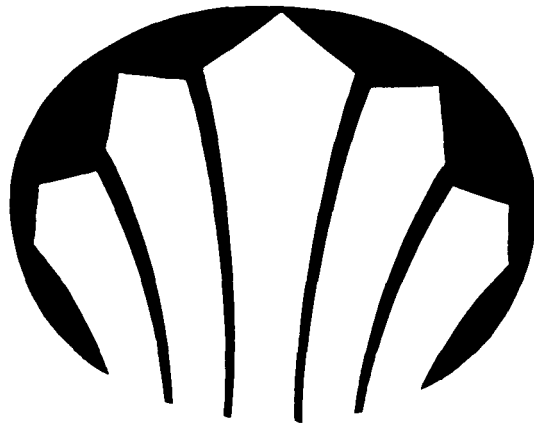


**AWARENESS OF
FLASH FLOODING
AMONG
CLARK COUNTY RESIDENTS
- YEAR 2001 -**

Prepared For:

REGIONAL FLOOD CONTROL DISTRICT



THE SOURCE
for marketing guidance

November, 2001

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I. INTRODUCTION

A. Background and Objectives

In October of 1999, THE SOURCE conducted an awareness survey among Clark County residents for the REGIONAL FLOOD CONTROL DISTRICT. Awareness levels of the dangers of flooding were high. The survey was repeated in October of 2000 with some additional areas of concern being explored.

The purpose of this current study was to replicate the previous surveys, and to also explore reactions to the billboard campaign.

The specific objectives of this study were to determine, among Clark County residents . . .

- > unaided and aided awareness of the dangers of flash flooding in Clark County, and how they compare to the previous year.
- > from which sources they obtained information about flash flooding.
- > their recall of the billboard advertising and how effective they believe it is.
- > their experience and behavior with flooding.
- > their opinion about whether violators of flood barriers should have to reimburse the County if they need to be rescued.

B. Methods and Procedures

To be able to statistically compare the 1999, 2000 and 2001 survey results in a valid and reliable manner, the methods and procedures used in this current study were identical to those used in the previous studies. Thus, a telephone survey was conducted with 506 Clark County residents who are 18 years or older between Monday, October 8, 2001 and Saturday, October 20, 2001.

One of the largest and most respected suppliers of scientific samples was employed to provide a representative sample of all (both listed and unlisted) working residential telephone numbers in Clark County.

During the call attempts, when a no answer, busy signal or answering machine was reached, at least four call back were made on different days and at different times of the day before the number was replaced with a number from a replicate sample. Each interview took 5 to 6 minutes to complete. It should also be noted that 15 interviews were conducted in Spanish for those respondents not fluent in the English language.

Based on the final sample distribution proportions across the county and comparing them to Clark County Comprehensive Planning Division population estimates, we believe this sample accurately represents telephone households and is projectable to all of Clark County.

The maximum margin of error for the 506 sample is plus or minus 4.4% at the 95% level of confidence. Where appropriate, statistically significant differences are indicated on the tables.

The flow of the interview and the exact wording of the questions can be discerned by examining the questionnaire in the Appendix.

For analytical purposes, the Las Vegas valley was divided into quadrants. A map showing the quadrant zip code boundaries and the number of interviews conducted in each zip code can be found in the Appendix. The proportion of interviews conducted in each quadrant closely match the population estimates from the Comprehensive Planning Division.

II. EXECUTIVE SUMMARY

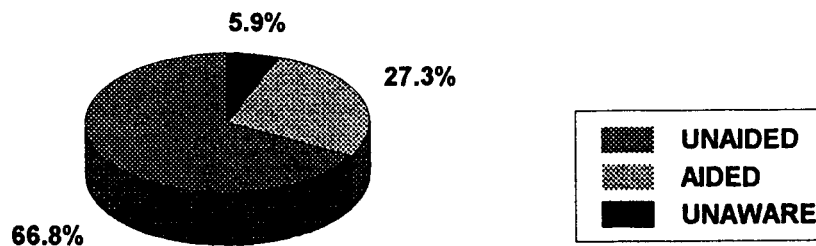
This is the third year of measuring flash flooding awareness for the CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT. For comparative purposes, this current project replicates the 1999 and 2000 studies, with some new areas of investigation added.

Five hundred and six respondents, composing a representative sample of Clark County adult residents, were interviewed by telephone during October, 2001. Fifty-eight percent are women and 42% are men. Their median age is 48.2 years, they've lived in Clark County an average of 11.4 years, and their households average 2.5 members.

When asked without any prompting if they could name the types of natural disasters that can be a danger to Clark County residents, 66.8% said "Flash Flooding/Flooding," significantly higher than all other mentions, which included earthquakes (37.2%), wind/dust/sand storms (7.9%), fires (7.3%), tornados (6.7%), and several other natural and non-natural dangers. By sub-sample, "Flash Flooding/Flooding" was named more frequently by those under 50 years old, those with three or more household members and with children in the household.

Those who did not spontaneously say flooding were asked if they were aware of the dangers of flash flooding in Clark County. In this aided or prompted situation, 27.3% said they were, thus producing a total awareness of 94.1% (unaided 66.8% + aided 27.3%).

Awareness of Flash Floods - 2001

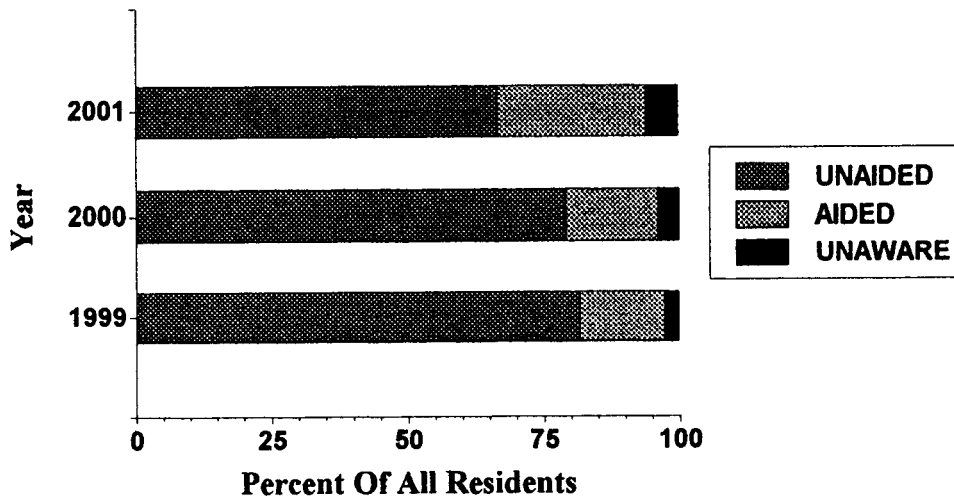


Unaided flooding awareness for 2001 (66.8%) is down significantly from 2000 (79%) and 1999 (81.6%). We believe two factors may account for this. First, there has been less rainfall in 2001 (.47 inches during the flood season of July, August and September) than there was in 2000 (.71 inches) and in 1999 (2.78 inches - the 100 Year Flood).

Second, people's minds may be preoccupied with the ongoing national events. This seems likely for two reasons: not only was unaided awareness of flooding lower this year, awareness of all the other disasters they named (earthquakes, fires, etc.) was lower, and the percentage of people not being able to name any disaster was higher. Also, there was a significantly higher level of aided awareness this year (27.3%) compared to 2000 (17%) and 1999 (15.8%). Once it was mentioned it was as if people were saying "Oh yeah, I remember."

As a result of the above cited fluctuations, the 2001 total awareness level of 94.1% was down slightly but not significantly from 2000 (96%); however, it is down significantly from 1999 (97.4%), the 100 Year Flood. The following chart illustrates the differences.

Comparison Of Awareness By Year



When asked without any prompting how they learned about the dangers of flash flooding in Clark County, in all three survey years respondents by far said "by living here/seeing it happen/ through personal experience" (55.9% in 2001). Other sources were given, similar in each year, which included television, newspaper, radio, billboard, family/friends, and several others.

Respondents were next asked if they had heard or read about flash flooding dangers from a list of nine specified sources. Following is a comparison of this year's responses to last year's, in this year's rank order. The spaces between sources indicate statistically significant differences between sources for 2001. The arrows between percentages indicate statistically significant differences for the source between years.

	<u>2001</u>		<u>2000</u>
Television	93.7%	<-->	97.7%
Radio	69.1%		67.3%
Newspaper	64.7%	<-->	73.1%
Friends or Relative	49.4%		49.2%
Billboard	47.7%		51.0%
Brochure	24.2%	<-->	18.5%
Bus Stop Shelter Ad	20.2%	<-->	13.5%
Children	18.1%	<-->	12.9%
Magazine	15.3%	<-->	9.8%

The 47.7% of respondents who this year said they had seen Billboards about flooding dangers were asked if they recalled any of the words or pictures on the billboards. Eighty percent said they could remember words and/or pictures.

For a billboard observation, where a person is driving by and has one or two seconds at the most to absorb the message, graphics usually communicate stronger than the words. This is true in the case of the Flood Billboards, where two-thirds of the respondents described cars in deep water: "car covered with water," "car half covered with water," "car floating," and "car almost up to roof with water."

However, there was also some recall of the copy - both this year's and last year's. In order of frequency, correct mentions of billboard copy included: "Farfromfloatin," "Not A Flotation Device," "Look Mom No Brains," "Boats Float Cars Don't," "This Is An IQ Test," "Just Add Water," "Up The River/Creek No Paddle," "Raindrops Keep Fallin Use Your Head" and "Instant Disaster."

Also, many respondents quoted copy statements that were incorrect, BUT they did get the message about flooding. There were numerous statements such as "Don't Try This," "Think Before You Drive," "Stay Safe," "Don't Even Think About It," "If You Drive Through, You Will Pay," "Cars Are Not Life Preservers," "Don't Take A Chance" and "Flash Floods Can Kill."

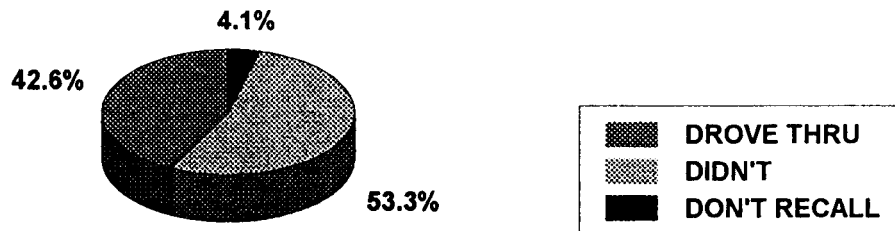
Over half (54.8%) of those who recalled something about the billboards felt that they are "Very Effective" in communicating the dangers of flash flooding. Another 40.3% said the billboards are "Somewhat Effective" and just 4.3% felt that they are "Not At All Effective."

The vast majority (89.5%) of these residents drive a vehicle. Of those who do drive, 59.6% usually drive a regular passenger car and 40.4% usually drive an SUV, van or truck.

All drivers were asked if they had ever encountered a flooded street or road while driving. Seven of ten (70%) said that they had. A significantly higher proportion of those who have lived here six or more years said they had. Six of ten (59.3%) of those who had encountered a flooded street said this had happened five or more times.

Those who had encountered a flooded street while driving were asked which of four statements best describes their experience the first time they came to a flooded street. One statement pertained to avoiding the flooded street, the three other statements pertained to driving through experiences. The pie chart on the following page summarizes those who drove through versus those who did not drive through.

First Time Encountered Flooded Street



The above breakdown is very close to last year's proportions.

Those driving into the flooded street the first time (42.6%) also indicated their experience:

22.4% "Drove Into It - No Problem"
18.0% "Drove Into It - Made It But Scary"
2.2% "Drove Into It And Got Stuck"

42.6%

In 2000 it was found that those who drive an SUV/van/truck were more likely to have driven into or through a flooded street than those who drive a regular car. This difference did not appear this year.

Those who had multiple experiences with flooding were asked which of five statements best describes their behavior over all of their flooded street encounters.

The following table summarizes the two most recent years of respondent behavior each time they encountered a flooded street.

**SUMMARY OF BEHAVIOR
EACH TIME ENCOUNTERED A FLOODED STREET**

	<u>2001</u>		<u>2000</u>
Sometimes drove thru sometimes went back	40.7%	<-->	18.4%
Went back/waited all times	37.5%		45.6%
Drove into first time/ back other times	11.8%		14.2%
Drove into/thru all times	8.9%	<-->	16.5%
Went back first time/ into other times	1.1%	<-->	5.4%
	-----		-----
TOTAL SAMPLE	100.0%		100.0%

<--> Statistically significant difference between proportions at the 95% level of confidence

Looking only at the significant differences from 2000 to 2001 (the other difference could be due to sampling variations), it appears that residents who in the past drove into or through flooded streets every time and those who drove into it during all subsequent visits after their first time are now more likely to evaluate the specific circumstances and sometimes drive through it and sometimes go back. This is definitely a shift in the right direction. Note that the proportion of those who went back each time appears to be lower than the previous year, however the difference is not quite statistically significant. This difference will be monitored next year to determine if in fact it may be an actual difference and an area of concern.

Looking at sub-sample differences this year, older drivers are more likely than younger drivers to have driven into a flooded street the first time but to have gone back on all subsequent encounters. Northeast area residents are less likely than residents in all other areas to be circumstance drivers, i.e. sometimes drive through and sometimes go back.

Last year there was evidence that SUV/van/truck drivers were more likely to drive into or through a flooded street every time they came to one compared to regular car drivers. There is no evidence of that this year. Last year 21.1% drove into a flooded street every time; this year 7.3% drove into it every time. Many of these drivers appear to have changed to circumstance drivers; last year 19.3% were circumstance drivers, this year 41.3% are circumstance drivers.

Respondents were asked "If a person drives around a posted County flood barricade and then needs to be rescued, should that person have to reimburse the County for the costs of the rescue?" A sizeable majority (78.3%) said that they should. Men are more likely to agree with this than women; residents who've lived in Clark County six or more years are more likely to agree than more recent residents, and SUV/van/truck drivers are more likely to agree than regular car drivers.

Finally, respondents were asked how much difference in the amount of flooding they've noticed during heavy rain storms in the last couple of years. Looking at those who've lived in Clark County 6 or more years, 31.9% said "A Lot Less Flooding," 41.8% said "Somewhat Less Flooding," and 25.8% said they noticed "No Difference In The Amount Of Flooding." Residents 50 years or older are more likely to have noticed improvement, and Northwest area residents are more likely to have noticed improvements than Southeast or Southwest area residents.

III. CONCLUSIONS AND RECOMMENDATIONS

There is still a high awareness of the dangers of flash flooding throughout Clark County, although it has dropped a little from previous years. This is most likely due to the light levels of rainfall and flooding in the past year. Experience - seeing it and being in it - is the most powerful teacher and reminder. As recommended in the 1999 report, when there is no serious flooding for a while, it is important to run a retentive advertising campaign to remind long-term residents and educate new residents about the dangers of flash flooding.

We believe that if the current advertising campaign had not been running, the awareness levels would be at a lower level than they currently are. The highest ranking media sources of information about flooding (television, radio, newspaper) are based on news coverage, not advertising time or space purchases and cannot be controlled. Information from friends or relatives also cannot be controlled. Thus, from the rank order list of sources, billboards are the highest ranking source of information that can be controlled. This survey suggests that the billboard campaign has been effective in communicating the dangers of flash flooding and we recommend that, if possible, an increased allotment of advertising dollars be directed toward billboards during the flash flood season. This will be especially important if 2002 turns out to be another light flooding year, because we know that heavy flooding will eventually happen again.

Looking at flood encounter behavior, it appears that there has been some shift in the right direction and that people are somewhat less likely to drive into flooded streets. Of course the goal is to convince all people to always avoid flooded areas, but unfortunately this will never happen regardless of any educational efforts. There are certain personality types - impulsive, risk takers - who may know about the dangers but will drive into it anyway.

Therefore, it is important to direct advertising efforts toward both those who found it scary driving into a flooded street and those who are imitators (seeing someone else doing it, thus giving them "permission" to also do it).

The results from this year's and last year's surveys indicate a mandate to charge people who violate flood barriers and who then need to be rescued; however this can be effective only if people are made aware of the policy once it is implemented.

We do not believe that the perceived amount of flooding responses given by residents can necessarily be related to the number of recently completed flood control projects. Any discerned improvement in the amount of flooding could be due to the completion of flood control projects, or due to the amount of actual flooding there has been. Although we used the rainfall inches per month as a measure to understand changes in unaided flooding awareness, actual flooding depends on how the rainfall is spread out over the days in a month. Perhaps the Flood Control District can develop a quantifiable measure of the amount of flooding in any given month or year to more accurately assess flood handling improvement.

IV. DETAILED FINDINGS

Five hundred and six respondents, constituting a representative sample of Clark County adult residents, were interviewed by telephone during October, 2001.

In addition to reporting information by total respondents, data was cross-tabulated by years lived in Clark County, gender, age, number of people in the household, whether there are children in the household, type of vehicle driven, quadrant of the valley lived in, and by whether or not they said "flash flooding/flooding" when asked to name the types of natural disasters than can be a danger to residents.

A. Awareness of Flooding

After first verifying their Zip Code and asking how long they have lived in Clark County, respondents were asked if they could name the types of natural disasters that can be a danger to residents of Clark County. In this unaided situation, 66.8% of all residents said "Flash Flooding" or "Flooding," significantly higher than all other mentions. The second most frequent mention was earthquakes (37.2%), followed by wind/dust/sand storms (7.9%), fires (7.3%), tornados (6.7%), and several other natural and non-natural dangers. Sixteen percent of respondents could not name any natural disasters that could be a danger to Clark County residents.

By sub-sample, "Flash Flooding/Flooding" was significantly more likely to be mentioned by those under 50 years old (74.5%) than those 50 or older (57.8%); by those with three or more people in the home (72.9%) compared to those with one or two people (61.1%); those with children (73.7%) than adult only homes (62.7%); and by those living in the Northwest area (75.7%) compared to those in the Southwest (57.6%).

(See Tables 1a & 1b)

The 168 residents who did not spontaneously mention "Flash Flooding/Flooding" were then asked if they were aware of the dangers of flash flooding here in Clark County. In this aided situation, 82.1% of these residents (27.3% of all respondents) said they were aware of the dangers of flooding.

The only significant sub-sample differences in aided awareness are that residents living in the Southeast area of the valley (89.2%) are more aware of flooding dangers than residents living in the Southwest area (66.7%).

(See Tables 2a & 2b)

Total awareness was derived by combining the previous unaided and aided responses. Across the total sample, 94.1% of these residents are aware of the dangers of flash flooding. Just 5.9% (30 of the 506 respondents) are not aware of this danger. By sub-sample, residents living in the Northwest (96.5%) and Southeast (96.2%) are significantly more aware than residents living in the Southwest (85.9%). There are no other statistically significant sub-sample differences.

(See Tables 3a & 3b)

B. Awareness Comparisons to Previous Years

Unaided awareness of flash flooding for 2001 (66.8%) is significantly lower than 2000 (79%) and 1999 (81.6%). It should be noted that all of the different disasters mentioned are at lower levels this year compared to last year. And those not being able to name any type of disaster is higher this year (16%) than last year (12.4%) and the previous year (10.4%).

With very light rainfall and flooding this year and the September national events, perhaps people's minds are preoccupied. This would seem likely as aided awareness - "Are you aware of the dangers of flash flooding here in Clark County?" - is significantly higher this year (27.3%) than in the past two years (2000 - 17%, 1999 - 15.8%). It's as if they remembered it once it was mentioned.

Total awareness, combining unaided and aided, for this year is at 94.1%; lower, but not significantly, from last year (96%). However, this year's total awareness is significantly lower than 1999 (97.4%), the year of the 100 Year Flood.

There are significant differences in several sub-samples. Generally, the sub-sample patterns follow the total samples. For unaided awareness 2001 is lower than the previous years and aided awareness is higher than previous years.

(See Tables 4a & 4b)

C. Sources of Information

The residents who were aware of the dangers of flooding were next asked questions about how they obtained information about flooding. The 30 residents who were not aware of flooding dangers were skipped ahead to the next series of questions.

The 476 residents who were aware of flooding dangers were asked, without any clues, how they learned about the dangers of flash flooding in Clark County. Over half (55.9%) of these residents in this unaided situation said they learned about it "by living here/seeing it happen/through personal experience." This response was significantly far above all other answers. The second most frequent mention was "TV" (19.5%), followed by "TV News" (12.6%). Specific channel news programs were also mentioned, giving television a total of 38.9%. Continuing on, the third most frequent mention is Newspaper (4.6%), then Radio (4.4%), Billboard (4.4%), Family/Parents/Friends/Co-workers (3.8%), News-unspecified (2.5%), and several other mentions, all less than 2%. The reader may wish to inspect the sub-sample frequencies for any useful patterns.

(See Tables 5a & 5b)

Respondents were then read a list of nine possible sources and asked to indicate whether they heard or read about flash flooding dangers from each source. In this aided situation, Television (93.7%) was cited significantly more than all other sources. Next, Radio (69.1%) and Newspaper (64.7%) were chosen significantly more than the remaining sources. Friends/Relatives (49.4%) and Billboard (47.7%) are significantly higher than the remaining four sources. There is a sizeable drop at this point. Brochure (24.2%) is significantly higher than the bottom two - Children (18.1%) and Magazine (15.3%).

By sub-sample, compared to men, women were significantly more likely to cite Children. Compared to those who've lived in Clark County 5 years or less, those who've lived in Clark County 6 or more years were significantly more likely to say Newspaper, Brochure, Children and Magazine. Those 50 and older were more likely to say Newspaper, while those under 50 years were more likely to say Friends/Relatives, Billboard and Bus Stop Shelter Ad. Compared to one or two person households, those with three or more in the home were significantly more likely to say Friends/Relatives, Billboard, Bus Stop Shelter Ad and Children.

(See Table 6a)

Continuing with sub-sample differences in information sources, households with children are significantly more likely to say Bus Stop Shelter Ad and Children than adult only households. Adult only households are more likely to say Newspaper. SUV/van/truck drivers are more likely to say Billboard than passenger car drivers. Residents in the Northwest valley are significantly more likely to cite Friends/Relatives and Brochure than residents in the Southeast. Residents in the Northeast and Northwest are significantly more likely to say Bus Stop Shelter Ad than residents in the Southeast.

(See Table 6b)

D. Billboard Recall and Effectiveness

The 227 respondents who said they had seen Billboards about flooding dangers were asked if they recalled any of the words or pictures on the billboard. Almost a fifth (18.1%) said they couldn't remember any words or pictures.

However, almost two-thirds (65.6%) of these respondents described cars in deep water: "car covered with water," "car half covered with water," "car floating," "car almost up to roof with water," and "car in water, person sitting on it."

There was good recall of the copy used, not only this year's but last year's also: "Farfromfloatin" (5.7%), "Not A Flotation Device" (5.3%), "Look Mom. No Brains." (4.8%), "Boats Float. Cars Don't." (2.6%), "This Is An IQ Test" (1.3%), "Just Add Water" (1.3%), "Up the River/Creek. No Paddle" (.9%), "Raindrops Keep Fallin. Use Your Head" (.9%) and "Instant Disaster" (.4%).

Interestingly, many respondents cited copy statements that were incorrect, BUT they did get the message. They gave statements like "Don't Try This," "Think Before You Drive," "Stay Safe," "Don't Even Think About It," "If You Drive Through, You Will Pay," "Cars Are Not Life Preservers," "Don't Take A Chance," "Flash Floods Can Kill" and many, many others. The reader may wish to inspect the sub-sample frequencies for any useful patterns.

(See Tables 7a & 7b)

Those who recalled something about the billboards were asked to indicate, on a three-point scale, how effective they thought the billboards are in communicating the dangers of flash flooding. Overall, 54.8% said the signs are "Very Effective," 40.3% said "Somewhat Likely" and 4.3% said "Not At All Effective." This equals a 2.51 average score out of a possible 3.00. There are no significant difference in ratings within the various sub-samples.

(See Tables 8a & 8b)

E. Experience with Flooding

Although there are other ways to experience flooding, this area of questioning concentrated on flooding encounters while driving. When asked if they drive a vehicle, 89.5% said that they did. Those who didn't were skipped on to the next area of questioning. A significantly greater proportion of 6 year or more residents (91.7%) drive a vehicle than shorter term residents (84.1%).

(See Tables 9a & 9b)

Of those who do drive a vehicle, 59.6% usually drive a regular passenger car and 40.4% usually drive an SUV, van or truck. Women (68%) are significantly more likely than men (48.7%) to drive a car; and conversely, men (51.3%) are significantly more likely than women (32%) to drive an SUV, van or truck. Older residents (67.5%) are more likely to drive a car than younger - under 50 - residents (53.4%); and conversely, younger residents (46.6%) are more likely to drive an SUV, van or truck than older residents (32.5%).

Adult only households (64.4%) are more likely to drive a car than households with children (52.6%); and conversely, households with children (47.4%) are more likely to drive an SUV, van or truck than adult only households (35.6%).

(See Tables 10a & 10b)

The 453 residents who are aware of flooding dangers and who drive a vehicle were asked if they had ever encountered a flooded street or road while driving. Seventy percent of them said that they had encountered a flooded street sometime while driving in Clark County. (This is 62.6% of the total 506 resident sample.) By sub-sample, those who've lived here 6 or more years (78.9%) are significantly more likely to have encountered a flooded street than shorter term residents (45.9%). And Northwest area drivers (79%) are significantly more likely to have encountered a flooded street than Northeast area drivers (59.5%).

(See Tables 11a & 11b)

When asked how many times they have encountered a flooded street, 59.3% said five or more times. Those who've lived here 6 years or more and Northwest and Southwest residents are more likely to have encountered a flood five or more times than their sub-sample counterparts.

(See Tables 12a & 12b)

In the 2000 study, respondents were asked to describe what they did the first time they came to a flooded street. Their open-ended responses were grouped into four categories. This year respondents were asked which of the four categories best describes their first time flooded street encounter. A little over half (53.3%) said that they "turned back/went a different way/waited for the water to go down," with 42.6% saying they drove into it or through it. This is very close to the same proportions as last year. Those driving into it further segmented as follows: "drove into it - no problem" (22.4%), "drove into it - made it but scary" (18%), and "drove into it and got stuck" (2.2%). Of all the various sub-samples, the only statistically significant difference is that one or two person household drivers (22.7%) are more likely to say they drove into it and found it scary than three or more person household drivers (13.3%).

(See Tables 13a & 13b)

Among the people who encountered flooded streets more than once, some changed their behavior after their first experience and some did not. As with the previous question, respondents' open-ended responses were grouped into five categories. This year respondents were asked which category best describes their behavior over all of their flooded street encounters.

The largest category (40.7% of all who have encountered flooding) is based on their evaluation of the specific circumstance, sometimes they drove through it and sometimes they went back.

The second largest category (37.5%) is the safest, they avoided the flooded street every time they came to one by going back, going a different way or waiting for the water to go down..

The third largest category (11.8%) are those who learned a lesson from their initial experience: they drove through it the first time but went back on subsequent encounters.

The fourth category (8.9%) are those who drove into or through a flooded street every time they came to one.

The fifth category (1.1%) are a small but curious group who went back the first time but drove into or through the flooded street on subsequent encounters.

By sub-sample, older drivers are more likely than younger drivers to have driven into a flooded street the first time they came to one, but went back on all subsequent encounters. Last year there was evidence that SUV/van/truck drivers were more likely to drive into or through a flooded street every time they came to one compared to regular car drivers. There is no evidence of that this year; however they are now more likely to sometimes drive through and sometimes go back. By geographic location, the only significant difference is that Northeast residents are less likely than others to be circumstance drivers; i.e., those who sometimes drive through and sometimes go back.

(See Tables 14a & 14b)

F. Should County Be Reimbursed For Rescue

All respondents were read the question "If a person drives around a posted County flood barricade and then needs to be rescued, do you think that person should have to reimburse the County for the costs of the rescue?"

More than three-fourths (78.3%) of all respondents said that the County should be reimbursed. By sub-sample, men (82.6%) are more likely to agree than women

(75.1%), those who've lived in Clark County six or more years (80.1%) are more likely to agree than newer residents (73.8%), and SUV/Van/Truck drivers (85.8%) are more likely to agree than passenger car drivers (77%).

(See Tables 15a & 15b)

G. Perceived Amount of Flooding in Recent Years

All respondents were asked: "During heavy rain storms, how much difference in the amount of flooding have you noticed? Would you say you've noticed, in the past couple of years, a lot less flooding, somewhat less flooding, or no difference in the amount of flooding. Overall, 27.5% said "A Lot Less Flooding," 39.3% said "Somewhat Less Flooding" and 32.2% said "No Difference In The Amount Of Flooding." This equals an average score of 1.95 out of a possible 3.00, slightly below the mid-point.

It should be noted, though, that recent residents do not have the same perspective as longer term residents. Looking at those who've lived in Clark County 6 or more years, 33.5% said "A Lot Less Flooding," 39.1% said "Somewhat Less Flooding" and 27% said "No Difference." This equals an average score of 2.06, significantly higher than the average score of 1.68 for more recent residents. Respondents 50 years or older are also more likely to have noticed improvement with an average score of 2.07, significantly higher than younger respondents (1.86). By geographic area, Northwest residents are more likely to have noticed improvement than Southeast and Southwest residents.

(See Tables 16a & 16b)

H. Characteristics of the Sample

In our sampling procedure we asked to speak to either the male or female head of the household. If neither was available, the interview was conducted with a permanent resident of the household who is 18 years or older.

There was a good sampling by gender, with 42.1% of the total sample being men and 57.9% being women. The only significant differences by gender are a greater proportion of SUV/van/truck drivers are men and a greater proportion of car drivers are women.

(See Tables 17a & 17b)

For the most part, one of the heads of household was interviewed (79.1%). When an other adult member of the household was interviewed, that person was significantly more likely to be female, lived in Clark County 5 years or less, be under 50 years old, from a household with three or more members, from a household with children, and live in the Northwest.

(See Tables 18a & 18b)

The median age of these residents is 48.2 years. Residents who have lived in Clark County 6 or more years are significantly older (51.2) than those who have lived in Clark County 5 years or less (40.9). Residents from one or two member households are significantly older (59.1) than those from three or more member households (41.6). This correlates with household composition - respondents in adult only households are significantly older (56.6) than respondents in households with children (40.3). Residents in the Northwest (48.9), Southeast (48.7) and Southwest (51.2) are significantly older than residents in the Northeast (44.2). And car drivers (50.1) are significantly older than SUV/van/truck drivers (45.4).

(See Tables 19a & 19b)

The median time these residents have lived in Clark County is 11.4 years. Residents who are 50 or older have lived in Clark County significantly longer (15 years) than those under 50 (8.7 years). Also, those living in the Northwest (14.6 years) have lived in Clark County significantly longer than residents in the Southeast (10.7 years) and Southwest (9.2 years).

(See Tables 20a & 20b)

The median number of household members is 2.5. Under 50 year old households are significantly larger (3.3) than 50 and older households (1.9). This correlates with household composition - households with children are significantly larger (4.1) than adult only households (1.9). Households in the Northeast (2.8) are significantly larger than households in the Southeast (2.4) and Southwest (2.4). And households with an SUV/van/truck are significantly larger (2.8) than car households (2.4).

(See Tables 21a & 21b)

Over six in ten (62.3%) of these households do not have children; 19.2% are single person households and 42.9% are two or more adults with no children. About a fifth (18.4%) are households with only pre-teens, 8.5% are households with teen-agers only, and 10.7% have both pre-teens and teen-agers. Most of the sub-sample significant differences are what would be expected for the categories. The reader can inspect the tables for these. Noteworthy significant differences are that single person households are more likely to be car drivers while SUV/van/truck drivers more likely live in households with only pre-teens.

(See Tables 22a & 22b)

I. Comparison by Unaided Awareness

In this section, differences in demographic characteristics are noted between those residents who initially named "Flash Flooding/Flooding as a natural disaster danger in Clark County and those who did not spontaneously mention flooding as a danger. These comparisons look at some of the previous data from a different perspective. All of the differences cited below are statistically significant.

Looking at unprompted awareness of flooding by area of Clark County, proportionately more Northwest area residents did not say flooding while proportionately more Southwest area residents did say flooding.

A greater proportion of those who initially said flooding are younger than those who did not initially say flooding.

A greater proportion of those who initially said flooding have more people living in their household than those who did not say flooding.

A greater proportion of those who did not initially say flooding are single person households.

(See Tables 23 -29)

For those readers interested in inspecting unaided awareness by individual Zip Code, this data can be found in Table 24.

V. SUPPORTING TABLES

Table 1a

UNAIDED AWARENESS: NAME TYPES OF NATURAL DISASTERS THAT CAN BE A DANGER
TO RESIDENTS OF CLARK COUNTY

	TOTAL	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
No, Can't Name Any	81 16.0%	32 15.0	49 16.7	31 21.4	50 13.9	32 11.7	48 20.9	50 19.5	31 12.6
Flash Flooding/ Flooding	338 66.8%	148 69.5	190 64.8	92 63.4	246 68.1	204 74.5	133 57.8	157 61.1	180 72.9
Earthquakes	188 37.2%	76 35.7	112 38.2	50 34.5	138 38.2	100 36.5	87 37.8	100 38.9	86 34.8
Wind/Dust/Sand Storms	40 7.9%	18 8.5	22 7.5	10 6.9	30 8.3	18 6.6	22 9.6	27 10.5	13 5.3
Fires/Wild Fires	37 7.3%	10 4.7	27 9.2	8 5.5	29 8.0	22 8.0	15 6.5	15 5.8	22 8.9
Tornados/Twisters/ Microbursts	34 6.7%	14 6.6	20 6.8	12 8.3	22 6.1	18 6.6	16 7.0	15 5.8	17 6.9
Lightning	12 2.4%	7 3.3	5 1.7	3 2.1	9 2.5	7 2.6	5 2.2	5 1.9	7 2.8
High Temperature/ Heat	8 1.6%	5 2.3	3 1.0	3 2.1	5 1.4	6 2.2	2 0.9	0	8 3.2
Storms (unspecified)	7 1.4%	5 2.3	2 0.7	0	7 1.9	1 0.4	6 2.6	3 1.2	4 1.6
Drought	6 1.2%	3 1.4	3 1.0	3 2.1	3 0.8	5 1.8	1 0.4	3 1.2	3 1.2
Rain	6 1.2%	2 0.9	4 1.4	2 1.4	4 1.1	2 0.7	4 1.7	3 1.2	3 1.2
Dam Break	6 1.2%	3 1.4	3 1.0	2 1.4	4 1.1	5 1.8	1 0.4	2 0.8	4 1.6
All Other Mentions	21 4.2%	7 3.3	14 4.8	5 3.4	16 4.4	15 5.5	6 2.6	7 2.7	13 5.3
TOTAL RESPONSES	784	330	454	221	563	435	346	387	391
BASE-NET RESPONDENTS	154.9%	154.9	154.9	152.4	156.0	158.8	150.4	150.6	158.3
NET RESPONDENTS	506	213	293	145	361	274	230	257	247

NOTE: For the "Flash Flooding/Flooding" row, arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Table 1b

UNAIDED AWARENESS: NAME TYPES OF NATURAL DISASTERS THAT CAN BE A DANGER
TO RESIDENTS OF CLARK COUNTY

	QUADRANT OF VALLEY					OUT- LYING	HOUSEHOLD COMPOSITION		TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST		ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
No, Can't Name Any	81 16.0%	20 21.7	11 9.6	34 18.3	16 17.4	0	56 17.8	25 13.2	51 18.9	18 9.8
Flash Flooding/ Flooding	338 66.8%	58 63.0	87 75.7	121 65.1	53 57.6	19 90.5	197 62.7	140 73.7	179 66.3	133 72.7
Earthquakes	188 37.2%	28 30.4	41 35.7	72 38.7	38 41.3	9 42.9	118 37.6	68 35.8	93 34.4	82 44.8
Wind/Dust/Sand Storms	40 7.9%	2 2.2	7 6.1	19 10.2	9 9.8	3 14.3	27 8.6	13 6.8	25 9.3	13 7.1
Fires/Wild Fires	37 7.3%	8 8.7	9 7.8	10 5.4	6 6.5	4 19.0	21 6.7	16 8.4	22 8.1	9 4.9
Tornados/Twisters/ Microbursts	34 6.7%	9 9.8	6 5.2	14 7.5	4 4.3	1 4.8	21 6.7	11 5.8	16 5.9	14 7.7
Lightning	12 2.4%	0	4 3.5	6 3.2	2 2.2	0	6 1.9	6 3.2	4 1.5	7 3.8
High Temperature/ Heat	8 1.6%	0	0	6 3.2	2 2.2	0	4 1.3	4 2.1	8 3.0	0
Storms (unspecified)	7 1.4%	1 1.1	0	4 2.2	2 2.2	0	6 1.9	1 0.5	5 1.9	2 1.1
Drought	6 1.2%	0	1 0.9	1 0.5	3 3.3	1 4.8	4 1.3	2 1.1	2 0.7	4 2.2
Rain	6 1.2%	2 2.2	1 0.9	0	3 3.3	0	3 1.0	3 1.6	5 1.9	1 0.5
Dam Break	6 1.2%	2 2.2	1 0.9	2 1.1	1 1.1	0	2 0.6	4 2.1	2 0.7	4 2.2
All Other Mentions	21 4.2%	4 4.3	5 4.3	5 2.7	6 6.5	1 4.8	12 3.8	8 4.2	10 3.7	10 5.5
TOTAL RESPONSES	784	134	173	294	145	38	477	301	422	297
BASE-NET RESPONDENTS	154.9%	145.7	150.4	158.1	157.6	181.0	151.9	158.4	156.3	162.3
NET RESPONDENTS	506	92	115	186	92	21	314	190	270	183

NOTE: For the "Flash Flooding/Flooding" row, arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence. Outlying area sample size is too small to calculate.

Table 2a

AIDED AWARENESS: (AMONG THOSE NOT SAYING "FLOODING" IN PREVIOUS QUESTION)
 AWARE OF DANGERS OF FLASH FLOODING HERE IN CLARK COUNTY

	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD		
	TOTAL	MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Yes	138 82.1%	57 87.7	81 78.6	39 73.6	99 86.1	53 75.7	84 86.6	84 84.0	53 79.1
No	30 17.9%	8 12.3	22 21.4	14 26.4	16 13.9	17 24.3	13 13.4	16 16.0	14 20.9
TOTAL RESPONSES	168	65	103	53	115	70	97	100	67
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

Table 2b

AIDED AWARENESS: (AMONG THOSE NOT SAYING "FLOODING" IN PREVIOUS QUESTION)
 AWARE OF DANGERS OF FLASH FLOODING HERE IN CLARK COUNTY

	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION		TYPE OF VEHICLE		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	CHILD-ADULTS ONLY	REN IN HOME	CAR	SUV/VAN/TRUCK
Yes	138 82.1%	28 82.4	24 85.7	58 89.2	26 66.7	2 100.0	95 81.2	42 84.0	79 85.9	43 86.0
No	30 17.9%	6 17.6	4 14.3	7 10.8	13 33.3	0	22 18.8	8 16.0	13 14.1	7 14.0
TOTAL RESPONSES	168	34	28	65	39	2	117	50	92	50
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrow indicates a difference between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 3a

TOTAL AWARENESS:
UNAIDED AND AIDED AWARENESS OF FLASH FLOODING DANGERS

	GENDER OF RESPONDENT	YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD			
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Aware of Flash Flooding	476 94.1%	205 96.2	271 92.5	131 90.3	345 95.6	257 93.8	217 94.3	241 93.8	233 94.3
Not Aware of Flash Flooding	30 5.9%	8 3.8	22 7.5	14 9.7	16 4.4	17 6.2	13 5.7	16 6.2	14 5.7
TOTAL RESPONSES	506	213	293	145	361	274	230	257	247
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

Table 3b

UNAIDED AND AIDED AWARENESS OF FLASH FLOODING DANGERS

	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION			TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
Aware of Flash Flooding	476 94.1%	86 93.5	111 96.5	179 96.2	79 85.9	21 100.0	292 93.0	182 95.8	257 95.2	176 96.2
Not Aware of Flash Flooding	30 5.9%	6 6.5	4 3.5	7 3.8	13 14.1	0	22 7.0	8 4.2	13 4.8	7 3.8
TOTAL RESPONSES	506	92	115	186	92	21	314	190	270	183
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 4a

COMPARISON OF AWARENESS
1999 - 2000 - 2001

	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD		
	TOTAL	MALE FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE	
<u>Unaided Awareness</u>									
1999	81.6%	78.3	83.8	83.0	81.1	87.5	75.3	76.4	88.7
2000	79.0%	84.7	74.2	72.1	82.6	81.3	75.8	76.3	81.7
2001	66.8%	69.5	64.8	63.4	68.1	74.5	57.8	61.1	72.9
<u>Aided Awareness</u>									
1999	15.8%	16.8	15.2	13.5	16.7	10.5	21.4	20.1	9.9
2000	17.0%	11.4	21.7	19.8	15.6	14.4	20.5	20.7	13.1
2001	27.3%	26.7	27.7	26.9	27.5	19.3	36.5	32.7	21.4
<u>Total Awareness</u>									
1999	97.4%	95.1	99.0	96.5	97.8	98.0	96.7	96.5	98.6
2000	96.0%	96.1	95.9	91.9	98.2	95.7	96.3	97.0	94.8
2001	94.1%	96.2	92.5	90.3	95.6	93.8	94.3	93.8	94.3
<u>TOTAL RESPONDENTS</u>									
1999	500	203	297	141	359	256	243	288	212
2000	500	229	271	172	327	278	219	266	230
2001	506	213	293	145	361	274	230	257	247

NOTE: Arrows indicate differences between years which were found to be statistically significant at the 95% level of confidence.

Table 4b

COMPARISON OF AWARENESS
1999 - 2000 - 2001

	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION		TYPE OF VEHICLE		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	CHILD-ADULTS ONLY	REN IN HOME	CAR	SUV/VAN/TRUCK
<u>Unaided Awareness</u>										
1999	81.6%	82.1	86.8	81.5	80.0	46.7	*	*	*	*
2000	79.0%	73.1	82.1	82.1	82.6	45.0	78.7	79.1	76.9	84.7
2001	66.8%	63.0	75.7	65.1	57.6	90.5	62.7	73.7	66.3	72.7
<u>Aided Awareness</u>										
1999	15.8%	16.0	10.6	17.0	17.1	33.3	*	*	*	*
2000	17.0%	19.4	14.5	15.2	13.9	45.0	17.8	16.0	18.7	12.2
2001	27.3%	30.5	20.8	31.1	28.3	9.5	30.3	22.1	28.9	23.5
<u>Total Awareness</u>										
1999	97.4%	98.1	97.4	98.5	97.1	80.0	*	*	*	*
2000	96.0%	93.5	96.6	97.3	96.5	90.0	96.5	95.1	95.6	96.9
2001	94.1%	93.5	96.5	96.2	85.9	100.0	93.0	95.8	95.2	96.3
<u>TOTAL RESPONDENTS</u>										
1999	500	106	114	195	70	15	*	*	*	*
2000	500	93	117	184	86	20	314	182	295	163
2001	506	92	115	186	92	21#	314	190	270	183

* Not all cross-tabulated categories are shown because specific area sub-samples in 1999 were replaced with household composition and type of vehicle sub-samples in 2000.

NOTE: Arrows indicate differences between years which were found to be statistically significant at the 95% level of confidence.

Significance not calculated for samples below 30 respondents.

Table 5a

HOW LEARN ABOUT DANGERS OF FLASH FLOODING IN CLARK COUNTY
(UNAIDED - AMONG ALL WHO ARE AWARE OF DANGERS OF FLOODING)

	TOTAL	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
By Living Here/Saw It Happen/Experience	266 55.9%	121 59.0	145 53.5	47 35.9	219 63.5	138 53.7	128 59.0	132 54.8	132 56.7
TV (unspecified)	93 19.5%	35 17.1	58 21.4	25 19.1	68 19.7	52 20.2	40 18.4	51 21.2	42 18.0
TV News	60 12.6%	21 10.2	39 14.4	24 18.3	36 10.4	35 13.6	24 11.1	29 12.0	31 13.3
Channel 3 News	9 1.9%	5 2.4	4 1.5	4 3.1	5 1.4	6 2.3	3 1.4	3 1.2	6 2.6
Channel 8 News	9 1.9%	4 2.0	5 1.8	4 3.1	5 1.4	6 2.3	3 1.4	2 0.8	7 3.0
Channel 13 News	9 1.9%	4 2.0	5 1.8	2 1.5	7 2.0	6 2.3	3 1.4	3 1.2	6 2.6
Channel 5 News	5 1.1%	2 1.0	3 1.1	2 1.5	3 0.9	4 1.6	1 0.5	2 0.8	3 1.3
Newspaper	22 4.6%	9 4.4	13 4.8	3 2.3	19 5.5	7 2.7	15 6.9	15 6.2	7 3.0
Radio	21 4.4%	10 4.9	11 4.1	7 5.3	14 4.1	11 4.3	10 4.6	8 3.3	12 5.2
Billboard	21 4.4%	9 4.4	12 4.4	11 8.4	10 2.9	19 7.4	2 0.9	6 2.5	15 6.4
Family/Parents/ Friends/Co-Workers	18 3.8%	5 2.4	13 4.8	13 9.9	5 1.4	12 4.7	6 2.8	7 2.9	11 4.7
News (unspecified)	12 2.5%	2 1.0	10 3.7	4 3.1	8 2.3	8 3.1	4 1.8	4 1.7	8 3.4
Flood Insurance/ Insurance Agent	6 1.3%	2 1.0	4 1.5	1 0.8	5 1.4	1 0.4	5 2.3	3 1.2	3 1.3
In School	5 1.1%	4 2.0	1 0.4	1 0.8	4 1.2	5 1.9	0	1 0.4	4 1.7
Public Service Announcements	4 0.8%	0	4 1.5	2 1.5	2 0.6	4 1.6	0	1 0.4	3 1.3

Continued...

(Table Continued)

Work for City/County /Government	4 0.8%	3 1.5	1 0.4	1 0.8	3 0.9	2 0.8	2 0.9	3 1.2	1 0.4
From my Realtor	4 0.8%	2 1.0	2 0.7	2 1.5	2 0.6	2 0.8	2 0.9	1 0.4	3 1.3
I'm in Real Estate	3 0.6%	0	3 1.1	1 0.8	2 0.6	1 0.4	2 0.9	3 1.2	0
Media/Advertising (unspecified)	3 0.6%	2 1.0	1 0.4	0	3 0.9	0	3 1.4	3 1.2	0
All Other Mentions	11 2.3%	4 2.0	7 2.6	3 2.3	8 2.3	7 2.7	4 1.8	8 3.3	3 1.3
Don't Know/Don't Remember	5 1.1%	1 0.5	4 1.5	3 2.3	2 0.6	2 0.8	3 1.4	4 1.7	1 0.4

TOTAL RESPONSES	590	245	345	160	430	328	260	289	298
BASE=NET RESPONDENTS	123.9%	119.5	127.3	122.1	124.6	127.6	119.8	119.9	127.9

NET RESPONDENTS	476	205	271	131	345	257	217	241	233

Table 5b

HOW LEARN ABOUT DANGERS OF FLASH FLOODING IN CLARK COUNTY
(UNAIDED - AMONG ALL WHO ARE AWARE OF DANGERS OF FLOODING)

	QUADRANT OF VALLEY						HOUSEHOLD COMPOSITION		TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
By Living Here/Saw It Happen/Experience	266 55.9%	46 53.5	67 60.4	103 57.5	42 53.2	8 38.1	165 56.5	99 54.4	139 54.1	107 60.8
TV (unspecified)	93 19.5%	18 20.9	22 19.8	31 17.3	12 15.2	10 47.6	59 20.2	34 18.7	48 18.7	32 18.2
TV News	60 12.6%	8 9.3	17 15.3	26 14.5	8 10.1	1 4.8	37 12.7	23 12.6	33 12.8	20 11.4
Channel 3 News	9 1.9%	1 1.2	2 1.8	3 1.7	3 3.8	0	5 1.7	4 2.2	7 2.7	2 1.1
Channel 8 News	9 1.9%	3 3.5	2 1.8	2 1.1	2 2.5	0	3 1.0	6 3.3	6 2.3	3 1.7
Channel 13 News	9 1.9%	2 2.3	1 0.9	3 1.7	3 3.8	0	3 1.0	6 3.3	6 2.3	3 1.7
Channel 5 News	5 1.1%	0	1 0.9	2 1.1	2 2.5	0	1 0.3	4 2.2	4 1.6	1 0.6
Newspaper	22 4.6%	4 4.7	7 6.3	8 4.5	1 1.3	2 9.5	16 5.5	6 3.3	14 5.4	3 1.7
Radio	21 4.4%	6 7.0	7 6.3	4 2.2	2 2.5	2 9.5	10 3.4	10 5.5	8 3.1	9 5.1
Billboard	21 4.4%	1 1.2	7 6.3	6 3.4	4 5.1	3 14.3	8 2.7	13 7.1	11 4.3	9 5.1
Family/Parents/ Friends/Co-Workers	18 3.8%	4 4.7	2 1.8	7 3.9	5 6.3	0	8 2.7	10 5.5	11 4.3	7 4.0
News (unspecified)	12 2.5%	5 5.8	2 1.8	4 2.2	1 1.3	0	5 1.7	7 3.8	6 2.3	6 3.4
Flood Insurance/ Insurance Agent	6 1.3%	0	0	4 2.2	2 2.5	0	5 1.7	1 0.5	4 1.6	2 1.1
In School	5 1.1%	2 2.3	1 0.9	2 1.1	0	0	1 0.3	4 2.2	1 0.4	3 1.7
Public Service Announcements	4 0.8%	0	0	2 1.1	2 2.5	0	0	4 2.2	3 1.2	1 0.6

Continued...

(Table Continued)

Work for City/County /Government	4 0.8%	1 1.2	1 0.9	1 0.6	1 1.3	0	3 1.0	1 0.5	2 0.8	2 1.1
From my Realtor	4 0.8%	0	0	2 1.1	2 2.5	0	1 0.3	3 1.6	1 0.4	3 1.7
I'm in Real Estate	3 0.6%	1 1.2	0	1 0.6	1 1.3	0	3 1.0	0	3 1.2	0
Media/Advertising (unspecified)	3 0.6%	0	1 0.9	1 0.6	1 1.3	0	3 1.0	0	0	3 1.7
All Other Mentions	11 2.3%	4 4.7	4 3.6	2 1.1	1 1.3	0	8 2.7	3 1.6	6 2.3	4 2.3
Don't Know/Don't Remember	5 1.1%	0	2 1.8	2 1.1	1 1.3	0	4 1.4	1 0.5	2 0.8	2 1.1

TOTAL RESPONSES	590	106	146	216	96	26	348	239	315	222
BASE-NET RESPONDENTS	123.9%	123.3	131.5	120.7	121.5	123.8	119.2	131.3	122.6	126.1

NET RESPONDENTS	476	86	111	179	79	21	292	182	257	176

Table 6a

HEARD OR READ ABOUT FLOODING DANGERS FROM SPECIFIED SOURCES
(AMONG THOSE AWARE OF FLASH FLOODING)

	TOTAL	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Television	446 93.7%	193 94.1	253 93.4	121 92.4	325 94.2	242 94.2	202 93.1	226 93.8	219 94.0
→ Radio	329 69.1%	143 69.8	186 68.6	87 66.4	242 70.1	185 72.0	142 65.4	158 65.6	169 72.5
→ Newspaper	308 64.7%	132 64.4	176 64.9	70 53.4←	238 69.0	150 58.4←	157 72.4	164 68.0	142 60.9
→ Friends/Relatives Told You About It	235 49.4%	98 47.8	137 50.6	67 51.1	168 48.7	138 53.7→	95 43.8	101 41.9←	132 56.7
→ Billboard	227 47.7%	104 50.7	123 45.4	56 42.7	171 49.6	148 57.6→	79 36.4	95 39.4←	131 56.2
→ Brochure	115 24.2%	49 23.9	66 24.4	21 16.0←	94 27.2	69 26.8	45 20.7	55 22.8	58 24.9
→ Bus Stop Shelter Ad	96 20.2%	38 18.5	58 21.4	22 16.8	74 21.4	77 30.0→	19 8.8	32 13.3←	63 27.0
→ Children Told You About It	86 18.1%	29 14.1←	57 21.0	13 9.9←	73 21.2	52 20.2	34 15.7	35 14.5←	51 21.9
→ Magazine	73 15.3%	29 14.1	44 16.2	13 9.9←	60 17.4	41 16.0	32 14.7	34 14.1	38 16.3
None of Them	10 2.1%	3 1.5	7 2.6	1 0.8	9 2.6	2 0.8	8 3.7	7 2.9	3 1.3
TOTAL RESPONSES	1925	818	1107	471	1454	1104	813	907	1006
BASE=NET RESPONDENTS	404.4%	399.0	408.5	359.5	421.4	429.6	374.7	376.3	431.8
NET RESPONDENTS	476	205	271	131	345	257	217	241	233

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Table 6b

HEARD OR READ ABOUT FLOODING DANGERS FROM SPECIFIED SOURCES
(AMONG THOSE AWARE OF FLASH FLOODING)

	TOTAL	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION		TYPE OF VEHICLE	
		NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILDREN IN HOME	CAR	SUV/VAN/TRUCK
Television	446 93.7%	79 91.9	105 94.6	172 96.1	73 92.4	17 81.0	275 94.2	170 93.4	237 92.2	169 96.0
Radio	329 69.1%	58 67.4	82 73.9	131 73.2	50 63.3	8 38.1	195 66.8	132 72.5	173 67.3	131 74.4
Newspaper	308 64.7%	51 59.3	73 65.8	123 68.7	50 63.3	11 52.4	204 69.9	102 56.0	164 63.8	120 68.2
Friends/Relatives Told You About It	235 49.4%	40 46.5	63 56.8	80 44.7	40 50.6	12 57.1	136 46.6	97 53.3	124 48.2	94 53.4
Billboard	227 47.7%	42 48.8	60 54.1	76 42.5	38 48.1	11 52.4	130 44.5	96 52.7	117 45.5	98 55.7
Brochure	115 24.2%	26 30.2	33 29.7	34 19.0	18 22.8	4 19.0	64 21.9	49 26.9	61 23.7	48 27.3
Bus Stop Shelter Ad	96 20.2%	23 26.7	30 27.0	27 15.1	13 16.5	3 14.3	45 15.4	50 27.5	51 19.8	38 21.6
Children Told You About It	86 18.1%	19 22.1	27 24.3	27 15.1	11 13.9	2 9.5	41 14.0	45 24.7	48 18.7	32 18.2
Magazine	73 15.3%	12 14.0	12 10.8	30 16.8	15 19.0	4 19.0	48 16.4	24 13.2	44 17.1	25 14.2
None of Them	10 2.1%	3 3.5	1 0.9	4 2.2	2 2.5	0	8 2.7	2 1.1	8 3.1	0
TOTAL RESPONSES	1925	353	486	704	310	72	1146	767	1027	755
BASE-NET RESPONDENTS	404.4%	410.5	437.8	393.3	392.4	342.9	392.5	421.4	399.6	429.0
NET RESPONDENTS	476	86	111	179	79	21	292	182	257	176

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 7a

RECALL WORDS OR PICTURES ON BILLBOARDS
(AMONG THOSE SEEING BILLBOARD)

	TOTAL	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Car/cars covered with water	55 24.2%	21 20.2	34 27.6	10 17.9	45 26.3	38 25.7	17 21.5	19 20.0	36 27.5
Car half covered with water	49 21.6%	28 26.9	21 17.1	9 16.1	40 23.4	42 28.4	7 8.9	18 18.9	31 23.7
Don't recall/Don't remember	41 18.1%	20 19.2	21 17.1	6 10.7	35 20.5	12 8.1	29 36.7	27 28.4	14 10.7
Car floating	26 11.5%	10 9.6	16 13.0	9 16.1	17 9.9	21 14.2	5 6.3	6 6.3	19 14.5
*"Far from floatin"	13 5.7%	5 4.8	8 6.5	3 5.4	10 5.8	11 7.4	2 2.5	3 3.2	10 7.6
*"Not A Flotation Device"	12 5.3%	5 4.8	7 5.7	5 8.9	7 4.1	9 6.1	3 3.8	6 6.3	6 4.6
Car almost up to roof with water	11 4.8%	4 3.8	7 5.7	5 8.9	6 3.5	10 6.8	1 1.3	5 5.3	6 4.6
*"Look Mom. No Brains."	11 4.8%	4 3.8	7 5.7	3 5.4	8 4.7	8 5.4	3 3.8	3 3.2	8 6.1
Car driving through flash flood	10 4.4%	3 2.9	7 5.7	2 3.6	8 4.7	5 3.4	5 6.3	7 7.4	3 2.3
Car in water, person sitting on it	8 3.5%	4 3.8	4 3.3	3 5.4	5 2.9	3 2.0	5 6.3	5 5.3	3 2.3
*"Boats Float. Cars Don't."	6 2.6%	3 2.9	3 2.4	2 3.6	4 2.3	5 3.4	1 1.3	3 3.2	3 2.3
"Don't Try This."	4 1.8%	2 1.9	2 1.6	2 3.6	2 1.2	2 1.4	2 2.5	2 2.1	2 1.5
Some billboards are in Spanish	4 1.8%	2 1.9	2 1.6	3 5.4	1 0.6	4 2.7	0	1 1.1	3 2.3
*"This is an IQ Test"	3 1.3%	2 1.9	1 0.8	2 3.6	1 0.6	1 0.7	2 2.5	1 1.1	2 1.5
*"Just Add Water."	3 1.3%	2 1.9	1 0.8	1 1.8	2 1.2	2 1.4	1 1.3	2 2.1	1 0.8

Continued...

(Table Continued)

"Think Before You Drive."	3 1.3%	2 1.9	1 0.8	1 1.8	2 1.2	2 1.4	1 1.3	2 2.1	1 0.8
"Stay Safe."	3 1.3%	2 1.9	1 0.8	0	3 1.8	3 2.0	0	0	3 2.3
**"Up The River/Creek No Paddle."	2 0.9%	1 1.0	1 0.8	0	2 1.2	2 1.4	0	0	2 1.5
**"Raindrops Keep Fallin,Use Your Head"	2 0.9%	1 1.0	1 0.8	0	2 1.2	1 0.7	1 1.3	1 1.1	1 0.8
**"Instant Disaster"	1 0.4%	1 1.0	0	1 1.8	0	1 0.7	0	0	1 0.8
All Other Copy Mentions (incorrect)	29 12.8%	13 12.5	16 13.0	8 14.3	21 12.3	21 14.2	8 10.1	13 13.7	16 12.2
Miscellaneous comments	3 1.3%	1 1.0	2 1.6	2 3.6	1 0.6	2 1.4	1 1.3	1 1.1	2 1.5

TOTAL RESPONSES	299	136	163	77	222	205	94	125	173
BASE=NET RESPONDENTS	131.7%	130.8	132.5	137.5	129.8	138.5	119.0	131.6	132.1

NET RESPONDENTS	227	104	123	56	171	148	79	95	131

* Indicates actual billboard copy used in 2001 or 2000.

Table 7b

RECALL WORDS OR PICTURES ON BILLBOARDS
(AMONG THOSE SEEING BILLBOARD)

	QUADRANT OF VALLEY						HOUSEHOLD COMPOSITION		TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
Car/cars covered with water	55 24.2%	10 23.8	18 30.0	18 23.7	8 21.1	1 9.1	27 20.8	28 29.2	25 21.4	28 28.6
Car half covered with water	49 21.6%	13 31.0	15 25.0	12 15.8	6 15.8	3 27.3	25 19.2	24 25.0	34 29.1	14 14.3
Don't recall/Don't remember	41 18.1%	8 19.0	6 10.0	19 25.0	7 18.4	1 9.1	34 26.2	7 7.3	20 17.1	16 16.3
Car floating	26 11.5%	4 9.5	6 10.0	10 13.2	5 13.2	1 9.1	12 9.2	13 13.5	13 11.1	12 12.2
*"Farfromfloatin"	13 5.7%	0	6 10.0	4 5.3	1 2.6	2 18.2	6 4.6	7 7.3	5 4.3	8 8.2
*"Not A Flotation Device"	12 5.3%	2 4.8	2 3.3	3 3.9	2 5.3	3 27.3	8 6.2	4 4.2	6 5.1	6 6.1
Car almost up to roof with water	11 4.8%	1 2.4	0	5 6.6	3 7.9	2 18.2	6 4.6	5 5.2	2 1.7	9 9.2
*"Look Mom. No Brains."	11 4.8%	0	5 8.3	3 3.9	2 5.3	1 9.1	6 4.6	5 5.2	9 7.7	2 2.0
Car driving through flash flood	10 4.4%	1 2.4	2 3.3	3 3.9	2 5.3	2 18.2	8 6.2	2 2.1	7 6.0	3 3.1
Car in water, person sitting on it	8 3.5%	2 4.8	2 3.3	3 3.9	1 2.6	0	5 3.8	3 3.1	5 4.3	3 3.1
*"Boats Float. Cars Don't."	6 2.6%	0	2 3.3	3 3.9	1 2.6	0	3 2.3	3 3.1	4 3.4	2 2.0
"Don't Try This."	4 1.8%	1 2.4	1 1.7	1 1.3	0	1 9.1	3 2.3	1 1.0	3 2.6	1 1.0
Some billboards are in Spanish	4 1.8%	1 2.4	2 3.3	0	0	1 9.1	1 0.8	3 3.1	3 2.6	1 1.0
*"This is an IQ Test"	3 1.3%	1 2.4	1 1.7	0	1 2.6	0	2 1.5	1 1.0	2 1.7	0
*"Just Add Water."	3 1.3%	2 4.8	0	0	1 2.6	0	1 0.8	2 2.1	1 0.9	2 2.0

Continued...

(Table Continued)

"Think Before You Drive."	3 1.3%	0	1 1.7	2 2.6	0	0	3 2.3	0	1 0.9	1 1.0
"Stay Safe."	3 1.3%	0	2 3.3	1 1.3	0	0	1 0.8	2 2.1	2 1.7	0
*"Up The River/Creek No Paddle."	2 0.9%	0	2 3.3	0	0	0	1 0.8	1 1.0	1 0.9	1 1.0
*"Raindrops Keep Fallin, Use Your Head"	2 0.9%	0	1 1.7	1 1.3	0	0	1 0.8	1 1.0	1 0.9	1 1.0
*"Instant Disaster"	1 0.4%	0	0	0	1 2.6	0	0	1 1.0	0	1 1.0
All Other Copy Mentions (incorrect)	29 12.8%	5 11.9	7 11.7	9 11.8	6 15.8	2 18.2	21 16.2	8 8.3	17 14.5	11 11.2
Miscellaneous comments	3 1.3%	0	2 3.3	1 1.3	0	0	3 2.3	0	2 1.7	1 1.0

TOTAL RESPONSES	299	51	83	98	47	20	177	121	163	123
BASE=NET RESPONDENTS	131.7%	121.4	138.3	128.9	123.7	181.8	136.2	126.0	139.3	125.5

NET RESPONDENTS	227	42	60	76	38	11	130	96	117	98

* Indicates actual billboard copy used in 2001 or 2000.

Table 8a

EFFECTIVENESS OF BILLBOARDS IN COMMUNICATING DANGERS OF FLASH FLOODING
(AMONG THOSE WHO RECALLED SOMETHING ABOUT THEM)

	TOTAL	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
(3) Very Effective	102 54.8%	42 50.0	60 58.8	30 60.0	72 52.9	76 55.9	26 52.0	39 57.4	62 53.0
(2) Somewhat Effective	75 40.3%	38 45.2	37 36.3	18 36.0	57 41.9	54 39.7	21 42.0	25 36.8	50 42.7
(1) Not At All Effective	8 4.3%	3 3.6	5 4.9	2 4.0	6 4.4	5 3.7	3 6.0	4 5.9	4 3.4
Don't Know/No Answer	1 0.5%	1 1.2	0	0	1 0.7	1 0.7	0	0	1 0.9
TOTAL RESPONSES	186	84	102	50	136	136	50	68	117
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEAN	2.51	2.47	2.54	2.56	2.49	2.53	2.46	2.51	2.50
STD. DEV.	0.58	0.57	0.59	0.57	0.58	0.57	0.61	0.61	0.56
T-Value			-0.81		0.75		0.67		0.16

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

Table 8b

EFFECTIVENESS OF BILLBOARDS IN COMMUNICATING DANGERS OF FLASH FLOODING
(AMONG THOSE WHO RECALLED SOMETHING ABOUT THEM)

	QUADRANT OF VALLEY						HOUSEHOLD COMPOSITION		TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	CHILD-ADULTS ONLY	REN IN HOME	CAR	SUV/VAN/TRUCK
(3) Very Effective	102 54.8%	13 38.2	30 55.6	35 61.4	19 61.3	5 50.0	55 57.3	46 51.7	57 58.8	41 50.0
(2) Somewhat Effective	75 40.3%	19 55.9	21 38.9	18 31.6	12 38.7	5 50.0	37 38.5	38 42.7	35 36.1	38 46.3
(1) Not At All Effective	8 4.3%	2 5.9	3 5.6	3 5.3	0	0	4 4.2	4 4.5	5 5.2	2 2.4
Don't Know/No Answer	1 0.5%	0	0	1 1.8	0	0	0	1 1.1	0	1 1.2
TOTAL RESPONSES	186	34	54	57	31	10	96	89	97	82
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEAN	2.51	2.32	2.50	2.57	2.61	2.50	2.53	2.48	2.54	2.48
STD. DEV.	0.58	0.58	0.60	0.59	0.49	0.50	0.58	0.58	0.59	0.55
T-Value			-1.37	-0.63	-0.35	0.62		0.63		0.64

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 9a

DOES RESPONDENT DRIVE A VEHICLE

	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD		
	TOTAL	MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Yes	453 89.5%	197 92.5%	256 87.4%	122 84.1%	331 91.7%	251 91.6%	200 87.0%	227 88.3%	224 90.7%
No	53 10.5%	16 7.5%	37 12.6%	23 15.9%	30 8.3%	23 8.4%	30 13.0%	30 11.7%	23 9.3%
TOTAL RESPONSES	506	213	293	145	361	274	230	257	247
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

Table 9b

DOES RESPONDENT DRIVE A VEHICLE

	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION			TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
Yes	453 89.5%	79 85.9	100 87.0	170 91.4	84 91.3	20 95.2	278 88.5	173 91.1	270 100.0	183 100.0
No	53 10.5%	13 14.1	15 13.0	16 8.6	8 8.7	1 4.8	36 11.5	17 8.9	0	0
TOTAL RESPONSES	506	92	115	186	92	21	314	190	270	183
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 10a

TYPE OF VEHICLE USUALLY DRIVEN

	TOTAL	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Passenger Car	270 59.6%	96 48.7%	174 68.0%	74 60.7	196 59.2	134 53.4%	135 67.5	145 63.9	125 55.8
SUV, Van or Truck	183 40.4%	101 51.3%	82 32.0	48 39.3	135 40.8	117 46.6%	65 32.5	82 36.1	99 44.2
TOTAL RESPONSES	453	197	256	122	331	251	200	227	224
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Table 10b

TYPE OF VEHICLE USUALLY DRIVEN

	QUADRANT OF VALLEY						HOUSEHOLD COMPOSITION		TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
Passenger Car	270 59.6%	46 58.2	55 55.0	103 60.6	54 64.3	12 60.0	179 64.4	91 52.6	270 100.0	0
SUV, Van or Truck	183 40.4%	33 41.8	45 45.0	67 39.4	30 35.7	8 40.0	99 35.6	82 47.4	0	183 100.0
TOTAL RESPONSES	453	79	100	170	84	20	278	173	270	183
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 11a

EVER ENCOUNTERED A FLOODED STREET OR ROAD WHILE DRIVING

	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD		
	TOTAL	MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Yes	317 70.0%	144 73.1	173 67.6	56 45.9	261 78.9 ←	175 69.7	142 71.0	150 66.1	165 73.7
No	136 30.0%	53 26.9	83 32.4	66 54.1	70 21.1	76 30.3	58 29.0	77 33.9	59 26.3
TOTAL RESPONSES	453	197	256	122	331	251	200	227	224
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

Table 11b

EVER ENCOUNTERED A FLOODED STREET OR ROAD WHILE DRIVING

	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION			TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
Yes	317 70.0%	47 59.5%	79 79.0%	121 71.2%	57 67.9%	13 65.0%	186 66.9%	129 74.6%	180 66.7%	137 74.9%
No	136 30.0%	32 40.5%	21 21.0%	49 28.8%	27 32.1%	7 35.0%	92 33.1%	44 25.4%	90 33.3%	46 25.1%
TOTAL RESPONSES	453	79	100	170	84	20	278	173	270	183
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrow indicates a difference between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 13a

FIRST TIME ENCOUNTERED A FLOODED STREET BEHAVIOR

	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD		
	TOTAL	MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Turned Back/Went a Different Way	169 53.3%	76 52.8	93 53.8	30 53.6	139 53.3	95 54.3	74 52.1	73 48.7	95 57.6
Drove into it and got stuck	7 2.2%	2 1.4	5 2.9	0	7 2.7	2 1.1	5 3.5	5 3.3	2 1.2
Drove into it - made it but scary	57 18.0%	24 16.7	33 19.1	11 19.6	46 17.6	30 17.1	27 19.0	34 22.7	22 13.3
Drove into it - no problem	71 22.4%	37 25.7	34 19.7	12 21.4	59 22.6	38 21.7	33 23.2	34 22.7	37 22.4
Don't Remember	13 4.1%	5 3.5	8 4.6	3 5.4	10 3.8	10 5.7	3 2.1	4 2.7	9 5.5
TOTAL RESPONSES	317	144	173	56	261	175	142	150	165
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

Table 13b

FIRST TIME ENCOUNTERED A FLOODED STREET BEHAVIOR

	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION			TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
Turned Back/Went a Different Way	169 53.3%	27 57.4	41 51.9	60 49.6	36 63.2	5 38.5	96 51.6	72 55.8	94 52.2	75 54.7
Drove into it and got stuck	7 2.2%	2 4.3	1 1.3	2 1.7	2 3.5	0	6 3.2	1 0.8	7 3.9	0
Drove into it - made it but scary	57 18.0%	5 10.6	13 16.5	27 22.3	7 12.3	5 38.5	36 19.4	20 15.5	33 18.3	24 17.5
Drove into it - no problem	71 22.4%	13 27.7	19 24.1	27 22.3	9 15.8	3 23.1	42 22.6	29 22.5	41 22.8	30 21.9
Don't Remember	13 4.1%	0	5 6.3	5 4.1	3 5.3	0	6 3.2	7 5.4	5 2.8	8 5.8
TOTAL RESPONSES	317	47	79	121	57	13	186	129	180	137
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 14a

BEHAVIOR EACH TIME ENCOUNTERED A FLOODED STREET

	TOTAL	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Sometimes drove thru	114	56	58	19	95	69	45	53	60
sometimes went back	40.7%	42.7	38.9	40.4	40.8	43.7	36.9	39.8	41.4
Went back/waited	105	50	55	19	86	56	49	47	57
all times	37.5%	38.2	36.9	40.4	36.9	35.4	40.2	35.3	39.3
Drove into 1st time/ back all other times	33 11.8%	13 9.9	20 13.4	5 10.6	28 12.0	12 7.6←	21 17.2	21 15.8	12 8.3
Drove into/thru all times	25 8.9%	11 8.4	14 9.4	4 8.5	21 9.0	18 11.4	7 5.7	12 9.0	13 9.0
Went back 1st time/ into all other times	3 1.1%	1 0.8	2 1.3	0	3 1.3	3 1.9	0	0	3 2.1
TOTAL RESPONSES	280	131	149	47	233	158	122	133	145
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

Table 14b

BEHAVIOR EACH TIME ENCOUNTERED A FLOODED STREET

	TOTAL	QUADRANT OF VALLEY				OUT- LYING	HOUSEHOLD COMPOSITION		TYPE OF VEHICLE	
		NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST		ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
Sometimes drove thru	114	10	30	47	23	4	66	47	57	57
sometimes went back	40.7%	23.3	41.1	47.5	43.4	33.3	40.0	41.6	36.3	46.3
		↑								
Went back/waited	105	18	29	33	21	4	62	42	59	46
all times	37.5%	41.9	39.7	33.3	39.6	33.3	37.6	37.2	37.6	37.4
Drove into 1st time/ back all other times	33 11.8%	7 16.3	7 9.6	11 11.1	5 9.4	3 25.0	24 14.5	9 8.0	23 14.6	10 8.1
Drove into/thru all times	25 8.9%	6 14.0	6 8.2	8 8.1	4 7.5	1 8.3	13 7.9	12 10.6	16 10.2	9 7.3
Went back 1st time/ into all other times	3 1.1%	2 4.7	1 1.4	0	0	0	0	3 2.7	2 1.3	1 0.8
TOTAL RESPONSES	280	43	73	99	53	12	165	113	157	123
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 15a

SHOULD PEOPLE WHO DRIVE AROUND POSTED FLOOD BARRICADES AND THEN NEED TO BE
RESCUED HAVE TO REIMBURSE THE COUNTY FOR THE COST OF THE RESCUE

	TOTAL	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Yes	396 78.3%	176 82.6%	220 75.1%	107 73.8%	289 80.1%	216 78.8%	178 77.4%	200 77.8%	194 78.5%
No	109 21.5%	36 16.9%	73 24.9%	38 26.2%	71 19.7%	58 21.2%	51 22.2%	56 21.8%	53 21.5%
Don't Know	1 0.2%	1 0.5%	0	0	1 0.3%	0	1 0.4%	1 0.4%	0
TOTAL RESPONSES	506	213	293	145	361	274	230	257	247
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Table 15b

SHOULD PEOPLE WHO DRIVE AROUND POSTED FLOOD BARRICADES AND THEN NEED TO BE
RESCUED HAVE TO REIMBURSE THE COUNTY FOR THE COST OF THE RESCUE

	QUADRANT OF VALLEY						HOUSEHOLD COMPOSITION		TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
Yes	396 78.3%	70 76.1	91 79.1	149 80.1	68 73.9	18 85.7	245 78.0	149 78.4	208 77.0	157 85.8
No	109 21.5%	22 23.9	23 20.0	37 19.9	24 26.1	3 14.3	68 21.7	41 21.6	62 23.0	25 13.7
Don't Know	1 0.2%	0	1 0.9	0	0	0	1 0.3	0	0	1 0.5
TOTAL RESPONSES	506	92	115	186	92	21	314	190	270	183
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrow indicates a difference between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 16a

PERCEIVED AMOUNT OF FLOODING IN PAST COUPLE OF YEARS

	TOTAL	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
(3) A lot less flooding	139 27.5%	53 24.9	86 29.4	24 16.6	115 31.9	62 22.6	77 33.5	76 29.6	63 25.5
(2) Somewhat less flooding	199 39.3%	89 41.8	110 37.5	48 33.1	151 41.8	108 39.4	90 39.1	89 34.6	110 44.5
(1) No difference in flooding	163 32.2%	70 32.9	93 31.7	70 48.3	93 25.8	100 36.5	62 27.0	90 35.0	71 28.7
Haven't lived here that long	2 0.4%	0	2 0.7	2 1.4	0	2 0.7	0	0	2 0.8
Don't Know/No Answer	3 0.6%	1 0.5	2 0.7	1 0.7	2 0.6	2 0.7	1 0.4	2 0.8	1 0.4
TOTAL RESPONSES	506	213	293	145	361	274	230	257	247
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEAN	1.95	1.92	1.98	1.68	2.06	1.86	2.07	1.95	1.97
STD. DEV.	0.77	0.76	0.79	0.75	0.76	0.76	0.78	0.80	0.74
T-Value			-0.80		-5.18		-2.98		-0.32

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Table 16b

PERCEIVED AMOUNT OF FLOODING IN PAST COUPLE OF YEARS

	TOTAL	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION		TYPE OF VEHICLE	
		NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
(3) A lot less flooding	139 27.5%	33 35.9	40 34.8	43 23.1	19 20.7	4 19.0	91 29.0	48 25.3	72 26.7	54 29.5
(2) Somewhat less flooding	199 39.3%	27 29.3	49 42.6	77 41.4	34 37.0	12 57.1	116 36.9	83 43.7	111 41.1	71 38.8
(1) No difference in flooding	163 32.2%	32 34.8	25 21.7	65 34.9	36 39.1	5 23.8	106 33.8	55 28.9	84 31.1	57 31.1
Haven't lived here that long	2 0.4%	0	0	1 0.5	1 1.1	0	0	2 1.1	2 0.7	0
Don't Know/No Answer	3 0.6%	0	1 0.9	0	2 2.2	0	1 0.3	2 1.1	1 0.4	1 0.5
TOTAL RESPONSES	506	92	115	186	92	21	314	190	270	183
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEAN	1.95	2.01	2.13	1.88	1.81	1.95	1.95	1.96	1.96	1.98
STD. DEV.	0.77	0.84	0.74	0.75	0.76	0.65	0.79	0.74	0.76	0.78
T-Value			-1.08	2.81	0.74	-0.88		-0.15		-0.38



NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 17a

RESPONDENT GENDER

	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD		
	TOTAL	MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Male	213 42.1%	213 100.0	0	64 44.1	149 41.3	115 42.0	98 42.6	108 42.0	104 42.1
Female	293 57.9%	0	293 100.0	81 55.9	212 58.7	159 58.0	132 57.4	149 58.0	143 57.9
TOTAL RESPONSES	506	213	293	145	361	274	230	257	247
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

Table 17b

RESPONDENT GENDER

	QUADRANT OF VALLEY						HOUSEHOLD COMPOSITION		TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
Male	213 42.1%	42 45.7	42 36.5	81 43.5	42 45.7	6 28.6	135 43.0	77 40.5	96 35.6←	101 55.2
Female	293 57.9%	50 54.3	73 63.5	105 56.5	50 54.3	15 71.4	179 57.0	113 59.5	174 64.4→	82 44.8
TOTAL RESPONSES	506	92	115	186	92	21	314	190	270	183
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 18a

RESPONDENT IS MALE OR FEMALE HEAD OF HOUSEHOLD OR OTHER HOUSEHOLD MEMBER

	TOTAL	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Head of Household	400 79.1%	190 89.2%	210 71.7%	105 72.4%	295 81.7%	198 72.3%	200 87.0%	224 87.2%	174 70.4%
Other Household Member	106 20.9%	23 10.8%	83 28.3%	40 27.6%	66 18.3%	76 27.7%	30 13.0%	33 12.8%	73 29.6%
TOTAL RESPONSES	506	213	293	145	361	274	230	257	247
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Table 18b

RESPONDENT IS MALE OR FEMALE HEAD OF HOUSEHOLD OR OTHER HOUSEHOLD MEMBER

	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION			TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
Head of Household	400	70	83	153	78	16	261	137	213	151
	79.1%	76.1	72.2	82.3	84.8	76.2	83.1	72.1	78.9	82.5
Other Household Member	106	22	32	33	14	5	53	53	57	32
	20.9%	23.9	27.8	17.7	15.2	23.8	16.9	27.9	21.1	17.5
TOTAL RESPONSES	506	92	115	186	92	21	314	190	270	183
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 19a

AGE OF RESPONDENT

	GENDER OF RESPONDENT	YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD			
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
(19) 18 to 20	18 3.6%	6 2.8	12 4.1	6 4.1	12 3.3	18 6.6	0	4 1.6	14 5.7
(25) 21 to 29	52 10.3%	26 12.2	26 8.9	26 17.9	26 7.2	52 19.0	0	17 6.6	35 14.2
(35) 30 to 39	82 16.2%	26 12.2	56 19.1	37 25.5	45 12.5	82 29.9	0	20 7.8	62 25.1
(45) 40 to 49	122 24.1%	57 26.8	65 22.2	32 22.1	90 24.9	122 44.5	0	42 16.3	79 32.0
(55) 50 to 59	78 15.4%	36 16.9	42 14.3	17 11.7	61 16.9	0	78 33.9	49 19.1	28 11.3
(62) 60 to 64	46 9.1%	18 8.5	28 9.6	10 6.9	36 10.0	0	46 20.0	34 13.2	12 4.9
(70) 65 or Older	106 20.9%	44 20.7	62 21.2	16 11.0	90 24.9	0	106 46.1	89 34.6	17 6.9
Refused	2 0.4%	0	2 0.7	1 0.7	1 0.3	0	0	2 0.8	0
TOTAL RESPONSES	506	213	293	145	361	274	230	257	247
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN	48.20	48.51	47.92	40.94	51.15	38.17	64.13	59.08	41.58
T-Value			0.20		-5.55		-38.78		10.83
				↑				↑	

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Table 19b

AGE OF RESPONDENT

		QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION		TYPE OF VEHICLE		
		TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
(19)	18 to 20	18 3.6%	7 7.6	4 3.5	4 2.2	2 2.2	1 4.8	7 2.2	11 5.8	7 2.6	6 3.3
(25)	21 to 29	52 10.3%	11 12.0	6 5.2	24 12.9	9 9.8	2 9.5	26 8.3	26 13.7	26 9.6	19 10.4
(35)	30 to 39	82 16.2%	18 19.6	22 19.1	20 10.8	19 20.7	3 14.3	26 8.3	56 29.5	40 14.8	36 19.7
(45)	40 to 49	122 24.1%	24 26.1	28 24.3	51 27.4	14 15.2	5 23.8	58 18.5	63 33.2	61 22.6	56 30.6
(55)	50 to 59	78 15.4%	10 10.9	23 20.0	23 12.4	17 18.5	5 23.8	59 18.8	18 9.5	42 15.6	31 16.9
(62)	60 to 64	46 9.1%	8 8.7	9 7.8	18 9.7	9 9.8	2 9.5	39 12.4	7 3.7	34 12.6	11 6.0
(70)	65 or Older	106 20.9%	14 15.2	22 19.1	45 24.2	22 23.9	3 14.3	97 30.9	9 4.7	59 21.9	23 12.6
	Refused	2 0.4%	0	1 0.9	1 0.5	0	0	2 0.6	0	1 0.4	1 0.5
TOTAL RESPONSES		506	92	115	186	92	21	314	190	270	183
BASE=NET RESPONDENTS		100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN		48.20	44.17	48.93	48.73	51.18	49.00	56.61	40.32	50.12	45.36
T-Value				-1.99	-0.25	-0.08	0.53		10.57		2.96
			↑					↑		↑	

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 20a

YEARS LIVED IN CLARK COUNTY

	TOTAL	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
(1) 2 Years or Less	74 14.6%	36 16.9	38 13.0	74 51.0	0	54 19.7	19 8.3	34 13.2	40 16.2
(4) 3 to 5 Years	71 14.0%	28 13.1	43 14.7	71 49.0	0	47 17.2	24 10.4	33 12.8	38 15.4
(8) 6 to 10 Years	97 19.2%	41 19.2	56 19.1	0	97 26.9	53 19.3	43 18.7	48 18.7	48 19.4
(13) 11 to 15 Years	59 11.7%	28 13.1	31 10.6	0	59 16.3	27 9.9	32 13.9	28 10.9	31 12.6
(18) 16 to 20 Years	45 8.9%	17 8.0	28 9.6	0	45 12.5	30 10.9	15 6.5	23 8.9	21 8.5
(25) 21 to 30 Years	81 16.0%	33 15.5	48 16.4	0	81 22.4	40 14.6	41 17.8	48 18.7	33 13.4
(35) 31 or More Years	79 15.6%	30 14.1	49 16.7	0	79 21.9	23 8.4	56 24.3	43 16.7	36 14.6
TOTAL RESPONSES	506	213	293	145	361	274	230	257	247
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN	11.43	10.77	12.03	1.48	18.22	8.72	15.03	12.91	9.79
T-Value			-1.06		-31.72		-5.58		1.70

↑

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

Table 20b

YEARS LIVED IN CLARK COUNTY

	TOTAL	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION		TYPE OF VEHICLE	
		NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
(1) 2 Years or Less	74 14.6%	15 16.3	8 7.0	27 14.5	22 23.9	2 9.5	43 13.7	31 16.3	40 14.8	24 13.1
(4) 3 to 5 Years	71 14.0%	13 14.1	21 18.3	29 15.6	7 7.6	1 4.8	45 14.3	26 13.7	34 12.6	24 13.1
(8) 6 to 10 Years	97 19.2%	13 14.1	22 19.1	36 19.4	21 22.8	5 23.8	63 20.1	33 17.4	56 20.7	39 21.3
(13) 11 to 15 Years	59 11.7%	15 16.3	8 7.0	24 12.9	7 7.6	5 23.8	35 11.1	24 12.6	31 11.5	19 10.4
(18) 16 to 20 Years	45 8.9%	7 7.6	9 7.8	18 9.7	7 7.6	4 19.0	25 8.0	19 10.0	24 8.9	19 10.4
(25) 21 to 30 Years	81 16.0%	16 17.4	21 18.3	27 14.5	14 15.2	3 14.3	50 15.9	31 16.3	44 16.3	31 16.9
(35) 31 or More Years	79 15.6%	13 14.1	26 22.6	25 13.4	14 15.2	1 4.8	53 16.9	26 13.7	41 15.2	27 14.8
TOTAL RESPONSES	506	92	115	186	92	21	314	190	270	183
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN	11.43	12.17	14.56	10.71	9.24	13.00	11.36	11.54	11.31	11.68
T-Value			-1.50	2.17	0.14	-0.04		0.64		-0.17

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 21a

NUMBER OF PEOPLE LIVING IN HOUSEHOLD

	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD		
	TOTAL	MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
(1)	98 19.4%	39 18.3	59 20.1	27 18.6	71 19.7	23 8.4	75 32.6	98 38.1	0
(2)	159 31.4%	69 32.4	90 30.7	40 27.6	119 33.0	60 21.9	97 42.2	159 61.9	0
(3)	92 18.2%	40 18.8	52 17.7	33 22.8	59 16.3	66 24.1	26 11.3	0	92 37.2
(4)	76 15.0%	33 15.5	43 14.7	22 15.2	54 15.0	58 21.2	18 7.8	0	76 30.8
(5)	43 8.5%	20 9.4	23 7.8	11 7.6	32 8.9	33 12.0	10 4.3	0	43 17.4
(7) 6 or More	36 7.1%	11 5.2	25 8.5	12 8.3	24 6.6	33 12.0	3 1.3	0	36 14.6
Refused	2 0.4%	1 0.5	1 0.3	0	2 0.6	1 0.4	1 0.4	0	0
TOTAL RESPONSES	506	213	293	145	361	274	230	257	247
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN	2.47	2.47	2.47	2.67	2.41	3.31	1.91	1.69	3.91
T-Value			-0.52		0.72		10.84		-28.92



NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

Table 21b

NUMBER OF PEOPLE LIVING IN HOUSEHOLD

	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION			TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
(1)	98 19.4%	15 16.3	18 15.7	47 25.3	16 17.4	2 9.5	98 31.2	0	54 20.0	25 13.7
(2)	159 31.4%	24 26.1	39 33.9	53 28.5	34 37.0	9 42.9	149 47.5	10 5.3	91 33.7	57 31.1
(3)	92 18.2%	19 20.7	19 16.5	35 18.8	15 16.3	4 19.0	41 13.1	51 26.8	56 20.7	32 17.5
(4)	76 15.0%	12 13.0	19 16.5	30 16.1	15 16.3	0	18 5.7	58 30.5	39 14.4	32 17.5
(5)	43 8.5%	12 13.0	8 7.0	14 7.5	7 7.6	2 9.5	7 2.2	36 18.9	17 6.3	19 10.4
(7) 6 or More	36 7.1%	9 9.8	12 10.4	7 3.8	5 5.4	3 14.3	1 0.3	35 18.4	13 4.8	16 8.7
Refused	2 0.4%	1 1.1	0	0	0	1 4.8	0	0	0	2 1.1
TOTAL RESPONSES	506	92	115	186	92	21	314	190	270	183
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN	2.47	2.84	2.53	2.37	2.38	2.39	1.90	4.09	2.39	2.77
T-Value			0.52	2.02	-0.74	-0.74		-19.50		-2.73
			↑ ↑				↑		↑	

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 22a

HOUSEHOLD COMPOSITION

	GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD		
	TOTAL	MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Single person household	97 19.2%	38 17.8	59 20.1	26 17.9	71 19.7	22 8.0←	75 32.6	97 37.7	0
Two or more adults, no children	217 42.9%	97 45.5	120 41.0	62 42.8	155 42.9	95 34.7←	120 52.2	150 58.4→	67 27.1
Households with only pre-teens	93 18.4%	35 16.4	58 19.8	39 26.9→	54 15.0	79 28.8→	14 6.1	7 2.7←	86 34.8
Households with only teen-agers	43 8.5%	18 8.5	25 8.5	7 4.8←	36 10.0	30 10.9→	13 5.7	2 0.8←	41 16.6
Households with both pre-teens & teens	54 10.7%	24 11.3	30 10.2	11 7.6	43 11.9	47 17.2→	7 3.0	1 0.4←	53 21.5
Refused	2 0.4%	1 0.5	1 0.3	0	2 0.6	1 0.4	1 0.4	0	0
TOTAL RESPONSES	506	213	293	145	361	274	230	257	247
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Table 22b

HOUSEHOLD COMPOSITION

	QUADRANT OF VALLEY					HOUSEHOLD COMPOSITION			TYPE OF VEHICLE	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT-LYING	ADULTS ONLY	CHILD-REN IN HOME	CAR	SUV/VAN/TRUCK
Single person household	97 19.2%	14 15.2	18 15.7	47 25.3	16 17.4	2 9.5	97 30.9	0	54 20.0	24 13.1
Two or more adults, no children	217 42.9%	34 37.0	52 45.2	79 42.5	43 46.7	9 42.9	217 69.1	0	125 46.3	75 41.0
Households with only pre-teens	93 18.4%	20 21.7	23 20.0	32 17.2	13 14.1	5 23.8	0	93 48.9	43 15.9	46 25.1
Households with only teen-agers	43 8.5%	7 7.6	9 7.8	14 7.5	11 12.0	2 9.5	0	43 22.6	23 8.5	14 7.7
Households with both pre-teens & teens	54 10.7%	16 17.4	13 11.3	14 7.5	9 9.8	2 9.5	0	54 28.4	25 9.3	22 12.0
Refused	2 0.4%	1 1.1	0	0	0	1 4.8	0	0	0	2 1.1
TOTAL RESPONSES	506	92	115	186	92	21	314	190	270	183
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

Table 23

COMPARISON BY UNAIDED AWARENESS
 QUADRANT OF THE VALLEY

	NATURAL DISASTERS?		
	TOTAL	SAID FLOODS	DIDN'T SAY FLOODS
North East Valley	92 18.2%	58 17.2	34 20.2
North West Valley	115 22.7%	87 25.7	28 16.7
South East Valley	186 36.8%	121 35.8	65 38.7
South West Valley	92 18.2%	53 15.7	39 23.2
Outlying Areas	21 4.2%	19 5.6	2 1.2
TOTAL RESPONSES	506	338	168
BASE-NET RESPONDENTS	100.0%	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Table 24

COMPARISON BY UNAIDED AWARENESS
ZIP CODE OF RESPONDENT

	NATURAL DISASTERS?		
	TOTAL	SAID FLOODS	DIDN'T SAY FLOODS
89005	5 1.0%	5 1.5	0
89012	7 1.4%	5 1.5	2 1.2
89014	15 3.0%	14 4.1	1 0.6
89015	38 7.5%	22 6.5	16 9.5
89019	2 0.4%	1 0.3	1 0.6
89021	2 0.4%	2 0.6	0
89027	5 1.0%	5 1.5	0
89029	3 0.6%	2 0.6	1 0.6
89030	17 3.4%	10 3.0	7 4.2
89031	12 2.4%	9 2.7	3 1.8
89032	11 2.2%	8 2.4	3 1.8
89040	3 0.6%	3 0.9	0
89052	3 0.6%	3 0.9	0
89074	11 2.2%	9 2.7	2 1.2
89101	7 1.4%	5 1.5	2 1.2

Continued...

(Table Continued)

89102	17 3.4%	11 3.3	6 3.6
89103	14 2.8%	8 2.4	6 3.6
89104	20 4.0%	9 2.7	11 6.5
89106	8 1.6%	5 1.5	3 1.8
89107	19 3.8%	14 4.1	5 3.0
89108	31 6.1%	24 7.1	7 4.2
89109	5 1.0%	2 0.6	3 1.8
89110	22 4.3%	11 3.3	11 6.5
89113	3 0.6%	3 0.9	0
89115	15 3.0%	11 3.3	4 2.4
89117	17 3.4%	12 3.6	5 3.0
89118	8 1.6%	3 0.9	5 3.0
89119	13 2.6%	10 3.0	3 1.8
89120	11 2.2%	7 2.1	4 2.4
89121	27 5.3%	19 5.6	8 4.8
89122	11 2.2%	6 1.8	5 3.0
89123	13 2.6%	10 3.0	3 1.8
89124	1 0.2%	1 0.3	0

Continued...

(Table Continued)

89128	10 2.0%	9 2.7	1 0.6
89129	4 0.8%	3 0.9	1 0.6
89130	8 1.6%	5 1.5	3 1.8
89131	9 1.8%	9 2.7	0
89134	5 1.0%	2 0.6	3 1.8
89135	6 1.2%	3 0.9	3 1.8
89141	1 0.2%	1 0.3	0
89142	12 2.4%	5 1.5	7 4.2
89144	5 1.0%	3 0.9	2 1.2
89145	6 1.2%	4 1.2	2 1.2
89146	13 2.6%	8 2.4	5 3.0
89147	12 2.4%	4 1.2	8 4.8
89148	1 0.2%	0	1 0.6
89149	6 1.2%	5 1.5	1 0.6
89156	12 2.4%	8 2.4	4 2.4

TOTAL RESPONSES	506	338	168
BASE-NET RESPONDENTS	100.0%	100.0	100.0

Table 25

COMPARISON BY UNAIDED AWARENESS
RESPONDENT GENDER

	NATURAL DISASTERS?		
	TOTAL	SAID FLOODS	DIDN'T SAY FLOODS
Male	213 42.1%	148 43.8	65 38.7
Female	293 57.9%	190 56.2	103 61.3
TOTAL RESPONSES	506	338	168
BASE=NET RESPONDENTS	100.0%	100.0	100.0

NOTE: There is no statistically significant difference between sub-samples at the 95% level of confidence.

Table 26

COMPARISON BY UNAIDED AWARENESS
AGE OF RESPONDENT

		NATURAL DISASTERS?		
		TOTAL	DIDN'T SAID SAY	
			FLOODS	FLOODS
(19)	18 to 20	18 3.6%	14 4.1	4 2.4
(25)	21 to 29	52 10.3%	38 11.2	14 8.3
(35)	30 to 39	82 16.2%	64 18.9	18 10.7
(45)	40 to 49	122 24.1%	88 26.0	34 20.2
(55)	50 to 59	78 15.4%	56 16.6	22 13.1
(62)	60 to 64	46 9.1%	29 8.6	17 10.1
(70)	65 or Older	106 20.9%	48 14.2	58 34.5
	Refused	2 0.4%	1 0.3	1 0.6
TOTAL RESPONSES		506	338	168
BASE=NET RESPONDENTS		100.0%	100.0	100.0
MEDIAN		48.20	45.97	56.14
T-Value			-4.70	
			↑	

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

Table 27

COMPARISON BY UNAIDED AWARENESS
YEARS LIVED IN CLARK COUNTY

	NATURAL DISASTERS?		
	TOTAL	DIDN'T SAID FLOODS	SAY FLOODS
(1) 2 Years or Less	74 14.6%	45 13.3	29 17.3
(4) 3 to 5 Years	71 14.0%	47 13.9	24 14.3
(8) 6 to 10 Years	97 19.2%	64 18.9	33 19.6
(13) 11 to 15 Years	59 11.7%	35 10.4	24 14.3
(18) 16 to 20 Years	45 8.9%	34 10.1	11 6.5
(25) 21 to 30 Years	81 16.0%	58 17.2	23 13.7
(35) 31 or More Years	79 15.6%	55 16.3	24 14.3
TOTAL RESPONSES	506	338	168
BASE=NET RESPONDENTS	100.0%	100.0	100.0
MEDIAN	11.43	12.36	9.76
T-Value			1.45

NOTE: There is no statistically significant difference between sub-samples at the 95% level of confidence.

Table 28

COMPARISON BY UNAIDED AWARENESS
NUMBER OF PEOPLE LIVING IN HOUSEHOLD

	NATURAL DISASTERS?		
	TOTAL	DIDN'T SAID FLOODS	SAID FLOODS
(1)	98 19.4%	55 16.3	43 25.6
(2)	159 31.4%	102 30.2	57 33.9
(3)	92 18.2%	67 19.8	25 14.9
(4)	76 15.0%	57 16.9	19 11.3
(5)	43 8.5%	29 8.6	14 8.3
(7) 6 or More	36 7.1%	27 8.0	9 5.4
Refused	2 0.4%	1 0.3	1 0.6
TOTAL RESPONSES	506	338	168
BASE=NET RESPONDENTS	100.0%	100.0	100.0
MEDIAN	2.47	2.67	2.21
T-Value		2.56	
		└──┬──┐ ↑	

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

Table 29

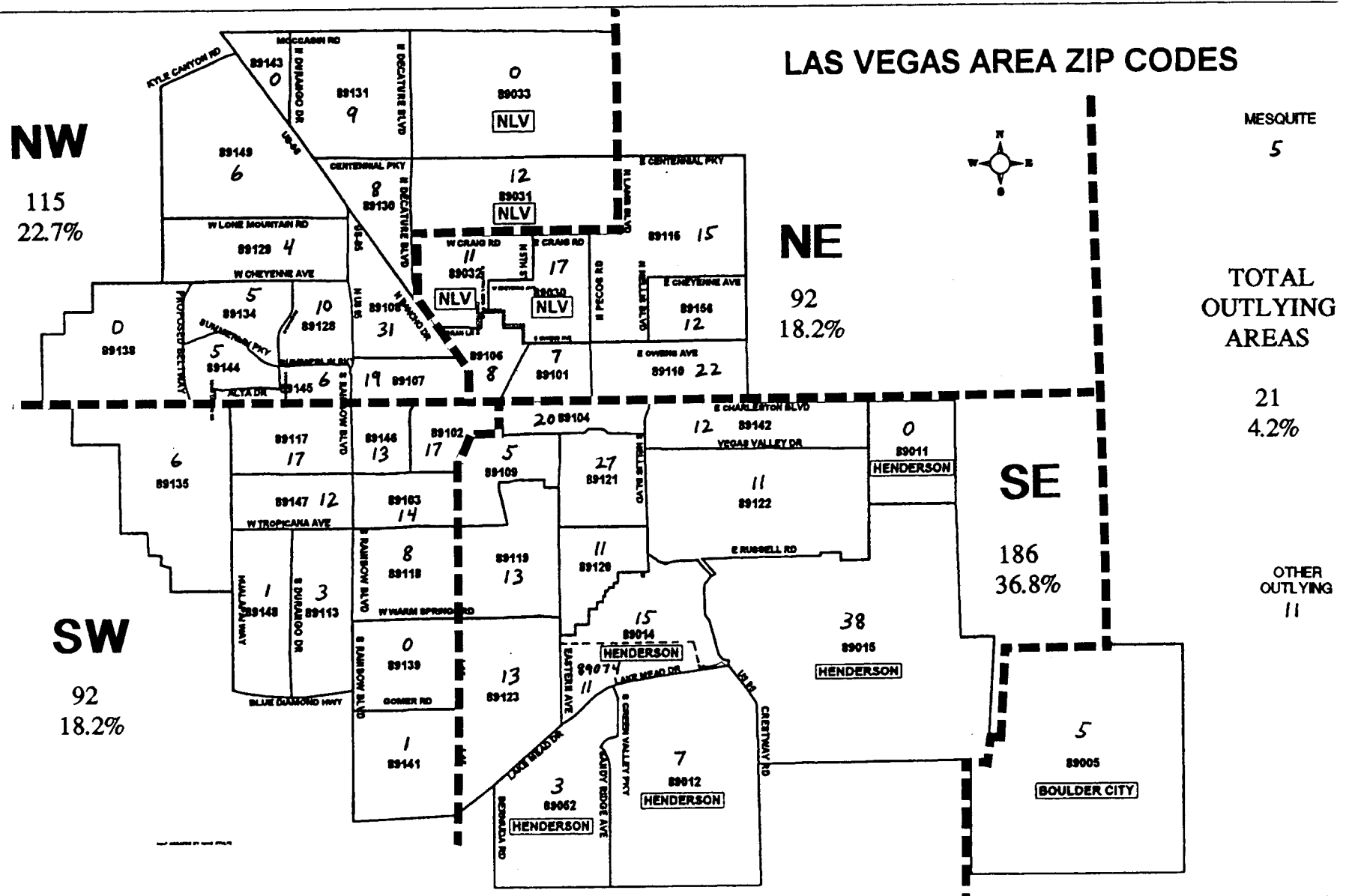
COMPARISON BY UNAIDED AWARENESS
HOUSEHOLD COMPOSITION

	NATURAL DISASTERS?		
	TOTAL	DIDN'T SAID FLOODS	DIDN'T SAY FLOODS
Single person household	97 19.2%	54 16.0	43 25.6 ←
Two or more adults, no children	217 42.9%	143 42.3	74 44.0
Households with only pre-teens	93 18.4%	66 19.5	27 16.1
Households with only teen-agers	43 8.5%	33 9.8	10 6.0
Households with both pre-teens & teens	54 10.7%	41 12.1	13 7.7
Refused	2 0.4%	1 0.3	1 0.6
TOTAL RESPONSES	506	338	168
BASE-NET RESPONDENTS	100.0%	100.0	100.0

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

VI. APPENDIX

FLOOD AWARENESS SURVEY 2001 N = 506



NOTE: 89074 SPLIT FROM 89014 IN JULY 2001

CLARK COUNTY RESIDENTS SURVEY

REP-PAGE

ENTER PHONE NUMBER FROM CALL LIST _____

Hello, my name is _____ and I'm calling on behalf of Clark County Governmental Services.
I would like to speak to either the male or female head of the household.

(IF NEITHER AVAILABLE) Are you 18 years or older and a permanent resident of the household,
or is anyone available who's 18 or older and a permanent resident of the household?
(IF "NO" --> TERMINATE)

A. **INDICATE:** 1 HEAD OF HOUSEHOLD 2 OTHER HOUSEHOLD MEMBER (1)

We are conducting a survey among Clark County residents and would like to ask you a few questions.
(IF RESPONDENT ASKS HOW LONG IT WILL TAKE -- SAY 4 TO 5 MINUTES)

B. **INDICATE RESPONDENT GENDER:** 1 MALE 2 FEMALE (2)
(ASK GENDER IF YOU CAN'T TELL BY THE VOICE)

C. I would like to verify your Zip Code. Is it **(READ NUMBER FROM CALL LIST)?**

**IF CORRECT, ENTER NUMBER BELOW. IF NOT CORRECT, ENTER
CORRECT NUMBER BELOW**

8 9 _____ (3)

_____ (4)

_____ (5)

D. How long have you lived in Clark County? _____ Years. (6)

1. Can you name the types of natural disasters that can be a danger to residents of Clark County?

_____ Anything else? (7)

_____ Anything else? (8)

_____ Anything else? (9)

_____ (10)

(IF FLOODING/FLASH FLOODING MENTIONED ABOVE --> SKIP TO Q.3) (11)

2. Are you aware of the dangers of flash flooding here in Clark County? (12)

1 YES 2 NO -->**(SKIP TO Q. 6)** (13)

3. How did you learn about the dangers of flash flooding in Clark County?
 (IF THEY SAY "NEWS," ASK WHAT TYPE OF NEWS - TV, RADIO, NEWSPAPER?) (14)
- (15)
- (16)
- (17)

4. From the list I am going to read, please tell me - with a Yes or No - whether you heard or read about flash flood dangers from that source. **(READ ENTIRE LIST)**

	<u>YES</u>	<u>NO</u>	
BROCHURE	1	0	(18)
BUS STOP SHELTER AD	2	0	(19)
→ BILLBOARD	3	0	(20)
TELEVISION	4	0	(21)
RADIO	5	0	(22)
NEWSPAPER	6	0	(23)
MAGAZINE	7	0	(24)
CHILDREN TOLD YOU ABOUT IT	8	0	(25)
FRIENDS/RELATIVES TOLD YOU ABOUT IT ...	9	0	(26)

(IF "NO" FOR BILLBOARD -->SKIP TO Q.6)

5. You said that you saw billboards about the dangers of flooding. Do you recall any of the words on the billboard or can you describe the picture on the billboard? (27)
- (28)
- (29)
- (30)

5a. How effective would you say the billboards are in communicating the dangers of flash flooding?
Would you say they are . . .

1 VERY EFFECTIVE 2 SOMEWHAT EFFECTIVE 3 NOT AT ALL EFFECTIVE (31)

6. Do you drive a vehicle? 1 YES 2 NO -> **(SKIP TO Q. 9)** (32)

6a. Is the vehicle you usually drive a . . .

1 REGULAR PASSENGER CAR or 2 AN SUV, VAN or TRUCK (33)

7. Have you ever encountered a flooded street or road while driving?

1 YES 2 NO -> **(SKIP TO Q. 9)** (34)

7a. How many times have you encountered a flooded street?

1 2 3 4 5 OR MORE (35)

8. Thinking back to the **FIRST TIME** you came to a flooded street, which of the following statements best describes what you did? **(READ LIST)**

- 1 TURNED BACK/WENT A DIFFERENT WAY/WAITED FOR WATER TO GO DOWN
- 2 DROVE INTO IT AND GOT STUCK
- 3 DROVE INTO IT - MADE IT BUT SCARY (36)
- 4 DROVE INTO IT - NO PROBLEM
- 5 DON'T REMEMBER

(IF ANSWER TO Q. 7a ABOVE IS MORE THAN "1" ASK THIS QUESTION - 8a. OTHERWISE, GO TO NEXT QUESTION - 9)

8a. You said you encountered a flooded street more than once. Which of the following statements best describes what you did all times? **(READ LIST)**

- 1 WENT BACK/WAITED ALL TIMES (37)
- 2 DROVE INTO/THRU ALL TIMES
- 3 DROVE INTO FIRST TIME/WENT BACK ALL OTHER TIMES
- 4 WENT BACK FIRST TIME/INTO IT ALL OTHER TIMES
- 5 SOMETIMES DROVE THRU/SOMETIMES WENT BACK

9. If a person drives around a posted County flood barricade and then needs to be rescued, do you think that person should have to reimburse the County for the costs of the rescue?

1 YES

2 NO

(38)

10. In the past few years a number of flood control projects have been completed. During heavy rain storms, how much difference in the amount of flooding have you noticed? Would you say you've noticed, in the past couple of years . . .

1 A LOT LESS FLOODING,

(39)

2 SOMEWHAT LESS FLOODING , or

3 NO DIFFERENCE IN THE AMOUNT OF FLOODING

11. Including yourself, how many people live in your household?

1

2

3

4

5

6 OR MORE

(40)

(41)

12. Which of the following categories best describes your household? **(READ LIST)**

1 SINGLE PERSON HOUSEHOLD

(42)

2 TWO OR MORE ADULTS WITH NO CHILDREN

(43)

3 HOUSEHOLD WITH ONLY PRE-TEENS

4 HOUSEHOLD WITH ONLY TEEN-AGERS

5 HOUSEHOLD WITH BOTH PRE-TEENS AND TEEN-AGERS

13. One final question. Is your age . . . **(READ LIST)**

1 18 TO 20 5 50 TO 59 (44)

2 21 TO 29 6 60 TO 64

3 30 TO 39 7 65 OR OLDER (45)

4 40 TO 49 (46)

Thank you so much for your time. Good-bye. (47)

DATE: _____ TIME INTERVIEW COMPLETED: _____ AM or PM

I AFFIRM THAT THE ABOVE INFORMATION IS ACCURATELY RECORDED FROM THE RESPONDENT'S STATEMENTS.

INTERVIEWER'S SIGNATURE _____