Reliable	1.3
County N	0.4	Not Very Reliable	0.5
County O	0.6	Not Very Reliable	0.5
County P	3.0	Somewhat Reliable	0.8
County Q	3.7	Not Very Reliable	4.7
County R	0.0	Not Very Reliable	0.4
County S	3.3	Reliable	0.3
County T	1.0	Somewhat Reliable	0.4
County U	1.6	Reliable	0.3
County V	3.3	Reliable	0.4
County W	2.0	Reliable	0.3
County X	3.4	Reliable	0.3
County Y	31.9	Reliable	1.3
County Z	1.5	Reliable	0.4
County AA	1.2	Somewhat Reliable	0.6
County BB	7.5	Reliable	1.0
County CC	3.5	Reliable	0.8
County DD	3.7	Reliable	0.5
County EE	2.5	Somewhat Reliable	0.8
County FF	0.4	Not Very Reliable	0.4
County GG	3.3	Somewhat Reliable	1.0
County HH	2.3	Somewhat Reliable	0.7
County II	0.8	Somewhat Reliable	0.3
County JJ	1.2	Not Very Reliable	1.0
County KK	0.7	Somewhat Reliable	0.3
County LL	1.1	Somewhat Reliable	0.3
County MM	4.2	Somewhat Reliable	1.1
County NN	0.2	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 51: Geographical Comparison Table with Legend Behind Link and Green First in the Legend (E2)

Table ID
GCT0804

Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation
(Excluding Taxicab) in Anystate, USA
Universe: Workers 16 years and over in Anystate, USA
2008 American Community Survey 1-Year Estimates 

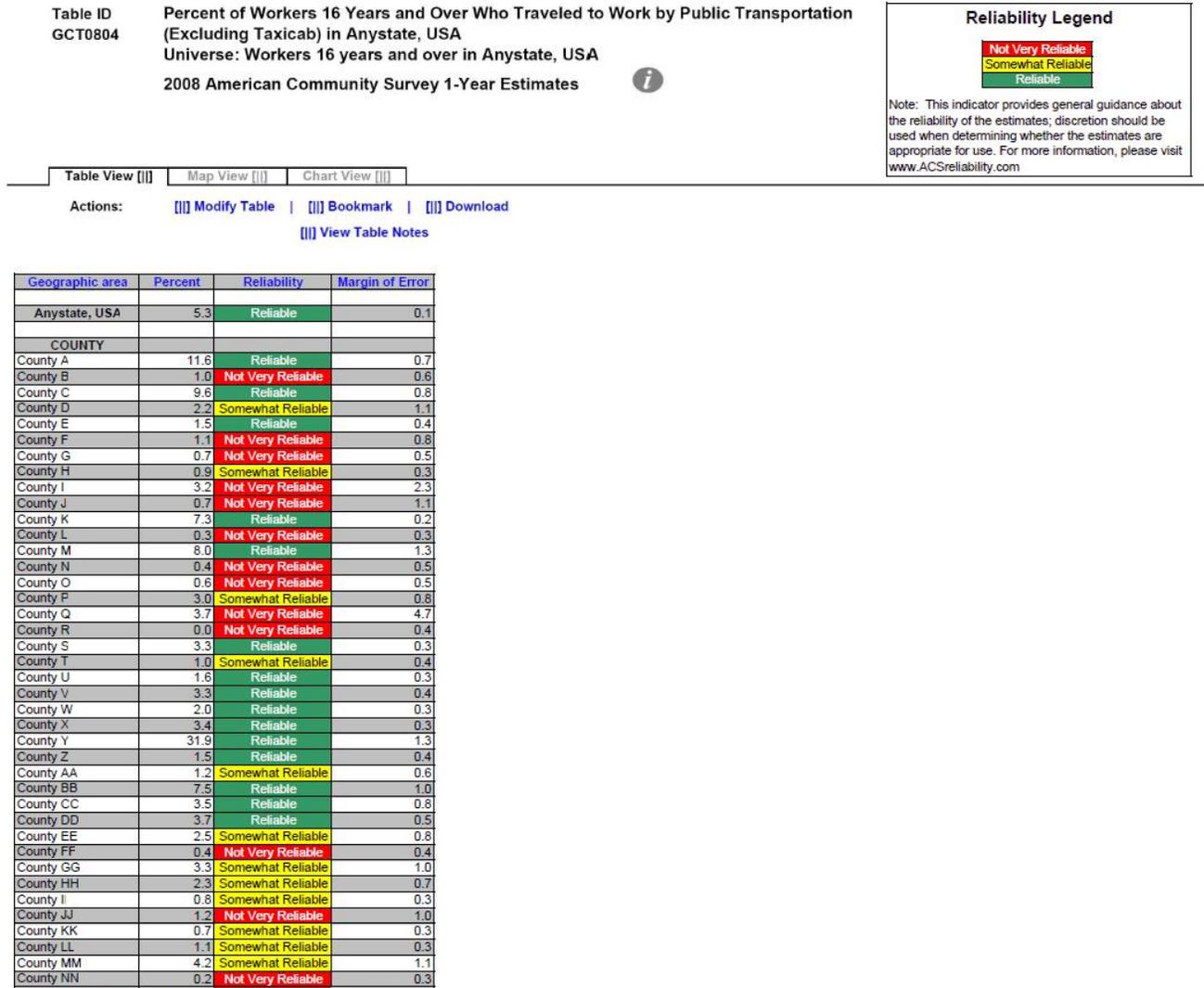
Table View  | Map View  | Chart View 

Actions: [Modify Table](#) | [Bookmark](#) | [Download](#)
[View Table Notes](#)

Geographic area	Percent	Reliability	Margin of Error
Anystate, USA	5.3	Reliable	0.1
COUNTY			
County A	11.6	Reliable	0.7
County B	1.0	Not Very Reliable	0.6
County C	9.6	Reliable	0.8
County D	2.2	Somewhat Reliable	1.1
County E	1.5	Reliable	0.4
County F	1.1	Not Very Reliable	0.8
County G	0.7	Not Very Reliable	0.5
County H	0.9	Somewhat Reliable	0.3
County I	3.2	Not Very Reliable	2.3
County J	0.7	Not Very Reliable	1.1
County K	7.3	Reliable	0.2
County L	0.3	Not Very Reliable	0.3
County M	8.0	Reliable	1.3
County N	0.4	Not Very Reliable	0.5
County O	0.6	Not Very Reliable	0.5
County P	3.0	Somewhat Reliable	0.8
County Q	3.7	Not Very Reliable	4.7
County R	0.0	Not Very Reliable	0.4
County S	3.3	Reliable	0.3
County T	1.0	Somewhat Reliable	0.4
County U	1.6	Reliable	0.3
County V	3.3	Reliable	0.4
County W	2.0	Reliable	0.3
County X	3.4	Reliable	0.3
County Y	31.9	Reliable	1.3
County Z	1.5	Reliable	0.4
County AA	1.2	Somewhat Reliable	0.6
County BB	7.5	Reliable	1.0
County CC	3.5	Reliable	0.8
County DD	3.7	Reliable	0.5
County EE	2.5	Somewhat Reliable	0.8
County FF	0.4	Not Very Reliable	0.4
County GG	3.3	Somewhat Reliable	1.0
County HH	2.3	Somewhat Reliable	0.7
County II	0.8	Somewhat Reliable	0.3
County JJ	1.2	Not Very Reliable	1.0
County KK	0.7	Somewhat Reliable	0.3
County LL	1.1	Somewhat Reliable	0.3
County MM	4.2	Somewhat Reliable	1.1
County NN	0.2	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 52: Geographical Comparison Table with Legend Above Table and Red First in the Legend (E3)



Source: U.S. Census Bureau, 2008 American Community Survey

Table ID: GCT0804
 Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation (Excluding Taxicab) in Anystate, USA
 Universe: Workers 16 years and over in Anystate, USA
 2008 American Community Survey 1-Year Estimates

Reliability Legend

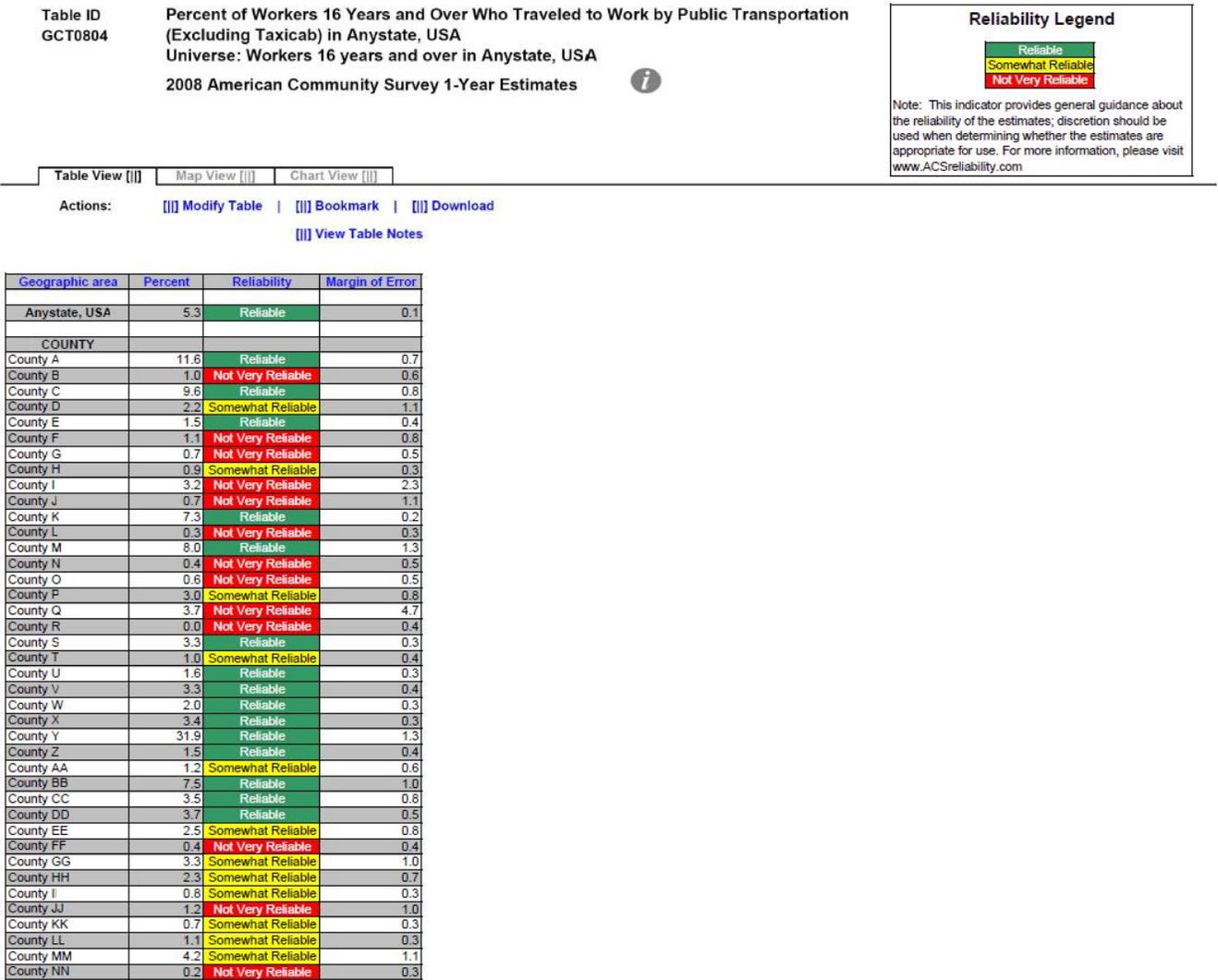
Not Very Reliable
 Somewhat Reliable
 Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View | Map View | Chart View

Actions: | Modify Table | Bookmark | Download | View Table Notes

Figure 53: Geographical Comparison Table with Legend Above Table and Green First in the Legend (E4)



Source: U.S. Census Bureau, 2008 American Community Survey

Table ID
GCT0804

Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation (Excluding Taxicab) in Anystate, USA
Universe: Workers 16 years and over in Anystate, USA
2008 American Community Survey 1-Year Estimates



Reliability Legend

Reliable
Somewhat Reliable
Not Very Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View [] | Map View [] | Chart View []

Actions: [] Modify Table | [] Bookmark | [] Download
[] View Table Notes

8 Appendix B: Tasks for All Tables

The tasks and their associated answers are included below.

Figure 54: Tasks Part 1

A – Data Profiles tasks

1. What is the first thing that you noticed about this table?
[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
 - Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 -
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. A company offering cleaning services to senior citizens living alone is looking for potential customers. They want to know the estimate of householders ages 65 or older living alone in Anytown, USA. What would you tell them?

ANSWER:
2,266, Somewhat Reliable, +/- 641, or 9.3% (+/- 2.5%) somewhat reliable

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: easy

3. The Irish Embassy wants to know how many people in Anytown, USA might be interested in an open-house. What is the estimate and percentage estimate of people of Irish ancestry in Anytown, USA? Would you use either of these estimates?

Figure 55: Tasks Part 2

ANSWER:

12,714, Reliable, +/- 2,912

19.6%, Reliable, +/- 4.5%

Yes, Estimates are both Reliable

Difficulty: easy

4. A tutoring provider would like to teach courses that prepare students for standardized tests in Anytown, USA. They want to know the estimate and percentage estimate for school enrollment for high school (grades 9-12). What would you tell them?

ANSWER: 4,100, Reliable, +/- 1,086,

30.1%, Somewhat Reliable, +/- 7.1%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: Under "School Enrollment" heading, not "Educational Attainment", the reliability is different for the estimate and the percent.

DIFFICULTY: medium

5. The Danish Embassy is reporting that they have more people of Danish decent in Anytown than those of Portuguese decent. Is this true?

ANSWER: Danish, 1,700 +/- 1,689, Not Very Reliable, 2.6% +/- 2.6%, Not very reliable

Portuguese, 1,543, +/- 802, Not very Reliable, 2.4% +/- 1.2, Not Very reliable

No, not true. Estimates are not significantly different, and both estimates are not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: U.S. Citizenship status estimates and percents have different reliabilities.

DIFFICULTY: hard

6. GetYourDegree Community College is interested in opening a branch in Anytown, USA; however, their corporate mandate stipulates that there must be at least 14,000 students who have completed some college, but did not get their degree. You are responsible for reporting whether Anytown, USA, has met the mandate. What is your recommendation?

ANSWER: 10,562, Reliable, +/- 1,731

Do not open branch. With the MOE, the estimate could be as high as 12,293, but does not approach 14,000.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

Figure 56: Tasks Part 3

7. The mayor of Anytown, USA wants to know if the town should continue to fund a welcome wagon program for people who move from other states. If at least 5.0% percent of the population in Anytown, USA lived in a different state 1 year ago, he will keep the program. Based on the data, what would you tell him?

ANSWER: 2.9%, Not Very Reliable, +/-1.8%
Do not fund program. With MOE, estimate is at most 4.7%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

8. You are a demographer working for a local university conducting research about the population's heritage. What do you think about the Ancestry data in this table?

ANSWER: Most of the estimates are not very reliable, may look for another data source.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

9. In 2007, the percent of people who were separated in Anytown, USA was 1.9% (+/- .3%) and that estimate was considered "reliable". The Bureau for Family Affairs is now reporting that, based on 2008 ACS data, the percentage of people who were separated increased from 2007. Do you agree?

ANSWER: Disagree
2008 estimate is 2.9% (+/-2.7) – not very reliable, which is not significantly different than 1.9%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: hard

Figure 57: Tasks Part 4

B – Selected Pop Profiles tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. The National Organization for Young Adults is considering opening a chapter in Anytown, USA. They first want to know what the estimate for the number of people in Anytown that are ages 18 to 34. What would you tell them?

ANSWER: 569,916, Reliable, +/- 743

DIFFICULTY: Easy

3. The National Education Association wants to know what percentage of those who reported two or more races have a bachelor's degree? What would you tell the National Education Association?

ANSWER: 10.7%, Somewhat Reliable, +/- 3.1%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

NOTES: Under Educational Attainment

Figure 58: Tasks Part 5

4. A green company wants to know the percentage of households, where the householder reported having two or more races, which use a fuel other than gas or electricity to heat their home. What is the percentage?

ANSWER: 3.8%, Not Very Reliable, +/- 2.9%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

5. Your boss wants to know whether the percent of nonfamily households is higher for the total population or the population of housing units where the householder reported two or more races. What would you tell her?

ANSWERS: Total Population, 26.9%, Reliable, +/- 0.7%

Two or more races, 24.9%, Somewhat Reliable, +/- 6.8%

Using only the point estimates, Total population appears higher; but the estimates are not significantly different, and one may be less reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: Under Households by Type

DIFFICULTY: Hard

6. Find the civilian non-institutionalized population of 18 to 64 years who have a disability for both the total population and for the two or more race subcategory. If you were asked if the two estimates were different, what would you say?

ANSWER: Total Pop: 8.8%, Reliable, +/- 0.5%

Two or More Races: 8.7%, Somewhat Reliable, +/- 2.5%

They are not significantly different, Two or more races is less reliable than total pop.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

7. The mayor of Anytown, USA wants to know if the town should continue to fund a public telephone line for households with no telephone service available. If at least 2.0% percent of the population in Anytown doesn't have telephone service, she will keep the program. Based on the data, what would you tell her?

ANSWER: 1.0%, Somewhat Reliable, +/-0.3%

Discontinue the program, because the percentage does not approach 2.0%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

Figure 59: Tasks Part 6

8. Anytown, USA will be designated as a high income earning town if the median household income is at least \$55,000 in 2008. Will they get this designation?

ANSWER: Yes, 57,792, Reliable, +/- 1,233
Yes, the estimate and the range are above 55,000.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

9. Part of a new job creation program was designed to see how jobs were spread out across the population. What is percentage of the civilian employed population of two or more races who work in Farming, fishing, and forestry occupations?

ANSWER: 0.0%, Not Very Reliable, +/- 0.9%
No people were reported to work in these occupations, but the estimate may be inaccurate since it is not very reliable

DIFFICULTY: Hard

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: 0 estimate

Figure 60: Tasks Part 7

C – Subject Tables tasks

Note that “industries” are rows, “occupations” are columns.

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

(Starting out respondents with easier tasks because this is a large table)

2. What is the total number of people working in the Construction industry?

ANSWER: 5,334, Reliable, +/- 1,127

DIFFICULTY: easy

3. A technology association wants to know the amount of people who works in “Information” industries, with a goal of 1,800. Did they meet their goal?

ANSWER: 900, Not Very Reliable, +/- 595,

No. 1,800 is not within the MOE range of the estimate, but the estimate may be inaccurate since it is not very reliable

DIFFICULTY: Medium

Figure 61: Tasks Part 8

4. Of those working in the “Arts, entertainment, and recreation, and accommodation and food services” industry, what percent are in service occupations?

ANSWER: 64.7%, Reliable, +/- 10.6%

DIFFICULTY: easy

5. Of those working in the Construction industry, how many are in Farming, fishing, and forestry occupations?

ANSWER: 0.0%, Not Very Reliable, +/-3.7%

No one is reported to work in that industry and occupation combination, but the estimate may be inaccurate since it is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: 0 estimate

DIFFICULTY: hard

6. A company wants to know if at least 3,000 total people are working in public administration in Anytown, USA. What would you tell them?

ANSWER: 3,623, Reliable, +/- 807.

Yes. The point estimate is over 3,000 and the estimate is Reliable, so over 3,000 people work in public administration.

DIFFICULTY: Medium

7. Your boss wants to know which industry has more people in “Sales and office occupations”: “Educational services, and health care and social assistance” or “Transportation and warehousing, and utilities”? What would you tell him?

ANSWER: Educational, 16.2%, Somewhat Reliable, +/- 5.4%

Transportation, 16.5%, Not Very Reliable, +/- 10.9%

They are not significantly different, “Educational” is less reliable than total pop, and the estimate may be inaccurate.

DIFFICULTY: Hard

8. You are writing a grant proposal to secure funding for a research project focused on increasing the workforce in the “educational services, and health care, and social assistance” industry. You need the percent of people in this industry working in “service occupations”. What would you say in your grant proposal?

ANSWER: 26.4%, +/- 7.0%, somewhat reliable

Figure 62: Tasks Part 9

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

Figure 63: Tasks Part 10

D – Detailed Tables tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. There is consideration for expanding an outreach program if there are at least 30,000 Native Hawaiian and Other Pacific Islanders in Cherry County. What is your recommendation to the program directors?

ANSWER: 27,049, Reliable, +/- 2,239
Not enough to expand the program.

DIFFICULTY: Medium

3. Your boss wants to know the estimate of the number of people of two or more races in Apple County. What would you tell him?

ANSWER: 3,749, Somewhat Reliable, +/- 1,285

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

Figure 64: Tasks Part 11

4. For a grant proposal, you need an estimate of the number of people of four or more races in Birch County. What would you say in your proposal?

ANSWER: 0, Not Very Reliable, +/- 294

No one reported to have four or more races, but the estimate may be inaccurate since it is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

NOTES: 0 estimate

5. The Mayor of Birch County wants to know the estimate of the number of people of one race in Birch County. What would you tell the mayor?

ANSWER: 62,279, Reliable, +/- 830

DIFFICULTY: Easy

6. You are a reporter for a newspaper, and are writing an article about the amount of people who report one race as "some other race." Specifically for Birch County, you want to know if the estimate for the "some other race" group for those reporting only one race is higher than the estimate of American Indian and Alaska Native group. What is your finding?

ANSWER: American Indian and Alaska Native, 1,817, Somewhat Reliable, +/- 745

Some other group, 2,013, Not Very Reliable, +/- 1,414

Yes the group reporting "some other race" is higher than the group reporting American Indian and Alaska Native.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

7. Looking at the estimates of the Black or African American subpopulation in Apple County and Birch County, which estimate is more accurate?

ANSWER: Apple, 11,519, Reliable, +/- 704

Birch, 1,437, Reliable, +/- 248

Based on reliability, they have the same accuracy. Apple County has a smaller relative MOE, it could be considered more accurate.

DIFFICULTY: Medium

8. A local newspaper reports that Apple County has more people reported as having three or more races than Birch County. Do you agree?

Figure 65: Tasks Part 12

ANSWER: 451 in Apple county (+/-523), Not very reliable
0 in Birch County (+/-294), not very reliable.
No, Not statistically different, and both estimates are not very reliable.

DIFFICULTY: Hard

Figure 66: Tasks Part 13

E – Geographic Comparison Table tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.] make changes noted above.

- Probe if indicator is mentioned: What do the colors represent?
 - IF quality/reliability: How is quality measured here or what measure is used to determine the level of quality?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the colors in the tables? What do the colors represent?
 - IF quality: How is quality measured here or what measure is used to determine the level of quality?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. a. The Anystate government will be publishing a report in which it highlights various counties and the degree to which they use public transportation to get to work. They only want to include counties where they are confident that the data would not likely be contested.

Which counties would you use?

ANSWER: Any counties of "Reliable" (or "somewhat reliable")

DIFFICULTY: easy

b. Anystate, USA wants to warn the county planners in counties where the data on public transportation use may not be very accurate.

Which counties do you think Anystate should warn?

ANSWER: Any counties of "Not Very Reliable"

DIFFICULTY: easy

Figure 67: Tasks Part 14

3. Counties D and E, which share a border, would like to tell the local newspaper about the success of their combined public transportation system. They want to calculate the total percent of people using public transportation to get to work by adding the percent in each county together. Would you recommend they do this?

ANSWER: County D has 2.2%, Somewhat Reliable, and +/- 1.1%
County E has 1.5%, Reliable, and 0.4%
OK to do this, but want to mention differences in reliability.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

4. Counties Q and U used two different approaches towards their public transportation systems. County Q would like to say that they had a higher percentage that traveled to work using public transportation compared to County U. Is this true?

ANSWER: County Q, 3.7%, Not Very Reliable, +/- 4.7%
County U, 1.6%, Reliable, +/- 0.3%
No, Not statistically different, and County Q estimate is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: hard

5. County Y is a very urbanized area. The county is eligible for a green initiative award if at least 30% of its citizens used public transportation to get to work. Should they get the award?

ANSWER: County Y, 31.9%, Reliable, 1.3%
Yes, they should get the award.

DIFFICULTY: Medium

6. County A wants to say that over 10% of people used public transportation to travel to work. Is this true?

ANSWER: 11.6%, Reliable, +/- 0.7%
Yes, over 10%

DIFFICULTY: Medium

7. In an effort to raise awareness of the county's under-used bus system, County R says that absolutely no one in the county uses public transportation to travel to work. Is this true?

ANSWER: No, not necessarily, 0.0%, +/- 0.4%, not very reliable

Figure 68: Tasks Part 15

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

8. What is the percentage of people in County FF who use public transportation to travel to work?

ANSWER 0.4%, Not Very Reliable, +/-0.4%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

9 Appendix C: General Protocol

Figure 69: Protocol Part 1

General Introduction

Thank you for your time today. My name is <Name>, and I will be working with you today. We will be evaluating a new design of the new ACS data table format by having you work on several tasks. Your experience with the table is an essential part of our work. We are going to use your comments to give feedback to the developers of the table. Your comments and thoughts may help the developers make changes to improve the table. I did not create the site, so please do not feel like you have to hold back on your thoughts to be polite. Please share both your positive and negative reactions to the site. And remember, we are not evaluating you or your skills, but rather you are helping us see how well the table works.

First, I would like to ask you to read and sign this consent form. It explains the purpose of the session and informs you that we would like to videotape the session, with your permission. Only those of us connected with the project will review the tape. We will use it mainly as a memory aid. We are going to do some eye tracking as well as have you work on some task scenarios that I will give you. There is also a short background survey that we would like you to complete. If you don't want to answer any of the questions, please feel free to skip them.

[Hand consent form and background survey; give time to read and sign; sign own name and date if you have not already done so.]

During the session, I will ask you to work on several tasks. I would like you to tell me your impressions and thoughts about the Tables as you work through the tasks. I would like you to "think aloud" and talk to me about your decisions. So if you expect something to happen, tell me what you expect. If you expect to see some piece of information, tell me about what you expect. This means that as you work on a task, talk to me about what you are doing, what you are going to do, and why. Talk to me about why you clicked on a link or where you expect the link to take you.

Finally, during the session, I will remind you to talk to me if you get quiet, not to interrupt your thought process simply to remind you to talk to me. Please focus on verbalizing what you are thinking and expecting to happen. We are interested in the reasoning behind your actions, not just what you are doing.

I ask that each time you start a task, please read the task out loud, and once you have found the information you are looking for please state your answer aloud. For example, say, "My answer is ---" or "This is my final answer." After each task, I will save the eye-tracking data and close the table. I will return you to the table and let you know when you can begin the next task.

Please remember to begin each task by reading the task question aloud as well as stating the final answer. As you work, please remember think aloud.

[Pull up a Web site in Firefox, such as www.wtop.com or www.espn.com, etc.]

Before we get started, let's practice thinking aloud. Say that you had a minute or two to kill and came to this Web site. Describe your thought process as you navigate through a Web site looking for something interesting to read

Figure 70: Protocol Part 2

Now I am going to calibrate your eyes for the eye-tracking. I am going to have you position yourself in front of the screen so that you can see your nose in the reflection at the bottom of the monitor. To calibrate your eyes, please follow the [red/blue] dot across the screen with your eyes.

[Do Calibration]

Now that we have your eyes calibrated, we are ready to begin.

[If Calibration Fails]

It seems that we are having some technical difficulties with our equipment and need to continue without the eye tracker.

[Continue with Test]

I am going to leave you here in the test room, but we will still be able to communicate through a series of microphones and speakers. I will let you know when to begin the first task by reading it aloud from the folder near you. Do you have any questions?

[After the last task]

I will come back to the testing room to discuss your experience with the ACS data tables with you.

[Have them complete the Satisfaction and Task Difficulty Forms, then walk through the Debriefing Questions]

10 Appendix D: Consent Form

Figure 71: Consent Form



Consent Form
Usability Study of the ACS Data Tables

Each year the Census Bureau conducts many different usability evaluations. For example, the Census Bureau routinely tests the wording, layout and behavior of products, such as Web sites and online surveys, in order to obtain the best information possible from respondents.

You have volunteered to take part in a study to improve the usability of the ACS data tables. In order to have a complete record of your comments, your usability session will be videotaped. We plan to use the tapes to improve the design of the product. Staff directly involved in the usable design research project will have access to the tapes. Your participation is voluntary and your answers will remain strictly confidential.

This usability study is being conducted under the authority of Title 13 USC. The OMB control number for this study is 0607-0725. This valid approval number legally certifies this information collection.

I have volunteered to participate in this Census Bureau usability study, and I give permission for my tapes to be used for the purposes stated above.

Participant's Name: _____

Participant's Signature: _____ Date: _____

Researcher's Name: _____

Researcher's Signature: _____ Date: _____

11 Appendix E: Questionnaire on Statistical Experience, Computer Use and Internet Experience

Figure 72: Questionnaire on Statistical Experience, Computer Use and Internet Experience Part 1

Questionnaire on Statistical Background, Computer Use, Internet Experience

YOUR ANSWERS ARE CONFIDENTIAL

Demographics

1. What is your age? _____

2. Are you male or female? _____

3. What is your level of education?

- grade school
- some high school
- high school degree
- some college
- 2-year college degree
- 4-year college degree
- some postgraduate study (e.g., M.A., M.B.A., J.D., Ph.D., M.D., programs)
- postgraduate degree (e.g., M.A., M.B.A., J.D., Ph.D., M.D.)

4. How long have you been using ACS data products?

5. How often do you use ACS data products?

- Daily
- Weekly
- Monthly
- Less than once a month
- Do not use

6. For what purpose do you usually use ACS data products? (e.g., to write reports, news articles, make decisions, etc.)

7. What statistics courses have you completed?

- Advanced graduate-level statistics
- Advanced undergraduate/beginning level graduate statistics courses only
- Introductory statistics courses only
- No statistics courses completed

8. Rate your level of expertise with statistics.

- Novice (Just beginning to use statistics or rarely use them)
- Intermediate (Moderate experience with statistics)
- Expert (A great deal of experience with and/or frequent use of statistics)

Figure 73: Questionnaire on Statistical Experience, Computer Use and Internet Experience
Part 2

Computer Experience

1. Do you use a computer at home, at work, or both?

(Check all that apply.)

- Home
- Work
- Somewhere else, such as school, library, etc.

2. If you have a computer at home,

a. What kind of modem do you use at home?

- Dial-up
- Cable
- DSL
- Wireless (Wi-Fi)
- Other _____
- Don't know _____

b. Which browser do you typically use at home? Please indicate the version if you can recall it.

- Firefox
- Internet Explorer
- Netscape
- Other _____
- Don't know _____

c. What operating system does your home computer run in?

- MAC OS
- Windows 95
- Windows 2000
- Windows XP
- Windows Vista
- Other _____
- Don't know _____

3. On average, about how many hours do you spend on the Internet per day?

- 0 hours
- 1-3 hours
- 4-6 hours
- 7 or more hours

4. Please rate your overall experience with the following:

Circle one number.

	No experience	Very experienced
Computers	1 2 3 4 5 6 7 8 9	
Internet	1 2 4 5 5 6 7 8 9	

12 Appendix F: Satisfaction Questionnaire (QUIS)

Figure 74: Satisfaction Questionnaire

Questionnaire for User Interaction Satisfaction (QUIS)

Please circle the numbers that most appropriately reflect your impressions about using the new ACS data tables.

1. Overall reaction to the new ACS data tables:	terrible 1 2 3 4 5 6 7 8 9	wonderful 1 2 3 4 5 6 7 8 9	not applicable
2. Definition of reliability:	confusing 1 2 3 4 5 6 7 8 9	clear 1 2 3 4 5 6 7 8 9	not applicable
3. Use of terminology throughout the tables:	inconsistent 1 2 3 4 5 6 7 8 9	consistent 1 2 3 4 5 6 7 8 9	not applicable
4. Information displayed in the tables:	inadequate 1 2 3 4 5 6 7 8 9	adequate 1 2 3 4 5 6 7 8 9	not applicable
5. Arrangement of information in the tables:	illogical 1 2 3 4 5 6 7 8 9	logical 1 2 3 4 5 6 7 8 9	not applicable
6. Tasks can be performed in a straight-forward manner:	never 1 2 3 4 5 6 7 8 9	always 1 2 3 4 5 6 7 8 9	not applicable
7. Reliability indicator for the tables:	confusing 1 2 3 4 5 6 7 8 9	clear 1 2 3 4 5 6 7 8 9	not applicable
8. Overall experience of finding information:	difficult 1 2 3 4 5 6 7 8 9	easy 1 2 3 4 5 6 7 8 9	not applicable
9. Additional Comments:			

13 Appendix G: Task Difficulty Survey

The task difficulty survey was tailored for each type of table. Only the task difficulty survey for the Data Profiles Tables are shown here to conserve space.

Figure 75: Data Profiles Task Difficulty Part 1

Task Difficulty Rating Questionnaire

On a scale of 1-10 with 1 being extremely easy and 10 being extremely difficult, please rate the difficulty of each task.

A. What is the first thing that you noticed about this table?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

1. A company offering cleaning services to senior citizens living alone is looking for potential customers. They want to know the estimate of householders ages 65 or older living alone in Anytown, USA. What would you tell them?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

2. The Irish Embassy wants to know how many people in Anytown, USA might be interested in an open-house. What is the estimate and percentage estimate of people of Irish ancestry in Anytown, USA? Would you use either of these estimates?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

3. A tutoring provider would like to teach courses that prepare students for standardized tests in Anytown, USA. They want to know the estimate and percentage estimate for school enrollment for high school (grades 9-12). What would you tell them?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

4. The Danish Embassy is reporting that they have more people of Danish decent in Anytown than those of Portuguese decent. Is this true?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

Figure 76: Data Profiles Task Difficulty Part 2

5. GetYourDegree Community College is interested in opening a branch in Anytown, USA; however, their corporate mandate stipulates that there must be at least 14,000 students who have completed some college, but did not get their degree. You are responsible for reporting whether Anytown, USA, has met the mandate. What is your recommendation?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

6. The mayor of Anytown, USA wants to know if the town should continue to fund a welcome wagon program for people who move from other states. If at least 5.0% percent of the population in Anytown, USA lived in a different state 1 year ago, he will keep the program. Based on the data, what would you tell him?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

7. You are a demographer working for a local university conducting research about the population's heritage. What do you think about the Ancestry data in this table?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

8. In 2007, the percent of people who were separated in Anytown, USA was 1.9% (+/- .3%) and that estimate was considered "reliable". The Bureau for Family Affairs is now reporting that, based on 2008 ACS data, the percentage of people who were separated increased from 2007. Do you agree?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

14 Appendix H: Debriefing Questions

Figure 77: Debriefing Questions

Data Reliability Indicator Round 3 Debriefing Questions

1. Can you walk me through your thinking on why you marked (a particular QUIS item) especially low/high? (Do this for several low/high QUIS ratings; also, do this for easy/difficult ratings).
2. Do you think the new data reliability indicator helped you to find information quickly? Did you think the color-coding made it take longer or seem more difficult to find information?

FOR VERSIONS WITH THE LEGEND BEHIND THE LINK ONLY: *If they did not click on the "View table notes" link to open the legend: At any point during the testing, did you look for a legend to explain the data reliability indicator?*

Click on the link to bring up the legend. There is a legend located in the table notes. Do you think this legend would have been useful for completing the tasks or not?

Open the version of the same table with the legend above the table. We are also testing another version of the table you saw that has the indicator legend located above the table. Which version do you prefer – the one that you used or this one? Which do you think would be easier to use and why?

FOR VERSIONS WITHOUT COLOR ONLY: *Open the color-coded version of the same table.* We are also testing another version of the table you saw that has a color-coded data reliability indicator. Which version would you prefer to use? Which do you think would be easier to use and why?

3. Because of the color-coding used in these tables, they may appear differently to different people. In order to examine this issue, we are asking participants whether they are color-blind or not. Are you color-blind?

4. Is there anything else about the tables that we have not discussed that you would like to mention?

15 Appendix I: Satisfaction Questionnaire Comments, Usability Issues with the ACS Tables, and Participant Comments

Comments about the ACS Data Tables from QUIS Satisfaction Survey

Data Profiles

- A1: Typeface too small, need down arrow (scroll arrow) on the right.
- A2: It would be useful to have the column names frozen so they still appear on the screen when you scroll down.
- A3: Too much data on one table, font size too small.
- A4: The tables are very small for data recognition , they should be enlarged to make the data easier to see. I do like the fact that each line is an alternating gray white, that makes it easier to decipher each line of data.
- A4: Get rid of tables all together. Use search options. Google seems to be able to do this, why can't the government?
- A4: Grey/White is boring - blue lines or color shift when shift (color bar) when shift categories [note: participant meant the bolded row headers].

Selected Population Profiles

- B4: Print on screen was very small. Persons with not so good visual acuity may have difficulty locating column data. Otherwise, I would use the ACS Tables for future work/research.

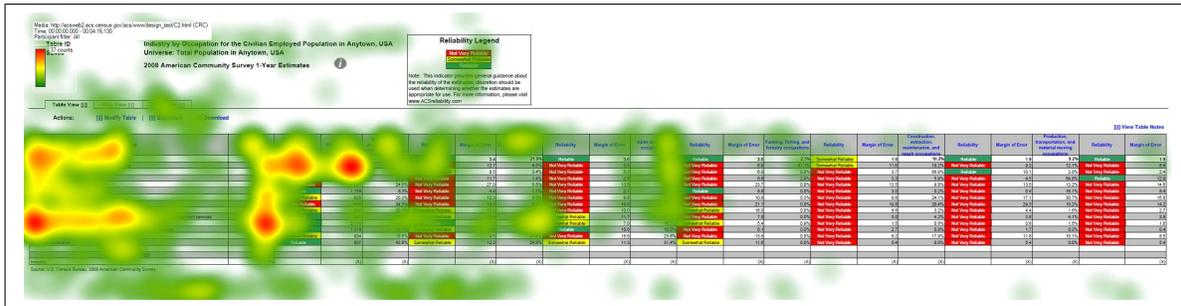
Subject Tables

- C1: Should include an index or key that describes what the column headings mean, particularly those w/ the same name and different information (e.g., margin of error being presented in seemingly different ways). *Note: The legend was behind the link for this participant.*

Detailed Tables

- D1: It takes more than a few moments to become acclimated to the layout of the information to ascertain what is where. Otherwise it was an okay read.
- D2: Clearly, a learning curve will occur and help.

Figure 79: Heat Map of Subject Table with the Legend Above the Table (C2)



column for this category. Participant 4 commented halfway through the testing session, “Oh I just saw it, the two or more races column.” Participant 5 said, “So now I’m reading over the table heading again, selected populations profile in Anytown USA, the total population of two or more races. I’m finding that confusing because the table has the total population which presumably refers to the total population of Anytown, and then in the fourth column two or more races.” Participant 6 did not see the separate column until the last task (Task 8) and then said, “I see two or more races here now at the top.”

Comments are paraphrased unless they appear in quotation marks.

15.1 Dry Run

The short descriptions used in this section refer to the tasks that can be found in Appendix B.

Get Your Degree: “See, I have to keep scrolling up this column ’cause I don’t know what this is. Margin of error, percent. There’s two margin of errors, and reliability, I have no clue.”

Irish embassy question: “I think this is the reliability column.”

“I’m trying to figure out why there’s two reliability and margin of error columns. I don’t know if I’m looking at the right thing.”

Danish embassy question: “I don’t know what kind of scale this is on. Not reliable somewhat reliable, whatever.”

What do you think about the ancestry data: “I’m seeing a lot of not very reliable notes right here, so I’m thinking that the information located here isn’t really reliable. I would probably be reluctant to accept the estimates that are given here.”

Comments: *Do you think it's an obvious place where people would look for a legend under table notes?* “No I would've clicked here [on margin of error column header].”

“These [row headers] aren't really distinct”

“If I scroll down here, I can't remember what the column headings were, so that was annoying, 'cause then I have to scroll back up and then figure out where I was at before and come back down here. So it would've been nice if the column headings were still there.”

“And then I can't figure out how it's organized [talking about indentations]. I see total households, and then it's like indented, and I've been trying to figure out this goes with this, and does this go under this, and these both go underneath here? I don't know, the organization is really not that clear, as far as the subcategories. And then there's a space here. I guess this is still under households by type, why is there a blank line,? Why are these separated?”

“I didn't know what kind of scale it [reliability] was on.”

“These headings don't really pop out, so I think just making these distinct, grouping them together, some kind of bolded box around it. I wasn't able to easily distinguish between different categories listed here.”

15.2 Participant 1 - A1

“It's a little blurry 'cause my eyes aren't the best.”

Irish Ancestry question: “The column labels are gone so I need to scroll back up to see what they are.”

Demographer at a local university: “For the most part it doesn't look very reliable, in terms of, because of the red um boxes.”

“Though I guess what I'm thinking is that I would like to know a little bit more about how they came up with the reliability statistics, just to confirm that it would be in a similar way I would make that assessment.”

Danish embassy question: “I would probably visit that ACS Reliability.com website to learn more about it [reliability].”

Mayor question: “The estimate is not very reliable, yeah that red box is really getting me.”

Comments: “There isn’t a definition of how they constructed it, and so my confidence in my own ability to interpret data um makes me think maybe they include something else in their reliability measure that just isn’t standard affair.”

15.3 Participant 2-A3

“I don’t know how I feel about it, as someone who understand generally statistics, it’s nice to have something that’s color coded, so I don’t have to think about this. But it’s a simple mathematic formula, I guess your doing standard deviation / mean.”

15.4 Participant 3-A4

“ I don’t know exactly what that MOE is, I’m assuming +/- 641.”

“And that the MOE is 2.5, now I don’t know if that’s a percentage, I assume that’s a percentage, could be + or -”

“Probably, I think that I would be more inclined to tell them if the data looked to be not very or not reliable. Somewhat reliable to reliable I would probably mention it in passing. I trust what’s shown on the computers, so I’m probably a bit over-trusting when it comes to data.”

“I think a lot of the top tables need to be carried down with it all the way to the bottom of the table so you don’t have to scroll back and forth to see what your data is.”

“The table is going make me go cross-eyed eventually, it’s very small.”

“In terms of reliability it seems there’s a lot of unreliability data, but it’s useless.”

“Unreliable stuff makes life more difficult.”

“Ooh I like that better, mostly because it’s easier to read.” [when shown a color table]

“And it shows red, not very reliable it makes it a lot faster.” [when talking about the ancestry Danish vs. Portuguese question]..

15.5 Participant 4-B1

“The font size is really small.”

“I see the colors.”

Fuel, Two or More Races: “Oh I just saw it, the two or more races column.”

“The way it’s pulled out, the two or more races column, you wouldn’t think it would be in that column, because it’s also a row. I wouldn’t think to find it in a column.”

P4, Task 4. “What differs reliable and somewhat reliable? Scale needed on the bottom.”

Boss wants to know: “Yeah I would say it’s that the data is much more reliable, well I don’t know if it’s much more reliable, but the data is considered reliable. And it’s only somewhat reliable. Still now that I think about it , it seems really vague, like what does that mean? Somewhat reliable? What makes it reliable versus somewhat reliable? It would nice if there was some type of range, to give me an idea what that really means. A scale or something, at the bottom. I can’t really have much confidence in saying something is somewhat reliable or not very reliable in this case.”

P4, Task 5. Row with percents is confusing with numbers.

Reliability table is confusing.

Disability, two or more races: “Ok, so it’s under disability status.” [thought it was somewhere else]

“The list what the disability, it makes me think that, the line above it is not the disability, but it’s the same number, the one below it is just a percent of the population. That’s confusing.”

“And the data is reliable for this case, but I look at the percent and the percent for two or more races is somewhat reliable, isn’t it just the calculation from the base of the population? So that’s confusing.”

“The reliability column is confusing.”

P4, Task 7. "I would want to click on something to read why is this reliable."

High Income: "If I could click on something, just to read why, why is this reliable?"

Comments:

"I did, I also tried to click on reliability. 'Cause sometimes, especially when it's blue I thought that I would be able to sort based on that. Um, and I thought that maybe there would be a pop up saying 'reliability is this.'

"Maybe It's just the title, view table notes. Maybe if it were like view table definitions or something like that. That would make me think that, ok, this means they are explaining something on the table. A table note, makes me think that oh it's just something like I can save my notes."

"I rated it as a 5 because it's usable, but honestly I don't think my I don't think this would've been any different than opening a book."

"This use hasn't been enhanced by the Web at all."

"It was hard to find [the definition of reliability]."

"Make the headings stand out more. I know it's in all caps but some starts to blur after a while. I mean it's not consistent, sometimes its gray."

"Can't tell how reliability is measured."

Don't know what they base that on. Recommends having a general sentence about statistical reliability followed by more detailed information for statistics experts.

Novices may not care, but understand what reliable means in a general sense if next to a statistical cue.

Somewhat reliable is too vague.

15.6 Participant 5-B2

P5, Task 0: “The font on the table is really small.”

“The second thing I notice are the reliability indicators and the different colors that are highlighted. And I’m not sure if I like that or not. I guess I do find that to be helpful.”

“Just because it jumps out at you right at the beginning, and so I don’t see the data first. It’s like I don’t have to look at the data to determine myself if it’s reliable. Like someone else is just telling me that. Which is good for the average user I guess. But the colors did jump out at me.”

“Well now thinking about it, they seem to correlate with streetlights, green being go ahead, it’s very positive. Yellow is somewhat mediocre, and red is not at all good or stop. So I guess that makes intuitive sense to me.”

“It’s difficult to look at the table because it’s so long and the subject headings besides being capitalized aren’t really emphasized or highlighted in anyway so it’s hard to tell when your looking at a new piece of data. I think, for me it would be easier if the subject headings were highlighted in a different color. And if you can search within the table or a subject specifically.”

P5, Task 2: “This is where I would like to have a find search so I could immediate scroll to education, or be immediately be taken to it as opposed to having to scroll through the whole document.”

“And then now I’m looking next to reliable, it says this number is .6 and I think that’s the margin of error but again I would have to scroll all the way up to the top of the table to find that. Which I find to be rather annoying. Oh no see I gave you the wrong answer because I was looking at the 13 percent was the total population, so I actually need to be looking in the 4th column.”

“I would prefer to see on the table is the uh, column headings to scroll down the table as I scroll down the table so I don’t make that same kind of mistake again by reading the wrong column.”

P5, Task 3: Table title is misleading/confusing: Total population and 2 or more races.

“So now I’m reading over the table heading again, selected populations profile in Anytown USA, the total population of two or more races. I’m finding that confusing because the table has the total population which presumably refers to the total population of Anytown, and then in the fourth column two or more races.” *Note: P5 mixed up two or more reliability column with total population, as well as estimate with percent occasionally.*

Comments: “Font was too small, too much information on the table, had to scroll down so much.”

“I would want the subject headings ..*participant read column headers* scroll down with you or at least have them at the top of every subject, like sex and age so you remember what your looking at in each of the columns.”

“I wouldn’t have gone to view table notes to learn about reliability.”

“I think the reliability thing is important enough to have it as a separate thing. The casual observer probably doesn’t need to know +/- parentheses but they would want to know what the definition of reliability is or at least that would help them analyze the data.”

“So I guess I would expect to see it somewhere on the top, and I would prefer to have it not be something you would have to click on.”

“One thing I would like to see, just for usability purposes to be able to minimize some of these columns if you don’t need them or want to look at them.’

“Yeah, I mean I like It [reliability], but I didn’t know what it actually meant.”

“I guess they had a high enough response rate to know that it would be a consistent statistic.”

“But then again that’s why I think reliability should be defined just right on top as opposed to something you have to click on.”

“Not very reliable [indicator] is most helpful.”

15.7 Participant 6-B4

P6 had trouble finding two or more races column (kept referring to the two or more races row value which is 3.1 percent). As a result many of the participant’s responses are incorrect.

Task 8: “I see two or more races here now at the top.”

Colors are universal, “I love the colors, I’m a color person. I love it.”

Comments:

Had some difficulty understanding logic of the problem

Public should be able to use this table, color coding helps.

15.8 Participant 7-C1

P7, Task 0. *The two reliability columns confused the participant.* Labeled the same not sure what the difference is.

“The first thing I notice would be the color scheme, red, yellow, and green shaded boxes.”

“I would assume red is bad and green is good, and yellow is neutral. And by looking at it that’s somewhat right cause it says red is not very reliable so I assume the source of the data is not the best.”

“Although it is a little confusing that there’s two different columns for reliability that don’t have the same information. I guess one’s a percentage and one’s a...Actually I’m not sure what the difference is.”

Task 4. “So it’s kinda difficult with such a long with so many columns to keep track of, which row you want to focus on.”

P7, Task 6. *in reference to table width.* “...difficult to go back and forth here with the way this is setup.”

“The transportation data is not very reliable and the education data is somewhat reliable but it’s difficult to use it to make any determination about the answer they’re both pretty subjective, I don’t know the threshold between somewhat and not very or what that means in terms of numbers, especially when the two numbers are close together. Oh I guess I can saywell I guess that’s why, the transportation data has a higher margin of error, I guess that’s why it’s not very versus somewhat. But I’m still not exactly sure about what type of index or what those numbers mean in later columns for margin of error oppose to beginning where it seems to be a whole number.”

Comments: “I think the use of color is always good in terms of making things clear and helping people focus. So it quickly alerts you to I guess the type of info like how good the information is. I honestly looked at that before I even saw what the table was for.”

“This is the way I would expect this type of data to be displayed.”

“I guess.. it seems subjective, so if there were some of key or index that had even if it was a numeric range like things with a MOE of 0 to 5 are considered reliable, even though I don’t necessarily know what that means. But it would give it some sort of qualifying description,

it seems like anyone could've just drawn a line and say that's reliable and that's not reliable and I have no idea where that line is drawn or how or why."

"They seem to represent different things with the same column heading" (referring to headers like MOE, or reliability).

Perhaps adding an abbreviated description could add some clarification.

Explain columns like MOE.

"When looking at it without any other information I don't know what that means."

Recommended placing "reliable first because w/o color it doesn't make sense to people."

15.9 Participant 8-C2

P8, Task 0. Looking at areas that are highlighted, then subjects, then industry. Thinking about what this is telling me.

P8, Task 3. Did not realize that table scrolled horizontally.

P8, Task 6. Looked for way to modify it so she didn't have to keep scrolling. Tried "modify it" and other links.

15.10 Participant 9-B3

P9, Task 1, Would Control+F and look for 18-24.

P9, Task 3. After clicking on view table notes the P commented that there was no discussion of household or individuals.

Tried clicking on the 2 or more races column.

P9, Task 4. Mentioned having to scroll back up to find column.

P9, Task 5. “I lost track of my columns again” “I wonder if there’s a way to highlight the row” to find out where I am suppose to be.

Comments: Scrolling columns, width too much, heading disappears, too wide and too long.

Subheadings don’t jump out that much.

15.11 Participant 10-D1

P10, Task 0. Did not mention color/reliability.

Comments: Looked for legend, something to make sense.

15.12 Participant 11-D2

P11, Task 0. “Print is fairly small.”

P11, Task 4. “Trouble tracking rows across”.

P11, Task 5. “Would probably use the mouse to help me stay on a horizontal plane.”

15.13 Participant 12-E1

P12, Task 0: “The first thing that my eyes are drawn to is the coloring.” probe: what do you think the colors represented: “Just good data versus bad data or the strength of the information.”

“I was just thinking that um might be uh if it is suppose to represent the strength then maybe uh like a bar or uh a color code expressing intensity more linearly instead of just color coding.”

P12, Task 1: “I’m not looking at the MOE or the percent. I’m just letting the reliability column do the thinking for me.”

“Actually, now I...I’m just thinking through this, I actually don’t know if the percent column has to do with the reliability. But if it did I would take County A and County Y” Because I would make an arbitrary cut-off, like above 10 percent. But again I’m not sure what that percent column has to do with” (Don’t know what percent column has to do with reliability [participant seems to think percent is related to reliability, not the estimate.]

“Oh you know what, since the colors are so dramatic, I’m just realizing that I didn’t even read the title on this page which is pretty bad” [non verbal behavior: shaking head]

“I guess it just shows you jump to reading things that pop out.”

“I’m not sure I’d have that so colorful then um maybe it’s my.. just looking at the title.”

P12, Task 2: “I think that I would probably not recommend this but something that would be useful to see again would be um the strength represented as a percentage or something. So that I could um kind of see whether or not.”

“I think on this page it would be helpful to have a descriptive of the margin of error for um as a refresher for people who haven’t had statistics in a while.”

“I would not recommend because I don’t understand um how close um the somewhat reliable versus the reliable um are, in relation to one another.”

Comments:

“This could be the way I look at things, I was so distracted by like getting into this and looking at the red, and green, and yellow, and those being almost so obvious I actually didn’t even look at what the title was first thing.”

“I would probably need.. I think I put this in my notes, just a description of like almost what each of the columns mean, related to the entire ...”

“I don’t know why I did not [click on View Table Notes].. it’s like I thought about it but then I just thought oh they’re not clickable.”

“I don’t really see anywhere else that it says anything else about this [the reliability legend].”

“On all of them [tasks] I just find myself going percent, margin of error, not really understanding how they relate to reliable.”

15.14 Participant 13-E2

Task 0, “I’m a little confused as to what the reliability factor pertains to.” *Probe: What are you confused about?* “The reliability of what? The data itself? What being reliable as far as the percentages, are we looking at the margin of error, like what does the reliability factor

pertain to, that data is not very reliable based on what, or it's very reliable but what are we basing that on, the reliability factor?"

Task 2, "Looking at counties D and E on the table, county D indicates their data is somewhat reliable, and county E indicates their data is very reliable, based on these two factors I would recommend that they add the percentages together, because again the reliability factor for D, although it is somewhat reliable, I would be confident enough to know that average or that percentage does have, as the table indicates, a small margin of error."

Comments: "So reliable means to me that the data is very reliable, somewhat reliable there's a margin of error, and not very reliable means no that data's not very reliable at all."

"I thought it would've be useful to have a definition for the reliable, the not very reliable, and the somewhat reliable. It makes it a little bit difficult to understand if all the data is being pulled from the same source what makes.. or my assumption is all the data is being pulled from the same source, what makes one category more reliable than another."

"As I'm reading through this, by clicking on that link [view table notes], that still would not have given me a better understanding of what a reliability the reliability columns really refers to."

Probe: What would you expect to see define reliability? "I would expect um reliable to say, reliable means 100 percent of the data is consistent or factual. Somewhat reliable being 90 percent of the data 80 percent of the data is factual, and not very reliable so I would like to see some type of number associated with the ranges of reliability and not very reliable."

"I felt to me that the margin of error was a little bit confusing as far as how it related to let's say for example the reliability factor. So when I'm looking at one of the categories or one of the columns that specifically says that this is not very reliable, however there's a 50 percent margin of error, that doesn't really give me a good indication as to whether or not that data is indeed very reliable at all or there's that... there's a little bit of interpretation that could be made on that. So I don't really think the margin of error column is that useful to be honest with you."

"I think it all goes back to the reliability column, it's very difficult to determine whether or not this data is accurate, and if it's not accurate, the not very reliable column meaning what? So those percentages aren't accurate at all? So therefore, why are they even there? "

"And how are we differentiating between reliable and not very reliable, what is the source of that data?"

15.15 Participant 14-E3

P14, Task 0: “Um, I guess the reliability column because it’s really bright and sort of stands out.”

“I’m assuming this means um how reliable the estimates are, given the uh...I guess given the standard errors.”

P14, Task 6. “And it says that 0 percent travel to work by public transportation, but it also says that the estimate is not very reliable, so I guess I’m not sure um I guess you can’t really tell by the table without knowing why the estimate isn’t reliable, so that’s my final answer that I don’t know.”

Comments: “I noticed, I just wrote down I remember seeing that there was a reliability definition like up here somewhere, but I didn’t really use it, I guess it would’ve helped.”

Why do you think it didn’t stand out? “I don’t know, because I felt like that the focus was here [the columns] maybe if there was an asterisk next to the reliability column, maybe I’m just lazy. It just seems like it’s so far away, even the title seems disconnected.”

15.16 Participant 15-E4

P15, Task 0. Would go to website to learn more about reliability.

P15, Task 1A. Generally want reliable data, somewhat reliable data if more information was given.

P15, Task 2. Reliabilities are close enough to include together.

P15, Task 3. *The participant seemed to equate MOE with reliability.* “MOE is very small so it’s very reliable.” (The participant also went out of bounds for this question, mentioning that the two counties could be using two different forms of public transportation).

Note: For Task 4 and Task 5, the participant subtracted the estimate from the MOE to confirm it met the requirement for the answer, despite the estimate being reliable.

Comment: Dunno how confident because there’s no info on what reliability means

15.17 Participant 16-A2

P16, Task 0. It’s detailed

P16, Task 2. Helpful if names of fields [column headers] were pushed down so she didn't have to keep scrolling.

P16, Task 4. The participant reported true, but not very reliable [report w/ a caveat]. The correct response on this task was not true.

Comments: Reliability legend behind link "no, not really helpful."

Wanted more information about MOE.

15.18 Participant 17-A1

P17, Task 0. Typeface too small.

"You've got these lovely green, yellow, red categories defining reliability instead of giving margins of errors."

P17, Task 2. "I can't see the [column] heading here so I don't know."

"I should be able to see these headers no matter how far down I go, ok?"

Comments:

"I didn't look at the definition of reliability but I know the definition of reliability. I don't see the definition of reliability here [looking at table, clicked reliable column heading] it's not there."

"Type face is too small."

"I don't think the definition of what's defined as reliable, somewhat, and not very. I want to know statistically what it is, before I decide whether I use it."

"For what I sometimes call library users, casual users, this is probably a good idea, but it's making decisions for the users, where as I like to make my own decisions, I'm not typical, far more experienced with advanced statistics than the average person."

Probe: But for the average person do you think it would be helpful? "Yeah, it's better than margin of error, they don't understand that. It just confuses them. But the definition should be you know readily available."

“I know what margin of error, sampling error is, but I don’t know what’s being considered reliable versus somewhat versus not very here. And the other thing is that it’s better to collapse categories than make the reliability higher, cause the level of detail is beyond what most people need anyhow.”

15.19 Participant 18-A3

P18, Task 0. Trusts in Census that it [data] is reliable. -¿ Green is reliable -¿ Reliability is near MOE?

When it shows not very reliable you can’t really use estimate.

Small font, hard to read.

A lot of colors.

Looks like an excel table with small font.

Now looking at what it is [ACS survey]

P18, Task 2. Looked at US citizenship and Language spoken first before settling on ancestry data (*Expected to see Ancestry data there?*)

Note: Participant had to re-check column headers to make sure he was looking at the percentage column.

P18, Task 7. The thing that stands out is all the red.

So many numbers for heritage that are not reliable.

Could also look at somewhat reliable [data], could use for research if reliability is kept in mind.

Comments about the overall table (at this point):

Would’ve brought glasses if he knew table font is this small.

Shades of gray and white are helpful.

Color stands out.

P18, Task 8. Estimates say true but reliability and MOE says no.

Would report no, or yes with reliability warning. Can't draw conclusions based on estimate.

Comment:

Not familiar with CV, stat class was ages ago.

Not visually appealing.

Legend doesn't define what not very reliable means.

Most people wouldn't visit ACS reliable website.

Clear definition of what each reliability is.

15.20 Participant 19-A4

P19, Task 0. Noticed reliability legend, keywords, reliable, not reliable estimates, and lots of replications in columns.

“There's a lot of replication in terms of columns.” [referring to column headers for estimates and percentages]

Task1: “Oh I'm sorry this is Anytown, the total population of Anytown, that is one thing I missed before so, I wasn't actually sure what this city was, but yeah I would, since it is Anytown.”

P19, Task 2. “That's one thing that is really actually a little annoying is that you have the titles of the chart at the top, but if I scroll down then I might not actually remember every single title for every single column and so I have to go all the way back up to see estimate and what not.”

P19, Task 3. “Again I don’t really know what that reliability means, I don’t know if there’s a p-value you can put in there or what not, um test of significance but I guess I would say it is that score but how reliable I don’t know what that metric means. Except I know it lists some legend, but again there’s no numerical values attached to it.”

“I think before I gave you high school graduate, I mis-read the columns they’re so small they kinda float together.”

P19, Task 4. *Subject had trouble reading across rows, which resulted in him giving the wrong number (Gave Dutch percentage, not Danish)*

“But again we don’t know how reliable that is.”

Task 6. “I would probably just look at different county, and look at percentage which is 5.5 percent, somewhat reliable, we have a margin of error of 2.1, I’d say we could probably do it but again it depends on what somewhat reliable means.”

P19, Task 7. Very busy (search through a list of ancestries).

Would search through the table using Ctrl + F.

Suggest: Drop down menu where you could choose [ancestries].

Noted estimates, reliable or not, MOE. But in the end stated “Nothing stands out.”

“Honestly, nothing stands out with it, I see the numbers there, it’s just really clunky, and very very, yeah it’s just clunky so nothing really stands out.”

P19, Task 8. “What I’m thinking is again I guess I hate to say this but it’s extremely extremely clunky, so I’m thinking why can’t I just do CTRL+F and search or why isn’t there a search box where I can actually have it pull up. Um I have to go through piece by piece and find this, and quite frankly it’s just wasting time. And maybe it’s because I’m a child of Google, but I don’t like searching step by step. I don’t like charts at all, I rather have it the computer tell me where it’s at. Not to be too harsh on you here.”

“Yeah I would agree with that, well no actually I would not agree with that, it’s not reliable. But again the first thing I’m looking at is percentages, I look at that not reliable thing secondly, and I really don’t know what that means, so quite frankly I ignore it for most of the time. So I’m going guess that you know if I was quickly looking for something unless this was like something in terms of a masters thesis or a paper I’m writing I probably wouldn’t really dig to much into that not reliable, not very reliable, and I actually might just take the 2.8 percent for face value because it is from the Census Bureau.”

Comments:

“Make this into separate sections with some white space between it, because here’s the thing I’m looking so quickly and there’s so much information coming at me both for a project I might be working on using the ACS but also with other projects I’m working on or maybe an idea hits and I open up another browser and look at something for example, that easily and I do this all the time I’m looking at average family size and I’m accidentally looking at that.”

“There’s a lot depth here but it’s not parsimonious.”

Participant was shown an alternate version of the with color-coding. “That’s a little bit better actually, that’s a lot better, just having those colors. But again I don’t know what that [reliability] means and if I’m doing a study I don’t want to have to go to ACSreliability.com and again that’s more work for me to have to go through..someone should have a quick link that has a breakdown of it.

15.21 Participant 20-D1

Comments:

Color coding helps.

Locating information was easy, but had difficulty in interpreting the answer.

View table notes is not helpful (P found link during post-test interview).

Legend sticks out, but not helpful.

Going to link [ACS reliability website] “implies passing the buck.”

Would want to mouse-over or click column [headers].

15.22 Participant 21-A4

P21, Task 0. Noticed gray and white stripes [rows].

Then read title, and noticed reliability legend.

No clue as to what it tells me, it indicates a spectrum.

Then saw the reliability columns.

Would have to go to ACS reliability website to see how it's measured.

P21, Task 1. Would have to explain what reliability meant to company.

P21, Task 2. Have to think about what are the different columns (P had to remember what column headers were?) Would give both estimates but say "we're confident at whatever level."

P21, Task 3. Somewhat reliable makes P wonder why they have somewhat reliable [data].

Comments:

Have a color bar when switching between [row] heading categories.

Should have a footnote of reliability with a notice to see footnote.

Legend indicates reliability matters, but how did you fit things into categories? What does it mean and what is the cutoff?

Not sure what N means.

Scrolled down and lost top [header] columns.

Put percent sign in MOE percent column."

Preferred no color in the reliability indicator, "color is intense".

U S C E N S U S B U R E A U

Statistical Research Division

Usability Laboratory

Washington, D.C. 20233

Date: September 16, 2010

To: DSSD Data Reliability Indicator Team: Anthony Tersine, Jennifer Tancreto

From: Kathleen T. Ashenfelter and Victor Quach, SRD Human Factors and Usability Research Group

Subject: Data Reliability Indicator Based on the Coefficient of Variation: Report for the Third Round of Usability Testing

1 Executive Summary

This study compared different versions of American Community Survey data tables with a data reliability indicator based on the coefficient of variation. The tables differed in terms of whether the data reliability legend was displayed above the table or behind a link, “Reliable” or “Not Very Reliable” was listed first, or whether it was color-coded. There were few key differences between the tables in terms of user accuracy in finding answers to the tasks. The usability goals were met for accuracy of responses and users satisfaction for all of the conditions (although the goal was not met for all data products). However, the efficiency goal was not met for several of the table types. As with previous tests, key usability issues were confusion about the meaning of “reliability” and what the cut-offs for the different levels of reliability were. Evidence from an analysis of efficiency and task difficulty ratings indicated that including the data reliability indicator above the table may have a slightly negative impact.

2 Abstract

This study was the third round of usability testing for the Data Reliability Indicator for American Community Survey (ACS) data tables proposed by the sponsor team. Sixteen prototype tables with a data reliability indicator based on an estimate’s coefficient of variation were tested. Each reliability indicator had three levels: “Reliable,” “Somewhat Reliable,” and “Not Very Reliable.” We tested whether the location of the data reliability legend, whether the indicator was color-coded or plain text, and whether the “Reliable” or “Not

Very Reliable” level was listed first in the legend made a difference in the accuracy, efficiency, or user satisfaction of data users in responding to the tasks.

The usability goals for response accuracy and user satisfaction were met for all of the conditions, but the goal for efficiency was not met for several conditions, mostly for easy and medium–difficulty tasks.

More detailed results and potential usability issues are discussed.

Key Words: data reliability indicator, coefficient of variation, color-coded data tables, usability

3 Introduction

This was the third round in a series of usability tests of the proposed data reliability indicator (Ashenfelter, Beck, & Murphy, 2009; Ashenfelter, 2010). A group of American Community Survey (ACS) data users from both inside and outside of the Census Bureau were recruited as participants for this round of testing. Findings from this third round of testing will inform the design-and-development team on areas of user satisfaction and success as well as areas where the participants struggled while using the data.

3.1 Background

This project aimed to address an issue that arises with the ACS data tables because the estimates have varying levels of reliability. Some of the data, especially some single-year estimates, have high coefficients of variation (CVs). Some users may use the estimates without taking into account their reliability (i.e., ignoring or misunderstanding the margin of error currently provided with the ACS estimates) (Tersine, 2010).¹ The goal of this project is help data users more easily detect potential reliability issues as measured by the CV (although the decision of whether or not to use the estimate is ultimately the data user’s).

The proposed method for addressing the presentation of the reliability of the estimate was to color-code a reliability indicator for each estimate with the appropriate level of reliability along with an associated word (e.g., “Reliable” or “Not Very Reliable”), as measured by the coefficient of variation (Whitford & Weinberg, 2008). The choice of CV as the estimate of sampling error to be tested was based on the goal to produce a standardized measure of reliability that might be easier for users to interpret. Although the margin of error (MOE) is currently provided with each estimate, ACS data users often ignore the MOE.

As a starting point, a categorization based on the coefficient of variation was proposed by the sponsoring team in the Decennial Statistical Studies Division (DSSD) (Tersine, 2010; Whitford & Weinberg, 2008). The idea was to color-code the estimate according to its reliability, as evaluated by its associated CV. “Reliable” was defined as $CV \leq 0.15$, “Somewhat

¹Although estimates of lower reliability are still useful in many applications.

Reliable” was defined as $0.15 < CV \leq 0.35$, and “Not Very Reliable” was defined as $CV > 0.35$ (or zero estimates). A color-coded data reliability column was added to the tables for the prototypes since Section 508 standards prevent the color-coding of the estimate. Consistent with the first two rounds of testing, a red color indicates a low-reliability estimate and green indicates a reliable estimate. However, the number of levels to include in the indicator was not tested in this round, since the decision was made to test only a three-level indicator further after the first and second rounds of testing. For this round, versions of the tables that did not have color-coding associated with the reliability indicator were also tested. Mid-range reliability is indicated by yellow coding. The prototypes that were tested in this third-round evaluation of the ACS data reliability indicators are included in Appendix A.

The tasks that participants completed for the third round of testing are provided as Appendix B. These tasks were kept as similar as possible to those used in the previous round of usability testing, but they were updated to incorporate findings from the prior testing as well as feedback from team members and the Census Bureau’s Methodology and Standards Council.

3.2 Research Goals

The usability goals for this study were defined in three categories: user accuracy, efficiency, and satisfaction.

Goal 1: To achieve a high level of accuracy in completing the given tasks using the data tables. The goal for the third round of testing was set at 80% accuracy. A related sub-goal was to evaluate whether the color-coded and text-only data reliability indicators would prompt users to pay attention to and report an estimate’s reliability.

Goal 2: To achieve a high level of efficiency in using the data tables. It was decided that the participants should be able to complete the tasks in an efficient manner taking no longer than 3 minutes for a harder task, 2 minutes for a medium task, and 1 minute for an easier task.

Goal 3: For the users to experience a moderate to high level of satisfaction from their experience with the data tables. A tailored version of the University of Maryland’s Questionnaire for User Interaction Satisfaction (QUIS) (Chin, Diehl, & Norman, 1988) was implemented. The overall mean of the QUIS ratings for the data tables should be above the mean (above 5 on a nine-point scale, where 1 is the lowest rating and 9 is the highest rating). The same should hold true for the individual QUIS items.

3.3 Scope

A specific set of user interactions with the tables (as portrayed in the prototypes provided by the sponsor) was within the scope of the usability evaluation. The user interface was not tested for compliance with Section 508 regulations, although members of the Systems Support Division (SSD) did consult with the usability and sponsor team about potential accessibility issues associated with color-coding data tables before the first round of usability

testing took place. Before the table tables can be accessed through a government Web site, they must comply with Section 508 regulations or obtain a waiver.

3.4 Assumptions

- Participants had at least one year of prior Internet and computer experience.
- Participants had prior knowledge of how to navigate a Web site.
- Participants had some prior familiarity with the ACS and/or survey data.
- Participants had no known disabilities, but were screened for color blindness.

4 Method

4.1 Participants

The original goal for this study was to recruit forty participants from the metro Washington, D.C. area from a list of local ACS data users to come to the SRD Usability Laboratory in Suitland, MD for testing. However, the usability staff encountered difficulty with recruiting participants and only 21 people participated in the study. Participants were recruited from email lists including the Association of Public Data Users (APDU), Census Information Centers (CIC), State Data Centers (SDC), the Census Advisory Committee, and the D.C. chapter of the American Association for Public Opinion Research (AAPOR). The goal for the CIC, SDC, and Advisory Committee participants was to recruit the constituents of these organizations, but we also accepted the members themselves. Local teachers and graduate students were recruited through Craigslist and emails sent to the principals of the schools and Universities.

Each participant had at least one year of prior experience in navigating different Web sites. Participants varied in their levels of familiarity with the ACS and ACS data tables, but all were at least aware of the American Community Survey data products. The amount of time that participants reported using ACS data products or tabulations ranged from two years to the very beginning of the ACS. The average age of the participants was 38.2, with a minimum of 23 and a maximum of 70.

Observers from the Decennial Statistical Studies Division (DSSD) Data Reliability Indicator team were invited to watch the usability tests on television screens in a separate room from the participant and test administrator.

4.2 Facilities and Equipment

Testing Facilities

The participant sat in a small room (5K512), facing a one-way glass and a wall camera, in front of an LCD monitor equipped with an eye-tracking machine that is placed on a table at standard desktop height. The participant and test administrator were in the same room for the reading of the general protocol, the think-aloud practice, and eye-tracking calibration. The test administrator then went into the control room for the usability testing segment of the session and returned to sit in the same room as the participant for the debriefing segment.

Computing Environment

The participant's workstation consisted of a Dell personal computer, a 17-inch Tobii LCD monitor (Tobii model T120) equipped with cameras for eye tracking, a standard keyboard, and a standard mouse with a wheel. The operating system was Windows XP for all participants.

Audio and Video Recording

Video of the application on the participant's monitor was fed through a PC Video Hyper-converter Gold Scan Converter, mixed in a picture-in-picture format with the camera video, and recorded via a Sony DSR-20 digital Videocassette Recorder on 124-minute, Sony PDV metal-evaporated digital videocassette tape. Audio for the videotape was picked up from one desk and one ceiling microphone near the participant. The audio sources are mixed in a Shure audio system, eliminating feedback, and fed to the videocassette recorder.

Eye-Tracking

The participant's eye movements were recorded during the usability test using a trial version of Tobii Studio Enterprise Edition (Tobii Technology, 2008). The Tobii eye-tracking device monitors the participant's eye movements and records eye-gaze data. The data recorded represent the physical position of the eye as measured by the reflection of a near-infrared beam off of the pupil. The horizontal and physical position of the pupil are recorded for both eyes at a rate of 120 Hz (e.g., 120 samples per second) on this eye tracker model. This type of eye-tracking requires the calibration of each eye. Data collected from the eye-tracking device includes eye-gaze position, timing for each data point, eye position, and areas of interest. The Tobii eye tracker records data at a rate of 120 Hz. When a participant looks away or blinks, or if the eye tracker loses track of the participant's pupil, this data is recorded as missing data and this does not stop the data recording. Often, the eye tracker will regain tracking status of the participant's pupil and data recording will begin again within a few

seconds following a glance away from the computer screen.

4.3 Materials

Usability testing required the use of various testing materials. Testing materials included the following items provided in the appendices. There were sixteen different prototypes corresponding to different possible ways of displaying the data reliability indicator and different ACS data products. For this round of testing, the following ACS data products were tested: Data Profile, Selected Population Profile, Subject Table, Detailed Table, and Geographic Comparison. Versions of these prototypes are available in Appendix A. Following the initial probe item (i.e., “What is the first thing that that you noticed about this table?”), the tasks for each prototype were tailored to the geography and type of table being tested (see Appendix B).

Prototypes

Sixteen tables with different versions of a three-level data reliability indicator were tested in this third-round investigation. Some tables had a data reliability indicator legend above the table and some had the legend located behind a “View Table Notes” link. This comparison was made because a meeting with members of the Census Bureau’s Data Access and Dissemination System Office (DADSO) revealed that because of lack of free space on the ACS data tables currently available through American Factfinder (AFF), the legend may have to be placed behind this link in order to implement the data reliability indicator. Also, some prototypes used color-coding in the the data reliability indicator, while some used only text without color. Some prototype tables had “Reliable” listed first in the reliability indicator legend, while some had “Not Very Reliable” listed first in order to test the “stoplight” analogy associated with the data reliability indicators. That is, we wanted to see whether participants would have trouble understanding and using the indicator if the order of the colors was reversed from a traditional stoplight. The prototypes from this round of testing can be found in Appendix A.

Tasks

Members of the ACS data-reliability indicator team created the tasks, which can be found in Appendix B. The tasks are designed to capture the participant’s interaction with, and reactions to, the design and functionality of the ACS data reliability indicators. The first question asked of the participants is not a task in the traditional sense because it asks them to report the first thing that they notice about the tables, so it is called the “initial probe” question and is not considered an official task. The rest of the tasks were designed so that the participant would look for estimates that were located in different areas of the table.

General Protocol

Each participant was read a general protocol, which can be found in Appendix C. The test administrator read some background material and explained several key points about the

session. The general protocol emphasizes that the participant’s skills and abilities are not being tested, but that the participant is helping in an evaluation of the data table’s overall usability.

Consent Form

Prior to beginning the usability test, the participants completed a general consent form supplied in Appendix D. The consent form documents the participant’s agreement to permit videotaping of the testing session and states that the study is authorized under Title 13 of the U.S. Code.

Questionnaire on Statistical Experience, Computer Use and Internet Experience

Prior to the usability test, the participant completed this questionnaire, which gathered information on the participant’s demographics, experience using statistics, computer use, and Internet experience (Appendix E). This information helped us determine whether there is a relationship between these three experience factors and performance and preference scores found during testing.

Questionnaire for User Interaction Satisfaction (QUIS)

The original version of the QUIS includes dozens of items related to user satisfaction with a user interface (Chin et al., 1988). In a usability test at the Census Bureau, SRD typically uses 10 to 12 items that the usability team has tailored to the particular user interface being evaluated. This study used a modified version that includes items worded for the ACS data-reliability indicators context (Appendix F). The experimenter handed the QUIS to the participant at the same time as the task-difficulty rating questionnaire (below).

Task-Difficulty Rating Questionnaire

Participants were asked to provide a difficulty rating for each task, which was used for validation of the “medium” versus “hard” designation during analysis. This short survey can be found in Appendix G.

Debriefing Questions

After completing the tasks, the experimenter read aloud debriefing questions to the participants about their overall experience using the prototype ACS Data Reliability Indicator (Appendix H). The debriefing questions included an inquiry about each participant’s color vision. These questions are included in the debriefing segment of the protocol following testing and not included in the survey administered to the participants before testing so as not to prime them to focus intentionally on color during testing.

Procedure

Each participant was escorted to the usability lab at the U.S. Census Bureau headquarters building in Suitland, Maryland. Upon arriving, the participant was seated with the test

administrator in the testing room (5K512). The test administrator greeted the participant, thanked him or her for his or her time, and read the general introduction. Next, the participant read and signed the consent form. After signing the consent form, the participant completed the questionnaire on demographics, experience with statistics, computer use and Internet experience.

Since this test used the eye-tracking device, the participant's eyes were calibrated after the general protocol was read and the consent form was signed. Calibration was usually completed in about fifteen to twenty seconds by having the participant look at a dot moving across the computer screen. Once calibration was completed, the test administrator exited the room and continued the testing process from the control room (5K509).

Following calibration, the participant began to complete the tasks on the ACS data reliability indicators prototype. At the start of each task, the participant read the task aloud. While completing the task, the participants were encouraged to think aloud and share what they were thinking about the task. This interaction was not intended to be a conversation. If at any time the participant became quiet, the test administrator probed the participant about what they were looking for in the table. The content of the so-called "think-aloud" protocol allows us to gain a greater understanding on how the participant is completing the task and to identify issues with the tables. In order to make sure that the participants understood what was expected by the instruction to think aloud, they engaged in a practice think-aloud task where they walk through their thought process while performing a task using a commonly accessed Web page (the end of Appendix C).

At the conclusion of each task, the participant stated a "final answer" to the task. During the task or while watching the tapes of the sessions at a later time, the test administrator noted any observable struggles or other noteworthy behaviors, including comments and body language. After the participant completes all tasks, the eye-tracking device was stopped, the test administrator returned to the testing room, and the video recording continued. The participant then completed the modified QUIS and task-difficulty rating questionnaire silently. When the participant completed the two paper forms, the test administrator asked the participant a series of debriefing questions (Appendix H). At the conclusion of the usability evaluation, the video recording was stopped. Overall, the usability session ran between 45 and 60 minutes.

5 Results

5.1 Accuracy

Table 1 shows the average accuracy scores by table type and whether Usability Goal 1 of 80% correct responses was met. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color-coding. The location of the legend was manipulated for the Data Profile, Selected Population Profile, Subject, and Geographic Comparison tables. The order of the colors in the data reliability legend was manipulated for the Selected Population Profile and Geographic Comparison tables. Whether or not the tables were color-coded was manipulated for the Data Profiles and the Detailed Tables. Responses were considered correct if the participant reported the correct estimate from the table. Table 1 shows that the usability goal was met for each of the different conditions. This provides some evidence that the data reliability indicator has about the same level of impact across these different methods of displaying it. However, the goal was not met for all data products; the Selected Population Profile tables had an accuracy score of 72% and the Detailed Tables had a score of just 67%.

Table 1: **Accuracy Scores by Table Type**

Table Type	Tasks	Average Score	Goal Met?
Legend Above Table	73	86%	Yes
Legend Behind Link	60	90%	Yes
No Color	35	83%	Yes
Color	42	83%	Yes
Red First	32	90%	Yes
Green First	32	81%	Yes
Data Profile	49	88%	Yes
Selected Pop. Profile	32	72%	No
Subject Table	14	93%	Yes
Detailed Table	21	67%	No
Geographic Comparison	27	100%	Yes

5.2 Efficiency

The start and stop times for the different tasks were obtained from the time stamps on the eye-tracking data in order to calculate average completion times for the tasks. The tasks were rated by the usability staff and the sponsor team before testing began as being easy, medium, or hard in difficulty. The average efficiency score for the easy tasks for across all participants and all tables was 2.3 minutes, the average score for the medium tasks was 2.0 minutes, and the average efficiency score for the hard tasks was 2.4 minutes. The goal was for participants to take 1 minute for an easier task, 2 minutes for a medium task, and 3 minutes for a harder task. The goal was met for the medium and hard tasks, but not for the easy tasks. This finding may be related to participants having difficulty using the different data products in general and may not be directly related to the data reliability indicator itself.

Table 2 shows the efficiency scores by condition and whether or not the efficiency goal for the easy, medium, and hard tasks were met for that condition. Efficiency averages were only calculated for the tables where each condition was specifically manipulated. The efficiency goals were not met for the easy tasks when the legend was behind the “View Table Notes” link, the easy and medium tasks when the legend was above the table, the easy tasks for both color orders, the easy tasks for the black and white table, or the easy and medium tasks for the tables with a color-coded data reliability indicator.

Table 2: **Average Efficiency Scores by Difficulty Rating**

Condition	Difficulty	Average Eff. (min)	Goal Met?
Legend Above Table	Easy	2.4	No
	Medium	2.3	No
	Hard	2.7	Yes
Legend Behind Link	Easy	2.5	No
	Medium	1.6	Yes
	Hard	2.0	Yes
No Color	Easy	2.1	No
	Medium	1.9	Yes
	Hard	2.1	Yes
Color	Easy	2.1	No
	Medium	2.1	No
	Hard	2.7	Yes
Red First	Easy	2.1	No
	Medium	2.4	No
	Hard	2.3	Yes
Green First	Easy	2.4	No
	Medium	3.0	No
	Hard	1.9	Yes

The efficiency goal for the easy tasks was not met by any of the conditions, although it was met for the hard tasks for all of the conditions. Since ACS users in the field would

presumably be more likely to consult the data reliability indicator for harder problems, the fact that the goal was met for the harder tasks is a positive result. The easy and medium tasks may have been more difficult than anticipated.

Table 3 shows the average efficiency scores for easy, medium, and hard tasks broken down by table type and whether or not the usability goal for efficiency was met.

The usability goal for efficiency was not met for the easy or medium–difficulty tasks for the Data Profile tables, any of the tasks for the Selected Population Profile tables, the easy tasks for the Subject Tables, the easy tasks for the Detailed Tables, or the easy tasks for the Geographical Comparison tables.

The efficiency goal set for the easy tasks was not met for any of the table types, and there was no table type that met the goal for all the easy, medium, and hard tasks. The medium tasks for the data profiles had the highest completion times. Again, both of these results could indicate that the tasks, especially the easy and medium–difficulty tasks, were more difficult than anticipated. Also, this may reflect that using ACS data tables overall is more difficult than originally thought. Another possibility is that the participants were inexperienced with using this type of table.

Table 3: **Average Efficiency Scores by Difficulty Rating**

Table Type	Difficulty	Average Eff. (min)	Goal Met?
Data Profile	Easy	2.4	No
	Medium	5.0	No
	Hard	2.4	Yes
Selected Pop. Profile	Easy	2.9	No
	Medium	3.1	No
	Hard	3.2	No
Subject Table	Easy	1.6	No
	Medium	1.4	Yes
	Hard	2.7	Yes
Detailed Table	Easy	1.1	No
	Medium	2.0	Yes
	Hard	2.5	Yes
Geographic Comparison	Easy	2.4	No
	Medium	1.3	Yes
	Hard	1.2	Yes

Table 4 shows the average efficiency scores in minutes by table type and across all easy, medium, and hard tasks. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color–coding. It is noteworthy that the participants using tables with the legend above the table took 30 seconds longer (i.e., 25 % longer) to complete tasks than did participants using tables with the legend behind the link. It is possible that including the legend could be distracting to participants and

increases the amount of time they take to complete the tasks. Overall, there were several conditions where the efficiency goal was not met for this round of testing. Since the last two rounds of testing showed no differences between efficiency performance when participants have a data reliability indicator versus when they are using a table without one (Ashenfelter et al., 2009; Ashenfelter, 2010), it is likely that the failure to meet the efficiency goals for the easy tasks is related to the table complexity and not to the data reliability indicator itself. Although they are similar, the tasks and tables used in this round of testing are not the same as in previous rounds and may have been more difficult.

Table 4: **Efficiency Scores by Table Type**

Table Type	Tasks	Average Eff. (min)
Above Table	76	2.5
Behind Link	61	2.0
No Color	39	2.1
Color	46	2.3
Red First	30	2.5
Green First	29	2.2
Data Profile	56	2.1
Selected Pop. Profile	31	3.0
Subject Table	14	1.8
Detailed Table	21	2.0
Geographic Comparison	28	1.6

Looking at the efficiency results by table type, the key result is that the participants using tables with the reliability legend above the table took 30 seconds longer to complete the tasks than those with the legend behind a link. It is possible the legend could have a slightly negative impact on efficiency, possibly being a distracting element. Also, participants in the Selected Population Profile condition took about twice as long to complete their tasks as did the participants in the Geographic Comparison condition.² The Selected Population Profile tables are the longest tables vertically and require the most scrolling, which could have impacted the participants' efficiency scores.

5.3 Satisfaction

The overall mean of the satisfaction scores for this round of testing with 21 participants was 6.23, which is above Usability Goal 3 of having at least a score of 5 on the scale. The averages reflect only those cases where there was a direct comparison of the location of the legend, color order, or color-coding. The mean satisfaction score for tables with the

²A one-way ANOVA ($F(4, 145) = 6.60, p < 0.001$) revealed at least one significant difference between the tables. Post-hoc Tukey's test showed that the Selected Population table had significantly longer efficiency scores than the Data Profiles tables (Mean Difference=55 seconds, $p = 0.005$), the Subject Tables (Mean Difference=71 seconds, $p = 0.014$), the Detailed Tables (Mean Difference=64 seconds, $p = 0.010$), and the Geographic Comparison tables (Mean Difference=86 seconds, $p < 0.001$).

reliability legend above the table was 6.1 (n=78)³ and the mean score for table with the reliability legend behind the “View Table Notes” link was 6.1 (n=62).

The mean satisfaction score for the tables with color-coding was 6.7 (n=40) and the mean score for tables with no color-coding was 5.9 (n=40). This is a somewhat large difference in score and indicates that there was more overall satisfaction for the color-coded indicator and is consistent with several participants making the comment that they liked the colors.

The mean satisfaction score for the tables where the red/unreliable indicator came first (i.e., was on “top”) on the indicator legend was 5.1 (n=31). The mean score for the tables where green/reliable was first was 6.8 (n=31).

The Detailed Tables had a mean satisfaction score of 6.0 (n=63), the Selected Population Profile tables had a mean score of 6.3 (n=31), the Subject Tables had a mean score of 6.9 (n=15), the Data Profiles had a mean score of 7.1, and the Geographic Comparison tables had a mean score of 5.6.

The participants met the usability satisfaction goal of at least a 5 on a 9-point scale for every condition.

The participants were allowed to write in open-ended comments for the last item of the satisfaction survey. Here are the comments received along with the table assigned to the participant that were directly related to the data reliability indicator. All comments that pertain to the tables themselves and not to the indicator can be found in Appendix I.

Data Profiles

- A3: location of reliability. Column affected ease of reading estimate and % estimate. Would prefer to see reliability column on left or right margin rather than in [the] middle.

Subject Tables

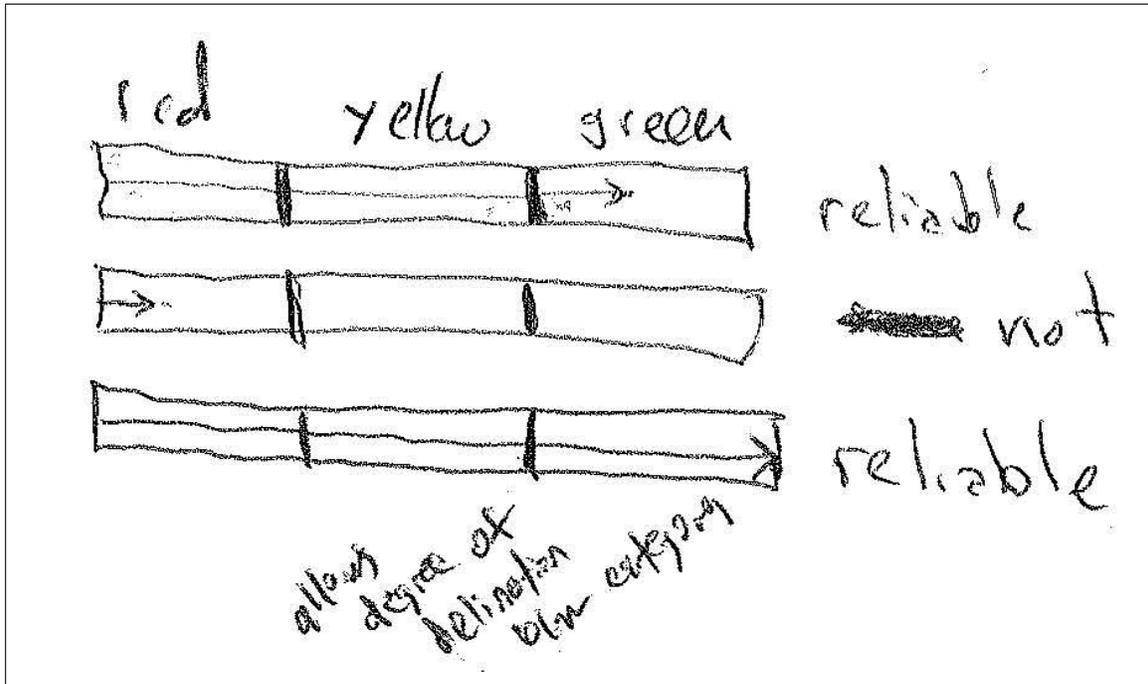
- C2: I didn’t even look at the definition of reliability. Sorry about that. I found the table mostly easy to read. I would however recommend that the need for scrolling be reduced if possible.

Geographical Comparisons

- E1: 1) It would be useful to have an * describing & defining: % (percent), reliability, m.o.e (i.e. is margin of error + or - the percent? Or is it linked to reliability?). 2) could the reliability be something like this: [see graphic drawn by participant 12 in Figure 1]. The red & green are pretty distracting. *Note: The legend was behind the link for this participant.*

³Where n is the number of satisfaction questions completed across all participants who saw this table.

Figure 1: Participant Suggested Indicator Revision



E2: It would have been helpful to have a definition for the reliability categories. Why was some data listed as reliable and others 'somewhat' or 'not at all' particularly if the information was ultimately coming from the same source. *Note: The legend was behind the link for this participant.*

E3: I think I might've noticed the reliability def. in the upper right corner but I didn't read it - it didn't really stand out.

5.4 Task Difficulty

Participants completed a task difficulty rating scale after they completed them. Difficulty was rated on a scale from 1 to 9, with 1 being very easy and 9 being very difficult. Table 5 shows the average task difficulty score for each data product tested.

Table 5: Overall Task Difficulty by Data Product

Table Type	Tasks	Average Eff. (min)
Behind Link	61	2.0
Above Table	76	2.5
No Color	39	2.1
Color	46	2.3
Red First	30	2.5
Green First	29	2.2
Data Profile	56	2.1
Selected Pop. Profile	31	3.0
Subject Table	14	1.8
Detailed Table	21	2.0
Geographic Comparison	28	1.6

Table 6 shows the average task difficulty for each task broken down by whether the data reliability indicator legend was displayed above the table, or behind the “View Table Notes” link. Although the average task difficulty for the tables with the data reliability indicator legend above the table was equal to the that of the tables with the legend behind a link for the Selected Population Profiles, it was considerably higher for the other data products. This key finding may indicate that adding a legend that is constantly visible above the table may make completing the tasks more difficult. This is consistent with the finding that tables with the legend above the table were also associated with longer efficiency time. It is possible. that showing the legend above the table could potentially have a negative impact on users’ interaction with the table. If that is the case, having the legend behind the link would likely not be problematic. However, usability best practices would suggest that the legend be present somewhere so that data users who are searching for this information can find it.

Table 6: Task Difficulty Scores by Location of the Data Reliability Legend

Table Type	Task	Above Table	Behind Link	Initial Rating
Data Profile	1	3.2	2.3	Easy
	2	4.2	2.3	Easy
	3	3.6	3.0	Medium
	4	5.0	2.0	Hard
	5	4.8	3.0	Medium
	6	5.8	3.0	Medium
	7	5.4	3.0	Medium
	8	<u>8.0</u>	<u>3.7</u>	Hard
	mean	5.0	2.8	
Selected Pop. Profile	1	1.0	8.0	Easy
	2	2.5	1.0	Easy
	3	1.0	1.0	Easy
	4	4.5	1.0	Hard
	5	4.0	4.0	Hard
	6	2.5	1.0	Medium
	7	1.0	1.0	Medium
	8	<u>3.0</u>	<u>1.0</u>	Hard
	mean	2.1	2.1	
Subject Table	1	2.0	2.0	Easy
	2	4.0	1.0	Medium
	3	1.0	3.0	Easy
	4	2.0	2.0	Hard
	5	6.0	1.0	Medium
	6	7.0	1.0	Hard
	7	<u>4.0</u>	<u>1.0</u>	Medium
	mean	3.7	1.6	
Geographic Comparison	1	1.0	1.5	Easy
	2	4.5	2.5	Medium
	3	7.0	2.5	Hard
	4	3.0	2.0	Medium
	5	4.5	2.0	Medium
	6	7.0	3.5	Hard
	7	<u>4.5</u>	<u>4.5</u>	Easy
	mean	4.5	2.6	

There were several instances when the average difficulty rating was at odds with its original difficulty categorization. For instance, task 1 for the Selected Population Profiles had an average task difficulty rating of 8.0 out of 9.0 points for the tables where the legend was behind the “View Table Notes” link, which indicates that that this task was not considered easy by the participant who saw this table. This question was “The National Organization for Young Adults is considering opening a chapter in Anytown, USA. They first want to know what the estimate for the number of people in Anytown that are ages 18 to 34 is. What would you tell them? ” This question may need to be revised to be more clear and specific if used in future rounds of testing.

Table 7 shows the average difficulty scores broken down by whether the green/reliable or red/not very reliable category was listed first in the data reliability indicator legend.

Table 7: Task Difficulty Scores by the Order of the Levels of the Reliability Legend

Table Type	Task	Red First	Green First	Initial Rating
Selected Pop. Profile	1	1.0	4.5	Easy
	2	4.0	1.0	Easy
	3	1.0	1.0	Easy
	4	8.0	1.0	Hard
	5	7.0	2.5	Hard
	6	1.0	2.5	Medium
	7	1.0	1.0	Medium
	8	<u>5.0</u>	<u>1.0</u>	Hard
	mean	3.2	1.8	
Geographic Comparison	1	1.5	2.0	Easy
	2	3.0	4.0	Medium
	3	4.0	5.5	Hard
	4	3.5	2.0	Medium
	5	4.5	2.0	Medium
	6	5.0	5.5	Hard
	7	<u>3.1</u>	<u>3.4</u>	Easy
	mean	4.5	2.6	

Table 8 shows the average difficulty rating broken down by whether the table was color-coded or not.

Table 8: Task Difficulty Scores by Whether the Reliability Indicator was Color-Coded

Table Type	Task	No Color	Color	Initial Rating
Data Profile	1	3.8	2.0	Easy
	2	4.5	2.5	Easy
	3	4.0	2.8	Medium
	4	5.3	2.5	Hard
	5	4.5	3.8	Medium
	6	5.5	4.0	Medium
	7	6.0	3.0	Medium
	8	<u>6.5</u>	<u>6.3</u>	Hard
	mean	4.8	3.3	
Detailed Tables	1	2.0	3.5	Easy
	2	4.0	3.5	Easy
	3	1.0	6.5	Hard
	4	3.0	3.0	Hard
	5	2.0	3.5	Medium
	6	2.0	4.5	Medium
	7	<u>8.0</u>	<u>3.5</u>	Hard
	mean	3.1	3.8	

5.5 Usability Findings

Successes

Although usability testing often reveals usability issues, it also can highlight the strengths of the data product being tested. The data reliability indicator had several strengths that came through during the sessions.

- Easily understood stoplight analogy

Although participants may not have understood exactly what was meant by statistical reliability, they did pick up on the relative meaning of the color-coded indicator. This meaning was supported by analogy with a red-yellow-green traffic stoplight. Just as in prior rounds of testing, some participants specifically mentioned a stoplight when commenting. Participant 5 said, “Well now thinking about it, they seem to correlate with streetlights, green being go ahead, it’s very positive. Yellow is somewhat mediocre, and red is not at all good or stop. So I guess that makes intuitive sense to me.” Participant 7 made the remark, “I would assume red is bad and green is good, and yellow is neutral.”

- Attractiveness of Added Color

Eye-tracking analysis from all three rounds of testing showed that participants’ eyes were drawn to the color-coded reliability column. Participant 14 commented during the initial probe question about what they noticed first about the tables, “Um, I guess the reliability column because it’s really bright and sort of stands out.” Participant 7 commented during the initial probe question, “The first thing I notice would be the color scheme, red, yellow, and green shaded boxes.”

Many participants commented that they liked the colors themselves because they added a splash of color and aesthetic appeal to the tables. Participant 6 said that colors are good to use to convey information because they are universal and “I love the colors, I’m a color person. I love it.” Participant 7 commented, “I think the use of color is always good in terms of making things clear and helping people focus. So it quickly alerts you to I guess the type of info like how good the information is. I honestly looked at that before I even saw what the table was for.”

- Participant Use of the Data Reliability Indicator

The data reliability indicator was successful in that participants did use it. It is possible that this indicator would be very helpful to statistical novices and they may use the indicator even though they would not normally use the MOE or another measure of error. Participant 12 said during the first task, “I’m not looking at the MOE or the percent. I’m just letting the reliability column do the thinking for me.” Participant 18 understood the general meaning of the indicator, but said that when the indicator shows not very reliable, that you can’t really use estimate. This is evidence that although the participant used the indicator, they saw the “Not Very Reliable” as an instruction not to use the estimate rather than to carefully consider the context of its use.

Usability Issues

Results reported include all identified usability issues and resolutions recommended by the team. Additional Comments by participants can be found in Appendix I. Identified issues are prioritized based on the following criteria:

- **High:** This problem brought the participant to a stand still. He or she was not able to complete the task. For this study, a high-priority issue can also be one where the data reliability indicator was not being applied correctly or there was a fundamental misunderstanding of its meaning.
- **Moderate:** This problem caused some difficulty or confusion, but the participant was able to complete the task.
- **Low:** This problem caused minor annoyance but does not interfere with the flow of the tasks.

High-Priority Issues

- Confusion of Statistical Reliability with Lack of Confidence in the Source or Quality of the Data

Some participants made comments that showed that they associated the “Not Very Reliable” indicator with low-quality data or data that came from an unreliable source (i.e., “good” versus “bad” data). Participant 7 said, ‘It says red is not very reliable so I assume the source of the data is not the best.’ When probed about what the meaning of the colors was, Participant 10 said it was “just good data versus bad data or the strength of the information.” Participant 13 said, “So reliable means to me that the data is very reliable, somewhat reliable there’s a margin of error, and not very reliable means no that data’s not very reliable at all.” Later, the same participant was probed about what she thought the definition of reliability was and responded, “I would expect um reliable to say, reliable means 100 percent of the data is consistent or factual. Somewhat reliable being 90 percent of the data 80 percent of the data is factual, and not very reliable so I would like to see some type of number associated with the ranges of reliability and not very reliable.”

- Vagueness of “Somewhat Reliable”

Several participants commented that they were not sure what “somewhat reliable” meant. Without a clear definition or the inclusion of information about the cutoff CV values, the meaning of this middle category may not be straightforward to users. As a result, they may not use an estimate that would have been appropriate to use in the context of their goals. Participants who made this comment did make the correct

assumption that this category was between “reliable” and “not very reliable” in terms of statistical reliability. However, a few people also made the comment that they were uncertain about whether or not to use an estimate as the answer to a task because they were unsure how large the difference between “reliable” and “somewhat reliable” was. Some participants also said they could justify the use of “not very reliable” data if they could tell if it were near the threshold for “somewhat reliable.” Participant 12 said, “I would not recommend [the reliability indicator] because I don’t understand um how close um the somewhat reliable versus the reliable um are, in relation to one another.” Participant 7 made a detailed comment:

“The transportation data is not very reliable and the education data is somewhat reliable but it’s difficult to use it to make any determination about the answer they’re both pretty subjective, I don’t know the threshold between somewhat and not very or what that means in terms of numbers, especially when the two numbers are close together. Oh I guess I can say, well I guess that’s why, the transportation data has a higher margin of error, I guess that’s why it’s not very versus somewhat. But I’m still not exactly sure about what type of index or what those numbers mean in later columns for margin of error oppose to beginning where it seems to be a whole number.”

It did not seem to make a difference whether the participants saw the indicator legend or not. During debriefing, participants who did not see the legend by clicking on the “View Table Notes” link were shown the legend and asked if it would have been helpful. The majority of participants said that it did not contain enough information about what reliability meant to be of much use.

- Unintuitive Nature of Legend Without Color Where Reliable is Listed First

Related to the usability strength of the intuitive stoplight analogy described above, two participants commented that the analogy does not hold when the color is removed. The dry run participant saw this type of legend and said she was surprised to see “Not Very Reliable” listed first and had to “reverse it in her head” in order to make sense of it. Participant 7 saw a legend with the color-coding and “Not Very Reliable” listed first and also thought having this category first was not intuitive. This participant recommended placing “reliable first because without color it doesn’t make sense to people.”

While this may not be an issue for users who have accessed the tables before and are familiar with their layout, it may be a problem for the novice data user. This is another issue with the table itself and not necessarily with the data reliability indicator, but the data reliability indicator is likely not to be used correctly if the correct estimate is not found.

Medium–Priority Issues

- Uninformative Nature of Reliability Legend

Several participants commented that there was not enough information about the CV, the cutoff values used for the indicator levels, and the definition of reliability. Although some participants never even saw the legend, it did not seem to impact their ability or inclination to use the reliability indicators when compared to the sessions where the participants saw and read the legend. Participant 4 said “If I could click on something, just to read why, why is this reliable?” During debriefing, Participant 4 also said, “I did, I also tried to click on reliability. Cause sometimes, especially when it’s blue I thought that I would be able to sort based on that. Um, and I thought that maybe there would be a pop up saying ‘Reliability is this’.” Participant 5 commented, “Yeah, I mean I like it [reliability], but I didn’t know what it actually meant.” Participant 7 remarked, “I guess.. it seems subjective, so if there were some of key or index that had even if it was a numeric range like things with a MOE of zero to five are considered reliable, even though I don’t necessarily know what that means. But it would give it some sort of qualifying description; it seems like anyone could’ve just drawn a line and say that’s reliable and that’s not reliable and I have no idea where that line is drawn or how or why.” Participant 13 said, “I’m a little confused as to what the reliability factor pertains to.” The experimenter asked the probe question “What are you confused about?” The participant continued, “The reliability of what? The data itself? What being reliable as far as the percentages, are we looking at the margin of error, like what does the reliability factor pertain to, that data is not very reliable based on what, or it’s very reliable but what are we basing that on, the reliability factor?” Participant 19 remarked that there should be numerical values defining the reliability categories, “Again, I don’t really know what that reliability means, I don’t know if there’s a p-value you can put in there or what not, um, test of significance, but I guess I would say it is that score but how reliable. I don’t know what that metric means. Except I know it lists some legend, but again there’s no numerical values attached to it.”

A related issue is that it is unclear how the estimate, percent, MOE, and reliability columns are related to one another. Participant 12 said, “On all of them [tasks] I just find myself going percent, margin of error, not really understanding how they relate to reliable.” Participant 15 used the MOE and reliability indicator interchangeably and called the Margins of Error “reliabilities.”

- Small Font Size

A majority of the participants across all of the conditions remarked that the font size was small. Several had difficulty reading the table contents. However, this problem may have been an artifact of the manner in which the tables were converted to HTML files for testing. The tables were embedded as images into Web screens. If the tables were fully functional as they would be in American Fact Finder (AFF), the tables

would have the ability to be adjusted to fit a user’s preferences more readily.

Low Priority Issues

- View Table Notes

Twenty of the twenty-one participants never clicked on the “View Table Notes” above the upper right corner of the table. Participant 10 actually looked for a legend and did not find it behind the link. Participant 13 said, “As I’m reading through this, by clicking on that link [view table notes], that still would not have given me a better understanding of what a reliability the reliability columns really refers to.”

This issue was especially clear in the wide subject tables (C1 and C2), since participants could potentially never scroll the browser to the point where they could see it. However, since there was no significant difference in performance whether they saw the legend or not, this issue becomes low-priority.

The dry run participant said that she would have clicked on the MOE row header to look for information about reliability. Duplicate links on the MOE and Reliability column headers could help users find the table notes more easily. Participant 19 also said that he would prefer if he could click or mouse over the column headers for more information about the MOE and Reliability.

When shown the reliability legend during debriefing, Participant 4 said, “Maybe it’s just the title, ‘view table notes.’ Maybe if it were like ‘view table definitions’ or something like that, that would make me think that, ok, this means they are explaining something on the table. A table note makes me think that, oh, it’s just something like I can save my notes.” During debriefing, Participant 5 made a similar comment, “I wouldn’t have gone to view table notes to learn about reliability.”

- The Color Coding is Potentially Distracting

As with the previous round of testing, a participant commented that the colors were distracting while completing the tasks. Participant 12 commented that colors distract from reading title; “Oh, you know what, since the colors are so dramatic, I’m just realizing that I didn’t even read the title on this page which is pretty bad” and “I guess it just shows you jump to reading things that pop out.” Participant 16 was drawn to the reliability indicator and did not notice the MOE column. Participant 16 said, “You’ve got these lovely green, yellow, red categories defining reliability instead of giving margins of errors.” When shown a color-coded table and legend after completing the tasks for a table with no color-coding, Participant 21 said that she would prefer the table without color-coding because the “color is intense.”

6 Eye–Tracking Results

6.1 Fixation Durations on Areas of Interest

Location of Data Reliability Indicator Legend

Table 13 shows the fixation durations for the tables where the data reliability indicator legend was above the table versus behind a link. Most notably, the participants who saw tables with the legend above the table looked at the Data Description (row name) for 17.72 seconds on average, which is much longer than the average of 7.43 for the participants who saw tables with a legend behind the link name.

Table 9: Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Data Profiles

AOI	Legend Above Table (A3,A4)	Legend Behind Link (A1,A2)
Column Headers	0.77	0.69
Data Description	17.72	7.43
Estimate	7.84	5.61
Estimate MOE	5.02	2.70
Estimate MOE Link	0.10	0.05
Estimate Reliability Link	0.10	0.13
Information Icon	0.00	0.01
Percent	5.05	3.23
Percent MOE	1.13	1.53
Percent Reliability	1.39	1.89
Percent MOE Link	0.07	0.10
Percent Reliability Link	0.14	0.07
Table Information	0.90	0.35
Table Source	0.12	0.01
Top Links	0.24	0.14
Top Tabs	0.10	0.15
View Table Notes	0.13	0.04
Reliability Legend	1.51	Not Applicable
Legend Levels	0.62	Not Applicable
Legend Text	1.03	Not Applicable

Table 10 shows the average fixation durations. for the tables where the data reliability indicator legend was above the table, versus behind a link. The most striking differences were that participants looked at the Two or More Races Estimate column for the tables with the legend behind a link, compared to 4.98 for the tables with the legend above the table. Similarly, participants looked at the Total Population estimate column for an average or 15 seconds for the Behind Link condition, while they only looked at this column for an average of 8.52 seconds. Participants looked at the Total Population Reliability column an average 11.73 seconds for the Legend Behind Link tables, but only 2.45 seconds for the Legend Above Table condition. This could be evidence that

participants’s eyes are drawn to the colorful reliability column itself more so than if the colorful reliability legend were also present.

Table 10: **Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Selected Population Tables**

AOI	Legend Above Table (B3,B4)	Legend Behind Link (B1,B2)
Data Description	30.42	35.83
Column Headers	0.91	2.09
Two or More Races Estimate	4.98	10.42
Two or More Races MOE	0.94	1.35
Two or More Races Reliability	1.10	1.35
Total Population Estimate	8.52	15.00
Total Population MOE	2.48	4.81
Total Population Reliability	2.45	11.73
Information Icon	2.96	3.39
Table Information	0.03	0.00
Table Source	0.03	0.00
Top Links	0.79	0.63
Top Tabs	0.45	0.32
View Table Notes	0.06	0.14
Reliability Legend	2.14	Not Applicable
Legend Levels	0.64	Not Applicable
Legend Text	0.83	Not Applicable

Table 11 shows the average fixation durations for the tables where the data reliability indicator legend was above the table versus behind a link for the Subject Tables. The largest difference between the table prototypes in terms of fixation duration was that participants looked at the Data Description column for an average 17.86 seconds for the Legend Above Table condition compared to an average 6.37 seconds for the Legend Behind Link condition. There were longer fixations on the Management, Management MOE, Management Reliability, and Service MOE for the Behind Link tables, but overall the fixation durations were fairly similar.

Table 11: **Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Subject Tables**

AOI	Legend Above Table (C2)	Legend Behind Link (C1)
Column Headers	10.08	11.86
Data Description	17.86	6.37
Information Icon	0.00	0.00
Construction	0.06	0.00
Construction MOE	0.00	0.00
Construction Reliability	0.09	0.20
Farming	0.31	0.30
Farming MOE	0.06	0.23
Farming Reliability	0.15	0.07
Management	2.13	4.52
Management MOE	1.00	3.65
Management Reliability	1.69	2.48
Production	0.00	0.00
Production MOE	0.06	0.00
Production Reliability	0.00	0.00
Sales	2.28	6.40
Sales MOE	0.22	1.64
Sales Reliability	1.09	0.94
Service	2.27	1.84
Service MOE	0.54	2.01
Service Reliability	1.26	0.46
Table Source	0.15	0.22
Table Information	0.74	1.33
Top Links	0.79	0.13
Top Tabs	0.75	0.94
Reliability Legend	Not Applicable	0.33
Legend Levels	Not Applicable	0.13
Legend Text	Not Applicable	0.13

Table 12 shows that there is a large difference in the amount of time spent looking at the Percent and Reliability columns in these tables. In fact, participants looked at every AOI longer in the Legend Behind Link condition than the Above Table condition. When the reliability legend is present, it may reduce the amount of time participants need to look at the reliability column itself while interpreting its meaning. On the contrary, participants may spend more time reading and cognitively processing the reliability column when the legend is absent.

Table 12: Fixation Durations (sec): Reliability Legend Above Table Versus Behind a Link for Geographic Comparison Tables

AOI	Above Table (E3,E4)	Behind Link (E1,E2)
Geographical Area	2.52	8.28
Column Headings	0.80	2.05
Information Icon	0.02	0.03
MOE	3.88	7.98
Percent	3.40	11.85
Reliability	8.54	23.92
Table Information	2.56	2.62
Table Source	0.00	0.16
Top Links	0.89	0.91
Top Tabs	0.28	0.43
View Table Notes	0.61	0.86
Reliability Legend	2.23	NA
Legend Colors	0.31	NA
Legend Text	1.37	NA

The information icon may not be very helpful, since it was hardly looked at.

Color vs. No Color

Table 13 presents the fixation durations for the tables with a color-coded data reliability indicator as compared to the tables with a plain text indicator with no color for the Data Profile Tables. For this analysis, the location of the legend was removed from the analysis, since no one saw the legend for the tables where it was behind the “View Table Notes” link. The largest difference in fixation duration between the two conditions was that participants looked at the Data Description column for an average of 16.30 for the color-coded tables, but only an average of 11.40 for the tables without color. Overall, the fixation durations on the AOIs were similar for the two prototypes.

Table 13: **Fixation Durations (in seconds): Color vs. No Color for Data Profile Tables**

AOI	Color (A1,A3)	No Color (A2,A4)
Column Headers	0.91	0.73
Data Description	16.30	11.40
Estimate	7.12	5.93
Estimate MOE	4.07	3.35
Estimate MOE Link	0.09	0.20
Estimate Reliability Link	0.10	0.13
Information Icon	0.01	0.00
Percent	4.69	4.31
Percent MOE	1.38	1.56
Percent Reliability	1.76	1.85
Percent MOE Link	0.10	0.12
Percent Reliability Link	0.03	0.19
Table Information	0.84	0.37
Table Source	0.05	0.06
Top Links	0.21	0.16
Top Tabs	0.10	0.11
View Table Notes	0.14	0.05

Table 14 shows the fixation durations for the tables with a color-coded data reliability indicator as compared to the tables with a plain text indicator with no color for the Detailed Tables. The most notable differences in the fixation durations for the two prototypes are that participants looked at the Data description column for an average of 12.28 in the Color condition versus only 6.64 for the No Color condition. Participants also fixated on the Apple County Reliability Column for 7.88 seconds on average for the Color tables as compared to only 3.96 seconds for the No Color tables. Since Apple County is the first county that appears at the left-hand side of the table, this may be evidence that participants’s eyes were initially drawn to the most colorful part of the screen. Participants looked at the Cherry County Reliability column almost twice as long for the No Color tables as they did for the Color tables, and this is the last and right-most county displayed in the table. This is consistent with participants becoming accustomed to the color-coded table.

Table 14: **Fixation Durations (in seconds): Color vs. No Color for Detailed Tables**

AOI	Color (D1)	No Color (D2)
Geography Headers	0.42	1.89
Data Description	6.64	12.28
Apple County Estimate	2.79	1.89
Apple County Estimate MOE	2.06	1.10
Apple County Reliability	7.88	3.96
Birch County Estimate	4.21	3.07
Birch County MOE	1.00	1.60
Birch County Reliability	3.67	4.56
Cherry County Estimate	1.46	2.57
Cherry County MOE	0.00	0.05
Cherry County Reliability	0.88	1.66
Information Icon	0.02	0.00
Table Information	0.92	0.47
Table Source	0.22	0.26
Top Links	0.60	0.49
Top Tabs	0.18	0.33
View Table Notes	0.04	0.07

Order of the Legend Levels

Table 15 shows the average fixation durations for the tables with the Red/“Not Very Reliable” level presented at the top of the reliability legend and the tables where the Green/“Reliable” level was displayed first for the Selected Population Profile tables. The reliability legend AOIs were removed because the tables with the legends behind the “View Table Notes” link did not have a visible AOI legend. Although the fixation durations are similar overall, participants with the Green First tables looked at the Column Headers and Total Population Estimate columns longer on average than the participants with the Red First tables. Participants in the Green First condition looked at the Two or More Races Estimate column longer on average than participants in the Red First condition.

Table 15: **Fixation Durations (sec): Red/Not Very Reliable First Versus Green/Reliable in Legend for Selected Population Profiles**

AOI	Red First (B1,B3)	Green First (B2,B4)
Data Description	33.24	32.49
Column Headers	0.71	2.33
Two or More Races Estimate	9.12	5.82
Two or More Races MOE	1.77	0.42
Two or More Races Reliability	4.64	5.07
Total Population Estimate	9.66	13.80
Total Population MOE	4.27	2.88
Total Population Reliability	6.52	7.72
Information Icon	0.00	0.07
Table Information	1.41	3.75
Table Source	0.02	0.00
Top Links	0.83	0.54
Top Tabs	0.43	0.30
View Table Notes	0.05	0.15

Table 16 shows the average fixation durations for the tables with the Red/“Not Very Reliable” level presented at the top of the reliability legend and the tables where the Green/“Reliable” level was displayed first for the Geographic Comparison tables. The fixation durations were similar overall.

Table 16: **Fixation Durations (sec): Red/Not Very Reliable First Versus Green/Reliable in Legend for Geographic Comparison Tables**

AOI	Red First (E1,E3)	Green First (E2,E4)
Geographical Area	4.71	6.10
Column Headings	1.51	1.34
Information Icon	0.00	0.05
MOE	6.17	5.68
Percent	7.30	8.25
Reliability	16.81	15.65
Table Information	2.11	3.07
Table Source	0.01	0.16
Top Links	0.79	1.01
Top Tabs	0.38	0.33
View Table Notes	0.65	0.82

6.2 Heatmaps

Heatmaps are visualization tools that show where participants looked most often on a stimulus, in this case the data tables. This section provides a heatmap for each of the tables. Overall, participants’ eyes are drawn most to the color-coded columns and row descriptions (data descriptions).⁴

Data Profile Tables

For tables A1, A3, and A4, the participants looked at the column headers, but the participants who saw the A4 table did not read them very carefully. The participant who saw the A2 table did not read the table’s title, while the participants in every other Data Profile Table condition did. This may be due to individual differences, since only one person saw the A2 table.

Figure 2 shows the heatmap for Table A1, Figure 3 shows the heatmap for Table A2, Figure 4 shows the heatmap for Table A3, and Figure 5 shows the heatmap for Table A4. Comparing Tables A1 and A2, the heatmap for A1 shows that participants look at the margin of error more than in the heatmap for A2, especially in the Ancestry section at the end of the table. The color-coded reliability indicator may have been attracting additional attention to the right side of the table. Participants looked at the relationship section more for table A2 than in A1 (e.g., the section is “hotter”). The color-coded reliability column could have helped participants track the rows across, requiring the participants with the A2 table to more carefully follow the row. Participants for Table A2 also looked at the column headers more than those for A1.

Comparing Tables A3 and A4, the heatmap of the columns near the color-coded reliability column in A3 appear “hotter” than those in A4, which also occurred in Table A1 more than Table A2. Again, the colors may attract additional attention to that section of the table.

Participants did appear to read the Data Reliability Indicator description in the legend. Similar reading patterns were found for tables A3, A4, B4, C2, E3, and to a certain extent, B3 and E4.

⁴It is important to note that some tables only had one participant view them. Therefore, strong conclusions about differences in the heatmaps cannot be made.

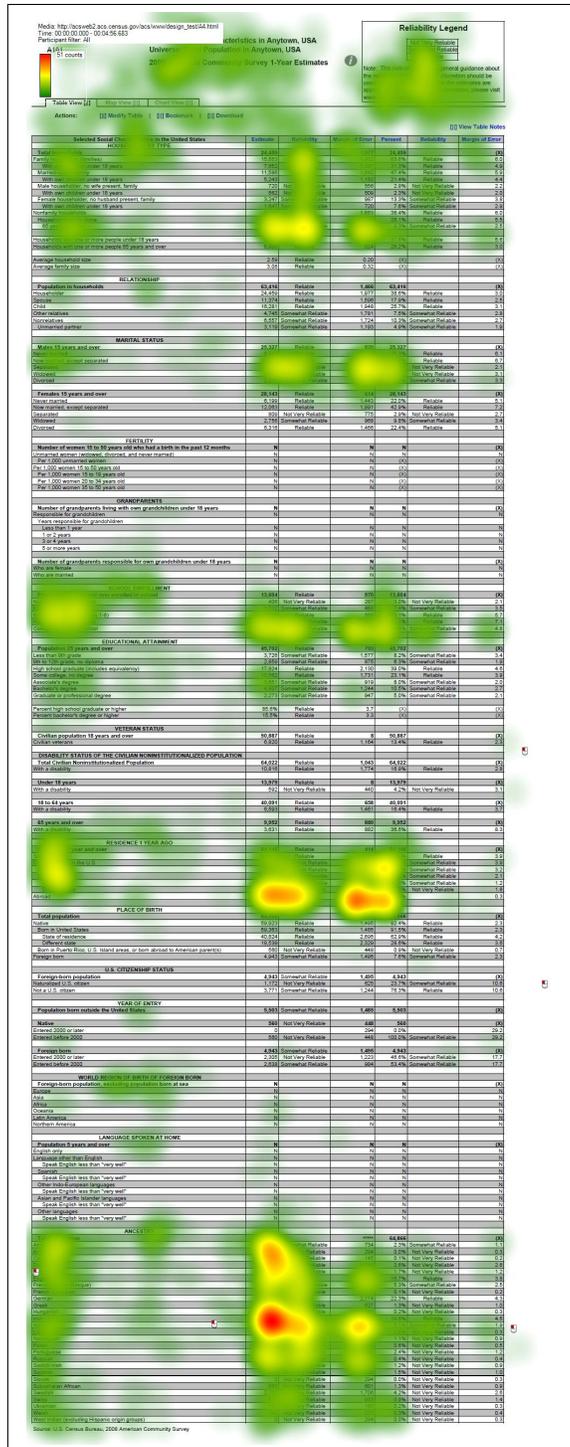
Figure 2: Heatmap for Table A1, Two Participants



Figure 4: Heatmap for Table A3, Three Participants



Figure 5: Heatmap for Table A4, Two Participants



Selected Population Profile Tables

Figure 6 shows the heatmap for Table B1, Figure 7 displays the heatmap for Table B2, Figure 8 shows the heatmap for Table B3, and Figure 9 displays the heatmap for Table B4. Across all of the conditions but B4, the participants looked at the column headers. The participant who did not read the column headers could have had greater confusion during the session during the tasks that require a response from the “Two or More Races” column.

Figure 6: Heatmap for Table B1, One Participant



Figure 7: Heatmap for Table B2, One Participant

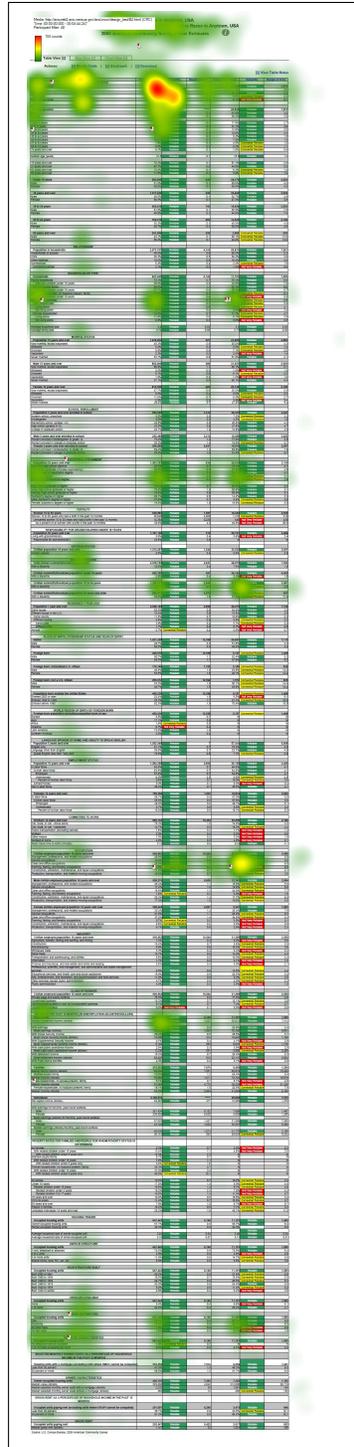


Figure 8: Heatmap for Table B3, One Participant

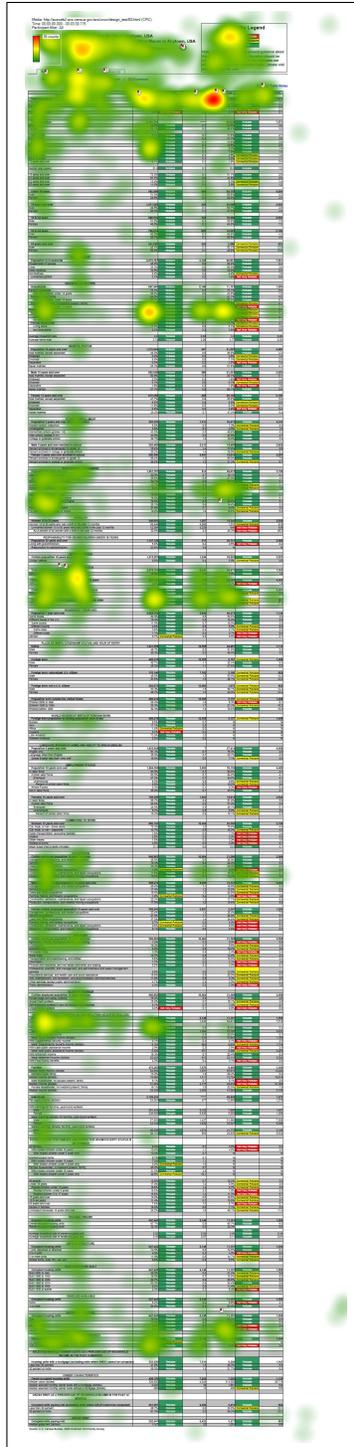
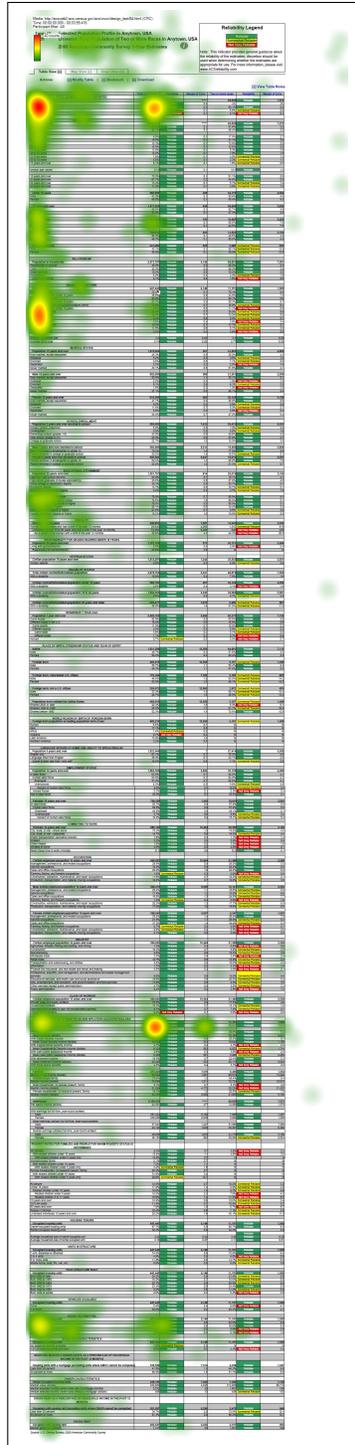


Figure 9: Heatmap for Table B4, One Participant



Subject Tables

The participants who saw the wide Subject Tables did not read the right side of the table. In order to see this area, participants would have had to scroll horizontally to the right. The requirement of horizontal scrolling goes against the commonly held usability principle to avoid horizontal scrolling whenever possible.

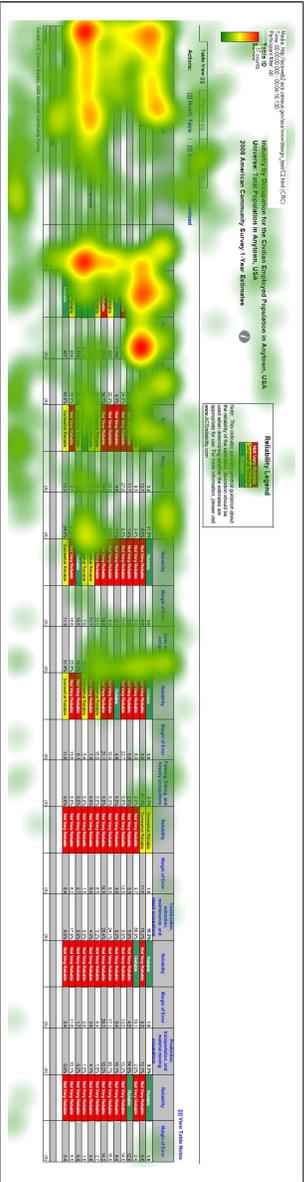


Figure 11: Heatmap for Table C2, One Participant

Geographical Comparison Tables

Overall, the fixation patterns were similar for all of the Geographical Comparison Tables. The participant in E3 did not look at the margin of error often, but participants across the conditions and tables differed widely when looking at the margin of error. Differences in duration of fixation on margin of error may also depend on how long they spent trying to identify what the reliability or margin of error was determined by.

Figure 14: Heatmap for Table E1, One Participant

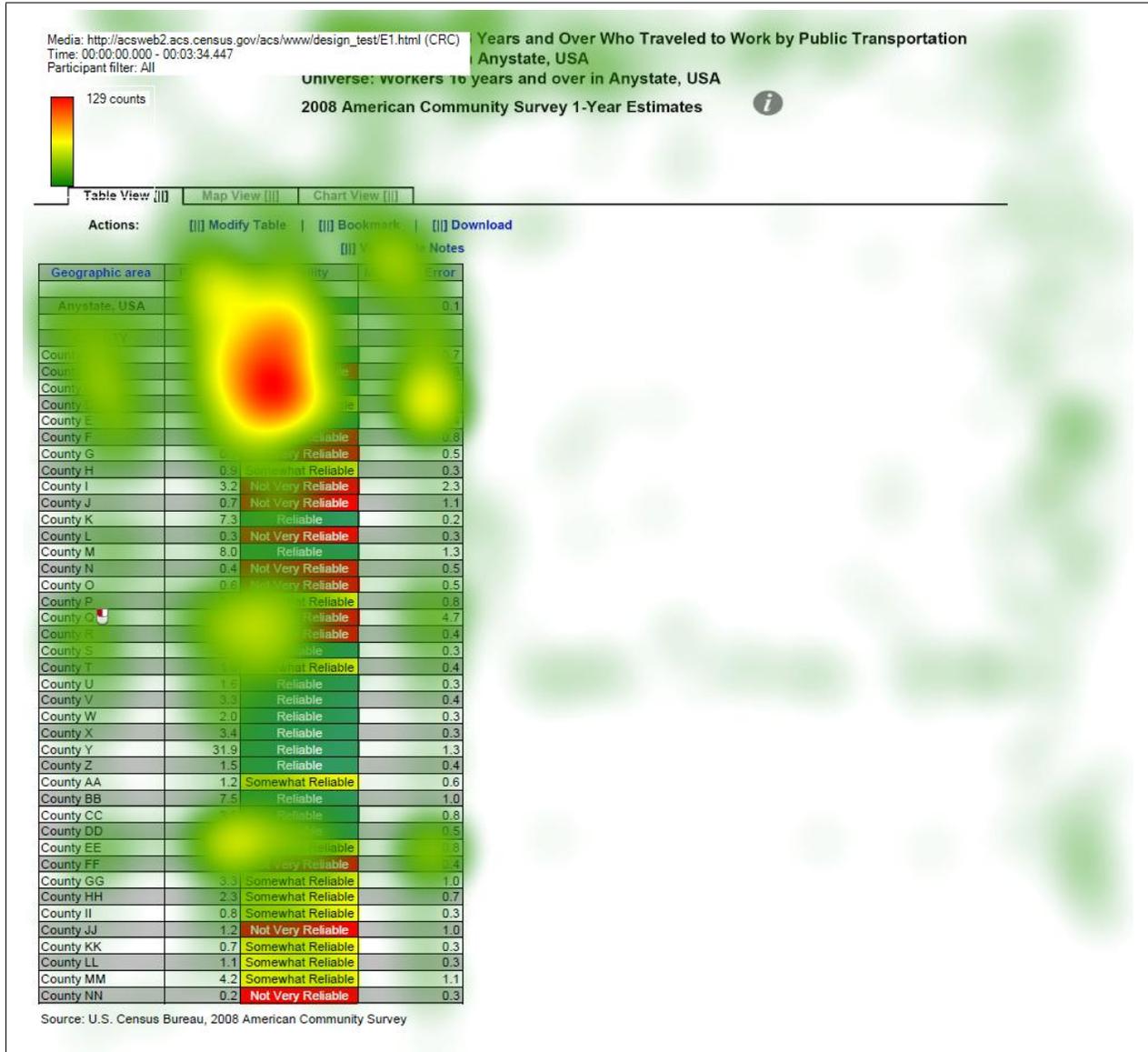


Figure 15: Heatmap for Table E2, One Participant

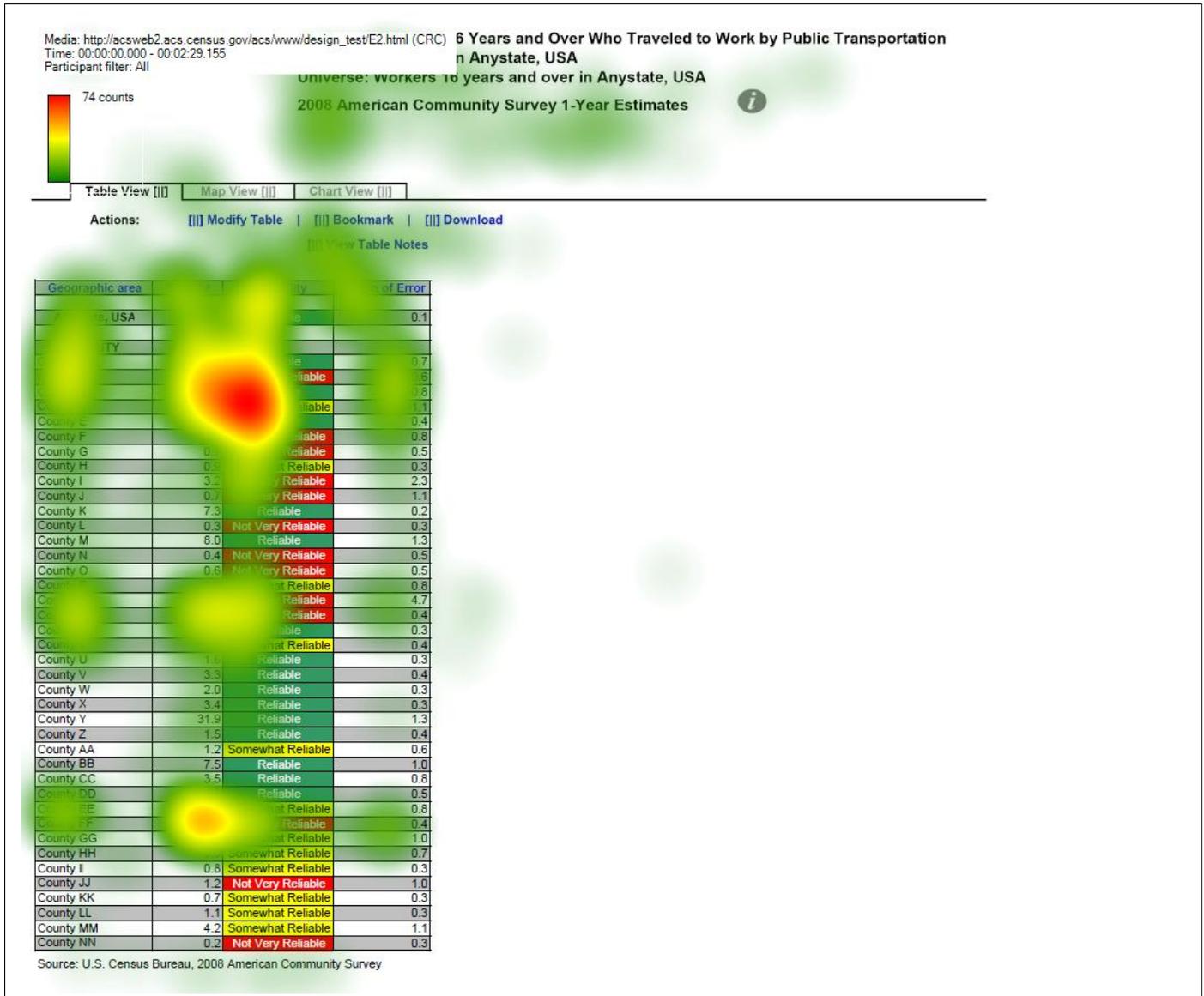


Figure 17: Heatmap for Table E4, One Participant



6.3 Summary

The participants' response to the data reliability indicators was mostly positive, as it was for the first two rounds of testing. However, there was some confusion about the indicator. For instance, some participants confused the concept of statistical reliability with a lack of confidence in the source or quality of the data or had trouble interpreting what "Somewhat Reliable" really meant.

In terms of whether the data reliability legend is displayed above the table or behind a link, "Reliable" or "Not Very Reliable" is listed first, or whether it is color-coded, the usability goals were met for accuracy of responses and users satisfaction for all of the conditions (although the goal was not met for all data products). However, the efficiency goal was not met for several of the table types.

Overall, it appears that participants can use the tables equally well whether or not the indicator has color-coding, has a legend above the table or behind a link, or whether the "Reliable" or "Not Very Reliable" indicator is listed first in the legend. Participants can use the tables with about equal efficiency whether it is color-coded or not and whether "Reliable" or "Not Very Reliable" is listed first. However, the tables with the legend placed above the table had scores that were 30 seconds longer than the scores for the tables with the legend placed behind a hyperlink.

when asked for their preference during debriefing, most participants in the text-only (i.e., no color-coding) conditions indicated that they would prefer the color-coded version .

Many participants had trouble tracking estimates across the table, reading the small text, and interpreting the meaning of "Somewhat Reliable."

As with the previous rounds of testing, there was a general sense of confusion about the meaning of "reliability" and what the cut-offs for the different levels of reliability were. Since none of the participants with the legend behind the link actually clicked on the link during testing, none of these participants saw the legend.⁵ It is unclear whether this would have been beneficial to them or not.

⁵One participant with the legend located above the table clicked on this link.

References

- Ashenfelter, K. T. (2010). Data reliability indicator based on the coefficient of variation: Results from the second round of testing. *Statistical Research Division Research Report Series*.
- Ashenfelter, K. T., Beck, J., & Murphy, E. D. (2009). Final report for first-round usability testing of data-reliability indicator prototypes. *Statistical Research Division Report Series, Report SSM2009/01*. Available from <http://www.census.gov/srd/papers/pdf/ssm2009-01.pdf>
- Chin, J. P., Diehl, V., & Norman, K. L. (1988). Development of an instrument measuring user satisfaction of the human-computer interface. *Proceedings of CHI 88: Human Factors in Computing Systems*, 213-218.
- Tersine, A. (2010). Proposal to apply a reliability indicator to ACS estimates. *U.S. Census Bureau Document: Prepared for the 2010 Census Advisory Committee and the Census Scientific Advisory Committee*.
- Tobii Technology, I. (2008). *Tobii studio enterprise edition software*.
- Whitford, D., & Weinberg, D. (2008). Proposal to highlight american community survey data with a data confidence indicator. *U.S. Census Bureau Document*.

7 Appendix A: Tables

The longer tables that scrolled down vertically have been broken up into three sections (called Top, Middle, and Bottom for the relative vertical position of the sections) for increased legibility.

Figure 18: Data Profile Table with Color-Coding and the Legend Behind a Link (A1): Top

Table ID	Selected Social Characteristics in Anytown, USA					
A101	Universe: Total Population in Anytown, USA					
	2008 American Community Survey 1-Year Estimates					
Table View Map View Chart View						
Actions: Modify Table Bookmark Download						
View Table Notes						
Selected Social Characteristics in the United States	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
HOUSEHOLDS BY TYPE						
Total households	24,459	Reliable	1,977	24.459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,598	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,182	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	558	2.9%	Not Very Reliable	2.2
With own children under 18 years	562	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.8%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,188	Reliable	1,686	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	924	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63.416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,596	17.8%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,745	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25.327		(X)
Never married	8,944	Reliable	1,833	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28.143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,063	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.8%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren	N		N	N		N
Less than 1 year	N		N	N		N

Figure 19: Data Profile Table with Color-Coding and the Legend Behind a Link (A1): Middle

GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren						
Less than 1 year	N		N	N		N
1 or 2 years	N		N	N		N
3 or 4 years	N		N	N		N
5 or more years	N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years	N		N	N		(X)
Who are female	N		N	N		N
Who are married	N		N	N		N
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	13,604	Reliable	970	13,604		(X)
Nursery school, preschool	406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten	1,012	Somewhat Reliable	488	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)	6,285	Reliable	556	46.1%	Reliable	5.7
High school (grades 9-12)	4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school	1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT						
Population 25 years and over	45,702	Reliable	703	45,702		(X)
Less than 9th grade	3,726	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma	2,858	Somewhat Reliable	675	6.3%	Somewhat Reliable	1.9
High school graduate (includes equivalency)	17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree	10,562	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree	3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree	4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree	2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher	85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher	15.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS						
Civilian population 18 years and over	50,887	Reliable	8	50,887		(X)
Civilian veterans	6,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION						
Total Civilian Noninstitutionalized Population	64,022	Reliable	1,043	64,022		(X)
With a disability	10,516	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years	13,979	Reliable	8	13,979		(X)
With a disability	592	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years	40,091	Reliable	658	40,091		(X)
With a disability	6,583	Reliable	1,461	16.4%	Reliable	3.7
65 years and over	9,952	Reliable	880	9,952		(X)
With a disability	3,631	Reliable	882	36.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO						
Population 1 year and over	64,146	Reliable	414	64,146		(X)
Same house	54,826	Reliable	2,478	85.5%	Reliable	3.9
Different house in the U.S.	9,320	Somewhat Reliable	2,495	14.5%	Somewhat Reliable	3.9
Same county	5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county	3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state	1,668	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state	1,878	Not Very Reliable	1,149	2.9%	Not Very Reliable	1.8
Abroad	0		294	0.0%		0.3
PLACE OF BIRTH						
Total population	64,866		64,866			(X)
Native	59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	82.9%	Reliable	4.2
Different state	18,539	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	580	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)

Figure 20: Data Profile Table with Color-Coding and the Legend Behind a Link (A1):
Bottom

Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	53.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable	2.6
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,467	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	769	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	883	Not Very Reliable	601	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable	2.6
Swiss	815	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	150	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 21: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):
Top

Table ID A101		Selected Social Characteristics in Anytown, USA Universe: Total Population in Anytown, USA		2008 American Community Survey 1-Year Estimates		
Table View [i]		Map View [i]		Chart View [i]		
Actions: [i] Modify Table [i] Bookmark [i] Download						
[i] View Table Notes						
Selected Social Characteristics in the United States						
HOUSEHOLDS BY TYPE						
	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
Total households	24,459	Reliable	1,977	24,459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,590	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,182	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	556	2.9%	Not Very Reliable	2.2
With own children under 18 years	582	Not Very Reliable	508	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,186	Reliable	1,666	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	924	20.2%	Reliable	3.9
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63,416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,596	17.9%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,746	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25,327		(X)
Never married	8,944	Reliable	1,633	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28,143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,063	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)

Figure 22: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):Middle

Different state	18,539	Reliable	2,329	28.6%	Reliable	3.8
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.8%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.8
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.8
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	48.8%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	63.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 3 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,889	2.6%	Not Very Reliable	2.8
Dutch	1,099	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,467	Somewhat Reliable	1,802	5.3%	Somewhat Reliable	2.5
French Canadian	78	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.8%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	883	Not Very Reliable	601	1.3%	Not Very Reliable	0.8
Swedish	2,705	Not Very Reliable	1,708	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 23: Data Profile Table with No Color-Coding and the Legend Behind a Link (A2):
Bottom

Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	62.9%	Reliable	4.2
Different state	18,836	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.6
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native	560	Not Very Reliable	448	560		(X)
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born	4,943	Somewhat Reliable	1,495	4,943		(X)
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	984	63.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		****	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable	2.6
Dutch	1,086	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,487	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	800	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Nonwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	358	Not Very Reliable	353	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	670	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	863	Not Very Reliable	601	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,708	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 24: Data Profile Table with Color-Coding and the Legend Above the Table (A3):Top

Selected Social Characteristics in the United States	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
HOUSEHOLDS BY TYPE						
Total households	24,459	Reliable	1,977	24,459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,586	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,162	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	556	2.9%	Not Very Reliable	2.2
With own children under 18 years	562	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,663	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,186	Reliable	1,666	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	824	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63,416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,586	17.9%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,746	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,183	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25,327		(X)
Never married	8,944	Reliable	1,633	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	621	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28,143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,083	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						

Reliability Legend

Not Very Reliable
Somewhat Reliable
Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View [] | Map View [] | Chart View []

Actions: [] Modify Table | [] Bookmark | [] Download

[] View Table Notes

Figure 25: Data Profile Table with Color-Coding and the Legend Above the Table (A3): Middle

Per 1,000 women 20 to 34 years old		N		N	(X)		(X)
Per 1,000 women 35 to 50 years old		N		N	(X)		(X)
GRANDPARENTS							
Number of grandparents living with own grandchildren under 18 years		N		N	N		(X)
Responsible for grandchildren		N		N	N		N
Years responsible for grandchildren							
Less than 1 year		N		N	N		N
1 or 2 years		N		N	N		N
3 or 4 years		N		N	N		N
5 or more years		N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years		N		N	N		(X)
Who are female		N		N	N		N
Who are married		N		N	N		N
SCHOOL ENROLLMENT							
Population 3 years and over enrolled in school		13,604	Reliable	970	13,604		(X)
Nursery school, preschool		406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten		1,012	Somewhat Reliable	488	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)		6,265	Reliable	556	46.1%	Reliable	5.7
High school (grades 9-12)		4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school		1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT							
Population 25 years and over		45,702	Reliable	703	45,702		(X)
Less than 9th grade		3,728	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma		2,859	Somewhat Reliable	875	6.3%	Somewhat Reliable	1.8
High school graduate (includes equivalency)		17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree		10,662	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree		3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree		4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree		2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher		85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher		15.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS							
Civilian population 18 years and over		50,887	Reliable	8	50,887		(X)
Civilian veterans		6,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION							
Total Civilian Noninstitutionalized Population		64,022	Reliable	1,043	64,022		(X)
With a disability		10,818	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years		13,979	Reliable	8	13,979		(X)
With a disability		582	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years		40,091	Reliable	658	40,091		(X)
With a disability		6,593	Reliable	1,461	16.4%	Reliable	3.7
65 years and over		9,952	Reliable	880	9,952		(X)
With a disability		3,631	Reliable	882	36.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO							
Population 1 year and over		64,146	Reliable	414	64,146		(X)
Same house		54,828	Reliable	2,478	85.5%	Reliable	3.9
Different house in the U.S.		9,320	Somewhat Reliable	2,495	14.5%	Somewhat Reliable	3.9
Same county		5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county		3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state		1,868	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state		1,878	Not Very Reliable	1,149	2.9%	Not Very Reliable	1.8
Abroad		0		294	0.0%		0.3
PLACE OF BIRTH							
Total population		64,866		****	64,866		(X)
Native		59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States		59,369	Reliable	1,485	91.5%	Reliable	2.3
State of residence		40,824	Reliable	2,695	62.9%	Reliable	4.2
Different state		18,539	Reliable	2,329	28.6%	Reliable	3.6
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)		560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born		4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS							
Foreign-born population		4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen		1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.8

Figure 26: Data Profile Table with Color-Coding and the Legend Above the Table (A3): Bottom

YEAR OF ENTRY					
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503	
Native	560	Not Very Reliable	448	560	
Entered 2000 or later	0		294	0.0%	
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable
Foreign born	4,943	Somewhat Reliable	1,495	4,943	
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable
Entered before 2000	2,638	Somewhat Reliable	984	53.4%	Somewhat Reliable
WORLD REGION OF BIRTH OF FOREIGN BORN					
Foreign-born population, excluding population born at sea	N		N	N	
Europe	N		N	N	
Asia	N		N	N	
Africa	N		N	N	
Oceania	N		N	N	
Latin America	N		N	N	
Northern America	N		N	N	
LANGUAGE SPOKEN AT HOME					
Population 5 years and over	N		N	N	
English only	N		N	N	
Language other than English	N		N	N	
Speak English less than "very well"	N		N	N	
Spanish	N		N	N	
Speak English less than "very well"	N		N	N	
Other Indo-European languages	N		N	N	
Speak English less than "very well"	N		N	N	
Asian and Pacific Islander languages	N		N	N	
Speak English less than "very well"	N		N	N	
Other languages	N		N	N	
Speak English less than "very well"	N		N	N	
ANCESTRY					
Total population	64,866		****	64,866	
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable
Danish	1,700	Not Very Reliable	1,689	2.6%	Not Very Reliable
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable
English	10,824	Reliable	2,441	16.7%	Reliable
French (except Basque)	3,467	Somewhat Reliable	1,602	5.3%	Somewhat Reliable
French Canadian	78	Not Very Reliable	126	0.1%	Not Very Reliable
German	14,479	Reliable	2,774	22.3%	Reliable
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable
Irish	12,714	Reliable	2,912	19.6%	Reliable
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable
Polish	358	Not Very Reliable	363	0.6%	Not Very Reliable
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable
Russian	232	Not Very Reliable	260	0.4%	Not Very Reliable
Scotch-Irish	769	Not Very Reliable	570	1.2%	Not Very Reliable
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable
Subsaharan African	863	Not Very Reliable	601	1.3%	Not Very Reliable
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable
Swiss	615	Not Very Reliable	932	0.9%	Not Very Reliable
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 27: Data Profile Table with No Color-Coding and the Legend Above the Table (A4):
Top

Table ID A101		Selected Social Characteristics in Anytown, USA Universe: Total Population in Anytown, USA 2008 American Community Survey 1-Year Estimates			Reliability Legend	
					<div style="border: 1px solid black; padding: 2px; display: inline-block;">Not Very Reliable</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Somewhat Reliable</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Reliable</div>	
<p>Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com</p>						
<p>Table View [i] Map View [i] Chart View [i]</p> <p>Actions: [i] Modify Table [i] Bookmark [i] Download</p> <p style="text-align: right;">[i] View Table Notes</p>						
Selected Social Characteristics in the United States						
HOUSEHOLDS BY TYPE						
	Estimate	Reliability	Margin of Error	Percent	Reliability	Margin of Error
Total households	24,459	Reliable	1,977	24,459		(X)
Family households (families)	15,553	Reliable	1,902	63.6%	Reliable	6.0
With own children under 18 years	7,652	Reliable	1,397	31.3%	Reliable	4.9
Married-couple family	11,586	Reliable	1,640	47.4%	Reliable	5.9
With own children under 18 years	5,243	Reliable	1,162	21.4%	Reliable	4.4
Male householder, no wife present, family	720	Not Very Reliable	558	2.9%	Not Very Reliable	2.2
With own children under 18 years	582	Not Very Reliable	509	2.3%	Not Very Reliable	2.0
Female householder, no husband present, family	3,247	Somewhat Reliable	987	13.3%	Somewhat Reliable	3.8
With own children under 18 years	1,847	Somewhat Reliable	720	7.6%	Somewhat Reliable	2.9
Nonfamily households	8,906	Reliable	1,063	36.4%	Reliable	6.0
Householder living alone	6,377	Reliable	1,440	26.1%	Reliable	5.5
65 years and over	2,266	Somewhat Reliable	641	9.3%	Somewhat Reliable	2.5
Households with one or more people under 18 years	9,188	Reliable	1,666	37.6%	Reliable	5.6
Households with one or more people 65 years and over	6,906	Reliable	824	28.2%	Reliable	3.0
Average household size	2.59	Reliable	0.20	(X)		(X)
Average family size	3.08	Reliable	0.32	(X)		(X)
RELATIONSHIP						
Population in households	63,416	Reliable	1,466	63,416		(X)
Householder	24,459	Reliable	1,977	38.6%	Reliable	3.0
Spouse	11,374	Reliable	1,596	17.9%	Reliable	2.5
Child	16,281	Reliable	1,948	25.7%	Reliable	3.1
Other relatives	4,745	Somewhat Reliable	1,781	7.5%	Somewhat Reliable	2.8
Nonrelatives	6,557	Somewhat Reliable	1,724	10.3%	Somewhat Reliable	2.7
Unmarried partner	3,119	Somewhat Reliable	1,193	4.9%	Somewhat Reliable	1.9
MARITAL STATUS						
Males 15 years and over	25,327	Reliable	820	25,327		(X)
Never married	9,944	Reliable	1,633	35.3%	Reliable	6.1
Now married, except separated	11,905	Reliable	1,679	47.0%	Reliable	6.7
Separated	703	Not Very Reliable	521	2.8%	Not Very Reliable	2.1
Widowed	1,552	Not Very Reliable	789	6.1%	Not Very Reliable	3.1
Divorced	2,223	Somewhat Reliable	823	8.8%	Somewhat Reliable	3.3
Females 15 years and over	28,143	Reliable	614	28,143		(X)
Never married	6,199	Reliable	1,443	22.0%	Reliable	5.1
Now married, except separated	12,083	Reliable	1,991	42.9%	Reliable	7.2
Separated	809	Not Very Reliable	775	2.9%	Not Very Reliable	2.7
Widowed	2,756	Somewhat Reliable	968	9.8%	Somewhat Reliable	3.4
Divorced	6,316	Reliable	1,466	22.4%	Reliable	5.1
FERTILITY						
Number of women 15 to 50 years old who had a birth in the past 12 months	N		N	N		(X)
Unmarried women (widowed, divorced, and never married)	N		N	N		N
Per 1,000 unmarried women	N		N	(X)		(X)
Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)

Figure 28: Data Profile Table with No Color-Coding and the Legend Above the Table (A4): Middle

Per 1,000 women 15 to 50 years old	N		N	(X)		(X)
Per 1,000 women 15 to 19 years old	N		N	(X)		(X)
Per 1,000 women 20 to 34 years old	N		N	(X)		(X)
Per 1,000 women 35 to 50 years old	N		N	(X)		(X)
GRANDPARENTS						
Number of grandparents living with own grandchildren under 18 years	N		N	N		(X)
Responsible for grandchildren	N		N	N		N
Years responsible for grandchildren						
Less than 1 year	N		N	N		N
1 or 2 years	N		N	N		N
3 or 4 years	N		N	N		N
5 or more years	N		N	N		N
Number of grandparents responsible for own grandchildren under 18 years	N		N	N		(X)
Who are female	N		N	N		N
Who are married	N		N	N		N
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	13,604	Reliable	970	13,604		(X)
Nursery school, preschool	406	Not Very Reliable	287	3.0%	Not Very Reliable	2.1
Kindergarten	1,012	Somewhat Reliable	498	7.4%	Somewhat Reliable	3.5
Elementary school (grades 1-8)	6,265	Reliable	556	48.1%	Reliable	5.7
High school (grades 9-12)	4,100	Somewhat Reliable	1,086	30.1%	Reliable	7.1
College or graduate school	1,821	Somewhat Reliable	701	13.4%	Somewhat Reliable	4.8
EDUCATIONAL ATTAINMENT						
Population 25 years and over	45,702	Reliable	703	45,702		(X)
Less than 9th grade	3,726	Somewhat Reliable	1,577	8.2%	Somewhat Reliable	3.4
9th to 12th grade, no diploma	2,859	Somewhat Reliable	875	8.3%	Somewhat Reliable	1.9
High school graduate (includes equivalency)	17,824	Reliable	2,130	39.0%	Reliable	4.6
Some college, no degree	10,562	Reliable	1,731	23.1%	Reliable	3.9
Associate's degree	3,651	Somewhat Reliable	919	8.0%	Somewhat Reliable	2.0
Bachelor's degree	4,807	Somewhat Reliable	1,244	10.5%	Somewhat Reliable	2.7
Graduate or professional degree	2,273	Somewhat Reliable	947	5.0%	Somewhat Reliable	2.1
Percent high school graduate or higher	85.6%	Reliable	3.7	(X)		(X)
Percent bachelor's degree or higher	16.5%	Reliable	3.3	(X)		(X)
VETERAN STATUS						
Civilian population 18 years and over	50,887	Reliable	8	50,887		(X)
Civilian veterans	8,820	Reliable	1,164	13.4%	Reliable	2.3
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION						
Total Civilian Noninstitutionalized Population	64,022	Reliable	1,043	64,022		(X)
With a disability	10,816	Reliable	1,774	16.9%	Reliable	2.8
Under 18 years	13,979	Reliable	8	13,979		(X)
With a disability	592	Not Very Reliable	440	4.2%	Not Very Reliable	3.1
18 to 64 years	40,091	Reliable	658	40,091		(X)
With a disability	6,593	Reliable	1,481	16.4%	Reliable	3.7
65 years and over	9,952	Reliable	880	9,952		(X)
With a disability	3,631	Reliable	882	38.5%	Reliable	8.3
RESIDENCE 1 YEAR AGO						
Population 1 year and over	64,146	Reliable	414	64,146		(X)
Same house	54,826	Reliable	2,478	85.5%	Reliable	3.9
Different house in the U.S.	9,320	Somewhat Reliable	2,495	14.5%	Somewhat Reliable	3.9
Same county	5,774	Somewhat Reliable	2,057	9.0%	Somewhat Reliable	3.2
Different county	3,546	Somewhat Reliable	1,325	5.5%	Somewhat Reliable	2.1
Same state	1,888	Somewhat Reliable	770	2.6%	Somewhat Reliable	1.2
Different state	1,878	Not Very Reliable	1,149	2.9%	Not Very Reliable	1.8
Abroad	0		294	0.0%		0.3
PLACE OF BIRTH						
Total population	64,866		****	64,866		(X)
Native	59,923	Reliable	1,495	92.4%	Reliable	2.3
Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,874	Reliable	2,895	87.9%	Reliable	4.7

Figure 29: Data Profile Table with No Color-Coding and the Legend Above the Table (A4):
Bottom

Born in United States	59,363	Reliable	1,485	91.5%	Reliable	2.3
State of residence	40,824	Reliable	2,695	82.9%	Reliable	4.2
Different state	18,539	Reliable	2,329	28.6%	Reliable	3.8
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	560	Not Very Reliable	448	0.9%	Not Very Reliable	0.7
Foreign born	4,943	Somewhat Reliable	1,495	7.6%	Somewhat Reliable	2.3
U.S. CITIZENSHIP STATUS						
Foreign-born population	4,943	Somewhat Reliable	1,495	4,943		(X)
Naturalized U.S. citizen	1,172	Not Very Reliable	625	23.7%	Somewhat Reliable	10.6
Not a U.S. citizen	3,771	Somewhat Reliable	1,244	76.3%	Reliable	10.6
YEAR OF ENTRY						
Population born outside the United States	5,503	Somewhat Reliable	1,485	5,503		(X)
Native						
Entered 2000 or later	0		294	0.0%		29.2
Entered before 2000	560	Not Very Reliable	448	100.0%	Somewhat Reliable	29.2
Foreign born						
Entered 2000 or later	2,305	Not Very Reliable	1,223	46.6%	Somewhat Reliable	17.7
Entered before 2000	2,638	Somewhat Reliable	994	53.4%	Somewhat Reliable	17.7
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population, excluding population born at sea	N		N	N		(X)
Europe	N		N	N		N
Asia	N		N	N		N
Africa	N		N	N		N
Oceania	N		N	N		N
Latin America	N		N	N		N
Northern America	N		N	N		N
LANGUAGE SPOKEN AT HOME						
Population 5 years and over	N		N	N		(X)
English only	N		N	N		N
Language other than English	N		N	N		N
Speak English less than "very well"	N		N	N		N
Spanish	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other Indo-European languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Asian and Pacific Islander languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
Other languages	N		N	N		N
Speak English less than "very well"	N		N	N		N
ANCESTRY						
Total population	64,866		***	64,866		(X)
American	1,518	Somewhat Reliable	734	2.3%	Somewhat Reliable	1.1
Arab	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Czech	74	Not Very Reliable	145	0.1%	Not Very Reliable	0.2
Danish	1,700	Not Very Reliable	1,889	2.8%	Not Very Reliable	2.8
Dutch	1,089	Not Very Reliable	764	1.7%	Not Very Reliable	1.2
English	10,824	Reliable	2,441	16.7%	Reliable	3.8
French (except Basque)	3,487	Somewhat Reliable	1,602	5.3%	Somewhat Reliable	2.5
French Canadian	76	Not Very Reliable	126	0.1%	Not Very Reliable	0.2
German	14,479	Reliable	2,774	22.3%	Reliable	4.3
Greek	860	Not Very Reliable	627	1.3%	Not Very Reliable	1.0
Hungarian	144	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Irish	12,714	Reliable	2,912	19.6%	Reliable	4.5
Italian	3,310	Somewhat Reliable	1,220	5.1%	Somewhat Reliable	1.9
Lithuanian	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Norwegian	692	Not Very Reliable	602	1.1%	Not Very Reliable	0.9
Polish	368	Not Very Reliable	363	0.6%	Not Very Reliable	0.5
Portuguese	1,543	Not Very Reliable	802	2.4%	Not Very Reliable	1.2
Russian	232	Not Very Reliable	280	0.4%	Not Very Reliable	0.4
Scotch-Irish	789	Not Very Reliable	570	1.2%	Not Very Reliable	0.9
Scottish	970	Not Very Reliable	625	1.5%	Not Very Reliable	1.0
Slovak	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3
Subsaharan African	893	Not Very Reliable	801	1.3%	Not Very Reliable	0.9
Swedish	2,705	Not Very Reliable	1,706	4.2%	Not Very Reliable	2.6
Swiss	615	Not Very Reliable	632	0.6%	Not Very Reliable	1.4
Ukrainian	147	Not Very Reliable	180	0.2%	Not Very Reliable	0.3
Welsh	198	Not Very Reliable	272	0.3%	Not Very Reliable	0.4
West Indian (excluding Hispanic origin groups)	0	Not Very Reliable	294	0.0%	Not Very Reliable	0.3

Figure 30: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Top

Table ID
S201

Selected Population Profile in Anytown, USA
Universe: Total Population of Two or More Races in Anytown, USA
2008 American Community Survey 1-Year Estimates



Table View [X]		Map View [X]		Chart View [X]		
Actions: [X] Modify Table [X] Bookmark [X] Download						
[X] View Table Notes						
Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,516		****	65,838	Reliable	7,573
One race	96.7%	Reliable	0.4	(X)		(X)
Two races	3.1%	Reliable	0.3	53.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.8%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,516		****	65,838	Reliable	7,573
Male	49.3%	Reliable	0.1	51.6%	Reliable	3.2
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.8%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.8%	Reliable	2.0
25 to 34 years	16.3%	Reliable	0.1	12.6%	Reliable	2.5
35 to 44 years	13.5%	Reliable	0.1	9.3%	Reliable	1.5
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.5
55 to 64 years	7.8%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6
Median age (years)	31.8	Reliable	0.1	18.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
52 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,890	Reliable	438	34,170	Reliable	4,554
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.3
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.3
18 years and over	1,517,626	Reliable	438	35,668	Reliable	3,938
Male	49.2%	Reliable	0.1	52.7%	Reliable	4.3
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.3
18 to 34 years	565,916	Reliable	743	18,456	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.8%	Reliable	0.1	44.6%	Reliable	7.3
35 to 64 years	706,014	Reliable	593	14,523	Reliable	2,106
Male	50.3%	Reliable	0.1	45.5%	Reliable	4.9
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.9
65 years and over	241,696	Reliable	535	2,689	Somewhat Reliable	933
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9
RELATIONSHIP						
Population in households	2,073,707	Reliable	4,145	68,831	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	10.5%	Reliable	0.6	10.2%	Reliable	2.5
Nonrelatives	8.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.5
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.7	75.1%	Reliable	8.8
With own children under 18 years	39.5%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.0%	Reliable	1.1	52.1%	Reliable	8.0
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5
Nonfamily households	25.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.8
Male householder	12.5%	Reliable	0.7	13.2%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.8%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.20	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.74	Reliable	0.05	3.77	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,618,004	Reliable	547	41,893	Reliable	4,865
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	8.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4
Divorced	9.5%	Reliable	0.5	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,509	Reliable	588	21,551	Reliable	2,959
Now married, except separated	50.3%	Reliable	1.1	35.1%	Reliable	5.1

Figure 31: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Top Middle

Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,939
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.6
Separated	1.5%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	455	26,142	Reliable	3,186
Now married, except separated	47.7%	Reliable	0.4	35.0%	Reliable	5.5
Widowed	8.5%	Reliable	0.2	5.6%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	583,029	Reliable	7,412	30,472	Reliable	4,341
Nursery school, preschool	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Kindergarten	5.0%	Reliable	0.5	4.8%	Somewhat Reliable	1.8
Elementary school (grades 1-5)	43.5%	Reliable	0.9	40.6%	Reliable	4.2
High school (grades 9-12)	23.8%	Reliable	0.6	27.8%	Reliable	4.7
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,469	Reliable	5,212	15,454	Reliable	2,822
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.6%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	300,560	Reliable	5,647	15,016	Reliable	2,597
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	69.0%	Reliable	7.4
Percent enrolled in college or graduate school	25.2%	Reliable	1.2	21.3%	Somewhat Reliable	6.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,797	Reliable	814	26,015	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.8%	Reliable	0.9	27.9%	Reliable	4.8
Some college or associate's degree	32.1%	Reliable	0.8	38.7%	Reliable	5.1
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.6
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	76.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.0%	Reliable	0.7	9.5%	Somewhat Reliable	3.9
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,893	Reliable	1,587	16,343	Reliable	2,920
Women 15 to 50 years who had a birth in the past 12 months	38,646	Reliable	4,060	1,310	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	12,364	Reliable	54	54	Not Very Reliable	436
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable	26.5
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,128	Reliable	912	20,721	Reliable	2,688
Living with grandchild(ren)	5.3%	Reliable	0.2	2.4%	Not Very Reliable	N
Responsible for grandchild(ren)	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,521
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.8
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,875	Reliable	7,552
With a disability	10.5%	Reliable	0.4	7.8%	Reliable	1.8
Civilian noninstitutionalized population under 18 years	582,753	Reliable	497	34,142	Reliable	4,553
With a disability	2.5%	Reliable	0.4	3.1%	Not Very Reliable	1.6
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,045	32,083	Reliable	3,581
With a disability	8.5%	Reliable	0.5	8.7%	Somewhat Reliable	2.8
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,072	2,650	Somewhat Reliable	907
With a disability	36.5%	Reliable	1.6	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,169	Reliable	2,868	66,272	Reliable	7,136
Same house	82.9%	Reliable	0.8	83.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	15.9%	Reliable	2.9
Same county	11.5%	Reliable	0.7	10.0%	Reliable	2.2
Different county	4.9%	Reliable	0.5	5.9%	Somewhat Reliable	2.5
Same state	3.5%	Reliable	0.4	6.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.6
Abroad	0.7%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,296	Reliable	12,558	64,681	Reliable	7,113
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.3
Foreign born	469,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.6%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,146	Reliable	7,182	3,188	Somewhat Reliable	825
Male	46.5%	Reliable	1.9	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.5	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	293,072	Reliable	12,962	1,972	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	469,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Entered 2000 or later	22.4%	Reliable	1.6	8.3%	Not Very Reliable	6.1
Entered 1990 to 1999	25.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.2
Entered before 1990	52.3%	Reliable	1.5	70.6%	Reliable	10.9
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	468,218	Reliable	12,558	5,157	Somewhat Reliable	1,408
Europe	5.5%	Reliable	0.7	N	N	N

Figure 32: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Bottom Middle

Asia	17.3%	Reliable	0.8	N		N
Africa	1.4%	Somewhat Reliable	0.9	N		N
Oceania	0.7%	Not Very Reliable	0.4	N		N
Latin America	7.3%	Reliable	1.0	N		N
Northern America	2.2%	Reliable	0.2	N		N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 5 years and over	1,532,940	Reliable	7	57.4%	Reliable	6,600
English only	61.3%	Reliable	0.7	76.3%	Reliable	4.8
Language other than English	38.9%	Reliable	0.7	23.7%	Reliable	4.8
Speak English less than "very well"	16.6%	Reliable	0.6	7.1%	Somewhat Reliable	2.0
EMPLOYMENT STATUS						
Population 16 years and over	1,584,308	Reliable	2,804	39.15%	Reliable	4,460
In labor force	63.2%	Reliable	0.7	64.5%	Reliable	4.1
Civilian labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1
Employed	57.2%	Reliable	0.7	54.6%	Reliable	4.1
Unemployed	6.3%	Reliable	0.0	6.6%	Somewhat Reliable	2.1
Percent of civilian labor force	9.2%	Reliable	0.0	15.0%	Somewhat Reliable	3.8
Armed Forces	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4
Not in labor force	36.2%	Reliable	0.7	35.5%	Reliable	4.1
Females 16 years and over	798,658	Reliable	1,263	18.81%	Reliable	2,843
In labor force	55.7%	Reliable	0.9	57.3%	Reliable	5.0
Civilian labor force	55.6%	Reliable	0.9	57.9%	Reliable	5.1
Employed	49.9%	Reliable	0.9	49.1%	Reliable	5.1
Unemployed	5.7%	Reliable	0.0	6.0%	Somewhat Reliable	3.4
Percent of civilian labor force	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3
COMMUTING TO WORK						
Workers 16 years and over	880,102	Reliable	10,454	20.35%	Reliable	2,160
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable	4.5
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.2%	Somewhat Reliable	4.4
Public transportation (excluding taxicab)	1.5%	Reliable	0.2	1.1%	Not Very Reliable	1.2
Walked	2.0%	Reliable	0.2	0.3%	Not Very Reliable	0.8
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.8
Worked at home	4.9%	Reliable	0.8	4.0%	Not Very Reliable	2.1
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.5	Reliable	4.1
OCCUPATION						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21.38%	Reliable	2,500
Management, professional, and related occupations	25.4%	Reliable	0.3	24.0%	Reliable	5.0
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable	5.2
Sales and office occupations	26.9%	Reliable	1.0	29.0%	Reliable	6.0
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.0%	Not Very Reliable	0.8
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable	4.1
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable	3.8
Male civilian employed population 16 years and over	506,218	Reliable	8,085	12.14%	Reliable	2,004
Management, professional, and related occupations	25.4%	Reliable	1.1	18.5%	Somewhat Reliable	5.8
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.8
Sales and office occupations	18.6%	Reliable	1.3	24.3%	Somewhat Reliable	7.7
Farming, fishing, and forestry occupations	1.2%	Reliable	0.4	0.0%	Not Very Reliable	1.6
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	16.6%	Somewhat Reliable	5.8
Female civilian employed population 16 years and over	398,644	Reliable	6,657	9.24%	Reliable	1,623
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.9
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable	8.3
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3
Farming, fishing, and forestry occupations	0.2%	Somewhat Reliable	0.2	0.0%	Not Very Reliable	2.3
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.6%	Not Very Reliable	2.3
INDUSTRY						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21.38%	Reliable	2,500
Agriculture, forestry, fishing and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction	10.4%	Reliable	0.7	5.5%	Somewhat Reliable	2.5
Manufacturing	9.9%	Reliable	0.8	10.2%	Somewhat Reliable	3.8
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4
Retail trade	12.7%	Reliable	0.6	14.9%	Somewhat Reliable	4.3
Transportation and warehousing, and utilities	6.4%	Reliable	0.5	10.0%	Somewhat Reliable	4.4
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable	1.8
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable	2.1
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.6	13.0%	Somewhat Reliable	4.4
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable	5.2
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.8
Other services (except public administration)	4.7%	Reliable	0.3	5.0%	Somewhat Reliable	2.3
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.8
CLASS OF WORKER						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21.38%	Reliable	2,500
Private wage and salary workers	76.5%	Reliable	0.9	77.5%	Reliable	4.8
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.8
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable	2.7
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.5
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)						
Households	647,448	Reliable	6,148	11.19%	Reliable	1,898
Median household income (dollars)	57,752	Reliable	1,233	52,012	Reliable	7,612
With earnings	79.9%	Reliable	0.8	83.8%	Reliable	5.4
Mean earnings (dollars)	72,948	Reliable	1,364	70,186	Reliable	9,631
With Social Security income	28.4%	Reliable	0.5	25.5%	Reliable	4.1
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable	1,169
With Supplemental Security income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9
Mean Supplemental Security income (dollars)	8,124	Reliable	563	6,003	Somewhat Reliable	1,718
With cash public assistance income	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.9
Mean cash public assistance income (dollars)	6,330	Reliable	851	5,908	Somewhat Reliable	2,459
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	5.3
Mean retirement income (dollars)	22,425	Reliable	912	21,116	Reliable	5,928
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable	2.0
Families	473,263	Reliable	7,070	8.49%	Reliable	1,354
Median family income (dollars)	64,543	Reliable	1,551	63,619	Reliable	13,424
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable	8.4
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable	10,818
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.0
Median income (dollars)	51,268	Reliable	4,778	28,202	Not Very Reliable	21,328
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable	7.9
Median income (dollars)	34,335	Reliable	2,904	41,065	Reliable	5,184
Individuals	2,109,516	Reliable	69,838	69.83%	Reliable	7,573
Per capita income (dollars)	24,301	Reliable	471	12,968	Reliable	1,378

Figure 33: Selected Population Profile Table with the Legend Behind a Link and Red First in the Legend (B1): Bottom

With earnings for full-time, year-round workers:						
Male	361,434	Reliable	8,152	7,606	Reliable	1,467
Female	238,605	Reliable	6,630	5,609	Reliable	1,298
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,966	Reliable	7,569
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,636	Reliable	1,074	41,770	Reliable	3,198
Female	36,153	Reliable	693	29,939	Somewhat Reliable	6,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.9
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.0	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.4
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	16.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.6%	Reliable	1.0	6.7%	Not Very Reliable	6.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.15	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.9%	Reliable	6.4
2 to 4 units	4.9%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.6
Mobile home, boat, RV, van, etc.	8.6%	Reliable	0.5	8.5%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	26.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.3%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.8	63.5%	Reliable	6.9
Electricity	17.9%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOC cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.8	46.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.8	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	438,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,252	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	455	Reliable	13	459	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRPI cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	848
Less than 30 percent	38.7%	Reliable	2.0	33.9%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	189

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 34: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Top

Table ID S201 Selected Population Profile in Anytown, USA
 Universe: Total Population of Two or More Races in Anytown, USA
 2008 American Community Survey 1-Year Estimates

Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,518	Reliable	65,838	Reliable	7,373	
One race	96.7%	Reliable	0.4	0%	0%	0%
Two races	3.1%	Reliable	0.3	83.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.9%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,518	Reliable	65,838	Reliable	7,373	
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.2
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.3%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.6%	Reliable	2.0
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.5
35 to 44 years	13.5%	Reliable	0.1	9.3%	Reliable	1.6
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.5
55 to 64 years	7.8%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.4%	Somewhat Reliable	0.6
Median age (years)	31.0	Reliable	0.1	16.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.3
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
52 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,890	Reliable	438	34,170	Reliable	4,594
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.6
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.6
18 years and over	1,517,628	Reliable	438	35,668	Reliable	3,999
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.6
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.6
18 to 34 years	569,310	Reliable	743	18,456	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.8%	Reliable	0.1	44.5%	Reliable	7.5
35 to 64 years	706,014	Reliable	693	14,523	Reliable	2,106
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.6
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.6
65 years and over	241,694	Reliable	539	2,689	Somewhat Reliable	333
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9
RELATIONSHIP						
Population in households	2,075,707	Reliable	4,145	68,631	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	16.5%	Reliable	0.6	10.2%	Reliable	2.6
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.6
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.6
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.7	75.1%	Reliable	6.8
With own children under 18 years	38.8%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.0%	Reliable	1.1	52.1%	Reliable	8.0
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5
Nonfamily households	26.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.6
Male householder	12.9%	Reliable	0.7	13.3%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.6%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7
Living alone	11.5%	Reliable	0.6	9.1%	Somewhat Reliable	3.5
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.7	Reliable	0.05	3.7	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,616,004	Reliable	547	41,635	Reliable	4,885
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	5.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4
Divorced	9.9%	Reliable	0.6	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,959
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	6.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.6
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	463	20,142	Reliable	3,188
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.5
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4

Figure 35: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Top Middle

Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	8.9	56.1%	Reliable	5.4
Female 15 years and over	815,355	Reliable	483	20,142	Reliable	3,188
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	6.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	3.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	5.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	693,022	Reliable	7,412	30,472	Reliable	4,241
Nursery school, preschool, kindergarten	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Elementary school (grades 1-5)	43.5%	Reliable	0.8	40.8%	Reliable	4.2
High school (grades 9-12)	23.9%	Reliable	0.6	27.9%	Reliable	4.7
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,452	Reliable	5,212	15,452	Reliable	2,622
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.8%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	396,566	Reliable	5,647	15,018	Reliable	2,587
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	68.2%	Reliable	7.2
Percent enrolled in college or graduate school	25.2%	Reliable	1.2	21.3%	Somewhat Reliable	6.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,757	Reliable	814	26,015	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.8%	Reliable	0.8	27.9%	Reliable	4.6
Some college or associate's degree	32.1%	Reliable	0.8	38.7%	Reliable	5.3
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.5
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	76.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.0%	Reliable	0.7	9.5%	Somewhat Reliable	3.2
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,893	Reliable	1,587	16,343	Reliable	2,520
Women 15 to 50 years who had a birth in the past 12 months	38,646	Reliable	4,050	1,310	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	16,384	Reliable	2,226	544	Not Very Reliable	436
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable	25.4
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,124	Reliable	312	20,721	Reliable	2,686
Living with grandchildren	5.9%	Reliable	0.4	2.6%	Not Very Reliable	2.4
Responsible for grandchildren	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,521
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.6
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,878	Reliable	7,552
With a disability	10.6%	Reliable	0.4	7.8%	Reliable	1.6
Civilian noninstitutionalized population under 18 years	582,753	Reliable	497	34,142	Reliable	4,593
With a disability	2.9%	Reliable	0.4	3.1%	Not Very Reliable	1.6
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,045	32,083	Reliable	3,581
With a disability	8.9%	Reliable	0.5	8.7%	Somewhat Reliable	2.5
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,673	2,650	Somewhat Reliable	907
With a disability	38.5%	Reliable	1.6	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,162	Reliable	2,868	66,273	Reliable	7,134
Same house	82.9%	Reliable	0.8	83.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	15.9%	Reliable	2.9
Same county	11.5%	Reliable	0.7	10.2%	Reliable	2.4
Different county	4.9%	Reliable	0.8	5.9%	Somewhat Reliable	2.3
Same state	3.8%	Reliable	0.4	5.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.6
Abroad	0.7%	Somewhat Reliable	0.2	0.8%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,298	Reliable	12,558	64,681	Reliable	7,118
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.3
Foreign born	459,216	Reliable	12,558	5,157	Somewhat Reliable	1,488
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.8%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,144	Reliable	7,182	3,185	Somewhat Reliable	825
Male	46.5%	Reliable	1.5	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.5	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	283,072	Reliable	12,960	1,972	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	459,216	Reliable	12,558	5,157	Somewhat Reliable	1,488
Entered 2000 or later	22.4%	Reliable	1.6	9.3%	Not Very Reliable	6.1
Entered 1990 to 1999	26.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.6
Entered before 1990	51.3%	Reliable	1.5	70.6%	Reliable	10.5
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	459,216	Reliable	12,558	5,157	Somewhat Reliable	1,488
Europe	5.5%	Reliable	0.7	N	N	N
Asia	17.1%	Reliable	0.8	N	N	N
Africa	1.4%	Somewhat Reliable	0.5	N	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N	N
Latin America	73.0%	Reliable	1.0	N	N	N
Northern America	2.2%	Reliable	0.4	N	N	N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 3 years and over	1,832,948	Reliable	7	57,414	Reliable	6,598
English only	81.1%	Reliable	0.7	79.3%	Reliable	4.8
Language other than English	33.9%	Reliable	0.7	23.7%	Reliable	4.5
Speak English less than "very well"	16.9%	Reliable	0.6	7.1%	Somewhat Reliable	2.0

Figure 36: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Bottom Middle

In labor force	63.8%	Reliable	0.7	64.5%	Reliable	4.1
Civilian labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1
Employed	57.2%	Reliable	0.7	54.6%	Reliable	4.1
Unemployed	6.3%	Reliable	0.5	9.6%	Somewhat Reliable	2.6
Percent of civilian labor force	9.8%	Reliable	0.7	15.0%	Somewhat Reliable	3.5
Armed Forces	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4
Not in labor force	36.2%	Reliable	0.7	35.5%	Reliable	4.1
Females 16 years and over	798,558	Reliable	1,909	18,816	Reliable	2,645
In labor force	55.7%	Reliable	0.9	57.9%	Reliable	5.5
Civilian labor force	55.6%	Reliable	0.9	57.9%	Reliable	5.5
Employed	49.9%	Reliable	0.9	49.1%	Reliable	5.1
Unemployed	5.7%	Reliable	0.6	8.8%	Somewhat Reliable	3.4
Percent of civilian labor force	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3
COMMUTING TO WORK						
Workers 16 years and over	880,102	Reliable	10,454	20,350	Reliable	2,160
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable	4.5
Car, truck, or van - carpool	14.7%	Reliable	0.8	16.2%	Somewhat Reliable	4.4
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable	1.4
Walked	2.0%	Reliable	0.6	0.3%	Not Very Reliable	0.8
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.8
Worked at home	4.9%	Reliable	0.6	4.0%	Not Very Reliable	2.1
Mean travel time to work (minutes)	31.9	Reliable	0.6	33.9	Reliable	4.1
OCCUPATION						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable	5.0
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable	5.2
Sales and office occupations	26.9%	Reliable	1.0	29.0%	Reliable	6.0
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable	4.1
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable	3.8
Male civilian employed population 16 years and over	508,219	Reliable	8,009	12,141	Reliable	2,004
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable	5.5
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.6
Sales and office occupations	19.6%	Reliable	1.3	24.8%	Somewhat Reliable	7.1
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable	1.6
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	19.6%	Somewhat Reliable	5.5
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9,247	Reliable	1,893
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.9
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable	6.3
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3
Farming, fishing, and forestry occupations	0.7%	Somewhat Reliable	0.2	0.0%	Not Very Reliable	2.1
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8
Production, transportation, and material moving occupations	6.1%	Reliable	0.6	2.6%	Not Very Reliable	2.3
INDUSTRY						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Agriculture, forestry, fishing, and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.9
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable	7.1
Manufacturing	9.9%	Reliable	0.6	10.2%	Somewhat Reliable	3.8
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4
Retail trade	12.7%	Reliable	0.8	14.9%	Somewhat Reliable	4.3
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable	4.4
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable	1.8
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable	2.1
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.6	13.0%	Somewhat Reliable	4.4
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable	5.2
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.8
Other services (except public administration)	4.7%	Reliable	0.6	5.0%	Somewhat Reliable	2.3
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.8
CLASS OF WORKER						
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable	2,508
Private wage and salary workers	76.5%	Reliable	0.8	77.5%	Reliable	4.8
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.8
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable	2.7
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.9
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)						
Households	647,445	Reliable	6,148	11,191	Reliable	1,508
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable	7,512
With earnings	79.9%	Reliable	0.6	83.8%	Reliable	5.4
Mean earnings (dollars)	72,948	Reliable	1,364	70,185	Reliable	9,631
With Social Security income	26.4%	Reliable	0.5	25.5%	Reliable	5.7
Mean Social Security income (dollars)	19,590	Reliable	314	10,642	Reliable	1,169
With Supplemental Security Income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9
Mean Supplemental Security Income (dollars)	9,124	Reliable	663	6,033	Somewhat Reliable	1,718
With cash public assistance income	2.9%	Reliable	0.3	3.8%	Not Very Reliable	2.9
Mean cash public assistance income (dollars)	5,330	Reliable	551	5,906	Somewhat Reliable	2,459
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	5.3
Mean retirement income (dollars)	22,425	Reliable	912	22,115	Reliable	5,024
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable	2.0
Families						
Families	473,263	Reliable	7,070	8,403	Reliable	1,354
Median family income (dollars)	64,594	Reliable	1,851	65,819	Reliable	13,424
Married-couple family	73.9%	Reliable	1.3	69.4%	Reliable	8.4
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable	10,818
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.6
Median income (dollars)	51,269	Reliable	4,778	28,233	Not Very Reliable	21,320
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable	7.9
Median income (dollars)	34,335	Reliable	2,904	41,063	Reliable	5,184
Individuals						
Individuals	2,100,518	Reliable	4,777	69,838	Reliable	7,573
Per capita income (dollars)	24,301	Reliable	477	12,983	Reliable	1,378
With earnings for full-time, year-round workers:						

Figure 37: Selected Population Profile Table with the Legend Behind a Link and Green First in the Legend (B2): Bottom

With earnings for full-time, year-round workers:						
Male	381,434	Reliable	8,152	7,608	Reliable	1,467
Female	238,808	Reliable	6,630	5,609	Reliable	1,298
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,968	Reliable	7,568
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,836	Reliable	1,074	41,770	Reliable	3,199
Female	36,153	Reliable	893	29,930	Somewhat Reliable	8,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.9
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.8	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.6
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	8.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.16	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
1-unit, detached or attached	74.5%	Reliable	0.9	72.9%	Reliable	6.4
2 to 4 units	4.3%	Reliable	0.5	4.0%	Not Very Reliable	2.8
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.8
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.6	8.5%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Built 2000 or later	26.2%	Reliable	0.8	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.9
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.6
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
Gas	79.5%	Reliable	0.8	63.5%	Reliable	6.9
Electricity	17.9%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,508
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.8	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOG cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	49.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.3
OWNER CHARACTERISTICS						
Owner-occupied housing units	458,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,233	Reliable	38	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	456	Reliable	13	456	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRPI cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	36.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 38: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Top

Table ID	Selected Population Profile in Anytown, USA		Reliability Legend			
S201	Universe: Total Population of Two or More Races in Anytown, USA		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: red; color: white; padding: 2px;">Not Very Reliable</div> <div style="background-color: orange; color: white; padding: 2px;">Somewhat Reliable</div> <div style="background-color: green; color: white; padding: 2px;">Reliable</div> </div>			
2008 American Community Survey 1-Year Estimates			Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACStreliability.com			
Table View Map View Chart View						
Actions: Modify Table Bookmark Download			View Table Notes			
Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,518	Reliable	****	69,838	Reliable	7,573
One race	96.7%	Reliable	0.4	1%	Reliable	2.2
Two races	3.1%	Reliable	0.3	93.1%	Reliable	2.2
Three races	0.2%	Somewhat Reliable	0.1	6.6%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,518	Reliable	****	69,838	Reliable	7,573
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.0
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.8%	Reliable	2.7
5 to 17 years	19.8%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.9%	Reliable	2.0
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.8
35 to 44 years	13.6%	Reliable	0.1	9.3%	Reliable	1.9
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.8
55 to 64 years	7.6%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.5%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6
Median age (years)	31.8	Reliable	0.1	18.5	Reliable	1.2
18 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
21 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.9
62 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
65 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,690	Reliable	438	34,170	Reliable	4,554
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.3
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.8
18 years and over	1,517,628	Reliable	438	35,668	Reliable	3,938
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.0
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.8
18 to 34 years	589,916	Reliable	743	18,458	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	49.8%	Reliable	0.1	44.8%	Reliable	7.8
35 to 64 years	706,614	Reliable	639	14,523	Reliable	2,108
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.0
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.8
65 years and over	241,638	Reliable	539	2,688	Somewhat Reliable	933
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.8
RELATIONSHIP						
Population in households	2,073,707	Reliable	4,144	68,831	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.8	28.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	10.8%	Reliable	0.6	10.2%	Reliable	2.9
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.5
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,148	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.1	75.1%	Reliable	6.8
With own children under 18 years	38.6%	Reliable	0.9	43.0%	Reliable	7.2
Married-couple family	54.9%	Reliable	1.1	52.1%	Reliable	9.8
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.0
Nonfamily households	26.9%	Reliable	0.1	24.9%	Somewhat Reliable	6.8
Male householder	12.9%	Reliable	0.7	13.2%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.6	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.8%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.3%	Somewhat Reliable	4.9
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.74	Reliable	0.05	3.77	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,618,004	Reliable	547	41,823	Reliable	4,885
Now married, except separated	49.3%	Reliable	0.9	35.0%	Reliable	4.3
Widowed	5.6%	Reliable	0.3	3.6%	Somewhat Reliable	1.4
Divorced	9.2%	Reliable	0.4	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.6%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.6%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,950
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	8.1%	Reliable	0.4	6.3%	Somewhat Reliable	2.8
Separated	1.6%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	469	20,242	Reliable	3,168
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.6%	Reliable	0.4	5.6%	Somewhat Reliable	2.9
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.9%	Not Very Reliable	2.4
Never married	29.2%	Reliable	0.7	47.2%	Reliable	6.4

Figure 39: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Top Middle

Divorced	8.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.6	56.1%	Reliable	5.4
Female 15 years and over	815,339	Reliable	465	20,142	Reliable	3,158
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.5%	Reliable	0.4	5.8%	Somewhat Reliable	2.8
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	2.9%	Reliable	0.3	3.3%	Not Very Reliable	2.6
Never married	29.2%	Reliable	0.7	47.2%	Reliable	5.4
SCHOOL ENROLLMENT						
Population 3 years and over enrolled in school	593,029	Reliable	7,412	30,472	Reliable	4,341
Nursery school, preschool	5.0%	Reliable	0.5	7.3%	Somewhat Reliable	2.2
Kindergarten	5.0%	Reliable	0.6	4.5%	Somewhat Reliable	1.6
Elementary school (grades 1-8)	43.5%	Reliable	0.8	40.5%	Reliable	4.2
High school (grades 9-12)	23.9%	Reliable	0.6	27.9%	Reliable	4.2
College or graduate school	22.7%	Reliable	1.0	19.9%	Reliable	3.9
Male 3 years and over enrolled in school	292,463	Reliable	5,212	15,459	Reliable	2,822
Percent enrolled in kindergarten to grade 12	75.2%	Reliable	1.4	77.6%	Reliable	5.8
Percent enrolled in college or graduate school	20.2%	Reliable	1.4	18.5%	Somewhat Reliable	5.1
Female 3 years and over enrolled in school	300,566	Reliable	5,647	15,013	Reliable	2,527
Percent enrolled in kindergarten to grade 12	69.4%	Reliable	1.3	69.0%	Reliable	7.5
Percent enrolled in college or graduate school	25.2%	Reliable	1.2	21.3%	Somewhat Reliable	5.7
EDUCATIONAL ATTAINMENT						
Population 25 years and over	1,301,797	Reliable	814	26,019	Reliable	3,150
Less than high school diploma	22.0%	Reliable	0.7	19.1%	Reliable	4.1
High school graduate (includes equivalency)	25.9%	Reliable	0.8	27.9%	Reliable	4.6
Some college or associate's degree	32.1%	Reliable	0.8	33.7%	Reliable	5.3
Bachelor's degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable	3.1
Graduate or professional degree	6.4%	Reliable	0.3	3.7%	Somewhat Reliable	1.8
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable	4.1
Male, high school graduate or higher	75.5%	Reliable	1.0	80.9%	Reliable	5.1
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable	5.1
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable	3.3
Male, bachelor's degree or higher	21.5%	Reliable	0.7	9.3%	Somewhat Reliable	3.0
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable	5.8
FERTILITY						
Women 15 to 50 years	548,833	Reliable	1,587	16,342	Reliable	2,320
Women 15 to 50 years who had a birth in the past 12 months	35.64%	Reliable	4,060	1,310	Somewhat Reliable	619
Unmarried women 15 to 50 years who had a birth in the past 12 months	12.35%	Reliable	2,226	646	Not Very Reliable	438
As a percent of all women with a birth in the past 12 months	32.0%	Reliable	4.3	49.3%	Not Very Reliable	26.5
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS						
Population 30 years and over	1,107,126	Reliable	912	20,721	Reliable	2,686
Living with grandchild(ren)	5.5%	Reliable	0.4	2.6%	Not Very Reliable	2.4
Responsible for grandchild(ren)	23.8%	Reliable	3.8	N	N	N
VETERAN STATUS						
Civilian population 18 years and over	1,513,207	Reliable	1,244	35,552	Reliable	3,321
Civilian veteran	9.0%	Reliable	0.4	5.9%	Somewhat Reliable	2.8
DISABILITY STATUS						
Total civilian noninstitutionalized population	2,078,753	Reliable	2,041	68,879	Reliable	7,552
With a disability	10.5%	Reliable	0.4	7.8%	Reliable	1.6
Civilian noninstitutionalized population under 18 years	582,750	Reliable	491	34,142	Reliable	4,583
With a disability	2.5%	Reliable	0.4	3.1%	Not Very Reliable	1.8
Civilian noninstitutionalized population 18 to 64 years	1,256,523	Reliable	2,043	32,083	Reliable	3,581
With a disability	9.5%	Reliable	0.5	6.7%	Somewhat Reliable	2.5
Civilian noninstitutionalized population 65 years and older	239,477	Reliable	1,073	2,650	Somewhat Reliable	907
With a disability	35.6%	Reliable	1.6	57.0%	Somewhat Reliable	17.0
RESIDENCE 1 YEAR AGO						
Population 1 year and over	2,068,165	Reliable	2,868	65,273	Reliable	7,136
Came to house	62.9%	Reliable	0.8	53.6%	Reliable	3.0
Different house in the U.S.	16.4%	Reliable	0.8	16.9%	Reliable	2.8
Same county	11.5%	Reliable	0.7	10.0%	Reliable	2.2
Different county	4.9%	Reliable	0.5	5.9%	Somewhat Reliable	2.3
Same state - different county	3.5%	Reliable	0.4	5.1%	Somewhat Reliable	2.2
Different state	1.1%	Reliable	0.2	0.7%	Not Very Reliable	0.8
Abroad	0.7%	Somewhat Reliable	0.2	0.6%	Not Very Reliable	0.7
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY						
Native	1,631,298	Reliable	12,558	64,681	Reliable	7,113
Male	49.7%	Reliable	0.3	51.6%	Reliable	3.3
Female	50.3%	Reliable	0.3	48.4%	Reliable	3.8
Foreign born	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Male	50.7%	Reliable	1.1	52.4%	Reliable	9.3
Female	49.3%	Reliable	1.1	47.6%	Reliable	9.3
Foreign born, naturalized U.S. citizen	176,146	Reliable	7,162	3,185	Somewhat Reliable	825
Male	46.5%	Reliable	1.5	53.9%	Somewhat Reliable	14.2
Female	53.5%	Reliable	1.8	46.1%	Somewhat Reliable	14.2
Foreign born, not a U.S. citizen	293,072	Reliable	12,960	1,372	Somewhat Reliable	833
Male	53.3%	Reliable	1.5	50.1%	Somewhat Reliable	14.4
Female	46.7%	Reliable	1.5	49.9%	Somewhat Reliable	14.4
Population born outside the United States	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Entered 2000 or later	22.4%	Reliable	1.6	8.3%	Not Very Reliable	6.1
Entered 1990 to 1999	25.3%	Reliable	1.3	21.1%	Somewhat Reliable	10.8
Entered before 1990	52.3%	Reliable	1.9	70.6%	Reliable	10.8
WORLD REGION OF BIRTH OF FOREIGN BORN						
Foreign-born population excluding population born at sea	469,216	Reliable	12,558	5,157	Somewhat Reliable	1,408
Europe	5.5%	Reliable	0.6	N	N	N
Asia	17.1%	Reliable	0.8	N	N	N
Africa	1.4%	Somewhat Reliable	0.4	N	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N	N
Latin America	73.0%	Reliable	1.0	N	N	N
Northern America	2.2%	Reliable	0.4	N	N	N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 5 years and over	1,532,948	Reliable	7	57,414	Reliable	6,608
English only	61.1%	Reliable	0.7	76.3%	Reliable	4.9
Language other than English	38.9%	Reliable	0.7	23.7%	Reliable	4.5
Language spoken at home and ability to speak English	12.9%	Reliable	0.4	1.8%	Somewhat Reliable	2.8

Figure 40: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Bottom Middle

COMMUTERS TO WORK					
Workers 16 years and over	680,102	Reliable	10,454	20,350	Reliable
Car, truck, or van - drove alone	75.3%	Reliable	1.0	74.6%	Reliable
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.2%	Somewhat Reliable
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable
Walked	2.0%	Reliable	0.5	0.9%	Not Very Reliable
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable
Worked at home	4.9%	Reliable	0.5	4.0%	Not Very Reliable
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.9	Reliable
OCCUPATION					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable
Service occupations	19.3%	Reliable	0.8	22.4%	Reliable
Sales and office occupations	25.9%	Reliable	1.0	23.0%	Reliable
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.3%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.7	10.3%	Somewhat Reliable
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.2%	Somewhat Reliable
Male civilian employed population 16 years and over	508,219	Reliable	8,009	12,141	Reliable
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable
Sales and office occupations	18.6%	Reliable	1.3	24.8%	Somewhat Reliable
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	19.6%	Somewhat Reliable
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9,247	Reliable
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable
Service occupations	21.8%	Reliable	1.1	26.9%	Somewhat Reliable
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable
Farming, fishing, and forestry occupations	0.7%	Somewhat Reliable	0.2	0.0%	Not Very Reliable
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.6%	Not Very Reliable
INDUSTRY					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Agriculture, forestry, fishing and hunting, and mining	1.3%	Reliable	0.3	0.3%	Not Very Reliable
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable
Manufacturing	9.8%	Reliable	0.6	10.2%	Somewhat Reliable
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable
Retail trade	12.7%	Reliable	0.6	14.9%	Somewhat Reliable
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable
Information	1.7%	Reliable	0.2	2.1%	Not Very Reliable
Finance and insurance, and real estate and rental and leasing	5.5%	Reliable	0.4	4.0%	Not Very Reliable
Professional, scientific, and management, and administrative and waste management services	9.5%	Reliable	0.6	13.0%	Somewhat Reliable
Educational services, and health care and social assistance	19.9%	Reliable	0.9	20.5%	Somewhat Reliable
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable
Other services (except public administration)	4.7%	Reliable	0.5	5.0%	Somewhat Reliable
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable
CLASS OF WORKER					
Civilian employed population 16 years and over	906,862	Reliable	10,664	21,388	Reliable
Private wage and salary workers	75.9%	Reliable	0.9	77.5%	Reliable
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable
Self-employed workers in own not incorporated business	8.1%	Reliable	0.7	7.4%	Somewhat Reliable
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)					
Households	647,443	Reliable	6,148	11,191	Reliable
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable
With earnings	79.9%	Reliable	0.6	83.8%	Reliable
Mean earnings (dollars)	72,948	Reliable	1,364	70,185	Reliable
With Social Security income	26.4%	Reliable	0.5	25.5%	Reliable
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable
With Supplemental Security income	4.1%	Reliable	0.4	4.1%	Not Very Reliable
Mean Supplemental Security Income (dollars)	9,124	Reliable	563	6,033	Somewhat Reliable
With cash public assistance income	2.9%	Reliable	0.3	3.8%	Not Very Reliable
Mean cash public assistance income (dollars)	5,330	Reliable	551	5,905	Somewhat Reliable
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable
Mean retirement income (dollars)	22,425	Reliable	912	22,115	Reliable
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable
Families	473,263	Reliable	7,070	8,405	Reliable
Median family income (dollars)	64,594	Reliable	1,551	65,619	Reliable
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable
Median income (dollars)	75,868	Reliable	1,511	72,724	Reliable
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable
Median income (dollars)	51,269	Reliable	4,775	28,235	Not Very Reliable
Female householder, no husband present, family	18.1%	Reliable	1.0	22.5%	Somewhat Reliable
Median income (dollars)	34,335	Reliable	2,904	41,065	Reliable
Individuals	2,100,516	****	477	69,638	Reliable
Per capita income (dollars)	24,301	Reliable	477	12,985	Reliable
With earnings for full-time, year-round workers:					
Male	381,434	Reliable	8,152	7,605	Reliable
Female	238,805	Reliable	6,530	5,605	Reliable
Mean earnings (dollars) for full-time, year-round workers:					
Male	57,693	Reliable	1,427	51,966	Reliable
Female	43,122	Reliable	1,032	35,327	Reliable
Median earnings (dollars) full-time, year-round workers:					
Male	46,836	Reliable	1,074	41,770	Reliable
Female	36,153	Reliable	893	29,939	Somewhat Reliable
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED					
All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable

Figure 41: Selected Population Profile Table with the Legend Above the Table and Red First in the Legend (B3): Bottom

All families	9.3%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.6%	Not Very Reliable	3.5
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.9%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.6
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.9%	Reliable	0.6	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	8.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.16	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.8%	Reliable	6.4
2 to 4 units	4.9%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.8
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.5	8.5%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	25.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.6%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1960 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1959	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.8	63.5%	Reliable	5.8
Electricity	17.9%	Reliable	0.6	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1.01 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOG cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	48.3%	Reliable	8.5
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	438,193	Reliable	7,265	7,352	Reliable	1,125
Median value (dollars)	329,600	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,232	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	455	Reliable	13	458	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRAP cannot be computed)	201,897	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	38.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,547	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 42: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Top

Subject	Total population	Reliability	Margin of Error	Two or more races	Reliability	Margin of Error
TOTAL NUMBER OF RACES REPORTED						
Total population	2,100,516	Reliable	0.4	65,836	Reliable	7,573
One race	95.7%	Reliable	0.4	0%	Reliable	0%
Two races	3.1%	Reliable	0.3	93.1%	Reliable	2.9
Three races	0.2%	Somewhat Reliable	0.1	6.6%	Somewhat Reliable	2.2
Four or more races	0.0%	Not Very Reliable	0.1	0.1%	Not Very Reliable	0.1
SEX AND AGE						
Total population	2,100,516	Reliable	0.4	65,836	Reliable	7,573
Male	49.9%	Reliable	0.1	51.6%	Reliable	3.2
Female	50.1%	Reliable	0.1	48.4%	Reliable	3.2
Under 5 years	8.0%	Reliable	0.1	17.5%	Reliable	2.7
5 to 17 years	19.9%	Reliable	0.1	31.1%	Reliable	3.0
18 to 24 years	10.3%	Reliable	0.1	13.3%	Reliable	2.0
25 to 34 years	16.9%	Reliable	0.1	12.6%	Reliable	2.6
35 to 44 years	13.6%	Reliable	0.1	9.3%	Reliable	1.8
45 to 54 years	12.2%	Reliable	0.1	7.0%	Reliable	1.8
55 to 64 years	7.5%	Reliable	0.1	4.5%	Somewhat Reliable	1.2
65 to 74 years	5.8%	Reliable	0.1	2.3%	Somewhat Reliable	1.1
75 years and over	6.1%	Reliable	0.1	1.6%	Somewhat Reliable	0.6
Median age (years)	31.8	Reliable	0.1	16.5	Reliable	1.2
15 years and over	72.3%	Reliable	0.1	51.1%	Reliable	2.8
25 years and over	67.7%	Reliable	0.2	44.6%	Reliable	2.8
35 years and over	13.4%	Reliable	0.1	5.1%	Somewhat Reliable	1.4
45 years and over	11.5%	Reliable	0.1	3.9%	Somewhat Reliable	1.2
Under 18 years	582,830	Reliable	438	34,170	Reliable	4,564
Male	51.0%	Reliable	0.1	50.6%	Reliable	4.5
Female	49.0%	Reliable	0.1	49.4%	Reliable	4.5
18 years and over	1,517,626	Reliable	438	35,628	Reliable	3,985
Male	49.5%	Reliable	0.1	52.7%	Reliable	4.8
Female	50.5%	Reliable	0.1	47.3%	Reliable	4.8
18 to 34 years	589,916	Reliable	743	18,455	Reliable	2,533
Male	51.2%	Reliable	0.1	55.5%	Reliable	7.5
Female	48.8%	Reliable	0.1	44.5%	Reliable	7.5
35 to 64 years	706,014	Reliable	633	14,523	Reliable	2,106
Male	50.3%	Reliable	0.1	49.5%	Reliable	4.9
Female	49.7%	Reliable	0.1	50.5%	Reliable	4.9
65 years and over	241,636	Reliable	633	2,688	Somewhat Reliable	933
Male	43.1%	Reliable	0.1	50.1%	Somewhat Reliable	13.9
Female	56.9%	Reliable	0.1	49.9%	Somewhat Reliable	13.9
RELATIONSHIP						
Population in households	2,073,707	Reliable	4,145	68,831	Reliable	7,561
Householder or spouse	48.0%	Reliable	0.6	26.2%	Reliable	2.3
Child	35.3%	Reliable	0.5	59.3%	Reliable	3.6
Other relatives	10.8%	Reliable	0.8	10.2%	Reliable	2.9
Nonrelatives	6.2%	Reliable	0.4	4.4%	Somewhat Reliable	1.6
Unmarried partner	2.1%	Reliable	0.2	1.6%	Not Very Reliable	0.8
HOUSEHOLDS BY TYPE						
Households	647,443	Reliable	6,146	11,191	Reliable	1,505
Family households	73.1%	Reliable	0.7	75.1%	Reliable	6.8
With own children under 18 years	33.5%	Reliable	0.5	43.0%	Reliable	7.2
Married-couple family	54.9%	Reliable	1.1	52.1%	Reliable	6.0
With own children under 18 years	27.7%	Reliable	0.9	30.3%	Reliable	6.7
Female householder, no husband present, family	13.2%	Reliable	0.7	16.9%	Somewhat Reliable	6.1
With own children under 18 years	8.0%	Reliable	0.6	11.1%	Not Very Reliable	5.5
Nonfamily households	26.9%	Reliable	0.7	24.9%	Somewhat Reliable	6.8
Male householder	12.9%	Reliable	0.7	13.2%	Somewhat Reliable	5.2
Living alone	9.4%	Reliable	0.8	9.4%	Somewhat Reliable	4.1
Not living alone	3.5%	Reliable	0.4	3.9%	Not Very Reliable	3.4
Female householder	14.0%	Reliable	0.7	11.7%	Somewhat Reliable	4.7
Living alone	11.8%	Reliable	0.6	8.1%	Somewhat Reliable	3.9
Not living alone	2.2%	Reliable	0.3	3.6%	Not Very Reliable	2.8
Average household size	3.2	Reliable	0.03	3.3	Reliable	0.29
Average family size	3.7	Reliable	0.05	3.77	Reliable	0.30
MARITAL STATUS						
Population 15 years and over	1,518,004	Reliable	547	41,693	Reliable	4,885
Now married, except separated	49.3%	Reliable	0.6	35.0%	Reliable	4.3
Widowed	5.4%	Reliable	0.3	3.5%	Somewhat Reliable	1.4
Divorced	9.5%	Reliable	0.5	7.1%	Somewhat Reliable	2.0
Separated	2.3%	Reliable	0.2	2.5%	Not Very Reliable	1.4
Never married	33.1%	Reliable	0.6	51.8%	Reliable	4.1
Male 15 years and over	802,609	Reliable	588	21,551	Reliable	2,959
Now married, except separated	50.9%	Reliable	1.1	35.1%	Reliable	5.1
Widowed	2.2%	Reliable	0.3	1.5%	Not Very Reliable	1.3
Divorced	9.1%	Reliable	0.6	6.1%	Somewhat Reliable	2.8
Separated	1.8%	Reliable	0.3	1.2%	Not Very Reliable	1.0
Never married	37.1%	Reliable	0.8	56.1%	Reliable	5.4
Female 15 years and over	815,395	Reliable	465	20,142	Reliable	3,158
Now married, except separated	47.7%	Reliable	0.9	35.0%	Reliable	5.9
Widowed	8.6%	Reliable	0.4	5.6%	Somewhat Reliable	2.6
Divorced	11.6%	Reliable	0.7	8.3%	Somewhat Reliable	2.7
Separated	9.9%	Reliable	0.3	3.9%	Not Very Reliable	3.2

Figure 43: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Top Middle

Population 15 years and over					
Now married, except separated	1,618,004	Reliable	54%	41,639	Reliable
Widowed	49.3%	Reliable	0.9	35.0%	Reliable
Divorced	5.4%	Reliable	0.3	3.9%	Somewhat Reliable
Separated	3.9%	Reliable	0.5	7.1%	Somewhat Reliable
Never married	2.3%	Reliable	0.2	2.8%	Not Very Reliable
	33.1%	Reliable	0.6	51.8%	Reliable
Male 15 years and over					
Now married, except separated	862,609	Reliable	58%	21,551	Reliable
Widowed	25.0%	Reliable	0.3	35.1%	Reliable
Divorced	2.2%	Reliable	0.3	1.5%	Not Very Reliable
Separated	8.1%	Reliable	0.8	6.1%	Somewhat Reliable
Never married	1.8%	Reliable	0.3	1.2%	Not Very Reliable
	37.1%	Reliable	0.8	56.1%	Reliable
Female 15 years and over					
Now married, except separated	815,595	Reliable	46%	20,146	Reliable
Widowed	47.7%	Reliable	0.9	35.0%	Reliable
Divorced	8.5%	Reliable	0.4	5.6%	Somewhat Reliable
Separated	11.6%	Reliable	0.7	8.2%	Somewhat Reliable
Never married	2.9%	Reliable	0.3	3.9%	Not Very Reliable
	29.2%	Reliable	0.7	47.2%	Reliable
SCHOOL ENROLLMENT					
Population 3 years and over enrolled in school					
Nursery school, preschool	582,029	Reliable	7.41%	30,472	Reliable
Kindergarten	4.9%	Reliable	0.2	7.9%	Somewhat Reliable
Elementary school (grades 1-6)	5.0%	Reliable	0.5	4.5%	Somewhat Reliable
High school (grades 7-12)	43.5%	Reliable	0.8	40.6%	Reliable
College or graduate school	23.2%	Reliable	0.8	27.8%	Reliable
	22.7%	Reliable	1.0	19.9%	Reliable
Male 3 years and over enrolled in school					
Percent enrolled in kindergarten to grade 12	292,465	Reliable	5.21%	15,455	Reliable
Percent enrolled in college or graduate school	75.2%	Reliable	1.4	77.6%	Reliable
	20.2%	Reliable	1.4	19.5%	Somewhat Reliable
Female 3 years and over enrolled in school					
Percent enrolled in kindergarten to grade 12	300,560	Reliable	5.43%	15,014	Reliable
Percent enrolled in college or graduate school	69.4%	Reliable	1.3	65.0%	Reliable
	29.5%	Reliable	1.2	21.3%	Somewhat Reliable
EDUCATIONAL ATTAINMENT					
Population 25 years and over					
Less than high school diploma	1,361,751	Reliable	61%	26,015	Reliable
High school graduate (includes equivalency)	22.0%	Reliable	0.7	19.1%	Reliable
Some college or associate's degree	25.8%	Reliable	0.8	27.9%	Reliable
Bachelor's degree	30.1%	Reliable	0.9	38.7%	Reliable
Graduate or professional degree	13.7%	Reliable	0.6	10.7%	Somewhat Reliable
	6.4%	Reliable	0.3	3.7%	Somewhat Reliable
High school graduate or higher	78.0%	Reliable	0.7	80.9%	Reliable
Male, high school graduate or higher	74.5%	Reliable	1.0	69.9%	Reliable
Female, high school graduate or higher	79.5%	Reliable	0.8	80.9%	Reliable
Bachelor's degree or higher	20.1%	Reliable	0.6	14.4%	Reliable
Male, bachelor's degree or higher	21.0%	Reliable	0.9	9.9%	Somewhat Reliable
Female, bachelor's degree or higher	19.2%	Reliable	1.0	19.6%	Somewhat Reliable
FERTILITY					
Women 15 to 50 years					
Women 15 to 50 years who had a birth in the past 12 months	548,893	Reliable	1.58%	16,543	Reliable
Unmarried women 15 to 50 years who had a birth in the past 12 months	33,640	Reliable	4.0%	1,311	Somewhat Reliable
As a percent of all women with a birth in the past 12 months	6.1%	Reliable	2.2%	6.4%	Not Very Reliable
	32.0%	Reliable	4.3	49.3%	Not Very Reliable
RESPONSIBILITY FOR GRANDCHILDREN UNDER 18 YEARS					
Population 30 years and over					
Living with grandchildren	1,167,124	Reliable	91%	20,721	Reliable
Responsible for grandchildren	5.5%	Reliable	0.4	3.4%	Not Very Reliable
	33.6%	Reliable	3.8	N	N
VETERAN STATUS					
Civilian population 18 years and over					
Civilian veteran	1,513,207	Reliable	1,244	35,552	Reliable
	9.0%	Reliable	0.4	6.9%	Somewhat Reliable
DISABILITY STATUS					
Total civilian noninstitutionalized population					
With a disability	2,016,743	Reliable	2,641	68.8%	Reliable
	10.6%	Reliable	0.4	7.8%	Reliable
Civilian noninstitutionalized population under 18 years					
With a disability	583,715	Reliable	43%	34.14	Reliable
	2.5%	Reliable	0.4	3.1%	Not Very Reliable
Civilian noninstitutionalized population 18 to 64 years					
With a disability	1,284,521	Reliable	2,045	32.0%	Reliable
	8.5%	Reliable	0.3	6.7%	Somewhat Reliable
Civilian noninstitutionalized population 65 years and older					
With a disability	229,477	Reliable	1,072	2,656	Somewhat Reliable
	38.8%	Reliable	1.6	57.0%	Somewhat Reliable
RESIDENCE 1 YEAR AGO					
Population 1 year and over					
Same house	2,063,165	Reliable	2,858	66,273	Reliable
Different house in the U.S.	42.3%	Reliable	0.5	63.6%	Reliable
Same county	16.4%	Reliable	0.8	16.9%	Reliable
Different county	11.8%	Reliable	0.7	10.0%	Reliable
Same state	4.9%	Reliable	0.4	5.9%	Somewhat Reliable
Different state	3.5%	Reliable	0.4	5.1%	Somewhat Reliable
Abroad	1.1%	Reliable	0.2	0.7%	Not Very Reliable
	0.7%	Somewhat Reliable	0.2	0.5%	Not Very Reliable
PLACE OF BIRTH, CITIZENSHIP STATUS AND YEAR OF ENTRY					
Native					
Male	1,631,228	Reliable	12,558	64,681	Reliable
Female	49.7%	Reliable	0.3	51.6%	Reliable
	50.2%	Reliable	0.3	48.4%	Reliable
Foreign born					
Male	469,218	Reliable	12,558	6,157	Somewhat Reliable
Female	59.7%	Reliable	1.1	52.4%	Reliable
	49.2%	Reliable	0.9	47.6%	Reliable
Foreign born, naturalized U.S. citizen					
Male	178,144	Reliable	7,182	3,188	Somewhat Reliable
Female	49.5%	Reliable	1.5	53.9%	Somewhat Reliable
	53.9%	Reliable	1.5	46.1%	Somewhat Reliable
Foreign born, not a U.S. citizen					
Male	283,072	Reliable	12,964	1,972	Somewhat Reliable
Female	53.3%	Reliable	1.5	50.1%	Somewhat Reliable
	48.2%	Reliable	1.2	49.9%	Somewhat Reliable
Population born outside the United States					
Entered 2003 or later	465,216	Reliable	12,558	5,157	Somewhat Reliable
Entered 1990 to 1999	22.4%	Reliable	1.6	3.3%	Not Very Reliable
Entered before 1990	35.3%	Reliable	1.7	21.1%	Somewhat Reliable
	52.3%	Reliable	1.6	70.6%	Reliable
WORLD REGION OF BIRTH OF FOREIGN BORN					
Foreign-born population excluding population born in Asia					
Europe	485,218	Reliable	12,558	5,157	Somewhat Reliable
Asia	6.5%	Reliable	0.7	N	N
Africa	17.1%	Reliable	0.8	N	N
Oceania	1.4%	Somewhat Reliable	0.5	N	N
Latin America	0.7%	Not Very Reliable	0.4	N	N
North America	73.0%	Reliable	1.0	N	N
	2.5%	Reliable	0.6	N	N
LANGUAGES SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH					
Population 5 years and over					
English only	1,532,944	Reliable	7	57,414	Reliable
Language other than English	61.1%	Reliable	0.5	76.3%	Reliable
Speak English less than "very well"	18.5%	Reliable	0.7	23.7%	Reliable
	19.5%	Reliable	0.8	7.1%	Somewhat Reliable
EMPLOYMENT STATUS					
Population 16 years and over					
In labor force	1,584,308	Reliable	2,806	38,155	Reliable
Civilian labor force	63.6%	Reliable	0.7	64.2%	Reliable
Employed	57.2%	Reliable	0.9	54.6%	Reliable

Figure 44: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Bottom Middle

Female	52.3%	Reliable	1.9	46.1%	Somewhat Reliable	16.4
Foreign born, not a U.S. citizen	253,272	Reliable	12,363	1,972	Somewhat Reliable	633
Male	23.3%	Reliable	1.2	26.1%	Somewhat Reliable	12.1
Female	46.7%	Reliable	1.5	49.3%	Somewhat Reliable	14.4
Population born outside the United States	469,218	Reliable	12,558	5,167	Somewhat Reliable	1,468
Entered 2000 or later	22.4%	Reliable	1.6	8.3%	Not Very Reliable	6.1
Entered 1990 to 1999	28.3%	Reliable	1.7	21.1%	Somewhat Reliable	10.9
Entered before 1990	52.3%	Reliable	1.6	70.6%	Reliable	10.3
WORLD REGION OF BIRTH OF FOREIGN BORN	469,218	Reliable	12,558	5,167	Somewhat Reliable	1,468
Foreign-born population excluding population born at sea						
Europe	5.5%	Reliable	0.7	N	N	N
Asia	17.1%	Reliable	0.8	N	N	N
Africa	1.4%	Somewhat Reliable	0.2	N	N	N
Oceania	0.7%	Not Very Reliable	0.4	N	N	N
Latin America	73.0%	Reliable	1.0	0.3%	Reliable	N
Northern America	2.2%	Reliable	0.2	N	N	N
LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH						
Population 5 years and over	1,932,348	Reliable	7	57,414	Reliable	6,000
English only	61.1%	Reliable	5.7	76.3%	Reliable	4.5
Language other than English	38.9%	Reliable	0.7	23.7%	Reliable	4.0
Speak English less than "very well"	16.9%	Reliable	0.6	7.1%	Somewhat Reliable	2.6
EMPLOYMENT STATUS						
Population 16 years and over	1,584,308	Reliable	2,894	39,133	Reliable	4,480
In labor force	63.6%	Reliable	0.7	64.2%	Reliable	4.1
Civilian labor force	63.5%	Reliable	0.7	64.2%	Reliable	4.1
Employed	57.2%	Reliable	0.7	54.4%	Reliable	4.1
Unemployed	6.3%	Reliable	0.2	9.6%	Somewhat Reliable	2.1
Percent of civilian labor force	9.6%	Reliable	0.7	15.0%	Somewhat Reliable	3.9
Armed Forces	0.3%	Reliable	0.1	0.3%	Not Very Reliable	0.4
Not in labor force	36.2%	Reliable	0.7	35.5%	Reliable	4.1
Families 16 years and over	786,558	Reliable	1,262	16,816	Reliable	2,843
In labor force	49.7%	Reliable	1.5	57.0%	Reliable	5.5
Civilian labor force	55.6%	Reliable	0.9	57.3%	Reliable	5.9
Employed	49.9%	Reliable	0.9	45.1%	Reliable	5.1
Unemployed	6.7%	Reliable	0.6	9.8%	Somewhat Reliable	3.6
Percent of civilian labor force	10.2%	Reliable	0.9	15.1%	Somewhat Reliable	5.3
COMMUTING TO WORK						
Workers 16 years and over	680,102	Reliable	10,454	20,350	Reliable	2,160
Car, truck, or van - drove alone	78.3%	Reliable	1.0	74.6%	Reliable	4.5
Car, truck, or van - carpooled	14.7%	Reliable	0.8	16.3%	Somewhat Reliable	4.6
Public transportation (excluding taxicab)	1.6%	Reliable	0.3	1.1%	Not Very Reliable	1.4
Walked	2.0%	Reliable	0.2	0.9%	Not Very Reliable	0.8
Other means	1.5%	Reliable	0.2	3.2%	Not Very Reliable	1.5
Worked at home	4.9%	Reliable	0.2	4.0%	Not Very Reliable	2.1
Mean travel time to work (minutes)	31.5	Reliable	0.6	33.9	Reliable	4.1
OCCUPATION						
Civilian employed population 16 years and over	506,622	Reliable	10,664	21,388	Reliable	2,508
Management, professional, and related occupations	28.9%	Reliable	0.9	26.0%	Reliable	5.0
Service occupations	19.3%	Reliable	0.8	20.0%	Somewhat Reliable	5.2
Sales and office occupations	25.9%	Reliable	1.0	25.0%	Reliable	6.0
Farming, fishing, and forestry occupations	1.0%	Somewhat Reliable	0.3	0.9%	Not Very Reliable	0.8
Construction, extraction, maintenance, and repair occupations	11.6%	Reliable	0.2	10.3%	Somewhat Reliable	4.1
Production, transportation, and material moving occupations	12.2%	Reliable	0.7	12.3%	Somewhat Reliable	3.8
Male civilian employed population 16 years and over	506,218	Reliable	8,009	12,141	Reliable	2,004
Management, professional, and related occupations	25.4%	Reliable	1.1	18.8%	Somewhat Reliable	5.5
Service occupations	17.4%	Reliable	1.2	19.0%	Somewhat Reliable	6.6
Sales and office occupations	19.4%	Reliable	1.3	24.1%	Somewhat Reliable	7.2
Farming, fishing, and forestry occupations	1.2%	Somewhat Reliable	0.4	0.0%	Not Very Reliable	1.6
Construction, extraction, maintenance, and repair occupations	20.3%	Reliable	1.3	17.7%	Somewhat Reliable	6.9
Production, transportation, and material moving occupations	17.0%	Reliable	1.0	16.8%	Somewhat Reliable	6.5
Female civilian employed population 16 years and over	398,643	Reliable	6,857	9,247	Reliable	1,639
Management, professional, and related occupations	33.4%	Reliable	1.4	35.4%	Reliable	7.5
Service occupations	21.9%	Reliable	1.1	26.9%	Somewhat Reliable	8.3
Sales and office occupations	37.5%	Reliable	1.4	34.6%	Somewhat Reliable	9.3
Farming, fishing, and forestry occupations	0.6%	Somewhat Reliable	0.2	0.0%	Not Very Reliable	2.3
Construction, extraction, maintenance, and repair occupations	0.6%	Somewhat Reliable	0.2	0.5%	Not Very Reliable	0.8
Production, transportation, and material moving occupations	6.1%	Reliable	0.8	2.6%	Not Very Reliable	2.3
INDUSTRY						
Civilian employed population 16 years and over	506,622	Reliable	10,664	21,388	Reliable	2,508
Agriculture, forestry, fishing, and hunting, and mining	1.3%	Reliable	0.3	0.0%	Not Very Reliable	0.6
Construction	10.4%	Reliable	0.7	5.6%	Somewhat Reliable	2.5
Manufacturing	9.9%	Reliable	0.6	10.2%	Somewhat Reliable	3.8
Wholesale trade	3.3%	Reliable	0.4	2.4%	Not Very Reliable	2.4
Retail trade	12.7%	Reliable	0.8	14.9%	Somewhat Reliable	4.3
Transportation and warehousing, and utilities	5.6%	Reliable	0.5	10.0%	Somewhat Reliable	4.4
Information	1.0%	Reliable	0.2	2.1%	Not Very Reliable	1.8
Finance and insurance, and real estate and rental and leasing	5.1%	Reliable	0.4	4.0%	Not Very Reliable	2.1
Professional, scientific, and management, and administrative and waste management	9.8%	Reliable	0.6	10.0%	Somewhat Reliable	4.4
Education, health care, and social assistance	19.9%	Reliable	0.9	10.6%	Somewhat Reliable	5.2
Arts, entertainment, and recreation, and accommodation and food services	11.0%	Reliable	0.8	9.3%	Somewhat Reliable	3.3
Other services (except public administration)	4.7%	Reliable	0.3	5.0%	Somewhat Reliable	2.8
Public administration	4.4%	Reliable	0.4	2.9%	Not Very Reliable	1.5
CLASS OF WORKER						
Civilian employed population 16 years and over	506,622	Reliable	10,664	21,388	Reliable	2,508
Private wage and salary workers	76.5%	Reliable	0.9	77.5%	Reliable	4.6
Government workers	15.2%	Reliable	0.7	15.1%	Somewhat Reliable	3.9
Self-employed workers in own not incorporated business	8.1%	Reliable	1.2	7.4%	Somewhat Reliable	2.8
Unpaid family workers	0.2%	Not Very Reliable	0.1	0.0%	Not Very Reliable	0.9
INCOME IN THE PAST 12 MONTHS (IN 2008 INFLATION-ADJUSTED DOLLARS)						
Households	647,443	Reliable	6,146	11,191	Reliable	1,508
Median household income (dollars)	57,792	Reliable	1,233	52,012	Reliable	7,512
With earnings	79.9%	Reliable	0.6	83.5%	Reliable	5.4
Mean earnings (dollars)	72,648	Reliable	1,364	70,188	Reliable	9,631
With Social Security income	26.4%	Reliable	0.3	25.0%	Reliable	5.7
Mean Social Security income (dollars)	15,500	Reliable	314	10,642	Reliable	1,189
With Supplemental Security Income	4.1%	Reliable	0.4	4.1%	Not Very Reliable	2.9
Mean Supplemental Security Income (dollars)	9,104	Reliable	563	6,633	Somewhat Reliable	1,718
With cash public assistance income	2.9%	Reliable	0.3	3.0%	Not Very Reliable	2.1
Mean cash public assistance income (dollars)	5,330	Reliable	851	5,900	Somewhat Reliable	2,489
With retirement income	18.3%	Reliable	0.7	22.4%	Reliable	6.3
Mean retirement income (dollars)	22,425	Reliable	312	23,115	Reliable	5,026
With Food Stamp benefits	4.3%	Reliable	0.4	3.1%	Not Very Reliable	2.0
Families	473,263	Reliable	7,070	8,405	Reliable	1,354
Median family income (dollars)	64,594	Reliable	1,551	65,619	Reliable	13,426
Married-couple family	73.9%	Reliable	1.2	69.4%	Reliable	6.4
Median income (dollars)	76,856	Reliable	1,511	72,724	Reliable	10,818
Male householder, no spouse present, family	8.1%	Reliable	0.7	8.1%	Not Very Reliable	4.6
Median income (dollars)	51,289	Reliable	4,775	28,235	Not Very Reliable	21,320

Figure 45: Selected Population Profile Table with the Legend Above the Table and Green First in the Legend (B4): Bottom

Male	381,434	Reliable	8,152	7,604	Reliable	1,467
Female	238,205	Reliable	6,630	5,609	Reliable	1,299
Mean earnings (dollars) for full-time, year-round workers:						
Male	57,693	Reliable	1,427	51,966	Reliable	7,568
Female	43,122	Reliable	1,032	35,327	Reliable	6,362
Median earnings (dollars) full-time, year-round workers:						
Male	46,836	Reliable	1,074	41,770	Reliable	3,199
Female	36,153	Reliable	893	29,939	Somewhat Reliable	8,534
POVERTY RATES FOR FAMILIES AND PEOPLE FOR WHOM POVERTY STATUS IS DETERMINED						
All families	9.2%	Reliable	0.7	3.5%	Not Very Reliable	2.3
With related children under 18 years	13.4%	Reliable	1.1	4.5%	Not Very Reliable	3.5
With related children under 5 years only	13.3%	Reliable	2.7	N	N	N
Married-couple family	5.1%	Reliable	0.7	N	N	N
With related children under 18 years	7.2%	Reliable	1.1	N	N	N
With related children under 5 years only	3.4%	Somewhat Reliable	1.6	N	N	N
Female householder, no husband present, family	25.3%	Reliable	2.7	N	N	N
With related children under 18 years	31.5%	Reliable	3.4	N	N	N
With related children under 5 years only	40.0%	Somewhat Reliable	10.1	N	N	N
All people	12.6%	Reliable	0.7	10.2%	Somewhat Reliable	3.3
Under 18 years	17.0%	Reliable	1.4	9.9%	Somewhat Reliable	4.6
Related children under 18 years	16.6%	Reliable	1.4	9.7%	Somewhat Reliable	4.6
Related children under 5 years	19.2%	Reliable	2.3	7.0%	Not Very Reliable	4.3
Related children 5 to 17 years	15.6%	Reliable	1.4	11.3%	Not Very Reliable	5.7
18 years and over	10.5%	Reliable	0.8	10.6%	Somewhat Reliable	3.4
18 to 64 years	11.4%	Reliable	0.7	10.9%	Somewhat Reliable	3.7
65 years and over	7.8%	Reliable	1.0	6.7%	Not Very Reliable	8.7
People in families	10.4%	Reliable	0.8	7.1%	Somewhat Reliable	3.3
Unrelated individuals 15 years and over	25.2%	Reliable	1.6	45.1%	Somewhat Reliable	11.5
HOUSING TENURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Owner-occupied housing units	67.7%	Reliable	0.9	65.7%	Reliable	6.0
Renter-occupied housing units	32.3%	Reliable	0.9	34.3%	Reliable	6.0
Average household size of owner-occupied unit	3.22	Reliable	0.04	3.40	Reliable	0.34
Average household size of renter-occupied unit	3.15	Reliable	0.07	3.11	Reliable	0.51
UNITS IN STRUCTURE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
1-unit, detached or attached	74.5%	Reliable	0.9	72.8%	Reliable	6.4
2 to 4 units	2.5%	Reliable	0.5	4.0%	Not Very Reliable	2.6
5 or more units	11.8%	Reliable	0.6	14.7%	Somewhat Reliable	5.6
Mobile home, boat, RV, van, etc.	8.8%	Reliable	0.5	6.5%	Somewhat Reliable	3.8
YEAR STRUCTURE BUILT						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Built 2000 or later	26.2%	Reliable	0.9	21.4%	Somewhat Reliable	5.8
Built 1990 to 1999	16.5%	Reliable	0.7	15.5%	Somewhat Reliable	5.5
Built 1980 to 1989	22.7%	Reliable	0.9	20.8%	Somewhat Reliable	5.3
Built 1970 to 1979	23.3%	Reliable	0.9	24.4%	Reliable	5.8
Built 1940 to 1969	9.2%	Reliable	0.6	11.4%	Somewhat Reliable	5.2
Built 1939 or earlier	2.0%	Reliable	0.3	6.4%	Not Very Reliable	3.8
VEHICLES AVAILABLE						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
None	5.4%	Reliable	0.4	6.6%	Not Very Reliable	4.1
1 or more	94.6%	Reliable	0.4	93.4%	Reliable	4.1
HOUSE HEATING FUEL						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
Gas	79.5%	Reliable	0.7	63.5%	Reliable	6.8
Electricity	17.5%	Reliable	0.8	30.6%	Reliable	6.5
All other fuels	1.0%	Reliable	0.2	3.8%	Not Very Reliable	2.9
No fuel used	1.6%	Reliable	0.3	2.1%	Not Very Reliable	1.6
SELECTED CHARACTERISTICS						
Occupied housing units	647,443	Reliable	6,148	11,191	Reliable	1,505
No telephone service available	1.0%	Somewhat Reliable	0.3	N	N	N
1 D1 or more occupants per room	6.6%	Reliable	0.5	4.1%	Not Very Reliable	3.4
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Housing units with a mortgage (excluding units where SMOC cannot be computed)	333,556	Reliable	7,516	6,236	Reliable	1,047
Less than 30 percent	41.5%	Reliable	1.5	48.3%	Reliable	8.8
30 percent or more	58.5%	Reliable	1.5	51.7%	Reliable	8.5
OWNER CHARACTERISTICS						
Owner-occupied housing units	436,193	Reliable	7,265	7,352	Reliable	1,128
Median value (dollars)	329,000	Reliable	4,045	313,000	Reliable	26,719
Median selected monthly owner costs with a mortgage (dollars)	2,232	Reliable	39	1,881	Reliable	194
Median selected monthly owner costs without a mortgage (dollars)	456	Reliable	13	458	Somewhat Reliable	153
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS						
Occupied units paying rent (excluding units where GRPI cannot be computed)	201,097	Reliable	6,296	3,473	Reliable	846
Less than 30 percent	38.7%	Reliable	2.0	33.8%	Somewhat Reliable	12.1
30 percent or more	61.3%	Reliable	2.0	66.2%	Reliable	12.1
GROSS RENT						
Occupied units paying rent	202,347	Reliable	6,423	3,517	Reliable	853
Median gross rent (dollars)	1,147	Reliable	23	1,201	Reliable	169

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 48: Detailed Table with Color-Coding (D1)

	Apple County, USA			Birch County, USA			Cherry County, USA		
	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error
Total:	149,518	*****	64,866	*****	9,862,049	*****	*****	*****	*****
Population of one race:	145,799	Reliable	1,285	62,279	Reliable	830	9,558,835	Reliable	11,282
White	108,310	Reliable	3,943	56,795	Reliable	1,432	5,193,451	Reliable	41,862
Black or African American	11,519	Reliable	704	1,437	Reliable	248	866,596	Reliable	6,204
American Indian and Alaska Native	2,432	Somewhat Reliable	602	1,817	Somewhat Reliable	745	61,347	Reliable	6,416
Asian alone	4,875	Reliable	634	66	Not Very Reliable	122	1,275,136	Reliable	6,674
Native Hawaiian and Other Pacific Islander	39	Not Very Reliable	65	151	Not Very Reliable	273	27,049	Reliable	2,239
Some other race	18,564	Reliable	3,779	2,013	Not Very Reliable	1,414	2,135,056	Reliable	40,114
Population of two or more races:	3,749	Somewhat Reliable	1,285	2,587	Somewhat Reliable	830	303,414	Reliable	11,282
Two races including Some other race	875	Not Very Reliable	472	121	Not Very Reliable	194	104,722	Reliable	8,166
Two races excluding Some other race, and three or more races	2,874	Somewhat Reliable	1,198	2,466	Somewhat Reliable	827	198,692	Reliable	9,075
Population of two races:	3,257	Somewhat Reliable	1,105	2,587	Somewhat Reliable	830	281,478	Reliable	11,462
White; Black or African American	812	Not Very Reliable	605	359	Not Very Reliable	248	33,577	Reliable	4,247
White; American Indian and Alaska Native	522	Not Very Reliable	465	1,416	Somewhat Reliable	664	41,180	Reliable	4,166
White; Asian	725	Not Very Reliable	467	273	Not Very Reliable	408	69,715	Reliable	5,780
Black or African American; American Indian and Alaska Native	40	Not Very Reliable	65	418	Somewhat Reliable	200	11,670	Somewhat Reliable	3,770
All other two race combinations	1,158	Not Very Reliable	599	121	Not Very Reliable	194	125,334	Reliable	8,350
Population of three races	451	Not Very Reliable	523	0	Not Very Reliable	264	20,428	Reliable	3,232
Population of four or more races	41	Not Very Reliable	67	0	Not Very Reliable	264	1,510	Not Very Reliable	839

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 49: Detailed Table with No Color-Coding (D2)

Table ID C02003	Race in the United States Universe: Total Population in the United States 2008 American Community Survey 1-Year Estimates								
i									
Table View Map View Chart View									
Actions: Modify Table Bookmark Download									
View Table Notes									
	Apple County, USA			Birch County, USA			Cherry County, USA		
	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error	Estimate	Reliability	Margin of Error
Total:	149,518		*****	64,866		*****	9,862,049		*****
Population of one race:	145,799	Reliable	1,285	62,279	Reliable	830	9,558,635	Reliable	11,282
White	108,310	Reliable	3,943	56,795	Reliable	1,432	5,193,451	Reliable	41,862
Black or African American	11,519	Reliable	704	1,437	Reliable	248	866,696	Reliable	6,204
American Indian and Alaska Native	2,432	Somewhat Reliable	602	1,817	Somewhat Reliable	745	61,347	Reliable	6,419
Asian alone	4,875	Reliable	634	66	Not Very Reliable	122	1,276,138	Reliable	6,674
Native Hawaiian and Other Pacific Islander	39	Not Very Reliable	65	151	Not Very Reliable	273	27,049	Reliable	2,239
Some other race	18,594	Reliable	3,779	2,013	Not Very Reliable	1,414	2,136,056	Reliable	40,114
Population of two or more races:	3,749	Somewhat Reliable	1,285	2,587	Somewhat Reliable	830	303,414	Reliable	11,282
Two races including Some other race	875	Not Very Reliable	472	121	Not Very Reliable	194	104,722	Reliable	8,156
Two races excluding Some other race, and three or more races	2,874	Somewhat Reliable	1,198	2,466	Somewhat Reliable	827	198,692	Reliable	9,075
Population of two races:	3,257	Somewhat Reliable	1,105	2,587	Somewhat Reliable	830	281,476	Reliable	11,482
White; Black or African American	812	Not Very Reliable	605	359	Not Very Reliable	248	33,577	Reliable	4,247
White; American Indian and Alaska Native	522	Not Very Reliable	465	1,416	Somewhat Reliable	664	41,180	Reliable	4,166
White; Asian	725	Not Very Reliable	467	273	Not Very Reliable	408	69,715	Reliable	5,780
Black or African American; American Indian and Alaska Native	40	Not Very Reliable	65	418	Somewhat Reliable	200	11,670	Somewhat Reliable	3,770
All other two race combinations	1,158	Not Very Reliable	599	121	Not Very Reliable	194	125,334	Reliable	8,350
Population of three races	451	Not Very Reliable	523	0	Not Very Reliable	294	20,428	Reliable	3,232
Population of four or more races	41	Not Very Reliable	67	0	Not Very Reliable	294	1,510	Not Very Reliable	839

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 50: Geographical Comparison Table with Legend Behind Link and Red First in the Legend (E1)

Geographic area	Percent	Reliability	Margin of Error
Anystate, USA	5.3	Reliable	0.1
COUNTY			
County A	11.6	Reliable	0.7
County B	1.0	Not Very Reliable	0.6
County C	9.6	Reliable	0.8
County D	2.2	Somewhat Reliable	1.1
County E	1.5	Reliable	0.4
County F	1.1	Not Very Reliable	0.8
County G	0.7	Not Very Reliable	0.5
County H	0.9	Somewhat Reliable	0.3
County I	3.2	Not Very Reliable	2.3
County J	0.7	Not Very Reliable	1.1
County K	7.3	Reliable	0.2
County L	0.3	Not Very Reliable	0.3
County M	8.0	Reliable	1.3
County N	0.4	Not Very Reliable	0.5
County O	0.6	Not Very Reliable	0.5
County P	3.0	Somewhat Reliable	0.8
County Q	3.7	Not Very Reliable	4.7
County R	0.0	Not Very Reliable	0.4
County S	3.3	Reliable	0.3
County T	1.0	Somewhat Reliable	0.4
County U	1.6	Reliable	0.3
County V	3.3	Reliable	0.4
County W	2.0	Reliable	0.3
County X	3.4	Reliable	0.3
County Y	31.9	Reliable	1.3
County Z	1.5	Reliable	0.4
County AA	1.2	Somewhat Reliable	0.6
County BB	7.5	Reliable	1.0
County CC	3.5	Reliable	0.8
County DD	3.7	Reliable	0.5
County EE	2.5	Somewhat Reliable	0.8
County FF	0.4	Not Very Reliable	0.4
County GG	3.3	Somewhat Reliable	1.0
County HH	2.3	Somewhat Reliable	0.7
County II	0.8	Somewhat Reliable	0.3
County JJ	1.2	Not Very Reliable	1.0
County KK	0.7	Somewhat Reliable	0.3
County LL	1.1	Somewhat Reliable	0.3
County MM	4.2	Somewhat Reliable	1.1
County NN	0.2	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 51: Geographical Comparison Table with Legend Behind Link and Green First in the Legend (E2)

Table ID
GCT0804

Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation
(Excluding Taxicab) in Anystate, USA
Universe: Workers 16 years and over in Anystate, USA
2008 American Community Survey 1-Year Estimates 

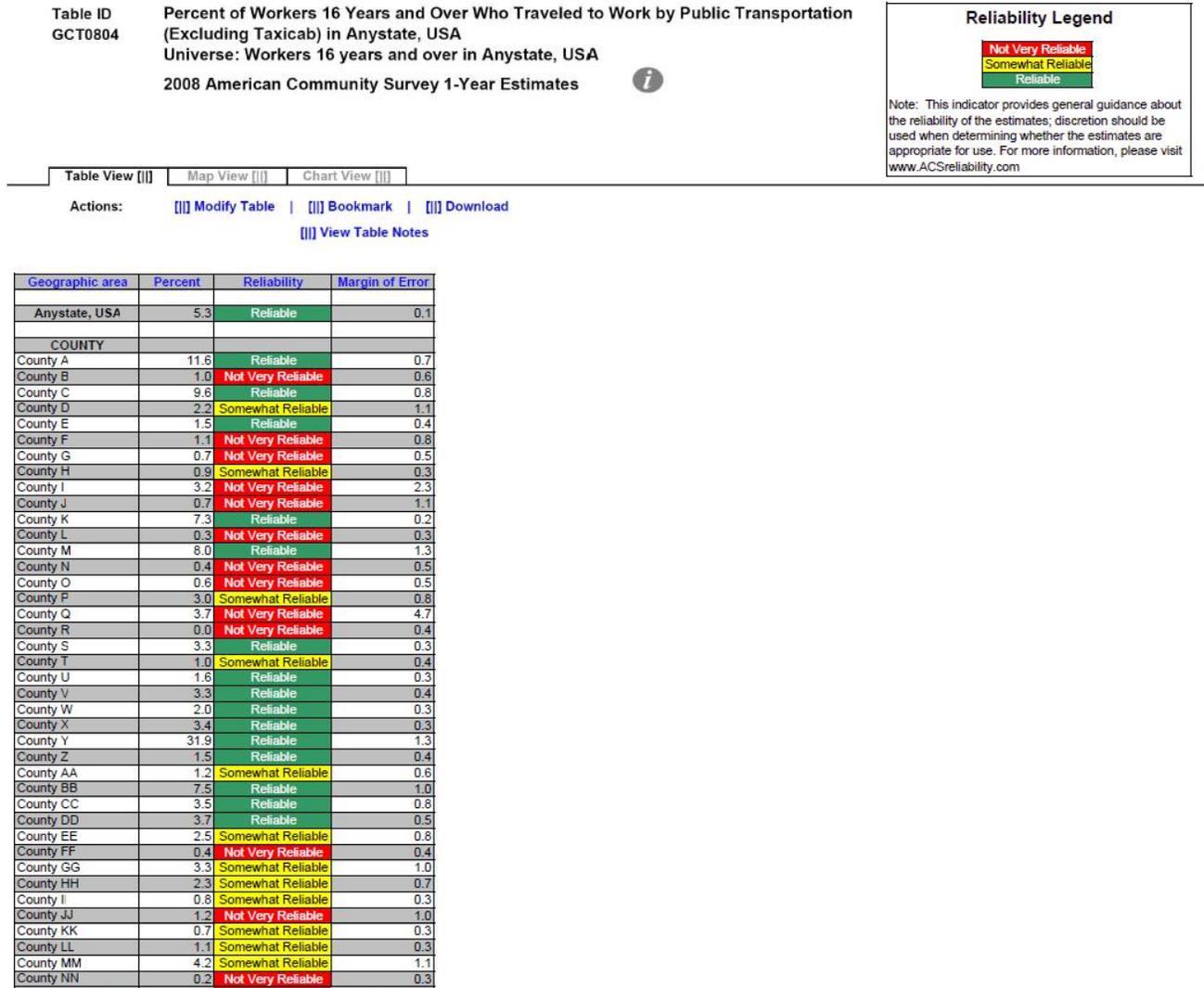
Table View  | Map View  | Chart View 

Actions: [Modify Table](#) | [Bookmark](#) | [Download](#)
[View Table Notes](#)

Geographic area	Percent	Reliability	Margin of Error
Anystate, USA	5.3	Reliable	0.1
COUNTY			
County A	11.6	Reliable	0.7
County B	1.0	Not Very Reliable	0.6
County C	9.6	Reliable	0.8
County D	2.2	Somewhat Reliable	1.1
County E	1.5	Reliable	0.4
County F	1.1	Not Very Reliable	0.8
County G	0.7	Not Very Reliable	0.5
County H	0.9	Somewhat Reliable	0.3
County I	3.2	Not Very Reliable	2.3
County J	0.7	Not Very Reliable	1.1
County K	7.3	Reliable	0.2
County L	0.3	Not Very Reliable	0.3
County M	8.0	Reliable	1.3
County N	0.4	Not Very Reliable	0.5
County O	0.6	Not Very Reliable	0.5
County P	3.0	Somewhat Reliable	0.8
County Q	3.7	Not Very Reliable	4.7
County R	0.0	Not Very Reliable	0.4
County S	3.3	Reliable	0.3
County T	1.0	Somewhat Reliable	0.4
County U	1.6	Reliable	0.3
County V	3.3	Reliable	0.4
County W	2.0	Reliable	0.3
County X	3.4	Reliable	0.3
County Y	31.9	Reliable	1.3
County Z	1.5	Reliable	0.4
County AA	1.2	Somewhat Reliable	0.6
County BB	7.5	Reliable	1.0
County CC	3.5	Reliable	0.8
County DD	3.7	Reliable	0.5
County EE	2.5	Somewhat Reliable	0.8
County FF	0.4	Not Very Reliable	0.4
County GG	3.3	Somewhat Reliable	1.0
County HH	2.3	Somewhat Reliable	0.7
County II	0.8	Somewhat Reliable	0.3
County JJ	1.2	Not Very Reliable	1.0
County KK	0.7	Somewhat Reliable	0.3
County LL	1.1	Somewhat Reliable	0.3
County MM	4.2	Somewhat Reliable	1.1
County NN	0.2	Not Very Reliable	0.3

Source: U.S. Census Bureau, 2008 American Community Survey

Figure 52: Geographical Comparison Table with Legend Above Table and Red First in the Legend (E3)



Source: U.S. Census Bureau, 2008 American Community Survey

Table ID: GCT0804
 Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation (Excluding Taxicab) in Anystate, USA
 Universe: Workers 16 years and over in Anystate, USA
 2008 American Community Survey 1-Year Estimates

Reliability Legend

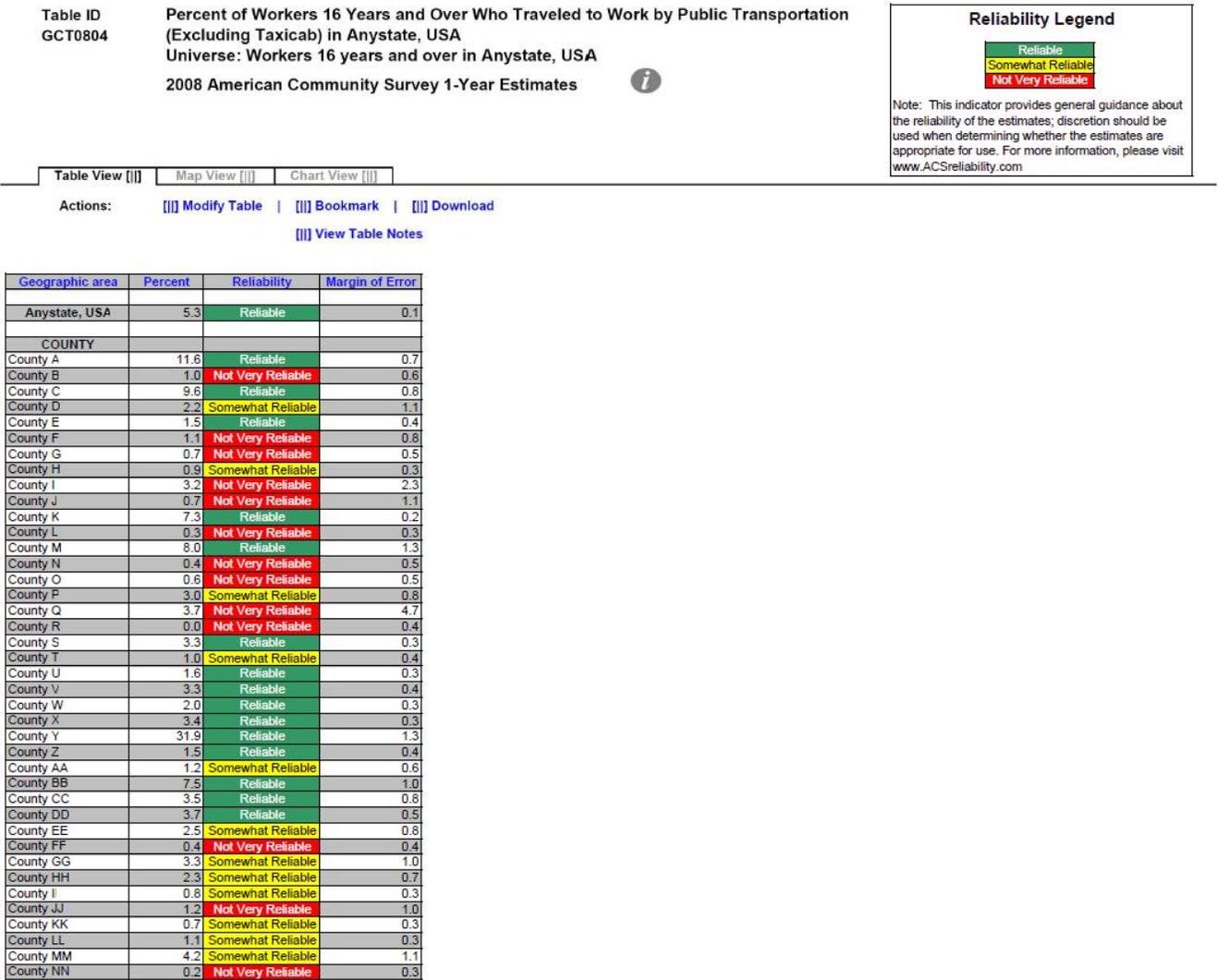
Not Very Reliable
 Somewhat Reliable
 Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View | Map View | Chart View

Actions: | Modify Table | Bookmark | Download | View Table Notes

Figure 53: Geographical Comparison Table with Legend Above Table and Green First in the Legend (E4)



Source: U.S. Census Bureau, 2008 American Community Survey

Table ID: GCT0804
 Percent of Workers 16 Years and Over Who Traveled to Work by Public Transportation (Excluding Taxicab) in Anystate, USA
 Universe: Workers 16 years and over in Anystate, USA
 2008 American Community Survey 1-Year Estimates

Reliability Legend

Reliable
 Somewhat Reliable
 Not Very Reliable

Note: This indicator provides general guidance about the reliability of the estimates; discretion should be used when determining whether the estimates are appropriate for use. For more information, please visit www.ACSreliability.com

Table View [] | Map View [] | Chart View []

Actions: [] Modify Table | [] Bookmark | [] Download

[] View Table Notes

8 Appendix B: Tasks for All Tables

The tasks and their associated answers are included below.

Figure 54: Tasks Part 1

A – Data Profiles tasks

1. What is the first thing that you noticed about this table?
[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 -
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. A company offering cleaning services to senior citizens living alone is looking for potential customers. They want to know the estimate of householders ages 65 or older living alone in Anytown, USA. What would you tell them?

ANSWER:
2,266, Somewhat Reliable, +/- 641, or 9.3% (+/- 2.5%) somewhat reliable

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: easy

3. The Irish Embassy wants to know how many people in Anytown, USA might be interested in an open-house. What is the estimate and percentage estimate of people of Irish ancestry in Anytown, USA? Would you use either of these estimates?

Figure 55: Tasks Part 2

ANSWER:

12,714, Reliable, +/- 2,912

19.6%, Reliable, +/- 4.5%

Yes, Estimates are both Reliable

Difficulty: easy

4. A tutoring provider would like to teach courses that prepare students for standardized tests in Anytown, USA. They want to know the estimate and percentage estimate for school enrollment for high school (grades 9-12). What would you tell them?

ANSWER: 4,100, Reliable, +/- 1,086,

30.1%, Somewhat Reliable, +/- 7.1%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: Under "School Enrollment" heading, not "Educational Attainment", the reliability is different for the estimate and the percent.

DIFFICULTY: medium

5. The Danish Embassy is reporting that they have more people of Danish decent in Anytown than those of Portuguese decent. Is this true?

ANSWER: Danish, 1,700 +/- 1,689, Not Very Reliable, 2.6% +/- 2.6%, Not very reliable

Portuguese, 1,543, +/- 802, Not very Reliable, 2.4% +/- 1.2, Not Very reliable

No, not true. Estimates are not significantly different, and both estimates are not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: U.S. Citizenship status estimates and percents have different reliabilities.

DIFFICULTY: hard

6. GetYourDegree Community College is interested in opening a branch in Anytown, USA; however, their corporate mandate stipulates that there must be at least 14,000 students who have completed some college, but did not get their degree. You are responsible for reporting whether Anytown, USA, has met the mandate. What is your recommendation?

ANSWER: 10,562, Reliable, +/- 1,731

Do not open branch. With the MOE, the estimate could be as high as 12,293, but does not approach 14,000.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

Figure 56: Tasks Part 3

7. The mayor of Anytown, USA wants to know if the town should continue to fund a welcome wagon program for people who move from other states. If at least 5.0% percent of the population in Anytown, USA lived in a different state 1 year ago, he will keep the program. Based on the data, what would you tell him?

ANSWER: 2.9%, Not Very Reliable, +/-1.8%
Do not fund program. With MOE, estimate is at most 4.7%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

8. You are a demographer working for a local university conducting research about the population's heritage. What do you think about the Ancestry data in this table?

ANSWER: Most of the estimates are not very reliable, may look for another data source.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

9. In 2007, the percent of people who were separated in Anytown, USA was 1.9% (+/- .3%) and that estimate was considered "reliable". The Bureau for Family Affairs is now reporting that, based on 2008 ACS data, the percentage of people who were separated increased from 2007. Do you agree?

ANSWER: Disagree
2008 estimate is 2.9% (+/-2.7) – not very reliable, which is not significantly different than 1.9%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: hard

Figure 57: Tasks Part 4

B – Selected Pop Profiles tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. The National Organization for Young Adults is considering opening a chapter in Anytown, USA. They first want to know what the estimate for the number of people in Anytown that are ages 18 to 34. What would you tell them?

ANSWER: 569,916, Reliable, +/- 743

DIFFICULTY: Easy

3. The National Education Association wants to know what percentage of those who reported two or more races have a bachelor's degree? What would you tell the National Education Association?

ANSWER: 10.7%, Somewhat Reliable, +/- 3.1%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

NOTES: Under Educational Attainment

Figure 58: Tasks Part 5

4. A green company wants to know the percentage of households, where the householder reported having two or more races, which use a fuel other than gas or electricity to heat their home. What is the percentage?

ANSWER: 3.8%, Not Very Reliable, +/- 2.9%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

5. Your boss wants to know whether the percent of nonfamily households is higher for the total population or the population of housing units where the householder reported two or more races. What would you tell her?

ANSWERS: Total Population, 26.9%, Reliable, +/- 0.7%

Two or more races, 24.9%, Somewhat Reliable, +/- 6.8%

Using only the point estimates, Total population appears higher; but the estimates are not significantly different, and one may be less reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: Under Households by Type

DIFFICULTY: Hard

6. Find the civilian non-institutionalized population of 18 to 64 years who have a disability for both the total population and for the two or more race subcategory. If you were asked if the two estimates were different, what would you say?

ANSWER: Total Pop: 8.8%, Reliable, +/- 0.5%

Two or More Races: 8.7%, Somewhat Reliable, +/- 2.5%

They are not significantly different, Two or more races is less reliable than total pop.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

7. The mayor of Anytown, USA wants to know if the town should continue to fund a public telephone line for households with no telephone service available. If at least 2.0% percent of the population in Anytown doesn't have telephone service, she will keep the program. Based on the data, what would you tell her?

ANSWER: 1.0%, Somewhat Reliable, +/-0.3%

Discontinue the program, because the percentage does not approach 2.0%.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

Figure 59: Tasks Part 6

8. Anytown, USA will be designated as a high income earning town if the median household income is at least \$55,000 in 2008. Will they get this designation?

ANSWER: Yes, 57,792, Reliable, +/- 1,233
Yes, the estimate and the range are above 55,000.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

9. Part of a new job creation program was designed to see how jobs were spread out across the population. What is percentage of the civilian employed population of two or more races who work in Farming, fishing, and forestry occupations?

ANSWER: 0.0%, Not Very Reliable, +/- 0.9%
No people were reported to work in these occupations, but the estimate may be inaccurate since it is not very reliable

DIFFICULTY: Hard

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: 0 estimate

Figure 60: Tasks Part 7

C – Subject Tables tasks

Note that “industries” are rows, “occupations” are columns.

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

(Starting out respondents with easier tasks because this is a large table)

2. What is the total number of people working in the Construction industry?

ANSWER: 5,334, Reliable, +/- 1,127

DIFFICULTY: easy

3. A technology association wants to know the amount of people who works in “Information” industries, with a goal of 1,800. Did they meet their goal?

ANSWER: 900, Not Very Reliable, +/- 595,

No. 1,800 is not within the MOE range of the estimate, but the estimate may be inaccurate since it is not very reliable

DIFFICULTY: Medium

Figure 61: Tasks Part 8

4. Of those working in the “Arts, entertainment, and recreation, and accommodation and food services” industry, what percent are in service occupations?

ANSWER: 64.7%, Reliable, +/- 10.6%

DIFFICULTY: easy

5. Of those working in the Construction industry, how many are in Farming, fishing, and forestry occupations?

ANSWER: 0.0%, Not Very Reliable, +/-3.7%

No one is reported to work in that industry and occupation combination, but the estimate may be inaccurate since it is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

NOTES: 0 estimate

DIFFICULTY: hard

6. A company wants to know if at least 3,000 total people are working in public administration in Anytown, USA. What would you tell them?

ANSWER: 3,623, Reliable, +/- 807.

Yes. The point estimate is over 3,000 and the estimate is Reliable, so over 3,000 people work in public administration.

DIFFICULTY: Medium

7. Your boss wants to know which industry has more people in “Sales and office occupations”: “Educational services, and health care and social assistance” or “Transportation and warehousing, and utilities”? What would you tell him?

ANSWER: Educational, 16.2%, Somewhat Reliable, +/- 5.4%

Transportation, 16.5%, Not Very Reliable, +/- 10.9%

They are not significantly different, “Educational” is less reliable than total pop, and the estimate may be inaccurate.

DIFFICULTY: Hard

8. You are writing a grant proposal to secure funding for a research project focused on increasing the workforce in the “educational services, and health care, and social assistance” industry. You need the percent of people in this industry working in “service occupations”. What would you say in your grant proposal?

ANSWER: 26.4%, +/- 7.0%, somewhat reliable

Figure 62: Tasks Part 9

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Medium

Figure 63: Tasks Part 10

D – Detailed Tables tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.]

- Probe if indicator is mentioned: (if color) What do the colors represent? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the column labeled reliability in the tables? (if color) What do the colors represent? ? (if no color) what do the words represent?
 - IF quality/reliability: How is reliability measured here or what measure is used to determine the level of reliability?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. There is consideration for expanding an outreach program if there are at least 30,000 Native Hawaiian and Other Pacific Islanders in Cherry County. What is your recommendation to the program directors?

ANSWER: 27,049, Reliable, +/- 2,239
Not enough to expand the program.

DIFFICULTY: Medium

3. Your boss wants to know the estimate of the number of people of two or more races in Apple County. What would you tell him?

ANSWER: 3,749, Somewhat Reliable, +/- 1,285

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

Figure 64: Tasks Part 11

4. For a grant proposal, you need an estimate of the number of people of four or more races in Birch County. What would you say in your proposal?

ANSWER: 0, Not Very Reliable, +/- 294

No one reported to have four or more races, but the estimate may be inaccurate since it is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

NOTES: 0 estimate

5. The Mayor of Birch County wants to know the estimate of the number of people of one race in Birch County. What would you tell the mayor?

ANSWER: 62,279, Reliable, +/- 830

DIFFICULTY: Easy

6. You are a reporter for a newspaper, and are writing an article about the amount of people who report one race as "some other race." Specifically for Birch County, you want to know if the estimate for the "some other race" group for those reporting only one race is higher than the estimate of American Indian and Alaska Native group. What is your finding?

ANSWER: American Indian and Alaska Native, 1,817, Somewhat Reliable, +/- 745

Some other group, 2,013, Not Very Reliable, +/- 1,414

Yes the group reporting "some other race" is higher than the group reporting American Indian and Alaska Native.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

7. Looking at the estimates of the Black or African American subpopulation in Apple County and Birch County, which estimate is more accurate?

ANSWER: Apple, 11,519, Reliable, +/- 704

Birch, 1,437, Reliable, +/- 248

Based on reliability, they have the same accuracy. Apple County has a smaller relative MOE, it could be considered more accurate.

DIFFICULTY: Medium

8. A local newspaper reports that Apple County has more people reported as having three or more races than Birch County. Do you agree?

Figure 65: Tasks Part 12

ANSWER: 451 in Apple county (+/-523), Not very reliable
0 in Birch County (+/-294), not very reliable.
No, Not statistically different, and both estimates are not very reliable.

DIFFICULTY: Hard

Figure 66: Tasks Part 13

E – Geographic Comparison Table tasks

1. What is the first thing that you noticed about this table?

[First-round results showed that color-coded column was noticed before the legend.] make changes noted above.

- Probe if indicator is mentioned: What do the colors represent?
 - IF quality/reliability: How is quality measured here or what measure is used to determine the level of quality?
 - **What is the coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**
- Probe if indicator is not mentioned:
 - Did you notice the colors in the tables? What do the colors represent?
 - IF quality: How is quality measured here or what measure is used to determine the level of quality?
 - **What is a coefficient of variation?**
 - **Is a higher or lower coefficient of variation associated with better data quality/reliability?**
 - **How is the coefficient of variation different from a Margin of Error?**
 - **Do you have a preference?**
 - **If so, which would you prefer to use?**

Task 1 Difficulty: Easy (report features of table noticed at first glance).

2. a. The Anystate government will be publishing a report in which it highlights various counties and the degree to which they use public transportation to get to work. They only want to include counties where they are confident that the data would not likely be contested.

Which counties would you use?

ANSWER: Any counties of "Reliable" (or "somewhat reliable")

DIFFICULTY: easy

b. Anystate, USA wants to warn the county planners in counties where the data on public transportation use may not be very accurate.

Which counties do you think Anystate should warn?

ANSWER: Any counties of "Not Very Reliable"

DIFFICULTY: easy

Figure 67: Tasks Part 14

3. Counties D and E, which share a border, would like to tell the local newspaper about the success of their combined public transportation system. They want to calculate the total percent of people using public transportation to get to work by adding the percent in each county together. Would you recommend they do this?

ANSWER: County D has 2.2%, Somewhat Reliable, and +/- 1.1%
County E has 1.5%, Reliable, and 0.4%
OK to do this, but want to mention differences in reliability.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: medium

4. Counties Q and U used two different approaches towards their public transportation systems. County Q would like to say that they had a higher percentage that traveled to work using public transportation compared to County U. Is this true?

ANSWER: County Q, 3.7%, Not Very Reliable, +/- 4.7%
County U, 1.6%, Reliable, +/- 0.3%
No, Not statistically different, and County Q estimate is not very reliable.

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: hard

5. County Y is a very urbanized area. The county is eligible for a green initiative award if at least 30% of its citizens used public transportation to get to work. Should they get the award?

ANSWER: County Y, 31.9%, Reliable, 1.3%
Yes, they should get the award.

DIFFICULTY: Medium

6. County A wants to say that over 10% of people used public transportation to travel to work. Is this true?

ANSWER: 11.6%, Reliable, +/- 0.7%
Yes, over 10%

DIFFICULTY: Medium

7. In an effort to raise awareness of the county's under-used bus system, County R says that absolutely no one in the county uses public transportation to travel to work. Is this true?

ANSWER: No, not necessarily, 0.0%, +/- 0.4%, not very reliable

Figure 68: Tasks Part 15

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Hard

8. What is the percentage of people in County FF who use public transportation to travel to work?

ANSWER 0.4%, Not Very Reliable, +/-0.4%

(if reliability not mentioned, probe about whether they would report reliability or use that number)

DIFFICULTY: Easy

9 Appendix C: General Protocol

Figure 69: Protocol Part 1

General Introduction

Thank you for your time today. My name is <Name>, and I will be working with you today. We will be evaluating a new design of the new ACS data table format by having you work on several tasks. Your experience with the table is an essential part of our work. We are going to use your comments to give feedback to the developers of the table. Your comments and thoughts may help the developers make changes to improve the table. I did not create the site, so please do not feel like you have to hold back on your thoughts to be polite. Please share both your positive and negative reactions to the site. And remember, we are not evaluating you or your skills, but rather you are helping us see how well the table works.

First, I would like to ask you to read and sign this consent form. It explains the purpose of the session and informs you that we would like to videotape the session, with your permission. Only those of us connected with the project will review the tape. We will use it mainly as a memory aid. We are going to do some eye tracking as well as have you work on some task scenarios that I will give you. There is also a short background survey that we would like you to complete. If you don't want to answer any of the questions, please feel free to skip them.

[Hand consent form and background survey; give time to read and sign; sign own name and date if you have not already done so.]

During the session, I will ask you to work on several tasks. I would like you to tell me your impressions and thoughts about the Tables as you work through the tasks. I would like you to "think aloud" and talk to me about your decisions. So if you expect something to happen, tell me what you expect. If you expect to see some piece of information, tell me about what you expect. This means that as you work on a task, talk to me about what you are doing, what you are going to do, and why. Talk to me about why you clicked on a link or where you expect the link to take you.

Finally, during the session, I will remind you to talk to me if you get quiet, not to interrupt your thought process simply to remind you to talk to me. Please focus on verbalizing what you are thinking and expecting to happen. We are interested in the reasoning behind your actions, not just what you are doing.

I ask that each time you start a task, please read the task out loud, and once you have found the information you are looking for please state your answer aloud. For example, say, "My answer is ---" or "This is my final answer." After each task, I will save the eye-tracking data and close the table. I will return you to the table and let you know when you can begin the next task.

Please remember to begin each task by reading the task question aloud as well as stating the final answer. As you work, please remember think aloud.

[Pull up a Web site in Firefox, such as www.wtop.com or www.espn.com, etc.]

Before we get started, let's practice thinking aloud. Say that you had a minute or two to kill and came to this Web site. Describe your thought process as you navigate through a Web site looking for something interesting to read

Figure 70: Protocol Part 2

Now I am going to calibrate your eyes for the eye-tracking. I am going to have you position yourself in front of the screen so that you can see your nose in the reflection at the bottom of the monitor. To calibrate your eyes, please follow the [red/blue] dot across the screen with your eyes.

[Do Calibration]

Now that we have your eyes calibrated, we are ready to begin.

[If Calibration Fails]

It seems that we are having some technical difficulties with our equipment and need to continue without the eye tracker.

[Continue with Test]

I am going to leave you here in the test room, but we will still be able to communicate through a series of microphones and speakers. I will let you know when to begin the first task by reading it aloud from the folder near you. Do you have any questions?

[After the last task]

I will come back to the testing room to discuss your experience with the ACS data tables with you.

[Have them complete the Satisfaction and Task Difficulty Forms, then walk through the Debriefing Questions]

10 Appendix D: Consent Form

Figure 71: Consent Form



Consent Form
Usability Study of the ACS Data Tables

Each year the Census Bureau conducts many different usability evaluations. For example, the Census Bureau routinely tests the wording, layout and behavior of products, such as Web sites and online surveys, in order to obtain the best information possible from respondents.

You have volunteered to take part in a study to improve the usability of the ACS data tables. In order to have a complete record of your comments, your usability session will be videotaped. We plan to use the tapes to improve the design of the product. Staff directly involved in the usable design research project will have access to the tapes. Your participation is voluntary and your answers will remain strictly confidential.

This usability study is being conducted under the authority of Title 13 USC. The OMB control number for this study is 0607-0725. This valid approval number legally certifies this information collection.

I have volunteered to participate in this Census Bureau usability study, and I give permission for my tapes to be used for the purposes stated above.

Participant's Name: _____

Participant's Signature: _____ Date: _____

Researcher's Name: _____

Researcher's Signature: _____ Date: _____

11 Appendix E: Questionnaire on Statistical Experience, Computer Use and Internet Experience

Figure 72: Questionnaire on Statistical Experience, Computer Use and Internet Experience Part 1

Questionnaire on Statistical Background, Computer Use, Internet Experience

YOUR ANSWERS ARE CONFIDENTIAL

Demographics

1. What is your age? _____

2. Are you male or female? _____

3. What is your level of education?

- grade school
- some high school
- high school degree
- some college
- 2-year college degree
- 4-year college degree
- some postgraduate study (e.g., M.A., M.B.A., J.D., Ph.D., M.D., programs)
- postgraduate degree (e.g., M.A., M.B.A., J.D., Ph.D., M.D.)

4. How long have you been using ACS data products?

5. How often do you use ACS data products?

- Daily
- Weekly
- Monthly
- Less than once a month
- Do not use

6. For what purpose do you usually use ACS data products? (e.g., to write reports, news articles, make decisions, etc.)

7. What statistics courses have you completed?

- Advanced graduate-level statistics
- Advanced undergraduate/beginning level graduate statistics courses only
- Introductory statistics courses only
- No statistics courses completed

8. Rate your level of expertise with statistics.

- Novice (Just beginning to use statistics or rarely use them)
- Intermediate (Moderate experience with statistics)
- Expert (A great deal of experience with and/or frequent use of statistics)

Figure 73: Questionnaire on Statistical Experience, Computer Use and Internet Experience
Part 2

Computer Experience

1. Do you use a computer at home, at work, or both?

(Check all that apply.)

- Home
- Work
- Somewhere else, such as school, library, etc.

2. If you have a computer at home,

a. What kind of modem do you use at home?

- Dial-up
- Cable
- DSL
- Wireless (Wi-Fi)
- Other _____
- Don't know _____

b. Which browser do you typically use at home? Please indicate the version if you can recall it.

- Firefox
- Internet Explorer
- Netscape
- Other _____
- Don't know _____

c. What operating system does your home computer run in?

- MAC OS
- Windows 95
- Windows 2000
- Windows XP
- Windows Vista
- Other _____
- Don't know _____

3. On average, about how many hours do you spend on the Internet per day?

- 0 hours
- 1-3 hours
- 4-6 hours
- 7 or more hours

4. Please rate your overall experience with the following:

Circle one number.

	No experience	Very experienced
Computers	1 2 3 4 5 6 7 8 9	
Internet	1 2 4 5 5 6 7 8 9	

12 Appendix F: Satisfaction Questionnaire (QUIS)

Figure 74: Satisfaction Questionnaire

Questionnaire for User Interaction Satisfaction (QUIS)

Please circle the numbers that most appropriately reflect your impressions about using the new ACS data tables.

1. Overall reaction to the new ACS data tables:	terrible 1 2 3 4 5 6 7 8 9	wonderful 7 8 9	not applicable
2. Definition of reliability:	confusing 1 2 3 4 5 6 7 8 9	clear 7 8 9	not applicable
3. Use of terminology throughout the tables:	inconsistent 1 2 3 4 5 6 7 8 9	consistent 7 8 9	not applicable
4. Information displayed in the tables:	inadequate 1 2 3 4 5 6 7 8 9	adequate 7 8 9	not applicable
5. Arrangement of information in the tables:	illogical 1 2 3 4 5 6 7 8 9	logical 7 8 9	not applicable
6. Tasks can be performed in a straight-forward manner:	never 1 2 3 4 5 6 7 8 9	always 7 8 9	not applicable
7. Reliability indicator for the tables:	confusing 1 2 3 4 5 6 7 8 9	clear 7 8 9	not applicable
8. Overall experience of finding information:	difficult 1 2 3 4 5 6 7 8 9	easy 7 8 9	not applicable
9. Additional Comments:			

13 Appendix G: Task Difficulty Survey

The task difficulty survey was tailored for each type of table. Only the task difficulty survey for the Data Profiles Tables are shown here to conserve space.

Figure 75: Data Profiles Task Difficulty Part 1

Task Difficulty Rating Questionnaire

On a scale of 1-10 with 1 being extremely easy and 10 being extremely difficult, please rate the difficulty of each task.

A. What is the first thing that you noticed about this table?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

1. A company offering cleaning services to senior citizens living alone is looking for potential customers. They want to know the estimate of householders ages 65 or older living alone in Anytown, USA. What would you tell them?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

2. The Irish Embassy wants to know how many people in Anytown, USA might be interested in an open-house. What is the estimate and percentage estimate of people of Irish ancestry in Anytown, USA? Would you use either of these estimates?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

3. A tutoring provider would like to teach courses that prepare students for standardized tests in Anytown, USA. They want to know the estimate and percentage estimate for school enrollment for high school (grades 9-12). What would you tell them?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

4. The Danish Embassy is reporting that they have more people of Danish decent in Anytown than those of Portuguese decent. Is this true?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

Figure 76: Data Profiles Task Difficulty Part 2

5. GetYourDegree Community College is interested in opening a branch in Anytown, USA; however, their corporate mandate stipulates that there must be at least 14,000 students who have completed some college, but did not get their degree. You are responsible for reporting whether Anytown, USA, has met the mandate. What is your recommendation?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

6. The mayor of Anytown, USA wants to know if the town should continue to fund a welcome wagon program for people who move from other states. If at least 5.0% percent of the population in Anytown, USA lived in a different state 1 year ago, he will keep the program. Based on the data, what would you tell him?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

7. You are a demographer working for a local university conducting research about the population's heritage. What do you think about the Ancestry data in this table?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

8. In 2007, the percent of people who were separated in Anytown, USA was 1.9% (+/- .3%) and that estimate was considered "reliable". The Bureau for Family Affairs is now reporting that, based on 2008 ACS data, the percentage of people who were separated increased from 2007. Do you agree?

Extremely Easy											Extremely Difficult
	1	2	3	4	5	6	7	8	9	10	

14 Appendix H: Debriefing Questions

Figure 77: Debriefing Questions

Data Reliability Indicator Round 3 Debriefing Questions

1. Can you walk me through your thinking on why you marked (a particular QUIS item) especially low/high? (Do this for several low/high QUIS ratings; also, do this for easy/difficult ratings).
2. Do you think the new data reliability indicator helped you to find information quickly? Did you think the color-coding made it take longer or seem more difficult to find information?

FOR VERSIONS WITH THE LEGEND BEHIND THE LINK ONLY: *If they did not click on the "View table notes" link to open the legend: At any point during the testing, did you look for a legend to explain the data reliability indicator?*

Click on the link to bring up the legend. There is a legend located in the table notes. Do you think this legend would have been useful for completing the tasks or not?

Open the version of the same table with the legend above the table. We are also testing another version of the table you saw that has the indicator legend located above the table. Which version do you prefer – the one that you used or this one? Which do you think would be easier to use and why?

FOR VERSIONS WITHOUT COLOR ONLY: *Open the color-coded version of the same table.* We are also testing another version of the table you saw that has a color-coded data reliability indicator. Which version would you prefer to use? Which do you think would be easier to use and why?

3. Because of the color-coding used in these tables, they may appear differently to different people. In order to examine this issue, we are asking participants whether they are color-blind or not. Are you color-blind?

4. Is there anything else about the tables that we have not discussed that you would like to mention?

15 Appendix I: Satisfaction Questionnaire Comments, Usability Issues with the ACS Tables, and Participant Comments

Comments about the ACS Data Tables from QUIS Satisfaction Survey

Data Profiles

- A1: Typeface too small, need down arrow (scroll arrow) on the right.
- A2: It would be useful to have the column names frozen so they still appear on the screen when you scroll down.
- A3: Too much data on one table, font size too small.
- A4: The tables are very small for data recognition , they should be enlarged to make the data easier to see. I do like the fact that each line is an alternating gray white, that makes it easier to decipher each line of data.
- A4: Get rid of tables all together. Use search options. Google seems to be able to do this, why can't the government?
- A4: Grey/White is boring - blue lines or color shift when shift (color bar) when shift categories [note: participant meant the bolded row headers].

Selected Population Profiles

- B4: Print on screen was very small. Persons with not so good visual acuity may have difficulty locating column data. Otherwise, I would use the ACS Tables for future work/research.

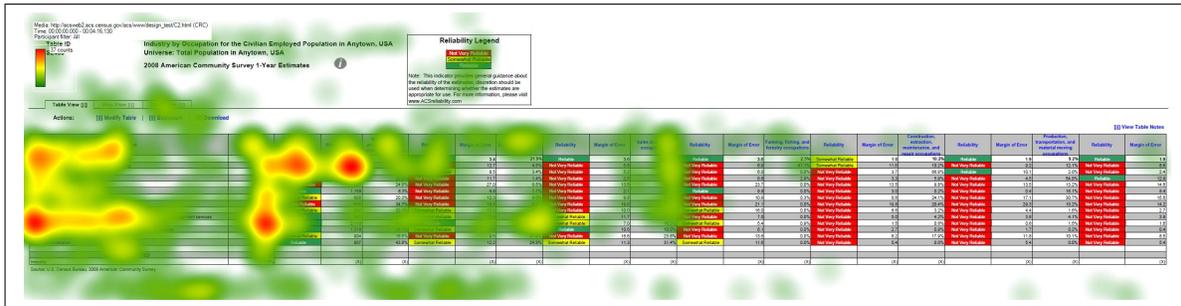
Subject Tables

- C1: Should include an index or key that describes what the column headings mean, particularly those w/ the same name and different information (e.g., margin of error being presented in seemingly different ways). *Note: The legend was behind the link for this participant.*

Detailed Tables

- D1: It takes more than a few moments to become acclimated to the layout of the information to ascertain what is where. Otherwise it was an okay read.
- D2: Clearly, a learning curve will occur and help.

Figure 79: Heat Map of Subject Table with the Legend Above the Table (C2)



column for this category. Participant 4 commented halfway through the testing session, “Oh I just saw it, the two or more races column.” Participant 5 said, “So now I’m reading over the table heading again, selected populations profile in Anytown USA, the total population of two or more races. I’m finding that confusing because the table has the total population which presumably refers to the total population of Anytown, and then in the fourth column two or more races.” Participant 6 did not see the separate column until the last task (Task 8) and then said, “I see two or more races here now at the top.”

Comments are paraphrased unless they appear in quotation marks.

15.1 Dry Run

The short descriptions used in this section refer to the tasks that can be found in Appendix B.

Get Your Degree: “See, I have to keep scrolling up this column ’cause I don’t know what this is. Margin of error, percent. There’s two margin of errors, and reliability, I have no clue.”

Irish embassy question: “I think this is the reliability column.”

“I’m trying to figure out why there’s two reliability and margin of error columns. I don’t know if I’m looking at the right thing.”

Danish embassy question: “I don’t know what kind of scale this is on. Not reliable somewhat reliable, whatever.”

What do you think about the ancestry data: “I’m seeing a lot of not very reliable notes right here, so I’m thinking that the information located here isn’t really reliable. I would probably be reluctant to accept the estimates that are given here.”

Comments: *Do you think it's an obvious place where people would look for a legend under table notes?* “No I would've clicked here [on margin of error column header].”

“These [row headers] aren't really distinct”

“If I scroll down here, I can't remember what the column headings were, so that was annoying, 'cause then I have to scroll back up and then figure out where I was at before and come back down here. So it would've been nice if the column headings were still there.”

“And then I can't figure out how it's organized [talking about indentations]. I see total households, and then it's like indented, and I've been trying to figure out this goes with this, and does this go under this, and these both go underneath here? I don't know, the organization is really not that clear, as far as the subcategories. And then there's a space here. I guess this is still under households by type, why is there a blank line,? Why are these separated?”

“I didn't know what kind of scale it [reliability] was on.”

“These headings don't really pop out, so I think just making these distinct, grouping them together, some kind of bolded box around it. I wasn't able to easily distinguish between different categories listed here.”

15.2 Participant 1 - A1

“It's a little blurry 'cause my eyes aren't the best.”

Irish Ancestry question: “The column labels are gone so I need to scroll back up to see what they are.”

Demographer at a local university: “For the most part it doesn't look very reliable, in terms of, because of the red um boxes.”

“Though I guess what I'm thinking is that I would like to know a little bit more about how they came up with the reliability statistics, just to confirm that it would be in a similar way I would make that assessment.”

Danish embassy question: “I would probably visit that ACS Reliability.com website to learn more about it [reliability].”

Mayor question: “The estimate is not very reliable, yeah that red box is really getting me.”

Comments: “There isn’t a definition of how they constructed it, and so my confidence in my own ability to interpret data um makes me think maybe they include something else in their reliability measure that just isn’t standard affair.”

15.3 Participant 2-A3

“I don’t know how I feel about it, as someone who understand generally statistics, it’s nice to have something that’s color coded, so I don’t have to think about this. But it’s a simple mathematic formula, I guess your doing standard deviation / mean.”

15.4 Participant 3-A4

“ I don’t know exactly what that MOE is, I’m assuming +/- 641.”

“And that the MOE is 2.5, now I don’t know if that’s a percentage, I assume that’s a percentage, could be + or -”

“Probably, I think that I would be more inclined to tell them if the data looked to be not very or not reliable. Somewhat reliable to reliable I would probably mention it in passing. I trust what’s shown on the computers, so I’m probably a bit over-trusting when it comes to data.”

“I think a lot of the top tables need to be carried down with it all the way to the bottom of the table so you don’t have to scroll back and forth to see what your data is.”

“The table is going make me go cross-eyed eventually, it’s very small.”

“In terms of reliability it seems there’s a lot of unreliability data, but it’s useless.”

“Unreliable stuff makes life more difficult.”

“Ooh I like that better, mostly because it’s easier to read.” [when shown a color table]

“And it shows red, not very reliable it makes it a lot faster.” [when talking about the ancestry Danish vs. Portuguese question]..

15.5 Participant 4-B1

“The font size is really small.”

“I see the colors.”

Fuel, Two or More Races: “Oh I just saw it, the two or more races column.”

“The way it’s pulled out, the two or more races column, you wouldn’t think it would be in that column, because it’s also a row. I wouldn’t think to find it in a column.”

P4, Task 4. “What differs reliable and somewhat reliable? Scale needed on the bottom.”

Boss wants to know: “Yeah I would say it’s that the data is much more reliable, well I don’t know if it’s much more reliable, but the data is considered reliable. And it’s only somewhat reliable. Still now that I think about it , it seems really vague, like what does that mean? Somewhat reliable? What makes it reliable versus somewhat reliable? It would nice if there was some type of range, to give me an idea what that really means. A scale or something, at the bottom. I can’t really have much confidence in saying something is somewhat reliable or not very reliable in this case.”

P4, Task 5. Row with percents is confusing with numbers.

Reliability table is confusing.

Disability, two or more races: “Ok, so it’s under disability status.” [thought it was somewhere else]

“The list what the disability, it makes me think that, the line above it is not the disability, but it’s the same number, the one below it is just a percent of the population. That’s confusing.”

“And the data is reliable for this case, but I look at the percent and the percent for two or more races is somewhat reliable, isn’t it just the calculation from the base of the population? So that’s confusing.”

“The reliability column is confusing.”

P4, Task 7. "I would want to click on something to read why is this reliable."

High Income: "If I could click on something, just to read why, why is this reliable?"

Comments:

"I did, I also tried to click on reliability. 'Cause sometimes, especially when it's blue I thought that I would be able to sort based on that. Um, and I thought that maybe there would be a pop up saying 'reliability is this.'

"Maybe It's just the title, view table notes. Maybe if it were like view table definitions or something like that. That would make me think that, ok, this means they are explaining something on the table. A table note, makes me think that oh it's just something like I can save my notes."

"I rated it as a 5 because it's usable, but honestly I don't think my I don't think this would've been any different than opening a book."

"This use hasn't been enhanced by the Web at all."

"It was hard to find [the definition of reliability]."

"Make the headings stand out more. I know it's in all caps but some starts to blur after a while. I mean it's not consistent, sometimes its gray."

"Can't tell how reliability is measured."

Don't know what they base that on. Recommends having a general sentence about statistical reliability followed by more detailed information for statistics experts.

Novices may not care, but understand what reliable means in a general sense if next to a statistical cue.

Somewhat reliable is too vague.

15.6 Participant 5-B2

P5, Task 0: “The font on the table is really small.”

“The second thing I notice are the reliability indicators and the different colors that are highlighted. And I’m not sure if I like that or not. I guess I do find that to be helpful.”

“Just because it jumps out at you right at the beginning, and so I don’t see the data first. It’s like I don’t have to look at the data to determine myself if it’s reliable. Like someone else is just telling me that. Which is good for the average user I guess. But the colors did jump out at me.”

“Well now thinking about it, they seem to correlate with streetlights, green being go ahead, it’s very positive. Yellow is somewhat mediocre, and red is not at all good or stop. So I guess that makes intuitive sense to me.”

“It’s difficult to look at the table because it’s so long and the subject headings besides being capitalized aren’t really emphasized or highlighted in anyway so it’s hard to tell when your looking at a new piece of data. I think, for me it would be easier if the subject headings were highlighted in a different color. And if you can search within the table or a subject specifically.”

P5, Task 2: “This is where I would like to have a find search so I could immediate scroll to education, or be immediately be taken to it as opposed to having to scroll through the whole document.”

“And then now I’m looking next to reliable, it says this number is .6 and I think that’s the margin of error but again I would have to scroll all the way up to the top of the table to find that. Which I find to be rather annoying. Oh no see I gave you the wrong answer because I was looking at the 13 percent was the total population, so I actually need to be looking in the 4th column.”

“I would prefer to see on the table is the uh, column headings to scroll down the table as I scroll down the table so I don’t make that same kind of mistake again by reading the wrong column.”

P5, Task 3: Table title is misleading/confusing: Total population and 2 or more races.

“So now I’m reading over the table heading again, selected populations profile in Anytown USA, the total population of two or more races. I’m finding that confusing because the table has the total population which presumably refers to the total population of Anytown, and then in the fourth column two or more races.” *Note: P5 mixed up two or more reliability column with total population, as well as estimate with percent occasionally.*

Comments: “Font was too small, too much information on the table, had to scroll down so much.”

“I would want the subject headings ..*participant read column headers* scroll down with you or at least have them at the top of every subject, like sex and age so you remember what your looking at in each of the columns.”

“I wouldn’t have gone to view table notes to learn about reliability.”

“I think the reliability thing is important enough to have it as a separate thing. The casual observer probably doesn’t need to know +/- parentheses but they would want to know what the definition of reliability is or at least that would help them analyze the data.”

“So I guess I would expect to see it somewhere on the top, and I would prefer to have it not be something you would have to click on.”

“One thing I would like to see, just for usability purposes to be able to minimize some of these columns if you don’t need them or want to look at them.’

“Yeah, I mean I like It [reliability], but I didn’t know what it actually meant.”

“I guess they had a high enough response rate to know that it would be a consistent statistic.”

“But then again that’s why I think reliability should be defined just right on top as opposed to something you have to click on.”

“Not very reliable [indicator] is most helpful.”

15.7 Participant 6-B4

P6 had trouble finding two or more races column (kept referring to the two or more races row value which is 3.1 percent). As a result many of the participant’s responses are incorrect.

Task 8: “I see two or more races here now at the top.”

Colors are universal, “I love the colors, I’m a color person. I love it.”

Comments:

Had some difficulty understanding logic of the problem

Public should be able to use this table, color coding helps.

15.8 Participant 7-C1

P7, Task 0. *The two reliability columns confused the participant.* Labeled the same not sure what the difference is.

“The first thing I notice would be the color scheme, red, yellow, and green shaded boxes.”

“I would assume red is bad and green is good, and yellow is neutral. And by looking at it that’s somewhat right cause it says red is not very reliable so I assume the source of the data is not the best.”

“Although it is a little confusing that there’s two different columns for reliability that don’t have the same information. I guess one’s a percentage and one’s a...Actually I’m not sure what the difference is.”

Task 4. “So it’s kinda difficult with such a long with so many columns to keep track of, which row you want to focus on.”

P7, Task 6. *in reference to table width.* “...difficult to go back and forth here with the way this is setup.”

“The transportation data is not very reliable and the education data is somewhat reliable but it’s difficult to use it to make any determination about the answer they’re both pretty subjective, I don’t know the threshold between somewhat and not very or what that means in terms of numbers, especially when the two numbers are close together. Oh I guess I can saywell I guess that’s why, the transportation data has a higher margin of error, I guess that’s why it’s not very versus somewhat. But I’m still not exactly sure about what type of index or what those numbers mean in later columns for margin of error oppose to beginning where it seems to be a whole number.”

Comments: “I think the use of color is always good in terms of making things clear and helping people focus. So it quickly alerts you to I guess the type of info like how good the information is. I honestly looked at that before I even saw what the table was for.”

“This is the way I would expect this type of data to be displayed.”

“I guess.. it seems subjective, so if there were some of key or index that had even if it was a numeric range like things with a MOE of 0 to 5 are considered reliable, even though I don’t necessarily know what that means. But it would give it some sort of qualifying description,

it seems like anyone could've just drawn a line and say that's reliable and that's not reliable and I have no idea where that line is drawn or how or why."

"They seem to represent different things with the same column heading" (referring to headers like MOE, or reliability).

Perhaps adding an abbreviated description could add some clarification.

Explain columns like MOE.

"When looking at it without any other information I don't know what that means."

Recommended placing "reliable first because w/o color it doesn't make sense to people."

15.9 Participant 8-C2

P8, Task 0. Looking at areas that are highlighted, then subjects, then industry. Thinking about what this is telling me.

P8, Task 3. Did not realize that table scrolled horizontally.

P8, Task 6. Looked for way to modify it so she didn't have to keep scrolling. Tried "modify it" and other links.

15.10 Participant 9-B3

P9, Task 1, Would Control+F and look for 18-24.

P9, Task 3. After clicking on view table notes the P commented that there was no discussion of household or individuals.

Tried clicking on the 2 or more races column.

P9, Task 4. Mentioned having to scroll back up to find column.

P9, Task 5. “I lost track of my columns again” “I wonder if there’s a way to highlight the row” to find out where I am suppose to be.

Comments: Scrolling columns, width too much, heading disappears, too wide and too long.

Subheadings don’t jump out that much.

15.11 Participant 10-D1

P10, Task 0. Did not mention color/reliability.

Comments: Looked for legend, something to make sense.

15.12 Participant 11-D2

P11, Task 0. “Print is fairly small.”

P11, Task 4. “Trouble tracking rows across”.

P11, Task 5. “Would probably use the mouse to help me stay on a horizontal plane.”

15.13 Participant 12-E1

P12, Task 0: “The first thing that my eyes are drawn to is the coloring.” probe: what do you think the colors represented: “Just good data versus bad data or the strength of the information.”

“I was just thinking that um might be uh if it is suppose to represent the strength then maybe uh like a bar or uh a color code expressing intensity more linearly instead of just color coding.”

P12, Task 1: “I’m not looking at the MOE or the percent. I’m just letting the reliability column do the thinking for me.”

“Actually, now I...I’m just thinking through this, I actually don’t know if the percent column has to do with the reliability. But if it did I would take County A and County Y” Because I would make an arbitrary cut-off, like above 10 percent. But again I’m not sure what that percent column has to do with” (Don’t know what percent column has to do with reliability [participant seems to think percent is related to reliability, not the estimate.]

“Oh you know what, since the colors are so dramatic, I’m just realizing that I didn’t even read the title on this page which is pretty bad” [non verbal behavior: shaking head]

“I guess it just shows you jump to reading things that pop out.”

“I’m not sure I’d have that so colorful then um maybe it’s my.. just looking at the title.”

P12, Task 2: “I think that I would probably not recommend this but something that would be useful to see again would be um the strength represented as a percentage or something. So that I could um kind of see whether or not.”

“I think on this page it would be helpful to have a descriptive of the margin of error for um as a refresher for people who haven’t had statistics in a while.”

“I would not recommend because I don’t understand um how close um the somewhat reliable versus the reliable um are, in relation to one another.”

Comments:

“This could be the way I look at things, I was so distracted by like getting into this and looking at the red, and green, and yellow, and those being almost so obvious I actually didn’t even look at what the title was first thing.”

“I would probably need.. I think I put this in my notes, just a description of like almost what each of the columns mean, related to the entire ...”

“I don’t know why I did not [click on View Table Notes].. it’s like I thought about it but then I just thought oh they’re not clickable.”

“I don’t really see anywhere else that it says anything else about this [the reliability legend].”

“On all of them [tasks] I just find myself going percent, margin of error, not really understanding how they relate to reliable.”

15.14 Participant 13-E2

Task 0, “I’m a little confused as to what the reliability factor pertains to.” *Probe: What are you confused about?* “The reliability of what? The data itself? What being reliable as far as the percentages, are we looking at the margin of error, like what does the reliability factor

pertain to, that data is not very reliable based on what, or it's very reliable but what are we basing that on, the reliability factor?"

Task 2, "Looking at counties D and E on the table, county D indicates their data is somewhat reliable, and county E indicates their data is very reliable, based on these two factors I would recommend that they add the percentages together, because again the reliability factor for D, although it is somewhat reliable, I would be confident enough to know that average or that percentage does have, as the table indicates, a small margin of error."

Comments: "So reliable means to me that the data is very reliable, somewhat reliable there's a margin of error, and not very reliable means no that data's not very reliable at all."

"I thought it would've be useful to have a definition for the reliable, the not very reliable, and the somewhat reliable. It makes it a little bit difficult to understand if all the data is being pulled from the same source what makes.. or my assumption is all the data is being pulled from the same source, what makes one category more reliable than another."

"As I'm reading through this, by clicking on that link [view table notes], that still would not have given me a better understanding of what a reliability the reliability columns really refers to."

Probe: What would you expect to see define reliability? "I would expect um reliable to say, reliable means 100 percent of the data is consistent or factual. Somewhat reliable being 90 percent of the data 80 percent of the data is factual, and not very reliable so I would like to see some type of number associated with the ranges of reliability and not very reliable."

"I felt to me that the margin of error was a little bit confusing as far as how it related to let's say for example the reliability factor. So when I'm looking at one of the categories or one of the columns that specifically says that this is not very reliable, however there's a 50 percent margin of error, that doesn't really give me a good indication as to whether or not that data is indeed very reliable at all or there's that... there's a little bit of interpretation that could be made on that. So I don't really think the margin of error column is that useful to be honest with you."

"I think it all goes back to the reliability column, it's very difficult to determine whether or not this data is accurate, and if it's not accurate, the not very reliable column meaning what? So those percentages aren't accurate at all? So therefore, why are they even there? "

"And how are we differentiating between reliable and not very reliable, what is the source of that data?"

15.15 Participant 14-E3

P14, Task 0: “Um, I guess the reliability column because it’s really bright and sort of stands out.”

“I’m assuming this means um how reliable the estimates are, given the uh...I guess given the standard errors.”

P14, Task 6. “And it says that 0 percent travel to work by public transportation, but it also says that the estimate is not very reliable, so I guess I’m not sure um I guess you can’t really tell by the table without knowing why the estimate isn’t reliable, so that’s my final answer that I don’t know.”

Comments: “I noticed, I just wrote down I remember seeing that there was a reliability definition like up here somewhere, but I didn’t really use it, I guess it would’ve helped.”

Why do you think it didn’t stand out? “I don’t know, because I felt like that the focus was here [the columns] maybe if there was an asterisk next to the reliability column, maybe I’m just lazy. It just seems like it’s so far away, even the title seems disconnected.”

15.16 Participant 15-E4

P15, Task 0. Would go to website to learn more about reliability.

P15, Task 1A. Generally want reliable data, somewhat reliable data if more information was given.

P15, Task 2. Reliabilities are close enough to include together.

P15, Task 3. *The participant seemed to equate MOE with reliability.* “MOE is very small so it’s very reliable.” (The participant also went out of bounds for this question, mentioning that the two counties could be using two different forms of public transportation).

Note: For Task 4 and Task 5, the participant subtracted the estimate from the MOE to confirm it met the requirement for the answer, despite the estimate being reliable.

Comment: Dunno how confident because there’s no info on what reliability means

15.17 Participant 16-A2

P16, Task 0. It’s detailed

P16, Task 2. Helpful if names of fields [column headers] were pushed down so she didn't have to keep scrolling.

P16, Task 4. The participant reported true, but not very reliable [report w/ a caveat]. The correct response on this task was not true.

Comments: Reliability legend behind link "no, not really helpful."

Wanted more information about MOE.

15.18 Participant 17-A1

P17, Task 0. Typeface too small.

"You've got these lovely green, yellow, red categories defining reliability instead of giving margins of errors."

P17, Task 2. "I can't see the [column] heading here so I don't know."

"I should be able to see these headers no matter how far down I go, ok?"

Comments:

"I didn't look at the definition of reliability but I know the definition of reliability. I don't see the definition of reliability here [looking at table, clicked reliable column heading] it's not there."

"Type face is too small."

"I don't think the definition of what's defined as reliable, somewhat, and not very. I want to know statistically what it is, before I decide whether I use it."

"For what I sometimes call library users, casual users, this is probably a good idea, but it's making decisions for the users, where as I like to make my own decisions, I'm not typical, far more experienced with advanced statistics than the average person."

Probe: But for the average person do you think it would be helpful? "Yeah, it's better than margin of error, they don't understand that. It just confuses them. But the definition should be you know readily available."

“I know what margin of error, sampling error is, but I don’t know what’s being considered reliable versus somewhat versus not very here. And the other thing is that it’s better to collapse categories than make the reliability higher, cause the level of detail is beyond what most people need anyhow.”

15.19 Participant 18-A3

P18, Task 0. Trusts in Census that it [data] is reliable. -¿ Green is reliable -¿ Reliability is near MOE?

When it shows not very reliable you can’t really use estimate.

Small font, hard to read.

A lot of colors.

Looks like an excel table with small font.

Now looking at what it is [ACS survey]

P18, Task 2. Looked at US citizenship and Language spoken first before settling on ancestry data (*Expected to see Ancestry data there?*)

Note: Participant had to re-check column headers to make sure he was looking at the percentage column.

P18, Task 7. The thing that stands out is all the red.

So many numbers for heritage that are not reliable.

Could also look at somewhat reliable [data], could use for research if reliability is kept in mind.

Comments about the overall table (at this point):

Would’ve brought glasses if he knew table font is this small.

Shades of gray and white are helpful.

Color stands out.

P18, Task 8. Estimates say true but reliability and MOE says no.

Would report no, or yes with reliability warning. Can't draw conclusions based on estimate.

Comment:

Not familiar with CV, stat class was ages ago.

Not visually appealing.

Legend doesn't define what not very reliable means.

Most people wouldn't visit ACS reliable website.

Clear definition of what each reliability is.

15.20 Participant 19-A4

P19, Task 0. Noticed reliability legend, keywords, reliable, not reliable estimates, and lots of replications in columns.

“There's a lot of replication in terms of columns.” [referring to column headers for estimates and percentages]

Task1: “Oh I'm sorry this is Anytown, the total population of Anytown, that is one thing I missed before so, I wasn't actually sure what this city was, but yeah I would, since it is Anytown.”

P19, Task 2. “That's one thing that is really actually a little annoying is that you have the titles of the chart at the top, but if I scroll down then I might not actually remember every single title for every single column and so I have to go all the way back up to see estimate and what not.”

P19, Task 3. “Again I don’t really know what that reliability means, I don’t know if there’s a p-value you can put in there or what not, um test of significance but I guess I would say it is that score but how reliable I don’t know what that metric means. Except I know it lists some legend, but again there’s no numerical values attached to it.”

“I think before I gave you high school graduate, I mis-read the columns they’re so small they kinda float together.”

P19, Task 4. *Subject had trouble reading across rows, which resulted in him giving the wrong number (Gave Dutch percentage, not Danish)*

“But again we don’t know how reliable that is.”

Task 6. “I would probably just look at different county, and look at percentage which is 5.5 percent, somewhat reliable, we have a margin of error of 2.1, I’d say we could probably do it but again it depends on what somewhat reliable means.”

P19, Task 7. Very busy (search through a list of ancestries).

Would search through the table using Ctrl + F.

Suggest: Drop down menu where you could choose [ancestries].

Noted estimates, reliable or not, MOE. But in the end stated “Nothing stands out.”

“Honestly, nothing stands out with it, I see the numbers there, it’s just really clunky, and very very, yeah it’s just clunky so nothing really stands out.”

P19, Task 8. “What I’m thinking is again I guess I hate to say this but it’s extremely extremely clunky, so I’m thinking why can’t I just do CTRL+F and search or why isn’t there a search box where I can actually have it pull up. Um I have to go through piece by piece and find this, and quite frankly it’s just wasting time. And maybe it’s because I’m a child of Google, but I don’t like searching step by step. I don’t like charts at all, I rather have it the computer tell me where it’s at. Not to be too harsh on you here.”

“Yeah I would agree with that, well no actually I would not agree with that, it’s not reliable. But again the first thing I’m looking at is percentages, I look at that not reliable thing secondly, and I really don’t know what that means, so quite frankly I ignore it for most of the time. So I’m going guess that you know if I was quickly looking for something unless this was like something in terms of a masters thesis or a paper I’m writing I probably wouldn’t really dig to much into that not reliable, not very reliable, and I actually might just take the 2.8 percent for face value because it is from the Census Bureau.”

Comments:

“Make this into separate sections with some white space between it, because here’s the thing I’m looking so quickly and there’s so much information coming at me both for a project I might be working on using the ACS but also with other projects I’m working on or maybe an idea hits and I open up another browser and look at something for example, that easily and I do this all the time I’m looking at average family size and I’m accidentally looking at that.”

“There’s a lot depth here but it’s not parsimonious.”

Participant was shown an alternate version of the with color-coding. “That’s a little bit better actually, that’s a lot better, just having those colors. But again I don’t know what that [reliability] means and if I’m doing a study I don’t want to have to go to ACSreliability.com and again that’s more work for me to have to go through..someone should have a quick link that has a breakdown of it.

15.21 Participant 20-D1

Comments:

Color coding helps.

Locating information was easy, but had difficulty in interpreting the answer.

View table notes is not helpful (P found link during post-test interview).

Legend sticks out, but not helpful.

Going to link [ACS reliability website] “implies passing the buck.”

Would want to mouse-over or click column [headers].

15.22 Participant 21-A4

P21, Task 0. Noticed gray and white stripes [rows].

Then read title, and noticed reliability legend.

No clue as to what it tells me, it indicates a spectrum.

Then saw the reliability columns.

Would have to go to ACS reliability website to see how it's measured.

P21, Task 1. Would have to explain what reliability meant to company.

P21, Task 2. Have to think about what are the different columns (P had to remember what column headers were?) Would give both estimates but say "we're confident at whatever level."

P21, Task 3. Somewhat reliable makes P wonder why they have somewhat reliable [data].

Comments:

Have a color bar when switching between [row] heading categories.

Should have a footnote of reliability with a notice to see footnote.

Legend indicates reliability matters, but how did you fit things into categories? What does it mean and what is the cutoff?

Not sure what N means.

Scrolled down and lost top [header] columns.

Put percent sign in MOE percent column."

Preferred no color in the reliability indicator, "color is intense".