

# Demographic Survey of Texas Lottery Players 2011



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# TABLE OF CONTENTS

- List of Figures ..... ii
- List of Tables..... iii
- Executive Summary ..... 1
- I. Introduction and Method of Analysis .....5
- II. Sample Characteristics .....7
- III. Game Findings..... 13
  - a. Any Game Results ..... 13
  - b. Pick 3 Day Results ..... 17
  - c. Cash 5 Results ..... 23
  - d. Lotto Texas Results ..... 28
  - e. Texas Lottery Scratch Off Ticket Results ..... 33
  - f. Texas Two Step Results ..... 38
  - g. Mega Millions Results ..... 43
  - h. Megaplier Results ..... 48
  - i. Powerball Results..... 53
  - j. Power Play Feature Results..... 57
- IV. Summary ..... 61
- Appendix: List of Counties ..... 62
- Notes..... 64

## LIST OF FIGURES

Figure 1	Percentage of Respondents Playing Any Lottery Game	13
Figure 2	Percentage of Past-Year Players Playing Pick 3 Day	17
Figure 3	Frequency of Purchasing Pick 3 Day Tickets	18
Figure 4	Years Playing Pick 3 Day	22
Figure 5	Percentage of Past-Year Players Playing Cash 5	23
Figure 6	Frequency of Purchasing Cash 5 Tickets	24
Figure 7	Years Playing Cash 5	27
Figure 8	Percentage of Past-Year Players Playing Lotto Texas	28
Figure 9	Frequency of Purchasing Lotto Texas Tickets	29
Figure 10	Years Playing Lotto Texas	32
Figure 11	Percentage of Past-Year Players Playing Texas Lottery Scratch Off Tickets	33
Figure 12	Frequency of Purchasing Texas Lottery Scratch Off Tickets	34
Figure 13	Years Playing Texas Lottery Scratch Off Tickets	37
Figure 14	Percentage of Past-Year Players Playing Texas Two Step	38
Figure 15	Frequency of Purchasing Texas Two Step Tickets	39
Figure 16	Years Playing Texas Two Step	42
Figure 17	Percentage of Past-Year Players Playing Mega Millions	43
Figure 18	Frequency of Purchasing Mega Millions Tickets	44
Figure 19	Years Playing Mega Millions	47
Figure 20	Percentage of Past-Year Players Playing Megaplier	48
Figure 21	Frequency of Purchasing Megaplier Tickets	49
Figure 22	Years Playing Megaplier	52
Figure 23	Frequency of Purchasing Powerball Tickets	53
Figure 24	Years Playing Powerball	56
Figure 25	Frequency of Purchasing Power Play Feature	57
Figure 26	Years Playing Power Play Feature	60

## LIST OF TABLES

Table 1	Demographics	8
Table 2	Any Game: Past-Year Lottery Play and Median Dollars Spent per Month by Demographics	14
Table 3	Participation and Dollars Spent by Lottery District	15
Table 4	Average Number of Times Played Pick 3 Day	18
Table 5	Dollars Spent on Pick 3 Day	19
Table 6	Pick 3 Day: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	20
Table 7	Average Number of Times Played Cash 5	24
Table 8	Dollars Spent on Cash 5	25
Table 9	Cash 5: Lottery Play and Median Dollars Spent per Month by Past-Year Cash 5 Player Demographics	26
Table 10	Average Number of Times Played Lotto Texas	29
Table 11	Dollars Spent on Lotto Texas	30
Table 12	Lotto Texas: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	31
Table 13	Average Number of Times Played Texas Lottery Scratch Off Tickets	34
Table 14	Dollars Spent on Texas Lottery Scratch Off Tickets	35
Table 15	Texas Lottery Scratch Off Tickets: Lottery Play and Median Dollars Spent per Month By Past-Year Player Demographics	36
Table 16	Average Number of Times Played Texas Two Step	39
Table 17	Dollars Spent on Texas Two Step	40
Table 18	Texas Two Step: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	41
Table 19	Average Number of Times Played Mega Millions	44
Table 20	Dollars Spent on Mega Millions	45
Table 21	Mega Millions: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	46
Table 22	Average Number of Times Played Megaplier	49
Table 23	Dollars Spent on Megaplier	50

**LIST OF TABLES (CONTINUED)**

Table 24	Megaplier: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	51
Table 25	Average Number of Times Played Powerball	53
Table 26	Dollars Spent on Powerball	54
Table 27	Powerball: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	55
Table 28	Average Number of Times Played Power Play Feature	58
Table 29	Dollars Spent on Power Play Feature	58
Table 30	Power Play Feature: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	59
Table A	Sample Population by County	62

## EXECUTIVE SUMMARY

The Texas Lottery Commission 2011 Demographic Study of Texas Lottery Players surveyed a total of 1,697 Texas citizens aged 18 years and older between mid-July and early August of 2011. Texas registered lottery participation in general had been in decline over the past decade. The Texas lottery participation in 2011 was one of the few exceptions to this trend: its participation rate had increased by as much as seven percentage points (6.7) as compared to 2010. The 2011 rate indicated a reversal of the decline in participation (8.0 percentage points) between 2010 and 2009. Slightly more than two-fifths (40.5 percent) of survey respondents in 2011 indicated they participated in any of the Texas Lottery games in the past year, compared to 33.8 percent in 2010. Similar to the 2010 survey, there was a statistically significant difference between past-year players and non-players with regard to marital status. In contrast to 2010, income and gender were also found to be statistically significant for the difference in participation in 2011. Among those who had participated in any game, only income and gender were found to be statistically significant. The 2011 survey findings also showed increases in participation rates in all the games played as compared to 2010. Among the biggest increases in participation rates were Powerball (11.5 percentage points) and Mega Millions (11.0 percentage points). As in last year's survey, in nearly 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

In 2011, the Texas Lottery Commission restructured their sales force and the corresponding geographies to create four additional lottery districts. We reported the findings of the 14 lottery districts, instead of the 10 lottery districts as in 2010. When **lottery district** was used as the unit of analysis, the following results emerge for participation rates and personal expenditures:

- The 2011 participation rates in any Texas Lottery games were highest in the El Paso (51.1 percent), San Antonio (50.3 percent) and Lubbock (46.5 percent) lottery districts. Fort Worth district recorded the lowest participation rate of 34.7 percent, while Houston East and Tyler both recorded a participation rate of 35.0 percent.
- The lottery districts demonstrating the highest average monthly amount spent per player were Dallas South (\$25.26), Houston Southwest (\$23.71), and Waco (\$18.72). The lowest average monthly amounts spent per player were found in the Houston Northwest (\$6.41) and Tyler (\$7.38) districts.

A brief summary of game results follows:

**Note:** *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, and Power Play Feature. Data for these games may be made available upon written request to the Texas Lottery Commission.*

**Pick 3 Day:** Approximately nineteen percent (18.8) of past-year lottery players (N=687) had played Pick 3 Day. More than two-fifths (40.31 percent) of Pick 3 Day players purchased tickets for the game at least once a week, an increase of 2 percentage points since 2010. Twenty percent (20.16) purchased tickets at least once a month, and the remaining two-fifths (39.53 percent) made purchases only a few times a year. Pick 3 Day players spent an average of \$5.15 per play, slightly higher than in 2010 (\$4.85).

**Cash 5:** Twenty-two percent (22.1) of past-year lottery players had played Cash 5. Exactly twenty-five percent of the Cash 5 players purchased Cash 5 tickets at least once a week, an increase of five percentage points from 2010. Twenty-eight percent (27.63) purchased tickets at least once a month, and forty-seven percent (47.37) purchased Cash 5 tickets just a few times a year. Cash 5 players spent an average of \$5.54 per play.

**Lotto Texas:** Lotto Texas maintained its most popular game status in 2011 as in 2010: more than seventy percent (71.5) of past-year lottery players had played Lotto Texas. Among them, over one-third (34.83) purchased Lotto Texas tickets at least once a week. About twenty-four percent (23.63) purchased the tickets at least once a month, while forty-two percent (41.55) indicated having purchased Lotto Texas tickets a few times a year. Lotto Texas players spent an average of \$4.78 per play.

**Texas Lottery Scratch Off Tickets:** About fifty-seven percent (56.6) of past-year lottery players reported playing Texas Lottery Scratch Off Tickets, making it the second most popular set of games among players. Some twenty-eight percent (28.02) of these players bought Scratch-off tickets at least once a week. Another twenty-six percent (26.48) purchased tickets at least once a month, while forty-six percent (45.50) purchased tickets a few times a year. On average, Texas Lottery Scratch Off tickets players spent \$7.91 per play.

**Texas Two Step:** About eleven percent (11.1) of past-year lottery players had played Texas Two Step. More than a third (34.21%) of Texas Two Step players purchased tickets for the game at least once a week. Sixteen percent (15.79) indicated that they purchased tickets for Texas Two Step at least once a month. Exactly one-half of Texas Two Step players purchased tickets a few times a year. Players of Texas Two Step spent an average of \$3.48 per play.

**Mega Millions:** Slightly more than half (50.9 percent) of past-year lottery players had played Mega Millions. Twenty-seven percent (26.86) of Mega Millions players reported buying Mega Millions tickets at least once a week. One-fifth (20.29 percent) said that they purchased Mega Millions tickets at least once a month while more than one-half (52.86 percent) purchased tickets a few times a year. On average, Mega Millions players spent \$4.36 per play.

**Megaplier:** More than fourteen percent (14.4) of past-year lottery players had played Megaplier. More than half (51.52%) of this group indicated purchasing Megaplier tickets a few times a year. On the other hand, about one-fifth (21.21%) of the Megaplier players purchased tickets at least once a week. Another twenty-seven percent (27.27) said that they purchased Megaplier tickets at least once a month. Megaplier players spent an average of \$4.71 per play.

**Powerball:** One-third (33.3%) of past-year lottery players indicated that they played Powerball. One-quarter (25.76 percent) of that group purchased Powerball tickets at least once a week. Twenty percent (19.21) purchased the tickets at least once a month, while the remaining fifty-five percent (55.02) indicated having purchased Powerball tickets a few times a year. Powerball players spent an average of \$4.62 per play.

**Power Play Feature:** About six percent (6.1) of past-year lottery players indicated that they played Power Play Feature. One-third of that group purchased Power Play Feature tickets at least once a week. Twenty-six percent (26.19) purchased the tickets at least once a month, while forty percent (40.48) indicated having purchased Power Play Feature tickets a few times a year. Power Play Feature players spent an average of \$5.20 per play.

## Testing differences in Lottery participation and expenditure from 2010 to 2011

In addition to the basic results that ensured continuity of information and presentation of prior studies, the 2011 study provides statistical tests of ***differences in lottery participation and individual expenditures from 2010 to 2011***. The report highlights these differences for general participation rates, and for the individual lottery games separately. Comparing 2011 survey results with those from 2010, we find the following:

- A small but statistically significant increase of seven (6.65) percentage points in the overall participation rates in the Texas Lottery games between 2011 and 2010 (see Table 1).<sup>1</sup>
- The 2011 survey findings show increases in participation rates in all the games played as compared to 2010. Among the biggest increases in participation rates were: Powerball (11.5 percentage points), Mega Millions (11.0 percentage points), Cash 5 (5.5 percentage points) and Megaplier (5.3 percentage points).

## I. INTRODUCTION AND METHOD OF ANALYSIS

A random survey of adult Texas residents aged 18 and older was conducted during mid-July to early August of 2011. The objectives were to measure the citizen participation rates, the distribution and frequency of play, and the demographic profiles of past-year lottery players and non-players.

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

Renée Cross  
 Jim Granato  
 Chris Mainka  
 Lauren Neely  
 Kwok-Wai Wan

The random digit dialing sampling method (RDD) was used in the survey because it provides the best coverage of active telephone numbers and 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 Hobby Center for Public Policy's Survey Research Institute (SRI) (<http://www.uh.edu/hcpp/sri.htm>) fielded 1,700 telephone interviews. Of these, three (3) gave a "don't know" response on whether they had played the Texas Lottery games in the past year. Because these 3 respondents would bias the results of the analysis, they were not included in the sample. The remaining 1,697 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 16th and August 8th, 2011. 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 HCPP 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 2011 Texas Lottery Study in addition to the standard statewide RDD sample. The data included in this report are based on 1,379 (81.26 percent) completed interviews on standard landlines and 318 completed interviews (18.74 percent) from the cell phone sample.<sup>2</sup> This combination, in our judgment, improves the quality of the overall data by including individuals who might be excluded using traditional sampling methods.<sup>3</sup>

## II. SAMPLE CHARACTERISTICS<sup>4</sup>

Selected questions for 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 non-players 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. “Level” of statistical significance (denoted by a p-value) has to do with 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 (n=1,697)	Past-Year Players (n=687)	Non-Players (n=1,010)
Year***5			
2011	1,697 (100%)	687 (40.48%)	1,010 (59.52%)
2010	1,691 (100%)	572 (33.83%)	1,119 (66.17%)
2009	1,678 (100%)	699 (41.66%)	979 (58.34%)
Income*	n=1,067 (100%)	n=450 (100%)	n=617 (100%)
Less than \$12,000	75 (7.03%)	19 (4.22%)	56 (9.08%)
Between \$12,000 and \$19,999	96 (9.00%)	32 (7.11%)	64 (10.37%)
Between \$20,000 and \$29,999	119 (11.15%)	58 (12.89%)	61 (9.89%)
Between \$30,000 and \$39,999	105 (9.84%)	38 (8.44%)	67 (10.86%)
Between \$40,000 and \$49,999	94 (8.81%)	43 (9.56%)	51 (8.27%)
Between \$50,000 and \$59,999	88 (8.25%)	39 (8.67%)	49 (7.94%)
Between \$60,000 and \$74,999	91 (8.53%)	48 (10.67%)	43 (6.97%)
Between \$75,000 and \$100,000	133 (12.46%)	65 (14.44%)	68 (11.02%)
More than \$100,000	266 (24.93%)	108 (24.00%)	158 (25.61%)
Employment Status	n=1,679 (100%)	n=680 (100%)	n=999 (100%)
Employed Full-time	751 (44.73%)	321 (47.21%)	430 (43.04%)
Employed Part-time	107 (6.37%)	41 (6.03%)	66 (6.61%)
Unemployed/Looking for Work	137 (8.16%)	56 (8.24%)	81 (8.11%)
Not in Labor Force	94 (5.60%)	38 (5.59%)	56 (5.61%)
Retired	590 (35.14%)	224 (32.94%)	366 (36.64%)
Own or Rent Home	n=1,671 (100%)	n=675 (100%)	n=996 (100%)
Own	1,344 (80.43%)	551 (81.63%)	793 (79.62%)
Rent	296 (17.71%)	113 (16.74%)	183 (18.37%)
Occupied without Payment	31 (1.86%)	11 (1.63%)	20 (2.01%)
Age of Respondent	n=1,556 (100%)	n=630 (100%)	n=926 (100%)
18 to 24	103 (6.62%)	20 (3.17%)	83 (8.96%)
25 to 34	115 (7.39%)	43 (6.83%)	72 (7.78%)
35 to 44	210 (13.50%)	90 (14.29%)	120 (12.96%)
45 to 54	275 (17.67%)	130 (20.63%)	145 (15.66%)
55 to 64	371 (23.84%)	173 (27.46%)	198 (21.38%)
65 and over	482 (30.98%)	174 (27.62%)	308 (33.26%)

**Note:** \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001, two-tailed test. There was a statistically significant difference between players and non-players regarding the distribution by income status of the respondents (p < 0.05).

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

Demographic Factors	Number and Percentage Responding		
	All (n=1,697)	Past-Year Players (n=687)	Non-Players (n=1,010)
Marital Status*	n=1,671 (100%)	n=671 (100%)	n=1,000 (100%)
Married	1,002 (59.96%)	427 (63.64%)	575 (57.50%)
Widowed	187 (11.19%)	57 (8.49%)	130 (13.00%)
Divorced	173 (10.35%)	80 (11.92%)	93 (9.30%)
Separated	33 (1.97%)	13 (1.94%)	20 (2.00%)
Never Married	276 (16.52%)	94 (14.01%)	182 (18.20%)
Children under 18 Living in Household	n=1,660 (100%)	n=675 (100%)	n=985 (100%)
Yes	443 (26.69%)	195 (28.89%)	248 (25.18%)
No	1,217 (73.31%)	480 (71.11%)	737 (74.82%)
Number of Children under 18 Living in Household	n=443 (100%)	n=195 (100%)	n=248 (100%)
1	185 (41.76%)	77 (39.49%)	108 (43.55%)
2	165 (37.25%)	74 (37.95%)	91 (36.69%)
3	63 (14.22%)	30 (15.38%)	33 (13.31%)
4 or more	30 (6.77%)	14 (7.18%)	16 (6.45%)
Gender of Respondent **	n=1,697 (100%)	n=687 (100%)	n=1,010 (100%)
Male	764 (45.02%)	337 (49.05%)	427 (42.28%)
Female	933 (54.98%)	350 (50.95%)	583 (57.72%)
Race	n=1,660 (100%)	n=672 (100%)	n=988 (100%)
White	1,159 (69.82%)	453 (67.41%)	706 (71.46%)
Black	225 (13.55%)	98 (14.58%)	127 (12.85%)
Asian	36 (2.17%)	11 (1.64%)	25 (2.53%)
Native American Indian	16 (0.96%)	8 (1.19%)	8 (0.81%)
Other	224 (13.49%)	102 (15.18%)	122 (12.35%)
Hispanic Origin	n=1,667 (100%)	n=675 (100%)	n=992 (100%)
Yes	279 (16.74%)	123 (18.22%)	156 (15.73%)
No	1,388 (83.26%)	552 (81.78%)	836 (84.27%)

**Note:** \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001, two-tailed test. There were statistically significant differences between players and non-players regarding the distribution by marital status (at p < 0.05) and gender (at p < 0.01) of the respondents.

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

Demographic Factors	Number and Percentage Responding		
	All (n=1,697)	Past-Year Players (n=687)	Non-Players (n=1,010)
Education	n=1,681 (100%)	n=679 (100%)	n=1,002 (100%)
Less than High School	72 (4.28%)	25 (3.68%)	47 (4.69%)
High School Graduate/GED	435 (25.88%)	176 (25.92%)	259 (25.85%)
Some College, no degree	401 (23.85%)	181 (26.66%)	220 (21.96%)
College Degree	543 (32.30%)	209 (30.78%)	334 (33.33%)
Graduate/Professional Degree	230 (13.68%)	88 (12.96%)	142 (14.17%)
Occupation	n=1,458 (100%)	n=609 (100%)	n=849 (100%)
Executive, Administrative, and Managerial	168 (11.52%)	63 (10.34%)	105 (12.37%)
Professional Specialty	487 (33.40%)	203 (33.33%)	284 (33.45%)
Technicians and Related Support	138 (9.47%)	63 (10.34%)	75 (8.83%)
Sales	163 (11.18%)	69 (11.33%)	94 (11.07%)
Administrative Support, Clerical	91 (6.24%)	38 (6.24%)	53 (6.24%)
Private Household	76 (5.21%)	29 (4.76%)	47 (5.54%)
Protective Service	29 (1.99%)	11 (1.81%)	18 (2.12%)
Service	144 (9.88%)	66 (10.84%)	78 (9.19%)
Precision Productions, Craft, and Repair	10 (0.69%)	5 (0.82%)	5 (0.59%)
Machine Operators, Assemblers, and Inspectors	52 (3.57%)	22 (3.61%)	30 (3.53%)
Transportation and Material Moving	29 (1.99%)	12 (1.97%)	17 (2.00%)
Equipment Handlers, Cleaners, Helpers, and Laborers	35 (2.40%)	16 (2.63%)	19 (2.24%)
Farming, Forestry, Fishing	19 (1.30%)	5 (0.82%)	14 (1.65%)
Armed Forces	17 (1.17%)	7 (1.15%)	10 (1.18%)

- Table 1 shows that slightly more than two-fifths (40.48 percent) of survey respondents said they participated in any of the Texas Lottery games in the past year, a statistically significant increase of 6.65 percentage points compared to 2010.
- Different from 2010, there was a statistically significant difference between past-year players and non-players by the respondents' income status in 2011. Slightly more than twenty-seven percent (27.18) of all respondents had a household annual income of \$29,999 or less. Seventeen percent (17.06) had an income of between \$40,000 and \$59,999. More than thirty-seven percent (37.39) had an income of \$75,000 or more. All three percentages were quite similar to those reported in 2010. Nearly a quarter (24.00 percent) of past-year players had a household annual income over \$100,000, and a slightly higher percentage (25.61%) of non-players had a household annual income over \$100,000.

- Similar to 2010, there was a statistically significant difference between past-year players and non-players by the respondents' marital status in 2011. About sixty-four percent (63.64) of past-year players were married, compared to a lower percentage (57.50%) of non-players who were married. Fourteen percent (14.01) of past-year players were never-married, while nearly twelve percent (11.92%) of those who participated in any games were divorced.
- Different from 2010, there was a statistically significant difference between past-year players and non-players by the respondents' gender. Just like the past year, there were more female respondents than male respondents in 2011: fifty-five percent (54.98) were female and forty-five percent (45.02) were male. There was an increase in both percentages of female and male respondents that participated in any of the Texas lottery games compared to 2010: among the female respondents, over thirty-seven percent (37.51) participated in any games while sixty-two percent (62.49) did not. Among the male respondents, more than forty-four percent (44.11) participated in any games while nearly fifty-six percent (55.89) did not.
- Unlike the 2009 and 2010 surveys, there was no statistically significant difference between past-year players and non-players due to employment status. Nearly forty-five percent (44.73) of all respondents were employed full-time, while thirty-five percent (35.14) were retired. More than forty-seven percent (47.21) of past-year players were employed full-time. As for the retired, about one-third (32.94 percent) were past-year players.
- As was the case in the 2010 survey, more than eighty percent (80.43) of all respondents owned their home. Nearly eighteen percent (17.71) rented homes. Among the past-year players, eighty-two percent (81.63) owned their home. A similar percentage of the non-players were also home owners (79.62 percent).
- Forty-two percent (41.51) of all respondents were between the ages of 45 and 64. A greater percentage of non-players (33.26 percent) than past-year players (27.62 percent) were 65 and over, although the gap between the two was smaller (5.64 percentage points) than in the 2010 survey (13.72 percentage points). On the other hand, a greater percentage of past-year players (27.46 percent) than non-players (21.38 percent) were between the ages of 55 and 64. The average age for all respondents was 54.9 years, with the average age among players being 55.0 years and non-players 54.9 years. (Note: average age is not shown in Table 1).
- About twenty-nine percent (28.89) of the respondents that played in the past year had children under age 18 living in their household. On the other hand, one-quarter (25.18 percent) of the non-player respondents had children under 18 living in their households. Unlike 2010, differences in children under age 18 living in the household were not statistically significant with regard to participation.
- Whites constituted seventy percent (69.82) of all respondents in the 2011 survey. As was the case in the 2010 survey, Whites were similarly represented within the racial categories for both past-year players (67.41 percent) and non-players (71.46 percent). Similar to 2010, racial differences in participation were not statistically significant.
- Seventeen percent (16.74) of the respondents stated they were of Hispanic descent. A greater percentage of past-year players than non-players claimed to be of Hispanic origin

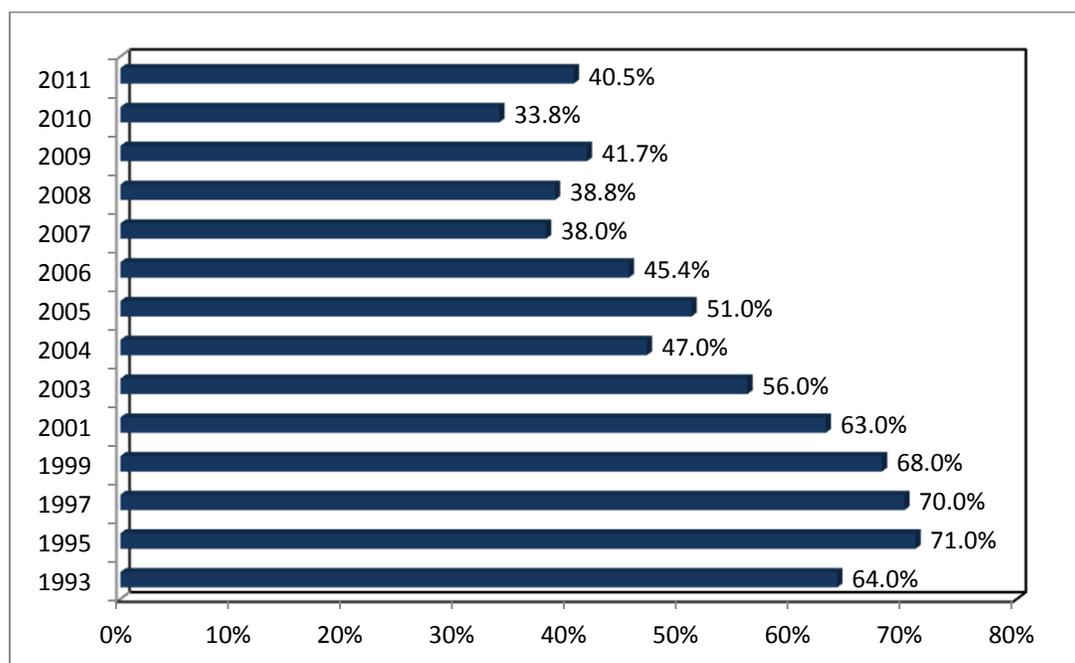
(18.22 percent and 15.73 percent, respectively). Contrary to 2010, differences in participation by Hispanic origin were not statistically significant in the 2011 survey.

- Nearly forty-six percent (45.98) of all respondents had a college degree (32.30 percent) or a graduate/professional degree (13.68 percent). A larger percentage of non-players (33.33 percent) than past-year players (30.78 percent) earned a college degree, indicating a reverse of the findings in 2010. However, similar to the 2010 survey, differences in participation by education were not statistically significant in the 2011 survey.
- The three largest occupational categories in the 2011 survey were: “professional specialty” (33.40 percent), “executive, administrative, and managerial occupations” (11.52 percent), and “sales” (11.18 percent). Similar proportions of past-year players (33.33 percent) and non-players (33.45 percent) indicated their occupations as professional specialty.
- As in the 2010 survey, own or rent home, age, race, education and occupation were not statistically significant in the 2011 survey.

### III. GAME FINDINGS

#### IIIa. ANY GAME RESULTS

**Figure 1**  
**Percentage of Respondents Playing Any Lottery Game**



**Source:** 2007, 2008, 2009, 2010, and 2011 HCPP survey data, 2006 UNT survey reports and survey reports from 1993-2005.

Figure 1 shows past-year Texas lottery participation rates for those playing any Texas Lottery games since the agency's first survey conducted in 1993. The Texas lottery participation rate in 2011 had increased by as much as seven percentage points (6.7) as compared to 2010. The 2011 rate indicated a reverse of the decline in participation (eight percentage points) between 2009 and 2010. Other notable exceptions to the steady decline of the percentage of respondents playing any lottery game since 1995 were: a four percentage point increase between 2004 and 2005, and a three percentage point increase between 2008 and 2009.

The average monthly dollar amount spent on any lottery game was \$31.08. 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 aged 18 and older to compare with actual revenue.<sup>6</sup> Our survey data provided for estimated annual sales in Texas to be approximately \$2.74 billion. When applying the margin of error calculation for this subset of the sample, the expected forecast of actual lottery sales ranged between \$2.67 billion and \$2.81 billion. This range is lower than the actual lottery ticket sales for fiscal year 2010 (\$3.8 billion).

Table 2 shows that the participation rates in 2011 by income status and gender were statistically significant. Past-year participation rates in 2011 among the various income categories were higher than in 2010 except those with income under \$12,000, and those with income between \$30,000 and \$39,999.

Similar to 2010, past-year participation rates were higher for male (44.1 percent) than female (37.5 percent). Comparing 2011 survey results with those from 2010, there was a general pattern of higher participation rates among all demographic categories.

The 2011 participation findings under the categories of education, race, Hispanic origin, age and employment status 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
2011***7	40.5	\$13.00
2010	33.8	10.00
2009	41.7	10.00
<b>Demographic Factors 2011</b>		
Education		
Less than high school diploma	34.7	25.00
High school degree	40.5	15.00
Some college	45.1	18.00
College degree	38.5	10.00
Graduate degree	38.3	4.50
Income*		
Under \$12,000	25.3	11.00
\$12,000 to \$19,999	33.3	22.00
\$20,000 to \$29,999	48.7	18.00
\$30,000 to \$39,999	36.2	20.00
\$40,000 to \$49,999	45.7	20.00
\$50,000 to \$59,999	44.3	8.00
\$60,000 to \$74,999	52.7	10.50
\$75,000 to \$100,000	48.9	15.00
More than \$100,000	40.6	11.00
Race		
White	39.1	10.00
Black	43.6	25.50
Asian	30.6	20.00
Native American Indian	50.0	17.00
Other	45.5	20.00
Hispanic origin		
Yes	44.1	20.00
No	39.8	11.00
Gender**		
Female	37.5	15.00
Male	44.1	12.00

**Table 2 (continued)**

Year	Percentage played	Median Dollars Spent
Age		
18 to 24	19.4	11.50
25 to 34	37.4	15.00
35 to 44	42.9	14.50
45 to 54	47.3	14.50
55 to 64	46.6	15.00
65 or older	36.1	12.00
Employment status		
Employed full/part time	42.2	14.00
Unemployed	40.9	14.50
Retired	38.0	13.00

**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**

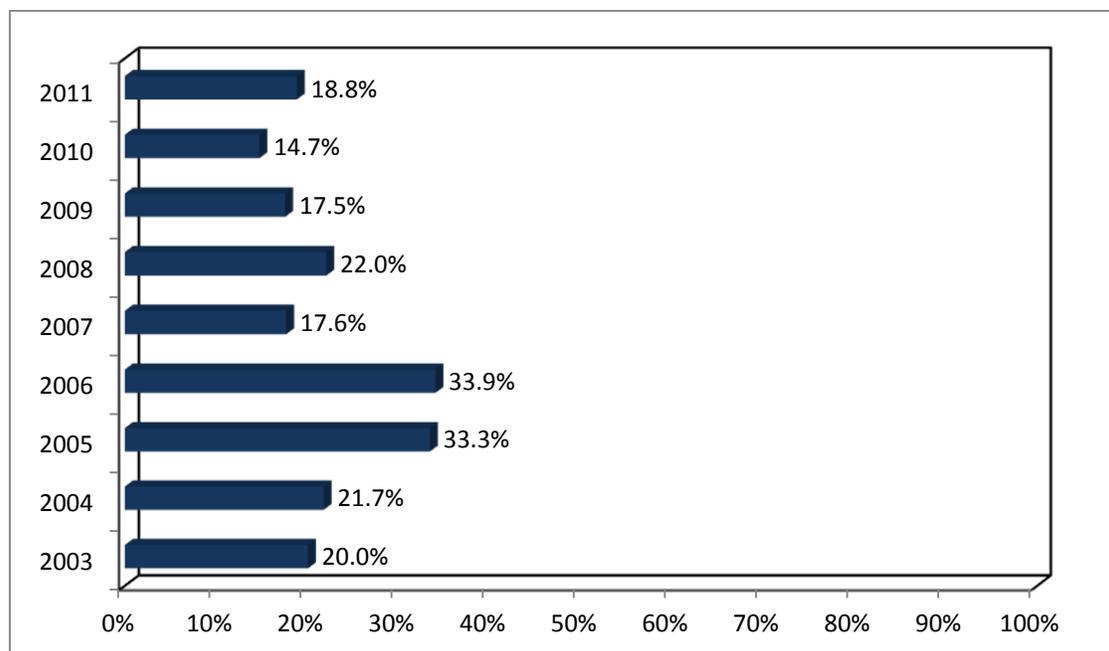
District	2011	2011	2011
	Percent Playing Any Game	Average Amount Spent Per Month among Lottery Past-Year Players	Median Amount Spent Per Month among Lottery Past-Year Players
Austin	37.8	\$15.97	\$10.00
Dallas North	37.6	9.26	5.00
Dallas South	42.6	25.26	24.00
El Paso	51.1	15.40	11.50
Fort Worth	34.7	15.11	14.50
Houston East	35.0	15.88	18.50
Houston Northwest	44.9	6.41	7.00
Houston Southwest	40.5	23.71	20.00
Lubbock	46.5	9.91	12.00
McAllen	38.6	14.02	35.00
San Antonio	50.3	13.59	15.00
Tyler	35.0	7.38	10.00
Victoria	37.6	14.47	16.00
Waco	42.0	18.72	13.00

- Table 3: In 2011, we reported the findings of the 14 lottery districts, instead of the 10 lottery districts as in 2010.

- The 2011 participation rates in any Texas Lottery games were highest in the El Paso (51.1 percent), San Antonio (50.3 percent) and Lubbock (46.5 percent) lottery districts. Fort Worth district recorded the lowest participation rate of 34.7 percent, while Houston East and Tyler both recorded a participation rate of 35.0 percent.
- The lottery districts demonstrating the highest average monthly amount spent per player were Dallas South (\$25.26), Houston Southwest (\$23.71), and Waco (\$18.72). The lowest average monthly amounts spent per player were found in the Houston Northwest (\$6.41) and Tyler (\$7.38) districts.
- The lottery districts with the highest median monthly amount spent per player were McAllen (\$35.00), Dallas South (\$24.00), and Houston Southwest (\$20.00). The lowest median monthly amounts spent per player were recorded in the Dallas North (\$5.00) and Houston Northwest (\$7.00) lottery districts.
- Because the lottery districts were grouped differently in 2011 compared to 2010, we did not provide district-to-district comparisons or test for statistical significance of the differences between the results of 2011 and 2010.

### IIIb. PICK 3 DAY RESULTS

**Figure 2**  
**Percentage of Past-Year Players Playing Pick 3 Day**



**Source:** Hobby Center for Public Policy 2007, 2008, 2009, 2010, and 2011 survey data and additional survey reports 2003-2006.

Figure 2 shows that nearly nineteen percent (18.8) of past year players played Pick 3 Day, an increase of 4.1 percentage points compared to 2010. This was a reverse of the decrease for two consecutive years for Pick 3 Day participation among lottery players (a decrease of 4.5 percentage points from 2008 to 2009, followed by a decrease of 2.8 percentage points from 2009 to 2010).

**Figure 3**  
**Frequency of Purchasing Pick 3 Day Tickets**  
**(n=129)**

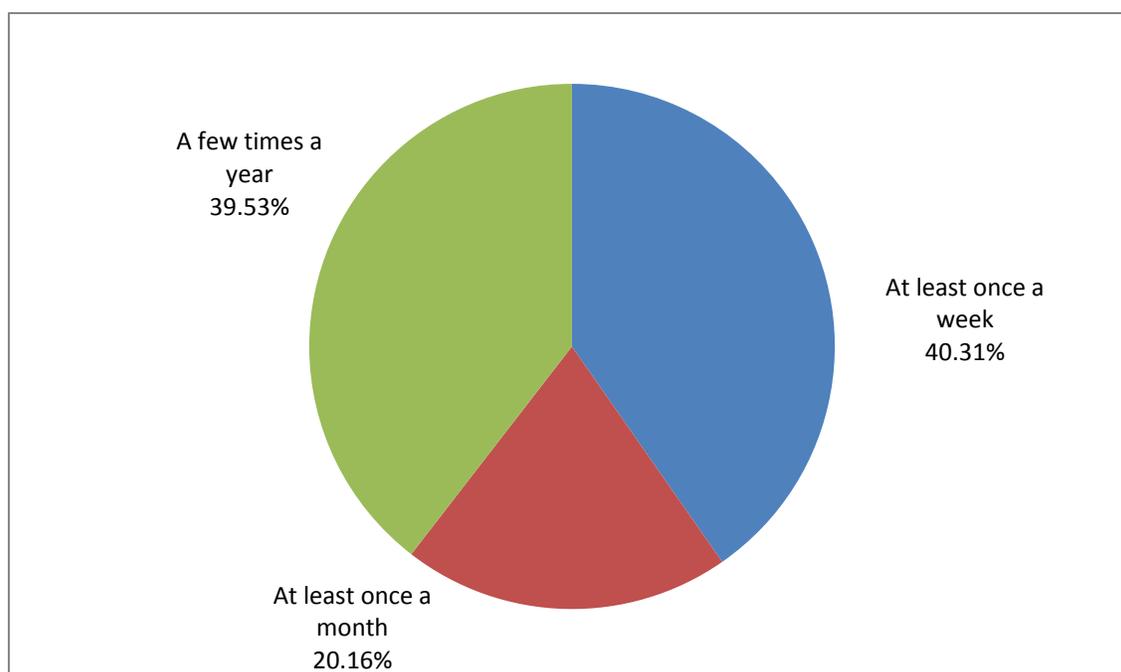


Figure 3 shows that slightly over two-fifths (40.31 percent) of respondents that purchased Pick 3 Day tickets purchased them at least once a week. Twenty percent (20.16) purchased tickets at least once a month, and the remaining two-fifths (39.53 percent) of the respondents purchased them only a few times a year. The distributions were very similar to the findings in the 2010 survey.

**Table 4**  
**Average Number of Times Played Pick 3 Day**

Played Pick 3 Day	Average Number of Times Played
Per week for weekly past-year players	2.39
Per month for monthly past-year players	7.20
Per year for yearly past-year players <sup>8</sup>	8.92

Table 4 indicates that weekly players of Pick 3 Day played an average number of 2.39 times per week; monthly players played an average number of 7.20 times per month; and yearly players played an average number of 8.92 times per year. The average times played in Pick 3 Day by the weekly, monthly, and yearly players had increased by 0.34, 1.61, and 2.34 times respectively from 2010 to 2011.

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.<sup>9</sup>

**Table 5**  
**Dollars Spent on Pick 3 Day**

<b>Pick 3 Day</b>	<b>Dollars Spent</b>
Average spent per play <sup>10</sup>	\$5.15
Average spent per month (mean) <sup>11</sup>	15.73
Average spent per month (median) <sup>12</sup>	8.00

Table 5 illustrates that Pick 3 Day players spent an average of \$5.15 per play, slightly higher (\$0.30) than the 2010 survey. Those who reported playing the game on a monthly basis spent an average of \$15.73 per month, which was \$2.28 more than in 2010. Note that per month figures are for those respondents who reported playing the game at a monthly or more frequent (i.e., weekly) basis. Approximately half of the respondents were likely to spend \$8.00 or more a month on playing Pick 3 Day, an increase of \$3.00 compared to 2010.

**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		
2011	18.8	\$5.00
2010	14.7	5.00
<b>2011 Demographics</b>		
Education		
Less than high school diploma	-- <sup>13</sup>	--
High school degree	22.9	5.50
Some college	22.8	5.00
College degree	13.5	7.50
Graduate degree	16.1	5.50
Income***		
Less than \$12,000	33.3	4.50
\$12,000 to \$19,999	37.5	8.00
\$20,000 to \$29,999	24.6	8.50
\$30,000 to \$39,999	26.3	15.00
\$40,000 to \$49,999	23.3	2.50
\$50,000 to \$59,999	20.5	--
\$60,000 to \$74,999	14.6	4.00
\$75,000 to \$100,000	15.6	7.50
More than \$100,000	10.3	1.00
Race**		
White	13.1	3.00
Black	37.8	10.00
Asian	--	--
Native American Indian	--	--
Other	25.7	14.00
Hispanic Origin		
Yes	24.6	12.00
No	16.9	5.00
Gender		
Female	19.0	4.50
Male	18.8	7.00
Age		
18 to 24	40.0	10.50
25 to 34	16.3	3.00
35 to 44	21.1	12.00
45 to 54	20.9	2.00
55 to 64	14.6	10.00
65 or older	17.9	9.00

**Table 6 (continued)**

Employment status		
Employed full/part time	20.7	4.00
Unemployed	14.3	9.00
Retired	15.5	10.00

**Note:** \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . There were statistically significant differences between past-year players and non-players by income and race.

Table 6 indicates that, in contrast to the 2010 survey, more past-year players reported playing Pick 3 Day in 2011 than did for 2010 (18.8 percent and 14.7 percent, respectively). However, the difference between the two years was not statistically significant. The differences in income and race between past-year players who played Pick 3 Day and those who did not were statistically significant.

Some of the key findings are:

- Similar to 2010, participation rates among Pick 3 Day past-year players tended to be much higher for the low household income categories than those in the middle and high household income categories. However, different from the 2010 findings, the 2011 data indicated a more gradual decrease in participation rates from the lower income groups to the higher income groups. The differences in income between past-year players who played Pick 3 Day and those who did not were statistically significant.
- Specifically, respondents whose income was less than \$12,000 or between \$12,000 and \$19,999 recorded the highest rates of participation: 33.3 percent and 37.5 percent respectively. In comparison, respondents whose income was between \$75,000 and \$100,000 or more than \$100,000 were among the lowest rates reported: 15.6 percent and 10.3 percent respectively.
- In contrast to the 2010 survey, the differences in race between past-year players who played Pick 3 Day and those who did not were statistically significant. Participation was highest among Blacks versus all other ethnic groups, and the rate for this group had increased to 37.8 percent in 2011 (versus 29.3 percent last year). The participation rate for Whites was 13.1 percent, as compared to twelve percent in 2010. Please note, however, that the sample sizes of Asian and Native American Indian groups were too small to be included in the analysis.
- There were no significant differences in education, Hispanic origin, gender, age, and employment status between past-year players who played Pick 3 Day in 2011 and those who did not.

**Figure 4**  
**Years Playing Pick 3 Day**  
**(n=119)**

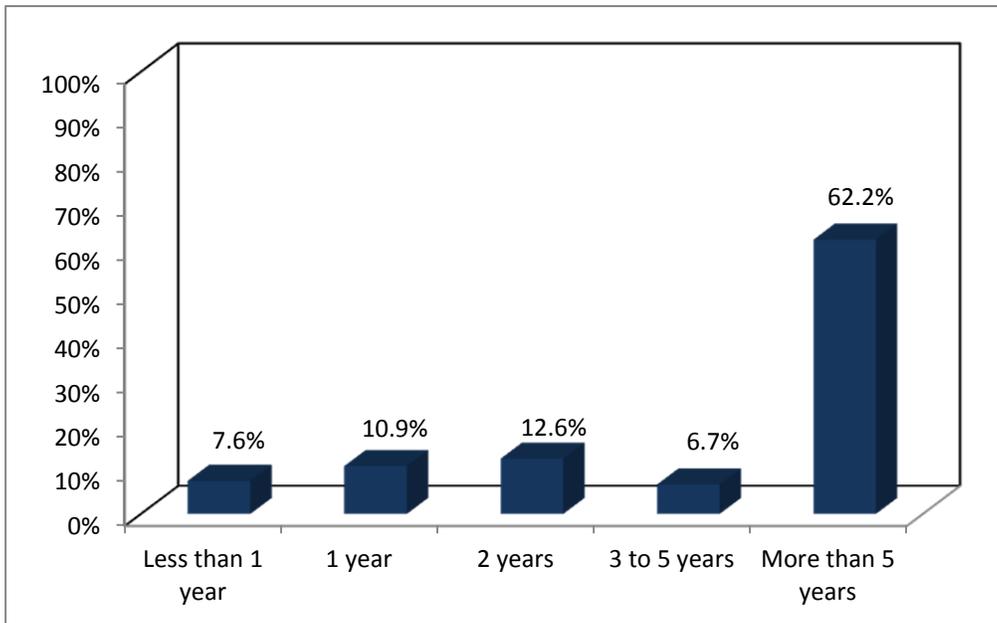
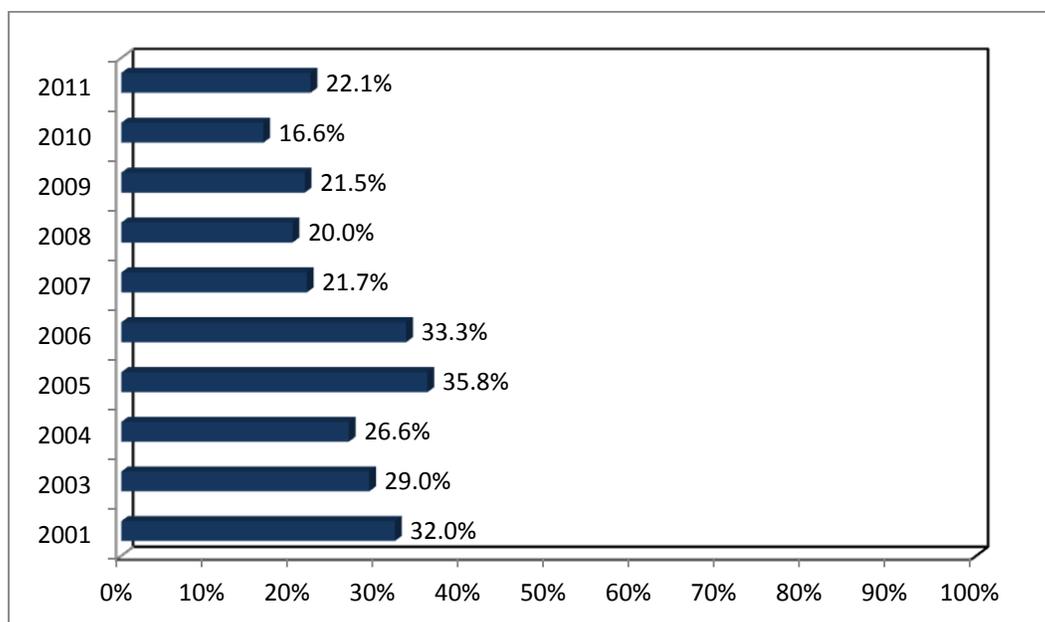


Figure 4 indicates that more than three-fifths (62.2 percent) of the respondents that played Pick 3 Day reported playing it for more than 5 years, which was higher than the 56.4 percent reported in 2010. At the same time, about one-fifth (18.5 percent) of respondents reported having played Pick 3 Day for less than two years.

## IIIc CASH 5 RESULTS

**Figure 5**  
**Percentage of Past-Year Players Playing Cash 5**



Source: 2007, 2008, 2009, 2010, and 2011 HCPP survey data and additional survey reports 2001-2006.

Figure 5 illustrates that twenty-two percent (22.1) of past year players played Cash 5. This was an increase of 5.5 percentage points compared to 2010.

**Figure 6**  
**Frequency of Purchasing Cash 5 Tickets**  
**(n=152)**

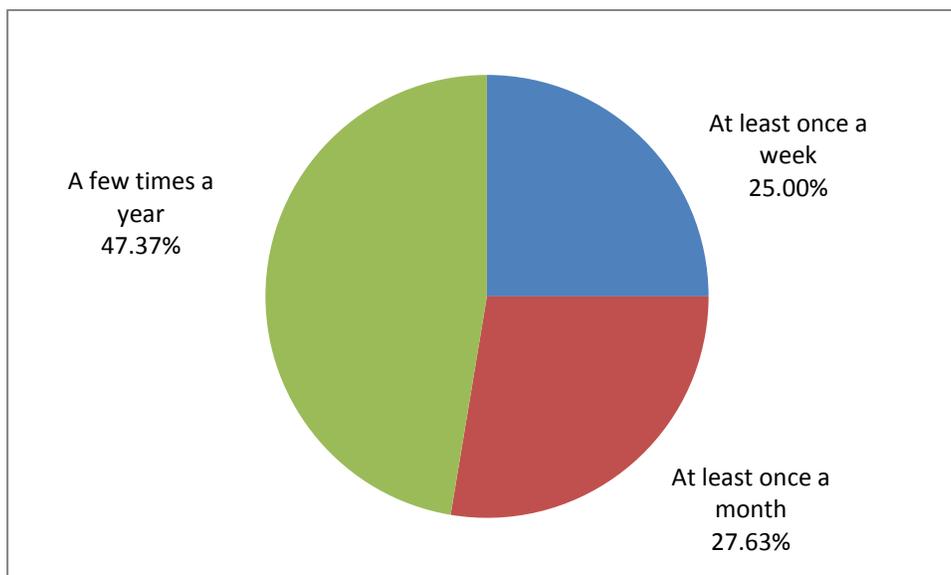


Figure 6 shows that exactly one-quarter of the respondents that purchased Cash 5 tickets purchased them at least once a week. This was five percentage points higher compared to 2010. Twenty-eight percent (27.63) purchased tickets at least once a month. Forty-seven percent (47.37) purchased Cash 5 tickets just a few times a year, a drop of 6.31 percentage points.

**Table 7**  
**Average Number of Times Played Cash 5**

Played Cash 5	Average Number of Times Played
Per week for weekly past-year players <sup>14</sup>	1.61
Per month for monthly past-year players	4.43
Per year for yearly past-year players	17.65

Table 7 indicates that weekly players of Cash 5 played an average number of 1.61 times per week. Monthly players played an average number of 4.43 times per month. Yearly players played an average number of 17.65 times per year, an increase of 5.36 times from 2010.

**Table 8**  
**Dollars Spent on Cash 5**

Cash 5	Dollars Spent
Average spent per play	\$5.54
Average spent per month (mean) <sup>15</sup>	9.65
Average spent per month (median) <sup>16</sup>	4.00

Table 8 shows that Cash 5 players spent an average of \$5.54 per play, similar to the amount spent recorded in 2010. Those who reported playing the game at a monthly or more frequent basis spent an average of \$9.65 per month. Approximately half of the respondents were likely to spend \$4.00 or more a month on playing Cash 5.

Table 9 shows a statistically significant difference on the overall participation rates between 2010 and 2011. The differences in education, income and gender between past-year players who played Cash 5 and those who did not were statistically significant.

- There was a statistically significant increase of 5.5 percentage points in the participation rates from 2010 to 2011 for playing Cash 5 (22.1 percent and 16.6 percent, respectively).
- In contrast to the 2010 survey, the differences in education between past-year players who played Cash 5 and those who did not were statistically significant. Participation rate was highest among Cash 5 past-year players with high school degrees (30.6 percent). This was followed by those with some college (24.0 percent). On the other hand, Cash 5 past-year players with graduate degrees recorded the lowest rate of participation (15.9 percent).
- The participation rate for Cash 5 past-year players was highest for the income category of between \$12,000 and \$19,999 (38.7 percent). This was followed by the income category of \$20,000 to \$29,999 (33.3 percent). The differences in income between past-year players who played Cash 5 and those who did not were statistically significant. Please note, however, that the sample sizes of some income categories were too small to be included in the analysis and therefore limit generalizations to the Texas population at large.
- Similar to last year, the differences in gender between past-year players who played Cash 5 and those who did not were statistically significant. The participation rates among past-year Cash 5 players were higher for females (26.1 percent) than for males (18.6 percent) in 2011.
- The differences in race, Hispanic origin, age and employment status between past-year players who played Cash 5 and those who did not were not statistically significant.

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

<b>Cash 5</b>	<b>Percentage Played</b>	<b>Median Dollars Spent</b>
Year*		
2011	22.1	\$4.00
2010	16.6	3.00
<b>2011 Demographics</b>		
Education**		
Less than high school diploma	--	--
High school degree	30.6	5.00
Some college	24.0	3.00
College degree	17.4	5.00
Graduate degree	15.9	1.00
Income**		
Less than \$12,000	--	--
\$12,000 to \$19,999	38.7	5.00
\$20,000 to \$29,999	33.3	3.00
\$30,000 to \$39,999	29.0	8.00
\$40,000 to \$49,999	26.2	1.00
\$50,000 to \$59,999	--	--
\$60,000 to \$74,999	16.7	6.50
\$75,000 to \$100,000	21.9	5.00
More than \$100,000	16.7	3.50
Race		
White	17.4	3.50
Black	42.7	4.00
Asian	--	--
Native American Indian	--	--
Other	25.0	5.00
Hispanic Origin		
Yes	24.2	5.00
No	21.8	4.00
Gender*		
Female	26.1	4.00
Male	18.6	3.50
Age		
18 to 24	--	--
25 to 34	14.0	5.00
35 to 44	23.3	4.00
45 to 54	23.1	2.50
55 to 64	26.2	5.00
65 or older	20.1	4.50

**Table 9 (continued)**

Employment status		
Employed full/part time	21.9	4.00
Unemployed	17.9	4.50
Retired	24.3	4.00

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . There were statistically significant differences between past-year players and non-players by education, income and gender.

**Figure 7**  
**Years Playing Cash 5**  
**(n=144)**

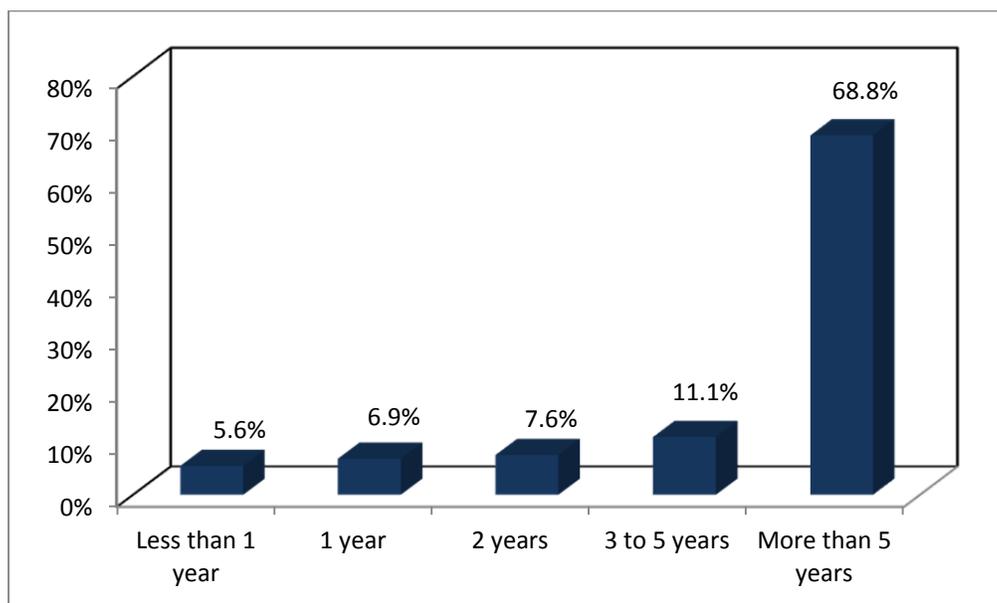
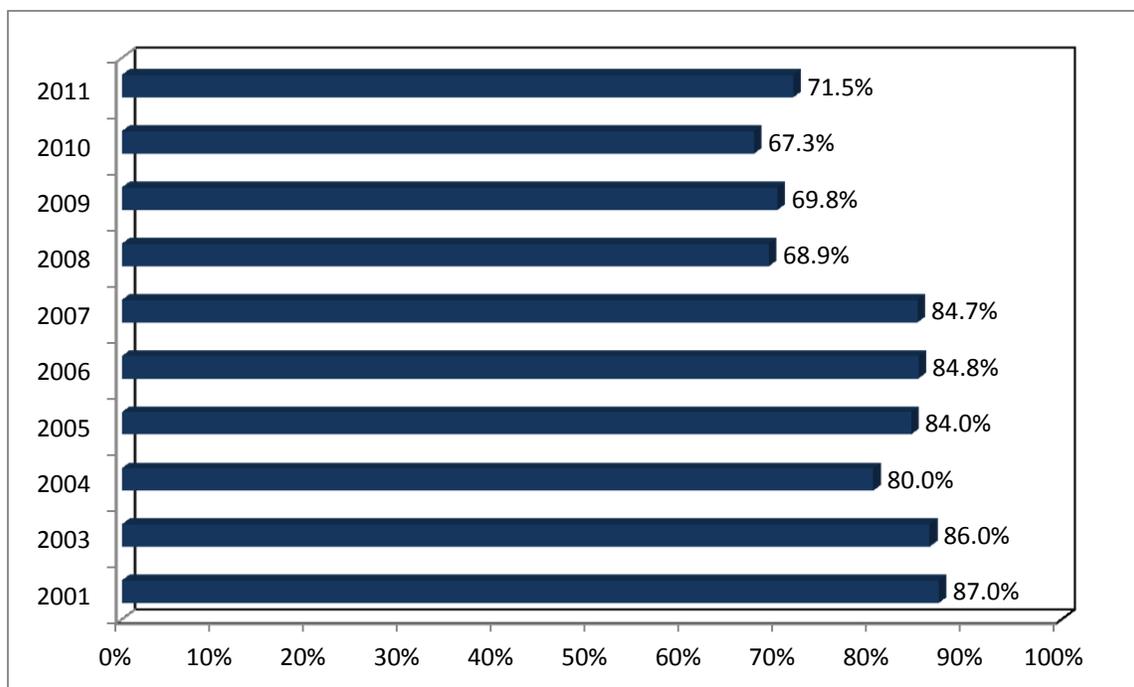


Figure 7 shows that a majority, or over two-thirds (68.8 percent) of the respondents who played Cash 5 during the past year reported playing it for more than five years. On the other hand, 12.5 percent of respondents reported having played Cash 5 for less than two years.

### IIIId. LOTTO TEXAS RESULTS

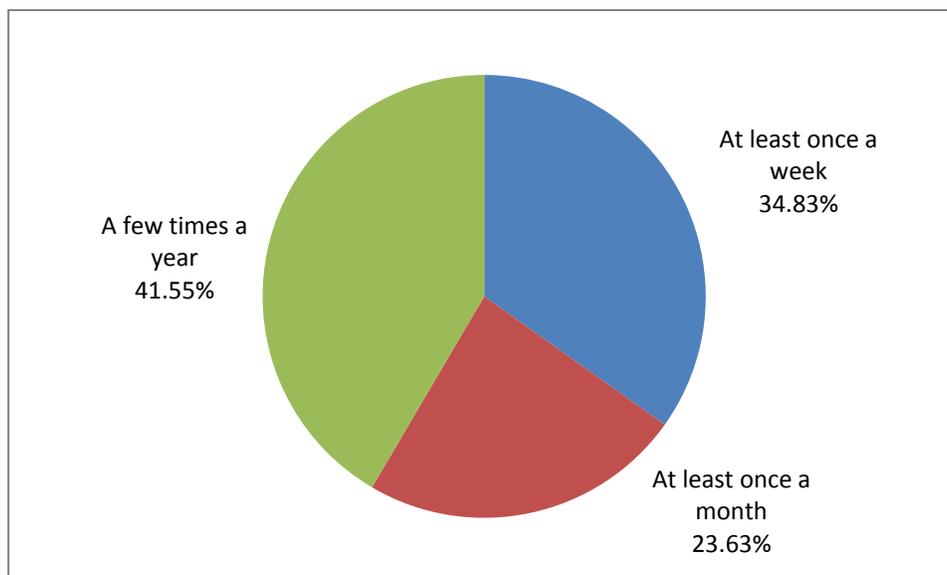
**Figure 8**  
**Percentage of Past-Year Players Playing Lotto Texas**



**Source:** Hobby Center for Public Policy 2007, 2008, 2009, 2010 and 2011 survey data and additional survey reports 2003-2006.

Figure 8 illustrates that more than seventy percent (71.5) of past year players played Lotto Texas. This was 4.2 percentage points higher than in 2010. As in past years, Lotto Texas was the most popular single game among players.

**Figure 9**  
**Frequency of Purchasing Lotto Texas Tickets**  
**(n=491)**



More than one-third (34.83) of respondents that purchased Lotto Texas tickets purchased them at least once a week, as shown in Figure 9. Nearly twenty-four percent (23.63) purchased the tickets at least once a month while forty-two percent (41.55) indicated having purchased Lotto Texas tickets a few times a year.

**Table 10**  
**Average Number of Times Played Lotto Texas**

Lotto Texas	Average Number of Times Played
Per week for weekly past-year players	1.64
Per month for monthly past-year players	4.68
Per year for yearly past-year players <sup>17</sup>	18.43

Weekly players of Lotto Texas played an average number of 1.64 times per week, monthly players played an average number of 4.68 times per month, and yearly players played an average number of 18.43 times per year, as shown in Table 10. All three frequencies were higher than those reported in 2010.

**Table 11**  
**Dollars Spent on Lotto Texas**

<b>Lotto Texas</b>	<b>Dollars Spent</b>
Average spent per play <sup>18</sup>	\$4.78
Average spent per month (mean) <sup>19</sup>	10.58
Average spent per month (median) <sup>20</sup>	5.00

Table 11 shows that Lotto Texas players spent an average of \$4.78 per play. Those who reported playing the game on a monthly or more frequent basis spent an average of \$10.58 per month. About half of the respondents were likely to spend \$5.00 or more a month on playing Lotto Texas. The three average data were very similar or identical to those recorded in 2010.

As shown in Table 12, there was no statistically significant difference in participation rates between 2010 and 2011. However, the differences in education, income and age between past-year players who played Lotto Texas and those who did not were statistically significant.

- Different from the 2010 survey, the differences in education between past-year players who played Lotto Texas and those who did not were statistically significant. Participation rate was highest among Lotto Texas past-year players with some college (77.8 percent). Those with college degrees and others with graduate degrees recorded similarly higher rates: 75.0 percent and 73.3 percent, respectively. On the other hand, Lotto Texas past-year players with less than high school diploma reported the lowest rate of participation (48.0 percent).
- The participation rate for Lotto Texas past-year players was highest for the income category of between \$75,000 and \$100,000 (79.7 percent). Participation rates for income categories of \$50,000 to \$59,999 and more than \$100,000 were also high: 76.3 percent and 75.9 percent, respectively. In contrast, those with income of less than \$12,000 reported the lowest participation rate of 52.6 percent. The differences in income between past-year players who played Lotto Texas and those who did not were statistically significant.
- Similar to 2010, the percentage of past year players who played Lotto Texas increased as age increased in general. Over eighty percent (80.6) of the age group of 55-64 reported playing Lotto Texas, which was 25.6 percentage points higher than those reported by the age group of 18-24 (55.0 percent).
- The differences in race, Hispanic origin, gender, and employment status between past-year players who played Lotto Texas and those who did not were not statistically significant.

**Table 12**  
**Lotto Texas: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics**

<b>Lotto Texas</b>	<b>Percentage Played</b>	<b>Median dollars spent</b>
Year		
2011	71.5	\$5.00
2010	67.3	5.00
<b>2011 Demographics</b>		
Education*		
Less than high school diploma	48.0	8.00
High school degree	65.1	5.00
Some college	77.8	5.00
College degree	75.0	5.00
Graduate degree	73.3	2.00
Income*		
Less than \$12,000	52.6	7.00
\$12,000 to \$19,999	68.8	9.00
\$20,000 to \$29,999	63.8	5.00
\$30,000 to \$39,999	71.1	8.00
\$40,000 to \$49,999	64.3	3.00
\$50,000 to \$59,999	76.3	5.00
\$60,000 to \$74,999	68.8	5.00
\$75,000 to \$100,000	79.7	5.00
More than \$100,000	75.9	3.50
Race		
White/Anglo	73.0	5.00
Black/African American	75.3	7.00
Asian	54.6	7.50
Native American Indian	100.0	4.50
Other	66.7	5.50
Hispanic Origin		
Yes	68.9	5.00
No	72.8	5.00
Gender		
Female	69.7	5.00
Male	74.6	5.00

Table 12 (continued)

Age*		
18 to 24	55.0	4.00
25 to 34	55.8	3.00
35 to 44	63.3	5.00
45 to 54	78.5	5.00
55 to 64	80.6	5.00
65 or older	70.9	5.00
Employment Status		
Employed full/part time	73.1	5.00
Unemployed	69.6	5.00
Retired	71.5	5.00

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . There were statistically significant differences between past-year players and non-players by education, income and age.

**Figure 10**  
**Years Playing Lotto Texas**  
**(n=488)**

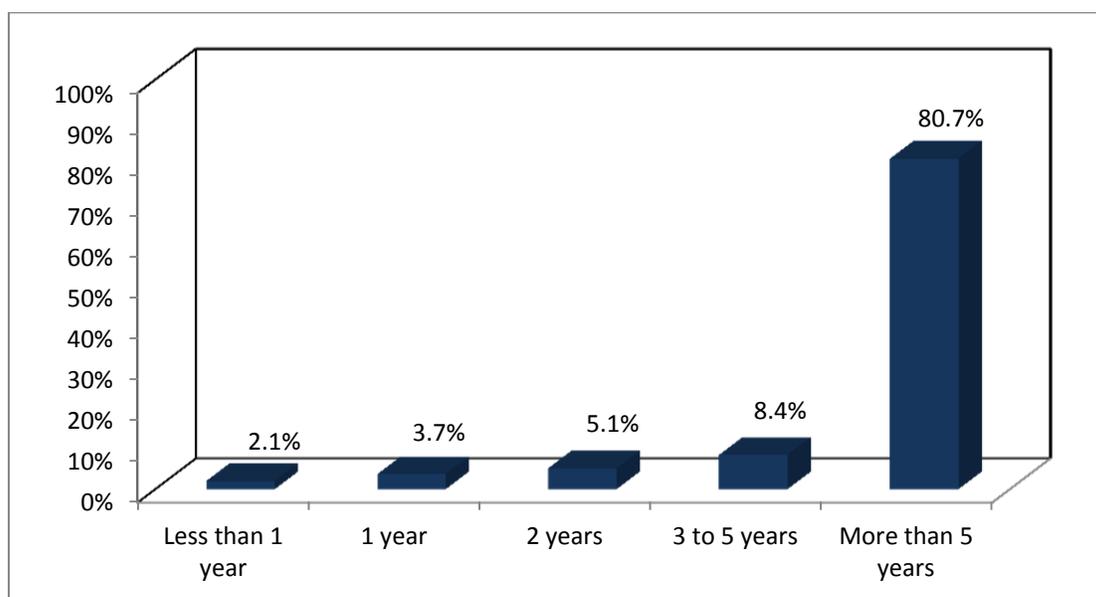
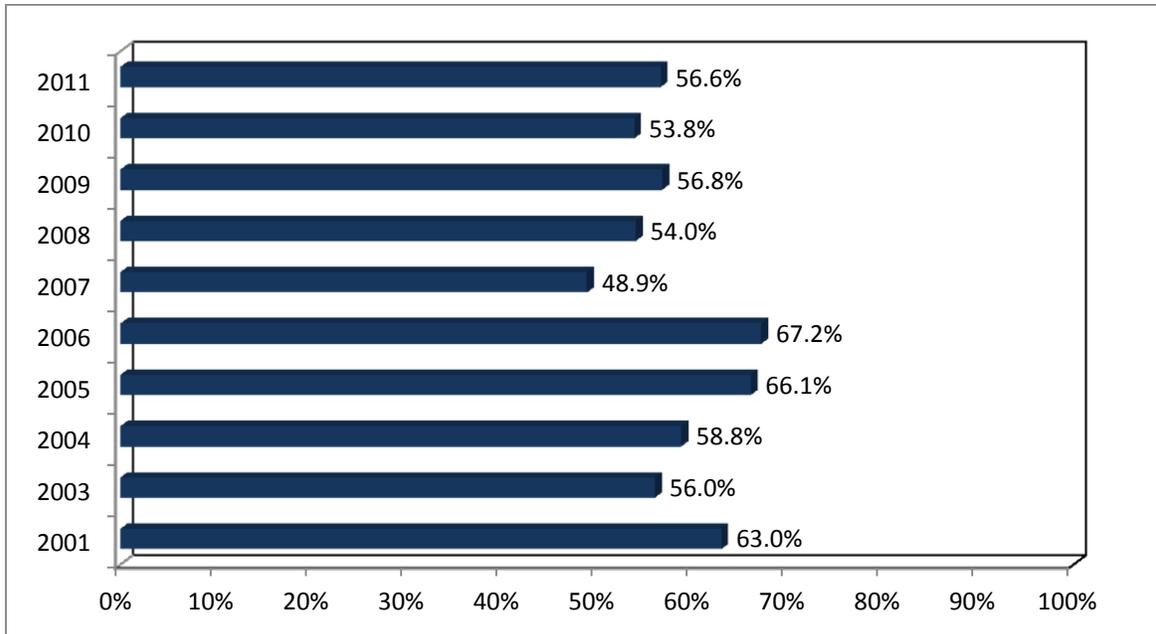


Figure 10 illustrates that four-fifths (80.7 percent) of the respondents who played Lotto Texas during the past year reported playing it for more than five years.

### IIIe. TEXAS LOTTERY SCRATCH OFF TICKETS RESULTS

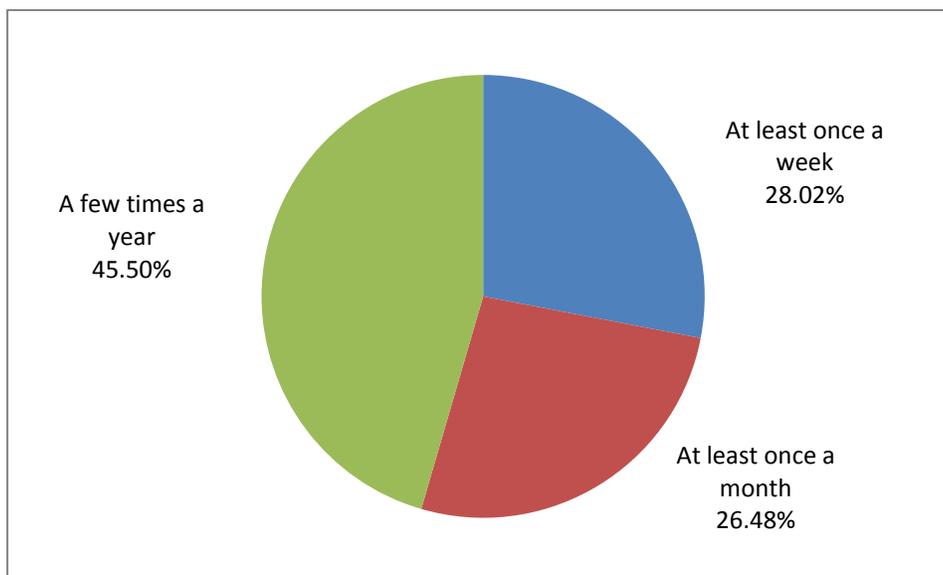
**Figure 11**  
**Percentage of Past-Year Players Playing Texas Lottery Scratch Off Tickets**



**Source:** Hobby Center for Public Policy 2007, 2008, 2009, 2010 and 2011 survey data and additional survey reports 2003-2006.

Figure 11 illustrates that fifty-seven percent (56.6) of past year players played Texas Lottery Scratch Off tickets, which was slightly higher than the fifty-four percent in 2010.

**Figure 12**  
**Frequency of Purchasing Texas Lottery Scratch Off Tickets**  
**(n=389)**



As shown in Figure 12, twenty-eight percent (28.02) of respondents that played Scratch-off tickets reported that they purchased them at least once a week. More than a quarter (26.48 percent) purchased tickets at least once a month while forty-six percent (45.50) purchased tickets a few times a year.

**Table 13**  
**Average Number of Times Played Texas Lottery Scratch Off Tickets**

Texas Lottery Scratch Off	Average Number of Times Played
Per week for weekly past-year players	2.08
Per month for monthly past-year players	5.58
Per year for yearly past-year players <sup>21</sup>	18.73

Table 13 shows that weekly players of Texas Lottery Scratch Off tickets played an average number of 2.08 times per week, slightly higher than in 2010. Monthly players played an average number of 5.58 times per month, and yearly players played an average number of 18.73 times per year.

**Table 14**  
**Dollars Spent on Texas Lottery Scratch Off Tickets**

<b>Texas Lottery Scratch Off Tickets</b>	<b>Dollars Spent</b>
Average spent per play <sup>22</sup>	\$7.91
Average spent per month (mean) <sup>23</sup>	15.36
Average spent per month (median) <sup>24</sup>	5.00

Table 14 indicates that Texas Lottery Scratch Off players spent an average of \$7.91 per play. Those who played the game on a monthly or more frequent basis spent an average of \$15.36 per month. Approximately half of the respondents spent \$5.00 or more per month playing Texas Lottery Scratch Off tickets.

As shown in Table 15, the differences in education, income, gender and age between past-year players who played Texas Lottery Scratch Off tickets and those who did not were statistically significant.

- The participation rates for Texas Lottery Scratch Off tickets past-year players decreased as the educational level increased. Those with less than high school diploma had a participation rate of seventy-two percent, higher than those in other educational groups. On the other hand, past-year players with graduate degrees reported the lowest participation rate (44.2 percent). The differences in education between past-year players who played Texas Lottery Scratch Off tickets and those who did not were statistically significant.
- The differences in income between past-year players who played Texas Lottery Scratch Off tickets and those who did not were statistically significant, which differed from the report in 2010. The participation rate for Texas Lottery Scratch Off tickets past-year players was highest for the income category of \$30,000 to \$39,999 (68.4 percent). In contrast, those with income of more than \$100,000 reported the lowest participation rate of 43.5 percent.
- Contrary to last year, the differences in gender between past-year players who played Texas Lottery Scratch Off tickets and those who did not were statistically significant. The participation rates among past-year Scratch Off players were higher for females (64.4 percent) than for males (50.2 percent) in 2011.
- The differences in age between past-year players who played Texas Lottery Scratch Off tickets and those who did not were statistically significant. As in 2010, younger respondents were more likely to play Scratch Off games than older respondents. More than seventy-five percent of respondents in each of the 18 to 24 and 25 to 34 age categories indicated that they played Texas Lottery Scratch Off tickets in the past year. In comparison, less than fifty-four percent of respondents in each of the 55 to 64 and 65 years or older age categories reported playing the games in the past year.
- There were no significant differences in race, Hispanic origin and employment status between past-year players who played Texas Lottery Scratch Off tickets in 2010 and those who did not.

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

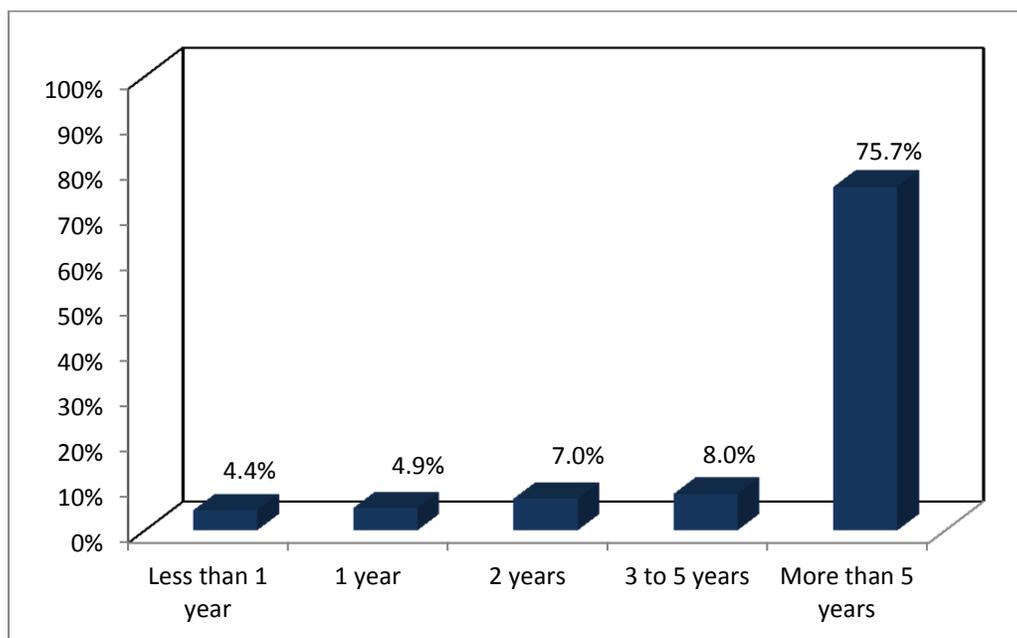
Texas Lottery Scratch Off Tickets	Percentage Played	Median Dollars Spent
Year		
2011	56.6	\$5.00
2010	53.8	5.00
<b>2011 Demographics</b>		
Education***		
Less than high school diploma	72.0	17.50
High school degree	63.8	5.00
Some college	63.9	5.00
College degree	50.0	5.00
Graduate degree	44.2	3.00
Income*		
Less than \$12,000	63.2	5.00
\$12,000 to \$19,999	61.3	4.00
\$20,000 to \$29,999	58.6	10.00
\$30,000 to \$39,999	68.4	5.50
\$40,000 to \$49,999	65.1	5.50
\$50,000 to \$59,999	57.9	4.50
\$60,000 to \$74,999	60.4	4.00
\$75,000 to \$100,000	65.1	10.00
More than \$100,000	43.5	5.00
Race		
White/Anglo	54.5	5.00
Black/African American	66.0	10.00
Asian	--	--
Native American Indian	75.0	6.50
Other	61.8	10.00
Hispanic Origin		
Yes	59.8	10.00
No	56.5	5.00
Gender***		
Female	64.4	5.00
Male	50.2	5.00
Age**		
18 to 24	75.0	5.00
25 to 34	76.7	5.00
35 to 44	61.1	5.00
45 to 54	54.6	5.00
55 to 64	53.2	5.00
65 or older	53.9	5.00

**Table 15 (continued)**

Employment status		
Employed full/part time	56.1	5.00
Unemployed	71.4	5.00
Retire	55.1	5.00

**Note:** \*p<0.05, \*\*p<0.01, \*\*\*p<0.001. There were statistically significant differences between past-year players and non-players by education, income, gender and age.

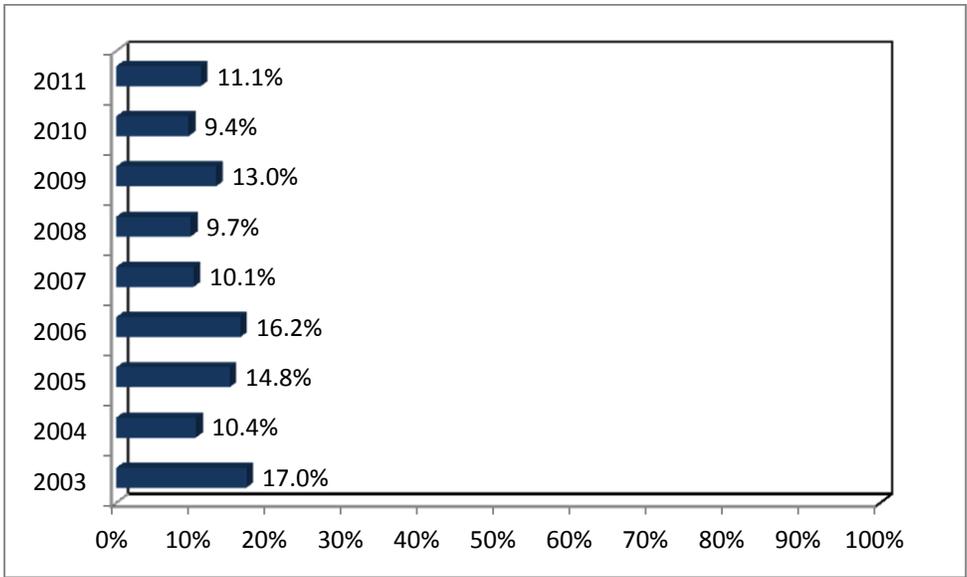
**Figure 13**  
**Years Playing Texas Lottery Scratch Off Tickets**  
**(n=386)**



As shown in Figure 13, more than three-quarters (75.7 percent) of the respondents who played Texas Lottery Scratch Off Tickets reported playing them for more than 5 years.

**III.f. TEXAS TWO STEP RESULTS**

**Figure 14**  
**Percentage of Past-Year Players Playing Texas Two Step**



**Source:** Hobby Center for Public Policy 2007, 2008, 2009, 2010, and 2011 survey data and additional survey reports 2003-2006.

Figure 14 shows that slightly more than eleven percent (11.1) of past year players played Texas Two Step, which was slightly higher compared to 2010.

**Figure 15**  
**Frequency of Purchasing Texas Two Step Tickets**  
**(n=76)**

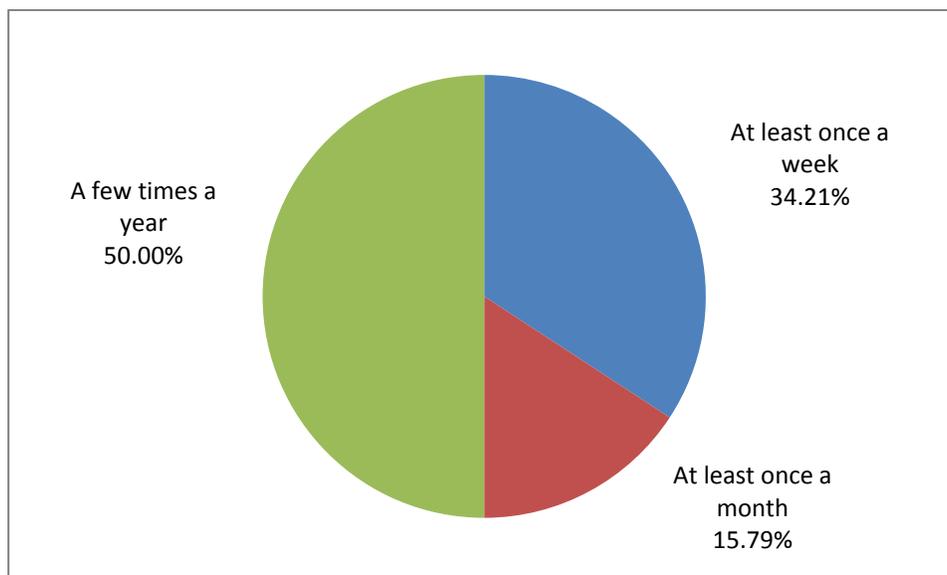


Figure 15 indicates that nearly thirty-five percent (34.21) of Texas Two Step players purchased tickets for the game at least once a week. Sixteen percent (15.79) indicated that they purchased tickets for Texas Two Step at least once a month. Exactly half of Texas Two Step players purchased tickets a few times a year.

**Table 16**  
**Average Number of Time Played Texas Two Step**

Texas Two Step Players	Average Number of Times Played
Per week for weekly past-year players	3.85
Per month for monthly past-year players	4.63
Per year for yearly past-year players <sup>25</sup>	18.85

Table 16 recorded that weekly players of Texas Two Step played an average number of 3.85 times per week, monthly players played an average number of 4.63 times per month, and yearly players played an average number of 18.85 times per year.

**Table 17**  
**Dollars Spent on Texas Two Step**

<b>Texas Two Step Players</b>	<b>Dollars Spent</b>
Average spent per play	\$3.48
Average spent per month (mean)	5.86
Average spent per month (median)	3.00

Respondents playing Texas Two Step spent an average of \$3.48 per play. Those who reported playing the game at a monthly or more frequent basis spent an average of \$5.86 per month and the median monthly expenditure was \$3.00, as shown in Table 17. All the three average data were lower than those reported in the 2010 survey.

As shown in Table 18 on the following page, the differences in age and employment status between past-year players who played Texas Two Step and those who did not were statistically significant.

- Respondents in each age group at or greater than age 45 reported a two-digit participation rate of playing Texas Two Step, which was higher than the younger age groups. The differences in age between past-year players who played Texas Two Step and those who did not were statistically significant. Please note, however, that the sample sizes of some younger age categories were too small to be included in the analysis.
- In contrast to 2010, the differences in employment status between past-year players who played Texas Two Step and those who did not were statistically significant. Specifically, retired respondents were more likely to play Texas Two Step than employed respondents in the 2011 survey: their respective rates were 16.4 percent and 8.9 percent. Please note, however, that the sample size of the unemployed was too small to be included in the analysis.
- There were no significant differences in educational level, income, race, Hispanic origin and gender between past-year players who played Texas Two Step in 2011 and those who did not.

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

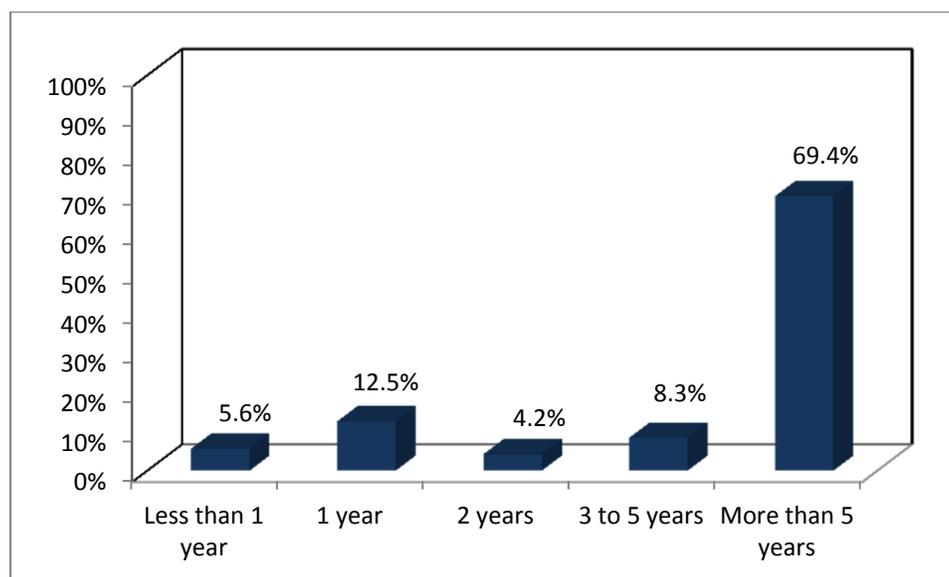
<b>Texas Two Step</b>	<b>Percentage Played</b>	<b>Median Dollars Spent</b>
Year		
2011	11.1	\$2.50
2010	9.4	3.00
<b>2011 Demographics</b>		
Education		
Less than high school diploma	--	--
High school degree	12.1	4.00
Some college	8.9	4.50
College degree	12.2	2.00
Graduate degree	11.4	1.00
Income		
Less than \$12,000	--	--
\$12,000 to \$19,999	19.4	8.00
\$20,000 to \$29,999	10.3	4.50
\$30,000 to \$39,999	--	--
\$40,000 to \$49,999	--	--
\$50,000 to \$59,999	--	--
\$60,000 to \$74,999	--	--
\$75,000 to \$100,000	14.3	1.00
More than \$100,000	7.4	2.50
Race		
White/Anglo	9.4	2.00
Black/African American	17.5	4.00
Asian	--	--
Native American Indian	--	--
Other	9.8	8.00
Hispanic Origin		
Yes	10.7	8.00
No	11.0	2.00
Gender		
Female	10.4	3.50
Male	12.0	2.00

**Table 18 (continued)**

Age**		
18 to 24	--	--
25 to 34	--	--
35 to 44	7.8	8.00
45 to 54	10.1	4.00
55 to 64	11.1	1.00
65 or older	16.5	2.50
Employment Status*		
Employed full/part time	8.9	2.50
Unemployed	--	--
Retired	16.4	2.50

**Note:** \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . There were statistically significant differences between past-year players and non-players by age and employment status. .

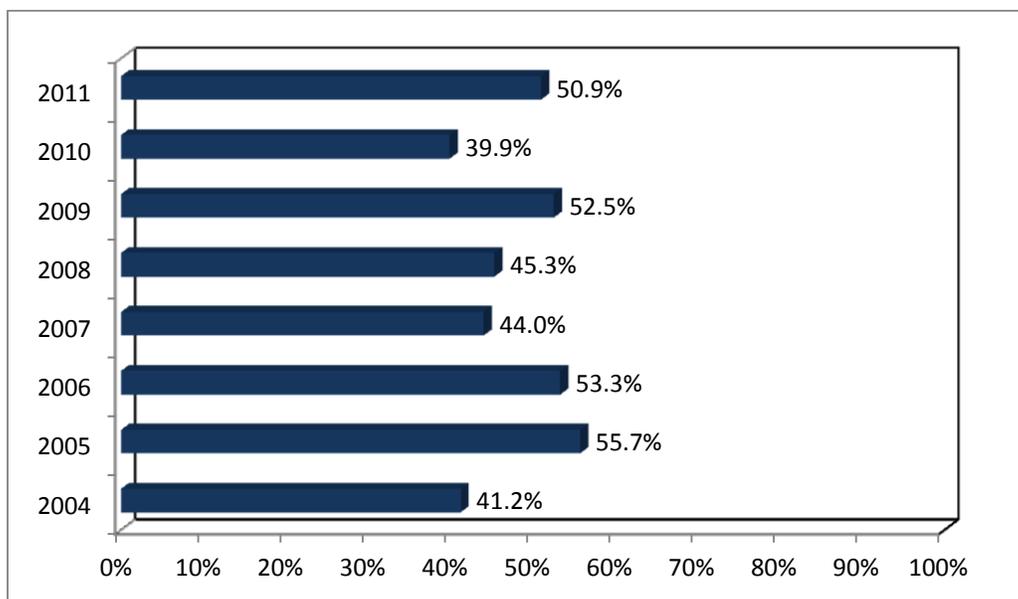
**Figure 16**  
**Years Playing Texas Two Step**  
**(n=72)**



As shown in Figure 16, almost seventy percent (69.4) of respondents indicated that they have played Texas Two Step for more than five years. On the other hand, about one-fifth (18.1 percent) of respondents reported having played Texas Two Step for less than two years.

### IIIg. MEGA MILLIONS RESULTS

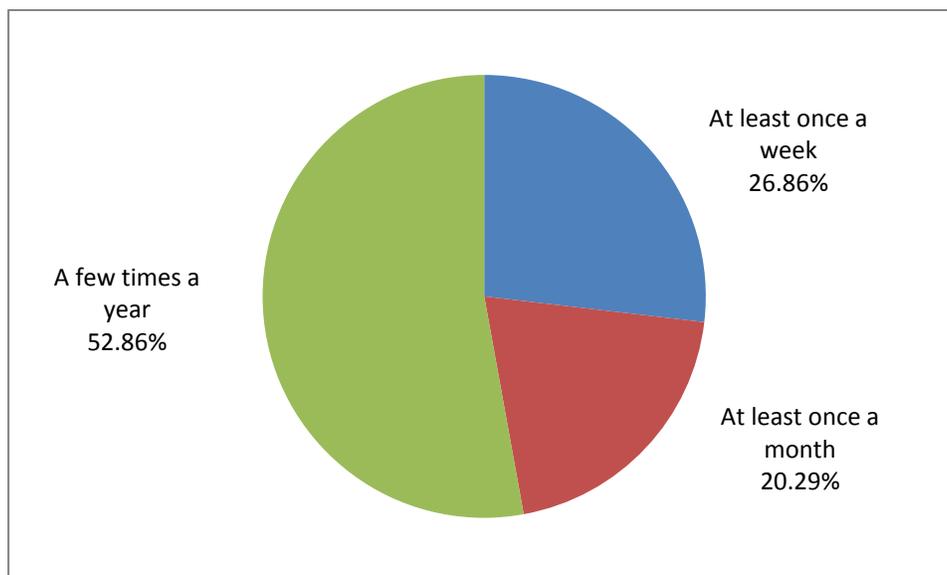
**Figure 17**  
**Percentage of Past-Year Players Playing Mega Millions**



**Source:** Hobby Center for Public Policy 2007, 2008, 2009, 2010 and 2011 survey data and additional survey reports from 2001-2006.

As indicated in Figure 17, more than half (50.9 percent) of past year players played Mega Millions. This was eleven percentage points higher compared to the 2010 survey (39.9 percent).

**Figure 18**  
**Frequency of Purchasing Mega Millions Tickets**  
**(n=350)**



Twenty-seven percent (26.86) of respondents reported that they purchased Mega Millions tickets at least once a week, as shown in Figure 18. Slightly over one-fifth (20.29 percent) said that they purchased Mega Millions tickets at least once a month, while more than a half (52.86 percent) of the respondents purchased Mega Millions tickets a few times a year.

**Table 19**  
**Average Number of Times Played Mega Millions**

Mega Millions	Average Number of Times Played
Per week for weekly past-year players	1.63
Per month for monthly past-year players	4.52
Per year for yearly past-year players <sup>26</sup>	16.99

As shown in Table 19, weekly players of Mega Millions played an average number of 1.63 times per week, monthly players played an average number of 4.52 times per month, and yearly players played an average number of 16.99 times per year. All the three average data were slightly higher than those reported in the 2010 survey.

**Table 20**  
**Dollars Spent on Mega Millions**

<b>Mega Millions</b>	<b>Dollars Spent</b>
Average spent per play <sup>27</sup>	\$4.36
Average spent per month (mean) <sup>28</sup>	8.34
Average spent per month (median) <sup>29</sup>	5.00

As shown in Table 20, Mega Millions players spent an average of \$4.36 per play. Those who reported playing the game at a monthly or more frequent basis spent an average of \$8.34 per month. Approximately half of the respondents spent \$5.00 or more a month on purchasing Mega Millions tickets.

Table 21 recorded that there was a statistically significant difference in player participation rates between 2010 and 2011. More people reported playing Mega Millions during the past year for the 2011 survey than did for 2010 (50.9 percent versus 39.9 percent).

However, similar to the 2010 survey, the differences in all the demographic groups between past-year players who played Mega Millions and those who did not were not statistically significant.

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

<b>Mega Millions</b>	<b>Percentage Played</b>	<b>Median Dollars Spent</b>
Year***		
2011	50.9	\$4.00
2010	39.9	3.00
<b>2011 Demographics</b>		
Education		
Less than high school diploma	56.0	7.00
High school degree	45.1	4.50
Some college	53.1	5.00
College degree	51.5	4.00
Graduate degree	61.4	1.00
Income		
Less than \$12,000	57.9	5.00
\$12,000 to \$19,999	46.9	5.00
\$20,000 to \$29,999	46.6	5.00
\$30,000 to \$39,999	63.2	4.00
\$40,000 to \$49,999	59.5	5.00
\$50,000 to \$59,999	54.1	5.00
\$60,000 to \$74,999	41.7	2.00
\$75,000 to \$100,000	55.6	4.00
More than \$100,000	50.9	4.00
Race		
White	48.1	4.00
Black	60.8	5.00
Asian	70.0	5.00
Native American Indian	--	--
Other	52.5	3.00
Hispanic origin		
Yes	45.4	5.00
No	39.6	4.00
Gender		
Female	48.3	4.00
Male	55.1	4.00
Age		
18 to 24	47.4	8.00
25 to 34	46.5	3.50
35 to 44	57.8	2.00
45 to 54	56.2	3.00
55 to 64	51.7	4.00
65 or older	44.7	4.00

**Table 21 (continued)**

Employment status		
Employed full/part time	50.4	3.00
Unemployed	61.8	3.00
Retired	50.5	5.00

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

**Figure 19**  
**Years Playing Mega Millions**  
**(n=342)**

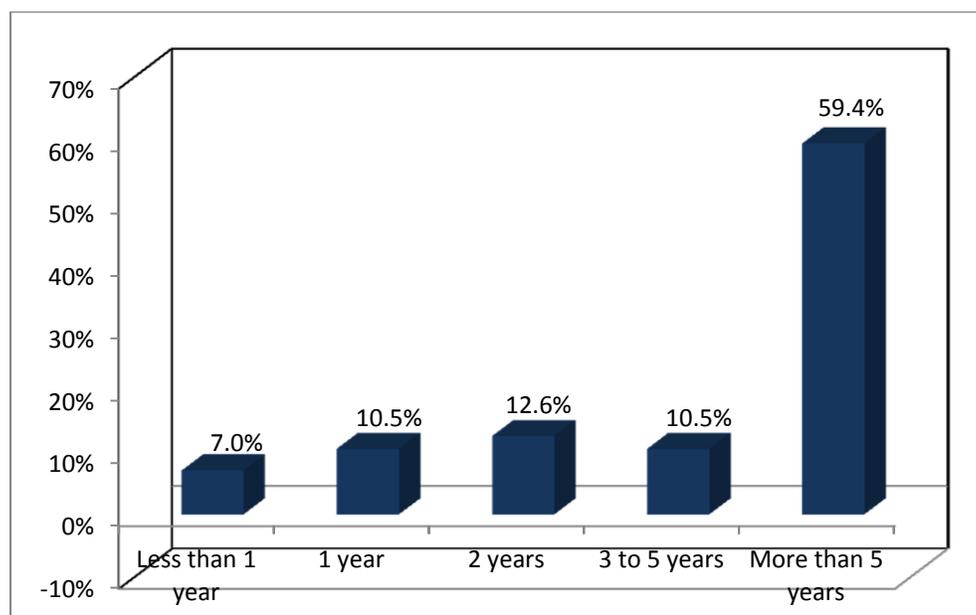
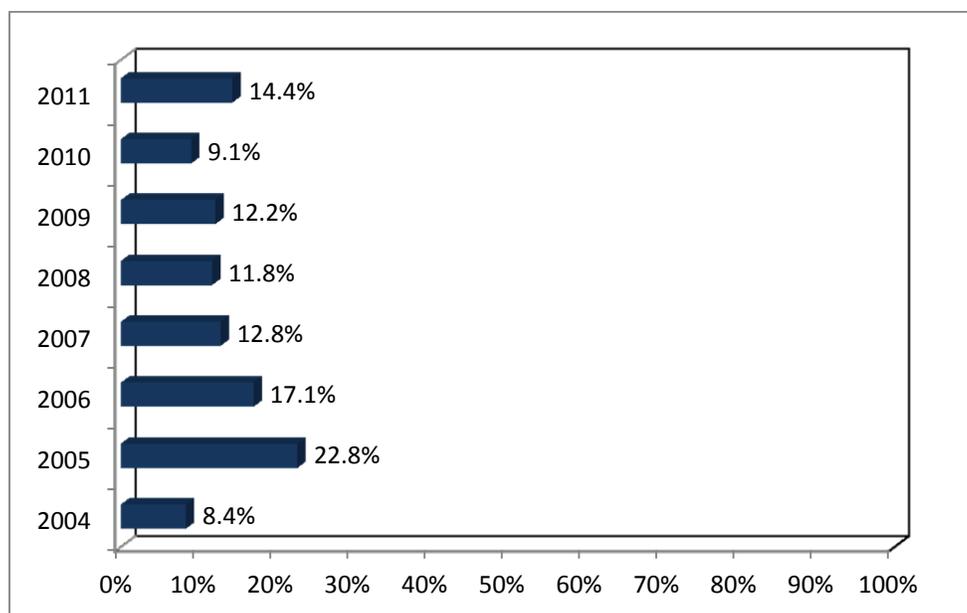


Figure 19 shows that three-fifths (59.4 percent) of the respondents mentioned that they have been playing Mega Millions for more than 5 years. At the same time, about eighteen percent (17.5) of respondents reported having played Mega Millions for less than two years.

### IIIh. MEGAPLIER RESULTS

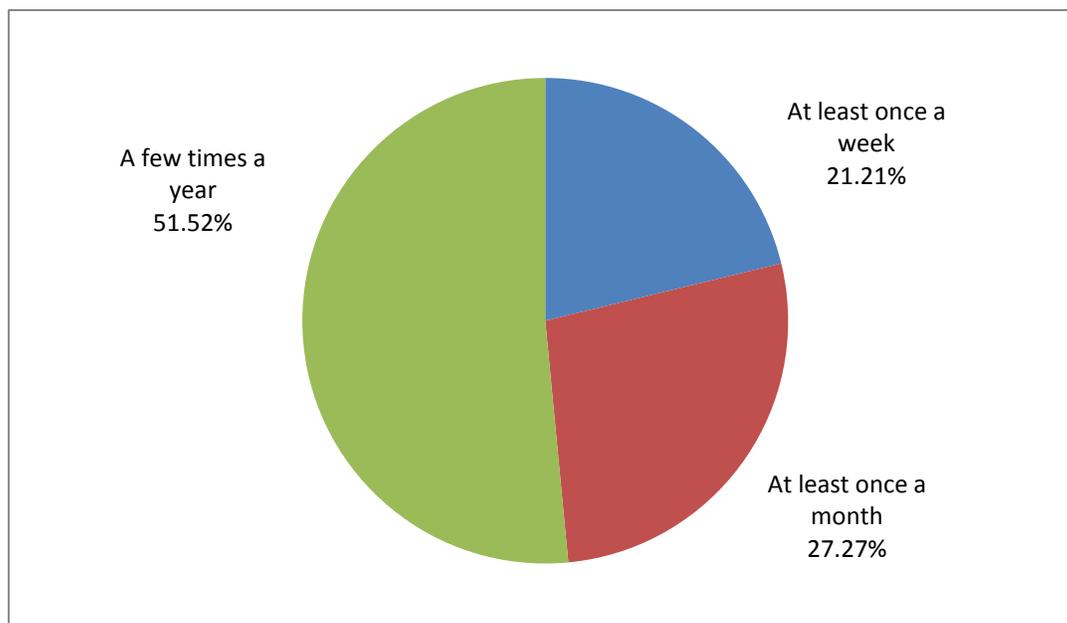
**Figure 20**  
**Percentage of Past-Year Players Playing Megaplier**



**Source:** Hobby Center for Public Policy 2007, 2008, 2009, 2010, and 2011 survey data and reports from 2001-2006.

Figure 20 shows that nearly fifteen percent (14.4) of past year players played Megaplier, a 5.3 percentage point increase from 2010.

**Figure 21**  
**Frequency of Purchasing Megaplier Tickets**  
**(n=99)**



As illustrated in Figure 21, more than a half (51.52 percent) of respondents who played Megaplier in the past year indicated that they purchased Megaplier tickets a few times a year. On the other hand, slightly over one-fifth (21.21 percent) of the respondents purchased tickets at least once a week, and twenty-seven percent (27.27) bought tickets at least once a month.

**Table 22**  
**Average Number of Times Played Megaplier**

Megaplier	Average Number of Times Played
Per week for weekly past-year players	1.63
Per month for monthly past-year players	3.16
Per year for yearly past-year players <sup>30</sup>	15.21

Table 22 reports that weekly players of Megaplier played an average number of 1.63 times per week, monthly players played an average number of 3.16 times per month, and yearly players played an average number of 15.21 times per year.

**Table 23**  
**Dollars Spent on Megaplier**

<b>Megaplier</b>	<b>Dollars Spent</b>
Average spent per play	\$4.71
Average spent per month (mean)	7.81
Average spent per month (median)	4.00

Table 23 illustrates that respondents playing Megaplier spent an average of \$4.71 per play. Those who reported playing the game at a monthly or more frequent basis spent an average of \$7.81 per month. Same as last year, approximately half of the respondents were likely to spend \$4.00 or more a month on playing Megaplier.

Table 24 presents demographic results. We find that there was a statistically significant increase of 5.3 percentage points in participation rates between 2010 and 2011 for Megaplier (from 9.1 percent to 14.4 percent).

However, none of the differences in the individual demographic categories between past-year players who played Megaplier in 2011 and those who did not were statistically significant.

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

Megaplier	Percentage Played	Median Dollars Spent
Year**		
2011	14.4	\$2.00
2010	9.1	3.00
<b>2011 Demographics</b>		
Education		
Less than high school diploma	--	--
High school degree	16.8	3.00
Some college	15.1	1.00
College degree	13.7	4.50
Graduate degree	14.1	2.00
Income		
Less than \$12,000	--	--
\$12,000 to \$19,999	--	--
\$20,000 to \$29,999	19.0	3.00
\$30,000 to \$39,999	--	--
\$40,000 to \$49,999	14.3	0.50
\$50,000 to \$59,999	16.7	2.00
\$60,000 to \$74,999	16.7	0.50
\$75,000 to \$100,000	20.3	4.00
More than \$100,000	15.9	2.00
Race		
White	14.4	3.50
Black	13.4	5.00
Asian	--	--
Native American Indian	--	--
Other	16.8	2.00
Hispanic origin		
Yes	20.5	2.00
No	13.5	3.00
Gender		
Female	14.7	2.00
Male	14.7	2.00
Age		
18 to 24	--	--
25 to 34	--	--
35 to 44	8.0	2.00
45 to 54	21.1	1.00
55 to 64	16.5	2.00
65 or older	11.1	5.00

**Table 24 (continued)**

Employment status		
Employed full/part time	13.5	2.00
Unemployed	13.2	2.00
Retired	15.1	5.00

Note: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Significance markings refer only to the percentage played.

**Figure 22**  
**Years Playing Megaplier**  
**(n=94)**

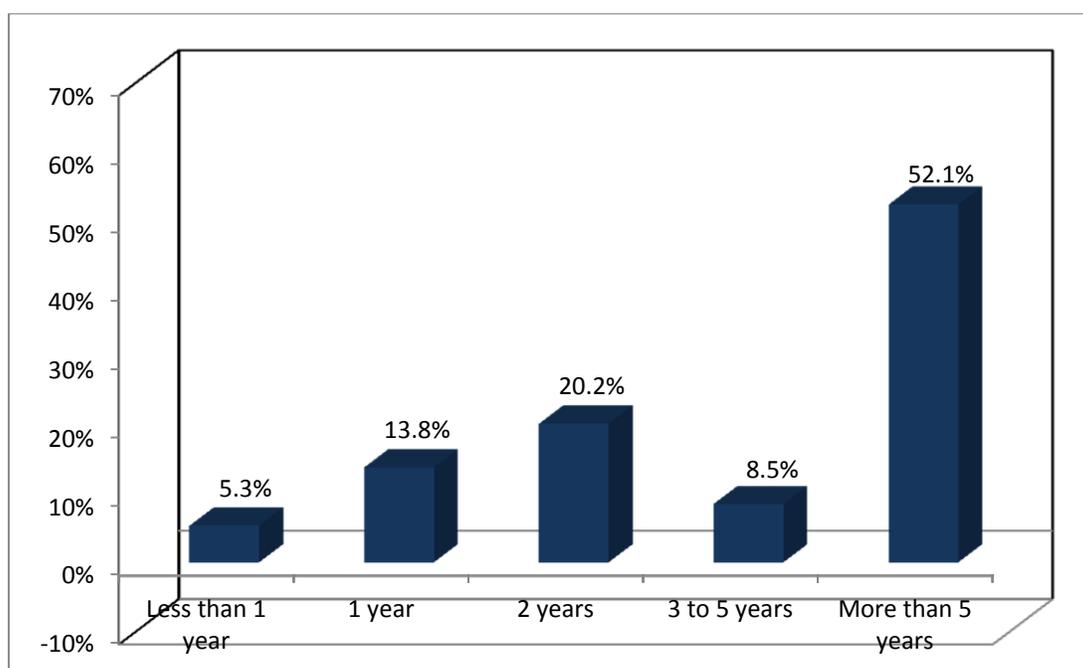


Figure 22 indicates that more than half (52.1 percent) of the respondents who played Megaplier reported playing the game for more than 5 years while about one-fifth (19.1 percent) of the players reported playing the game for less than 2 years.

### III. POWERBALL RESULTS

#### Percentage of Past-Year Players Playing Powerball

Two hundred and twenty-nine past-year lottery players (33.3 percent) indicated that they played Powerball, which was 11.5 percentage points higher than in 2010.

**Figure 23**  
**Frequency of Purchasing Powerball Tickets**  
 (n=229)

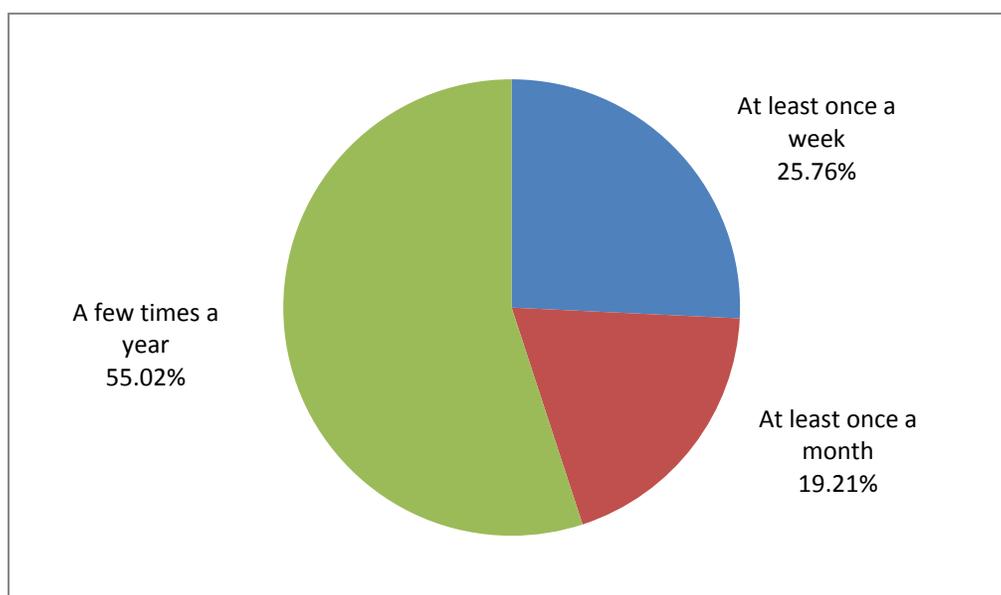


Figure 23 indicates that slightly over a quarter (25.76 percent) of respondents who purchased Powerball tickets purchased them at least once a week. Twenty percent (19.21) purchased the tickets at least once a month, while the remaining fifty-five percent (55.02) indicated having purchased Powerball tickets a few times a year.

**Table 25**  
**Average Number of Times Played Powerball**

Powerball	Average Number of Times Played
Per week for weekly past-year players	1.39
Per month for monthly past-year players	3.49
Per year for yearly past-year players <sup>31</sup>	16.72

Table 25 indicates that weekly players of Powerball played an average number of 1.39 times per week; monthly players played an average number of 3.49 times per month; and yearly players played an average number of 16.72 times per year.

**Table 26**  
**Dollars Spent on Powerball**

<b>Powerball</b>	<b>Dollars Spent</b>
Average spent per play	\$4.62
Average spent per month (mean) <sup>32</sup>	6.87
Average spent per month (median) <sup>33</sup>	4.00

As shown in Table 26, Powerball players spent an average of \$4.62 per play. Those who reported playing the game at a monthly or more frequent basis spent an average of \$6.87 per month. Approximately half of the respondents were likely to spend \$4.00 or more a month on Powerball.

The demographic results for Powerball participation are shown in Table 27. We find that there was a statistically significant increase of 11.48 percentage points in participation rates between 2010 and 2011 for Powerball.

However, none of the differences in the individual demographic categories between past-year players who played Powerball in 2011 and those who did not were statistically significant.

**Table 27**  
**Powerball: Lottery Play and Median Dollars Spent per Month by Past-Year Player**  
**Demographics**

<b>Powerball</b>	<b>Percentage Played</b>	<b>Median Dollars Spent</b>
Year***		
2011	33.33	\$3.00
2010	21.85	4.00
<b>2011 Demographics</b>		
Education		
Less than high school diploma	44.0	\$6.00
High school degree	29.9	2.00
Some college	36.3	4.00
College degree	36.4	3.00
Graduate degree	29.6	1.00
Income		
Less than \$12,000	36.8	3.00
\$12,000 to \$19,999	40.6	1.00
\$20,000 to \$29,999	36.2	5.00
\$30,000 to \$39,999	32.4	4.00
\$40,000 to \$49,999	32.6	--
\$50,000 to \$59,999	40.5	2.00
\$60,000 to \$74,999	29.2	3.00
\$75,000 to \$100,000	37.5	4.00
More than \$100,000	27.1	3.00
Race		
White	32.7	3.00
Black	43.3	4.00
Asian	--	--
Native American Indian	--	--
Other	27.5	3.50
Hispanic origin		
Yes	34.2	5.00
No	33.4	3.00
Gender		
Female	31.9	2.00
Male	35.5	4.00
Age		
18 to 24	35.0	4.00
25 to 34	39.5	2.00
35 to 44	31.8	5.00
45 to 54	37.2	3.50
55 to 64	36.8	3.00
65 or older	30.2	3.00

**Table 27 (continued)**

Employment status		
Employed full/part time	33.2	3.00
Unemployed	40.0	3.00
Retired	32.6	4.50

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

**Figure 24**  
**Years Playing Powerball**  
**(n=223)**

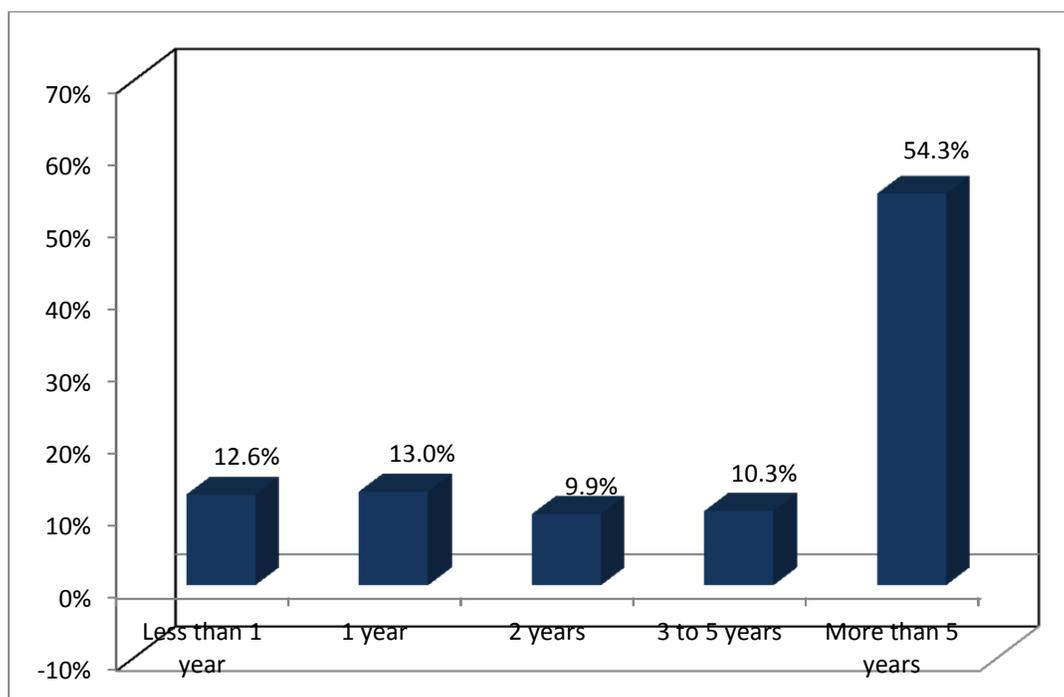


Figure 24 shows that fifty-four percent (54.3) of the respondents mentioned that they have been playing Powerball for more than five years. On the other hand, thirteen percent (12.6) of respondents reported having played Powerball for less than one year.

### IIIj. POWER PLAY FEATURE RESULTS

#### Percentage of Past-Year Players Playing Power Play Feature

Forty-two (42) past-year lottery players indicated that they played Power Play Feature in 2011. They constituted 6.1 percent of the respondents who reported that they played any of the 14 Texas Lottery games in the past year.

**Figure 25**  
**Frequency of Purchasing Power Play Feature**  
(n=42)

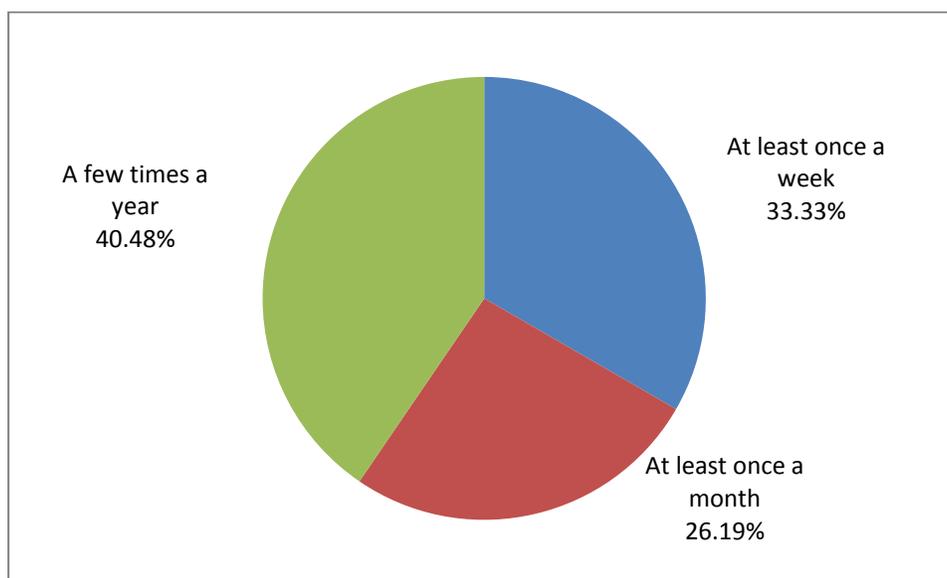


Figure 25 shows that exactly one-third (33.33 percent) of the respondents that purchased Power Play Feature tickets purchased them at least once a week. Two-fifths (40.48 percent) of respondents purchased tickets a few times a year, and the remaining twenty-six percent (26.19) of respondents purchased them at least once a month.

**Table 28**  
**Average Number of Times Played Power Play Feature**

<b>Power Play Feature</b>	<b>Average Number of Times Played</b>
Per week for weekly past-year players	2.05
Per month for monthly past-year players	4.79
Per year for yearly past-year players <sup>34</sup>	15.44

Table 28 illustrates that weekly players of Power Play Feature played an average number of 2.05 times per week, monthly players played an average number of 4.79 times per month, and yearly players played an average number of 15.44 times per year.

**Table 29**  
**Dollars Spent on Power Play Feature**

<b>Power Play Feature</b>	<b>Dollars Spent</b>
Average spent per play	\$5.20
Average spent per month (mean) <sup>35</sup>	9.25
Average spent per month (median) <sup>36</sup>	4.00

As shown in Table 29, respondents playing Power Play Feature spent an average of \$5.20 per play. Those who reported playing the game on a monthly or more frequent basis spent an average of \$9.25 per month. Approximately half of the respondents were likely to spend \$4.00 or more a month on playing Power Play Feature.

As shown in Table 30 on the following page, the differences in education between past-year players who played Power Play Feature and those who did not were statistically significant.

- The participation rates for Power Play Feature past-year players decreased as the educational level increased. Those with high school degree had a participation rate of twenty-nine percent (29.2), higher than those in other educational groups. On the other hand, past-year players with college degree reported the lowest participation rate (9.3 percent). Please note, however, that the sample sizes of some educational categories were too small to be included in the analysis.
- There were no significant differences in income, race, Hispanic origin, gender, age and employment status between past-year players who played Power Play Feature in 2011 and those who did not.

**Table 30**  
**Power Play Feature: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics**

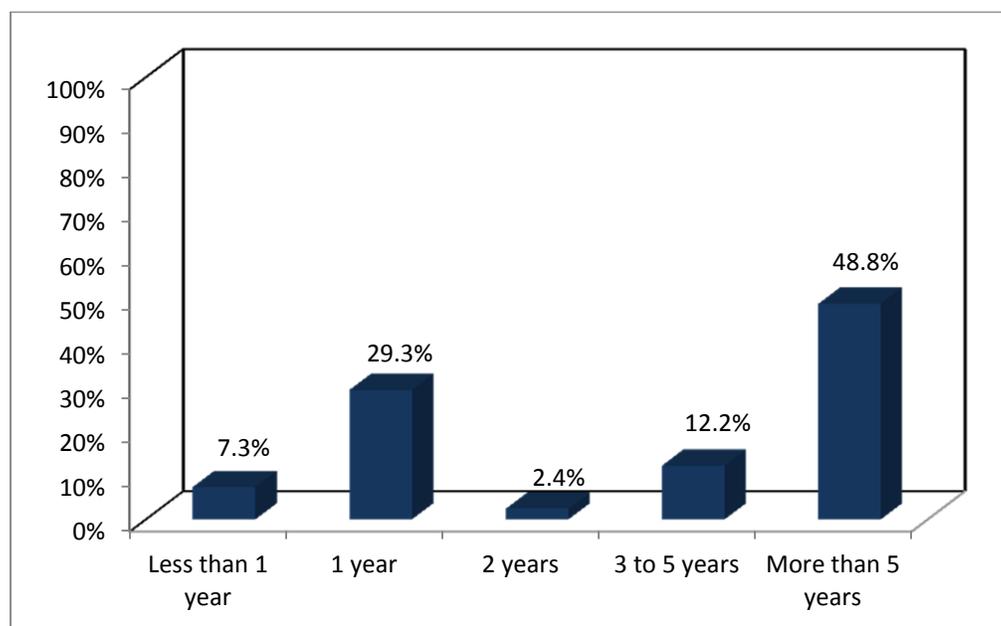
<b>Power Play Feature</b>	<b>Percentage Played</b>	<b>Median Dollars Spent</b>
Year		
2011	6.1	\$4.00
2010	2.6	5.00
<b>2011 Demographics</b>		
Education**		
Less than high school diploma	--	--
High school degree	29.2	3.00
Some college	24.6	3.00
College degree	9.3	20.00
Graduate degree	--	--
Income		
Less than \$12,000	--	--
\$12,000 to \$19,999	--	--
\$20,000 to \$29,999	--	--
\$30,000 to \$39,999	--	--
\$40,000 to \$49,999	--	--
\$50,000 to \$59,999	--	--
\$60,000 to \$74,999	53.9	5.00
\$75,000 to \$100,000	--	--
More than \$100,000	--	--
Race		
White/Anglo	20.7	7.00
Black/African American	15.0	3.00
Asian	--	--
Native American Indian	--	--
Other	--	--
Hispanic Origin		
Yes	22.5	3.00
No	18.4	4.00
Gender		
Female	21.5	2.00
Male	16.4	8.00

**Table 30 (continued)**

Age		
18 to 24	--	--
25 to 34	--	--
35 to 44	21.4	2.00
45 to 54	17.0	3.00
55 to 64	19.4	4.50
65 or older	14.0	10.00
Employment Status		
Employed full/part time	21.2	2.00
Unemployed	--	--
Retired	13.0	10.00

Note: \*p<0.05, \*\*p<0.01, \*\*\*p<0.001. There was statistically significant difference between past-year players and non-players by education.

**Figure 26**  
**Years Playing Power Play Feature**  
**(n=41)**



As shown in Figure 26, nearly half (48.8 percent) of respondents indicated that they have played Power Play Feature for more than five years. On the other hand, thirty-seven percent (36.6) of respondents reported having played Power Play Feature for less than two years.

## IV. SUMMARY

The Texas Lottery Commission 2011 Demographic Study surveyed approximately 1,700 Texas citizens aged 18 and over between mid-July and early August of 2011. Texas registered lottery participation in general had been in decline over the past decade. The Texas lottery participation in 2011 was one of the few exceptions to this trend: its participation rate had increased by as much as seven percentage points (6.7) as compared to 2010. The 2011 rate indicated a reversal of the decline in participation (eight percentage points) between 2009 and 2010. Slightly more than two-fifths (40.5 percent) of survey respondents in 2011 indicated they participated in any of the Texas Lottery games in the past year, compared to 33.8 percent in 2010 (see Table 1).

Similar to the 2010 survey, there was a statistically significant difference between past-year players and non-players with regard to marital status. In contrast to 2010, income and gender were found to be statistically significant for the difference in participation in 2011 (see Table 1). However, the 2011 survey did not find employment status, children under 18 living in household, and Hispanic origin to be statistically significant, as was the case in 2010. Among those who had participated in any game, only income and gender were found to be statistically significant, while other demographic factors were not statistically significant (see Table 2).

The 2011 survey findings showed increases in participation rates in all the games played as compared to 2010. Among the biggest increases in participation rates were: Powerball (11.5 percentage points) and Mega Millions (by 11.0 percentage points). As in last year's survey, in nearly 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.

Lottery participation rates varied within demographic groups depending on the types of game played (see Section III). Participation rates differed by income for respondents who played Pick 3 Day, Cash 5, Lotto Texas and Texas Lottery Scratch Off tickets. On the other hand, participation rates varied significantly by education for Cash 5, Lotto Texas, Texas Lottery Scratch Off tickets and Power Play Feature. Age variations were statistically significant for Lotto Texas, Texas Lottery Scratch Off tickets and Texas 2 Step, but not in other games. Participation rates varied by gender for only two games: Cash 5 and Texas Lottery Scratch Off tickets. Lastly, race was found significant only in Pick 3 Day, while employment status was only significant in Texas 2 Step.

Lastly, we reported the findings of the newly reconfigured 14 lottery districts in 2011, instead of the 10 lottery districts as in 2010. The 2011 participation rates in any Texas Lottery games were highest in the El Paso (51.1 percent), San Antonio (50.3 percent) and Lubbock (46.5 percent) lottery districts. Fort Worth district recorded the lowest participation rate of 34.7 percent, while Houston East and Tyler both recorded a participation rate of 35.0 percent. The lottery districts demonstrating the highest average monthly amount spent per player were Dallas South (\$25.26), Houston Southwest (\$23.71), and Waco (\$18.72). The lowest average monthly amounts spent per player were found in the Houston Northwest (\$6.41) and Tyler (\$7.38) districts.

## APPENDIX

**Table A**  
**Sample Population by County**<sup>37</sup>  
**(n=1,597)**

County	Count	Percentage
Anderson	3	0.19
Angelina	4	0.25
Archer	2	0.13
Armstrong	1	0.06
Atascosa	4	0.25
Austin	6	0.38
Bailey	1	0.06
Bandera	2	0.13
Bastrop	5	0.31
Baylor	1	0.06
Bee	5	0.31
Bell	11	0.69
Bexar	88	5.51
Bosque	1	0.06
Bowie	4	0.25
Brazoria	32	2.00
Brazos	12	0.75
Brewster	2	0.13
Brown	8	0.50
Burleson	2	0.13
Burnet	5	0.31
Caldwell	1	0.06
Calhoun	2	0.13
Cameron	13	0.81
Cass	2	0.13
Castro	1	0.06
Chambers	4	0.25
Cherokee	7	0.44
Clay	1	0.06
Coke	1	0.06
Coleman	4	0.25
Collin	48	3.01
Colorado	2	0.13
Comal	7	0.44
Comanche	2	0.13
Cooke	8	0.50
Coryell	6	0.38
Dallas	157	9.83
Dawson	3	0.19
Deaf Smith	1	0.06
Delta	1	0.06
Denton	30	1.88
De Witt	4	0.25
Donley	1	0.06
Eastland	2	0.13
Ector	4	0.25
Ellis	14	0.88
El Paso	40	2.50

County	Count	Percentage
Fannin	1	0.06
Fayette	1	0.06
Fisher	1	0.06
Floyd	2	0.13
Fort Bend	38	2.38
Freestone	2	0.13
Frio	1	0.06
Gaines	1	0.06
Galveston	20	1.25
Garza	3	0.19
Gillespie	3	0.19
Goliad	1	0.06
Gonzales	3	0.19
Gray	2	0.13
Grayson	11	0.69
Gregg	5	0.31
Grimes	1	0.06
Guadalupe	12	0.75
Hale	1	0.06
Hamilton	1	0.06
Hardin	3	0.19
Harris	282	17.66
Harrison	3	0.19
Haskell	2	0.13
Hays	12	0.75
Henderson	14	0.88
Hidalgo	21	1.31
Hill	4	0.25
Hood	4	0.25
Houston	1	0.06
Hunt	7	0.44
Hutchinson	4	0.25
Irion	1	0.06
Jackson	2	0.13
Jasper	6	0.38
Jefferson	19	1.19
Jim Hogg	1	0.06
Jim Wells	4	0.25
Johnson	9	0.56
Jones	4	0.25
Karnes	1	0.06
Kaufman	4	0.25
Kendall	5	0.31
Kent	1	0.06
Kerr	6	0.38
Kleberg	2	0.13
Lamar	5	0.31
Lamb	1	0.06

County	Count	Percentage
Lampasas	2	0.13
La Salle	1	0.06
Lavaca	5	0.31
Lee	3	0.19
Leon	2	0.13
Liberty	5	0.31
Limestone	2	0.13
Llano	2	0.13
Lubbock	13	0.81
Lynn	1	0.06
Madison	1	0.06
Marion	2	0.13
Martin	1	0.06
Matagorda	3	0.19
Maverick	2	0.13
Mcculloch	1	0.06
Mclennan	13	0.81
Mcmullen	1	0.06
Medina	2	0.13
Midland	10	0.63
Milam	2	0.13
Mills	2	0.13
Montague	3	0.19
Montgomery	32	2.00
Moore	1	0.06
Morris	1	0.06
Nacogdoches	6	0.38
Navarro	5	0.31
Newton	1	0.06
Nolan	3	0.19
Nueces	11	0.69
Ochiltree	1	0.06
Orange	4	0.25
Panola	1	0.06
Parker	6	0.38
Parmer	1	0.06
Pecos	1	0.06
Polk	9	0.56
Potter	6	0.38
Randall	5	0.31
Refugio	1	0.06
Robertson	4	0.25
Rockwall	5	0.31
Runnels	1	0.06
Rusk	3	0.19
San Jacinto	3	0.19
San Patricio	2	0.13
Scurry	1	0.06

County	Count	Percentage
Smith	15	0.94
Somervell	1	0.06
Starr	4	0.25
Stephens	1	0.06
Swisher	1	0.06
Tarrant	97	6.07
Taylor	8	0.50
Tom Green	6	0.38
Travis	64	4.01
Trinity	1	0.06
Tyler	3	0.19
Uvalde	1	0.06
Val Verde	2	0.13
Van Zandt	3	0.19
Victoria	9	0.56
Walker	10	0.63
Waller	3	0.19
Ward	2	0.13
Washington	5	0.31
Webb	4	0.25
Wharton	4	0.25
Wichita	9	0.56
Willacy	3	0.19
Williamson	22	1.38
Wilson	4	0.25
Wise	11	0.69
Wood	5	0.31
Yoakum	1	0.06
Young	1	0.06
Zapata	1	0.06

## Notes

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<sup>1</sup> See Section 1 for discussion of statistical significance.

<sup>2</sup> Information regarding the cell-phone and landline findings associated with the 2011 Texas Lottery survey is available upon request from the University of Houston Hobby Center for Public Policy (HCPP).

<sup>3</sup> 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](http://www.harrisinteractive.com/harris_poll/index.asp?PID=890).

<sup>4</sup> Note that discrepancies between total sample size and various variables are due to respondents either refusing to answer or saying they did not know.

<sup>5</sup> More respondents reported that they participated in any of the Texas Lottery games during the past year for the 2011 survey than did for 2010. The difference was statistically significant at the  $p < 0.001$  level of the distribution.

<sup>6</sup> The 2010 population estimate for persons 18 years and older in Texas was 18,155,095. The source for this estimate is the U.S. Census Bureau (<http://quickfacts.census.gov/qfd/states/48000.html>).

<sup>7</sup> There was an increase in the percentage played in any of the Texas Lottery games during the past year for the 2011 survey than did for 2010. The difference was statistically significant at the  $p < 0.001$  level of the distribution.

<sup>8</sup> The figure 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 22.48.

<sup>9</sup> We follow this coding method for each game regarding average time played.

<sup>10</sup> The figure excludes the respondent who indicated having purchased more than \$30 of Pick 3 Day tickets per play. If the respondent is included, the average number of dollars spent for purchasing the tickets is \$6.78 per play.

<sup>11</sup> The figure excludes the respondents that indicated having purchased more than \$120 of Pick 3 Day tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$23.58 per month.

<sup>12</sup> The figure excludes the respondents that indicated having purchased more than \$120 of Pick 3 Day tickets per month. If those respondents are included, the median dollars spent for purchasing the tickets is \$10.00 per month.

<sup>13</sup> There were only five or fewer respondents in this sub-category and therefore it is not reported. The same reporting rule is used for both median dollars spent and percentage played in all subsequent tables by demographics.

<sup>14</sup> The average number of time playing Cash 5 of weekly past-year players excludes the respondent who indicated that he or she played more than 7 times per week. If the respondent is included, the average number of time playing the game is 2.21 times per week.

<sup>15</sup> The figure excludes the respondents that indicated having played Cash 5 more than \$80 per month. If those respondents are included, the average number of dollars spent on the game is \$11.92 per month.

<sup>16</sup> The figure excludes the respondents that indicated having played Cash 5 more than \$80 per month. If those respondents are included, the median dollars spent on the game is \$5.00 per month.

<sup>17</sup> The average number of time playing Lotto Texas 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 times playing the game is 20.85 times per year.

<sup>18</sup> The figure excludes the respondents that indicated having purchased more than \$40 of Lotto Texas tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$5.93 per play.

<sup>19</sup> The figure excludes the respondents that indicated having purchased more than \$90 of Lotto Texas tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$12.03 per month.

<sup>20</sup> When the respondents who indicated that they purchased more than \$90 of Lotto Texas tickets per month are included or excluded, the median number does not change.

<sup>21</sup> 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 20.26 times per year.

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<sup>22</sup> This figure excludes respondents that claimed to have spent more than \$60 on Texas Lottery Scratch off tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$11.87 per play.

<sup>23</sup> This figure excludes respondents that claimed to have spent more than \$120 of Texas Lottery Scratch off tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$20.82 per month.

<sup>24</sup> When the respondents who indicated that they purchased more than \$120 of Texas Lottery Scratch Off tickets per month are included or excluded, the median number does not change.

<sup>25</sup> 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 52 times per year. If those respondents are included, the average number of time playing the game is 20.60 times per year.

<sup>26</sup> 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 18.12 times per year.

<sup>27</sup> The average number of dollars spent per week excludes the respondents who indicated that they purchased more than \$40 of Mega Million tickets per week. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$5.29 per week.

<sup>28</sup> The average number of dollars spent per month excludes the respondents who indicated that they purchased more than \$80 of Mega Million tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$9.86 per month.

<sup>29</sup> When the respondents who indicated that they purchased more than \$80 of Mega Million tickets per month are included or excluded, the median number does not change.

<sup>30</sup> The average number of time playing Megaplier feature tickets of yearly past-year players excludes the respondent who indicated that he or she played more than 52 times per year. If the respondent is included, the average number of time playing the game is 16.07 times per year.

<sup>31</sup> The average number of time playing Powerball 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 17.85 times per year.

<sup>32</sup> The average number of dollars spent per month excludes the respondents who indicated that they purchased more than \$50 of Powerball tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$8.75 per month.

<sup>33</sup> When the respondents who indicated that they purchased more than \$50 of Powerball tickets per month are included or excluded, the median dollar spent purchasing the tickets does not change.

<sup>34</sup> The average number of time playing Power Play Feature 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 18.74 times per year.

<sup>35</sup> The average number of dollars spent on Power Play Feature tickets excludes the respondents who indicated that they spent more than \$50 per month. If those respondents are included, the average number of dollars spent on the game is \$15.61 per month.

<sup>36</sup> The figure excludes the respondents that indicated having played Power Play Feature more than \$50 per month. If those respondents are included, the median number of dollars spent on the game is \$4.50 per month.

<sup>37</sup> The discrepancy between the sample in Table A (n=1,597) and the total sample (n=1,697) is due to respondents stating that they “did not know” or were “unsure” of their county of residence. Some refused to answer the question.