# Demographic Survey of Texas Lottery Players 2009 



## TABLE OF CONTENTS

List of Figures ..... ii
List of Tables ..... iii
Executive Summary ..... 1
I. Introduction and Method of Analysis ..... 4
II. Sample Characteristics ..... 6
III. Game Findings ..... 11
a. Any Game Results ..... 11
b. Pick 3 Day Results ..... 14
c. Cash 5 Results ..... 20
d. Lotto Texas Results ..... 25
e.Texas Lottery Scratch Off Ticket Results ..... 30
f. Texas Two Step Results ..... 35
g. Mega Millions Results ..... 41
h. Megaplier Results ..... 46
IV. Summary ..... 51
Appendix : List of Counties ..... 52
Notes ..... 56

## LIST OF FIGURES

Figure $1 \quad$ Percentage of Respondents Playing Any Lottery Game ..... 11
Figure 2 Percentage Playing Pick 3 Day ..... 14
Figure 3 Frequency of Purchasing Pick 3 Day Tickets ..... 15
Figure $4 \quad$ Years Playing Pick 3 Day ..... 19
Figure $5 \quad$ Percentage Playing Cash 5 ..... 20
Figure 6 Frequency of Purchasing Cash 5 Tickets ..... 21
Figure $7 \quad$ Years Playing Cash 5 ..... 24
Figure 8 Percentage Playing Lotto Texas ..... 25
Figure $9 \quad$ Frequency of Purchasing Lotto Texas Tickets ..... 26
Figure 10 Years Playing Lotto Texas ..... 29
Figure 11 Percentage Playing Texas Lottery Scratch Off Tickets ..... 30
Figure 12 Frequency of Purchasing Texas Lottery Scratch Off Tickets ..... 31
Figure 13 Years Playing Texas Lottery Scratch Off Tickets ..... 34
Figure 14 Percentage Playing Texas Two Step ..... 35
Figure 15 Frequency of Purchasing Texas Two Step Tickets ..... 36
Figure 16 Years Playing Texas Two Step ..... 40
Figure 17 Percentage Playing Mega Millions ..... 41
Figure 18 Frequency of Purchasing Mega Millions Tickets ..... 42
Figure 19 Years Playing Mega Millions ..... 45
Figure 20 Percentage Playing Megaplier ..... 46
Figure 21 Frequency of Purchasing Megaplier Tickets ..... 47
Figure 22 Years Playing Megaplier ..... 50

## LIST OF TABLES

Table 1 Demographics ..... 7
Table 2 Any Game: Past-Year Lottery Play and Median Dollars Spent per Month by Demographics ..... 12
Table $3 \quad$ Participation and Dollars Spent by Lottery District ..... 13
Table 4 Average Times Played Pick 3 Day ..... 15
Table 5 Dollars Spent on Pick 3 Day ..... 16
Table 6 Pick 3 Day: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics ..... 17
Table $7 \quad$ Average Times Played Cash 5 ..... 21
Table $8 \quad$ Dollars Spent on Cash 5 ..... 22
Table $9 \quad$ Cash 5: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics ..... 23
Table 10 Average Times Played Lotto Texas ..... 26
Table 11 Dollars Spent on Lotto Texas ..... 27
Table 12 Lotto Texas: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics ..... 28
Table 13 Average Times Played Texas Lottery Scratch Off Tickets ..... 31
Table 14 Dollars Spent on Texas Lottery Scratch Off Tickets ..... 32
Table 15 Texas Lottery Scratch Off Tickets: Lottery Play and Median Dollars Spent per Month By Past-Year Player Demographics ..... 33
Table 16 Average Times Played Texas Two Step ..... 36
Table 17 Dollars Spent on Texas Two Step ..... 37
Table 18 Texas Two Step: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics ..... 38
Table 19 Average Times Played Mega Millions ..... 42
Table 20 Dollars Spent on Mega Millions ..... 43
Table 21 Mega Millions: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics ..... 44
Table 22 Average Times Played Megaplier ..... 47
Table 23 Dollars Spent on Megaplier ..... 48
Table 24 Megaplier: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics ..... 49
Table A-1 Sample Population by County ..... 52

## EXECUTIVE SUMMARY

The Texas Lottery Commission 2009 Demographic Study of Texas Lottery Players surveyed 1,678 Texas citizens aged 18 years and older between late July and late August of 2009. Registered lottery participation decreased each year for 2006 and 2007, and stabilized in 2008 at 39 percent. Lottery participation increased slightly in 2009 to 42 percent. As with the 2007 and 2008 surveys, there is a statistically significant difference between past-year players and non-players due to employment status (please see Table 1). Gender also influences participation rates, with men slightly more likely to play in general than women. In contrast to 2008, race and Hispanic origin were also statistically significant in 2009. Income and education among those who participated in any game were not statistically significant while other demographic classifications were statistically significant (please see Table 2). Note, however, in many cases participation rates among demographic groups varied by the type of game played (see Section III below). Finally, for all games, most players reported participating in lottery games for more than five years and fewer reported having played the games for one year or less.

## Highlights

If findings are examined using lottery district as the unit of analysis, the following results emerge for participation rates and personal expenditures:

- Participation rates in any Texas Lottery games were highest in the El Paso (56.1 percent), Victoria ( 49.2 percent), San Antonio ( 48.2 percent), and Tyler ( 41.5 percent) lottery districts. The lowest rates were in the Lubbock (29.3 percent) and Austin ( 39.3 percent) districts (see Table 3).
- The McAllen (\$25.30) and El Paso (\$20.78) lottery districts demonstrated the highest average monthly amount spent per player. The lowest average monthly amounts spent per player were found in the Lubbock ( $\$ 5.41$ ) and Abilene ( $\$ 8.44$ ) districts.
- A comparison of lottery play across districts between the 2008 and 2009 surveys reveals several shifts in playership. The El Paso district, for example, saw a 10 percentage point increase in percent that played over the past year from 2008 to 2009, reaching the highest percentage at 56.1 percent. The Lubbock district, on the other hand, went from an above average play rate in 2008 (at 43.6 percent) to the lowest in 2009 (29.3 percent).

A brief summary of game results follows. Note first that we summarize results for games where the sample size exceeds two percent of the total sample. In this sample some games have individual sample sizes too small to give any statistically meaningful information. Games that have an insufficient sample size include: Sum It Up Features for Pick 3 Day, Pick 3 Night, Daily 4 Day, Daily 4 Night as well as Pick 3 Night, Daily 4 Day, and Daily 4 Night. While this information is not in this report, it is available upon request from the Texas Lottery Commission and the University of Houston Center for Public Policy (CPP).

Pick 3 Day: Over seventeen percent (17.5) of respondents playing any lottery game in the past year played Pick 3 Day. This is a 4.5 percentage point decline from the 2008 survey.

Forty-three percent of the respondents who purchased Pick 3 Day tickets purchased them at least once a week, a thirteen percentage point increase from 2008. Twenty percent purchased tickets at least once a month, and 36 percent purchased Pick 3 Day tickets a few times a year.

Cash 5: Twenty-one percent (21.46) of respondents playing any lottery game in the past year had played Cash 5. Thirty-six percent of the respondents that purchased Cash 5 tickets purchased them at least once a week. Twenty-one percent purchased tickets at least once a month, and 44.33 percent purchased Cash 5 tickets a few times a year.

Lotto Texas: Lotto Texas maintained similar playership in 2009 as in the previous year and remained the most popular game in 2009. Almost 70 percent of respondents playing any lottery game in the past year had played Lotto Texas. More than one-third (36.68 percent) of the respondents that purchased Lotto Texas tickets purchased them at least once a week. More than one-fifth ( 22.54 percent) purchased tickets at least once a month, and 40.78 percent purchased Lotto Texas tickets a few times a year.

Texas Lottery Scratch Off Tickets: More than half ( 56.8 percent) of respondents playing any lottery game in the past year played Texas Lottery Scratch Off Tickets. Roughly onethird ( 30.48 percent) of the respondents that purchased Texas Lottery Scratch Off tickets in the past year did so at least once a week. Roughly one-quarter ( 23.93 percent) purchased tickets at least once a month, and almost one-half ( 45.59 percent) purchased tickets a few times a year.

Texas Two Step: Thirteen percent of respondents playing any lottery game in the past year had played Texas Two Step in 2009, and nearly twice as many Texas Two Step players ( 45.0 percent) purchased tickets at least once a week compared to 2008 ( 25 percent). Roughly fifteen percent purchased Texas Two Step tickets at least once a month, and 39.56 percent purchased tickets a few times a year.

Mega Millions: More than half of respondents ( 52.5 percent) playing any lottery game in the past year reported playing Mega Millions. One-third ( 33.51 percent) of the respondents who purchased Mega Millions tickets bought them at least once a week, sixteen percent (16.35) purchased tickets at least once a month, and one-half ( 50.14 percent) purchased tickets a few times a year.

Megaplier: Roughly twelve percent (12.16) of respondents playing any lottery game in the past year played Megaplier. Thirty-seven percent (37.65) of Megaplier players purchased tickets at least once a week, 18.82 percent purchased tickets at least once a month, and approximately 43.53 percent purchased tickets a few times a year.

## Testing differences in Lottery participation and expenditure from 2008 to 2009

In addition to the basic results that ensure continuity of information and presentation of prior studies, the 2009 study provides statistical tests of differences in lottery participation and individual expenditures from 2008 to 2009. The report highlights these differences for general participation rates, for rates according to Texas lottery district, and for the individual lottery games separately. Comparing 2009 survey results with those from 2008, we find the following:

- A slight but statistically significant increase in overall participation rates (see Table 1).
- A slight but statistically significant increase in overall average individual monthly expenditure.
- Comparing 2009 survey results with those from 2008, we see that participation rates have increased the most in the El Paso, Tyler, and Irving districts (see Table 3). A statistically significant increase at $p<0.10$, however, was found for the Irving district. Participation rates appear to have fallen off the most in the Lubbock, Austin, and San Antonio districts (although these differences are not statistically significant). ${ }^{1}$
- Comparing games separately, we find that participation has increased from 2008 the most for Mega Millions (by 7.2 percent) but declined the most for Pick 3 Day. These differences are statistically significant.


## I. INTRODUCTION AND METHOD OF ANALYSIS

A random survey of adult Texas residents aged 18 and older was conducted during July/August 2009. The objectives were to measure the citizen participation rates, the distribution and frequency of play, and the demographic profiles of the past-year players and the non-players.

On behalf of the Texas Lottery Commission, the data collection and analysis was prepared under the auspices of the CPP (www.uh.edu/cpp). The individuals who worked on this study are listed in alphabetical order:

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Random digit dialing (RDD) was the sampling method used because it offers the best coverage of active telephone numbers and because it reduces sample bias.

The RDD method ensures the following:

- The conceptual frame and sampling frame match;
- The sample includes unlisted telephone numbers;
- The sampling frame is current, thus maximizing the probability that new residents are included; and
- There is comparability between land line surveys and surveys of cell phone users.

The Center for Public Policy's Survey Research Institute (SRI) (www.uh.edu/cpp/sri.htm) fielded 1,700 telephone interviews. Of these, thirteen responded that they did play but subsequent responses revealed that they, in fact, did not. Because these thirteen respondents would bias the results for the "Past-Year Player" group, they were dropped from the analysis. Additionally, nine respondents answered "don't know" to the first question, "Have you played any of the Texas Lottery games in the past year?" These individuals, per the survey instrument design, were not asked any further questions on lottery play and were only read questions about their demographic status. Accordingly, these nine respondents were not used for the analyses we report below. The remaining 1,678 usable interviews of self-reported players and non-players yielded a margin of error of $+/-2.4$ percent at the 95 percent confidence level. The data for the survey were collected between July 29 and August 31, 2009. Note that in some cases, the subset samples will be small and this can create high volatility in some results in those categories. The subset proportions are an approximation of the overall population; however, the relatively small size of subsets can allow for outliers to "bias" results when using the mean. We alert the reader to the influence of outliers throughout the report.

The standard SRI survey administration and management protocols include:

- The use of trained telephone interviewers to conduct the survey.
- Each interviewer completes intensive general training. The purposes of general training are to ensure that interviewers understand and practice all of the basic skills needed to conduct interviews and that they are knowledgeable about standard interviewing conventions.

- Following the usual administration and management protocols, the interviewers also participate in a specific training session for the project.
- Interviewers practice administering the survey to become familiar with the questions.

The Texas Lottery Commission provided a survey instrument designed to collect demographic data on adult Texans. The survey included past-year players and non-players and measured lottery participation rates, the frequency of lottery participation, and lottery spending patterns. The survey instrument used by the CPP was consistent with those used in previous years.

The major change from surveys prior to 2007 is the addition of cell phone users as part of the overall sample. Previous annual studies of lottery players and non-players in Texas have utilized the standard methodology for conducting random digit dial (RDD) surveys. This entails calling residential telephone numbers (landlines) randomly selected from a list of working numbers in homes that are not business lines. Because RDD sampling includes unlisted residential numbers, it is considered superior to methods that rely on published telephone numbers in generating samples. However, with the rapid increase in cell phone usage, traditional RDD sampling has been increasingly questioned because more and more individuals are exclusive users of cellular phones and therefore are excluded from RDD surveys that rely on traditional methods. With estimates of non-landline phone users now ranging up to 20 percent, sample bias in standard RDD polling is a major issue in the field.

To address this potential problem, Survey Sampling Inc., the largest RDD sample vendor in the United States, has recently begun selling cell phone samples to supplement traditional sets of numbers. The SRI took advantage of this new capacity and bought a cell phone sub-sample of numbers for the 2009 Texas Lottery Study in addition to the standard statewide RDD sample. The data included in this report are based on 1,384 ( 81.89 percent) completed interviews on standard landlines and 306 completed interviews ( 18.11 percent) from the cell phone sample. This combination, in our judgment, improves the quality of the overall data by including individuals who might be excluded using traditional sampling methods. ${ }^{2}$

## II. SAMPLE CHARACTERISTICS ${ }^{3}$

Selected questions regarding each lottery game were cross-tabulated with the following six demographic categories:

- Income
- Employment status
- Years of education
- Age of respondent
- Gender of respondent
- Race/ethnicity of respondent

In the social sciences, the distribution of outcomes often varies in terms of the categories of analysis of interest. Throughout this analysis, we will test to determine whether changes or differences between categories or groups are due to random chance. Traditional tests for statistical "significance" are used to test for differences between past-year players and nonplayers or for differences among past-year players (by demographic category). Specifically, we use standard t-tests on the "equality of means." Note also that discussions of statistical "significance" reflect a classical statistical (or "frequentist") tradition. The "level" of statistical significance (denoted by a p-value) tells us the probability that what was observed differs from the null hypothesis (of no relation or no difference). In the classical tradition a p-value of 0.05 indicates that in, say, 100 repeated samples, the value realized would fall within a given interval 95 out of 100 samples. To extend this further, a p-value of .01 means that the result would fall within a pre-specified interval in over 99 out of 100 samples. The closer the p-value is to zero the stronger the finding.

Table 1
Demographics: Summary for Income, Employment, Home Ownership, and Age

| Demographic Factors | Number and Percentage Responding |  |  |
| :---: | :---: | :---: | :---: |
|  | All ( $\mathrm{n}=1,678$ ) | Past-Year <br> Players ( $\mathrm{n}=699$ ) | Non-Players ( $\mathrm{n}=979$ ) |
| Year |  |  |  |
| 2009 | 1,678 (100\%) | 699 (41.66\%) | 979 (58.34\%) |
| 2008 | 1,695 (100\%) | 658 (38.82\%) | 1,037 (61.18\%) |
| Income ( $\mathrm{n}=1,132$ ) | $\mathrm{n}=1132$ (100\%) | $\mathrm{n}=513$ (100\%) | $\mathrm{n}=619$ (100\%) |
| Less than \$12,000 | 59 (5.21\%) | 18 (3.51\%) | 41 (6.62\%) |
| Between \$12,000 and \$19,999 | 83 (7.33\%) | 26 (5.07\%) | 57 (9.21\%) |
| Between \$20,000 and \$29,999 | 126 (11.13\%) | 62 (12.09\%) | 64 (10.34\%) |
| Between \$30,000 and \$39,999 | 123 (10.87\%) | 69 (13.45\%) | 54 (8.72\%) |
| Between \$40,000 and \$49,999 | 122 (10.78\%) | 54 (10.53\%) | 68 (10.99\%) |
| Between \$50,000 and \$59,999 | 99 (8.75\%) | 46 (8.97\%) | 53 (8.56\%) |
| Between \$60,000 and \$74,999 | 123 (10.87\%) | 58 (11.31\%) | 65 (10.50\%) |
| Between \$75,000 and \$100,000 | 175 (15.46\%) | 85 (16.57\%) | 90 (14.54\%) |
| More than \$100,000 | 222 (19.61\%) | 95 (18.52\%) | 127 (20.52\%) |
| Employment Status***4 | $\mathrm{n}=1665$ (100\%) | $\mathrm{n}=694$ (100\%) | $\mathrm{n}=971$ (100\%) |
| Employed Full-time | 798 (47.93\%) | 369 (53.17\%) | 429 (44.18\%) |
| Employed Part-time | 108 (6.49\%) | 47 (6.77\%) | 61 (6.28\%) |
| Unemployed/Looking for Work | 114 (6.85\%) | 47 (6.77\%) | 67 (6.90\%) |
| Not in Labor Force | 145 (8.71\%) | 45 (6.48\%) | 100 (10.30\%) |
| Retired | 500 (30.03\%) | 186 (26.80\%) | 314 (32.34\%) |
| Own or Rent Home ( $\mathrm{n}=1,663$ ) | $\mathrm{n}=1,663$ (100\%) | $\mathrm{n}=691$ (100\%) | n=972 (100\%) |
| Own | 1,321 (79.43\%) | 552 (79.88\%) | 769 (79.12\%) |
| Rent | 289 (17.38\%) | 119 (17.22\%) | 170 (17.49\%) |
| Occupied without Payment | 53 (3.19\%) | 20 (2.89\%) | 33 (3.40\%) |
| Age of Respondent | $\mathrm{n}=1,555$ (100\%) | $\mathrm{n}=648$ (100\%) | $\mathrm{n}=907$ (100\%) |
| 18 to 24 | 110 (7.07\%) | 36 (5.56\%) | 74 (8.16\%) |
| 25 to 34 | 143 (9.20\%) | 61 (9.41\%) | 82 (9.04\%) |
| 35 to 44 | 241 (15.50\%) | 119 (18.36\%) | 122 (13.45\%) |
| 45 to 54 | 372 (23.92\%) | 168 (25.93\%) | 204 (22.49\%) |
| 55 to 64 | 316 (20.32\%) | 151 (23.30\%) | 165 (18.19\%) |
| 65 and over | 373 (23.99\%) | 113 (17.44\%) | 260 (28.67\%) |

Note: ${ }^{*} \mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01$, ${ }^{* * *} \mathrm{p}<0.001$, two-tailed test. There was a significant difference between players and nonplayers regarding the distribution by the employment status of the respondents ( $p<0.001$ ).

Table 1 (continued)
Demographics: Summary for Marital Status, Children, Gender, and Race/Ethnicity

| Demographic Factors | Number and Percentage Responding |  |  |
| :---: | :---: | :---: | :---: |
|  | All ( $\mathrm{n}=1,678$ ) | $\begin{gathered} \text { Past-Year } \\ \text { Players ( } \mathrm{n}=699 \text { ) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Non-Players } \\ (\mathrm{n}=979) \end{gathered}$ |
| Marital Status | $\mathrm{n}=1,654$ (100\%) | $\mathrm{n}=689$ (100\%) | $\mathrm{n}=965$ (100\%) |
| Married | 998 (60.34\%) | 431 (62.55\%) | 567 (58.76\%) |
| Widowed | 186 (11.25\%) | 56 (8.13\%) | 130 (13.47\%) |
| Divorced | 182 (11.00\%) | 89 (12.92\%) | 93 (9.64\%) |
| Separated | 17 (1.03\%) | 10 (1.45\%) | 7 (0.73\%) |
| Never Married | 271 (16.38\%) | 103 (14.95\%) | 168 (17.41\%) |
| Children under 18 Living in Household | $\mathrm{n}=1,649$ (100\%) | $\mathrm{n}=685$ (100\%) | $\mathrm{n}=964$ (100\%) |
| Yes | 526 (31.90\%) | 232 (33.87\%) | 294 (30.50\%) |
| No | 1,123 (68.10\%) | 453 (66.13\%) | 670 (69.50\%) |
| Number of Children under 18 Living in Household | $\mathrm{n}=526$ (100\%) | $\mathrm{n}=232$ (100\%) | $\mathrm{n}=294$ (100\%) |
| 1 | 225 (42.78\%) | 88 (37.93\%) | 137 (46.60\%) |
| 2 | 189 (35.93\%) | 92 (39.66\%) | 97 (32.99\%) |
| 3 | 73 (13.88\%) | 37 (15.95\%) | 36 (12.24\%) |
| 4 or more | 39 (7.41\%) | 15 (6.47\%) | 24 (8.16\%) |
| Gender of Respondent* | $\mathrm{n}=1,676$ (100\%) | $\mathrm{n}=699$ (100\%) | $\mathrm{n}=977$ (100\%) |
| Male | 879 (52.45\%) | 340 (48.64\%) | 539 (55.17\%) |
| Female | 797 (47.55\%) | 359 (51.36\%) | 438 (44.83\%) |
| Race ( $\mathrm{n}=1,649$ )* | n=1,649 (100\%) | $\mathrm{n}=684$ (100\%) | $\mathrm{n}=965$ (100\%) |
| White | 1,099 (66.65\%) | 434 (63.45\%) | 665 (68.91\%) |
| Black | 218 (13.22\%) | 93 (13.60\%) | 125 (12.95\%) |
| Asian | 37 (2.24\%) | 13 (1.90\%) | 24 (2.49\%) |
| Native American Indian | 17 (1.03\%) | 10 (1.46\%) | 7 (0.73\%) |
| Other | 278 (16.86\%) | 134 (19.59\%) | 144 (14.92\%) |
| Hispanic Origin* | $\mathrm{n}=1625$ (100\%) | $\mathrm{n}=676$ (100\%) | $\mathrm{n}=949$ (100\%) |
| Yes | 298 (18.34\%) | 145 (21.45\%) | 153 (16.12\%) |
| No | 1,327 (81.66\%) | 531 (78.55\%) | 796 (83.88\%) |

Note: * p < 0.05, ** p < 0.01, *** p < 0.001, two-tailed test. There were statistically significant differences between players and non-players at the $p<0.05$ level for distributions by gender and race of the respondent.


Table 1 (continued) Demographics: Summary for Education and Occupation

| Demographic Factors | Number and Percentage Responding |  |  |
| :---: | :---: | :---: | :---: |
|  | All ( $\mathrm{n}=1,678$ ) | Past-Year Players ( $\mathrm{n}=699$ ) | Non-Players ( $\mathrm{n}=979$ ) |
| Education | $\mathrm{n}=1668$ (100\%) | $\mathrm{n}=695$ (100\%) | $\mathrm{n}=973$ (100\%) |
| Less than High School | 70 (4.20\%) | 25 (3.60\%) | 45 (4.62\%) |
| High School Graduate/GED | 453 (27.16\%) | 187 (26.91\%) | 266 (27.34\%) |
| Some College, no degree | 447 (26.80\%) | 207 (29.78\%) | 240 (24.67\%) |
| College Degree | 469 (28.12\%) | 191 (27.48\%) | 278 (28.57\%) |
| Graduate/Professional Degree | 229 (13.73\%) | 85 (12.23\%) | 144 (14.80\%) |
| Occupation | $\mathrm{n}=1,345$ (100\%) | $\mathrm{n}=592$ (100\%) | $\mathrm{n}=753$ (100\%) |
| Executive, Administrative, and Managerial | 218 (16.21\%) | 104 (17.57\%) | 114 (15.14\%) |
| Professional Specialty | 444 (33.01\%) | 182 (30.74\%) | 262 (34.79\%) |
| Technicians and Related Support | 100 (7.43\%) | 42 (7.09\%) | 58 (7.70\%) |
| Sales | 135 (10.04\%) | 55 (9.29\%) | 80 (10.62\%) |
| Administrative Support, Clerical | 111 (8.25\%) | 53 (8.95\%) | 58 (7.70\%) |
| Private Household | 47 (3.49\%) | 17 (2.87\%) | 30 (3.98\%) |
| Protective Service | 13 (0.97\%) | 10 (1.69\%) | 3 (0.40\%) |
| Service | 130 (9.67\%) | 60 (10.14\%) | 70 (9.30\%) |
| Precision Productions, Craft, and Repair | 20 (1.49\%) | 9 (1.52\%) | 11 (1.46\%) |
| Machine Operators, Assemblers, and Inspectors | 45 (3.35\%) | 20 (3.38\%) | 25 (3.32\%) |
| Transportation and Material Moving | 26 (1.93\%) | 17 (2.87\%) | 9 (1.20\%) |
| Equipment Handlers, Cleaners, Helpers, and Laborers | 27 (2.01\%) | 14 (2.36\%) | 13 (1.73\%) |
| Farming, Forestry, Fishing | 9 (0.67\%) | 1 (0.17\%) | 8 (1.06\%) |
| Armed Forces | 20 (1.49\%) | 8 (1.35\%) | 12 (1.59\%) |

Note: * $\mathrm{p}<0.05$, ** $\mathrm{p}<0.01$, ${ }^{* * *} \mathrm{p}<0.001$, two-tailed test. There were statistically significant differences between players and non-players at the $p<0.05$ level for distributions by the Hispanic origin of the respondents.

- Just less than twenty percent (19.53) of all respondents had a household annual income of between $\$ 40,000$ and $\$ 59,999$. Approximately thirty-five percent had an income of $\$ 75,000$ or more. Over one-fifth ( 20.52 percent) of non-players had a household annual income over $\$ 100,000$, though eighteen percent of past-year players had a household annual income over \$100,000.
- Nearly half ( 47.93 percent) of all respondents were employed full-time. Fifty-three percent (53.17) of past-year players and forty-four percent (44.18) of non-players were employed full-time.
- Seventy-nine percent (79.43) of all respondents owned their home. Seventeen percent (17.38) rented and over 3 percent (3.19) occupied their home without payment.
- Forty-four percent (44.24) of all respondents were between the ages of 45 to 64 . As was the case in the 2008 survey, a greater percentage of non-players ( 28.67 percent) than past-
year players (17.44 percent) were 65 and over. On the other hand, a greater percentage of past-year players ( 23.30 percent) than non-players ( 18.19 percent) were between the ages of 55 to 64 . The average age for all respondents was 53 years, with the average age among players being 52 years and non-players 54 years.
- Approximately sixty-two percent (62.55) of past-year players were married, slightly more than the percentage of non-players that were married (58.76 percent).
- Thirty-three percent (33.87) of the respondents that played in the past year had children under age 18 living in their household. Slightly less, thirty percent (30.5), of non-player respondents had children under 18 living in their household.
- Fifty-two percent (52.45) of the respondents were female and forty-seven percent (47.55) were male. Among the female respondents, thirty-nine percent (38.68) participated in any Texas lottery games while sixty-one percent (61.3) did not participate in any games. Among the male respondents, forty-five percent (45.00) participated in the lottery games while fiftyfive percent (55.00) did not participate in any games.
- Approximately two-thirds of all respondents were White. Whites were similarly represented within the racial categories for players and non-players.
- Eighteen percent of the respondents stated they were of Hispanic descent. A slightly greater percentage of past-year players than non-players claimed to be of Hispanic origin (21.45 percent and 16.12 percent, respectively, a difference that is statistically significant at $p=$ $0.01)$.
- Almost forty-two (41.85) percent of all respondents had a college degree ( 28.12 percent) or a graduate/professional degree ( 13.73 percent). Unlike in 2008, a larger percentage of past-year non-players ( 28.57 percent) than players ( 27.48 percent) earned a college degree. Average lottery participation rates did not, however, vary significantly across educational categories.
- Two-thirds of all respondents (33.01 percent) categorized their occupations as "professional specialty," over twice as much as those who classified themselves in any other single category. Executive, administrative, and managerial occupations (16.21 percent) and services occupations ( 10.04 percent) were the second and third largest groups, respectively. Thirty-five percent of non-players (34.79) and thirty-one percent of past-year players (30.74) classified their occupations as professional specialty.


## III. GAME FINDINGS

IIIa. ANY GAME RESULTS
Figure 1
Percentage of Respondents Playing Any Lottery Game


Source: 2007, 2008, and 2009 CPP survey data, 2006 UNT survey reports and survey reports from 1993-2005.
Figure 1 compares past-year Texas lottery participation rates over time for those playing any Lottery games since the agency's inception in 1993. The percentage of respondents playing any lottery game has decreased steadily since 1993, with the exception of a four percentage point increase between 2004 and 2005. The following two years (2006 and 2007) survey reports registered annual decreases of roughly five and seven percentage points, respectively. For 2008 and 2009, however, the trend reversed and Texas lottery participation increased slightly in 2008 and by three percent in the most recent 2009 survey (from 38.8 in 2008 to 41.7 in 2009).

The average monthly dollar amount spent on any lottery game, excluding outlying values, was $\$ 45.21$. Following the projection formula used in previous lottery studies, we applied a "weighted" average monthly dollar amount spent and extrapolated it to the Texas population to compare with actual revenue. ${ }^{5}$ Our survey data provided for estimated annual sales in Texas to be approximately $\$ 4.06$ billion. When applying the margin of error calculation for this subset of the sample, the expected forecast of actual lottery sales ranged between $\$ 3.962$ billion and $\$ 4.155$ billion. This range is higher than the actual lottery ticket sales for fiscal year 2008 ( $\$ 3.671$ billion).

Table 2 on the next page shows the percentage of past-year players was higher among Native American Indians compared to White, Black, Asian and other players, among Hispanic origin players compared to non-Hispanic players, for men compared to women, age group of 35 to 44 years, and among respondents employed full-time and part-time compared to unemployed and
retired respondents. Participation findings for education and income of the respondents were not statistically significant.

Table 2
Any Game: Past-Year Lottery Play and Median Dollars Spent per Month by Demographics

| Year | Percentage played | Median Dollars Spent |
| :---: | :---: | :---: |
| 2009 | 41.7 | \$10.00 |
| 2008 | 38.8 | 11.00 |
| Demographic Factors 2009 |  |  |
| Education |  |  |
| Less than high school diploma | 35.7 | 10.00 |
| High school degree | 41.3 | 15.00 |
| Some college | 46.3 | 10.00 |
| College degree | 40.7 | 8.00 |
| Graduate degree | 37.1 | 6.00 |
| Income |  |  |
| Under \$12,000 | 30.5 | 6.00 |
| \$12,000 to \$19,999 | 31.3 | 10.00 |
| \$20,000 to \$29,999 | 49.2 | 20.00 |
| \$30,000 to \$39,999 | 56.1 | 13.00 |
| \$40,000 to \$49,999 | 44.3 | 9.00 |
| \$50,000 to \$59,999 | 46.5 | 8.00 |
| \$60,000 to \$74,999 | 47.2 | 21.50 |
| \$75,000 to \$100,000 | 48.6 | 10.00 |
| More than \$100,000 | 42.8 | 7.00 |
| Race* |  |  |
| White | 39.5 | 7.50 |
| Black | 42.7 | 30.00 |
| Asian | 35.1 | 4.00 |
| Native American Indian | 58.8 | 21.00 |
| Other | 48.2 | 20.00 |
| Hispanic origin* |  |  |
| Yes | 48.7 | 20.00 |
| No | 40.0 | 8.00 |
| Gender* |  |  |
| Female | 38.7 | 8.00 |
| Male | 45.0 | 13.00 |
| Age* |  |  |
| 18 to 24 | 32.7 | 8.00 |
| 25 to 34 | 42.7 | 9.00 |
| 35 to 44 | 49.4 | 8.00 |
| 45 to 54 | 45.2 | 10.00 |
| 55 to 64 | 47.8 | 8.00 |
| 65 or older | 30.3 | 10.00 |

Table 2 (continued)

| Year | Percentage played | Median Dollars Spent |
| :--- | :---: | :---: |
| Employment status** |  |  |
| Employed full/part time | 46.0 | 10.00 |
| Unemployed | 41.2 | 6.00 |
| $\quad$ Retired | 37.2 | 12.50 |

Note: * $p<0.05$, ${ }^{* *} p<0.01$, *** $p<0.001$. The significance markings refer only to the percentage played. In some categories, the number of respondents contributing to cell percentages is small. This has the effect of making generalizations from these figures more tenuous. Due to greater uncertainty, small sample size also requires larger discrepancies among categories to attain acceptable levels of statistical significance. We note in the discussion of individual lottery games those instances where sub-samples are especially small.

## Table 3

Participation and Dollars Spent by Lottery District

| District | $\mathbf{2 0 0 8}$ <br> Percent <br> Playing <br> Any Game | $\mathbf{2 0 0 9}$ <br> Percent <br> Playing <br> Any Game | 2009 <br> Average Amount <br> Spent Per Month <br> among Lottery Past- <br> Year Players | 2009 <br> Median Amount <br> Spent Per Month <br> among Lottery Past- <br> Year Players |
| :--- | :---: | :---: | :---: | :---: |
| Abilene | $33.80 \%$ | 39.8 | $\$ 8.44$ | $\$ 10.00$ |
| Austin | 40.6 | 39.3 | 17.51 | 11.00 |
| El Paso | 46.2 | 56.1 | 20.78 | 30.00 |
| Houston | 39.9 | 41.1 | 10.77 | 7.00 |
| Irving | 34.9 | 41.1 | 16.89 | 10.00 |
| Lubbock | 43.6 | 29.3 | 5.41 | 10.00 |
| McAllen | 38.8 | 40.9 | 25.30 | 24.00 |
| San Antonio | 48.9 | 48.2 | 14.06 | 19.00 |
| Tyler | 32.4 | 41.5 | 13.18 | 10.00 |
| Victoria | 49.4 | 49.2 | 12.34 | 10.00 |

Note: Differences in percent playing any game by district reported in 2008 and 2009 surveys were not statistically significant at $p \leq$ 0.05 .

- As shown in Table 3, participation rates in any Texas Lottery games based on the 2009 survey were highest in the El Paso ( 56.1 percent), Victoria (49.2 percent), San Antonio (48.2 percent), and Tyler ( 41.5 percent) lottery districts. The lowest rates were in the Lubbock ( 29.3 percent) and Austin ( 39.3 percent) districts.
- The lottery districts demonstrating the highest average monthly amount spent per player were McAllen (\$25.30) and El Paso (\$20.78). The lowest average monthly amount spent per player was found in the Lubbock (\$5.41) and Abilene (\$8.44) districts.
- Comparing 2009 survey results with those from 2008, we see that participation rates have increased the most in the El Paso, Tyler, and Irving districts. However, the results are statistically significant at $p<0.10$ only in the Irving district. Participation rates have fallen off the most in the Lubbock and Austin districts. Due to small sub-sample sizes however, we are unable to assert that this decline is statistically significant.

IIIb. PICK 3 DAY RESULTS
Figure 2
Percentage Playing Pick 3 Day


Source: Center for Public Policy 2007, 2008, and 2009 survey data and additional survey reports 2003-2006.
Figure 2 shows that 17.5 percent of those respondents playing any of the 14 Texas lottery games played Pick 3 Day. This is a 4.5 percentage point decrease in Pick 3 Day participation among lottery players compared to 2008.

Figure 3
Frequency of Purchasing Pick 3 Day Tickets
( $\mathrm{n}=122$ )


Figure 3 illustrates that more than 4 in 10 ( 43.44 percent) respondents that purchased Pick 3 Day tickets purchased them at least once a week. Twenty percent purchased tickets at least once a month, and thirty-six percent purchased them only a few times a year.

Table 4
Average Times Played Pick 3 Day

| Played Pick 3 Day | Average Number of Times Played |
| :--- | :---: |
| Per week for weekly past-year players $^{6}$ | 2.89 |
| Per month for monthly past-year players $^{7}$ | 7.54 |
| Per year for yearly past-year players $^{8}$ | 9.18 |

Table 4 shows that respondents played an average number of 2.89 times per week, 7.54 times per month, or 9.18 times per year. Note that weekly, monthly, and yearly rates are distinct from each other. These responses were recorded as follows: respondents that claimed to play weekly were not asked if they played monthly or yearly and respondents that claimed to play monthly were not asked if they played weekly or yearly. Finally, respondents that claimed to play yearly were not asked if they played weekly or monthly. ${ }^{9}$

Table 5
Dollars Spent on Pick 3 Day

| Pick 3 Day | Dollars Spent |
| :--- | :---: |
| Average spent per play $^{10}$ | $\$ 6.53$ |
| Average spent per month (mean) $^{11}$ | 13.60 |
| Average spent per month (median) | 5.50 |

Table 5 shows that Pick 3 Day players spent an average of $\$ 6.53$ per play. We find that players spent an average of $\$ 13.60$ per month. Note that per month figures are for those respondents who reported playing the game at a monthly or more frequent (i.e., weekly) basis.

Table 6
Pick 3 Day: Lottery Play and Median Dollars Spent per Month by Past-Year Demographics

| Pick 3 Day | Percentage Played Game among Past Year Players | Median Dollars Spent |
| :---: | :---: | :---: |
| Year* |  |  |
| 2009 | 17.5 | \$4.50 |
| 2008 | 22.0 | 5.00 |
| 2009 Demographics |  |  |
| Education* |  |  |
| Less than high school diploma | 24.0 | --12 |
| High school degree | 22.0 | 4.00 |
| Some college | 17.7 | 5.50 |
| College degree | 15.9 | 4.00 |
| Graduate degree | 11.9 | 2.00 |
| Income* |  |  |
| Less than \$12,000 | 11.1 | $35.00^{13}$ |
| \$12,000 to \$19,999 | 16.7 | $11.00{ }^{14}$ |
| \$20,000 to \$29,999 | 26.2 | 15.00 |
| \$30,000 to \$39,999 | 22.4 | 5.00 |
| \$40,000 to \$49,999 | 24.5 | -- ${ }^{15}$ |
| \$50,000 to \$50,999 | 16.3 | 4.00 |
| \$60,000 to \$74,999 | 20.4 | 2.00 |
| \$75,000 to \$100,000 | 16.7 | 8.00 |
| More than \$100,000 | 9.8 | -- ${ }^{16}$ |
| Race* |  |  |
| White | 12.6 | 2.00 |
| Black | 37.8 | 8.00 |
| Asian | 9.1 | $50.00{ }^{17}$ |
| Native American Indian | 30.0 | --18 |
| Other | 21.8 | 4.00 |
| Hispanic Origin |  |  |
| Yes | 21.5 | 4.00 |
| No | 16.5 | 5.00 |
| Gender |  |  |
| Female | 19.4 | 2.50 |
| Male | 16.5 | 5.00 |
| Age |  |  |
| 18 to 24 | 20.0 | -- ${ }^{19}$ |
| 25 to 34 | 11.9 | 5.00 |
| 35 to 44 | 17.6 | 5.00 |
| 45 to 54 | 22.4 | 5.50 |
| 55 to 64 | 15.6 | 5.00 |
| 65 or older | 20.2 | 2.50 |

Table 6 (continued)

| Employment status |  |  |
| :--- | :---: | :---: |
| Employed full/pat time | 16.5 | 5.00 |
| Unemployed | 19.6 | 20.00 |
| Retired | 21.1 | 1.00 |

Note: * $p<0.05$. In Table 6, the significance markings refer only to the percentage played.

Table 6 above shows that, statistically speaking, there was a significant difference between player participation rates between 2008 and 2009. Less people reported playing Pick 3 Day during the past year for the 2009 survey than did for 2008. There were also statistically significant differences among demographic groups (education, income, and race) with reference to the percentage that played Pick 3 Day. Notable findings include:

- Unlike 2008, when the percentage of past year players that played Pick 3 Day decreased as income increased, no such relationship was observed in 2009. In 2009, the participation rate among past-year Pick 3 Day players tended to be comparatively higher in the low- to middle-household income ranges (between $\$ 20,000$ and $\$ 50,000$ and $\$ 60,000$ to $\$ 74,999$ ) and lower at the extremes of less than $\$ 12,000$ and more than $\$ 100,000$. .
- Participation was higher among African Americans compared to all other racial and ethnic groups and among players with less than high school diploma versus all other educational groups.
- However, participation findings for Hispanic origin, age, gender, and employment status were not statistically significant.

Figure 4
Years Playing Pick 3 Day ( $\mathrm{n}=115$ )


Figure 4 shows that fifty-seven percent of the respondents that played Pick 3 Day reported playing it more than 5 years, a figure similar to that reported in the 2008 study when fifty-eight percent reported playing Pick 3 Day for more than 5 years.

IIIc. CASH 5 RESULTS
Figure 5
Percentage Playing Cash 5


Source: 2007, 2008, and 2009 CPP survey data and additional survey reports 2001-2006.

Figure 5 illustrates that 21.46 percent of respondents playing any lottery game in the past year had played Cash 5, a nominal increase of roughly 1.5 percentage points compared to 2008.

Figure 6
Frequency of Purchasing Cash 5 Tickets ( $\mathrm{n}=150$ )


Thirty-six percent of the respondents that purchased Cash 5 tickets purchased them at least once a week, as shown in Figure 6. Twenty-one percent (20.67) purchased tickets at least once a month, and forty-three percent (43.33) purchased Cash 5 tickets just a few times a year.

## Table 7

Average Times Played Cash 5

| Cash 5 | Average Number of Times Played |
| :--- | :---: |
| Per week for weekly past-year players ${ }^{20}$ | 2.25 |
| Per month for monthly past-year players ${ }^{21}$ | 3.71 |
| Per year for yearly past-year players ${ }^{22}$ | 6.30 |

Table 7 shows that respondents played Cash 5 an average of 2.25 times per week, 3.71 times per month, and 6.30 times per year.

Table 8
Dollars Spent on Cash 5

| Cash 5 | Dollars Spent |
| :--- | :---: |
| Average spent per play | $\$ 4.86$ |
| Average spent per month (mean) | 23 |
| Average spent per month (median) $^{24}$ | 12.91 |

Table 8 shows that Cash 5 players spent an average of $\$ 4.86$ per play, while those playing on a weekly or monthly basis spent an average of $\$ 12.91$ per month.

Table 9 on the next page shows statistically significant differences regarding the percentage that played Cash 5 only in regards to race.

- Cash 5 participation rates were highest for Native American Indians (30.0 percent) closely followed by Blacks (28.9 percent).
- Participation findings for education, income, gender, age, Hispanic origin, and employment status.
- There was no statistically significant difference in Cash 5 participation rates between 2008 and 2009.

Table 9
Cash 5: Lottery Play and Median Dollars Spent per Month by Past-Year Cash 5 Player Demographics

| Cash 5 Players | Percentage Played | Median Dollars Spent |
| :---: | :---: | :---: |
| Year |  |  |
| 2009 | 22.1 | \$3.50 |
| 2008 | 20.0 | 4.00 |
| 2009 Demographics |  |  |
| Education |  |  |
| Less than high school diploma | 40.0 | 1.00 |
| High school degree | 24.7 | 3.00 |
| Some college | 20.2 | 5.00 |
| College degree | 20.4 | 4.00 |
| Graduate degree | 19.3 | --25 |
| Income |  |  |
| Less than \$12,000 | 27.8 | $4.00^{26}$ |
| \$12,000 to \$19,999 | 20.8 | --27 |
| \$20,000 to \$29,999 | 26.2 | 20.50 |
| \$30,000 to \$39,999 | 22.7 | 1.00 |
| \$40,000 to \$49,999 | 15.7 | 2.00 |
| \$50,000 to \$50,999 | 32.6 | 3.00 |
| \$60,000 to \$74,999 | 21.8 | 1.00 |
| \$75,000 to \$100,000 | 24.4 | 5.00 |
| More than \$100,000 | 17.4 | --28 |
| Race* |  |  |
| White | 18.7 | 4.00 |
| Black | 28.9 | 4.00 |
| Asian | 18.2 | $7.50{ }^{29}$ |
| Native American Indian ${ }^{30}$ | 30.0 | $3.00^{31}$ |
| Other | 28.8 | 1.50 |
| Hispanic Origin |  |  |
| Yes | 27.3 | 3.00 |
| No | 20.4 | 4.00 |
| Gender |  |  |
| Female | 23.4 | 4.00 |
| Male | 20.8 | 3.00 |
| Age |  |  |
| 18 to 24 | 27.8 | -- ${ }^{32}$ |
| 25 to 34 | 10.2 | 3.50 |
| 35 to 44 | 22.0 | 2.00 |
| 45 to 54 | 24.5 | 3.50 |
| 55 to 64 | 20.0 | 2.00 |
| 65 or older | 25.9 | 5.00 |

Table 9 (continued)

| Employment status |  |  |
| :---: | :---: | :---: |
| Employed full/part time | 21.9 | 2.00 |
| Unemployed | 25.0 | 1.00 |
| Retired | 20.3 | 5.00 |

Note: ${ }^{*} p<0.05,{ }^{* *} p<0.01,{ }^{* * *} p<0.001$. Significance markings refer only to the percentage played.

Figure 7
Years Playing Cash 5
( $\mathrm{n}=147$ )


Figure 7 shows that fifty-five percent (55.8) of the respondents who played Cash 5 during the past year reported playing it for more than five years.

## IIId. LOTTO TEXAS RESULTS

Figure 8
Percentage Playing Lotto Texas


Source: Center for Public Policy 2007, 2008, and 2009 survey data and additional survey reports 2003-2006.

Figure 8 demonstrates that roughly seventy percent of respondents playing any lottery game in the past year played Lotto Texas. As in past years, Lotto Texas was the most popular single game among players, and participation rates among players slightly increased in 2009 from sixty-nine percent in 2008.

Figure 9
Frequency of Purchasing Lotto Texas Tickets ( $\mathrm{n}=488$ )


Almost thirty-seven percent (36.68) of respondents that purchased Lotto Texas tickets purchased them at least once a week, as illustrated in Figure 9. More than twenty-two percent (22.54 percent) purchased the tickets at least once a month while forty-one percent (40.78 percent) indicated having purchased Lotto Texas tickets a few times a year.

Table 10
Average Times Played Lotto Texas

| Lotto Texas | Average Number of Times Played |
| :--- | :---: |
| Per week for weekly past-year players | 1.80 |
| Per month for monthly past-year players $^{33}$ | 3.85 |
| Per year for yearly past-year players ${ }^{34}$ | 7.14 |

Lotto Texas players played an average of 1.80 times per week, 3.85 per month, or 7.14 times per year, as shown in Table 10.

Table 11
Dollars Spent on Lotto Texas

| Lotto Texas | Dollars Spent |
| :--- | :---: |
| Average spent per play ${ }^{35}$ | $\$ 4.64$ |
| Average spent per month (mean) $^{36}$ | 11.67 |
| Average spent per month (median) $^{37}$ | 5.00 |

Table 11 illustrates that Lotto Texas players spent an average of $\$ 4.64$ per play while they spent an average of $\$ 11.67$ a month.

Table 12 presents demographic results. Examining the difference of participation between pastyear players and non-players, we find that there was a significant difference among demographic groups regarding the percentage that played Lotto Texas in relation to income and age. However, there was no statistically significant difference comparing participation rates between 2008 and 2009.

Table 12
Lotto Texas Players and Median Dollars Spent per Month by Past-Year Player Demographics

| Lotto Texas | Percentage <br> Played | Median dollars spent |
| :--- | :---: | :---: |
| Year |  |  |
| 2009 | 70.6 | $\$ 5.00$ |
| 2008 | 68.9 | 5.00 |
| 2009 Demographics |  |  |
| Education | 44.0 | 10.00 |
| Less than high school diploma | 69.0 | 5.00 |
| High school degree | 72.3 | 5.00 |
| Some college | 75.0 | 3.00 |
| College degree | 66.3 | 4.00 |
| Graduate degree |  |  |
| Income** | 44.4 | 0.50 |
| Less than \$12,000 | 58.3 | 5.00 |
| \$12,000 to \$19,999 | 67.7 | 10.00 |
| \$20,000 to \$29,999 | 63.2 | 5.00 |
| \$30,000 to \$39,999 | 64.8 | 1.00 |
| \$40,000 to \$49,999 | 82.6 | 4.50 |
| \$50,000 to \$59,999 | 75.9 | 6.50 |
| \$60,000 to \$74.999 | 72.3 | 4.00 |
| \$75,000 to \$100,000 | 77.2 | 5.00 |
| More than \$100,000 |  |  |
| Race | 72.1 | 4.00 |
| White/Anglo | 60.9 | 4.50 |
| Black/African American | 69.2 | 4.00 |
| Asian | 90 | 5.00 |
| Native American Indian 38 | 68.9 | 5.00 |
| Other | 67.8 |  |
| Hispanic Origin | 70.2 | 5.00 |
| Yes |  | 4.00 |
| No |  |  |
| Gender |  |  |
| Female |  |  |
| Male |  |  |
|  |  |  |

Table 12 (continued)

| Age $^{* * *}$ |  |  |
| :---: | :---: | :---: |
| 18 to 24 | 38.9 | 5.00 |
| 25 to 34 | 60.7 | 2.00 |
| 35 to 44 | 65.0 | 1.00 |
| 45 to 54 | 75.6 | 5.00 |
| 55 to 4 | 77.5 | 4.00 |
| 65 or older | 73.9 | 8.00 |
| Employment Status |  |  |
| Employed full/part time | 71.0 | 4.00 |
| Unemployed | 54.2 | 1.00 |
| Retired | 75.5 | 8.00 |

Note: ${ }^{*} p<0.05,{ }^{* *} p<0.01,{ }^{* * *} p<0.001$. Significance markings refer only to the percentage played.

Figure 10
Years Playing Lotto Texas
( $\mathrm{n}=487$ )


According to Figure 10, about eighty percent (80.1 percent) of respondents indicated that they have played Lotto Texas for more than five years.

IIIe. TEXAS LOTTERY SCRATCH OFF TICKETS RESULTS
Figure 11
Percentage Playing Texas Lottery Scratch Off Tickets


Source: Center for Public Policy 2007, 2008, and 2009 survey data and additional survey reports 2003-2006.

Figure 11 indicates that almost fifty-seven percent of respondents playing any lottery game in the past year played Texas Lottery Scratch Off tickets. This participation rate is slightly higher compared to 2008 (54 percent).

Figure 12
Frequency of Purchasing Texas Lottery Scratch Off Tickets ( $\mathrm{n}=397$ )


Thirty percent ( 30.48 percent) of respondents that played Scratch-off tickets reported that they purchased them at least once a week, as shown in Figure 12. Twenty-four percent (23.93 percent) purchased tickets at least once a month while forty-six percent (45.59 percent) purchased tickets a few times a year.

Table 13
Average Time Played Texas Lottery Scratch Off Tickets

| Texas Lottery Scratch Off | Average Number of Times Played |
| :--- | :---: |
| Per week for weekly past-year players ${ }^{39}$ | 2.22 |
| Per month for monthly past-year players ${ }^{40}$ | 4.96 |
| Per year for yearly past-year players ${ }^{41}$ | 13.00 |

Table 13 shows that respondents that played Texas Lottery Scratch Off tickets played an average number of 2.22 times a week, 4.96 times a month, and 13 times a year.

Table 14
Dollars Spent on Texas Lottery Scratch Off Tickets

| Texas Lottery Scratch Off Tickets | Dollars Spent |
| :--- | :---: |
| Average spent per play ${ }^{42}$ | $\$ 8.31$ |
| Average spent per month (mean) ${ }^{43}$ | 14.15 |
| Average spent per month (median) $^{44}$ | 8.00 |

Table 14 reports that Texas Lottery Scratch Off players spent an average of $\$ 8.31$ per play, while monthly players spent an average of $\$ 14.15$ a month.

Table 15 below shows there were significant differences among demographic groups (educational level, race, Hispanic origin age, and employment) regarding the percentage that played Texas Lottery Scratch Off tickets.

- Less educated respondents were more likely to play Texas Lottery Scratch off tickets than respondents with more education.
- Respondents that reported race as "Other" were most likely to purchase Scratch Off tickets ( 67.4 percent) followed by Native American Indian ( 60.0 percent) and Black/African American (58.9 percent) players.
- Younger respondents were more likely to play Scratch Off games than older respondents. According to Table 15, seventy-one percent of respondents in the 18 to 24 age category indicated that they played Texas Lottery Scratch Off games in the past year, while forty-four percent of respondents 65 years or older reported playing the games in the past year.
- Unemployed respondents were more likely to purchase Scratch Off tickets than employed and retired respondents.
- Average differences across income and gender groups were not statistically significant.

Table 15
Texas Lottery Scratch Off Tickets: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics

| Texas Lottery Scratch Off Tickets | Percentage Played | Median Dollars Spent |
| :---: | :---: | :---: |
| Year |  |  |
| 2009 | 58.4 | \$5.00 |
| 2008 | 54.0 | 5.00 |
| 2008 Demographics |  |  |
| Education*** |  |  |
| Less than high school diploma | 83.3 | 3.50 |
| High school degree | 64.6 | 8.00 |
| Some college | 62.4 | 5.00 |
| College degree | 51.6 | 3.00 |
| Graduate degree | 44.0 | 3.00 |
| Income |  |  |
| Less than \$12,000 | 64.7 | 2.00 |
| \$12,000 to \$19,999 | 56.0 | 12.00 |
| \$20,000 to \$29,999 | 47.5 | 5.00 |
| \$30,000 to \$39,999 | 68.8 | 5.00 |
| \$40,000 to \$49,999 | 69.8 | 5.00 |
| \$50,000 to \$59,999 | 61.4 | 5.00 |
| \$60,000 to \$74.999 | 57.1 | 10.00 |
| \$75,000 to \$100,000 | 61.4 | 5.00 |
| More than \$100,000 | 58.1 | 1.00 |
| Race* |  |  |
| White/Anglo | 56.3 | 4.00 |
| Black/African American | 58.9 | 10.00 |
| Asian ${ }^{45}$ | 30.0 | $10.00^{46}$ |
| Native American Indian ${ }^{47}$ | 60.0 | 15.00 |
| Other | 67.4 | 8.00 |
| Hispanic Origin* |  |  |
| Yes | 67.1 | 8.00 |
| No | 56.1 | 5.00 |
| Gender |  |  |
| Female | 59.0 | 5.00 |
| Male | 57.8 | 5.00 |
| Age*** |  |  |
| 18 to 24 | 71.4 | 5.00 |
| 25 to 34 | 69.5 | 5.00 |
| 35 to 44 | 64.7 | 8.00 |
| 45 to 54 | 60.0 | 5.00 |
| 55 to 64 | 51.7 | 4.00 |

Table 15 (continued)

| 65 or older | 44.0 | 5.00 |
| :---: | :---: | :---: |
| Employment status* |  |  |
| Employed full/part time | 60.6 | 5.00 |
| Unemployed | 72.9 | 1.00 |
| Retire | 48.0 | 5.00 |

Note: ${ }^{*} p<0.05,{ }^{* *} p<0.01,{ }^{* * *} p<0.001$. Significance markings refer only to the percentage played.

Figure 13
Years Playing Texas Lottery Scratch Off Tickets
( $\mathrm{n}=391$ )


As shown in Figure 13, nearly 4 in 5 (78.5 percent) of the respondents who played Texas Lottery Scratch Off Tickets reported playing them for more than 5 years.

## IIIf. TEXAS TWO STEP RESULTS

Figure 14
Percentage Playing Texas Two Step


Source: Center for Public Policy 2007, 2008, and 2009 survey data and additional survey reports 2003-2006.

Figure 14 illustrates that thirteen percent of respondents who reported playing any lottery game in the past year in the 2009 survey played Texas Two Step, up 3.3 percentage points compared to 2008 .

Figure 15
Frequency of Purchasing Texas Two Step Tickets
( $\mathrm{n}=91$ )


Figure 15 demonstrates that almost half ( 45.05 percent), or 41 in all, of Texas Two Step players purchased tickets for the game at least once a week. Similarly, almost forty percent (39.56 percent) of Texas Two Step players purchased tickets a few times a year. The remaining fifteen percent ( 15.38 percent) indicated that they purchased tickets for Texas Two Step at least once a month.

## Table 16

Average Time Played Texas Two Step

| Texas Two Step Players | Average Number of Times Played |
| :--- | :---: |
| Per week for weekly past-year players ${ }^{48}$ | 3.72 |
| Per month for monthly past-year players ${ }^{49}$ | 4.56 |
| Per year for yearly past-year players ${ }^{50}$ | 11.00 |

Table 16 reports that respondents playing Texas Two Step played an average of 3.72 times a week, 4.56 times a month, or 11.00 times a year.

Table 17
Dollars Spent on Texas Two Step

| Texas Two Step Players | Dollars Spent |
| :--- | :---: |
| Average spent per play | $\$ 5.25$ |
| Average spent per month (mean) ${ }^{51}$ | 14.04 |
| Average spent per month (median) $^{52}$ | 8.00 |

Respondents playing Texas Two Step spent an average of $\$ 5.25$ per play, the mean expenditure was $\$ 14.04$ a month and the median expenditure was $\$ 8.00$ as shown in Table 17.

According to Table 18 on the following page, only age was a statistically significant demographic indicator regarding the percentage that played Texas Two Step tickets. Respondents in the age group from 45 to 54 years were more likely to play Texas Two Step than respondents of other age groups.

Respondent characteristics of race, Hispanic origin, education, income, gender, and employment status had no association with propensities to purchase Texas Two Step tickets in the past year.

Table 18
Texas Two Step: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics

| Texas Two Step | Percentage Played | Median Dollars <br> Spent |
| :--- | :---: | :---: |
| Year $^{53}$ |  |  |
| 2009 | 13.5 | $\$ 5.00$ |
| 2008 | 10.1 | 3.50 |
| 2009 Demographics |  |  |
| Education | 16.0 | $2.50^{54}$ |
| Less than high school diploma | 14.0 | 4.00 |
| High school degree | 13.4 | 5.00 |
| Some college | 11.5 | 5.00 |
| College degree | 14.3 | 5.00 |
| Graduate degree |  |  |
| Income | 5.6 | -55 |
| Less than \$12,000 | 16.7 | 4.00 |
| \$12,000 to \$19,999 | 11.5 | 20.00 |
| \$20,000 to \$29,999 | 6.2 | -56 |
| \$30,000 to \$39,999 | 18.9 | 3.50 |
| \$40,000 to \$49,999 | 13.6 | 18.00 |
| \$50,000 to \$59,999 | 7.4 | 5.00 |
| \$60,000 to \$74.999 | 23.2 | 10.00 |
| \$75,000 to \$100,000 | 13.3 | 5.00 |
| More than \$100,000 |  |  |
| Race | 11.7 | 5.00 |
| White/Anglo | 21.3 | 2.00 |
| Black/African American | -- | --5 |
| Asian ${ }^{57}$ | 10.0 | 8.00 |
| Native American Indian | 13.7 | 8.00 |
| Other |  | 5.00 |
| Hispanic Origin | 12.0 |  |
| Yes | 13.2 |  |
| No |  |  |

Table 18 (continued)

| Gender |  |  |
| :---: | :---: | :---: |
| Female | 15.2 | 3.00 |
| Male | 11.8 | 8.00 |
| Age* |  |  |
| 18 to $24^{59}$ | -- | -- |
| 25 to 34 | 1.7 | $10.00^{60}$ |
| 35 to 44 | 16.9 | 5.00 |
| 45 to 54 | 18.9 | 4.00 |
| 55 to 64 | 12.3 | 6.50 |
| 65 or older | 12.0 | 10.00 |
| Employment Status |  |  |
| Employed full/part time | 11.9 | 4.50 |
| Unemployed | 20.8 | 12.00 |
| Retired | 14.6 | 6.50 |

Note: ${ }^{*} \mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01,{ }^{* * *} \mathrm{p}<0.001$. Significance markings refer to the percentage played.

Figure 16
Years Playing Texas Two Step
( $\mathrm{n}=89$ )


As shown in Figure 16, fifty-seven percent (57.3 percent) of respondents indicated that they have played Texas Two Step for more than five years.

IIIg. MEGA MILLIONS RESULTS

Figure 17
Percentage Playing Mega Millions


Source: Center for Public Policy 2007, 2008, and 2009 survey data and additional survey reports from 2001-2006.
Figure 17 illustrates that over fifty-two percent ( 52.5 percent) of respondents in the 2009 survey that played any lottery game in the past year had played Mega Millions. This was more than seven percentage points higher compared to the 2008 survey ( 45.3 percent), returning to the 2005 and 2006 levels.

Figure 18
Frequency of Purchasing Mega Millions Tickets
( $\mathrm{n}=367$ )


One-third (33.51 percent) of respondents reported that they purchased Mega Millions tickets at least once a week (see Figure 18). Sixteen (16.35) percent said that they purchased Mega Millions tickets at least once a month while half ( 50.14 percent) of the respondents purchased Mega Millions tickets a few times a year.

Table 19
Average Times Played Mega Millions

| Mega Millions | Average Number of Times Played |
| :--- | :---: |
| Per week for weekly past-year players | 1.58 |
| Per month for monthly past-year players ${ }^{61}$ | 4.13 |
| Per year for yearly past-year players ${ }^{62}$ | 17.04 |

As shown in Table 19, respondents who played Mega Millions tickets played an average of 1.58 times per week, 4.13 times per month, and 17.04 times per year, respectively.

Table 20
Dollars Spent on Mega Millions

| Mega Millions | Dollars Spent |
| :--- | :---: |
| Average spent per play | $\$ 5.59$ |
| Average spent per month (mean) ${ }^{63}$ | 10.27 |
| Average spent per month (median) | 5.00 |

Mega Millions players spent an average of $\$ 5.59$ per play and monthly players spent an average of $\$ 10.27$ per month, as shown in Table 20. Approximately half of the respondents were likely to spend $\$ 5.00$ or more a month on purchasing Mega Millions tickets.

As Table 21 shows, there were significant differences among demographic groups (race and gender) regarding the percentage that played Mega Millions in the past year. In particular:

- Native American Indian respondents were more likely to play Mega Millions than respondents of other races.
- Male respondents were more likely to play Mega Millions than females.

Table 21
Mega Millions: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics

| Mega Millions | Percentage Played | Median Dollars Spent |
| :---: | :---: | :---: |
| Year*** |  |  |
| 2009 | 54.8 | \$3.00 |
| 2008 | 45.3 | 5.00 |
| 2009 Demographics |  |  |
| Education |  |  |
| Less than high school diploma | 48.0 | 0.50 |
| High school degree | 53.9 | 3.50 |
| Some college | 54.5 | 3.00 |
| College degree | 59.8 | 2.00 |
| Graduate degree | 48.2 | 5.00 |
| Income |  |  |
| Less than \$12,000 | 35.3 | 3.00 |
| \$12,000 to \$19,999 | 52.2 | 4.00 |
| \$20,000 to \$29,999 | 59.0 | 5.00 |
| \$30,000 to \$39,999 | 59.7 | 2.00 |
| \$40,000 to \$49,999 | 48.1 | 5.00 |
| \$50,000 to \$59,999 | 60.0 | 1.00 |
| \$60,000 to \$74,999 | 60.0 | 5.00 |
| \$75,000 to \$100,000 | 55.6 | $10.00{ }^{64}$ |
| More than \$100,000 | 56.8 | 1.50 |
| Race* |  |  |
| White | 51.1 | 2.00 |
| Black | 60.2 | 2.00 |
| Asian | 41.7 | 1.00 |
| Native American Indian | $90.0{ }^{65}$ | 1.00 |
| Other | 60.5 | 5.00 |
| Hispanic origin |  |  |
| Yes | 56.8 | 4.00 |
| No | 53.7 | 2.00 |
| Gender** |  |  |
| Female | 49.1 | 1.00 |
| Male | 60.1 | 4.00 |
| Age |  |  |
| 18 to 24 | 48.6 | 1.00 |
| 25 to 34 | 43.9 | 8.00 |
| 35 to 44 | 50.4 | 3.00 |
| 45 to 54 | 60.1 | 2.00 |
| 55 to 64 | 59.1 | 3.50 |
| 65 or older | 52.3 | 5.00 |

Table 21 (continued)

| Employment status |  |  |
| :---: | :---: | :---: |
| Employed full/part time | 54.8 | 2.00 |
| Unemployed | 63.0 | 1.00 |
| Retired | 54.7 | 5.00 |

Note: ${ }^{*} p<0.05,{ }^{* *} \mathrm{p}<0.01$, *** $\mathrm{p}<0.001$. Significance markings refer to the percentage played.

Figure 19
Years Playing Mega Millions
( $\mathrm{n}=358$ )


Seventeen percent (16.76) of the respondents mentioned that they have been playing Mega Millions for less than two years. Meanwhile forty-three percent (43.30) of the respondents reported having played Mega Millions for more than 5 years.

IIIh. MEGAPLIER RESULTS
Figure 20
Percentage Playing Megaplier


Source: Center for Public Policy 2007, 2008, and 2009 survey data and reports from 2001-2006.
Figure 20 illustrates that about twelve percent (12.16) of the respondents playing any lottery game in the past year played Megaplier. While this is a slightly higher rate than last year, the difference is not at an acceptable level of statistical significance.

Figure 21
Frequency of Purchasing Megaplier Tickets ( $\mathrm{n}=85$ )


Almost thirty-eight percent (37.65) of those respondents who played Megaplier in the past year indicated that they purchased Megaplier tickets at least once a week. Almost nineteen percent (18.82) purchased tickets at least once a month, and forty-four percent (43.53) purchased tickets a few times a year.

Table 22
Average Times Played Megaplier

| Megaplier | Average Number of Times Played |
| :--- | :---: |
| Per week for weekly past-year players | 1.89 |
| Per month for monthly past-year players ${ }^{66}$ | 4.46 |
| Per year for yearly past-year players $^{67}$ | 16.73 |

Respondents playing Megaplier played an average of 1.89 times per week, 4.46 times per month, or 16.73 times per year, as shown in Table 22.

Table 23
Dollars Spent on Megaplier

| Megaplier | Dollars Spent |
| :--- | :---: |
| Average spent per play ${ }^{68}$ | $\$ 5.67$ |
| Average spent per month (mean) ${ }^{69}$ | 13.69 |
| Average spent per month (median) | 8.00 |

Table 23 shows that Megaplier players spent an average of $\$ 5.67$ per play. An average of $\$ 13.69$ was spent per month.

According to table 24, we find no significant difference among demographic variables except a marginally significant difference in race ( $p=0.055$ ).

Table 24
Megaplier: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics

| Megaplier | Percentage Played | Median Dollars Spent |
| :---: | :---: | :---: |
| Year |  |  |
| 2009 | 12.7 | \$4.00 |
| 2008 | 11.8 | 4.00 |
| 2009 Demographics |  |  |
| Education |  |  |
| Less than high school diploma | 8.0 | $1.00^{70}$ |
| High school degree | 11.2 | 6.00 |
| Some college | 9.2 | 6.50 |
| College degree | 18.6 | 2.50 |
| Graduate degree | 11.3 | --71 |
| Income |  |  |
| Less than \$12,000 | 11.8 | $30.00{ }^{72}$ |
| \$12,000 to \$19,999 | 17.1 | $8.00{ }^{73}$ |
| \$20,000 to \$29,999 | 11.5 | --74 |
| \$30,000 to \$39,999 | 13.8 | 8.00 |
| \$40,000 to \$49,999 | 9.4 | 10.00 |
| \$50,000 to \$59,999 | 9.6 | --75 |
| \$60,000 to \$74,999 | 17.0 | 8.00 |
| \$75,000 to \$100,000 | 15.0 | 3.00 |
| More than \$100,000 | 16.7 | --76 |
| Race ${ }^{7 /}$ |  |  |
| White | 10.6 | 4.00 |
| Black | 13.6 | 5.50 |
| Asian | 25.0 | $1.00^{78}$ |
| Native American Indian | 30.0 | --79 |
| Other | 16.4 | 5.00 |
| Hispanic origin |  |  |
| Yes | 15.2 | 4.00 |
| No | 12.2 | 4.00 |
| Gender |  |  |
| Female | 11.4 | 2.00 |
| Male | 14.0 | 6.50 |
| Age |  |  |
| 18 to 24 | 8.6 |  |
| 25 to 34 | 5.4 | $50.00^{81}$ |
| 35 to 44 | 10.3 | 1.50 |
| 45 to 54 | 16.5 | 2.00 |
| 55 to 64 | 13.9 | 2.00 |
| 65 or older | 11.2 | 8.00 |

Table 24 (continued)

| Employment status |  |  |
| :---: | :---: | :---: |
| Employed full/part time | 11.9 | 1.00 |
| Unemployed | 17.0 | 3.50 |
| Retired | 15.9 | 6.50 |

Note: ${ }^{*} \mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01$, ${ }^{* * *} \mathrm{p}<0.001$. Significance markings refer only to the percentage played.
Figure 22
Years Playing Megaplier
( $\mathrm{n}=79$ )


Almost forty-two percent (41.77) of the respondents who played Megaplier reported playing the game for more than 5 years while less than 22 percent (21.52) of the Megaplier players reported playing the game for 1 year or less.

## IV. SUMMARY

The Texas Lottery Commission 2009 Demographic Study surveyed 1,678 Texas citizens aged 18 and over between late July and late August of 2009. After registered decreased participation in 2006 and 2007, 4 in 10 ( 42 percent) of survey respondents in 2009 said they participated in Texas Lottery games in the past year, a slightly higher percentage compared to 2008. As with the 2007 and 2008 surveys, there was a statistically significant difference in participation due to employment status, but unlike 2008, in 2009, race and Hispanic origin were also significant. Income and education among those who participated in any game were not statistically significant while other demographic classifications were statistically significant.

In many cases participation rates within demographic groups varied by the type of game played (see Section III above). There was a statistically significant difference regarding educational level for Pick 3 Day and Texas Lottery Scratch Off tickets. Pick 3 Day and Lotto Texas participation rates also varied significantly across income groups. Participation rates varied significantly by age for Lotto Texas, Texas Lottery Scratch Offs, and Texas Two Step, while Texas Lottery Scratch Off participation varied by Hispanic origin and employment. Lottery participation rates varied by race for Pick 3 Day, Cash 5, Mega Millions, and Texas Lottery Scratch-off Tickets. Finally, participation rates between men and women differed for those that played Mega Millions during the past year.

An examination of Texas lottery districts found that participation rates in any Texas Lottery game were highest in the El Paso (56.1 percent), Victoria (49.2 percent), San Antonio (48.2 percent), and Tyler (41.5 percent) lottery districts. The lowest rates were in the Lubbock (29.3 percent) and Austin (39.3 percent) districts (see Table 3). Districts with the highest average monthly amount spent per player were McAllen (\$25.30) and El Paso (\$20.78). The lowest average monthly amounts spent per player were found in the Lubbock (\$5.41) and Abilene (\$8.44) districts.

Comparing 2009 survey results with those from 2008, we find a slight but statistically significant increase in overall participation rates. Among the districts, only Irving demonstrated a significant participation increase.

## APPENDIX

Table A-1
Sample Population by County ${ }^{82}$ ( $n=1,640$ )

| County | Count | Percentage |
| :---: | :---: | :---: |
| Anderson | 4 | 0.24 |
| Andrews | 2 | 0.12 |
| Angelina | 10 | 0.61 |
| Aransas | 1 | 0.06 |
| Archer | 3 | 0.18 |
| Atascosa | 2 | 0.12 |
| Bastrop | 4 | 0.24 |
| Bear | 5 | 0.30 |
| Bee | 5 | 0.30 |
| Bell | 27 | 1.64 |
| Bender | 1 | 0.06 |
| Bexar | 79 | 4.81 |
| Bosque | 1 | 0.06 |
| Bowie | 6 | 0.37 |
| Brazoria | 29 | 1.77 |
| Brazos | 13 | 0.79 |
| Brewster | 1 | 0.06 |
| Brown | 5 | 0.30 |
| Burnet | 4 | 0.24 |
| Caldwell | 4 | 0.24 |
| Callahan | 1 | 0.06 |
| Cameron | 17 | 1.03 |
| Camp | 1 | 0.06 |
| Cass | 3 | 0.18 |
| Chambers | 1 | 0.06 |
| Cherokee | 8 | 0.49 |
| Coke | 1 | 0.06 |
| Coleman | 1 | 0.06 |
| Collin | 44 | 2.68 |
| Colorado | 1 | 0.06 |
| Comal | 8 | 0.49 |
| Comanche | 2 | 0.12 |
| Cooke | 3 | 0.18 |
| Coryell | 8 | 0.49 |
| Crockett | 2 | 0.12 |
| Dallas | 139 | 8.46 |
| Dawson | 1 | 0.06 |
| De Witt | 3 | 0.18 |
| Deaf Smith | 1 | 0.0 .6 |
| Denton | 34 | 2.07 |
| Desoto | 1 | 0.06 |
| Donley | 1 | 0.06 |
| Duval | 1 | 0.06 |
| Ector | 8 | 0.49 |
| El Paso | 34 | 2.06 |
| Ellis | 15 | 0.91 |
| Erath | 1 | 0.06 |
| Falls | 1 | 0.06 |
| Fannin | 3 | 0.18 |
| Fayette | 3 | 0.18 |
| Fisher | 1 | 0.06 |


| Fort Bend | 33 | 2.01 |
| :---: | :---: | :---: |
| Franklin | 4 | 0.24 |
| Freestone | 1 | 0.06 |
| Gaines | 1 | 0.06 |
| Galveston | 22 | 1.33 |
| Gillespie | 3 | 0.18 |
| Gonzales | 2 | 0.12 |
| Gray | 3 | 0.18 |
| Grayson | 11 | 0.67 |
| Gregg | 6 | 0.37 |
| Grimes | 3 | 0.18 |
| Guadalupe | 10 | 0.61 |
| Hale | 1 | 0.06 |
| Hamilton | 2 | 0.12 |
| Hardin | 5 | 0.30 |
| Harris | 281 | 17.10 |
| Harrison | 2 | 0.12 |
| Hays | 11 | 0.67 |
| Henderson | 8 | 0.49 |
| Hidalgo | 23 | 1.40 |
| Hill | 2 | 0.12 |
| Hockey | 1 | 0.06 |
| Hood | 3 | 0.18 |
| Hopkins | 2 | 0.12 |
| Houston | 1 | 0.06 |
| Hunt | 3 | 0.18 |
| Hutchinson | 2 | 0.12 |
| Irion | 1 | 0.06 |
| Jackson | 1 | 0.06 |
| Jasper | 5 | 0.30 |
| Jeff Davis | 1 | 0.06 |
| Jefferson | 20 | 1.22 |
| Jim Wells | 2 | 0.12 |
| Johnson | 8 | 0.49 |
| Jones | 1 | 0.06 |
| Karnes | 1 | 0.06 |
| Kaufman | 7 | 0.43 |
| Kendall | 6 | 0.36 |
| Kerr | 2 | 0.32 |
| Killeen | 1 | 0.06 |
| Kinney | 1 | 0.06 |
| Kleberg | 1 | 0.06 |
| Lamar | 4 | 0.24 |
| Lampasas | 1 | 0.06 |
| Lavaca | 3 | 0.18 |
| Lee | 3 | 0.19 |
| Liberty | 4 | 0.24 |
| Limestone | 1 | 0.06 |
| Live Oak | 1 | 0.06 |
| Llano | 2 | 0.12 |
| Loving | 1 | 0.06 |
| Lubbock | 21 | 1.28 |
| Lynn | 1 | 0.06 |
| Marion | 3 | 0.18 |
| Matagorda | 2 | 0.12 |
| McLennan | 19 | 1.15 |
| Medina | 1 | 0.06 |
| Midland | 7 | 0.43 |


| Milam | 4 | 0.24 |
| :---: | :---: | :---: |
| Montague | 2 | 0.12 |
| Montgomery | 30 | 1.83 |
| Morris | 2 | 0.12 |
| Nacogdoches | 6 | 0.37 |
| Navarro | 5 | 0.30 |
| Newton | 1 | 0.06 |
| Nueces | 11 | 0.67 |
| Ochiltree | 1 | 0.06 |
| Orange | 6 | 0.37 |
| Palo Pinto | 2 | 0.12 |
| Panola | 3 | 0.18 |
| Parker | 7 | 0.43 |
| Parmer | 1 | 0.06 |
| Pecos | 2 | 0.12 |
| Polk | 3 | 0.18 |
| Potter | 8 | 0.49 |
| Randall | 7 | 0.43 |
| Red River | 1 | 0.06 |
| Robertson | 7 | 0.43 |
| Rockwall | 3 | 0.18 |
| Rooster | 1 | 0.06 |
| Runnels | 2 | 0.12 |
| Rusk | 5 | 0.30 |
| San Augustine | 1 | 0.06 |
| San Jacinto | 1 | 0.06 |
| San Patricio | 4 | 0.24 |
| Scheicher | 1 | 0.06 |
| Scurry | 1 | 0.06 |
| Shelby | 1 | 0.06 |
| Sherman | 1 | 0.06 |
| Smith | 13 | 0.79 |
| Starr | 3 | 0.18 |
| Stephens | 1 | 0.06 |
| Swisher | 2 | 0.12 |
| Tarrant | 129 | 7.85 |
| Taylor | 11 | 0.67 |
| Titus | 3 | 0.18 |
| Tom Green | 11 | 0.67 |
| Travis | 81 | 4.93 |
| Trinity | 2 | 0.12 |
| Tyler | 25 | 0.32 |
| Upshur | 2 | 0.13 |
| Upton | 1 | 0.06 |
| Uvalde | 3 | 0.19 |
| Val Verde | 6 | 0.39 |
| Van Zandt | 4 | 0.26 |
| Victoria | 9 | 0.58 |
| Walker | 3 | 0.19 |
| Washington | 5 | 0.32 |
| Webb | 6 | 0.39 |
| Wharton | 3 | 0.19 |
| Wheeler | 1 | 0.06 |
| Wichita | 14 | 0.85 |
| Wilbarger | 1 | 0.06 |
| Williamson | 29 | 1.77 |
| Wilson | 3 | 0.18 |
| Wise | 7 | 0.43 |


| Wood | 4 | 0.24 |
| :--- | :--- | :--- |
| Yoakum | 1 | 0.06 |
| Young | 1 | 0.06 |
| Zavala | 1 | 0.06 |

## Notes

${ }^{1}$ See Section 1 below for discussion of statistical significance.
${ }^{2}$ The proportion of cell phone users is determined by a variety of studies in the past five years. For example, see the 2008 Harris Interactive study on the continued increase in exclusive cell phone usage: http://www.harrisinteractive.com/harris poll/index.asp?PID=890.
${ }^{3}$ Note that discrepancies between total sample size and various variables are due to respondents either refusing to answer or saying they did not know. Consider the "Income" variable. We have a reduction in the total sample (who reports their income) from 1678 to 1132. The cell percentage for the column with the full sample has the denominator 1132 and not 1678. Consequently, the percentage of the adjusted "full" sample containing respondents earning less than $\$ 12,000$ is $58 / 1132$ or 5.21 percent as opposed to $59 / 1678$ or 3.52 percent.
${ }^{4}$ There was a significant difference between players and non-players regarding the distribution of employment status ( $\mathrm{p}<0.001$ ).
${ }^{5}$ The 2008 population estimate for persons 18 years and older in Texas is $17,943,064$. The sources for this figure are the Texas Department of State Health Services, Center for Health Statistics and the Texas State Data Center, Office of the State Demographer (http://txsdc.utsa.edu/tpepp/2008projections/).
${ }^{6}$ Excludes respondents that indicated they played Pick 3 Day more than 9 times per week. If those respondents are included, the average per week number of times playing the game is 3.25 .
${ }^{7}$ Excludes respondents that indicated they played Pick 3 Day more than 30 times per week. If those respondents are included, the average per month number of times playing the game is 9.29 .
${ }^{8}$ Excludes respondents that indicated they played Pick 3 Day more than 36 times per year. If those respondents are included, the average per year number of times playing the game is 22.82.
${ }^{9}$ We follow this coding method for each game regarding average time played.
${ }^{10}$ The figure excludes the respondents that indicated having purchased more than $\$ 100$ of Pick 3 Day tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets increases to $\$ 7.34$ per play.
${ }^{11}$ The figure excludes the respondents that indicated having purchased more than $\$ 100$ of Pick 3 Day tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is $\$ 21.73$ per month.
${ }^{12}$ Sixty nine out of seventy respondents in this category reported that they spent $\$ 0$ on Pick 3 Day tickets monthly. Only one respondent reported that he or she spent $\$ 15.00$ on Pick 3 Day monthly.
${ }^{13}$ There were two respondents in this category.
${ }^{14}$ There were four respondents in this category.
${ }^{15}$ Five out of 13 respondents in this category reported that they spent $\$ 0$ on Pick 3 Day tickets monthly. The median number of dollars spent on the game was $\$ 5$ per month when those respondents are excluded.
${ }^{16}$ Three out of 9 respondents in this category reported that they spent $\$ 0$ on Pick 3 Day monthly. The median dollars spent on the game is $\$ 36$ per month when those respondents are excluded.
${ }^{17}$ There was one respondent in this category.
${ }^{18}$ There were three respondents in this category and one reported that he or she spent $\$ 4.0$ on Pick 3 Day.
${ }^{19}$ Three out of 7 respondents in this category reported that they spent $\$ 0.00$ on purchasing Pick 3 Day monthly. If those respondents are excluded, then the median number of dollars spent on the game is $\$ 20.00$ per month.
${ }^{20}$ The average number of times playing Cash 5 tickets of weekly past-year players excludes respondents that indicated playing Cash 5 more than 30 times per week. If those respondents are included, the average number of times playing the game is 2.68 times per week.
${ }^{21}$ The average number of times playing Cash 5 tickets of monthly past-year players excludes respondents that claimed to play more than 20 times per month. If those respondents are included, the average number of times playing the game is 7.43 times per month.
${ }^{22}$ The average number of times playing Cash 5 tickets of yearly past-year players excludes respondents that claimed to play more than 24 times per year. If those respondents are included, the average number of times playing the game is 16.68 times per year.
${ }^{23}$ The figure excludes the respondents that indicated having purchased more than $\$ 100$ of Cash 5 tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is $\$ 16.71$ per month.
${ }^{24}$ The median number did not change when the respondents that indicated having purchased more than $\$ 150$ of Cash 5 tickets per month were included or excluded.
${ }^{25}$ Nine out of 16 respondents in this category reported that they spent $\$ 0.00$ on Cash 5 monthly. If those respondents are excluded, then the median number of dollar spent on the game is $\$ 5.00$ per month.
${ }^{26}$ There were five respondents in this category reporting how much they spent on Cash 5 in the past year.
${ }^{27}$ Four out of 5 respondents reported that they spent $\$ 0.00$ on Cash 5 monthly.
${ }^{28}$ Nine out of 16 respondents reported that they spent $\$ 0.00$ on Cash 5 monthly. If those respondents are excluded, the median number of dollar spent on the game is $\$ 10.00$ per month.
${ }^{29}$ There were two respondents in this category reporting how much they spent on Cash 5 in the past year.
${ }^{30}$ There were three out of ten respondents in this category reporting that they played Cash 5 in the past year.
${ }^{31}$ There were three respondents in this category reporting how much they spent on Cash 5 in the past year.
${ }^{32}$ Six out of 10 respondents in this category reported that they spent $\$ 0.00$ on Cash 5 monthly. If those respondents are excluded, the median number of dollars spent on the game is $\$ 10.00$ per month.
${ }^{33}$ The average number of time playing Lotto Texas tickets of monthly past-year players excludes the respondents who indicated that they played more than 10 times per month. If those respondents are included, the average number of time playing the game is 4.98 times per month.
${ }^{34}$ The average number of time playing Lotto Texas tickets of yearly past-year players excludes the respondents who indicated that they played more than 24 times per year. If those respondents are included, the average number of time playing the game is 24.01 times per year.
${ }^{35}$ The figure excludes the respondents that indicated having purchased more than $\$ 25$ of Lotto Texas tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is $\$ 5.75$ per play.
${ }^{36}$ The figure excludes the respondents that indicated having purchased more than $\$ 100$ of Lotto Texas tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is $\$ 13.14$ per month.
${ }^{37}$ When the respondents who indicated that they purchased more than \$ 100 of Lotto Texas tickets per month are included or excluded, the median number does not change.
${ }^{38}$ Nine out of ten respondents in this category reported that they played Lotto Texas in the past year.
${ }^{39}$ This figure excludes respondents that claimed to have played Texas Lottery Scratch Off tickets more than 25 times per week. If those respondents are included, the average number of time playing the game is 2.57 times per week.
${ }^{40}$ This figure excludes respondents that claimed to have played Texas Lottery Scratch Off tickets more than 30 times per month. If those respondents are included, the average number of time playing the game is 6.05 times per month.
${ }^{41}$ This figure excludes respondents that claimed to have played Texas Lottery Scratch Off tickets more than 52 times per year. If those respondents are included, the average number of time playing the game is 20.32 times per year.
${ }^{42}$ This figure excludes respondents that claimed to have spent more than $\$ 100$ on Texas Lottery Scratch off tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is $\$ 8.79$ per play.
${ }^{43}$ This figure excludes respondents that claimed to have spent more than $\$ 100$ of Texas Lottery Scratch off tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is $\$ 22.90$ per month.
${ }^{44}$ When the respondents who indicated that they purchased more than \$ 100 of Texas Lottery Scratch Off tickets per month are included or excluded, the median number does not change.
${ }^{45}$ Three out of ten respondents in this category reported that they played Texas Scratch Off in the past year.
${ }^{46}$ There were three respondents in this category.
${ }^{47}$ Six out of ten respondents in this category reported that they played Texas Scratch Offs in the past year.
${ }^{48}$ The average number of times playing Texas Two Step tickets of weekly past-year players excludes the respondents who indicated that they played more than 7 times per week. If those respondents are included, the average number of time playing the game is 3.88 times per week.
${ }^{49}$ The average number of time playing Texas Two Step tickets of monthly past-year players excludes the respondents who indicated that they played more than 25 times per month. If those respondents are included, the average number of time playing the game is 5.75 times per month.
${ }^{50}$ The average number of time playing Texas Two Step tickets of yearly past-year players excludes the respondents who indicated that they played more than 48 times per week. If those respondents are included, the average number of time playing the game is 29.76 times per week.
${ }^{51}$ The average number of dollars spent per month excludes the respondents who indicated that they purchased more than $\$ 100$ of Texas Two Step tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is $\$ 15.16$ per month.
${ }^{52}$ When the respondents who indicated that they purchased more than $\$ 100$ of Texas Two Step tickets per month are included or excluded, the median number does not change.
${ }^{53}$ The difference between percent playing Texas Two Step reported in 2009 and 2008 is statistically significant at $p<0.10$.
${ }^{54}$ There were four respondents in this category.
${ }^{55}$ There was one respondent in this category, and the respondent spent $\$ 0.00$ on this game.
${ }^{56}$ Three out of 4 respondents in this category reported that they spent $\$ 0.00$ on this game.
${ }^{57}$ There were no respondents reporting that they played Texas Two Step in this category.
${ }^{58}$ There were no respondents reporting how much they spent on Texas Two Step in this category.
${ }^{59}$ There were no respondents reporting that they played Texas Two Step in this category.
${ }^{60}$ There was one respondent in this category.
${ }^{61}$ The average number of time playing Mega Millions tickets of monthly past-year players excludes the respondents who indicated that they played more than 30 times per month. If those respondents are included, the average number of time playing the game is 4.71 times per month.
${ }^{62}$ The average number of time playing Mega Millions tickets of yearly past-year players excludes the respondents who indicated that they played more than 52 times per year. If those respondents are included, the average number of time playing the game is 22.95 times per year.
${ }^{63}$ The average number of dollars spent per month excludes the respondents who indicated that they purchased more than $\$ 100$ of Mega Million tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is $\$ 12.30$ per month.
${ }^{64}$ Twenty three out of forty five respondents reported that they spent $\$ 0.00$ on Mega Millions. If these respondents are excluded, the number of median dollar spent on Mega Millions in this category is $\$ 11.00$.
${ }^{65}$ Twenty three out of forty five respondents in this category reported that they spent $\$ 0.00$ on this game. If those respondents are included, then the median number of dollars spent on this game is $\$ 0.00$.
${ }^{66}$ The average number of time playing Megaplier tickets of monthly past-year players excludes the respondents who indicated that they played more than 24 times per month. If those respondents are included, the average number of time playing the game is 5.61 times per month.
${ }^{67}$ The average number of time playing Megaplier tickets of yearly past-year players excludes the respondents who indicated that they played more than 52 times per year. If those respondents are included, the average number of time playing the game is 25.43 times per year.
${ }^{68}$ The average number of dollars spent per play excludes the respondents who indicated that they purchased more than $\$ 100$ of Megaplier tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is $\$ 11.62$ per play.
${ }^{69}$ The average number of dollars spent per play excludes the respondents who indicated that they purchased more than $\$ 100$ of Megaplier tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is $\$ 15.01$ per month.
${ }^{70}$ There were two respondents reporting how much they spent on Megaplier in the past year.
${ }^{71}$ Five out of nine respondents reported that they spent $\$ 0.00$ on Megaplier. If these respondents are excluded, the number of median dollar spent on Megaplier in this category is $\$ 9.00$.
${ }^{72}$ There were two respondents reporting how much they spent on Megaplier in the past year.
${ }^{73}$ There were four respondents reporting how much they spent on Megaplier in the past year.
${ }^{74}$ Four out of seven respondents reported that they spent $\$ 0.00$ on Megaplier. If these respondents are excluded, the number of median dollar spent on Megaplier in this category is $\$ 20.00$.
${ }^{75}$ Three out of four respondents reported that they spent $\$ 0.00$ on Megaplier.
${ }^{76}$ Ten out of fifteen respondents reported that they spent $\$ 0.00$ on Megaplier. If these respondents are excluded, the number of median dollar spent on Megaplier in this category is \$16.00.
${ }^{77}$ Difference between players and non-players in this category is statistically significant at $p=$ 0.055 .
${ }^{78}$ There were three respondents in this category.
${ }^{79}$ There were no respondents reporting how much they spent on Megaplier in the past year.
${ }^{80}$ There were three respondents in this category.
${ }^{81}$ There were three respondents in this category.
${ }^{82}$ The discrepancy between the sample in Table A-1 $(n=1,640)$ and the total sample ( $n=1,678$ ) is due to respondents stating that they "did not know" or were "unsure" of their county of residence. Some refused to answer the question.

