

UnderStandingAmericaStudy

UAS 112: HURRICANE HARVEY/IRMA AND THE DIARY OF CONSUMER PAYMENT
CHOICE



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1 INTRODUCTION

This UAS survey, titled "UAS112: Hurricane Harvey/Irma and the Diary of Consumer Payment Choice" was a follow up survey for participants in FEMA codes affected by Hurricane Harvey or Irma who participated in the Diary of Consumer Payment Choice in October 2017. The Federal Reserve Bank of Boston was interested in how a natural disaster effects spending habits or payment choice. They have asked about natural disasters occurring at the same times as their spending surveys in prior years. This survey is no longer in the field. Respondents were paid \$3 to complete the survey. Respondents were selected by the Federal Reserve Bank of Boston. Due to the small size of the sample, no weights are provided.

1.1 Topics

This survey contains questions (among others) on the following topics: Consumer Behavior. A complete survey topic categorization for the UAS can be found here.

1.2 Experiments

This survey includes experiment(s) of the following type(s): Auxiliary Randomization. Please refer to explanatory comments in the Routing section for detailed information. A complete survey experiment categorization for the UAS can be found here.

1.3 Citation

Each publication, press release or other document that cites results from this survey must include an acknowledgment of UAS as the data source and a disclaimer such as, 'The project described in this paper relies on data from survey(s) administered by the Understanding America Study, which is maintained by the Center for Economic and Social Research (CESR) at the University of Southern California. The content of this paper is solely the responsibility of the authors and does not necessarily represent the official views of USC or UAS.' For any questions or more information about the UAS, contact Tania Gutsche, Project and Panel Manager, Center for Economic and Social Research, University of Southern California, at tgutsche@usc.edu.

2 SURVEY RESPONSE AND DATA

2.1 Sample selection and response rate

The sample selection for this survey was:

All active respondents who completed the Boston Federal Bank Diary 2017 AND are living in Alabama, Florida, Georgia, Louisiana, South Carolina, or Virginia.

As such, this survey was made available to 488 UAS participants. Of those 488 participants, 470 completed the survey and are counted as respondents. Of those who are not counted as respondents, 2 started the survey without completing and 16 did not start the survey. The overall response rate was 96.31%.

Note: We are unable to provide sample weights for a small number of UAS members (see the Sample and weighting section below for details). If they completed the survey, these members are included in the data set with a weight of zero, but accounted for in the computation of total sample size and survey response rate. %.

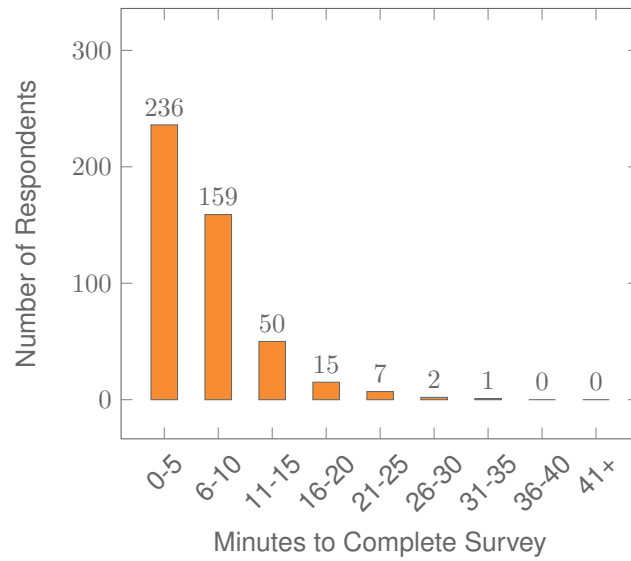
The detailed survey response rate is as follows:

| UAS112 - Response Overview | |
|---|--------|
| Size of selected sample | 488 |
| Completed the survey | 470 |
| Started but did not complete the survey | 2 |
| Did not start the survey | 16 |
| Response rate | 96.31% |

2.2 Timings

The survey took respondents an average of 7 minutes, and the full distribution of survey response times is available in the figure below. Times per question are available upon request.

Distribution of Respondents' Survey Response Times



2.3 Weighting

Weights are not (yet) available for this survey. Please contact UAS staff with any questions.

3 STANDARD VARIABLES

Each Understanding America Study data contains a series of standard variables, consisting of individual, household and sample identifiers, language indicator, time stamps and a rating by the respondent of how much he or she liked the survey:

- **uasid**: the identifier of the respondent. This identifier is assigned to a respondent at recruitment and stays with the respondent throughout each and every survey he/she participates in. When analyzing data from multiple surveys, the 'uasid' can be used to merge data sets.
- **uashhid**: the household identifier of the respondent. Every member is assigned a household identifier, stored in the variable 'uashhid'. For the primary respondent this identifier equals his or her 'uasid'. All other eligible members of the primary respondent's household (everyone who is 18 or older in the household) who become UAS respondents receive the 'uasid' of the primary respondent as their household identifier. The identifier 'uashhid' remains constant over time for all respondents. Thus it is always possible to find the original UAS household of an UAS panel member (even after they, for example, have moved out to form another household).
- **survhhid**: uniquely identifies the household a UAS panel member belongs to in a given survey. For instance, if the primary respondent and his/her spouse are both UAS members at the time of a given survey, they both receive the same 'survhhid' identifier for that survey. If they subsequently split, they receive two different 'survhhid' in subsequent surveys. They, however, always share the same 'uashhid'. The identifier 'survhhid' is set to missing (.) if no other household members are UAS panel members at the time of the survey. Since individuals can answer the same survey at different points in time (which can be relatively far apart if the survey is kept in the field for a prolonged time), it may be possible that, within the same data set, household members have different 'survhhid' reflecting different household compositions at the time they answered the survey. For instance, suppose that the primary respondent and his/her spouse are both UAS members. If the primary respondent answers the survey when he/she is living with the spouse, but the spouse answers the survey when the couple has split, they receive different 'survhhid'. Hence, the variable 'survhhid' identifies household membership of UAS panel members, at the time the respondent answers the survey. Note: in the My Household survey 'survhhid' is set to unknown (.u) for respondents who last participated in the My Household survey prior to January 21, 2015.
- **uasmembers**: is the number of other household members who are also UAS panel members at the time of the survey. Since individuals can answer the same survey at different points in time (which can be relatively far apart if the survey is kept in the field for a prolonged time), it may be possible that, within the same data set, the primary respondent of a household has a value of '0', whereas the second UAS household respondent has a value of '1'. Therefore 'uasmembers' should be interpreted as the

number of household and UAS panel members at the time the respondent answers the survey. Note: in the My Household survey 'uasmembers' is set to unknown (.u) for respondents who last participated in the My Household survey prior to January 21, 2015.

- **sampleframe**: indicates the sampling frame from which the household of the respondent was recruited. All UAS recruitment is done through address based sampling (ABS) in which samples are acquired based on postal records. Currently, the variable 'sampleframe' takes on four values reflecting four distinct sample frames used by the UAS over the year (in future data sets the number of sample frames used for recruitment may increase if additional specific populations are targeted in future recruitment batches):

1. U.S. National Territory: recruited through ABS within the entire U.S.
2. Areas high concentration Nat Ame: recruited through ABS in areas with a high concentration of Native Americans in the zip-code. Within these batches, individuals who are not Native Americans are not invited to join the UAS.
3. Los Angeles County: recruited through ABS within Los Angeles County.
4. California: recruited through ABS within California.

Note: prior to March 6, 2024 this variable was called sampletype and had the following value labels for the above list in UAS data sets:

1. Nationally Representative Sample: recruited through ABS within the entire U.S.
2. Native Americans: recruited through ABS in areas with a high concentration of Native Americans. Within these batches, individuals who are not Native Americans are not invited to join the UAS.
3. LA County: recruited through ABS within Los Angeles County.
4. California: recruited through ABS within California.

- **batch**: indicates the batch from which the respondent was recruited. Currently, this variable takes the following values (in future data sets the number of batches may increase as new recruitment batches are added to the UAS):

1. ASDE 2014/01
2. ASDE 2014/01
3. ASDE 2014/01
4. Public records 2015/05
5. MSG 2015/07
6. MSG 2016/01
7. MSG 2016/01
8. MSG 2016/01
9. MSG 2016/02

10. MSG 2016/03
11. MSG 2016/04
12. MSG 2016/05
13. MSG 2016/08
14. MSG 2017/03
15. MSG 2017/11
16. MSG 2018/02
17. MSG 2018/08
18. MSG 2019/04
19. MSG 2019/05
20. MSG 2019/11
21. MSG 2020/08
22. MSG 2020/10
23. MSG 2021/02
24. MSG 2021/08
25. MSG 2021/08
26. MSG 2022/02
27. MSG 2022/02
28. MSG 2022/08
29. MSG 2022/11
30. MSG 2022/11
31. MSG 2023/01
32. MSG 2023/06
33. MSG 2023/09
34. MSG 2023/10
35. MSG 2025/02

Note: prior to March 6, 2024 this variable had the following value labels for the above list in UAS data sets:

1. ASDE 2014/01 Nat.Rep.
2. ASDE 2014/01 Native Am.
3. ASDE 2014/11 Native Am.
4. LA County 2015/05 List Sample
5. MSG 2015/07 Nat.Rep.
6. MSG 2016/01 Nat.Rep. Batch 2

7. MSG 2016/01 Nat.Rep. Batch 3
8. MSG 2016/01 Nat.Rep. Batch 4
9. MSG 2016/02 Nat.Rep. Batch 5
10. MSG 2016/03 Nat.Rep. Batch 6
11. MSG 2016/04 Nat.Rep. Batch 7
12. MSG 2016/05 Nat.Rep. Batch 8
13. MSG 2016/08 LA County Batch 2
14. MSG 2017/03 LA County Batch 3
15. MSG 2017/11 California Batch 1
16. MSG 2018/02 California Batch 2
17. MSG 2018/08 Nat.Rep. Batch 9
18. MSG 2019/04 LA County Batch 4
19. MSG 2019/05 LA County Batch 5
20. MSG 2019/11 Nat. Rep. Batch 10
21. MSG 2020/08 Nat. Rep. Batch 11
22. MSG 2020/10 Nat. Rep. Batch 12
23. MSG 2021/02 Nat. Rep. Batch 13
24. MSG 2021/08 Nat. Rep. Batch 15
25. MSG 2021/08 Nat. Rep. Batch 16
26. MSG 2022/02 Nat. Rep. Batch 17 (priority)
27. MSG 2022/02 Nat. Rep. Batch 17 (regular)
28. MSG 2022/08 Nat. Rep. Batch 18
29. MSG 2022/11 LA County Batch 6
30. MSG 2022/11 Nat. Rep. Batch 20
31. MSG 2023/01 Nat. Rep. Batch 21
32. MSG 2023/06 Nat. Rep. Batch 22
33. MSG 2023-09 Native Am. Batch 3
34. MSG 2023-10 Nat. Rep. Batch 23

- **primary_respondent:** indicates if the respondent was the first person within the household (i.e. to become a member or whether s/he was added as a subsequent member. A household in this regard is broadly defined as anyone living together with the primary respondent. That is, a household comprises individuals who live together, e.g. as part of a family relationship (like a spouse/child/parent) or in context of some other relationship (like a roommate or tenant).

- **hardware**: indicates whether the respondent ever received hardware or not. Note: this variable should not be used to determine whether a respondent received hardware at a given point in time and/or whether s/he used the hardware to participate in a survey. Rather, it indicates whether hardware was ever provided:
 1. None
 2. Tablet (includes Internet)
- **language**: the language in which the survey was conducted. This variable takes a value of 1 for English and a value of 2 for Spanish.
- **start_date (start_year, start_month, start_day, start_hour, start_min, start_sec)**: indicates the time at which the respondent started the survey.
- **end_date (end_year, end_month, end_day, end_hour, end_min, end_sec)**: indicates the time at which the respondent completed the survey.
- **cs_001**: indicates how interesting the respondent found the survey.

4 BACKGROUND DEMOGRAPHICS

Every UAS survey data set includes demographic variables, which provide background information about the respondent and his/her household. Demographic information such as age, ethnicity, education, marital status, work status, state of residence, family structure is elicited every quarter through the “My Household” survey. The demographic variables provided with each survey are taken from the most recent ‘MyHousehold’ survey answered by the respondent. If at the time of a survey, the information in “My Household” is more than three months old, a respondent is required to check and update his or her information before being able to take the survey.

The following variables are available in each survey data set:

- **gender**: the gender of the respondent.
- **dateofbirth_year**: the year of birth of the respondent.
- **age**: the age of the respondent at the start of the survey.
- **agerange**: if the respondent’s age cannot be calculate due to missing information, ‘agerange’ indicates the approximate age. Should a value for both the ‘age’ and ‘agerange’ be present, then ‘age’ takes precedence over ‘agerange’.
- **citizenus**: indicates whether the respondent is a U.S. citizen.
- **bornus**: indicates whether the respondent was born in the U.S.
- **stateborn**: indicates the state in which the respondent was born. This is set to missing (.) if the respondent was not born in the U.S.
- **countryborn**: indicates the country in which the respondent was born. This is set to missing (.) if the respondent was born in the U.S.
- **countryborn_other**: indicates the country of birth if that country is not on the drop down list of countries shown to the respondent’.
- **statereside**: the state in which the respondent is living.
- **immigration_status**: indicates whether the respondent is an immigrant. It takes one of the following values: 0 Non-immigrant, 1 First generation immigrant (immigrant who migrated to the U.S), 2 Second generation immigrant (U.S.-born children of at least one foreign-born parent), 3 Third generation immigrant (U.S.-born children of at least one U.S.-born parent, where at least one grandparent is foreign-born), or 4 Unknown immigrant status.
- **maritalstatus**: the marital status of the respondent.
- **livewithpartner**: indicates whether the respondent lives with a partner.

- **education**: the highest level of education attained by the respondent.
- **hisplatin**: indicates whether the respondent identifies him or herself as being Hispanic or Latino. This variable is asked separately from race.
- **hisplatinogroup**: indicates which Hispanic or Latino group a respondent identifies him or herself with. This is set to missing (.) if the respondent does not identify him or herself as being Hispanic or Latino.
- **white**: indicates whether the respondent identifies him or herself as white (Caucasian).
- **black**: indicates whether the respondent identifies him or herself as black (African-American).
- **nativeamer**: indicates whether the respondent identifies him or herself as Native American (American Indian or Alaska Native).
- **asian**: indicates whether the respondent identifies him or herself as Asian (Asian-American).
- **pacific**: indicates whether the respondent identifies him or herself as Native Hawaiian or Other Pacific Islander.
- **race**: indicates the race of the respondent as singular (e.g., '1 White' or '2 Black') or as mixed (in case the respondent identifies with two or more races). The value '6 Mixed' that the respondent answered 'Yes' to at least two of the single race categories. This variable is generated based on the values of the different race variables (white, black, nativeamer, asian, pacific). This composite measure is not conditional on hisplatin, so an individual may identify as Hispanic or Latino, and also as a member of one or more racial groups.
- **working**: indicates whether the respondent is working for pay.
- **sick_leave**: indicates whether the respondent is not working because sick or on leave.
- **unemp_layoff**: indicates whether the respondent is unemployed or on lay off.
- **unemp_look**: indicates whether the respondent is unemployed and looking for a job.
- **retired**: indicates whether the respondent is retired.
- **disabled**: indicates whether the respondent has a disability.
- **If_other**: specifies other labor force status.
- **laborstatus**: indicates the labor force status of the respondent as singular (e.g., '1 Working for pay' or '2 On sick or other leave') or as mixed (in case the respondent selects two or more labor statuses). The value '8 Mixed' indicates that the respondent answered 'Yes' to at least two of the single labor force status variables. This variable is generated based on the values of the different labor status variables (working, sick_leave, unempl_layoff, unempl_look, retired, disabled, If_other).

- **employmenttype**: indicates the employment type of the respondent (employed by the government, by a private company, a nonprofit organization, or self-employed). This is set to missing (.) if the respondent is not currently working or currently on sick or other leave.
- **workfullpart**: indicates whether the respondent works full or part-time. This is set to missing (.) if the respondent is not currently working or currently on sick or other leave.
- **hourswork**: indicates the number of hours the respondent works per week. This is set to missing (.) if the respondent is not currently working or currently on sick or other leave.
- **hhincome**: is the total combined income of all members of the respondent's household (living in their household) during the past 12 months.
- **anyhhmember**: indicates whether there were any members in the respondent's household at the time he/she answered the survey as reported by the respondent.
- **hhmembernumber**: indicates the number of household members in the respondent's household at the time of the survey as reported by the respondent. It may be that 'anyhhmember' is 'Yes', but 'hhmembernumber' is missing if the respondent did not provide the number of household members at the time of the survey.
- **hhmemberin_#**: indicates whether a household member is currently in the household as reported by the respondent. Household members are never removed from the stored household roster and their information is always included in survey data sets. The order of the roster is the same order in which household members were specified by the respondent in the 'MyHousehold' survey. The order is identified by the suffix _# (e.g., _1 indicates the first household member, _2 the second household member, etc.).

As an example, if the first household member is in the household at the time of the survey, 'hhmemberin_1' is set to '1 HH Member 1 is in the HH'; if he/she has moved out, 'hhmemberin_1' is set to '0 HH member 1 is no longer in the HH'. Since information of other household members (stored in the variables listed below) is always included in survey data sets, information about 'hhmemberin_1' is available whether this person is still in the household or has moved out.

- **hhmembergen_#**: indicates the gender of another household member as reported by the respondent.
- **hhmemberage_#**: indicates the age of another household member. The age is derived from the month and year of birth of the household member as reported by the respondent.
- **hhmemberrel_#**: indicates the relationship of the respondent to the other household member as reported by the respondent.

- **hhmemberuasid_#**: is the 'uasid' of the other household member if this person is also a UAS panel member. It is set to missing (.) if this person is not a UAS panel member at the time of the survey. Since this identifier is directly reported by the respondent (chosen from a preloaded list), it may differ from the actual (correct) 'uasid' of the UAS member it refers to because of reporting error. Also, this variable should not be used to identify UAS members in a given household at the time of the survey. This is because the variables 'hhmemberuasid_#' are taken from the most recent 'My Household' and changes in household composition involving UAS members may have occurred between the time of the respondent answered 'My Household' and the time the respondent answers the survey. To follow UAS members of a given household, it is advised to use the identifiers 'uashhid' and 'survhhid'.
- **lastmyhh_date**: the date on which the demographics variables were collected through the 'My Household' survey.

In addition, data sets created after May 8, 2025 include an urbanicity variable. It is based on panel members' current census tract of residence and the 2010 Rural-Urban Commuting Area (RUCA) codes released by the US Department of Agriculture's Economic Research Service. To preserve confidentiality, the UAS collapses the 10 primary RUCA codes to 4 levels: Metropolitan, Micropolitan, Small/Rural, and Unknown. The Metropolitan level corresponds to primary RUCA codes 1-3, the Micropolitan level corresponds to RUCA codes 4-6, and the Small/Rural UAS classification corresponds to RUCA codes 7-10.

For detailed information and definitions of the 10 primary RUCA codes, please visit the USDA ERS Rural-Urban Commuting Area Codes site. Surveys conducted completely prior to May 8, 2025 will have an urbanicity data set available on request.

5 MISSING DATA CONVENTIONS

Data files provide so-called clean data, that is, answers given to questions that are not applicable anymore at survey completion (for example because a respondent went back in the survey and skipped over a previously answered question) are treated as if the questions were never asked. In the data files all questions that were asked, but not answered by the respondent are marked with (.e). All questions never seen by the respondent (or any dirty data) are marked with (.a). The latter may mean that a respondent did not view the question because s/he skipped over it; or alternatively that s/he never reached that question due to a break off. If a respondent did not complete a survey, the variables representing survey end date and time are marked with (.c). Household member variables are marked with (.m) if the respondent has less household members (e.g. if the number of household members is 2, any variables for household member 3 and up are marked with (.m)).

UAS provides data in STATA and CSV format. Stata data sets come with include variable labels that are not available in the CSV files. Value labels are provided for single-response answer option. In STATA these labels will include the labels 'Not asked' and 'Not answered' for (.a) and (.e), and will show in tabulations such as 'tab q1, missing'. For multiple-response questions a binary variable is created for each answer option indicating whether the option was selected or not. A summary variable is also provided in string format reflecting which options were selected and in which order. For example, if a question asked about favorite animals with options cat, dog, and horse, then if a respondent selected horse and then cat, the binary variables for horse and cat will be set to yes, while the overall variable would have a string value of '3-1'. If no answer was given, all binary variables and the summary variable will be marked with '.e'.

Questions that are asked multiple times are often implemented as so-called array questions. Supposing the name of such question was Q1 and it was asked in 6 different instances, your data set would contain the variables Q1_1_ to Q1_6_. To illustrate, if a survey asked the names of all children, then child_1_ would contain the name of the first child the respondent named and so on.

More information about the UAS data in general can be found on the UAS Data Pages web site.

6 ROUTING SYNTAX

The survey with routing presented in the next section includes all of the questions that make up this survey, the question answers when choices were provided, and the question routing. The routing includes descriptions of when questions are grouped, conditional logic that determines when questions are presented to the respondent, randomization of questions and answers, and fills of answers from one question to another.

If you are unfamiliar with conditional logic statements, they are typically formatted so that **if** the respondent fulfills some condition (e.g. they have a cellphone or a checking account), **then** they are presented with some other question or the value of some variable is changed. If the respondent does not fulfill the condition (e.g. they are not a cellphone adopter or they do not have a checking account), something **else** happens such as skipping the next question or changing the variable to some other value. Some of the logic involved in the randomization of questions or answers being presented to the respondent is quite complex, and in these instances there is documentation to clarify the process being represented by the routing.

Because logic syntax standards vary, here is a brief introduction to our syntax standards. The syntax used in the conditional statements is as follows: '=' is equal to, '<' is less than, '>' is greater than, and '!= ' is used for does not equal. When a variable is set to some number N, the statement looks like 'variable := N'.

The formatting of the questions and routing are designed to make it easier to interpret what is occurring at any given point in the survey. Question ID is the bold text at the top of a question block, followed by the question text and the answer selections. When a question or variable has associated data, the name links to the appropriate data page, so you can easily get directly to the data. Text color is used to indicate the routing: **red** is conditional logic, **gold** is question grouping, **green** is looping, and **orange** is used to document randomization and other complex conditional logic processes. The routing is written for a computer to parse rather than a human to read, so when the routing diverges significantly from what is displayed to the respondent, a screenshot of what the respondent saw is included.

The name of the randomization variables are defined in proximity to where they are put into play, and like the question ID the names of the randomization variables can be used to link directly to the associated data page.

7 SURVEY WITH ROUTING

Start of section **Preload**

```
startdate := getUas105Startdate()  
FLDay1 := date('l, F j', strtotime(startdate));  
FLDay3 := date('l, F j', strtotime(startdate . ' +2 days'));
```

End of section **Preload**

Start of section **Hurricane**

intro_gen (Section Hurricane)

You are receiving this survey because parts of your state were affected by Hurricane (Harvey/Irma) and you participated in the **Diary of Consumer Payment Choice**. If you, your family and friends, or your community were affected, we extend our sympathy and best wishes.

We would also like to thank you for participating in this research. Understanding how natural disasters affect payments decisions is important to improving preparation and quality of response in the future.

(Hurricane Harvey made landfall on **Friday, August 25, 2017**, but winds and rain from the storm began affecting parts of the U.S. as early as **Wednesday, August 23** and ended **Monday, September 2**./Hurricane Irma made landfall on **Sunday, September 8, 2017**, but winds and rain from the storm began affecting parts of the U.S. as early as **Wednesday, September 4** and ended **Thursday, September 14**.)

The following questions ask about certain effects that Hurricane (Harvey/Irma) may have had on your behavior, including that reported in the Diary of Consumer Payment Choice (DCPC) that you took from

(()) to (()).

IF statereside = EMPTY THEN

statereside (R STATE RESIDENCE in section Demographics)

In what state are you currently residing?

- 1 Alaska (AK)
- 2 Alabama (AL)
- 3 Arizona (AZ)
- 4 Arkansas (AR)
- 5 California (CA)
- 6 Colorado (CO)

7 Connecticut (CT)
8 Delaware (DE)
9 Florida (FL)
10 Georgia (GA)
11 Hawaii (HI)
12 Idaho (ID)
13 Illinois (IL)
14 Indiana (IN)
15 Iowa (IA)
16 Kansas (KS)
17 Kentucky (KY)
18 Louisiana (LA)
19 Maine (ME)
20 Maryland (MD)
21 Massachusetts (MA)
22 Michigan (MI)
23 Minnesota (MN)
24 Mississippi (MS)
25 Missouri (MO)
26 Montana (MT)
27 Nebraska (NE)
28 Nevada (NV)
29 New Hampshire (NH)
30 New Jersey (NJ)
31 New Mexico (NM)
32 New York (NY)
33 North Carolina (NC)
34 North Dakota (ND)
35 Ohio (OH)
36 Oklahoma (OK)
37 Oregon (OR)
38 Pennsylvania (PA)
39 Rhode Island (RI)
40 South Carolina (SC)
41 South Dakota (SD)
42 Tennessee (TN)
43 Texas (TX)
44 Utah (UT)
45 Vermont (VT)
46 Virginia (VA)
47 Washington (WA)
48 West Virginia (WV)
49 Wisconsin (WI)
50 Wyoming (WY)
51 Washington D.C.

| 52 Puerto Rico

END OF IF

Fill code of question FL_hurricane executed
Fill code of question FL_hurricane2 executed
Fill code of question FL_hurricane3 executed
days_passed := getDaysPassed()

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

intro_pr (Section Hurricane)

First, we'd like to ask you a few questions about how Hurricane (Harvey/Irma) affected your primary residence, your vehicles, or any other property you may rent or own.

pr001_intro (Section Hurricane)

As a result of Hurricane (Harvey/Irma), did any of the following happen to you?

SUBGROUP OF QUESTIONS

pr001_a (Lost electricity, heat or gas in section Hurricane)

Lost electricity, heat or gas

1 Yes

2 No

pr001_b (Primary residence was physically damaged in section Hurricane)

Primary residence was physically damaged

1 Yes

2 No

pr001_c (Vehicle(s) was physically damaged in section Hurricane)

Vehicle(s) was physically damaged

1 Yes

2 No

pr001_d (Other property was physically damaged in section Hurricane)

Had other property damage worth more than \$1,000

1 Yes

2 No

END OF SUBGROUP

END OF GROUP

IF pr001_b = YES THEN

pr003 (amount of destruction primary residence in section Hurricane)

How much destruction occurred to your primary residence?

- 1 Minor cosmetics
- 2 Substantive repairs
- 3 Major damage but repairable
- 4 Need to completely rebuild the house

IF pr003 = 3 OR pr003 = 4 THEN

pr004 (plan to continue to live at primary residence in section Hurricane)

Do you plan to continue to live at the address of your primary residence?

- 1 Yes
- 2 No

END OF IF

END OF IF

IF pr001_d = YES THEN

pr002 (what damaged in section Hurricane)

Please describe the property the property damage worth more than \$1,000:

STRING

END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

intro_bh (Section Hurricane)

We'd also like to know how Hurricane (Harvey/Irma) affected your daily life and behavior.

bh001_intro (Section Hurricane)

As a result of Hurricane (Harvey/Irma), did any of the following happen to you?

SUBGROUP OF QUESTIONS

bh001_a (Evacuated your primary residence in section Hurricane)

Evacuated your primary residence

- 1 Yes
- 2 No

bh001_b (Required or encouraged to stay inside your home in section Hurricane)

Required or encouraged to stay inside your home

- 1 Yes
- 2 No

bh001_c (Volunteered in the preparation or recovery efforts in section Hurricane)

Volunteered in the preparation or recovery efforts

- 1 Yes

2 No

bh001_e (Had friends, relatives, etc. stay with you in section Hurricane)

Had friends, relatives, etc. stay with you

1 Yes

2 No

bh001_f (Had other significant life disruptions in section Hurricane)

Had other significant life disruptions

1 Yes

2 No

END OF SUBGROUP

END OF GROUP

IF (bh001_f = YES) THEN

bh006 (what life disruptions in section Hurricane)

Please describe the life disruptions caused by Hurricane (Harvey/Irma):

STRING

END OF IF

IF (bh001_a = YES) THEN

bh003 (returned to live in your primary residence in section Hurricane)

Have you returned to live in your primary residence?

1 Yes

2 No

IF (bh003 = YES) THEN

bh004 (how long gone from primary residence in section Hurricane)

How long were you evacuated or gone from your primary residence?

RANGE 0..()

END OF IF

END OF IF

IF (bh001_b = YES) THEN

bh007 (how long required or suggested to stay inside home in section Hurricane)

How long were you required or suggested to stay inside your home?

RANGE 0..()

END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

bh002.intro (Section Hurricane)

As a result of Hurricane (Harvey/Irma), did any of the following happen to you?

SUBGROUP OF QUESTIONS

bh002.a (work cancelled in section Hurricane)

If you work outside the home, was your work cancelled?

- 1 Yes
- 2 No
- 3 Not applicable

bh002.b (if live with a spouse or partner, was work cancelled in section Hurricane)

If you live with a spouse or partner, was their work cancelled?

- 1 Yes
- 2 No
- 3 Not applicable

bh002.c (if work outside the home, was work cancelled in section Hurricane)

If you attend school, was your school cancelled?

- 1 Yes
- 2 No
- 3 Not applicable

bh002.d (if have school-aged children, was their school cancelled in section Hurricane)

If you have school-aged children, was their school cancelled?

- 1 Yes
- 2 No
- 3 Not applicable

END OF SUBGROUP

END OF GROUP

IF bh002.a = YES THEN

bh008 (how long work cancelled in section Hurricane)

How long was your work cancelled?

RANGE 0..()

END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

bh009.intro (Section Hurricane)

In addition, did any of the following happen to you as a result of Hurricane (Harvey/Irma)?

SUBGROUP OF QUESTIONS

bh009_a (unable to use payment cards in section Hurricane)

Was unable to use payment cards (credit, debit, prepaid) to make purchases

1 Yes

2 No

bh009_b (long lines for gas in section Hurricane)

Waited in long lines for gas

1 Yes

2 No

END OF SUBGROUP

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

intro_cash (Section Hurricane)

To help prepare for the emergency response to future disasters, please answer some questions about your need to get cash before Hurricane (Harvey/Irma). Because the Hurricane occurred a while ago, you may want to consult your banking records to refresh your memory.

cb001 (got extra cash in section Hurricane)

Between (August 23rd and September 2nd/September 4th and September 14th) did you get or receive cash to prepare for or deal with the aftermath of Hurricane (Harvey/Irma)?

1 Yes

2 No

END OF GROUP

amntcashwith := 0

IF cb001 = YES THEN

Fill code of question FLCashDay executed

LOOP FROM 1 TO 25

IF cnt = 1 OR cb002_more(cnt-1) = 1 THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

cb002_intro (Section Hurricane)

Please tell us how you got cash to prepare for Hurricane (Harvey/Irma) between **(August 23rd and September 2nd/September 4th and September 14th)**. Please include cash that was partly or entirely related to Hurricane (Harvey/Irma).

Complete one entire row for each time you got or received cash.

```
bootstrap-select { min-width: 180px; width: 180px; max-width: 180px; }.bootstrap-select > .btn { min-width: 180px; width: 180px; max-width: 180px; }
```

SUBGROUP OF QUESTIONS

cb002_a (date cash transaction in section Hurricane)

- 1 (September 4)
- 2 (September 5)
- 3 (September 6)
- 4 (September 7)
- 5 (September 8)
- 6 (September 9)
- 7 (September 10)
- 8 (September 11)
- 9 (September 12)
- 10 (September 13)
- 11 (September 14)

cb002_b (amount cash transaction in section Hurricane)
NUMBER (NO DECIMALS ALLOWED)

cb002_c (location cash transaction in section Hurricane)

- 1 ATM
- 2 Cash back at a retail store
- 3 Bank teller
- 4 Family or friend
- 5 Check cashing store
- 6 Employer
- 7 Cash refund from returning goods
- 8 Payday lender
- 9 Other location

cb002_d (source cash transaction in section Hurricane)

- 1 Checking account
- 2 Savings or other bank account
- 3 Salary/wages/tips
- 4 Cashing a check
- 5 Credit card cash advance
- 6 Prepaid card cash withdrawal

- 7 Another person
- 8 Other source

cb002_e (charged fee cash transaction in section Hurricane)

- 1 Yes
- 2 No

Figure 1: Example of listing

UnderstandingAmericaStudy

Please tell us how you got cash to prepare for Hurricane Harvey between **August 23rd** and **September 2nd**. Please include cash that was partly or entirely related to Hurricane Harvey.

- Complete one entire row for each time you got or received cash

| Date | Amount | Location (where you got the cash) | Source of funds | Were you charged a fee? |
|----------|-----------------------------|--------------------------------------|-----------------|----------------------------|
| Select ▾ | \$ <input type="text"/> .00 | Select ▾ | Select ▾ | Select ▾ |

<< Back

Next >>

END OF SUBGROUP

END OF GROUP

Fill code of question FLCashRow(cnt) executed
amntcashwith := amntcashwith + cb002_b(cnt)

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

cb002_overview (Section Hurricane)

Figure 2: Example of listing overview

UnderstandingAmericaStudy

You have reported the following cash withdrawals so far:

| Date | Amount | Location | Source | Charged fee |
|-----------|----------|----------|------------------|-------------|
| August 23 | \$222.00 | ATM | Checking account | No |

Did you get or receive any more cash between **August 23rd and September 2nd**?

- ☐ Yes
☐ No

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cb002_more (more cash transactions in section Hurricane)

Did you get or receive any more cash between **(August 23rd and September 2nd/September 4th and September 14th)**?

- 1 Yes
2 No

END OF GROUP

ELSE

|

END OF IF

END OF LOOP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

cb009_intro (Section Hurricane)

In addition to the \$(total cash taken out()) you were able to get, were there any locations that you tried to get cash at, but were unable to because of Hurricane (Harvey/Irma)?

SUBGROUP OF QUESTIONS

cb009_a (ATM in section Hurricane)

ATM

- 1 Yes
2 No

cb009_b (Bank teller in section Hurricane)

Bank teller

1 Yes

2 No

cb009_c (Check cashing store in section Hurricane)

Check cashing store

1 Yes

2 No

cb009_d (Cash back at a retail store in section Hurricane)

Cash back at a retail store

1 Yes

2 No

cb009_e (From your employer (you are paid in cash) in section Hurricane)

From your employer (you are paid in cash)

1 Yes

2 No

cb009_f (Family or friend in section Hurricane)

Family or friend

1 Yes

2 No

cb009_g (Payday lender in section Hurricane)

Payday lender

1 Yes

2 No

cb009_h (Other in section Hurricane)

Other

1 Yes

2 No

END OF SUBGROUP

END OF GROUP

IF cb009_a = 1 OR cb009_b = 1 OR cb009_c = 1 OR cb009_d = 1 OR cb009_e = 1 OR cb009_f = 1 OR cb009_g = 1 OR cb009_h = 1 THEN

cb017 (how much additional cash hoped to get in section Hurricane)

In total, how much additional cash did you hope to get?

RANGE 0..(total cash taken out())

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

cb010_intro (Section Hurricane)

About how much cash did you try to get at each location?

SUBGROUP OF QUESTIONS

IF cb009.a = 1 THEN

cb010_a (ATM in section Hurricane)

ATM

NUMBER (NO DECIMALS ALLOWED)

END OF IF

IF cb009.b = 1 THEN

cb010_b (Bank teller in section Hurricane)

Bank teller

NUMBER (NO DECIMALS ALLOWED)

END OF IF

IF cb009.c = 1 THEN

cb010_c (Check cashing store in section Hurricane)

Check cashing store

NUMBER (NO DECIMALS ALLOWED)

END OF IF

IF cb009.d = 1 THEN

cb010_d (Cash back at a retail store in section Hurricane)

Cash back at a retail store

NUMBER (NO DECIMALS ALLOWED)

END OF IF

IF cb009.e = 1 THEN

cb010_e (From your employer (you are paid in cash) in section Hurricane)

From your employer (you are paid in cash)

NUMBER (NO DECIMALS ALLOWED)

```

END OF IF

IF cb009.f = 1 THEN
    cb010.f (Family or friend in section Hurricane)
    Family or friend
    NUMBER (NO DECIMALS ALLOWED)
END OF IF

IF cb009.g = 1 THEN
    cb010.g (Payday lender in section Hurricane)
    Payday lender
    NUMBER (NO DECIMALS ALLOWED)
END OF IF

IF cb009.h = 1 THEN
    cb010.h (Other in section Hurricane)
    Other
    NUMBER (NO DECIMALS ALLOWED)
END OF IF

END OF SUBGROUP

END OF GROUP
END OF IF

cb003 (how much cash taken in section Hurricane)
Out of the $(total cash taken out()) that you got or received between (August 23rd and September 2nd/September 4th and September 14th), about how much was for any reason related to Hurricane (Harvey/Irma)?
RANGE 0..(total cash taken out())

amntcashwith2 := cb003

IF cb003 > 0 THEN
    /* The answer options in cb004 are randomly displayed (with the exception of the 'Other' option, which is always shown last). The order is captured in the cb004_order variables. For example, if cb004_order_1 is equal to 5, then the first option shown is 'In case I have to evacuate my residence'. */

```

IF cb004.order(1) = EMPTY THEN

cb004.order := shuffleArray(array(1 →1, 2 →2, 3 →3, 4 →4, 5 →5))
cb004.order(6) := 6

END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

cb004 (reasons extra cash in section Hurricane)

Please tell us the reasons you got this extra cash for Hurricane (Harvey/Irma):

Check all that apply.

- 1 As a precaution in case other methods of payment would not work during or after the hurricane.
- 2 Because it might be harder to get cash during or after the hurricane.
- 3 To buy goods or services to prepare for the hurricane.
- 4 Because I may not have access to banks or banking services during or after the hurricane.
- 5 In case I have to evacuate my residence.
- 6 Other, please specify:

cb004.other (other reasons got extra cash in section Hurricane)

STRING

END OF GROUP

cb005 (how much cash on hand today in section Hurricane)

As of today, how much of the \$(related hurricane total cash taken out()) that you got or received for Hurricane (Harvey/Irma) do you have on hand (in wallet or stored elsewhere)??

RANGE 0..(related hurricane total cash taken out())

amntcashwith3 := cb005

IF cb005 > 0 THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

cb011 (how much cash think to spend in section Hurricane)

Now think about the next seven days.

How much of the \$(on hand total cash taken out()) that you have on hand do you expect to spend?

RANGE 0..(on hand total cash taken out())

cb012 (how much deposit back in section Hurricane)

How much of the \$(on hand total cash taken out()) that you have on hand do you expect to deposit back into a checking or savings account?
RANGE 0..(on hand total cash taken out())

cb013 (how much keep for future in section Hurricane)
How much of the \$(on hand total cash taken out()) that you have on hand do you expect to keep for the future beyond those seven days?
RANGE 0..(on hand total cash taken out())

END OF GROUP

END OF IF

END OF IF

ELSE

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

cb007_intro (Section Hurricane)
Did you try to get cash at any of the following locations, but were unable to because of Hurricane (Harvey/Irma)?

SUBGROUP OF QUESTIONS

cb007_a (ATM in section Hurricane)
ATM
1 Yes
2 No

cb007_b (Bank teller in section Hurricane)
Bank teller
1 Yes
2 No

cb007_c (Check cashing store in section Hurricane)
Check cashing store
1 Yes
2 No

cb007_d (Cash back at a retail store in section Hurricane)
Cash back at a retail store
1 Yes
2 No

cb007_e (From your employer (you are paid in cash) in section Hurricane)
From your employer (you are paid in cash)
1 Yes

2 No

cb007.f (Family or friend in section Hurricane)

Family or friend

1 Yes

2 No

cb007.g (Payday lender in section Hurricane)

Payday lender

1 Yes

2 No

cb007.h (Other in section Hurricane)

Other

1 Yes

2 No

END OF SUBGROUP

END OF GROUP

IF cb007.a = 1 OR cb007.b = 1 OR cb007.c = 1 OR cb007.d = 1 OR cb007.e = 1 OR cb007.f = 1 OR cb007.g = 1 OR cb007.h = 1 THEN

cb016 (how much cash hoped to get in section Hurricane)

In total, how much cash did you hope to get?

RANGE 0..(total cash taken out())

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

cb008.intro (Section Hurricane)

About how much cash did you try to get at each location?

SUBGROUP OF QUESTIONS

IF cb007.a = 1 THEN

cb008.a (ATM in section Hurricane)

ATM

NUMBER (NO DECIMALS ALLOWED)

END OF IF

IF cb007.b = 1 THEN

cb008_b (Bank teller in section Hurricane)
Bank teller
NUMBER (NO DECIMALS ALLOWED)

END OF IF

IF cb007.c = 1 THEN

cb008_c (Check cashing store in section Hurricane)
Check cashing store
NUMBER (NO DECIMALS ALLOWED)

END OF IF

IF cb007.d = 1 THEN

cb008_d (Cash back at a retail store in section Hurricane)
Cash back at a retail store
NUMBER (NO DECIMALS ALLOWED)

END OF IF

IF cb007.e = 1 THEN

cb008_e (From your employer (you are paid in cash) in section Hurricane)
From your employer (you are paid in cash)
NUMBER (NO DECIMALS ALLOWED)

END OF IF

IF cb007.f = 1 THEN

cb008_f (Family or friend in section Hurricane)
Family or friend
NUMBER (NO DECIMALS ALLOWED)

END OF IF

IF cb007.g = 1 THEN

cb008_g (Payday lender in section Hurricane)
Payday lender
NUMBER (NO DECIMALS ALLOWED)

```

END OF IF
IF cb007_h = 1 THEN
  cb008_h (Other in section Hurricane)
  Other
  NUMBER (NO DECIMALS ALLOWED)
END OF IF
END OF SUBGROUP
END OF GROUP
END OF IF
END OF IF

```

cb014 (feelings carrying cash in section Hurricane)

How did the effects of Hurricane (Harvey/Irma) affect your plans about the average amount of cash you have on hand (in wallet or stored elsewhere)?

Since Hurricane (Harvey/Irma), I have...

- 1 A lot more cash than I used to
- 2 A little more cash than I used to
- 3 About the same amount of cash as I used to
- 4 A little less cash than I used to
- 5 A lot less cash than I used to

cb015 (future hurricane carry cash in section Hurricane)

Suppose another hurricane affects your area next year. In preparing for that hurricane, will your experience with Hurricane (Harvey/Irma) cause you to have on hand (in wallet or stored elsewhere)...

- 1 A lot more cash than I had for this hurricane
- 2 A little more cash than I had for this hurricane
- 3 About the same amount of cash as I had for this hurricane
- 4 A little less cash than I had for this hurricane
- 5 A lot less cash than I had for this hurricane

gov001 (receive any assistance in section Hurricane)

Did you receive assistance of any kind due to the effects of Hurricane (Harvey/Irma)?

Check all that apply

- 1 Yes, I got goods and services
- 2 Yes, I got money as financial assistance
- 3 No, I did not receive any assistance

IF 2 IN gov001 THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

gov002 (from whom receive any assistance in section Hurricane)

From whom did you get the assistance payments (money) due to the effects of Hurricane (Harvey/Irma)?

Check all that apply

- 1 Government (local, state, or federal)
- 2 Friends or family
- 3 Non-profit or other non-government relief (Red Cross, Salvation Army, etc.)
- 4 Other, please specify:

gov002.other (other receive any assistance in section Hurricane)

STRING

END OF GROUP

gov003 (how much assistance in section Hurricane)

About how much was the total dollar amount of money you received for assistance due to the effects of Hurricane (Harvey/Irma)?

Do NOT include value of goods or services received.

NUMBER (NO DECIMALS ALLOWED)

/ The answer options in gov004 are randomly displayed (with the exception of the 'Other' option, which is always shown last). The order is captured in the gov004_order variables. For example, if gov004_order_1 is equal to 5, then the first option shown is 'Prepaid card'. */*

IF gov004_order(1) = EMPTY THEN

gov004_order := shuffleArray(array(1 →1, 2 →2, 3 →3, 4 →4, 5 →5))

gov004_order(6) := 6

END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

gov004 (how received payment in section Hurricane)

How did you receive most of the payment for the disaster assistance?

- 1 Cash
- 2 Check
- 3 Deposit into your checking account(s)
- 4 Deposit into a non-bank deposit account (e.g. PayPal, etc.)
- 5 Prepaid card

6 Other, please specify:

gov004.other (other form payment in section Hurricane)
STRING

END OF GROUP

gov005 (how satisfied with payment instrument in section Hurricane)
How satisfied are you with the payment instrument used to pay you for disaster assistance?

- 1 Very satisfied
- 2 Satisfied
- 3 Neither satisfied nor dissatisfied
- 4 Dissatisfied
- 5 Very dissatisfied

IF (gov005 = 4 OR gov005 = 5) THEN

gov007 (why dissatisfied in section Hurricane)
Please tell us about why you were dissatisfied with the payment instrument used to pay you for disaster assistance:
STRING

END OF IF

END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

gov006 (in future preferred instrument in section Hurricane)
In the future, if you are to receive disaster assistance from the government, which way would you most prefer to receive the money?

- 1 Cash
- 2 Check
- 3 Deposit into your checking account(s)
- 4 Deposit into a non-bank deposit account (e.g. PayPal, etc.)
- 5 Prepaid card
- 6 Other, please specify:

gov006.other (other preferred instrument in section Hurricane)
STRING

END OF GROUP

intro_dp (Section Hurricane)

It would be helpful to understand how Hurricane (Harvey/Irma) may have affected your payment behavior on the dates you participated in the **Diary of Consumer Payment Choice**:

(()) to (())

This section will show the payments you recorded for those days and ask you about how they may have been affected.

We respect your privacy and thank you for your help. Your responses will remain confidential and will be used for research purposes only. Researchers will not have access to any identifying information.

dummy := getDiaryPayments()

IF numberofpayments > 0 THEN

LOOP FROM 1 TO NUMBEROFPAYMENTS

| Fill code of question FLPaymentRows(cnt) executed

END OF LOOP

dp001 (any impact in section Hurricane)

Figure 3: Example of recorded payments

UnderStandingAmericaStudy

Here is a list of payments you recorded in your diary for the dates of Friday, October 6 to Sunday, October 8.

| Date of payment | Amount spent | Payment method | Payment recipient |
|-----------------|--------------|----------------|---|
| 2017/10/06 | \$65.76 | Credit card | Grocery stores, convenience stores without gas stations, pharmacies |
| 2017/10/07 | \$13.70 | Credit card | Grocery stores, convenience stores without gas stations, pharmacies |
| 2017/10/07 | \$206.96 | Check | Telephone, internet, cable or satellite tv, video or music streaming services, movie theaters |
| 2017/10/08 | \$206.96 | Check | Telephone, internet, cable or satellite tv, video or music streaming services, movie theaters |

Thinking back on your list of payments, did Hurricane Harvey affect them in any of the following ways?

- The dollar value of one or more of these payments was affected.
- The date or timing of one or more of these payments was affected.
- The payment method used to make one or more of these payments was affected.

☐ Yes

☐ No

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- 1 Yes
- 2 No

IF dp001 = YES THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

dp002_intro (any impact in section Hurricane)

Here is a list of payments recorded in your diary. For each one, please indicate whether the entire payment was made because of Hurricane (Harvey/Irma).

Please choose one response for each payment.

LOOP FROM 1 TO NUMBEROFPAYMENTS

dp002_a (made entirely because of hurricane in section Hurricane)

- 1 Yes
- 2 No

END OF LOOP

Figure 4: Example

UnderStandingAmericaStudy

Here is a list of payments recorded in your diary. For each one, please indicate whether the entire payment was made because of Hurricane Harvey.

- Please choose one response for each payment.

| Payment information recorded in diary | | | | I made this entire payment only because of Hurricane Harvey | |
|---------------------------------------|--------------|----------------|---|--|-----------------------|
| Date of payment | Amount Spent | Payment Method | Payment recipient | Yes | No |
| 2017/10/06 | \$65.76 | Credit card | Grocery stores, convenience stores without gas stations, pharmacies | <input type="radio"/> | <input type="radio"/> |
| 2017/10/07 | \$13.70 | Credit card | Grocery stores, convenience stores without gas stations, pharmacies | <input type="radio"/> | <input type="radio"/> |
| 2017/10/07 | \$206.96 | Check | Telephone, internet, cable or satellite tv, video or music streaming services, movie theaters | <input type="radio"/> | <input type="radio"/> |
| 2017/10/08 | \$206.96 | Check | Telephone, internet, cable or satellite tv, video or music streaming services, movie theaters | <input type="radio"/> | <input type="radio"/> |

<< Back Next >>

END OF GROUP

LOOP FROM 1 TO NUMBEROFPAYMENTS

IF dp002_a(cnt) != 1 THEN

dp003_indicator := 1

END OF IF

END OF LOOP

IF dp003_indicator = 1 THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

dp003_intro (any impact in section Hurricane)

Thanks for answering. Now, we'd like to ask you about the payment amounts in more detail. For each payment, please indicate how the **dollar amount** of your payment was affected by Hurricane (Harvey/Irma).

Please choose one response for each payment.

LOOP FROM 1 TO NUMBEROFPAYMENTS

IF dp002_a(cnt) != 1 THEN

dp003_a (impact on amount in section Hurricane)

- 1 The dollar value of this payment is larger because of Hurricane (Harvey/Irma).
- 2 The dollar value of this payment is smaller because of Hurricane (Harvey/Irma)
- 3 Hurricane (Harvey/Irma) did not affect the dollar value of this payment.

END OF IF

END OF LOOP

Figure 5: Example

UnderStandingAmericaStudy

Thanks for answering. Now, we'd like to ask you about the payment amounts in more detail. For each payment, please indicate how the **dollar amount** of your payment was affected by Hurricane Harvey.

- Please choose one response for each payment.

| Payment information recorded in diary | | | | The dollar value of this payment is larger because of Hurricane Harvey | The dollar value of this payment is smaller because of Hurricane Harvey | Hurricane Harvey did not affect the dollar value of this payment |
|---------------------------------------|--------------|----------------|---|---|--|--|
| Date of payment | Amount Spent | Payment Method | Payment Recipient | | | |
| 2017/10/07 | \$13.70 | Credit card | Grocery stores, convenience stores without gas stations, pharmacies | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2017/10/07 | \$206.96 | Check | Telephone, internet, cable or satellite tv, video or music streaming services, movie theaters | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

dp004_intro (any impact in section Hurricane)

For each payment, please indicate how the **timing** of your payment was affected by Hurricane (Harvey/Irma).

Please choose one response for each payment.

LOOP FROM 1 TO NUMBEROFPAYMENTS

IF dp002_a(cnt) != 1 **THEN**

dp004_a (impact on timing in section Hurricane)

- 1 I made this payment sooner because of Hurricane (Harvey/Irma).
- 2 I made this payment later because of Hurricane (Harvey/Irma)
- 3 Hurricane (Harvey/Irma) did not affect the timing of this payment.

END OF IF

END OF LOOP

Figure 6: Example

UnderStandingAmericaStudy

For each payment, please indicate how the **timing** of your payment was affected by Hurricane Harvey.

- Please choose one response for each payment.

| Payment information recorded in diary | | | | I made this payment sooner because of Hurricane Harvey | I made this payment later because of Hurricane Harvey | Hurricane Harvey did not affect the timing of this payment |
|---------------------------------------|--------------|----------------|---|---|--|--|
| Date of payment | Amount Spent | Payment Method | Payment Recipient | | | |
| 2017/10/07 | \$13.70 | Credit card | Grocery stores, convenience stores without gas stations, pharmacies | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2017/10/07 | \$206.96 | Check | Telephone, internet, cable or satellite tv, video or music streaming services, movie theaters | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

dp005_intro (any impact in section Hurricane)

For each payment, please indicate if and how your **choice of payment method** was affected by Hurricane (Harvey/Irma).

Please choose one response for each payment.

LOOP FROM 1 TO NUMBEROFPAYMENTS

IF dp002_a(cnt) != 1 THEN

dp005_a (impact on payment method in section Hurricane)

- 1 I used a different payment method than usual because of Hurricane (Harvey/Irma)
- 2 My choice did not change

END OF IF

END OF LOOP

Figure 7: Example

UnderStandingAmericaStudy

For each payment, please indicate if and how your **choice of payment method** was affected by Hurricane Harvey.

- Please choose one response for each payment.

| Payment information recorded in diary | | | | I used a different payment method than usual because of Hurricane Harvey | My choice did not change |
|---------------------------------------|--------------|----------------|---|--|--------------------------|
| Date of payment | Amount Spent | Payment Method | Payment Recipient | | |
| 2017/10/07 | \$13.70 | Credit card | Grocery stores, convenience stores without gas stations, pharmacies | <input type="radio"/> | <input type="radio"/> |
| 2017/10/07 | \$206.96 | Check | Telephone, internet, cable or satellite tv, video or music streaming services, movie theaters | <input type="radio"/> | <input type="radio"/> |

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END OF GROUP

END OF IF

END OF IF

END OF IF

dummy := getCashPayments()

IF numberofwithdrawals > 0 THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

dp006_intro (any impact in section Hurricane)

Here is a list of cash withdrawals recorded in your diary. For each one, please indicate if and how it was affected by Hurricane (Harvey/Irma).

Please choose one response for each cash withdrawal.

LOOP FROM 1 TO NUMBEROFWITHDRAWALS

dp006_a (impact on cash withdrawal in section Hurricane)

1 I made this withdrawal entirely because of Hurricane (Harvey/Irma)

2 I withdrew **more** than I would have because of Hurricane (Harvey/Irma)

3 I withdrew **less** than I would have because of Hurricane (Harvey/Irma)

4 This withdrawal was not affected by Hurricane (Harvey/Irma)

END OF LOOP

Figure 8: Example

UnderstandingAmericaStudy

Here is a list of cash withdrawals recorded in your diary. For each one, please indicate if and how it was affected by Hurricane Harvey.

- Please choose one response for each cash withdrawal.

| Cash withdrawal recorded in diary | | I made this withdrawal entirely because of Hurricane Harvey | I withdrew more than I would have because of Hurricane Harvey | I withdrew less than I would have because of Hurricane Harvey | This withdrawal was not affected by Hurricane Harvey |
|-----------------------------------|--------------|---|---|---|--|
| Date of cash withdrawal | Amount Spent | | | | |
| 2017/10/07 | \$60.00 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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END OF GROUP

END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

dp007 (cancelled diary payments in section Hurricane)

To the best of your recollection, were there **payments** that you would have likely made during your diary period if it weren't for Hurricane (Harvey/Irma)? *Examples include cancelled shopping trips, medical appointments, or purchases that you make on typical days.*

1 Yes, please specify:

2 No

dp007.other (cancelled diary payments in section Hurricane)

STRING

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

dp008 (cancelled diary withdrawals in section Hurricane)

To the best of your recollection, were there **cash withdrawals** that you would have likely made or wanted to make during your diary period if it weren't for Hurricane (Harvey/Irma)?

1 Yes, please specify:

2 No

dp008_other (cancelled diary withdrawals in section Hurricane)

STRING

END OF GROUP

fq001 (any other information in section Hurricane)

Please tell us anything else you'd like us to know about how Hurricane (Harvey/Irma) affected your diary experience or payment activity. If you don't have anything to add, please just leave the box empty.

STRING

outro (Section Hurricane)

Thank you for completing this survey. Your responses are confidential and will be used for research purposes only.

End of section **Hurricane**

Start of section **Closing**

CS_001 (HOW PLEASANT INTERVIEW in section Closing)

Could you tell us how interesting or uninteresting you found the questions in this survey?

1 Very interesting

2 Interesting

3 Neither interesting nor uninteresting

4 Uninteresting

5 Very uninteresting

CS_003 (comments in section Closing)

Do you have any other comments on the survey? Please type these in the box below.(If you have no comments, please click next to complete this survey.)

STRING

End of section **Closing**

/* Please note that although question CS_003 is listed in the routing, the answers are not included in the microdata in the event identifiable information is captured. Cleaned responses are available by request. */