# Demographic Survey of Texas Lottery Players 2010





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### **EXECUTIVE SUMMARY**

The Texas Lottery Commission 2010 Demographic Study of Texas Lottery Players surveyed 1,691 Texas citizens aged 18 years and older in August of 2010. Registered lottery participation in general has decreased over the past decade with minor exceptions. After a slight increase from 38 percent in 2008 to 42 percent in 2009, lottery participation has resumed its decline in 2010 - slightly more than one-third (34 percent) of survey respondents said they participated in any of the Texas Lottery games in the past year, a statistically significant decrease of eight (8) percentage points compared to 2009. Similar to the 2008 and 2009 surveys, there was a statistically significant difference between past-year players and nonplayers due to employment status. Unlike 2009, gender and race were found to not be statistically significant for the difference in participation. However, Hispanic origin remained significant in 2010. Two demographic factors were statistically significant in the 2010 survey but were not in the previous year - marital status and children under 18 living in household. As in 2009, general participation findings broken down by income, education, age, home ownership, and occupation were not found to be statistically significant. Among those who had participated in any game, only employment status and Hispanic origin were statistically significant while other demographic factors were not. Note, however, in many cases participation rates among demographic groups varied by the type of game played. Looking at the games separately, we observed a decline in participation in almost all the games played in 2010. In particular, we found that participation has fallen the most for Mega Millions (by 12.6 percentage points), followed by Cash 5 (by 4.9 percentage points). Lastly, 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

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

- Participation rates in any Texas Lottery games were highest in the Victoria (45.1 percent), San Antonio (39.5 percent) and McAllen (36.6 percent) lottery districts. The lowest rates were in the El Paso and Lubbock districts (25 percent; see Table 3).
- The El Paso (\$18.85) and McAllen (\$18.07) lottery districts reported the highest average monthly amount spent per player. The lowest average monthly amounts spent per player were found in the Abilene (\$4.43) and Austin (\$5.10) districts.
- A comparison of lottery play across districts between the 2009 and 2010 surveys revealed that participation rates have decreased for all districts. Most notable was the El Paso district, falling from the highest rate in 2009 (56.1 percent) to the lowest rate in 2010 (25.0 percent). In contrast, the Victoria district suffered the smallest decline in rates, from 49.2 percent in 2009 to 45.1 percent in 2010.



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. Results were only summarized for games where the sample size exceeded two percent of the total sample.

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

**Pick 3 Day**: Approximately fifteen percent (14.69) of past-year lottery players (N=572) had played Pick 3 Day. Approximately two-fifths (38.10 percent) of Pick 3 Day players purchased tickets for the game at least once a week, a decrease of 5 percentage points since 2009. Twenty percent purchased tickets at least once a month, and the remaining two-fifths (41.67 percent) made purchases only a few times a year. Pick 3 Day players spent an average of \$4.85 per play.

<u>Cash 5</u>: Seventeen percent (16.61) of past-year lottery players had played Cash 5, which was 4.85 percentage points less than in 2009. Exactly twenty percent of the Cash 5 players purchased Cash 5 tickets at least once a week, a decline of sixteen percentage points from 2009. Twenty-six percent (26.32) purchased tickets at least once a month, and fifty-four percent (53.68) purchased Cash 5 tickets just a few times a year. Cash 5 players spent an average of \$5.03 per play.

**Lotto Texas**: Lotto Texas maintained its most popular game status in 2010 as in 2009: as many as two-thirds (67.3 percent) of past-year lottery players had played Lotto Texas. Among them, one-third (32.73) purchased Lotto Texas tickets at least once a week. More than twenty-seven percent (27.27) purchased the tickets at least once a month, while exactly forty percent (40.00) indicated having purchased Lotto Texas tickets a few times a year. Lotto Texas players spent an average of \$4.17 per play.

**Texas Lottery Scratch Off Tickets**: More than half (53.8 percent) 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-seven percent (26.95) of these players bought Scratch-off tickets at least once a week. Another twenty-three percent (23.05) purchased tickets at least once a month, while exactly half (50 percent) purchased tickets a few times a year. On average, Texas Lottery Scratch Off tickets players spent \$7.44 per play.

**Texas Two Step**: Slightly less than ten percent (9.4) of past-year lottery players had played Texas Two Step. Thirty-five percent (35.19) of Texas Two Step players purchased tickets for the game at least once a week, a decline of nearly ten percentage points compared to 2009. Nine percent (9.26) indicated that they purchased tickets for Texas Two Step at least once a month. The majority, (55.56%) of Texas Two Step players purchased tickets a few times a year. Players of Texas Two Step spent an average of \$3.56 per play.



<u>Mega Millions</u>: Two-fifths (39.9 percent) of past-year lottery players had played Mega Millions. This represented a 12.6 percentage point decline (the largest decrease among all games) from the 2009 survey. Twenty-eight percent (27.63) of Mega Millions players reported buying Mega Millions tickets at least once a week. About one-quarter (24.12 percent) said that they purchased Mega Millions tickets at least once a month while nearly one-half (48.25 percent) purchased tickets a few times a year. On average, Mega Millions players spent \$4.34 per play.

**Megaplier**: Some nine percent (9.09) of past-year lottery players had played Megaplier. Nearly two-thirds (65.38%) of this group indicated purchasing Megaplier tickets a few times a year. On the other hand, less than a quarter (23.08%) of the Megaplier players purchased tickets at least once a week, a drop of fifteen percentage points compared to 2009. Megaplier players spent an average of \$4.60 per play.

**Powerball**: About twenty-two percent (21.85) of past-year lottery players indicated that they played Powerball. Nearly one-third (32.80 percent) of that group purchased Powerball tickets at least once a week. Exactly twenty percent purchased the tickets at least once a month, while the remaining forty-seven percent (47.20) indicated having purchased Powerball tickets a few times a year. Powerball players spent an average of \$3.56 per play.



#### Testing differences in Lottery participation and expenditure from 2009 to 2010

In addition to the basic results that ensured continuity of information and presentation of prior studies, the 2010 study provides statistical tests of *differences in lottery participation and individual expenditures from 2009 to 2010*. The report highlights these differences for general participation rates, for rates according to Texas lottery district, and for the individual lottery games separately. Comparing 2010 survey results with those from 2009, we find the following:

- A small but statistically significant decline of eight (8) percentage points in overall participation rates (see Table 1).
- A small but statistically significant decrease in overall average individual monthly expenditure (from \$45.21 in 2009 to \$38.92 in 2010).
- Comparing 2010 survey results with those from 2009, we see that participation rates have decreased across all districts (see Table 3). The participation rate fell off the most in the El Paso district (by 31.1 percentage points). The other districts that have experienced sizable declines in participation rates included Abilene (by 10.5 percentage points), San Antonio (by 8.7 percentage points) and Houston (by 8.2 percentage points). However, differences in percent playing any game by district reported in the 2010 survey were only statistically significant at the p<0.05 level in the El Paso and Houston districts.<sup>1</sup>
- Looking at the games separately, we observed a decline in participation in almost all the games played in 2010. In particular, we found that participation had fallen the most for Mega Millions (by 12.6 percentage points), followed by Cash 5 (by 4.9 percentage points).



### I. INTRODUCTION AND METHOD OF ANALYSIS

A random survey of adult Texas residents aged 18 and older was conducted during August 2010. 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 (<u>http://www.uh.edu/hcpp</u>). The individuals who worked on this study are listed in alphabetical order:

Renée Cross Jim Granato Thanapan Laiprakobsup 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, five (5) responded that they did play but subsequent responses revealed that they, in fact, did not. Another four (4) gave a "don't know" response. Because these 9 respondents would bias the results for the "Past-Year Player" group, they were not included in the analysis. The remaining 1,691 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 August 4 and August 21, 2010. 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 2010 Texas Lottery Study in addition to the standard statewide RDD sample. The data included in this report are based on 1,377 (81.24 percent) completed interviews on standard landlines and 318 completed interviews (18.76 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

	Number	Number and Percentage Responding			
Demographic Factors	All (n=1,691)	Past-Year Players (n=572)	Non-Players (n=1,119)		
Year***					
2010	1,691 (100%)	572 (33.83%)	1,119 (66.17%)		
2009	1,678 (100%)	699 (41.66%)	979 (58.34%)		
Income (n=1,133)	n=1133 (100%)	n=407 (100%)	n=726 (100%)		
Less than \$12,000	100 (8.83%)	26 (6.39%)	74 (10.19%)		
Between \$12,000 and \$19,999	83 (7.33%)	25 (6.14%)	58 (7.99%)		
Between \$20,000 and \$29,999	118 (10.41%)	54 (13.27%)	64 (8.82%)		
Between \$30,000 and \$39,999	109 (9.62%)	42 (10.32%)	67 (9.23%)		
Between \$40,000 and \$49,999	108 (9.53%)	42 (10.32%)	66 (9.09%)		
Between \$50,000 and \$59,999	91 (8.03%)	35 (8.60%)	56 (7.71%)		
Between \$60,000 and \$74,999	112 (9.89%)	42 (10.32%)	70 (9.64%)		
Between \$75,000 and \$100,000	141 (12.44%)	51 (12.53%)	90 (12.40%)		
More than \$100,000	271 (23.92%)	90 (22.11%)	181 (24.93%)		
Employment Status*** <sup>5</sup>	n=1678 (100%)	n=565 (100%)	n=1113 (100%)		
Employed Full-time	720 (42.91%)	299 (52.92%)	421 (37.83%)		
Employed Part-time	115 (6.85%)	27 (4.78%)	88 (7.91%)		
Unemployed/Looking for Work	133 (7.93%)	37 (6.55%)	96 (8.63%)		
Not in Labor Force	132 (7.87%)	41 (7.26%)	91 (8.18%)		
Retired	578 (34.45%)	161 (28.50%)	417 (37.47%)		
Own or Rent Home (n=1,658)	n=1,658 (100%)	n=559 (100%)	n=1099 (100%)		
Own	1,374 (82.87%)	466 (83.36%)	908 (82.62%)		
Rent	244 (14.72%)	87 (15.56%)	157 (14.29%)		
Occupied without Payment	40 (2.41%)	6 (1.07%)	34 (3.09%)		
Age of Respondent	n=1,540 (100%)	n=518 (100%)	n=1022 (100%)		
18 to 24	95 (6.17%)	14 (2.70%)	81 (7.93%)		
25 to 34	126 (8.18%)	39 (7.53%)	87 (8.51%)		
35 to 44	189 (12.27%)	82 (15.83%)	107 (10.47%)		
45 to 54	310 (20.13%)	136 (26.25%)	174 (17.03%)		
55 to 64	335 (21.75%)	131 (25.29%)	204 (19.96%)		
65 and over	485 (31.49%)	116 (22.39%)	369 (36.11%)		

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



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

	Number and Percentage Responding			
Demographic Factors	All (n=1,691)	Past-Year Players (n=572)	Non-Players (n=1,119)	
Marital Status*	n=1,667 (100%)	n=564 (100%)	n=1103 (100%)	
Married	1,025 (61.49%)	375 (66.49%)	650 (58.93%)	
Widowed	204 (12.24%)	49 (8.69%)	155 (14.05%)	
Divorced	159 (9.54%)	61 (10.82%)	98 (8.88%)	
Separated	22 (1.32%)	9 (1.60%)	13 (1.18%)	
Never Married	257 (15.42%)	70 (12.41%)	187 (16.95%)	
Children under 18 Living in Household**	n=1,652 (100%)	n=558 (100%)	n=1094 (100%)	
Yes	438 (26.51%)	173 (31.00%)	265 (24.22%)	
No	1,214 (73.49%)	385 (69.00%)	829 (75.78%)	
Number of Children under 18 Living in Household	n=438 (100%)	n=173 (100%)	n=265 (100%)	
1	194 (44.29%)	79 (45.66%)	115 (43.40%)	
2	158 (36.07%)	65 (37.57%)	93 (35.09%)	
3	62 (14.16%)	21 (12.14%)	41 (15.47%)	
4 or more	24 (5.48%)	8 (4.62%)	16 (6.04%)	
Gender of Respondent	n=1,691 (100%)	n=572 (100%)	n=1119 (100%)	
Male	734 (43.41%)	252 (44.06%)	482 (43.07%)	
Female	957 (56.59%)	320 (55.94%)	637 (56.93%)	
Race (n=1,639)	n=1,639 (100%)	n=557 (100%)	n=1082 (100%)	
White	1,161 (70.84%)	388 (69.66%)	773 (71.44%)	
Black	203 (12.39%)	77 (13.82%)	126 (11.65%)	
Asian	51 (3.11%)	6 (1.08%)	45 (4.16%)	
Native American Indian	9 (0.55%)	4 (0.72%)	5 (0.46%)	
Other	215 (13.12%)	82 (14.72%)	133 (12.29%)	
Hispanic Origin*	n=1657 (100%)	n=562 (100%)	n=1095 (100%)	
Yes	267 (16.11%)	110 (19.57%)	157 (14.34%)	
No	1,390 (83.89%)	452 (80.43%)	938 (85.66%)	

**Note**: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001, two-tailed test. There were statistically significant differences between players and non-players at the p < 0.05 level for distributions by marital status, having children under 18 living in the household and Hispanic origin of the respondents.



Demographic Study of Texas Lottery Players 2010

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

Domographic Eastern	Number and Percentage Responding			
Demographic Factors	All (n=1,691)	Past-Year Players (n=572)	Non-Players (n=1,119)	
Education	n=1683 (100%)	n=568 (100%)	n=1115 (100%)	
Less than High School	88 (5.23%)	20 (3.52%)	68 (6.10%)	
High School Graduate/GED	450 (26.74%)	150 (26.41%)	300 (26.91%)	
Some College, no degree	448 (26.62%)	171 (30.11%)	277 (24.84%)	
College Degree	468 (27.81%)	173 (30.46%)	295 (26.46%)	
Graduate/Professional Degree	229 (13.61%)	54 (9.51%)	175 (15.70%)	
Occupation	n=1,225 (100%)	n=435 (100%)	n=790 (100%)	
Executive, Administrative, and Managerial	198 (16.16%)	68 (15.63%)	130 (16.46%)	
Professional Specialty	439 (35.84%)	144 (33.10%)	295 (37.34%)	
Technicians and Related Support	104 (8.49%)	46 (10.57%)	58 (7.34%)	
Sales	102 (8.33%)	26 (5.98%)	76 (9.62%)	
Administrative Support, Clerical	100 (8.16%)	40 (9.20%)	60 (7.59%)	
Private Household	47 (3.84%)	17 (3.91%)	30 (3.80%)	
Protective Service	12 (0.98%)	5 (1.15%)	7 (0.89%)	
Service	100 (8.16%)	37 (8.51%)	63 (7.97%)	
Precision Productions, Craft, and Repair	10 (0.82%)	6 (1.38%)	4 (0.51%)	
Machine Operators, Assemblers, and Inspectors	36 (2.94%)	19 (4.37%)	17 (2.15%)	
Transportation and Material Moving	16 (1.31%)	6 (1.38%)	10 (1.27%)	
Equipment Handlers, Cleaners, Helpers, and Laborers	22 (1.80%)	11 (2.53%)	11 (1.39%)	
Farming, Forestry, Fishing	11 (0.90%)	2 (0.46%)	9 (1.14%)	
Armed Forces	28 (2.29%)	8 (1.84%)	20 (2.53%)	

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

- Table 1 shows that slightly more than one-third (33.83 percent) of survey respondents said they participated in any of the Texas Lottery games in the past year, a statistically significant decrease of eight (8) percentage points compared to 2009.
- Similar to the 2008 and 2009 surveys, there was a statistically significant difference between
  past-year players and non-players due to employment status. Specifically, about forty-three
  percent (42.91) of all respondents were employed full-time. Over fifty percent (52.92) of past-year
  players and less than forty percent (37.83) of non-players were employed full-time.
- Different from 2009, marital status was statistically significant in the 2010 survey. Two-thirds (66.49) of past-year players were married, while slightly less than sixty percent (58.93) of non-players were married.



- Exactly thirty-one percent (31.00) of the respondents that played in the past year had children under age 18 living in their household. On the other hand, fewer (24.22 percent) of the non-player respondents had children under 18 living in their households. The difference between these two groups was statistically significant.
- Sixteen percent 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 (19.57 percent and 14.34 percent, respectively, a difference that was statistically significant).
- About eighteen percent (17.56) of all respondents had a household annual income of between \$40,000 and \$59,999. Twenty-seven percent (26.57) had an income of \$29,999 or less. On the other hand, slightly more than thirty-six percent (36.36) had an income of \$75,000 or more. Nearly a quarter (24.93 percent) of non-players had a household annual income over \$100,000, though no fewer than twenty-two percent of past-year players had a household annual income over \$100,000.
- More than eighty percent (82.87) of all respondents owned their home. Fifteen percent (14.72) rented and fewer than three percent (2.41) occupied their home without payment. Among the past-year players, eighty-three percent (83.36) owned their home. A similar proportion of the non-players were also home owners (82.62 percent).
- Forty-two percent (41.88) of all respondents were between the ages of 45 and 64. As was the case in the 2009 survey, a greater percentage of non-players (36.11 percent) than past-year players (22.39 percent) were 65 and over. On the other hand, a greater percentage of past-year players (25.29 percent) than non-players (19.96 percent) were between the ages of 55 and 64. The average age for all respondents was 56 years, with the average age among players being 54 years and non-players 57 years. (Note: average age is not shown in Table 1).
- Unlike 2009, there was no statistical difference between players and non-players regarding the respondents' gender. Fifty-seven percent (56.59) of the respondents were female and forty-three percent (43.41) were male. A similar proportion of the female or male respondents participated in any of the Texas lottery games: among the female respondents, one-third (33.44 percent) participated in any games while two-thirds (66.56 percent) did not. Among the male respondents, slightly more than one-third (34.33 percent) participated in any games while nearly two-thirds (65.67 percent) did not.
- About seventy-one percent (70.84) of all respondents were White. Whites were similarly represented within the racial categories for both past-year players (69.66 percent) and nonplayers (71.44 percent). Unlike 2009, racial differences in participation were not statistically significant.
- More than two-fifths (41.42 percent) of all respondents had a college degree (27.81 percent) or a graduate/professional degree (13.61 percent). Unlike in 2009, a larger percentage of past-year players (30.46 percent) than non-players (26.46 percent) earned a college degree. Average lottery participation rates did not, however, vary significantly among educational categories of High School Graduate/GED, Some College, no degree, and College Degree.



- Slightly more than two-thirds of all respondents (35.84 percent) categorized their occupations as "professional specialty", the highest occupational rate among all respondents. Executive, administrative, and managerial occupations (16.16 percent) and Technicians and Related Support occupations (8.49 percent) were the second and third largest occupational categories among respondents, respectively. Thirty-seven percent of non-players (37.34) and two-thirds of past-year players (33.10 percent) classified their occupations as professional specialty.
- Note, as in 2009, income, education, age, own or rent home, and occupation were not statistically significant in the 2010 survey.

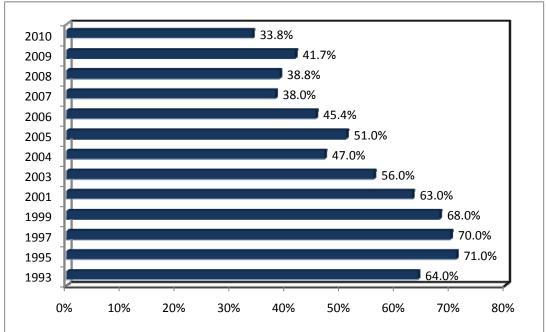


#### **III. GAME FINDINGS**

#### IIIa. ANY GAME RESULTS

#### Figure 1

Percentage of Respondents Playing Any Lottery Game



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

Figure 1 compares past-year Texas lottery participation rates over time for those playing any Lottery games since the agency's inception in 1993. The percentage of respondents playing any lottery game has decreased steadily since 1995, with the notable exceptions of a four percentage point increase between 2004 and 2005, and a three percentage point increase between 2008 and 2009. For 2010, however, the Texas lottery participation rate decreased by as much as eight percentage points from 2009 (from 41.7 to 33.8).

The average monthly dollar amount spent on any lottery game, excluding outlying values, was \$38.92. Following the projection formula used in previous lottery studies, we applied a "weighted" average monthly dollar amount spent and extrapolated it to the Texas population to compare with actual revenue.<sup>6</sup> Our survey data provided for estimated annual sales in Texas to be approximately \$2.84 billion. When applying the margin of error calculation for this subset of the sample, the expected forecast of actual lottery sales ranged between \$2.77 billion and \$2.90 billion. This range is lower than the actual lottery ticket sales for fiscal year 2009 (\$3.72 billion).



Table 2 shows that the participation rates in 2010 by Hispanic origin and employment status were statistically significant. Specifically, past-year participation rates were greater for Hispanics (41.2%) than non-Hispanics (32.5%). Similarly, participation was higher among respondents who were employed full-time and part-time (39.0 percent) compared to those who were unemployed or retired. In contrast, the 2010 participation findings under the categories of education, income, race, gender and age were not statistically significant. Comparing 2010 survey results with those from 2009, participation rates had decreased for all categories.

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

Year	Percentage played	Median Dollars Spent
2010	33.8	\$10.00
2009	41.7	10.00
Demographic Factors 2010		
Education		
Less than high school diploma	22.7	16.00
High school degree	33.3	10.50
Some college	38.1	9.00
College degree	37.0	8.00
Graduate degree	23.6	4.50
Income		
Under \$12,000	26.0	11.00
\$12,000 to \$19,999	30.1	5.00
\$20,000 to \$29,999	45.8	11.00
\$30,000 to \$39,999	38.5	13.00
\$40,000 to \$49,999	38.9	14.00
\$50,000 to \$59,999	38.5	12.00
\$60,000 to \$74,999	37.5	11.00
\$75,000 to \$100,000	36.2	8.00
More than \$100,000	33.2	10.00
Race		
White	33.4	8.00
Black	37.9	20.00
Asian	11.8	17.50
Native American Indian	44.4	7
Other	38.1	11.50
Hispanic origin*		
Yes	41.2	13.50
No	32.5	8.00
Gender		
Female	33.4	6.00
Male	34.3	11.00



#### Table 2 (continued)

Year	Percentage played	Median Dollars Spent
Age		
18 to 24	14.7	7.00
25 to 34	31.0	15.00
35 to 44	43.4	10.00
45 to 54	43.9	10.00
55 to 64	39.1	10.00
65 or older	24.0	8.00
Employment status***		
Employed full/part time	39.0	10.00
Unemployed	27.8	10.00
Retired	27.9	9.00

**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 3Participation and Dollars Spent by Lottery District

	2009	2010	2010	2010
District	Percent Playing Any Game	Percent Playing Any Game	Average Amount Spent Per Month among Lottery Past- Year Players	Median Amount Spent Per Month among Lottery Past- Year Players
Abilene	39.80%	29.3	\$4.43	\$6.50
Austin	39.3	31.9	5.10	5.00
El Paso**	56.1	25.0	18.85	10.00
Houston*	41.1	32.9	7.47	8.00
Irving	41.1	35.6	13.25	10.00
Lubbock	29.3	25.0	6.04	11.00
McAllen	40.9	36.6	18.07	13.00
San Antonio	48.2	39.5	16.40	17.00
Tyler	41.5	35.5	9.88	10.00
Victoria	49.2	45.1	16.80	10.00

**Note**: \* p< 0.05, \*\* p< 0.01, \*\*\* p<0.001.

- Table 3 shows the 2010 participation rates in any Texas Lottery games were highest in the Victoria (45.1 percentage points), San Antonio (39.5 percentage points) and McAllen (36.6 percentage points) lottery districts. El Paso and Lubbock districts both recorded the lowest participation rate of 25.0 percent.
- Compared to 2009, participation rates for 2010 have decreased for all districts. Most notable
  was the El Paso district, down from the highest rate in 2009 to the lowest rate in 2010 (a



decrease of 31.1 percentage points). The other districts that have experienced sizable decrease in rates include Abilene (a decrease of 10.5 percentage points), San Antonio (a decrease of 8.7 percentage points) and Houston (a decrease of 8.2 percentage points). Note however, differences in percent playing any game by district reported in the 2010 survey were not statistically significant at p<0.05 level except for the El Paso and Houston districts.

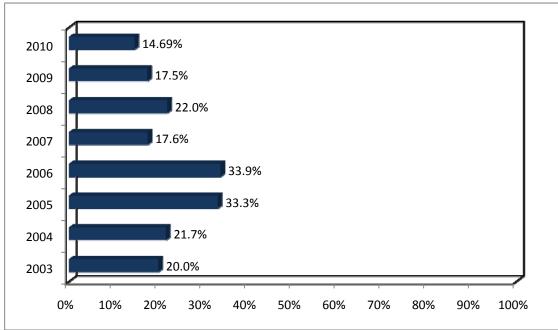
 The lottery districts demonstrating the highest average monthly amount spent per player were El Paso (\$18.85) and McAllen (\$18.07). The lowest average monthly amounts spent per player were found in the Abilene (\$4.43) and Austin (\$5.10) districts.



#### **IIIb. PICK 3 DAY RESULTS**

#### Figure 2





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

Figure 2 shows that fifteen percent (14.69) of past year players played Pick 3 Day. It indicates, however, a 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=84)

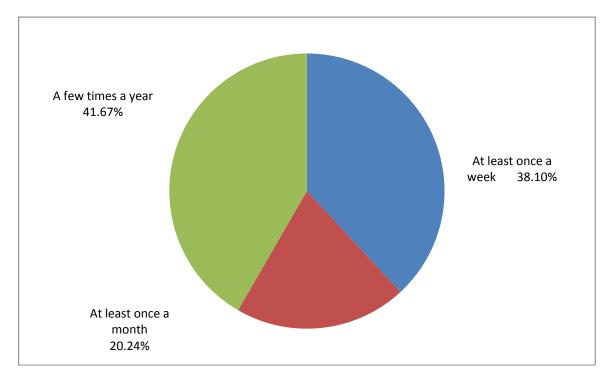


Figure 3 illustrates that about two-fifths (38.10 percent) of respondents that purchased Pick 3 Day tickets purchased them at least once a week, a decrease of approximately five percentage points compared to 2009. Twenty percent purchased tickets at least once a month, and the remaining two-fifths (41.67 percent) of the respondents purchased them only a few times a year.

#### Table 4 Average Times Played Pick 3 Day

Played Pick 3 Day	Average Number of Times Played
Per week for weekly past-year players <sup>8</sup>	2.05
Per month for monthly past-year players <sup>9</sup>	5.59
Per year for yearly past-year players <sup>10</sup>	6.58

Table 4 shows that weekly players of Pick 3 Day played an average number of 2.05 times per week; monthly players played an average number of 5.59 times per month; and yearly players played an average number of 6.58 times per year. There were decreases in all three categories of average times played in Pick 3 Day from 2009 to 2010. 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>11</sup>



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

Pick 3 Day	Dollars Spent
Average spent per play	\$4.85
Average spent per month (mean) <sup>12</sup>	13.45
Average spent per month (median)	5.00

Table 5 shows that Pick 3 Day players spent an average of \$4.85 per play, or \$1.68 less than in 2009. Those who reported playing the game on a monthly basis spent an average of \$13.45 per month, which is similar to the average spent (\$13.60) in 2009. 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 \$5.00 or more a month on playing Pick 3 Day.



#### 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		
2010	14.7	\$5.00
2009	17.5	4.50
2010 Demographics		
Education**		
Less than high school diploma	35.0	5.00
High school degree	19.3	5.00
Some college	14.9	4.00
College degree	8.2	5.00
Graduate degree	15.1	2.00
Income**		
Less than \$12,000	32.0	10.00
\$12,000 to \$19,999	8.0	
\$20,000 to \$29,999	20.8	5.00
\$30,000 to \$39,999	28.0	0.50
\$40,000 to \$49,999	14.3	3.00
\$50,000 to \$50,999	11.4	
\$60,000 to \$74,999	4.8	
\$75,000 to \$100,000	14.0	1.00
More than \$100,000	8.9	2.50
Race		
White	12.0	1.00
Black	29.3	10.00
Asian		
Native American Indian		
Other	16.1	12.00
Hispanic Origin		
Yes	18.5	5.00
No	14.1	5.00
Gender*		
Female	17.6	4.50
Male	11.3	5.00
Age		
18 to 24	8.3	
25 to 34	17.9	4.00
35 to 44	18.3	1.00
45 to 54	13.3	5.00
55 to 64	16.8	4.00
65 or older	13.0	16.00



#### Table 6 (continued)

Employment status		
Employed full/part time	13.3	4.00
Unemployed	19.4	16.00
Retired	13.2	5.00

**Note**: \* p < 0.05, \*\* p < 0.01. In Table 6, the significance markings refer only to the percentage played.

Table 6 indicates that less people reported playing Pick 3 Day during the past year for the 2010 survey than did for 2009 (14.7 percent and 17.5 percent, respectively), although the decline is not statistically significant. The differences in education, income and gender between past-year players who played Pick 3 Day and those who did not were statistically significant.

Some of the key findings are:

- Compared to 2009, the 2010 data illustrate a more distinct difference between the respondents in lower income ranges and those in the higher income groups. On a yearover-year basis, participation rates among Pick 3 Day past-year players tended to be much higher for the low household income ranges (except those in the range of \$12,000 to \$19,999) than those in the middle and high household income ranges.
- The differences in income between past-year players who played Pick 3 Day and those who did not were statistically significant. Please note, however, that the sample sizes of some income categories were small.
- Similar to 2009, participation was higher among players with less than a high school diploma versus all other educational categories, and the rate for this group has increased to 35.0 percent in 2010 (versus 24.0 percent last year). The differences in education between pastyear players who played Pick 3 Day and those who did not were statistically significant.
- As in last year, females had a higher participation rate than males in 2010 (17.6 percent and 11.3 percent, respectively). The differences in gender between past-year players who played Pick 3 Day and those who did not were statistically significant.
- There were no significant differences in race, Hispanic origin, age, and employment status between past-year players who played Pick 3 Day in 2010 and those who did not.



Figure 4 Years Playing Pick 3 Day (n=78)

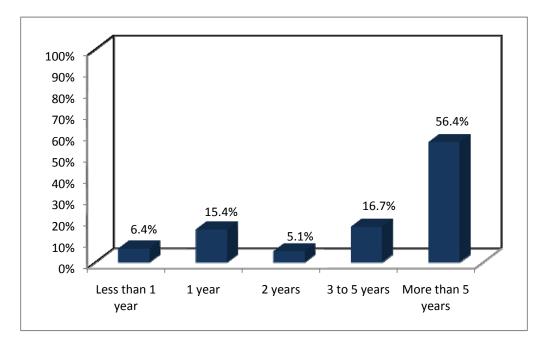
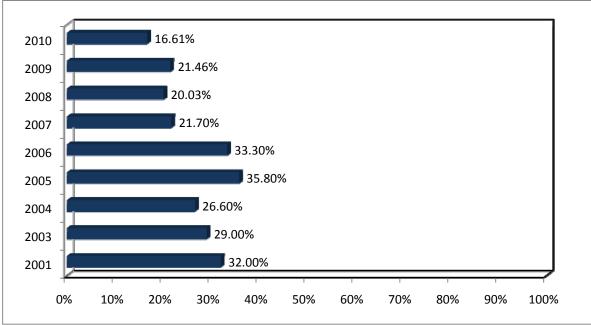


Figure 4 shows that fifty-seven percent of the respondents that played Pick 3 Day reported playing it for more than 5 years, which is not much different from what was reported in 2009. At the same time, more than one-fifth (21.8 percent) of respondents reported having played Pick 3 Day for less than two years.



#### **IIIC. CASH 5 RESULTS**

#### Figure 5 Percentage Playing Cash 5



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

Figure 5 illustrates that 16.61 percent of past year players played Cash 5. This is a decline of 4.85 percentage points compared to 2009.



#### Figure 6 Frequency of Purchasing Cash 5 Tickets (n=95)

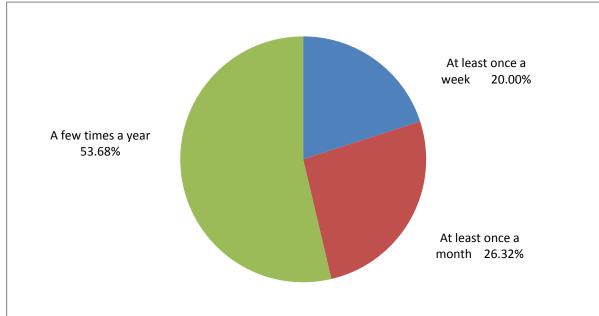


Figure 6 shows that exactly twenty percent of the respondents that purchased Cash 5 tickets purchased them at least once a week, a decrease of sixteen percentage points compared to 2009. Twenty-six percent (26.32) purchased tickets at least once a month, and fifty-four percent (53.68) purchased Cash 5 tickets just a few times a year.

#### Table 7 Average Times Played Cash 5

Played Cash 5	Average Number of Times Played
Per week for weekly past-year players	2.48
Per month for monthly past-year players	5.27
Per year for yearly past-year players <sup>13</sup>	12.29

Table 7 shows that weekly players of Cash 5 played an average number of 2.48 times per week, monthly players played an average number of 5.27 times per month, and yearly players played an average number of 12.29 times per year.



#### Table 8 Dollars Spent on Cash 5

Cash 5	Dollars Spent
Average spent per play	\$5.03
Average spent per month (mean) <sup>14</sup>	8.38
Average spent per month (median)	5.00

Table 8 shows that Cash 5 players spent an average of \$5.03 per play. Those who reported playing the game at a monthly or more frequent basis spent an average of \$8.38 per month. Approximately half of the respondents were likely to spend \$5.00 or less a month on playing Cash 5.

Table 9 shows a statistically significant difference on the overall participation rates between 2009 and 2010. The differences in income and gender between past-year players who played Cash 5 and those who did not were statistically significant.

- First, there was a decline of 4.9 percentage points in the participation rates between 2010 and 2009 for playing Cash 5 (16.6 percent and 21.5 percent, respectively). The difference was statistically significant.
- The differences in gender between past-year players who played Cash 5 and those who did not were statistically significant. Similar to the 2009 survey, the participation rates among past-year Cash 5 players were higher for females (20.1 percent) than for males (12.4 percent) in 2010.
- The participation rates were highest for the lowest income category of less than \$12,000 (34.6 percent), followed by the income category of \$20,000 to \$29,999 (26.4 percent). Please note, however, that the sample sizes of some income categories were small and therefore limit generalizations to the Texas population at large.

• The differences in education, race, age, Hispanic origin, 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	

Cash 5	Percentage Played	Median Dollars Spent
Year*		
2010	16.6	\$3.00
2009	21.5	3.50
2010 Demographics		
Education		
Less than high school diploma	15.0	15.00
High school degree	16.7	4.00
Some college	17.8	1.50
College degree	16.9	3.00
Graduate degree	14.8	0.50
Income*		
Less than \$12,000	34.6	8.00
\$12,000 to \$19,999	12.0	
\$20,000 to \$29,999	26.4	2.00
\$30,000 to \$39,999	18.6	5.00
\$40,000 to \$49,999	11.9	4.00
\$50,000 to \$50,999	14.3	10.00
\$60,000 to \$74,999	19.1	5.00
\$75,000 to \$100,000	13.7	
More than \$100,000	12.2	3.00
Race		
White	15.0	2.00
Black	17.1	5.00
Asian		
Native American Indian		
Other	21.0	4.00
Hispanic Origin		
Yes	23.9	4.00
No	15.1	2.50
Gender*		
Female	20.1	3.00
Male	12.4	4.00
Age		
18 to 24	30.8	
25 to 34	20.5	10.00
35 to 44	10.8	
45 to 54	21.5	5.00
55 to 64	17.7	3.00
65 or older	13.8	2.00



#### Table 9 (continued)

Employment status		
Employed full/part time	15.1	3.00
Unemployed	21.6	2.50
Retired	16.3	3.00

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

#### Figure 7 Years Playing Cash 5 (n=87)

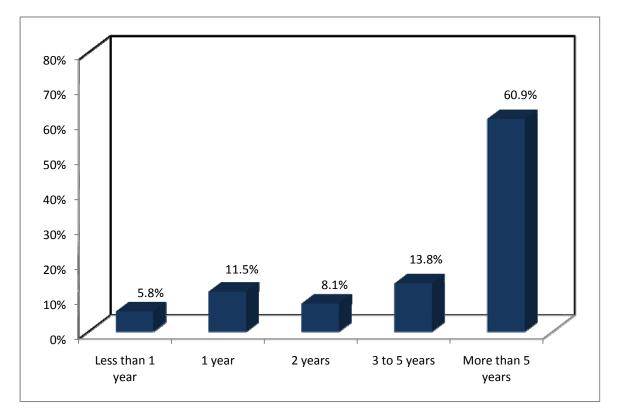
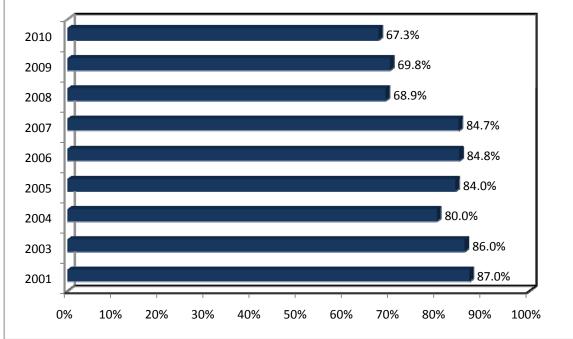


Figure 7 shows that over three-fifths (60.9 percent) of the respondents who played Cash 5 during the past year reported playing it for more than five years. On the other hand, 17.3 percent of respondents reported having played Cash 5 for less than two years.



#### **IIId. LOTTO TEXAS RESULTS**

#### Figure 8



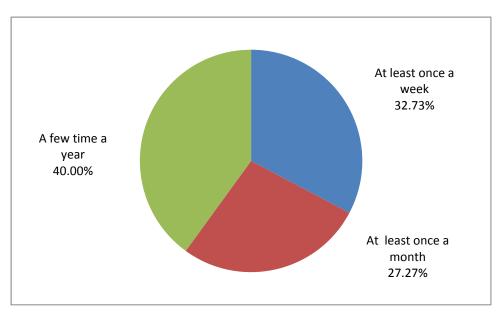
Percentage Playing Lotto Texas

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

Figure 8 illustrates that sixty-seven percent (67.3) of past year players played Lotto Texas. As in past years, Lotto Texas was the most popular single game among players, and participation rates among players in 2010 approached the seventy percent that reported playing Lotto Texas in 2009.



#### Figure 9 Frequency of Purchasing Lotto Texas Tickets (n=385)



About one-third (32.73) of respondents that purchased Lotto Texas tickets purchased them at least once a week, as illustrated in Figure 9. It is a four percentage point (3.95) decrease from 2009. More than twenty-seven percent (27.27) purchased the tickets at least once a month while forty percent (40.00) indicated having purchased Lotto Texas tickets a few times a year.

# Table 10Average Times Played Lotto Texas

Lotto Texas	Average Number of Times Played	
Per week for weekly past-year players	1.56	
Per month for monthly past-year players <sup>15</sup>	4.15	
Per year for yearly past-year players <sup>16</sup>	7.55	

Weekly players of Lotto Texas played an average number of 1.56 times per week, monthly players played an average number of 4.15 times per month, and yearly players played an average number of 7.55 times per year, as shown in Table 10.



# Table 11Dollars Spent on Lotto Texas

Lotto Texas	Dollars Spent
Average spent per play <sup>17</sup>	\$4.17
Average spent per month (mean) <sup>18</sup>	10.46
Average spent per month (median) <sup>19</sup>	5.00

Table 11 shows that Lotto Texas players spent an average of \$4.17 per play. Those who reported playing the game on a monthly or more frequent basis spent an average of \$10.46 per month. About half of the respondents were likely to spend \$5.00 or more a month on playing Lotto Texas.

Table 12 presents demographic results. There was no statistically significant difference comparing participation rates between 2009 and 2010. Only the differences in age between past-year players who played Lotto Texas and those who did not were statistically significant.

Similar to 2009, the percentage of past year players who played Lotto Texas increased as age increased in general. Over seventy percent (71.1) of those aged 65 years or older reported playing Lotto Texas, which was two times higher than those reported by the age group of 18-24 (36.4 percent).

 The differences in education, income, 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 12Lotto Texas Players and Median Dollars Spent per Month by Past-Year PlayerDemographics

Lotto Texas	Percentage Played	Median dollars spent
Year		
2010	67.3	\$5.00
2009	69.8	5.00
2010 Demographics		
Education		
Less than high school diploma	55.0	8.00
High school degree	60.5	5.00
Some college	73.4	4.00
College degree	72.5	5.00
Graduate degree	67.3	2.00
Income		
Less than \$12,000	54.2	8.00
\$12,000 to \$19,999	66.7	2.50
\$20,000 to \$29,999	68.5	8.00
\$30,000 to \$39,999	72.1	4.00
\$40,000 to \$49,999	61.9	4.00
\$50,000 to \$59,999	77.1	5.00
\$60,000 to \$74.999	75.0	3.00
\$75,000 to \$100,000	64.7	5.00
More than \$100,000	69.3	5.00
Race		
White/Anglo	70.2	4.00
Black/African American	65.3	5.00
Asian	66.7	10.00
Native American Indian		
Other	66.3	5.00
Hispanic Origin		
Yes	64.8	5.00
No	69.4	4.00
Gender		
Female	67.0	4.00
Male	70.5	5.00

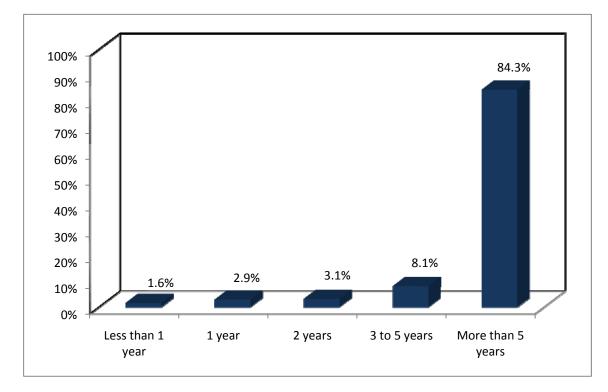


#### Table 12 (continued)

Age**		
18 to 24	36.4	2.50
25 to 34	55.6	5.00
35 to 44	62.7	5.00
45 to 54	68.7	4.50
55 to 64	74.0	5.00
65 or older	71.1	5.00
Employment Status		
Employed full/part time	68.6	4.00
Unemployed	50.0	5.00
Retired	71.9	5.00

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

#### Figure 10 Years Playing Lotto Texas (n=383)



According to Figure 10, most respondents (84.3 percent) indicated that they have played Lotto Texas for more than five years.



#### IIIe. TEXAS LOTTERY SCRATCH OFF TICKETS RESULTS

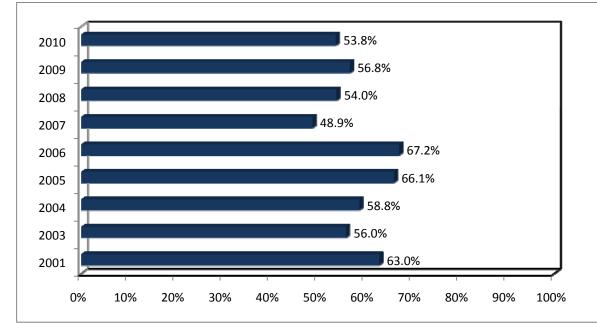


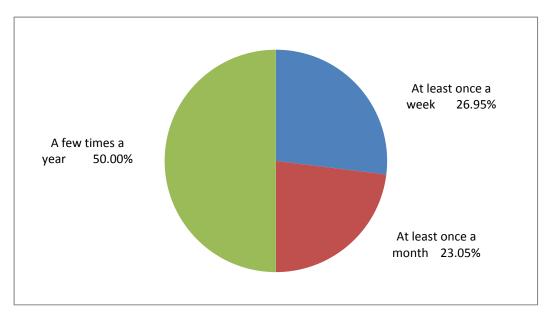
Figure 11 Percentage Playing Texas Lottery Scratch Off Tickets

Figure 11 indicates that almost fifty-four percent (53.8) of past year players played Texas Lottery Scratch Off tickets. which was slightly lower than 2009 (57 percent).



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

#### Figure 12 Frequency of Purchasing Texas Lottery Scratch Off Tickets (n=308)



Twenty-seven percent (26.95) of respondents that played Scratch-off tickets reported that they purchased them at least once a week, as shown in Figure 12. Twenty-three percent (23.05) purchased tickets at least once a month while exactly half (50 percent) purchased tickets a few times a year.

#### Table 13 Average Time Played Texas Lottery Scratch Off Tickets

Texas Lottery Scratch Off	Average Number of Times Played
Per week for weekly past-year players	2.02
Per month for monthly past-year players <sup>20</sup>	5.25
Per year for yearly past-year players <sup>21</sup>	17.02

Table 13 shows that weekly players of Texas Lottery Scratch Off tickets played an average number of 2.02 times per week, monthly players played an average number of 5.25 times per month, and yearly players played an average number of 17.02 times per year.



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

Texas Lottery Scratch Off Tickets	Dollars Spent
Average spent per play <sup>22</sup>	\$7.44
Average spent per month (mean) <sup>23</sup>	11.10
Average spent per month (median) <sup>24</sup>	5.00

Table 14 reports that Texas Lottery Scratch Off players spent an average of \$7.44 per play. Those who reported playing the game on a monthly or more frequent basis spent an average of \$11.10 per month. Approximately half of the respondents spent \$5.00 or more per month playing Texas Lottery Scratch Off tickets.

Table 15 below shows that the differences in education, age and employment status between past-year players who played Texas Lottery Scratch Off tickets and those who did not were statistically significant.

- The participation rate for Texas Lottery Scratch Off tickets past-year players with high school degree or some college was above sixty percent, higher than those in other educational groups. Past-year players with college degree reported the lowest participation rate (35.8 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 age between past-year players who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who played Texas Lottery Scratch Off tickets and those who did not were statistically significant.
- As in 2009, younger respondents were more likely to play Scratch Off games than older respondents. Nearly seventy percent (69.2) of respondents in the 18 to 24 age category indicated that they played Texas Lottery Scratch Off tickets in the past year, while forty-three percent (43.1) of respondents 65 years or older reported playing the games in the past year. Note, however, that the sample sizes of some age categories were small.
- The differences in employment status between past-year players who played Texas Lottery Scratch Off tickets and those who did not were statistically significant.
- In contrast to the 2009 findings, unemployed respondents were less likely to purchase Scratch Off tickets than employed and retired respondents in the 2010 survey. Specifically, the participation rate among the unemployed has decreased to forty-six percent (45.9) from seventy-three percent in 2009.
- There were no significant differences in income, race, Hispanic Origin and gender 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		
2010	53.8	\$5.00
2009	56.8	5.00
2010 Demographics		
Education**		
Less than high school diploma	45.0	20.00
High school degree	62.8	5.00
Some college	61.2	4.00
College degree	48.2	4.00
Graduate degree	35.8	5.00
Income		
Less than \$12,000	65.4	8.00
\$12,000 to \$19,999	68.0	15.00
\$20,000 to \$29,999	59.3	4.00
\$30,000 to \$39,999	48.8	5.00
\$40,000 to \$49,999	59.5	5.00
\$50,000 to \$59,999	56.0	10.00
\$60,000 to \$74.999	63.4	5.50
\$75,000 to \$100,000	64.7	3.00
More than \$100,000	51.1	5.00
Race		
White/Anglo	52.5	5.00
Black/African American	72.2	5.00
Asian	33.3	
Native American Indian		
Other	56.8	7.00
Hispanic Origin		
Yes	55.6	8.50
No	54.6	5.00
Gender		
Female	58.0	4.00
Male	50.0	5.00
Age***		
18 to 24	69.2	5.00
25 to 34	78.9	10.00
35 to 44	49.4	5.00
45 to 54	63.2	5.00
55 to 64	51.9	5.00



#### Table 15 (continued)

65 or older	43.1	2.00
Employment status*		
Employed full/part time	58.4	5.00
Unemployed	45.9	9.00
Retire	47.2	2.00

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



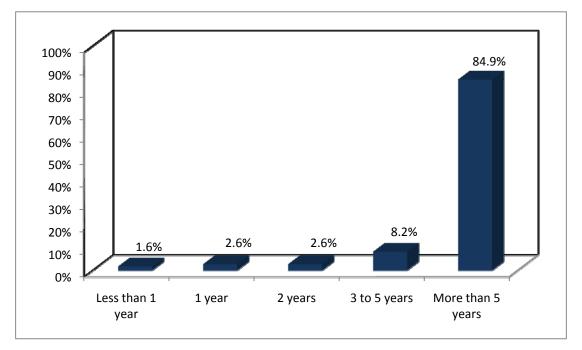


Figure 13 illustrates that a big majority (84.9 percent) of the respondents who played Texas Lottery Scratch Off Tickets reported playing them for more than 5 years.



#### **IIIF. TEXAS TWO STEP RESULTS**

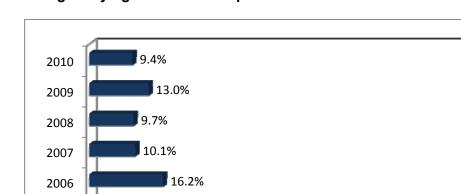
#### Figure 14

2005

2004

2003

0%



14.8%

17.0%

30%

20%

10.4%

10%

Percentage Playing Texas Two Step



As shown in Figure 14, slightly more than nine percent (9.4) of past year players played Texas Two Step, down by 3.6 percentage points compared to 2009.

50%

60%

70%

80%

90%

100%



#### Figure 15 Frequency of Purchasing Texas Two Step Tickets (n=54)

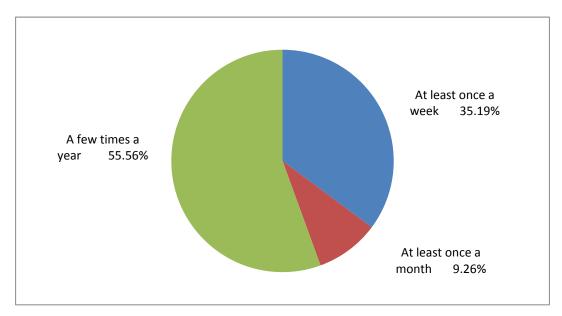


Figure 15 illustrates that thirty-five percent (35.19) of Texas Two Step players purchased tickets for the game at least once a week, a drop of nearly ten percentage points compared to 2009. Nine percent (9.26) indicated that they purchased tickets for Texas Two Step at least once a month. The majority, (55.56 percent) of Texas Two Step players purchased tickets a few times a year.

# Table 16Average Time Played Texas Two Step

Texas Two Step Players	Average Number of Times Played
Per week for weekly past-year players	3.86
Per month for monthly past-year players <sup>25</sup>	5.61
Per year for yearly past-year players <sup>26</sup>	12.70

Table 16 shows that weekly players of Texas Two Step played an average number of 3.86 times per week, monthly players played an average number of 5.61 times per month, and yearly players played an average number of 12.70 times per year.



## Table 17Dollars Spent on Texas Two Step

Texas Two Step Players	Dollars Spent
Average spent per play	\$3.56
Average spent per month (mean) <sup>27</sup>	14.72
Average spent per month (median) <sup>28</sup>	4.50

Respondents playing Texas Two Step spent an average of \$3.56 per play. Those who reported playing the game at a monthly or more frequent basis spent an average of \$14.72 per month and the median monthly expenditure was \$4.50, as shown in Table 17. Approximately one-half of the respondents were likely to spend \$4.50 or more a month on playing Texas Two Step.

As shown in Table 18 on the following page, the differences in income and age between pastyear players who played Texas Two Step and those who did not were statistically significant.

There was also a decline of 3.6 percentage points on the percentage played between 2009 and 2010 for Texas Two Step. The difference was statistically significant.

The participation rates were highest for the income category of \$20,000 to \$29,999 (23.1 percent), followed by the lower income group of \$12,000 to \$19,999 (16.0 percent). All other income categories showed single-digit participation rates. The differences in income 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 were twice as likely to play Texas Two Step than respondents in the younger age groups. The differences in age between pastyear players who played Texas Two Step and those who did not were statistically significant.

 There were no significant differences in educational level, race, Hispanic origin, gender, and employment status between past-year players who played Texas Two Step in 2010 and those who did not.



#### Table 18

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

Texas Two Step	Percentage Played	Median Dollars Spent
Year*		
2010	9.4	\$3.00
2009	13.0	5.00
2010 Demographics		
Education		
Less than high school diploma	5.0	
High school degree	7.4	<sup>29</sup>
Some college	12.9	4.50
College degree	9.4	4.50
Graduate degree	7.4	
Income*		
Less than \$12,000	7.7	
\$12,000 to \$19,999	16.0	
\$20,000 to \$29,999	23.1	1.50
\$30,000 to \$39,999	7.1	
\$40,000 to \$49,999	9.5	3.00
\$50,000 to \$59,999	8.6	
\$60,000 to \$74.999	7.1	
\$75,000 to \$100,000	9.8	2.00
More than \$100,000	3.3	30
Race		
White/Anglo	8.1	3.00
Black/African American	15.8	12.00
Asian		
Native American Indian		
Other	11.0	1.00
Hispanic Origin		
Yes	12.7	5.00
No	8.7	3.00



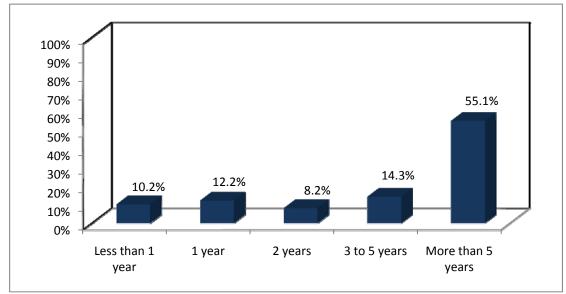
#### Table 18 (continued)

Gender		
Female	10.4	2.00
Male	8.4	5.00
Age*		
18 to 24		
25 to 34	5.1	
35 to 44	5.0	2.50
45 to 54	11.1	2.00
55 to 64	10.7	6.50
65 or older	11.2	1.00
Employment Status		
Employed full/part time	9.3	2.50
Unemployed	10.8	13.00
Retired	10.6	1.00

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



Figure 16 Years Playing Texas Two Step (n=89)



As shown in Figure 16, fifty-five percent (55.1) of respondents indicated that they have played Texas Two Step for more than five years. On the other hand, more than one-fifth (22.4 percent) of respondents reported having played Texas Two Step for less than two years.



#### **IIIg. MEGA MILLIONS RESULTS**

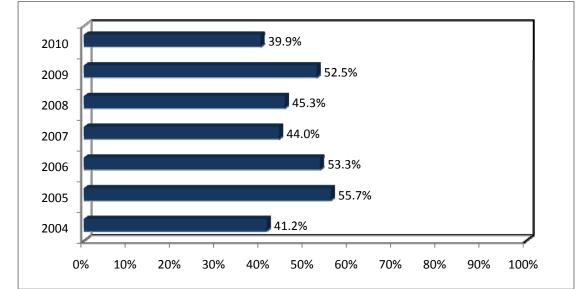


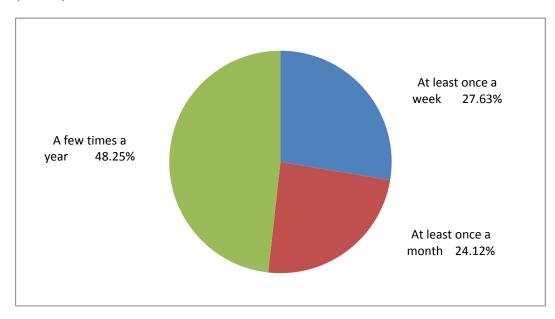


Figure 17 illustrates that forty percent (39.9 percent) of past year players played Mega Millions. This was thirteen percentage points lower compared to the 2009 survey (52.5 percent).



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

#### Figure 18 Frequency of Purchasing Mega Millions Tickets (n=228)



Twenty-eight percent (27.63) of respondents reported that they purchased Mega Millions tickets at least once a week (see Figure 18). About a quarter (24.12 percent) said that they purchased Mega Millions tickets at least once a month, while nearly half (48.25 percent) of the respondents purchased Mega Millions tickets a few times a year.

## Table 19Average Times Played Mega Millions

Mega Millions	Average Number of Times Played	
Per week for weekly past-year players	1.42	
Per month for monthly past-year players	3.95	
Per year for yearly past-year players <sup>31</sup>	16.85	

As shown in Table 19, weekly players of Mega Millions played an average number of 1.42 times per week, monthly players played an average number of 3.95 times per month, and yearly players played an average number of 16.85 times per year.



#### Table 20 Dollars Spent on Mega Millions

Mega Millions	Dollars Spent
Average spent per play	\$4.34
Average spent per month (mean) <sup>32</sup>	7.93
Average spent per month (median)	4.00

Mega Millions players spent an average of \$4.34 per play, as shown in Table 20. Those who reported playing the game at a monthly or more frequent basis spent an average of \$7.93 per month. Approximately half of the respondents spent \$4.00 or more a month on purchasing Mega Millions tickets.

As Table 21 shows, statistically speaking, there was a significant difference between player participation rates between 2009 and 2010. Fewer people reported playing Mega Millions during the past year for the 2010 survey than did for 2009 (39.9 percent versus 52.5 percent).

However, 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 21Mega Millions: Lottery Play and Median Dollars Spent per Month by Past-Year PlayerDemographics

Mega Millions	Percentage Played	Median Dollars Spent
Year***		
2010	39.9	\$3.00
2009	52.5	3.00
2009 Demographics		
Education		
Less than high school diploma	35.0	12.00
High school degree	37.6	3.00
Some college	43.2	2.00
College degree	42.2	3.00
Graduate degree	38.9	3.00
Income		
Less than \$12,000	42.3	5.00
\$12,000 to \$19,999	36.0	16.00
\$20,000 to \$29,999	53.7	8.00
\$30,000 to \$39,999	29.3	3.50
\$40,000 to \$49,999	34.2	1.50
\$50,000 to \$59,999	44.1	3.00
\$60,000 to \$74,999	35.7	4.00
\$75,000 to \$100,000	42.0	4.00
More than \$100,000	43.8	2.00
Race		
White	37.2	2.00
Black	46.8	2.00
Asian	66.7	7.00
Native American Indian		
Other	45.7	5.00
Hispanic origin		
Yes	45.4	4.00
No	39.6	2.00
Gender		
Female	40.0	1.00
Male	41.5	5.00
Age		
18 to 24	23.1	
25 to 34	39.5	5.00
35 to 44	35.4	4.00
45 to 54	45.1	2.00
55 to 64	44.2	3.00
65 or older	36.0	4.00



#### Table 21 (continued)

Employment status		
Employed full/part time	43.8	2.00
Unemployed	35.1	8.00
Retired	36.1	3.00

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

#### Figure 19 Years Playing Mega Millions (n=216)

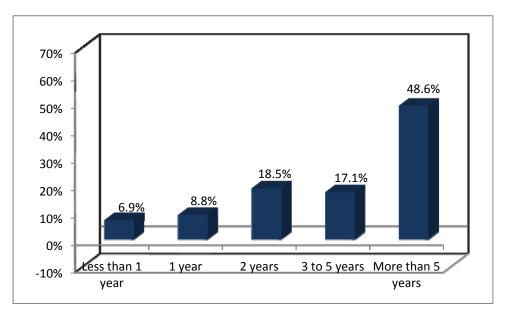
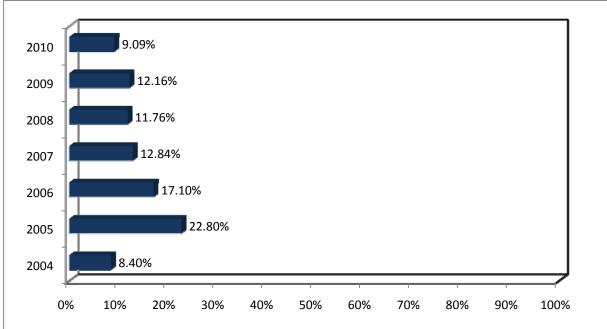


Figure 19 shows that nearly half (48.6 percent) of the respondents mentioned that they have been playing Mega Millions for more than 5 years. At the same time, sixteen percent (15.7) of respondents reported having played Mega Millions for less than two years.



#### IIIh. MEGAPLIER RESULTS

#### Figure 20 Percentage Playing Megaplier

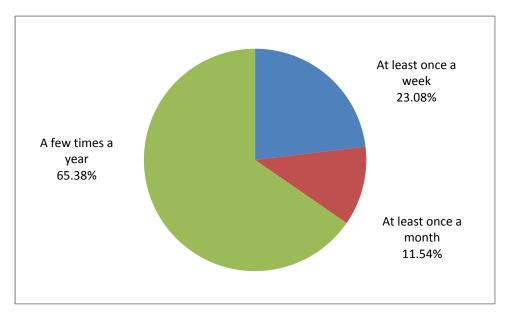


Source: Hobby Center for Public Policy 2007, 2008, 2009, and 2010 survey data and reports from 2001-2006.

Figure 20 illustrates that nearly ten percent (9.09) of past year players played Megaplier, a slight decline of two percentage points from 2009.



Figure 21 Frequency of Purchasing Megaplier Tickets (n=52)



As shown in Figure 21, more than two-thirds (65.38 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, less than a quarter (23.08 percent) of the respondents purchased tickets at least once a week, and a smaller proportion (11.54 percent) bought tickets at least once a month.

### Table 22Average Times Played Megaplier

Megaplier	Average Number of Times Played
Per week for weekly past-year players	1.57
Per month for monthly past-year players	4.50
Per year for yearly past-year players <sup>33</sup>	15.93

Weekly players of Megaplier played an average number of 1.57 times per week, monthly players played an average number of 4.50 times per month, and yearly players played an average number of 15.93 times per year, as shown in Table 22.



### Table 23Dollars Spent on Megaplier

Megaplier	Dollars Spent
Average spent per play	\$4.60
Average spent per month (mean)	8.39
Average spent per month (median)	4.00

Table 23 illustrates that respondents playing Megaplier spent an average of \$4.60 per play. Those who reported playing the game at a monthly or more frequent basis spent an average of \$8.39 per month. About 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 decrease in participation rates between 2009 and 2010 for Megaplier (from 12.2 percent to 9.1 percent).

In addition, the differences in gender between past-year players who played Megaplier and those who did not were statistically significant.

- Specifically, the participation rates for females more than doubled that of males (12.1 percent and 5.7 percent respectively). Female Megaplier players also tended to spend more than their male counterparts (\$3.00 and \$2.50 respectively).
- There were no significant differences in education, income, race, Hispanic origin, age, and employment status between past-year players who played Megaplier in 2010 and those who did not.



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

Megaplier	Percentage Played	Median Dollars Spent
Year <sup>34</sup>		
2010	9.1	\$3.00
2009	12.2	4.00
2009 Demographics		
Education		
Less than high school diploma		
High school degree	9.5	1.50
Some college	14.3	2.50
College degree	7.8	4.00
Graduate degree	2.0	
Income		
Less than \$12,000	7.7	
\$12,000 to \$19,999	12.0	
\$20,000 to \$29,999	14.8	10.00
\$30,000 to \$39,999	2.4	
\$40,000 to \$49,999	5.0	
\$50,000 to \$59,999	11.4	4.50
\$60,000 to \$74,999	7.1	
\$75,000 to \$100,000	8.2	3.00
More than \$100,000	8.0	2.00
Race		
White	9.0	1.00
Black	10.7	5.50
Asian		
Native American Indian		
Other	11.3	12.00
Hispanic origin		
Yes	11.3	8.50
No	8.8	3.00
Gender**		
Female	12.1	3.00
Male	5.7	2.50
Age		
18 to 24		
25 to 34	14.3	12.00
35 to 44	8.8	1.00
45 to 54	13.4	2.50
55 to 64	7.7	2.50
65 or older	9.7	5.00

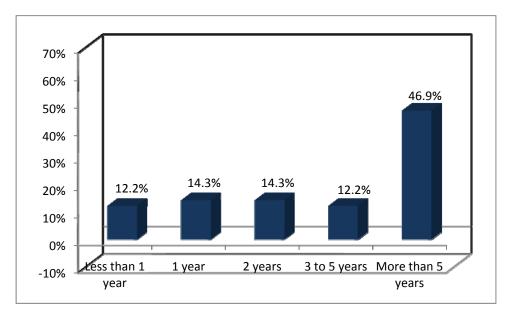


#### Table 24 (continued)

Employment status		
Employed full/part time	9.8	2.00
Unemployed	8.3	
Retired	8.2	3.00

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

#### Figure 22 Years Playing Megaplier (n=49)



Almost forty-seven percent (46.9) of the respondents who played Megaplier reported playing the game for more than 5 years while twenty-seven percent (26.5) of the players reported playing the game for less than 2 years.



#### IIIi. POWERBALL RESULTS

#### Percentage Playing Powerball

One hundred and twenty-five past-year lottery players (21.85 percent) indicated that they played Powerball.

Figure 23

## Frequency of Purchasing Powerball Tickets (n=125)

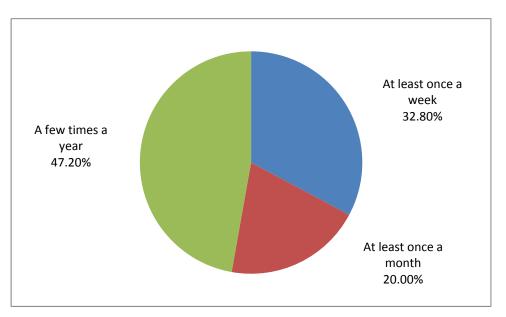


Figure 23 indicates that about one-third (32.80) of respondents who purchased Powerball tickets purchased them at least once a week. Exactly twenty percent (20.00) purchased the tickets at least once a month, while the remaining forty-seven percent (47.20) indicated having purchased Powerball tickets a few times a year.

### Table 25Average Times Played Powerball

Powerball	Average Number of Times Played
Per week for weekly past-year players	1.51
Per month for monthly past-year players	4.58
Per year for yearly past-year players <sup>35</sup>	17.16

Table 25 shows that weekly players of Powerball played an average number of 1.51 times per week; monthly players played an average number of 4.58 times per month; and yearly players played an average number of 17.16 times per year.



### Table 26Dollars Spent on Powerball

Powerball	Dollars Spent
Average spent per play	\$3.56
Average spent per month (mean)	9.22
Average spent per month (median)	4.50

As shown in Table 26, Powerball players spent an average of \$3.56 per play. Those who reported playing the game at a monthly or more frequent basis spent an average of \$9.22 per month. Approximately half of the respondents were likely to spend \$4.50 or more a month on Powerball.

Table 27 on the next page presents demographic results for Powerball participants. Only the differences in gender between past-year players who played Powerball and those who did not were statistically significant. The participation rate of males was twenty-four percent (23.6 percent) which was slightly higher than that of females (21.0 percent).

There were no significant differences in education, income, race, Hispanic origin, age, and employment status between past-year players who played Powerball in 2010 and those who did not.



# Table 27Powerball: Lottery Play and Median Dollars Spent per Month by Past-Year PlayerDemographics

Powerball	Percentage Played	Median Dollars Spent
Education		
Less than high school diploma		\$
High school degree	22.7	8.00
Some college	25.4	4.00
College degree	23.1	2.00
Graduate degree	14.8	3.50
Income		
Less than \$12,000	11.5	
\$12,000 to \$19,999	20.0	10.00
\$20,000 to \$29,999	27.8	8.00
\$30,000 to \$39,999	31.0	2.00
\$40,000 to \$49,999	19.0	2.50
\$50,000 to \$59,999	34.3	3.50
\$60,000 to \$74,999	22.0	4.00
\$75,000 to \$100,000	15.7	3.50
More than \$100,000	18.9	3.00
Race	10.5	5.00
White	21.5	3.50
Black	21.5	4.00
Asian	16.7	4.00
	10.7	
Native American Indian Other	15.9	5.00
	15.9	5.00
Hispanic origin	05.5	4.50
Yes	25.5	4.50
No Gender**	21.1	4.00
Female	21.0	2.00
Male	23.6	5.00
	23.0	5.00
Age 18 to 24	15.4	
25 to 34	18.4	5.00
	17.3	
35 to 44		5.00
45 to 54	25.9	2.00
55 to 64	22.1	4.00
65 or older	24.1	2.00
Employment status	22.0	4.00
Employed full/part time	23.0	4.00
Unemployed	21.6	11.00
Retired	21.9	2.00

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



Figure 24 Years Playing Powerball (n=119)

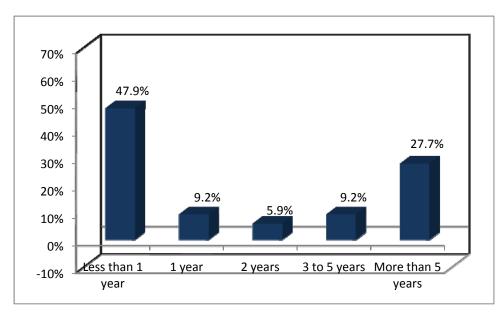


Figure 24 shows that nearly half (47.9 percent) of the respondents mentioned that they have been playing Powerball for less than one year. On the other hand, twenty-eight percent (27.7) of respondents reported having played Powerball for more than five years.



#### IV. SUMMARY

The Texas Lottery Commission 2010 Demographic Study surveyed approximately 1,700 Texas citizens aged 18 and over between early and late August of 2010. Texas registered lottery participation in general has decreased over the past decade with minor exceptions. Slightly more than one-third (34 percent) of survey respondents in 2010 said they participated in any of the Texas Lottery games in the past year, a statistically significant decrease of eight (8) percentage points compared to 2009 (see Table 1). Similar to the 2008 and 2009 surveys, there was a statistically significant difference between past-year players and non-players due to employment status. Unlike 2009, gender and race were found not statistically significant for the difference in participation, although Hispanic origin remained significant in 2010. Two demographic factors were statistically significant in the 2010 survey but were not in the previous year: marital status and children under 18 living in household. As in 2009, income, education, age, own or rent home, and occupation were not found to be statistically significant.

Among those who had participated in any game, only employment status and Hispanic origin were statistically significant, while other demographic factors were not statistically significant (see Table 2).

It is important to note that participation rates varied within demographic groups in terms of the type of game played (see Section III). Lottery participation rates between men and women differed for those who played Pick 3 Day, Cash 5, Megaplier, and Powerball. Same as 2009, participation rates varied significantly by age for Lotto Texas, Texas Lottery Scratch Off tickets, and Texas Two Step, while participation rates for Pick 3 Day and Texas Lottery Scratch Off tickets varied by educational levels. Income variations were found to be statistically significant for participation in Pick 3 Day. Cash 5, and Texas 2 Step, but not in other games. Lastly, the past-year Scratch Off participation rate was the only participation rate to vary by employment status.

Looking at the games separately, we observe a decline in participation in almost all the games played in 2010. In particular, we find that participation had fallen the most for Mega Millions (by 12.6 percentage points), followed by Cash 5 (by 4.85 percentage points). Lastly, 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.

A comparison of lottery play across districts between the 2009 and 2010 surveys revealed that participation rates declined for all districts (see Table 3). Most notable was the El Paso district, which fell off from the highest rate in 2009 (56.1 percent) to the lowest rate in 2010 (25.0 percent). In contrast, the Victoria district suffered the smallest decline in rates, from 49.2 percent in 2009 to 45.1 percent in 2010. Participation rates in any Texas Lottery games were highest in the Victoria (45.1 percent), San Antonio (39.5 percent) and McAllen (36.6 percent) lottery districts. The lowest rates were in the El Paso and Lubbock districts, both recorded the same rate of 25.0 percent. The El Paso (\$18.85) and McAllen (\$18.07) lottery districts reported the highest average monthly amount spent per player. On the other hand, the lowest average monthly amounts spent per player were found in the Abilene (\$4.43) and Austin (\$5.10) districts. Note, however, only the El Paso and Houston districts demonstrated a statistically significant decline in participation.



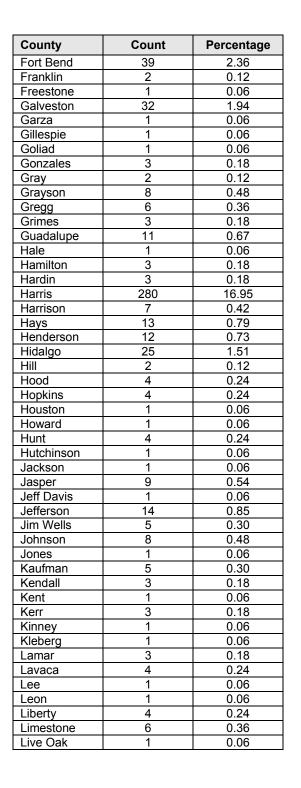
#### APPENDIX

# Table A-1Sample Population by County36(n=1,652)

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County	Count	Percentage
Anderson	4	0.24
Andrews	2	0.12
Angelina	8	0.48
Aransas	2	0.12
Archer	4	0.24
Atascosa	1	0.06
Austin	4	0.24
Bandera	2	0.12
Bastrop	2	0.12
Bee	3	0.18
Bell	26	1.57
Bexar	102	6.17
Bowie	9	0.54
Brazoria	42	2.54
Brazos	1	0.06
Brewster	1	0.06
Briscoe	1	0.06
Brown	5	0.30
Burleson	1	0.06
Burnet	7	0.42
Caldwell	2	0.12
Cameron	14	0.85
Camp	1	0.06
Cass	5	0.30
Chambers	2	0.12
Cherokee	2	0.12
Coleman	1	0.06
Collin	51	3.09
Colorado	5	0.30
Comal	6	0.36
Comanche	2	0.12
Cooke	7	0.42
Coryell	6	0.36
Dallam	1	0.06
Dallas	141	8.54
Dawson	2	0.12
De Witt	5	0.30
Deaf Smith	1	0.06
Delta	1	0.06
Denton	32	1.94
Donley	3	0.18
Duval	4	0.24
Eastland	1	0.06
Ector	8	0.48
El Paso	43	2.60
Ellis	14	0.85
Erath	2	0.12
Fisher	2	0.12





County	Count	Percentage
Llano	2	0.12
Lubbock	18	1.09
Lynn	1	0.06
Madison	1	0.06
Marion	2	0.12
Martin	1	0.06
Matagorda	4	0.24
McLennan	24	1.45
Medina	2	0.12
Midland	6	0.36
Mills	2	0.12
Montague	4	0.24
Montgomery	26	1.57
Morris	3	0.18
Nacogdoches	5	0.30
Navarro	3	0.18
	2	0.18
Newton Nolan	2	
	2 11	0.12
Nueces	1	0.67
Ochiltree		0.06
Orange	10	0.61
Palo Pinto	4	0.24
Panola	1	0.06
Parker	8	0.48
Polk	3	0.18
Potter	6	0.36
Presidio	1	0.06
Rains	1	0.06
Randall	10	0.61
Red River	2	0.12
Robertson	2	0.12
Rockwall	4	0.24
Rusk	3	0.24
San Jacinto	1	0.06
San Patricio	4	0.24
Shelby	3	0.18
Smith	17	1.03
Somervell	2	0.12
Starr	3	0.18
Stephens	2	0.12
Swisher	1	0.06
Tarrant	119	7.20
Taylor	12	0.73
Terrell	1	0.06
Terry	1	0.06
Titus	2	0.12
Tom Green	10	0.61
Travis	64	3.87
	1 37	0.01

County	Count	Percentage
Upshur	2	0.12
Uvalde	2	0.12
Val Verde	2	0.12
Van Zandt	7	0.42
Victoria	12	0.73
Walker	7	0.42
Waller	4	0.24
Ward	1	0.06
Washington	4	0.24
Webb	4	0.24
Wharton	4	0.24
Wheeler	1	0.06
Wichita	12	0.73
Williamson	26	1.57
Wilson	2	0.12
Wise	3	0.18
Wood	3	0.18
Young	1	0.06



#### Notes

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

<sup>2</sup> Information regarding the cell-phone and landline findings associated with the 2010 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. Note that discrepancies between total sample size and various variables are due to respondents either

refusing to answer or saying they did not know.

There was a significant difference between players and non-players regarding the distribution of employment status (p<0.001).

<sup>6</sup> The 2009 population estimate for persons 18 years and older in Texas is 17,892,823. The source for this estimate is the U.S. Census Bureau (http://quickfacts.census.gov/gfd/states/48000.html).

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>8</sup> Excludes respondents that indicated they played Pick 3 Day more than 12 times per week. If those respondents are included, the average per week number of times playing the game is 2.30.

<sup>9</sup> Excludes respondents that indicated they played Pick 3 Day more than 30 times per week. If those respondents are included, the average per month number of times playing the game is 7.32.

<sup>10</sup> 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 22.99.

<sup>11</sup> We follow this coding method for each game regarding average time played.

<sup>12</sup> The figure excludes the respondents that indicated having purchased more than \$100 of Pick 3 Day tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$16.35 per month.

<sup>13</sup> The figure excludes the respondents that indicated having played Cash 5 more than 52 times a year. If those respondents are included, the average number of times playing the game is 15.60 times a year.

<sup>14</sup> The figure excludes the respondents that indicated having played Cash 5 more than \$100 per month. If those respondents are included, the average number of dollars spent on the game is \$12.34 per month. <sup>15</sup> The average number of time playing Lotto Texas tickets of monthly past-year players excludes the

respondents who indicated that they played more than 40 times per month. If those respondents are included, the average number of time playing the game is 4.73 times per month.

<sup>16</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 24 times per year. If those respondents are included, the average number of times playing the game is 20.59 times per year.

<sup>17</sup> The figure excludes the respondents that indicated having purchased more than \$25 of Lotto Texas tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$4.74 per play.

<sup>18</sup> The figure excludes the respondents that indicated having purchased more than \$100 of Lotto Texas tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$11.59 per month.<sup>19</sup> When the respondents who indicated that they purchased more than \$ 100 of Lotto Texas tickets per

month are included or excluded, the median number does not change.

<sup>20</sup> This figure excludes respondents that claimed to have played Texas Lottery Scratch Off tickets more than 30 times per month. If those respondents are included, the average number of time playing the game is 5.75 times per month.

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 17.72 times per year. <sup>22</sup> This figure excludes respondents that claimed to have spent more than \$100 on Texas Lottery Scratch

off tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$7.75 per play.



<sup>23</sup> This figure excludes respondents that claimed to have spent more than \$100 of Texas Lottery Scratch off tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$21.91 per month.

<sup>24</sup> When the respondents who indicated that they purchased more than \$ 100 of Texas Lottery Scratch Off tickets per month are included or excluded, the median number does not change.

<sup>25</sup> The average number of time playing Texas Two Step tickets of monthly past-year players excludes the respondents who indicated that they played more than 30 times per month. If those respondents are included, the average number of time playing the game is 6.41 times per month.

<sup>26</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 80 times per year. If those respondents are included, the average number of time playing the game is 19.55 times per year.
<sup>27</sup> The average number of dollars spent per month excludes the respondents who indicated that they

<sup>27</sup> The average number of dollars spent per month excludes the respondents who indicated that they purchased more than \$100 of Texas Two Step tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$16.91 per month.

<sup>28</sup> The median number of dollars spent per month excludes the respondents who indicated that they purchased more than \$100 of Texas Two Step tickets per month. If those respondents are included, the median number of dollars spent for purchasing the tickets is \$5.00 per month.

<sup>29</sup> 135 out of 150 reported that they spent \$0.00 on Texas Two Step in the past year. If those respondents were excluded, the median dollars spent on this game would be \$5.00.

<sup>30</sup> 89 out of 90 respondents reported that they spent \$0.00 on Texas Two Step in the past year.

<sup>31</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 19.16 times per year.

<sup>32</sup> The average number of dollars spent per month excludes the respondents who indicated that they purchased more than \$100 of Mega Million tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$10.40 per month.

<sup>33</sup> The average number of time playing Megaplier 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 19 times per year.

<sup>34</sup> Difference between 2010 and 2009 players is statistically significant at p = 0.06.

<sup>35</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 22.34 times per year.

<sup>36</sup> The discrepancy between the sample in Table A-1 (n=1,652) and the total sample (n=1,691) is due to respondents stating that they "did not know" or were "unsure" of their county of residence. Some refused to answer the question.

