# Demographic Survey of Texas Lottery Players 2008





December 1, 2008

# TABLE OF CONTENTS

List of Figures	ii
List of Tablesi	iii
Executive Summary	1
I. Introduction and Method of Analysis	4
II. Sample Characteristics	6
III. Game Findings1	1
a. Any Game Results1	1
b. Pick 3 Day Results1	7
c. Sum It Up Feature with Pick 3 Day Results2	3
d. Pick 3 Night Results2	25
e. Sum It Up Feature with Pick 3 Night Results2	8
f. Cash 5 Results2	9
g. Lotto Texas Results	4
h. Texas Lottery Scratch Off Ticket Results4	0
i. Texas Two Step Results4	-5
j. Mega Millions Results5	1
k. Megaplier Results5	6
I. Daily 4 Results6	2
m. Sum It Up Feature with Daily 4 Results6	3
IV. Summary6	4
Appendix : List of Counties	5



### **LIST OF FIGURES**

Figure 1	Percentage of Respondents Playing Any Lottery Game	11
Figure 2	Percentage 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	Frequency of Purchasing Sum It Up Feature with Pick 3 Day	23
Figure 6	Percentage Playing Pick 3 Night	25
Figure 7	Years Playing Pick 3 Night	27
Figure 8	Percentage Playing Cash 5	29
Figure 9	Frequency of Purchasing Cash 5 Tickets	30
Figure 10	Years Playing Cash 5	33
Figure 11	Percentage Playing Lotto Texas	34
Figure 12	Frequency of Purchasing Lotto Texas Tickets	35
Figure 13	Years Playing Lotto Texas	39
Figure 14	Percentage Playing Texas Lottery Scratch Off Tickets	40
Figure 15	Frequency of Purchasing Texas Lottery Scratch Off Tickets	41
Figure 16	Years Playing Texas Lottery Scratch Off Tickets	44
Figure 17	Percentage Playing Texas Two Step	45
Figure 18	Frequency of Purchasing Texas Two Step Tickets	46
Figure 19	Years Playing Texas Two Step	50
Figure 20	Percentage Playing Mega Millions	51
Figure 21	Frequency of Purchasing Mega Millions Tickets	52
Figure 22	Years Playing Mega Millions	55
Figure 23	Percentage Playing Megaplier	56
Figure 24	Frequency of Purchasing Megaplier Tickets	57
Figure 25	Years Playing Megaplier	61



### LIST OF TABLES

Table 1	Demographics	7
Table 2	Any Game: Past-Year Lottery Play and Median Dollars Spent per Month by Demographics	13
Table 3	Participation and Dollars Spent by Lottery District	15
Table 4	Average Times Played Pick 3 Day	19
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 Times Played Sum It Up feature with Pick 3 Day	24
Table 8	Dollars Spent on Sum It Up feature with Pick 3 Day	24
Table 9	Average Times Played Pick 3 Night	25
Table 10	Dollars Spent on Pick 3 Night	26
Table 11	Average Times Played Sum It Up feature with Pick 3 Night	28
Table 12	Dollars Spent on Sum It Up feature with Pick 3 Night	28
Table 13	Average Times Played Cash 5	30
Table 14	Dollars Spent on Cash 5	31
Table 15	Cash 5: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	32
Table 16	Average Times Played Lotto Texas	35
Table 17	Dollars Spent on Lotto Texas	36
Table 18	Lotto Texas: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	37
Table 19	Average Times Played Texas Lottery Scratch Off Tickets	41
Table 20	Dollars Spent on Texas Lottery Scratch Off Tickets	42
Table 21	Texas Lottery Scratch Off Tickets: Lottery Play and Median Dollars Spent per Month By Past-Year Player Demographics	43
Table 22	Average Times Played Texas Two Step	46
Table 23	Dollars Spent on Texas Two Step	47
Table 24	Texas Two Step: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	48
Table 25	Average Times Played Mega Millions	52
Table 26	Dollars Spent on Mega Millions	53
Table 27	Mega Millions: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	54



Table 28	Average Times Played Megaplier	57
Table 29	Dollars Spent on Megaplier	58
Table 30	Megaplier: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics	59
Table 31	Average Times Played Daily 4	62
Table 32	Dollars Spent on Daily 4	62
Table 33	Average Times Played Sum It Up feature with Daily 4	63
Table 34	Dollars Spent on Sum It Up feature with Daily 4	63
Table A-1	Sample Population by County	65



# **EXECUTIVE SUMMARY**

The Texas Lottery Commission 2008 Demographic Study of Texas Lottery Players surveyed 1,701 Texas citizens aged 18 years and older between late August and early September of 2008. After registered decreased participation each year from 2005 through 2007, 4 in 10 (39 percent) of survey respondents in 2008 said they participated in Texas Lottery games in the past year, virtually the same percentage as in the 2007 survey. As with the 2006 and 2007 surveys, there is a statistically significant difference in participation due to employment status (please see Table 1). Gender also influences participation rates, with men more likely to play in general than women. General participation findings broken down by income, education, race, Hispanic origin, age, and other classifications are not statistically significant. Of these, the lack of differences across income categories is notable since the 2006 and 2007 surveys found significant income effects. Note, however, in many cases participation rates among demographic groups vary by the type of game played (see Section III below). Finally, for most games, most players report participating in lottery games for more than five years. For all games, fewer report having played the game for one year or less.

#### Highlights

If we examine the findings using *lottery district* as the unit of analysis, we find the following results for participation rates and personal expenditures:

- Participation rates in any Texas Lottery games were highest in the Victoria (49.4%), San Antonio (48.9%), El Paso (46.2%), and Lubbock (43.6%) lottery districts. The lowest rates were in the Tyler (32.4%) and Abilene (33.8%) districts (see Table 3).
- The lottery districts demonstrating the highest average monthly amount spent per player were in the El Paso (\$21.87) and McAllen (\$20.29) districts. The lowest average monthly amount spent per player was found in the Lubbock (\$5.55) and Austin (\$8.53) districts.
- A comparison of lottery play across districts between the 2007 and 2008 surveys reveals several shifts in playership. The El Paso district, for example, saw an 18 percentage point increase in percent who played over the past year from 2007 to 2008. The McAllen district, on the other hand, went from the highest play rate in 2007 (at 49.1%) to one of the lowest in 2008 (38.8%).
- A brief summary of game results follows:

<u>Pick 3 Day</u>: Over twenty-two percent (22.0%) of respondents playing any lottery game in the past year played Pick 3 Day. This is a five percent increase from the 2007 survey. Thirty percent of the respondents that purchased Pick 3 Day tickets purchased them at least once a week. Twenty-four percent purchased tickets at least once a month, and 46% purchased Pick 3 Day tickets a few times a year.

<u>Pick 3 Night</u>: Only about two percent (1.8%) of respondents playing any lottery game in the past year played Pick 3 Night. Of these, sixty-four percent purchased Pick 3 Night



tickets at least once a week and 36% said they purchased Pick 3 Night tickets a few times a year.

<u>Cash 5</u>: Twenty percent (20.0%) of respondents playing any lottery game in the past year were playing Cash 5. Thirty-five percent of the respondents that purchased Cash 5 tickets purchased them at least once a week. Twenty-one percent purchased tickets at least once a month, and 44% purchased Cash 5 tickets a few times a year.

<u>Lotto Texas</u>: Despite a decline in playership from 2007, Lotto Texas retained its ranking as the most popular game. Approximately 69 percent of respondents playing any lottery game in the past year were playing Lotto Texas. Over one-third (34.8%) of the respondents that purchased Lotto Texas tickets purchased them at least once a week. Approximately one-quarter (24.3%) purchased tickets at least once a month, and 41% purchased Lotto Texas tickets a few times a year.

<u>Texas Lottery Scratch Off Tickets</u>: Over half of (54.0%) of respondents playing any lottery game in the past year played Texas Lottery Scratch Off Tickets. One-third (33%) of the respondents that purchased Texas Lottery Scratch Off tickets purchased them at least once a week. One-quarter (25.8%) purchased tickets at least once a month, and 41% purchased tickets a few times a year.

<u>Texas Two Step</u>: Ten percent of respondents playing any lottery game in the past year played Texas Two Step. One-quarter (25.0%) of Texas Two Step players purchased tickets at least once a week, one-quarter (25.0%) purchased tickets at least once a month, and one-half (50.0%) purchased tickets a few times a year.

<u>Mega Millions</u>: Forty-five percent of respondents playing any lottery game in the past year reported playing Mega Millions. Thirty-one (31.3%) percent of the respondents that purchased Mega Millions tickets bought them at least once a week, twenty-two (22.3%) purchased tickets at least once a month, and forty-six (46.4%) purchased tickets a few times a year.

<u>Megaplier</u>: Almost twelve percent (11.76%) of respondents playing any lottery game in the past year played Megaplier. Thirty-seven percent (37.3%) of Megaplier players purchased tickets at least once a week, 21.3% purchased tickets at least once a month, and approximately 41.3% purchased tickets a few times a year.

<u>Daily 4</u>: About two percent of respondents (1.81%) indicated that they purchased Daily 4 in the past year. Of these 11 respondents, five reported that they purchased Daily 4 tickets at least once a week, two indicated that they purchased Daily 4 tickets at least once a month, and four purchased the tickets a few times a year.

#### New Feature – Testing differences in Lottery participation from 2007 to 2008

In addition to the basic results that ensure continuity of information and presentation of prior studies, the 2008 study provides statistical tests of *differences in lottery participation from* **2007 to 2008**. The report highlights these differences for general participation rates, for rates



according to Texas lottery district, and for the individual lottery games separately. Comparing 2008 survey results with those from 2007, we find the following:

- No general difference in participation rates
- Comparing 2008 survey results with those from 2007, we see that participation rates have increased the most in El Paso, Lubbock, and Victoria districts (each of these being statistically significant at *p* < .10). Participation rates appear to have have fallen off the most in the Irving, McAllen, and Tyler districts (although these differences are not statistically significant).<sup>1</sup>
- Comparing games separately, we find that participation has increased from 2007 for Pick 3 Day but declined for Lotto Texas.

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



## I. INTRODUCTION AND METHOD OF ANALYSIS

A random survey of adult Texas residents aged 18 and older was conducted during August/September 2008. The objectives were to measure the citizen participation rates, the distribution and frequency of play, and the demographic profiles of the past-year players and the non-players.

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

Renée Cross Jim Granato Tim Hellwig (Lead) Thanapan Laiprakobsup Chris Mainka Terry Mayes Richard Murray

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

The RDD method ensures the following:

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

The Center for Public Policy's Survey Research Institute (SRI) (<u>www.uh.edu/cpp/sri.htm</u>) fielded 1701 telephone interviews. Of these, six respondents answered "don't know" to the first question, "Have you played any of the Texas Lottery games in the past year?" These individuals, per the survey instrument design, were not asked any further questions on lottery play and were only read questions about their demographic status. Accordingly, these six respondents were not used for the analyses we report below. The remaining 1,695 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 25 and September 8, 2008. Note that in some cases, the subset samples will be small and this can create high volatility in some results in those categories. The subset proportions are an approximation of the overall population; however, the relatively small size of subsets can allow for outliers to "bias" results when using the mean. We alert the reader to the influence of outliers throughout the report.



The standard SRI survey administration and management protocols include:

- The use of trained telephone interviewers to conduct the survey.
- Each interviewer completes intensive general training. The purposes of general training are to ensure that interviewers understand and practice all of the basic skills needed to conduct interviews and that they are knowledgeable about standard interviewing conventions.
- Following the usual administration and management protocols, the interviewers also participate in a specific training session for the project.
- Interviewers practice administering the survey to become familiar with the questions.

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

The major change from surveys prior to 2007 is the addition of cell phone users as part of the overall sample. Previous annual studies of lottery players and non-players in Texas have utilized the standard methodology for conducting random digit dial (RDD) surveys. This entails calling residential telephone numbers (landlines) randomly selected from a list of working numbers in homes that are not business lines. Because RDD sampling includes *unlisted* residential numbers, it is considered superior to methods that rely on published telephone numbers in generating samples. However, with the rapid increase in cell phone usage, traditional RDD sampling has been increasingly questioned because more and more individuals are exclusive users of cellular phones and therefore are excluded from RDD surveys that rely on traditional methods. With estimates of non-landline phone users now ranging between 8 and 13 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 2008 Texas Lottery Study in addition to the standard statewide RDD sample. The data included in this report are based on 1531 completed interviews on standard landlines and 170 completed interviews (10.0%) from the cell phone sample. This combination, in our judgment, improves the quality of the overall data by including individuals who might be excluded using traditional sampling methods.



# **II. SAMPLE CHARACTERISTICS**<sup>2</sup>

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

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

In the social sciences, the distribution of outcomes often varies in terms of the categories of analysis of interest. Throughout this analysis, we will test to determine whether changes or differences between categories or groups are due to random chance. Traditional tests for statistical "significance" are used to test for differences between past-year players and non-players or for differences between past-year players (by demographic category). Specifically, we use standard t-tests on the "equality of means." Note also that discussions of statistical "significance" reflect a classical statistical (or "frequentist") tradition. The "level" of statistical significance (denoted by a p-value) tells us the probability that what was observed differs from the null hypothesis (of no relation or no difference). In the classical tradition a p-value of .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 .001 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.

<sup>&</sup>lt;sup>2</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. Consider the "Income" variable. We have a reduction in the total sample (who report their income) from 1695 to 1064. The cell percentage for the column with the full sample has the denominator 1064 and not 1695. Consequently, the percentage of the adjusted "full" sample containing respondents earning less than \$12,000 is 56/1064 or 5.3 percent as opposed to 56/1695 or 3.3 percent.



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

	Number and Percentage Responding		
Demographic Factors	All	Past-Year Players	Non-Players
	(n=1,695)	(n=658)	(n=1,037)
Year			
2008	1,695 (100%)	658 (38.82%)	1,037 (61.18%)
2007	1,697 (100%)	653 (38.47%)	1,044 (61.52%)
Income (n=1,064)	n=1064 (100%)	n=461 (100%)	n=603 (100%)
Less than \$12,000	56 ( 5.26%)	18(3.90%)	38 ( 6.30%)
Between \$12,000 and \$19,999	80 ( 7.52%)	33(7.16%)	47 ( 7.79%)
Between \$20,000 and \$29,999	111 (10.43%)	49 (10.63%)	62 (10.28%)
Between \$30,000 and \$39,999	104(9.77%)	44 ( 9.54%)	60 ( 9.95%)
Between \$40,000 and \$49,999	102(9.59%)	39(8.46%)	63 (10.45%)
Between \$50,000 and \$59,999	126 (11.84%)	53 (11.50%)	73 (12.11%)
Between \$60,000 and \$74,999	103(9.68%)	52 (11.28%)	51(8.46%)
Between \$75,000 and \$100,000	129 (12.12%)	67 (14.53%)	62 (10.28%)
Over \$100,000	253 (23.78%)	106 (22.99%)	147 (24.38%)
Employment Status (n=1.684)*** <sup>3</sup>	n=1684 (100%)	n=652 (100%)	n=1032 (100%)
Employed Full-time	834 (49.52%)	376 (57.67%)	458 (44.38%)
Employed Part-time	137(8.14%)	37(5.67%)	100(9.69%)
Unemployed and Looking for Work	123 ( 7.30%)	40(6.13%)	83(8.04%)
Not in Labor Force	111(6.59%)	35 ( 5.37%)	76 ( 7.36%)
Retired	479 (28.44%)	164 (25.15%)	315 (30.52%)
Own or Rent Home (n=1,669)	n=1,669 (100%)	n=646 (100%)	n=1023 (100%)
Own	1,315 (78.79%)	493 (76.32%)	822 (80.35%)
Rent	312 (18.69%)	134 (20.74%)	178 (17.40%)
Occupied without Payment	42 ( 2.52%)	19(2.94%)	23 ( 2.25%)

Note: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001, two-tailed test.

 $<sup>^{3}</sup>$  There was a significant difference between players and non-players at the p < 0.001 level for distribution of employment status.



 Table 1 (continued)

 Demographics: Summary for Age, Marital Status, Children, Gender, and Race

	Number and Percentage Responding		
Demographic Factors	<b>All</b> (n=1,695)	Past-Year Players (n=658)	Non-Players (n=1,037)
Age of Respondent (n=1,536)	n=1536 (100%)	n=597 (100%)	n=939 (100%)
18 to 24	91(5.92%)	30(5.03%)	61(6.50%)
25 to 34	164 (10.68%)	70 (11.73%)	94 (10.01%)
35 to 44	263 (17.12%)	104 (17.42%)	159 (16.93%)
45 to 54	333 (21.68%)	142 (23.79%)	191 (20.34%)
55 to 64	324 (21.09%)	144 (24.12%)	180 (19.17%)
65 and over	361 (23.50%)	107 (17.92%)	254 (27.05%)
Marital Status (n=1,672)	n=1672 (100%)	n=649 (100%)	n=1023 (100%)
Married	1,034 (61.84%)	396 (61.02%)	638 (62.37%)
Widowed	161(9.63%)	51(7.86%)	110 (10.75%)
Divorced	167(9.99%)	67 (10.32%)	100 ( 9.78%)
Separated	20(1.20%)	12(1.85%)	8 ( 0.78%)
Never Married	290 (17.34%)	123 (18.95%)	167 (16.32%)
Children under 18 Living in			
Household (n=1,654)	n=1654 (100%)	n=647 (100%)	n=1007 (100%)
Yes	535 (32.35%)	210 (32.46%)	325 (32.27%)
No	1,119 (67.65%)	437 (67.54%)	682 (67.73%)
Number of Children under 18 Living in			
Household (n=535)	n=535 (100%)	n=210 (100%)	n=325 (100%)
1	215 (40.19%)	91 (43.33%)	124 (38.15%)
2	195 (36.45%)	69 (32.86%)	126 (38.77%)
3	81 (15.14%)	38 (18.10%)	43 (13.23%)
4 or more	44 ( 8.22%)	12(5.71%)	32 ( 9.85%)
Gender of Respondent (n=1,695)** <sup>4</sup>	n=1695 (100%)	n=658 (100%)	n=1037 (100%)
Female	928 (54.75%)	330 (50.15%)	598 (57.67%)
Male	767 (45.25%)	328 (49.85%)	439 (42.33%)
Race (n=1,645)	n=1645 (100%)	n=639 (100%)	n=1006 (100%)
White	1,146 (69.67%)	434 (67.92%)	712 (70.78%)
Black	231 (14.04%)	98 (15.34%)	133 (13.22%)
Asian	31(1.88%)	7(1.10%)	24 ( 2.39%)
Native American Indian	15(0.91%)	5 ( 0.78%)	10 ( 0.99%)
Other	222 (13.50%)	95 (14.87%)	127 (12.62%)
Hispanic Origin (n=1,613)	n=1613 (100%)	n=628 (100%)	n=985 (100%)
Yes	284 (17.61%)	123 (19.59%)	161 (16.35%)
No	1,329 (82.39%)	505 (80.41%)	824 (83.65%)

Note: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001, two-tailed test.

 $<sup>^{4}</sup>$  There was a significant difference between players and non-players at the p < 0.01 level for distribution of gender of respondent.



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

	Number and Percentage Responding		
Demographic Factors	<b>All</b> (n=1,695)	Past-Year Players (n=658)	Non-Players (n=1,037)
Education (n=1,682)	n=1682 (100%)	n=649 (100%)	n=1033 (100%)
Less than High School	84 ( 4.99%)	31(4.78%)	53 ( 5.13%)
High School Graduate/GED	472 (28.06%)	175 (26.96%)	297 (28.75%)
Some College, no degree	408 (24.26%)	178 (27.43%)	230 (22.27%)
College Degree	488 (29.01%)	190 (29.28%)	298 (28.85%)
Graduate/Professional Degree	230 (13.67%)	75 (11.56%)	155 (15.00%)
Occupation (n=1,246)	n=1246 (100%)	n=511 (100%)	n=735 (100%)
Executive, Administrative, and			
Managerial	179 (14.37%)	83 (16.24%)	96 (13.06%)
Professional Specialty	375 (30.10%)	136 (26.61%)	239 (32.52%)
Technicians and Related			
Support	79(6.34%)	41(8.02%)	38(5.17%)
Sales	169 (13.56%)	66 (12.92%)	103 (14.01%)
Administrative Support,			
Clerical	73 ( 5.86%)	31(6.07%)	42(5.71%)
Private Household	31(2.49%)	10(1.96%)	21(2.86%)
Protective Service	17(1.36%)	11(2.15%)	6 ( 0.82%)
Service	175 (14.04%)	65 (12.72%)	110 (14.97%)
Precision Productions, Craft,			
and Repair	12(0.96%)	6(1.17%)	6 ( 0.82%)
Machine Operators,			
Assemblers, and Inspectors	49 ( 3.93%)	19(3.72%)	30(4.08%)
Transportation and Material			
Moving	30(2.41%)	18(3.52%)	12(1.63%)
Equipment Handlers,			
Cleaners, Helpers, and	23 ( 1.85%)	9(1.76%)	14(1.90%)
Laborers			
Farming, Forestry, and Fishing	8 ( 0.64%)	5 ( 0.98%)	3 ( 0.41%)
Armed Forces	26(2.09%)	11(2.15%)	15(2.04%)

Note: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001, two-tailed test.



- Just over twenty percent of all respondents had a household annual income of between \$40,000 and \$59,999. Approximately thirty-six percent had an income of \$75,000 or more. There is no evidence that income categories are systematically related to tendencies to play the lottery in the past year. Nearly one-quarter (24.38%) of non-players had a household annual income over \$100,000, though twenty-three percent of past-year players had a household annual income over \$100,000.
- Nearly half (49.52%) of all respondents were employed full-time. Fifty-eight percent (57.67%) of past-year players and forty-four percent (44.38%) of non-players were employed full-time.
- Seventy-eight percent (78.79%) of all respondents owned their home. Nineteen percent rented and nearly 3 percent (2.52%) occupied their home without payment.
- Forty-three percent (42.77%) of all respondents were between the ages of 45 to 64. As was the case in the 2007 survey, a greater percentage of non-players (27.05%) than past-year players (17.92%) were 65 and over. On the other hand, a greater percentage of past-year players (24.12%) than non-players (19.17%) were between the ages of 55 to 64. The average age for all respondents was 52 years, with the average age among players being 50 years and non-players 53 years.
- Approximately sixty-one percent (61.02%) of past-year players were married, or about the same percentage of non-players who were married (62.37%).
- Thirty-two percent (32.46%) of the respondents who played in the past year had children under age 18 living in their household. Likewise, thirty-two percent (32.27%) of the respondents that were non-players had children under 18 living in their household.
- Fifty-five percent (54.75%) of the respondents were female and forty-five percent (45.25%) were male.
- Approximately 7 in 10 of all respondents were White. Whites were divided equally among players and non-players. Whites comprised sixty-eight percent (67.92%) of all past-year players but also seventy-one percent of (70.78%) of non-players.
- Eighteen percent of the respondents stated they were of Hispanic descent. A slightly greater percentage of past-year players than non-players claimed to have Hispanic origin (19.59% and 16.35%, respectively, a difference that is statistically significant at p = .096).
- Education had no discernible influence on lottery participation over all. Forty-three percent of all respondents had a college degree (29.01%) or a graduate/professional degree (13.67%). As in 2007, a larger percentage of past-year players (27.43%) than non-players (22.27%) had some college education.
- Thirty percent of all respondents (30.10%)categorized their occupations as "professional specialty," over twice as much as those who classified themselves in any other single category. Executive, administrative, and managerial occupations (14.37 percent) and service occupations (14.04%) were the second and third largest groups respectively. Thirty-two percent of non-players (32.52%) but only twenty-seven percent of past-year players (26.61%) classified their occupations as professional specialty.



### **III. GAME FINDINGS**

### IIIa. ANY GAME RESULTS

#### Figure 1

Percentage of Respondents Playing Any Lottery Game



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

Figure 1 compares Texas lottery participation rates of those playing any of the Texas Lottery games during the past year from the Lottery's inception in 1993 to the present. The percentage of respondents playing any lottery game has decreased substantially since 1993. Between 2006 and 2007 survey reports registered an annual decrease of 7 percentage points. However, from 2007 to 2008 Texas lottery participation has remained stable at approximately thirty-eight percent (38.0 for 2007 and 38.8 for 2008).

The average monthly dollar amount spent on any lottery game, excluding outlying values, was \$37.98. 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>5</sup> Our survey data provided for estimated annual sales in Texas to be approximately \$3.080 billion. When applying the margin of error calculation for this subset of

<sup>&</sup>lt;sup>5</sup> Assuming a ratio of 18 years and older to the total population identical to 2006, the 2007 population estimate for persons 18 years and older in Texas is 17,420,085. The source for this figure is the Texas State Data Center, Office of the State Demographer (<u>http://txsdc.utsa.edu/</u>).



the sample, the expected forecast of actual lottery sales ranged between \$3.007 billion and \$3.154 billion. This range is lower than actual annual lottery ticket sales for fiscal year 2007 of \$3.774 billion dollars.

Table 2 on the next page shows the percentage of past-year players was higher for men compared to women and among respondents employed full-time and part-time compared to unemployed and retired respondents. Participation findings for education, income, race, Hispanic origin, and age of the respondents were not statistically significant.



# Table 2Any Game: Past-Year Lottery Play and Median Dollars Spent per Month byDemographics6

Year	Percentage played <sup>7</sup>	Median Dollars Spent
2008	38.8	\$11.00
2007	38.0	10.00
Demographic Factors 2008		
Education		
Less than high school diploma	36.9	16.00
High school degree	37.1	15.00
Some college	43.6	16.50
College degree	38.9	8.50
Graduate degree	32.6	6.00
Income		
Under \$12,000	32.1	19.00
\$12,000 to \$19,999	41.3	11.00
\$20,000 to \$29,999	44.1	16.00
\$30,000 to \$39,999	42.3	17.50
\$40,000 to \$49,999	38.2	12.00
\$50,000 to \$59,999	42.1	20.00
\$60,000 to \$74,999	50.5	16.50
\$75,000 to \$100,000	52.0	10.00
Over \$100,000	41.9	6.00
Race		
White	37.9	10.00
Black	42.4	15.50
Asian	22.6	21.00
Native American Indian	33.3	16.00
Other	42.8	16.00
Hispanic origin		
Yes	43.3	13.00
No	38.0	10.00
Gender**		
Female	35.6	10.00
Male	42.8	15.00

<sup>&</sup>lt;sup>7</sup> The significance markings refer only to the percentage played.



<sup>&</sup>lt;sup>6</sup> Note that for 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 uncertaintly, 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 (see below).

Year	Percentage played <sup>7</sup>	Median Dollars Spent
Age		
18 to 24	33.0	10.00
25 to 34	42.7	10.50
35 to 44	39.5	11.50
45 to 54	42.6	13.50
55 to 64	44.4	10.00
65 or older	29.6	11.00
Employment status**		
Employed full/part time	42.5	10.00
Unemployed	32.5	15.50
Retired	34.2	13.50

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



Table 3Participation and Dollars Spent by Lottery District

District	2007 Percent Playing Any Game <sup>8</sup>	2008 Percent Playing Any Game	2008 Mean Amount Spent Per Month among Lottery Past-Year Players	2008 Median Amount Spent Per Month among Lottery Past- Year Players
Abilene	37.4%	33.8	\$18.92	\$20.00
Austin	40.6	40.6	8.53	7.00
El Paso <sup>9</sup>	28.6	46.2	21.87	22.50
Houston	38.8	39.9	12.00	10.00
Irving	38.9	34.9	15.83	12.00
Lubbock <sup>10</sup>	27.8	43.6	5.55	6.00
McAllen	49.1	38.8	20.29	20.00
San Antonio	46.8	48.9	16.61	14.00
Tyler	38.8	32.4	14.63	14.00
Victoria <sup>11</sup>	33.3	49.4	11.03	10.00

As shown in Table 3, participation rates in any Texas Lottery games based on the 2008 survey were highest in the Victoria (49.4%), San Antonio (48.9%), El Paso (46.2%), and Lubbock (43.6%) lottery districts. The lowest rate was in the Tyler (32.4%) and Abilene (33.8%) districts.

<sup>&</sup>lt;sup>11</sup> Difference in percent playing any game reported in 2007 and 2008 surveys is statistically significant at p = .06.



<sup>&</sup>lt;sup>8</sup> Percent Playing Any Game in 2007 figures reported here are slightly different from those displayed in the 2007 report. A reanalysis of the data show these figures to be correct.

<sup>&</sup>lt;sup>9</sup> Difference in percent playing any game reported in 2007 and 2008 surveys is statistically significant at p = .07.

<sup>&</sup>lt;sup>10</sup> Difference in percent playing any game reported in 2007 and 2008 surveys is statistically significant at p = .09.

- The lottery districts demonstrating the highest average monthly amount spent per player were El Paso (\$21.87) and McAllen (\$20.29). The lowest average monthly amount spent per player was found in the Lubbock (\$5.55) and Austin (\$8.53) districts.
- Comparing 2008 survey results with those from 2007, we see that participation rates have increased the most in the El Paso, Lubbock, and Victoria districts. In each case this change is statistically significant at *p* = .10 or better (two-tailed test). Participation rates have fallen off the most in the McAllen and Tyler districts. Due to small sub-sample sizes however, we are not able to assert this decline with statistical significance.



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

### Figure 2





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

Figure 2 shows that 22.0 percent of those respondents playing any of the 12 Texas lottery games played Pick 3 Day. This is an increase in Pick 3 Day participation among lottery players of 4.4 percentage points (statistically significant at p < .05).



#### Figure 3 Frequency of Purchasing Pick 3 Day Tickets (n=145)



Figure 3 illustrates that 3 in 10 (30.34%) respondents that purchased Pick 3 Day tickets purchased them at least once a week. Twenty-four percent purchased tickets at least once a month, and forty-six percent purchased them only a few times a year.



# Table 4Average Times Played Pick 3 Day

Played Pick 3 Day	Average Number of Times Played
Per week for weekly past-year players	3.05
Per month for monthly past-year players	2.77
Per year for yearly past-year players	4.40

Table 4 shows that respondents played an average number of 3.05 times per week, 2.77 times per month, or 4.40 times per year. Note that weekly, monthly, and yearly rates are distinct from each other. As in prior studies, we code the data in the following way: if a respondent answered that she played weekly, she was not asked how many times she played monthly or yearly. If a respondent said she played monthly, she was not queried as to how often she played weekly or yearly. And if a respondent said she played yearly, she was not then asked how often she played in weekly or monthly increments.<sup>12</sup>

# Table 5Dollars Spent on Pick 3 Day

Pick 3 Day	Dollars Spent
Average spent per play <sup>13</sup>	\$6.34
Average spent per month (mean) <sup>14</sup>	11.44
Average spent per month (median)	5.00

Table 5 shows that Pick 3 Day players spent an average of \$6.34 per play. We find that players spent an average of \$11.44 per month. Note that per month figures are for those respondents who reported playing the game at a monthly or more frequent (i.e., weekly) basis.

<sup>&</sup>lt;sup>14</sup> The average number of dollars spent per month excludes the respondents who indicated that they purchased more than \$100 of Pick 3 Day tickets per month. If those respondents are included, the average number of dollar spent for purchasing the tickets is \$20.17 per month.



<sup>&</sup>lt;sup>12</sup> We follow this coding method for each game regarding average time played.

<sup>&</sup>lt;sup>13</sup> The average number of dollars spent per play excludes the respondents who indicated that they purchased more than \$100 of Pick 3 Day tickets per play. If those respondents are included, the average number of dollar spent for purchasing the tickets increases to \$8.32 per play.

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 <sup>15</sup>	Median Dollars Spent
Year*		
2008	22.0	\$5.00
2007	17.6	5.00
2008 Demographics		
Education		
Less than high school diploma	25.8	30.00
High school degree	25.0	5.00
Some college	22.2	4.00
College degree	22.0	2.00
Graduate degree	19.0	4.00
Income**		
Less than \$12,000	44.4	8.00
\$12,000 to \$19,999	25.0	6.00
\$20,000 to \$29,999	31.4	2.00
\$30,000 to \$39,999	25.6	10.00
\$40,000 to \$49,999	23.7	4.00
\$50,000 to \$50,999	22.6	6.00
\$60,000 to \$74,999	11.5	10.00
\$75,000 to \$100,000	25.8	2.00
Over \$100,000	14.2	1.00
Race*		
White	16.8	2.00
Black	41.7	10.00
Asian <sup>16</sup>	57.0	42.50
Native American Indian <sup>17</sup>	20.0	10.00
Other	25.5	5.00
Hispanic Origin		
Yes	18.9	6.00
No	22.9	3.00
Gender		
Female	22.1	4.00
Male	22.7	5.00

<sup>&</sup>lt;sup>17</sup> There was only one respondent in this category.



<sup>&</sup>lt;sup>15</sup> In Table 6, the significance markings refer only to the percentage played.

<sup>&</sup>lt;sup>16</sup> There were only four respondents in this category.

#### Table 6 (continued)

Age		
18 to 24	26.7	6.00
25 to 34	26.8	2.00
35 to 44	24.3	2.00
45 to 54	22.1	5.00
55 to 64	19.9	5.50
65 or older	19.2	3.00
Employment status		
Employed full/part time	21.7	2.00
Unemployed	31.6	9.00
Retired	21.9	10.00

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

Table 6 above shows that, statistically speaking, there was a significant difference between player participation rates between 2007 and 2008. More reported playing Pick 3 during the past year for the 2008 survey than did for 2007. There also were statistically significant differences among demographic groups as regards the percentage that played Pick 3 Day. Notable findings include:

- The percentage of past year players that played Pick 3 Day decreased as income increased.
- Participation was higher among African Americans.
- However, participation findings for education, age, gender, and employment status were not statistically significant.



Figure 4 Years Playing Pick 3 Day (n=138)



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

Figure 4 shows that fifty-eight percent of the respondents that played Pick 3 Day reported playing it more than 5 years, a figure identical to that reported in the 2007 study.



### **IIIC. SUM IT UP FEATURE WITH PICK 3 DAY RESULTS**

Twenty-eight of the 148 respondents (18.9%) who reported playing Pick 3 Day over the past year reported that they also played Pick 3 Day's Sum It Up feature.



#### Figure 5 Frequency of Purchasing Sum It Up Feature with Pick 3 Day Tickets (n=28)

Figure 5 reports that of these 28 respondents, half purchased the Sum It Up feature at least a few times a year, with one-quarter purchasing the feature at least once a month and one-quarter purchasing at least once a week. Given low sample sizes, however, we caution against drawing inferences from these data.



# Table 7Average Times Played Sum It Up feature with Pick 3 Day

Sum It Up Feature with Pick 3 Day	Average Number of Times Played
Per week for weekly past-year players	4.00
Per month for monthly past-year players	1.86
Per year for yearly past-year players <sup>18</sup>	

Table 7 shows that respondents who played the Sum It Up feature with Pick 3 Day played an average of 4.00 times per week and 1.86 times per month.

# Table 8Dollars Spent on Sum It Up feature with Pick 3 Day

Sum It Up Feature with Pick 3 Day	Dollars Spent
Average spent per play	\$7.11
Average spent per month, monthly players (mean) <sup>19</sup>	13.10
Average spent per month, monthly players (median) <sup>20</sup>	4.00

Players of Sum It Up with Pick 3 Day spent an average of \$7.11 per play. We find that players spent an average of \$13.10 per month, where per month figures are for those respondents who reported playing the game at a monthly or more frequent (i.e., weekly) basis.

There are an insufficient number of respondents for analyzing demographic differences in for the Pick 3 Day Sum It Up feature, so we do not report this analysis. Note, however, that no statistically significant differences among demographic groups were found.

<sup>&</sup>lt;sup>20</sup> The median number of dollars spent per month excludes the respondents who indicated that they purchased more than \$150 of Sum It Up featuring with Pick 3 Day tickets per month. If those respondents are included, the median number is \$5.00 per month.



<sup>&</sup>lt;sup>18</sup> Since it is a relatively new feature, there were not any respondents reporting how many times a year they played Sum It Up feature with Pick 3 Day in the past year.

<sup>&</sup>lt;sup>19</sup> The average number of dollars spent per month excludes the respondents who indicated that they purchased more than \$150 of Sum It Up featuring with Pick 3 Day tickets per month. If those respondents are included, the average number of dollar spent for purchasing the tickets is \$22.20 per month.

### IIId. PICK 3 NIGHT RESULTS<sup>21</sup>

### Figure 6



Percentage Playing Pick 3 Night

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

Figure 6 shows that 1.81 percent of those respondents playing any of the 12 Texas lottery games played Pick 3 Night during the past year. This is down from 11.2 percent in 2007 and 21.2 percent in 2006.

#### Table 9 Average Times Played Pick 3 Night

Pick 3 Night	Average Number of Times Played
Per week for weekly past-year players	1.67
Per month for monthly past-year players	
Per year for yearly past-year players	6.75

Those who played Pick 3 Night in the past year reported playing an average of 1.67 times per week or 6.75 times per year, as shown in Table 9.

<sup>&</sup>lt;sup>21</sup> Due to the small number of players, we do not report a frequency of play graph for Pick 3 Night.



#### Table 10 Dollars Spent on Pick 3 Night

Pick 3 Night	Dollars Spent
Average spent per play	\$4.46
Average spent per month (mean) <sup>22</sup>	9.30
Average spent per month (median) <sup>23</sup>	12.00

Table 10 shows that those who played Pick 3 Night in the past year spent an average of \$4.46 per play. Players spent an average of \$9.30 per month, where per month figures are for those respondents who reported playing the game at a monthly or more frequent (i.e., weekly) basis.

There are an insufficient number of respondents for analyzing demographic differences for the Pick 3 Night game.

<sup>&</sup>lt;sup>23</sup> When the respondents who indicated that they purchased more than \$150 of Pick 3 Night tickets per month are included or excluded, the median number does not change.



<sup>&</sup>lt;sup>22</sup> The average number of dollars spent per month excludes the respondents who indicated that they purchased more than \$150 of Pick 3 Night tickets per month. If those respondents are included, the average number of dollar spent for purchasing the tickets is \$22.10 per month.

Figure 7 Years Playing Pick 3 Night (n=11)



According to Figure 7, about three-quarters (72.7%) of those respondents who played the game said they played Pick 3 Night for more than five years.



### IIIe. SUM IT UP FEATURE WITH PICK 3 NIGHT RESULTS

#### Percentage Playing the Sum It Up feature with Pick 3 Night

Of those respondents who played Pick 3 Night, 8 in 10 (81.82%) reported that they also played Pick 3 Night's Sum It Up feature.

# Table 11Average Times Played Sum It Up Feature with Pick 3 Night

Sum It Up Feature with Pick 3 Night	Average Number of Times Played
Per week for weekly past-year players	2.67
Per month for monthly past-year players	1.00
Per year for yearly past-year players	4.25

Those who played the Sum It Up feature with Pick 3 Night in the past year reported playing an average of 2.67 times per week, 1.00 per month, or 4.25 times per year, as shown in Table 11. Please note that the sample size is quite low (n=9).

# Table 12Dollars Spent on Sum It Up Feature with Pick 3 Night

Sum It Up Feature with Pick 3 Night	Dollars Spent
Average spent per play	\$4.25
Average spent per month (mean)	7.29
Average spent per month (median)	6.00

Table 12 shows that those who played the Sum It Up feature with Pick 3 Night in the past year spent an average of \$4.25 per play, while weekly or monthly players spent an average of \$7.29 per month.

There are an insufficient number of respondents for analyzing frequency of play and demographic differences for the Pick 3 Night Sum It Up feature, so we do not report this information inin this analysis.



#### **IIIF. CASH 5 RESULTS**

#### Figure 8 Percentage Playing Cash 5



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

Figure 8 illustrates that 20% of respondents playing any lottery game in the past year were playing Cash 5, or about the same Cash 5 participation rate among past-year lottery players as in 2007.



#### Figure 9 Frequency of Purchasing Cash 5 Tickets (n=129)



Thirty-five percent (34.88%) of the respondents that purchased Cash 5 tickets purchased them at least once a week, as shown in Figure 9. Twenty-one percent (20.93%) purchased tickets at least once a month, and forty-four percent (44.19%) purchased Cash 5 tickets just a few times a year.

#### Table 13 Average Times Played Cash 5

Cash 5	Average Number of Times Played
Per week for weekly past-year players	2.90
Per month for monthly past-year players	1.52
Per year for yearly past-year players	3.61

Table 13 shows that respondents played an average number of 2.90 times per week, 1.52 times per month, and 3.61 times per year.



#### Table 14 Dollars Spent on Cash 5

Cash 5	Dollars Spent
Average spent per play <sup>24</sup>	\$4.41
Average spent per month (mean) <sup>25</sup>	9.88
Average spent per month (median)	4.00

Table 14 shows that Cash 5 players spent an average of \$4.41 per play, while those playing on a weekly or monthly basis spent an average of \$9.88 per month.

Table 15 on the next page shows statistically significant differences among demographic groups regarding the percentage that played Cash 5.

- Cash 5 participation rates varied across educational levels.
- Cash 5 participation rates were negatively related to income; indicating that as one's income increased, Cash 5 ticket purchases declined.
- Participation findings for gender, age, race, Hispanic origin, and employment status were not statistically significant.
- There was no statistically significant difference comparing participation rates between 2007 and 2008 past year Cash 5 players.

<sup>&</sup>lt;sup>25</sup> The average number of dollars spent per month excludes the respondents who indicated that they purchased more than \$100 of Cash 5 tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$13.34 per month.



<sup>&</sup>lt;sup>24</sup> The average number of dollars spent per play excludes the respondents who indicated that they purchased more than \$100 of Cash 5 tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$12.94 per play.
### Table 15

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

Cash 5 Players	Percentage Played <sup>26</sup>	Median Dollars Spent
Year		
2008	20.0	\$4.00
2007	22.0	5.00
2008 Demographics		
Education**		
Less than high school diploma	12.9	14.50
High school degree	29.9	3.50
Some college	20.1	10.00
College degree	14.8	1.00
Graduate degree	13.7	1.00
Income*		
Less than \$12,000	27.8	20.00 <sup>27</sup>
\$12,000 to \$19,999	21.1	3.00
\$20,000 to \$29,999	28.0	4.50
\$30,000 to \$39,999	25.6	3.00
\$40,000 to \$49,999	23.1	4.00
\$50,000 to \$50,999	34.0	12.50
\$60,000 to \$74,999	11.5	10.00
\$75,000 to \$100,000	9.4	1.50
Over \$100,000	18.1	3.00
Race		
White	18.6	4.00
Black	34.4	4.00
Asian	42.9	0.00
Native American Indian		
Other	13.8	3.00
Hispanic Origin		
Yes	16.4	3.00
No	21.4	4.00
Gender		
Female	19.5	4.00
Male	20.6	4.00
Age		
18 to 24	13.8	3.50
25 to 34	12.9	1.00
35 to 44	20.4	3.00
45 to 54	23.0	15.00
55 to 64	21.3	5.00
65 or older	19.0	2.00

<sup>26</sup> Significance markings refer only to the percentage played.

<sup>27</sup> There was only one respondent in this category reporting how much he/she spent on Cash 5 in the past year.



Table 15 continued		
Employment status		
Employed full/part time	19.0	4.00
Unemployed	27.5	5.00
Retired	22.0	2.00

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

#### Figure 10 Years Playing Cash 5 (n=129)



Figure 10 shows that fifty-five percent (55.3%) of the respondents that played Cash 5 during the past year reported playing it for more than five years.



#### **IIIg. LOTTO TEXAS RESULTS**

#### Figure 11 Percentage Playing Lotto Texas



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

Figure 11 shows that sixty-nine percent of respondents playing any lottery game in the past year played Lotto Texas. As in past years, Lotto Texas was one of the most popular games among players. Participation rates among players, however, fell in 2008 from eighty-five percent in 2007.



#### Figure 12 Frequency of Purchasing Lotto Texas Tickets (n=445)



Almost thirty five percent (34.8%) of respondents that purchased Lotto Texas tickets purchased them at least once a week, as illustrated in Figure 12. Twenty-four percent (24.3%) purchased the tickets at least once a month while forty-one percent (40.9%) indicated that they purchased Lotto Texas tickets a few times a year.

#### Table 16 Average Times Played Lotto Texas

Lotto Texas	Average Number of Times Played
Per week for weekly past-year players	1.78
Per month for monthly past-year players	2.06
Per year for yearly past-year players	6.11

Lotto Texas players played an average of 1.78 times per week, 2.06 per month, or 6.11 times per year, as shown in Table 16.



#### Table 17 Dollars Spent on Lotto Texas

Lotto Texas	Dollars Spent
Average spent per play <sup>28</sup>	\$6.00
Average spent per month (mean) <sup>29</sup>	10.03
Average spent per month (median)	5.00

Table 17 illustrates that Lotto Texas players spent an average of \$6.00 per play while they spent an average of \$10.03 a month.

According to Table 18 on the next page, there were no significant differences among demographic groups regarding the percentage that played Lotto Texas. There was a significant difference based on year, however, with a reduced Lotto Texas participation rate in 2008 compared to 2007.

Also, there is weak evidence, from the standpoint of statistical significance indicating 1) that respondents with more education were more likely to play Lotto Texas than less educated respondents, 2) that middle-level income respondents were more likely to play the game than any other groups, and 3) that men were more likely to play the game than women.<sup>30</sup>

<sup>&</sup>lt;sup>30</sup> By weak, we mean that p-values are less than or equal to .10. This means that for 100 repeated samples, the value realized would fall within a given interval 90 out of 100 samples.



<sup>&</sup>lt;sup>28</sup> The average number of dollars spent per play excludes the respondents who indicated that they purchased more than \$100 of Lotto Texas tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$10.13 per play.

<sup>&</sup>lt;sup>29</sup> The average number of dollars spent per month excludes the respondents who indicated that they 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 \$14.72 per month.

# Table 18Lotto Texas Players and Median Dollars Spent per Month by Past-Year PlayerDemographics

Lotto Texas	Percentage Played <sup>31</sup>	Median dollars spent
Year***		
2008	68.9	\$5.00
2007	84.7	5.00
2008 Demographics		
Education		
Less than high school diploma	61.3	6.00
High school degree	66.3	5.00
Some college	66.9	5.00
College degree	72.2	4.00
Graduate degree	75.0	3.00
Income		
Less than \$12,000	61.1	6.00
\$12,000 to \$19,999	62.5	5.00
\$20,000 to \$29,999	65.3	5.00
\$30,000 to \$39,999	55.8	10.00
\$40,000 to \$49,999	82.1	5.00
\$50,000 to \$59,999	82.0	7.00
\$60,000 to \$74.999	53.8	5.00
\$75,000 to \$100,000	75.8	5.00
Over \$100,000	74.3	5.00
Race		
White/Anglo	70.6	5.00
Black/African American	64.6	4.50
Asian	85.7	0.50
Native American Indian <sup>32</sup>	40.0	5.00
Other	66.0	6.00
Hispanic Origin		
Yes	68.0	5.00
No	68.8	5.00
Gender		
Female	65.4	5.00
Male	72.3	5.00

<sup>&</sup>lt;sup>32</sup> There were only two respondents in this category.



<sup>&</sup>lt;sup>31</sup> Significance markings refer only to the percentage played.

#### Table 18 continued

Age		
18 to 24	51.7	1.00
25 to 34	68.6	3.00
35 to 44	60.6	5.00
45 to 54	70.7	5.00
55 to 64	72.1	5.00
65 or older	69.8	5.00
Employment Status		
Employed full/part time	68.6	5.00
Unemployed	64.1	4.00
Retired	70.2	5.00

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



Figure 13 Years Playing Lotto Texas (n=123)



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

According to Figure 13, about fifty-five percent (55.3%) of respondents indicated that they have played Lotto Texas for more than five years.



## IIIh. TEXAS LOTTERY SCRATCH OFF TICKETS RESULTS



Figure 14 Percentage Playing Texas Lottery Scratch Off Tickets

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

Figure 14 indicates that fifty-four percent of respondents playing any lottery game in the past year played Texas Lottery Scratch Off tickets. This participation rate is quite similar to 2007 (50%) but is down from rates in 2006 and 2005, which were around 66%.



Figure 15 Frequency of Purchasing Texas Lottery Scratch Off Tickets (n=345)



Thirty-three percent (33.0%) of respondents who played Scratch-off tickets reported that they purchased them at least once a week, as shown in Figure 15. Twenty-six percent (25.8%) purchased tickets at least once a month while forty-one percent (41.2%) purchased tickets a few times a year.

# Table 19Average Time Played Texas Lottery Scratch Off Tickets

Texas Lottery Scratch Off	Average Number of Times Played
Per week for weekly past-year players	2.56
Per month for monthly past-year players	2.47
Per year for yearly past-year players	7.37

Table 19 shows that respondents that played Texas Lottery Scratch Off tickets played an average number of 2.56 times a week, 2.47 times a month, and 7.37 times a year.



# Table 20Dollars Spent on Texas Lottery Scratch Off Tickets

Texas Lottery Scratch Off Tickets	Dollars Spent
Average spent per play <sup>33</sup>	\$7.81
Average spent per month (mean) <sup>34</sup>	11.89
Average spent per month (median) <sup>35</sup>	5.00

Table 20 reports that Texas Lottery Scratch Off players spent an average of \$7.81 per play, while monthly players spent an average of \$11.89 a month.

Table 21 below shows there were significant differences among demographic groups (educational level, income, and age) regarding the percentage that played Texas Lottery Scratch Off tickets.

- Less educated and lower-income respondents were more likely to play Texas Lottery Scratch off tickets than their more educated and higher-income counterparts.
- Younger respondents were more likely to play Scratch Off games than older ones. According to Table 22, seventy-three percent of respondents in the 18 to 24 age category indicated that they played Texas Lottery Scratch Off tickets in the past year. In comparison, only forty percent of respondents 65 years or older reported playing Texas Lottery Scratch Off in the past year.
- Respondent characteristics of race, ethnic origin, gender, and employment status had no statistically significant relationship with propensities to purchase Texas Lottery Scratch Off tickets in the past year.

<sup>&</sup>lt;sup>35</sup> The median number of dollars spent per month excludes the respondents who indicated that they purchased more than \$100 of Texas Lottery Scratch off tickets per month. If those respondents are included, the median number of dollars spent for purchasing the tickets is \$7.00 per month.



<sup>&</sup>lt;sup>33</sup> The average number of dollars spent per play excludes the respondents who indicated that they purchased more than \$100 of Texas Lottery Scratch off tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$13.98 per play.

<sup>&</sup>lt;sup>34</sup> The average number of dollars spent per month excludes the respondents who indicated that they purchased 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 \$21.05 per month.

#### Table 21

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 <sup>36</sup>	Median Dollars Spent
Year		
2008	54.0	\$5.00
2007	49.0	7.00
2008 Demographics		
Education**		
Less than high school diploma	61.3	10.00
High school degree	58.5	6.00
Some college	59.2	10.00
College degree	47.8	5.00
Graduate degree	43.1	5.00
Income*		
Less than \$12,000	77.8	11.00
\$12,000 to \$19,999	60.6	5.50
\$20,000 to \$29,999	73.5	2.00
\$30,000 to \$39,999	52.4	10.00
\$40,000 to \$49,999	59.0	5.00
\$50,000 to \$59,999	47.1	10.00
\$60,000 to \$74.999	50.0	12.50
\$75,000 to \$100,000	53.8	6.00
Over \$100,000	51.0	4.00
Race		
White/Anglo	52.7	5.00
Black/African American	53.7	6.00
Asian	66.7	2.50
Native American Indian	80.0	11.00
Other	56.8	10.00
Hispanic Origin		
Yes	59.3	10.00
No	52.0	5.00
Gender		
Female	55.7	5.00
Male	52.3	5.50
Age***		
18 to 24	73.3	10.00
25 to 34	71.0	5.00
35 to 44	51.5	4.00
45 to 54	54.7	10.00
55 to 64	54.3	5.00
65 or older	40.4	5.00
Employment Status		
Employed full/part time	54.2	5.00
Unemployed	66.7	10.00
Retired	47.5	5.00

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

<sup>&</sup>lt;sup>36</sup> Significance markings refer only to the percentage played.



Figure 16 Years Playing Texas Lottery Scratch Off Tickets (n=339)



As shown in Figure 16, nearly 3 in 4 (73.5%) of the respondents that played Texas Lottery Scratch Off Tickets reported playing them for more than 5 years.



#### **IIII. TEXAS TWO STEP RESULTS**

#### Figure 17

Percentage Playing Texas Two Step



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

Figure 17 illustrates that, as in 2007, about ten percent (9.7%) of respondents who reported playing any lottery game in the past year in the 2008 survey played Texas Two Step.



Figure 18 Frequency of Purchasing Texas Two Step Tickets (n=64)



Figure 18 demonstrates that one-quarter, or 16 in all, of Texas Two Step players purchased tickets for the game at least once a week. Similarly, one-quarter Texas Two Step players purchased tickets at least once a month. The remaining half indicated that they purchased tickets for Texas Two Step a few times a year.

# Table 22Average Time Played Texas Two Step

Texas Two Step Players	Average Number of Times Played
Per week for weekly past-year players	1.00
Per month for monthly past-year players	2.80
Per year for yearly past-year players	6.80

Table 22 reports that respondents playing Texas Two Step played an average of 1.00 times a week, 2.80 times a month, or 6.80 times a year.



46

## Table 23Dollars Spent on Texas Two Step

Texas Two Step Players	Dollars Spent
Average spent per play <sup>37</sup>	\$4.62
Average spent per month (mean)	8.63
Average spent per month (median)	4.00

Respondents playing Texas Two Step spent an average of \$4.62 per play, the mean expenditure was \$8.63 a month and the median expenditure was \$4.00 as shown in Table 23.

According to Table 24 on the following page, there were significant differences among demographic groups regarding the percentage that played Texas Two Step tickets. Non-Hispanics were more likely to play than those of Hispanic origin. The older the respondents, the more likely they were to play Texas Two Step.

Respondent characteristics of race, education, income, gender, and employment status had no association with propensities to purchase TexasTwo Step tickets in the past year. Based on percentages played, Asians appeared more likely to play Texas Two Step than any other races. However, sample sizes are too small to assert this difference with any degree of statistical certainty.

<sup>&</sup>lt;sup>37</sup> The average number of dollars spent per play excludes the respondents who indicated that they purchased more than \$100 of Texas Two Step tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$17.51 per play.



47

#### Table 24

# 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		
2008	9.7	\$3.50
2007	10.1	5.00
2008 Demographics		
Education		
Less than high school diploma	12.9	4.50
High school degree	9.5	5.00
Some college	14.9	4.00
College degree	6.0	2.00
Graduate degree	9.9	1.00
Income		
Less than \$12,000 <sup>38</sup>	11.1	10.00
\$12,000 to \$19,999	12.5	3.50
\$20,000 to \$29,999 <sup>39</sup>	14.3	0.00
\$30,000 to \$39,999	7.1	2.00
\$40,000 to \$49,999	17.9	4.00
\$50,000 to \$59,999	11.8	10.00
\$60,000 to \$74.999	5.8	1.00
\$75,000 to \$100,000	12.1	3.50
Over \$100,000	8.0	1.50
Race		
White/Anglo	10.5	2.00
Black/African American	12.6	6.00
Asian <sup>40</sup>	28.6	4.00
Native American Indian		
Other	6.3	4.50
Hispanic Origin*		
Yes	5.7	6.00
No	11.4	3.00

<sup>&</sup>lt;sup>38</sup> Only two respondents reported how much they spent on Texas Two Step in the past year.

<sup>&</sup>lt;sup>40</sup> Only two respondents reported how much they spent on Texas Two Step in the past year.



<sup>&</sup>lt;sup>39</sup> There were no respondents in this category reporting how much they spent on the game in the past year.

#### Table 24 continued

Gender		
Female	8.9	3.00
Male	11.2	4.00
Age*		
18 to 24	3.3	4.00
25 to 34	2.9	1.00
35 to 44	10.0	2.00
45 to 54	12.5	4.00
55 to 64	10.8	3.00
65 or older	12.4	10.00
Employment Status		
Employed full/part time	9.5	2.50
Unemployed	7.9	5.00
Retired	12.5	8.00

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



Figure 19 Years Playing Texas Two Step (n=59)



As shown in Figure 19, fifty-one percent (50.9%) of respondents indicated that they have played Texas Two Step for more than five years.



#### **IIIJ. MEGA MILLIONS RESULTS**



Figure 20 Percentage Playing Mega Millions

Source: Center for Public Policy 2007 and 2008 survey data and additional survey reports from 2001-2006

Figure 20 illustrates that forty-five percent (45.3%) of respondents in the 2008 survey who played any lottery game in the past year said that they played Mega Millions. This was about the same rate as recorded by the 2007 survey (44.0%) and down from 2005 and 2005 levels.



#### Figure 21 Frequency of Purchasing Mega Millions Tickets (n=291)



Thirty-one percent (31.27%) of respondents purchased Mega Millions tickets at least once a week (see Figure 21). Twenty-two (22.34%) percent said that they purchased Mega Millions tickets at least once a month while forty-six percent (46.39%) of the respondents purchased Mega Millions tickets a few times a year.

#### Table 25 Average Times Played Mega Millions

Mega Millions	Average Number of Times Played
Per week for weekly past-year players	2.29
Per month for monthly past-year players	2.19
Per year for yearly past-year players	7.49

As shown in Table 25, respondents that played Mega Millions tickets played an average of 2.29 times per week, 2.19 times per month, and 7.49 times per year, respectively.



## Table 26Dollars Spent on Mega Millions

Mega Millions	Dollars Spent
Average spent per play <sup>41</sup>	\$5.88
Average spent per month (mean) <sup>42</sup>	9.70
Average spent per month (median)	5.00

Mega Millions players spent an average of \$5.88 per play and monthly players spent an average of \$9.70 per month, as shown in Table 26. Approximately half of the respondents were likely to spend \$5.00 or more a month on purchasing Mega Millions tickets.

As Table 27 shows, there were significant differences among demographic groups (educational level and gender) regarding the percentage that played Mega Millions in the past year.

- More educated respondents were more likely to play Mega Millions than less educated respondents.
- Male respondents were more likely to play Mega Millions than females.
- Other demographic classifications, including income, race, ethnic origin, age, and employment status, had no statistically significant effect on respondent propensity to play Mega Millions.

<sup>&</sup>lt;sup>42</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 \$10.92 per month.



<sup>&</sup>lt;sup>41</sup> The average number of dollars spent per play excludes the respondents who indicated that they purchased more than \$100 of Mega Million tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$12.00 per play.

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

Mega Millions	Percentage Played	Median Dollars Spent
Year		
2008	45.3	\$5.00
2007	44.0	4.00
2008 Demographics		
Education*		
Less than high school diploma	32.3	4.00
High school degree	40.4	5.00
Some college	44.6	6.00
College degree	50.8	4.00
Graduate degree	50.0	2.00
Income		
Less than \$12,000	27.8	8.00
\$12,000 to \$19,999	50.0	4.00
\$20,000 to \$29,999	40.8	8.00
\$30,000 to \$39,999	41.9	7.00
\$40,000 to \$49,999	50.0	2.00
\$50,000 to \$59,999	57.7	9.00
\$60,000 to \$74,999	44.2	3.00
\$75,000 to \$100,000	47.7	2.00
Over \$100,000	51.5	4.00
Race		
White	43.3	5.00
Black	53.6	5.00
Asian	57.1	8.00
Native American Indian	20.0	1.00
Other	47.9	5.00
Hispanic origin		
Yes	41.0	3.00
No	47.1	5.00
Gender*		
Female	39.7	3.00
Male	50.6	5.00
Age		0.50
18 to 24	33.3	3.50
25 to 34	37.7	6.00
35 to 44	45.1	5.00
45 to 54	51.8	5.00
55 t0 64	49.0	4.00
65 or older	41.0	3.00
Employment status	47.0	5.00
Employed full/part time	47.2	5.00
Unemployed	41.0	6.00
Retired	43.8	5.00

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



Figure 22 Years Playing Mega Millions (n=280)



Twenty-three percent (22.50%) of the respondents mentioned that they have been playing Mega Millions for less than two years. Meanwhile forty-seven percent (46.79%) of the respondents reported having played Mega Millions for more than 5 years.



#### **IIIk. MEGAPLIER RESULTS**

## Figure 23





Source: Center for Public Policy 2007 and 2008 survey data and reports from 2001-2006

Figure 23 illustrates that about twelve percent (11.76%) of the respondents playing any lottery game in the past year played Megaplier. While this is a slightly lower rate than last year, the difference is not at an acceptable level of statistical significance.



Figure 24 Frequency of Purchasing Megaplier Tickets (n=75)



Thirty-seven percent (37.33%) of those respondents who Megaplier in the past year indicated that they purchased Megaplier tickets at least once a week. Twenty-one percent (21.33%) purchased tickets at least once a month, and forty-one percent (41.33%) purchased tickets a few times a year.

## Table 28Average Times Played Megaplier

Megaplier	Average Number of Times Played
Per week for weekly past-year players	2.85
Per month for monthly past-year players	1.60
Per year for yearly past-year players	10.59

Respondents playing Megaplier played an average of 2.85 times per week, 1.60 times per month, or 10.59 times per year, as shown in Table 28.



Demographic Study of Texas Lottery Players 2008

## Table 29Dollars Spent on Megaplier

Megaplier	Dollars Spent
Average spent per play43	\$4.15
Average spent per month (mean) <sup>44</sup>	8.63
Average spent per month (median)	4.00

Table 29 shows that Megaplier players spent an average of \$4.15 per play. An average of \$8.63 was spent per month.

Table 30 on the next page indicates that the percentage of respondents that played Megaplier varied somewhat by every demographic group. That is, for no demographic category do we detect statistically significant differences for Megaplier participation rates.

<sup>&</sup>lt;sup>44</sup> The average number of dollars spent per play excludes the respondents who indicated that they purchased more than \$100 of Megaplier tickets per month. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$10.77 per month.



<sup>&</sup>lt;sup>43</sup> The average number of dollars spent per play excludes the respondents who indicated that they purchased more than \$100 of Megaplier tickets per play. If those respondents are included, the average number of dollars spent for purchasing the tickets is \$18.76 per play.

Table 30Megaplier: Lottery Play and Median Dollars Spent per Month

Megaplier	Percentage Played <sup>45</sup>	Median Dollars Spent
Year		
2008	11.8	\$4.00
2007	12.9	5.00
2008 Demographics		
Education		
Less than high school diploma <sup>46</sup>	6.5	0.50
High school degree	9.9	7.00
Some college	16.0	4.50
College degree	12.2	3.50
Graduate degree <sup>47</sup>	7.0	0.00
Income		
Less than \$12,000 <sup>48</sup>	5.6	1.00
\$12,000 to \$19,999	18.2	1.00
\$20,000 to \$29,999	6.3	8.00
\$30,000 to \$39,999	14.3	5.00
\$40,000 to \$49,999	15.4	1.00
\$50,000 to \$59,999	15.7	11.50
\$60,000 to \$74,999	7.7	10.00
\$75,000 to \$100,000	12.5	5.50
Over \$100,000	15.5	4.00
Race		
White	11.4	4.00
Black	12.5	4.00
Asian <sup>49</sup>	42.9	0.00
Native American Indian		
Other	12.9	2.50
Hispanic origin		
Yes	10.9	1.00
No	11.6	4.00
Gender		
Female	11.1	2.00
Male	12.4	7.00
Age		
18 to 24	13.3	1.00
25 to 34	8.8	2.50
35 to 44	8.9	6.00
45 to 54	17.4	5.50
55 to 64	12.1	1.00
65 or older	10.6	3.00

<sup>45</sup> Significance markings refer only to the percentage played.

<sup>46</sup> There were only two respondents reporting how much they spent on Megaplier in the past year.

<sup>47</sup> There was no respondent reporting how much they spent on Megaplier in the past year.

<sup>48</sup> There was only one respondent reporting how much they spent on Megaplier in the past year.

<sup>49</sup> There were no respondents reporting how much they spent on Megaplier in the past year.



Table 30 continued		
Employment status		
Employed full/part time	12.5	2.50
Unemployed	10.0	5.00
Retired	11.4	4.00

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



60

Demographic Study of Texas Lottery Players 2008

Figure 25





Thirty-eight percent (37.88%) of the respondents indicated that played Megaplier reported playing the game for more than 5 years while thirty-five percent (34.85%) of the Megaplier players reported playing the game for 2 years or less.



#### **IIII. DAILY 4 RESULTS**

#### Percentage Playing Daily 4

Almost two percent of respondents (1.81%) indicated that they purchased Daily 4 in the past year. Of these 11 respondents, five reported that they purchased Daily 4 tickets at least once a week, two indicated that they purchased Daily 4 tickets at least once a month, and four purchased the tickets a few times a year.

## Table 31Average Times Played Daily 4

Daily 4	Average Number of Times Played
Per week for weekly past-year players	3.75
Per month for monthly past-year players	1.00
Per year for yearly past-year players	2.75

Respondents playing Daily 4 played an average number of 3.75 times per week, 1.00 times per month, or 2.75 times per year, as shown in Table 31.

## Table 32Dollars Spent on Daily 4

Daily 4	Dollars Spent
Average spent per play	\$4.95
Average spent per month (mean) <sup>50</sup>	4.83
Average spent per month (median)	2.00

According to Table 32, Daily 4 players spent an average of \$4.95 per play. An average of \$4.83 was spent per month.

There are no statistically significant demographic differences between past-year Daily 4 players and their counterparts.

<sup>&</sup>lt;sup>50</sup> The average number of dollars spent per month excludes the respondents who indicated that they purchased \$0 and more than \$100 of Daily 4 tickets per month. If those respondents are included, the average number of dollars spent for playing the tickets is \$0.22 per month.



#### IIIm. SUM IT UP FEATURE WITH DAILY 4 RESULTS

#### Percentage Playing Sum It Up feature with Daily 4

Thirteen respondents indicated that they purchased Sum It Up feature with Daily 4 in the past year. Of these, eight respondents (61.5%) reported that they purchased Sum It up Feature with Daily 4 tickets at least once a week. Two respondents (15.4%) reported that they purchased the tickets at least once a month, and 3 respondents (23.1%) said they purchased the tickets a few times a year.

Note, however, that in order to purchase the Sum it Up feature, players must first purchase the base game. Of those who reported playing Daily 4 in the past year, 64 percent (63.63%) indicated they also purchased the Sum It Up feature. Please note, that this is based on a very small sample.

## Table 33Average Times Played Sum It Up feature with Daily 4

Sum It Up feature with Daily 4	Average Number of Times Played
Per week for weekly past-year players	2.25
Per month for monthly past-year players	1.00
Per year for yearly past-year players	3.50

Table 33 shows that respondents who played the Sum It Up feature with Daily 4 played an average of 2.25 times per week, 1.00 times per month, and 3.50 times per year, respectively. Please note, however, that this based on information from only 13 respondents.

# Table 34Dollars Spent on Sum It Up feature with Daily 4

Sum It Up feature with Daily 4	Dollars Spent
Average spent per play	\$6.11
Average spent per month (mean) <sup>51</sup>	2.50
Average spent per month (median)	2.50

Sum It up feature with Daily 4 players spent an average of \$6.11 per play and monthly players spent an average of \$2.50 per month, as shown in Table 34. Approximately half of the respondents were likely to spend \$2.50 or more a month on purchasing Sum It Up feature with Daily 4 tickets.

<sup>&</sup>lt;sup>51</sup> The average number of dollars spent per month excludes respondents who indicated that they spent \$0 dollars on purchasing the Sum It Up feature with Daily 4 tickets. If those respondents are included, the average number of dollars spent per month on playing the tickets is \$0.71. Note that when those respondents are excluded, there are only two respondents in this category.



#### **IV. SUMMARY**

The Texas Lottery Commission 2008 Demographic Study of Texas Lottery Players surveyed 1,701 Texas citizens aged 18 and over between late August and early September of 2008. After registered decreased participation each year from 2005 through 2007, 4 in 10 (39 percent) of survey respondents in 2008 said they participated in Texas Lottery games in the past year, virtually the same percentage as in the 2007 survey. As with the 2006 and 2007 surveys, there is a statistically significant difference in participation due to employment status. Gender also influenced participation rates, with men generally more likely to play than women. General participation findings broken down by income, education, race, Hispanic origin, age, and other classifications are not statistically significant.

In many cases participation rates among demographic groups vary by the type of game played (see Section III above). Education is found to affect game participation for Cash 5, Texas Lottery Scratch Off tickets, and Mega Millions. Cash 5 participation rates also vary across income groups. Age affects participation for Texas Lottery Scratch Off and Texas Two Step. Texas Two Step participation is also shown to be influenced by Hispanic origin. Finally, participation rates between men and women differ for those who played Mega Millions during the past year.

An examination of Texas lottery districts finds that participation rates in any Texas Lottery games were highest in the Victoria (49.4%), San Antonio (48.9%), El Paso (46.2%), and Lubbock (43.6%) lottery districts. The lowest rates were in the Tyler (32.4%) and Abilene (33.8%) districts (see Table 3). Districts with the highest average monthly amount spent per player were El Paso (\$21.87) and McAllen (\$20.29). The lowest average monthly amount spent per player was found in the Lubbock (\$5.55) and Austin (\$8.53) districts.

Comparing 2008 survey results with those from 2007, we find the following: no general difference in participation rates – Texans were no more or no less likely to play the lottery during 2008 than they were in 2007. Participation rates increased the most in El Paso, Lubbock, and Victoria districts. Participation rates fell in the Irving, McAllen, and Tyler districts.



### APPENDIX

## Table A-1 Sample Population by County<sup>52</sup> (n=1,548)

County	Count	Percentage
Anderson	4	0.26
Andrews	1	0.06
Angelina	3	0.19
Archer	3	0.19
Atascosa	2	0.13
Bastrop	6	0.39
Bee	1	0.06
Bell	25	1.62
Bexar	83	5.37
Blanco	1	0.06
Bowie	6	0.39
Brazoria	37	2.39
Brazos	10	0.65
Brewster	2	0.13
Briscoe	1	0.06
Brown	4	0.26
Burleson	1	0.06
Burnet	2	0.13
Caldwell	3	0.19
Calhoun	1	0.06
Callahan	1	0.06
Cameron	22	1.42
Carson	2	0.13
Cass	3	0.19
Chambers	3	0.19
Cherokee	4	0.26
Coleman	2	0.13
Collin	29	1.88
Colorado	2	0.13
Comal	6	0.39
Cooke	4	0.26
Coryell	6	0.39
Cottle	1	0.06
Culbertson	1	0.06

<sup>&</sup>lt;sup>52</sup> The discrepancy between the sample in Table A-1 (n=1,546) and the total sample (n=1,695) is due to respondents stating that they "did not know" or were "unsure" of their county of residence.



Dallas	113	7.31
De Witt	5	0.32
Deaf Smith	2	0.13
Denton	35	2.26
Donley	1	0.06
Ector	5	0.32
El Paso	35	2.26
Ellis	18	1.16
Erath	1	0.06
Falls	1	0.06
Fannin	2	0.13
Fayette	3	0.19
Fisher	1	0.06
Fort Bend	39	2.52
Franklin	1	0.06
Freestone	3	0.19
Frio	1	0.06
Gaines	1	0.06
Galveston	28	1.81
Garza	2	0.13
Gillespie	3	0.19
Goliad	1	0.06
Gonzales	2	0.12
Gray	1	0.06
Grayson	13	0.84
Gregg	10	0.65
Guadalupe	9	0.58
Hale	3	0.19
Hall	1	0.06
Hamilton	1	0.06
Hardeman	1	0.06
Hardin	3	0.19
Harris	251	16.24
Harrison	4	0.06
Haskell	1	0.06
Hays	9	0.58
Henderson	9	0.58
Hidalgo	21	1.36
Hill	4	0.26
Hood	3	0.19
Hopkins	3	0.19
Houston	2	0.13



Hunt	2	0.13
Hutchinson	2	0.13
Jack	1	0.06
Jackson	1	0.06
Jasper	3	0.19
Jefferson	22	1.42
Jim Wells	5	0.32
Johnson	11	0.71
Jones	2	0.13
Karnes	4	0.26
Kaufman	7	0.45
Kendall	2	0.13
Kerr	5	0.32
Kinney	2	0.13
Lamar	3	0.19
Lamb	1	0.06
Lampasas	2	0.13
Lavaca	7	0.45
Lee	3	0.19
Liberty	5	0.32
Limestone	3	0.19
Live Oak	1	0.06
Llano	1	0.06
Lubbock	17	1.10
Lynn	1	0.06
Madison	2	0.13
Martin	2	0.13
Matagorda	1	0.06
McLennan	24	1.55
Mcculloch	2	0.13
Medina	2	0.13
Midland	11	0.71
Milam	1	0.06
Mitchell	1	0.06
Montague	1	0.06
Montgomery	28	1.81
Moore	1	0.06
Nacogdoches	1	0.06
Navarro	5	0.32
Newton	2	0.13
Nolan	1	0.06
Nueces	16	1.03


Oldham	1	0.06
Orange	10	0.65
Palo Pinto	3	0.19
Panola	4	0.26
Parker	8	0.52
Parmer	1	0.06
Polk	6	0.39
Potter	9	0.58
Presidio	1	0.06
Randall	5	0.32
Red River	1	0.06
Refugio	1	0.06
Richardson	3	0.19
Robertson	5	0.32
Rockwall	5	0.32
Runnels	3	0.19
Rusk	2	0.13
San Jacinto	3	0.19
San Patricio	3	0.19
Shelby	1	0.06
Smith	15	0.97
Starr	2	0.13
Swisher	1	0.06
Tarrant	103	6.66
Taylor	9	0.58
Titus	5	0.32
Tom Green	8	0.52
Travis	74	4.79
Trinity	1	0.06
Tyler	5	0.32
Upshur	2	0.13
Upton	1	0.06
Uvalde	3	0.19
Val Verde	6	0.39
Van Zandt	4	0.26
Victoria	9	0.58
Walker	3	0.19
Washington	5	0.32
Webb	6	0.39
Wharton	3	0.19
Wheeler	1	0.06
Wichita	8	0.52



Wilbarger	2	0.13
Willacy	1	0.06
Williamson	26	1.68
Wilson	1	0.06
Wise	6	0.39
Wood	3	0.19
Yoakum	1	0.06
Young	1	0.06
Zapata	1	0.06

