## Demographic Survey of Texas Lottery Players 2014





November 2014

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### **EXECUTIVE SUMMARY**

The Texas Lottery Commission 2014 Demographic Study of Texas Lottery Players surveyed a total of 1,701 Texas citizens aged 18 years and older between August and September of 2014. The survey respondents included both past-year players (who had played any Texas Lottery game in the past year) and non-players (who had not played any Texas Lottery game in the past year.) The percentage of respondents playing any Texas Lottery game (the participation rate) for 2014 was 25.0 percent, which was lower (by 11.5 percentage points) than the 36.5 percent in 2013. The difference was statistically significant.<sup>1</sup> There were also statistically significant differences between the past-year players and the non-players in 2014 with regard to employment status, race, Hispanic origin and education. Among past-year players, differences in the percent playing any game were statistically significant for education, race and employment status, but not for the other demographic factors. In comparison to 2013, as many as eight games and features reported a decline in their respective participation rate in 2014. The participation rates of Powerball and its add-on feature, Power Play, which saw the largest increases in 2013, suffered the biggest reversal of trend of 14.6 and 8.5 percentage points, respectively, in 2014. Similar to the past few years, Lotto Texas was the most popular game among all games/features, with a participation rate of 67.8 percent in 2014. The lottery sales districts with the highest and the lowest participation rates in any Texas Lottery games in 2014 were Dallas South (38.6 percent) and Tyler (15.4 percent). All except one (Dallas South) of the lottery sales districts experienced a decline in the participation rate from 2013 to 2014. The biggest decreases in participation rates belonged to the El Paso and San Antonio sales districts: each recorded a decline of 21.4 percentage points.

### Highlights

The following are some key findings of the 2014 survey on participation rates and personal expenditures in any Texas Lottery games/features (see Table 1):

- Similar to the previous year, Lotto Texas was the most popular Texas Lottery game in 2014: a total of 67.8 percent of past-year players had played the game.
- Powerball recorded the biggest decline in participation rate from 2013 to 2014 among all Texas Lottery games/features of 14.6 percentage points.
- All or Nothing recorded the highest average number of times played per week (3.00 times) as well as the highest average number of times played per month (7.71 times) among all games and features by past-year players in 2014.
- Among all the Texas Lottery games and features in 2014, the Power Play feature with Powerball had the highest average spent per play of \$8.80 by past-year players.

A brief summary of participation rates by game and add-on feature is given below.

Note: Some games and add-on features had recorded very low participation rates (between 0.7 percent and 3.0 percent). We did not include statistical analyses for these games and features because their sample sizes were too small to give any statistically meaningful information. Games and features that had an insufficient sample size include: Sum It Up Feature with Pick 3

<sup>&</sup>lt;sup>1</sup> All statistical tests reported in this report yield a margin of error of +/- 2.4 percent at the 95 percent confidence level.



Day, Pick 3 Night, Sum It Up Feature with Pick 3 Night, Daily 4 Day, Sum It Up Feature with Daily 4 Day, Daily 4 Night, and Sum It Up Feature with Daily 4 Night.

**Pick 3 Day**: Approximately nineteen percent (18.6) of the past-year lottery players (n=425) had played Pick 3 Day in 2014. The proportion was about the same as the previous year (17.8 percent). About thirty-two percent (31.7) of the respondents who purchased Pick 3 Day tickets purchased them at least once a week, and fifteen percent (15.2) of the respondents purchased them at least once a month. On average, Pick 3 Day players spent \$5.70 per play.

<u>Cash 5</u>: Slightly more than twenty-three percent (23.3) of the past-year lottery players had played Cash 5, about two percentage points higher than the rate in 2013. Among these past-year players, slightly over twenty percent (21.2) purchased Cash 5 tickets at least once a week. Some 17.2 percent purchased tickets at least once a month. Cash 5 players spent an average of \$5.68 per play.

**Lotto Texas**: Lotto Texas continued to be the most popular Texas Lottery game, with a total of 67.8 percent of past-year players who reported playing the game in 2014. The participation rate, however, declined by 5.2 percentage points as compared to 2013. Among the players of Lotto Texas, 32.6 percent of respondents that purchased Lotto Texas tickets purchased them at least once a week. About twenty-two percent (22.2) of Lotto Texas players indicated having purchased the tickets at least once a month. On average, Lotto Texas players spent an average of \$5.38 per play.

**Extra! Feature with Lotto Texas**: Similar to the previous year, about five percent (4.9) of past-year lottery players indicated that they had selected Extra!.

**Texas Lottery Scratch-off Tickets**: Texas Lottery scratch-off tickets remained the secondmost popular Texas Lottery product among past-year players, with 57.6 percent of the respondents reporting that they had played Texas Lottery scratch-off games in 2014. Thirty percent (29.4) of respondents who bought scratch-off tickets reported that they purchased them at least once a week. Another 22.0 percent purchased the tickets at least once a month. Texas Lottery scratch-off games players spent an average of \$7.64 per play.

**Texas Two Step**: About thirteen percent (12.7) of past-year lottery players had played Texas Two Step in 2014. One-third (33.3 percent) of Texas Two Step players purchased tickets for the game at least once a week. Players of Texas Two Step spent an average of \$5.34 per play.

<u>Mega Millions</u>: Similar to 2013, the third-most popular Texas Lottery game among players in 2014 was Mega Millions, with a participation rate of 51.8 percent (6.9 percentage points lower than in 2013). Nearly twenty percent (19.6) of the respondents reported that they purchased Mega Millions tickets at least once a week. About the same proportion (18.6 percent) of the respondents purchased the tickets at least once a month. Mega Millions players spent an average of \$5.21 per play.

<u>Megaplier Feature with Mega Millions</u>: About nine percent (8.7) of past-year lottery players had included Megaplier in their Mega Millions play, which was 7.0 percentage points lower than the previous year. Among them, 10.8 percent reported having purchased the



add-on feature at least once a month. Megaplier players spent an average of \$5.56 per play.

**Powerball:** About forty percent (39.3) of past-year lottery players indicated that they played Powerball, a substantial decrease of fifteen percentage points (14.6) over the previous year. A total of 21.0 percent of the respondents who purchased Powerball tickets purchased them at least once a week. Another 18.0 percent of the respondents indicated having purchased Powerball tickets at least once a month. Powerball players spent an average of \$5.54 per play.

**Power Play Feature with Powerball**: Only four percent (3.5) of past-year lottery players indicated that they included Power Play with their Powerball ticket purchases, a decline of 8.5 percentage points as compared to 2013. Exactly forty percent (40.0) of the respondents that purchased the Power Play feature with Powerball purchased it at least once a week. On average, Power Play players spent \$8.80 per play.

<u>All or Nothing</u>: A total of six percent (6.4) of past-year lottery players indicated that they had played All or Nothing, a decrease of 2.8 percentage points over 2013, the year when the game was reintroduced.<sup>1</sup>

<u>Sum It Up Feature with Pick 3 Day</u>: Less than three percent (2.6) of past-year lottery players indicated that they selected the Sum It Up feature with Pick 3 Day.

**<u>Pick 3 Night</u>**: About one percent (1.2) of past-year lottery players indicated that they played Pick 3 Night.

<u>Sum It Up Feature with Pick 3 Night</u>: Less than one percent (0.9) of past-year lottery players indicated that they added the Sum It Up feature when they played Pick 3 Night.

**Daily 4 Day**: Less than three percent (2.1) of past-year lottery players indicated that they played Daily 4 Day.

<u>Sum It Up Feature with Daily 4 Day</u>: Less than one percent (0.7) of past-year lottery players indicated that they added the Sum It Up feature to their purchases of Daily 4 Day.

**Daily 4 Night:** Less than three percent (2.1) of past-year lottery players indicated that they played Daily 4 Night.

<u>Sum It Up Feature with Daily 4 Night</u>: Less than one percent (0.7) of the past-year lottery players indicated that they selected the Sum It Up feature with Daily 4 Night.



### Table 1 **Demographic Survey – Highlights of Key Findings**

			Frequency of Purchase		Average Number of Times Played (Past-year Players)		_	
Game/Feature <sup>1</sup>	2014 Participation Rate	Change in Rate from 2013	At Least Once a Week	At Least Once a Month	Per Week	Per Month	Average Spent Per Play	Page Results Begin
Pick 3 Day	18.6%	0.8	31.7%	15.2%	2.13	7.08	\$5.70	20
Cash 5	23.3%	2.1	21.2%	17.2%	2.50	5.95	\$5.68	25
Lotto Texas	67.8%^	-5.2	32.6%	22.2%	1.54	4.90	\$5.38	30
Extra! Feature with Lotto Texas	4.9%	-0.1	28.6%	71.4%^	1.83	4.56	\$4.74	35
Scratch-offs	57.6%	-3.4	29.4%	22.0%	2.45	7.19	\$7.64	39
Texas Two Step	12.7%	0.6	33.3%	16.7%	1.50	4.18	\$5.34	44
Mega Millions	51.8%	-6.9	19.6%	18.6%	1.37	3.57	\$5.21	49
Megaplier Feature with Mega Millions	8.7%	-7.0	13.5%	10.8%	1.50	4.80	\$5.56	54
Powerball	39.3%	-14.6^	21.0%	18.0%	1.51	4.28	\$5.54	59
Power Play Feature with Powerball	3.5%	-8.5	40.0%^	13.3%	1.67	5.86	\$8.80^	63
All or Nothing	6.4%	-2.8	7.4%	14.8%	3.00^	7.71^	\$5.12	67

<sup>1</sup> Games and add-on features with participation rates of 3.0 percent or below are excluded from the table. <sup>^</sup> The largest absolute value (positive or negative) in the column among all the games and features.



### Testing differences in lottery participation and expenditure from 2013 to 2014

In addition to the basic results that ensured continuity of information and presentation with prior survey reports, the 2014 report also provides statistical tests of *differences in lottery participation and individual expenditures from 2013 to 2014*. The report highlights these differences for general participation rates and for the individual lottery games separately. Comparing 2014 survey results with those from 2013, we found that there were statistically significant differences in the percent playing any game between 2013 and 2014 for the following individual games: Lotto Texas, Mega Millions, Megaplier feature with Mega Millions, Powerball, and Power Play feature with Powerball.<sup>2</sup> In addition, differences in participation rates between 2014 and 2013 were statistically significant for the lottery sales districts of Dallas North, El Paso, Fort Worth, Houston East, McAllen, San Antonio, Tyler and Waco.



### I. INTRODUCTION AND METHOD OF ANALYSIS

A random survey of adult Texas residents aged 18 and older was conducted during August to September of 2014. 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 Hobby Center for Public Policy (HCPP) (<u>http://www.uh.edu/class/hcpp/index.php</u>). The individuals who worked on this study are listed in alphabetical order:

Diana Benitez Renée Cross Sophiya Das Jim Granato Cong Huang David Llanos Chris Mainka Lauren Neely Kwok-Wai Wan Ching-Hsing Wang Kenicia Wright

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/class/hcpp/research/polling/index.php) fielded 1,709 telephone interviews. Of these, seven (7) respondents answered "don't know," and one (1) respondent refused to answer, to the first question, "Have you played any of the Texas Lottery games in the past year?" These respondents, 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 eight (8) individuals were not used for the analyses we report below. This process resulted in a total of 1,701 usable interviews of self-reported players and nonplayers. They yielded a margin of error of +/- 2.4 percent at the 95 percent confidence level. The data for the survey were collected between August 4th and September 13th, 2014. 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 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:

- Trained telephone interviewers are used 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.
- Besides receiving training in general 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 method 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 30 percent or more, 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, began selling cell phone samples to supplement traditional sets of numbers. The SRI took advantage of this capacity and bought a cell phone sub-sample of numbers to use for the 2014 Texas Lottery Study in addition to the standard statewide RDD sample. The data included in this report are based on 1,086 (63.8 percent) completed interviews on standard landlines and 615 (36.2 percent) completed interviews from the cell phone sample.<sup>3</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>4</sup>



## **II. SAMPLE CHARACTERISTICS**<sup>5</sup>

Selected questions for each lottery game were cross-tabulated with the following seven demographic categories:

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

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 is 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 in 95 out of 100 samples. Extending this relation, 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 2Demographics: Summary for Income, Employment, Home Ownership, and Age

	Number and Percentage Responding			
Demographic Factors	All (n=1,701)	Past-Year Players (n=425)	Non-Players (n=1,276)	
Year <sup>6</sup>				
2014	1,701 (100%)	425 (25.0%)	1,276 (75.0%)	
2013	1,695 (100%)	618 (36.5%)	1,077 (63.5%)	
2012	1,702 (100%)	616 (36.2%)	1,086 (63.8%)	
Income	n=756 (100%)	n=217 (100%)	n=539 (100%)	
Less than \$12,000	45 (6.0%)	15 (6.9%)	30 (5.6%)	
Between \$12,000 and \$19,999	59 (7.8%)	12 (5.5%)	47 (8.7%)	
Between \$20,000 and \$29,999	56 (7.4%)	16 (7.4%)	40 (7.4%)	
Between \$30,000 and \$39,999	67 (8.9%)	16 (7.4%)	51 (9.5%)	
Between \$40,000 and \$49,999	57 (7.5%)	16 (7.4%)	41 (7.6%)	
Between \$50,000 and \$59,999	79 (10.5%)	28 (12.9%)	51 (9.5%)	
Between \$60,000 and \$74,999	66 (8.7%)	25 (11.5%)	41 (7.6%)	
Between \$75,000 and \$100,000	108 (14.3%)	28 (12.9%)	80 (14.8%)	
More than \$100,000	219 (29.0%)	61 (28.1%)	158 (29.3%)	
Employment Status*	n=1,694 (100%)	n=420 (100%)	n=1,274 (100%)	
Employed Full-time	665 (39.3%)	189 (45.0%)	476 (37.4%)	
Employed Part-time	97 (5.7%)	16 (3.8%)	81 (6.4%)	
Unemployed/Looking for Work	67 (4.0%)	15 (3.6%)	52 (4.1%)	
Not in Labor Force	94 (5.6%)	29 (6.9%)	65 (5.1%)	
Retired	771 (45.5%)	171 (40.7%)	600 (47.1%)	
Own or Rent Home	n=1,674 (100%)	n=417 (100%)	n=1,257 (100%)	
Own	1,426 (85.2%)	350 (83.9%)	1076 (85.6%)	
Rent	196 (11.7%)	54 (13.0%)	142 (11.3%)	
Occupied without Payment	52 (3.1%)	13 (3.1%)	39 (3.1%)	
Age of Respondent	n=1,484 (100%)	n=375 (100%)	n=1,109 (100%)	
18 to 24	52 (3.5%)	7 (1.9%)	45 (4.1%)	
25 to 34	98 (6.6%)	32 (8.5%)	66 (6.0%)	
35 to 44	130 (8.8%)	34 (9.1%)	96 (8.7%)	
45 to 54	227 (15.3%)	60 (16.0%)	167 (15.1%)	
55 to 64	344 (23.2%)	106 (28.3%)	238 (21.5%)	
65 and over	633 (42.7%)	136 (36.3%)	497 (44.8%)	

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



## Table 2 (continued) Demographics: Summary for Marital Status, Children, Gender, and Race/Ethnicity

	Number and Percentage Responding			
Demographic Factors	All (n=1,701)	Past-Year Players (n=425)	Non-Players (n=1,276)	
Marital Status	n=1,683 (100%)	n=416 (100%)	n=1,267 (100%)	
Married	1,071 (63.6%)	275 (66.1%)	796 (62.8%)	
Widowed	227 (13.5%)	45 (10.8%)	182 (14.4%)	
Divorced	153 (9.1%)	39 (9.4%)	114 (9.0%)	
Separated	22 (1.3%)	8 (1.9%)	14 (1.1%)	
Never Married	210 (12.5%)	49 (11.8%)	161 (12.7%)	
Children under 18 Living in Household	n=1,638 (100%)	n=413 (100%)	n=1,225 (100%)	
Yes	348 (21.3%)	92 (22.3%)	256 (20.9%)	
No	1,290 (78.8%)	321 (77.7%)	969 (79.1%)	
Number of Children under 18 Living in Household	n=348 (100%)	n=92 (100%)	n=256 (100%)	
1	150 (43.1%)	37 (40.2%)	113 (44.1%)	
2	117 (33.6%)	36 (39.1%)	81 (31.6%)	
3	55 (15.8%)	14 (15.2%)	41 (16.0%)	
4 or more	26 (7.5%)	5 (5.4%)	21 (8.2%)	
Gender of Respondent	n=1,698 (100%)	n=423 (100%)	n=1,275 (100%)	
Male	735 (43.3%)	198 (46.8%)	537 (42.1%)	
Female	963 (56.7%)	225 (53.2%)	738 (57.9%)	
Race*	n=1,655 (100%)	n=406 (100%)	n=1,249 (100%)	
White	1,148 (69.4%)	255 (62.8%)	893 (71.5%)	
Black	213 (12.9%)	66 (16.3%)	147 (11.8%)	
Hispanic	230 (13.9%)	70 (17.2%)	160 (12.8%)	
Asian	23 (1.4%)	6 (1.5%)	17 (1.4%)	
Native American Indian	15 (0.9%)	3 (0.7%)	12 (1.0%)	
Other	26 (1.6%)	6 (1.5%)	20 (1.6%)	
Hispanic Origin*	n=1,670 (100%)	n=409 (100%)	n=1,261 (100%)	
Yes	229 (13.7%)	68 (16.6%)	161 (12.8%)	
No	1,441 (86.3%)	341 (83.4%)	1,100 (87.2%)	

Note: \* p < 0.05, two-tailed test. There were statistically significant differences between players and non-players regarding the distribution by race (p < 0.05) and Hispanic Origin (p < 0.05) of the respondents.



## Table 2 (continued)Demographics: Summary for Education and Occupation

	Number and Percentage Responding			
Demographic Factors	All (n=1,701)	Past-Year Players (n=425)	Non-Players (n=1,276)	
Education*	n=1,689 (100%)	n=420 (100%)	n=1,269 (100%)	
Less than High School	67 (4.0%)	14 (3.3%)	53 (4.2%)	
High School Graduate/GED	433 (25.6%)	129 (30.7%)	304 (24.0%)	
Some College, no degree	384 (22.7%)	99 (23.6%)	285 (22.5%)	
College Degree	586 (34.7%)	132 (31.4%)	454 (35.8%)	
Graduate/Professional Degree	219 (13.0%)	46 (11.0%)	173 (13.6%)	
Occupation	n=1,512 (100%)	n=383 (100%)	n=1,129 (100%)	
Executive, Administrative, and Managerial	183 (12.1%)	47 (12.3%)	136 (12.1%)	
Professional Specialty	588 (38.9%)	129 (33.7%)	459 (40.7%)	
Technicians and Related Support	168 (11.1%)	65 (17.0%)	103 (9.1%)	
Sales	132 (8.7%)	35 (9.1%)	97 (8.6%)	
Administrative Support, Clerical	114 (7.5%)	17 (4.4%)	97 (8.6%)	
Private Household	48 (3.2%)	16 (4.2%)	32 (2.8%)	
Protective Service	17 (1.1%)	7 (1.8%)	10 (0.9%)	
Service	136 (9.0%)	35 (9.1%)	101 (9.0%)	
Precision Productions, Craft, and Repair	11 (0.7%)	1 (0.3%)	10 (0.9%)	
Machine Operators, Assemblers, and Inspectors	41 (2.7%)	16 (4.2%)	25 (2.2%)	
Transportation and Material Moving	18 (1.2%)	8 (2.1%)	10 (0.9%)	
Equipment Handlers, Cleaners, Helpers, and Laborers	19 (1.3%)	3 (0.8%)	16 (1.4%)	
Farming, Forestry, Fishing	17 (1.1%)	3 (0.8%)	14 (1.2%)	
Armed Forces	20 (1.3%)	1 (0.3%)	19 (1.7%)	

Note: \* p < 0.05, two-tailed test. There were statistically significant differences between players and non-players regarding the distribution by education (p < 0.05).

- Table 2 indicates that almost twenty-five percent (25.0) of the survey respondents reported having participated in any of the Texas Lottery games in 2014. The decrease in the participation rate over the previous year's 36.5 percent was statistically significant.
- Among the demographic factors, there was a statistically significant difference between past-year players and non-players in terms of employment status in 2014, as there was in 2013. Whereas the proportion of the past-year players who were employed full-time was higher than those who were retired (45.0 percent and 40.7 percent, respectively), the reverse was true for the two groups among the non-players. Compared to 2013, the



participation rates in 2014 were lower (by 3.9 percentage points) for those who were employed full-time but higher (by 3.6 percentage points) for those who were retired.

- In contrast to 2013, the difference in participation by race was statistically significant in the 2014 survey. The proportion of Whites among the past-year players (62.8 percent) was lower than those among the non-players (71.5 percent). However, higher proportions of Blacks (16.26 percent) and Hispanics (17.2 percent) were found among the past-year players than among the non-players. The participation rate in 2014 for Whites recorded a decrease of 3.1 percentage points, and for Blacks an increase of 3.6 percentage points, over the previous year.
- Consistent with the survey in 2013, the difference between past-year players and nonplayers by Hispanic origin was also statistically significant in the 2014 report. Among the past-year players in this year, 16.6 percent was of Hispanic origin, which was 2.5 percentage points lower than the previous year.
- The difference between past-year players and non-players by education status was statistically significant in 2014. Similar to the previous year, a higher percentage of the respondents who were high school graduates or had a GED were past-year players rather than non-players (30.7 percent and 24.0 percent, respectively). Likewise, a slightly greater proportion of the respondents who had some college education were past-year players than non-players (23.6 percent and 22.5 percent, respectively). Consistent with 2013, about half (47.7 percent) of all respondents had a college degree (34.7 percent) or a graduate/professional degree (13.0 percent).
- The demographic factors of income, own or rent home, age, marital status, children under 18 living in household, number of children under 18 living in household, gender and occupation were not statistically significant in the 2014 survey.
- Similar to 2013, the difference between past-year players and non-players by income status
  was statistically not significant in 2014. The general income distributions of the respondents
  in 2014 were similar to those reported in 2013. Among the past-year players, 28.11 percent
  had a household annual income of more than \$100,000, while those with a household
  annual income of less than \$12,000 constituted only 6.9 percent of the total.
- The home-ownership rate of all respondents in 2014 was 85.2 percent, higher than the rate last year (80.3 percent). On the other hand, a lower percentage of the respondents rented homes in 2014 than in 2013 (11.7 percent and 16.2 percent, respectively). Among the past-year players, almost eighty-four percent (84.0) owned their home, a little higher as compared to the 80.1 percent a year ago. (Note: 2013 percentages are not shown in Table 2).
- More than eighty percent (81.1) of all respondents were 45 years old and over, as compared to the 75.3 percent of the previous year. A total of 42.7 percent of the respondents were 65 and over, and this proportion was 4.6 percentage points higher than the previous year. Among the past-year players, the largest proportion (42.7 percent) was age 65 and over. Those respondents between the ages of 18 and 24 constituted the smallest proportion, 1.9 percent. The average age for all respondents was 60.0 years, which was about 3 years older than the average age (56.9 years) reported in the 2013 survey. The average ages



among players and non-players were 58.2 years and 60.7 years, respectively. (Note: average ages are not shown in Table 2).

- Over sixty percent (63.6) of all respondents were married, which was similar to the 61.7 percent recorded in the previous year. Among those who were married, about sixty-six percent (66.1) reported playing any lottery game in 2014. Nine percent (9.4) of those who participated in any game were divorced, while almost 12 percent (11.8) of the past-year players were never married.
- About one out of four (22.3 percent) past-year players had children under age 18 living in their households, which was a decrease of 1.4 percentage points from 2013. Among them, almost eighty percent (79.4) had one or two children under age 18, as compared to the higher percentage (82.9) reported in the previous year.
- In contrast to 2013, the difference in participation by gender was not statistically significant in the 2014 survey. More female respondents than male respondents were surveyed in 2014: 56.7 percent and 43.3 percent, respectively. As shown in Table 2, among the pastyear players in 2014, 53.2 percent were female; while a lower proportion (46.8 percent) were male. The distribution between female and male was reversed compared to 2013 (48.8 percent and 51.2 percent, respectively).
- The four largest occupational categories in the 2014 survey were the same as those in 2013. They were: "professional specialty" (38.9 percent), "executive, administrative, and managerial occupations" (12.1 percent), "technicians and related support" (11.1 percent), and "sales" (8.7 percent). Together, they constituted seventy-one percent (70.8) of all the respondents by occupation. The occupational category of "professional specialty" constituted 33.7 percent of the past-year players, while the category of "executive, administrative, and managerial occupations" made up another 12.3 percent. Both proportions were similar to those recorded in the 2013 survey (36.7 percent and 13.3 percent, respectively).

(Note: 2013 percentages are not shown in Table 2).



### **III. GAME FINDINGS**

### IIIa. ANY GAME RESULTS

#### Figure 1

Percentage of Respondents Playing Any Lottery Game



Sources: 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 HCPP survey data, 2006 University of North Texas (UNT) survey reports and survey reports from 1993-2005.

Figure 1 shows past-year Texas Lottery participation rates over time for those playing any Texas Lottery game since the agency's first survey conducted in 1993. The Texas Lottery participation rate in 2014 was twenty-five percent (25.0), which was significantly lower (by 11.5 percentage points) than the previous year. In contrast to the slight increase (0.3 percentage point) in participation rate from 2012 to 2013, the decline in participation for 2014 was of a much greater magnitude. The 2014 participation rate was also inconsistent with the overall pattern of the participation rates in recent years, where approximately 35 to 40 percent of the respondents reported playing any lottery game.

The average monthly dollar amount spent on any lottery game in 2014 was \$49.28. Following the projection formula used in previous lottery studies, we applied a "weighted" average monthly dollar amount spent and extrapolated it to the Texas population aged 18 and older to compare with actual revenue.<sup>7</sup> Our survey data provided for estimated annual sales in Texas to be approximately \$2.87 billion in 2014. When applying the margin of error (+/- 2.4 percent) calculation for this subset of the sample, the expected forecast of actual lottery sales ranged between \$2.80 billion and \$2.94 billion for 2014. This range is lower than the actual lottery ticket sales for fiscal year 2014 (\$4.38 billion).



As shown in Table 3, there were significant differences among the demographic categories of education, race, and employment status regarding the percentage that played any game. In terms of education, respondents with high school diplomas had a higher participation rate (29.8 percent) than the other respondents, in particular, those with less than high school diplomas (20.9 percent) or graduate degrees (21.0 percent). With regard to race, respondents who were White recorded a lower participation rate of 22.2 percent as compared to those who were Black (31.0 percent) and Hispanic (30.4 percent). For employment status, the participation rate was higher among respondents employed full-time or part-time (26.9 percent) as compared to those who were who were retired (22.2 percent).

On the other hand, participation rates in the demographic categories of income, Hispanic origin, gender, and age were found to be statistically not significant.

Year	Percentage Played	Median Dollars Spent
2014 <sup>8</sup>	25.0 (n=425)	\$12.00
2013	36.5 (n=618)	12.00
2012	36.2 (n=616)	16.00
Demographic Factors 2014		
Education*		
Less than high school diploma	20.9 (n=14)	10.00
High school diploma	29.8 (n=129)	19.00
Some college	25.8 (n=99)	12.00
College degree	22.5 (n=132)	10.00
Graduate degree	21.0 (n=46)	5.50
Income		
Under \$12,000	33.3 (n=15)	8.00
\$12,000 to \$19,999	20.3 (n=12)	4.50
\$20,000 to \$29,999	28.6 (n=16)	12.50
\$30,000 to \$39,999	23.9 (n=16)	10.00
\$40,000 to \$49,999	28.1 (n=16)	42.50
\$50,000 to \$59,999	35.4 (n=28)	23.00
\$60,000 to \$74,999	37.9 (n=25)	40.00
\$75,000 to \$100,000	25.9 (n=28)	11.00
More than \$100,000	27.9 (n=61)	10.00

## Table 3 Any Game: Past-Year Lottery Play and Median Dollars Spent per Month by Demographics



### Table 3 (continued)

Demographic Factors 2014	Percentage Played	Median Dollars Spent
Race*		
White	22.2 (n=255)	11.00
Black	31.0 (n=66)	16.00
Hispanic	30.4 (n=70)	14.00
Asian	26.1 (n=6)	14.50
Native American Indian	20.0 (n=3)	6.00
Other	23.1 (n=6)	9.50
Hispanic Origin		
Yes	29.7 (n=68)	18.00
No	23.7 (n=341)	11.00
Gender		
Female	23.4 (n=225)	10.00
Male	26.9 (n=198)	17.50
Age		
18 to 24	13.5 (n=7)	100.00
25 to 34	32.7 (n=32)	31.00
35 to 44	26.1 (n=34)	20.00
45 to 54	26.4 (n=60)	18.00
55 to 64	30.8 (n=106)	11.50
65 or older	21.5 (n=136)	10.00
Employment Status*		
Employed full/part time	26.9 (n=205)	12.00
Unemployed	22.4 (n=15)	45.00
Retired	22.2 (n=171)	10.00

**Note**: \* p < 0.05. The significance notations refer only to the "percentage played" column. In some categories, the number of respondents contributing to cell percentages is small. This small size 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 subsamples are especially small.



# Table 4Participation and Dollars Spent by Lottery Sales District

Lottery Sales District	2013 Percent Playing Any Game	2014 Percent Playing Any Game	Percentage Change from 2013	2014 Average Amount Spent Per Month among Past- Year Players	2014 Median Amount Spent Per Month among Past-Year Players
Austin	33.3 (n=44)	27.9 (n=31)	-5.4	\$10.85	\$5.00
Dallas North*	33.3 (n=62)	22.8 (n=31)	-10.5	9.58	20.00
Dallas South	31.3 (n=26)	38.6 (n=34)	7.3	22.89	22.00
El Paso*	48.9 (n=22)	27.5 (n=11)	-21.4	16.05	20.00
Fort Worth*	37.5 (n=42)	22.2 (n=22)	-15.3	10.85	41.00
Houston East**	35.7 (n=50)	21.6 (n=32)	-14.1	8.77	15.50
Houston Northwest	36.2 (n=46)	32.4 (n=48)	-3.8	7.45	11.50
Houston Southwest	39.8 (n=64)	29.8 (n=50)	-10.0	14.82	9.00
Lubbock	34.7 (n=41)	24.4 (n=29)	-10.3	7.70	10.00
McAllen*	40.0 (n=40)	25.6 (n=21)	-14.4	15.51	12.00
San Antonio***	44.1 (n=67)	22.7 (n=29)	-21.4	11.41	15.00
Tyler**	30.6 (n=44)	15.4 (n=20)	-15.2	6.86	20.00
Waco**	46.0 (n=52)	27.1 (n=32)	-18.9	9.01	8.00

Note: The letter "n" denotes the number of respondents who played any Texas Lottery game.

- Table 4 shows that Dallas South was the lottery sales district with the highest participation rate (38.6 percent) in any Texas Lottery game in 2014. The lottery sales district of Houston Northwest also recorded a participation rate of over thirty percent (32.4 percent). Similar to last year, Tyler recorded the lowest participation rate (15.4 percent) among all lottery sales districts in 2014. The lottery sales district of Houston East had the second lowest participation rate (21.6 percent) for 2014.
- Compared to 2013, all except one (Dallas South) of the lottery sales districts recorded a
  decrease in participation rates in 2014. The lottery sales districts with the largest declines in



participation rates were El Paso and San Antonio: both recorded a decrease of 21.4 percentage points over the previous year. The differences in participation rates between 2014 and 2013 were statistically significant for the Dallas North, El Paso, Fort Worth, Houston East, McAllen, San Antonio, Tyler and Waco lottery sales districts.

- The three lottery sales districts with the highest average monthly amounts spent per player in 2014 were Dallas South (\$22.89), El Paso (\$16.05), and McAllen (\$15.51). In contrast, the three lowest average monthly amounts spent per player were found in the Tyler (\$6.86), Houston Northwest (\$7.45), and Lubbock (\$7.70) sales districts.
- As shown in Table 4, the two lottery sales districts with the highest median monthly amounts spent per player were Fort Worth (\$41.00) and Dallas South (\$22.00). By contrast, three lottery sales districts recorded single-digit median monthly amounts spent per player in 2014: Austin (\$5.00), Waco (\$8.00), and Houston Southwest (\$9.00).



# Table 5Number and Percentage of Respondents Playing by Game/Feature

Texas Lottery Game/Feature	2013 Number and Percent Playing the Game (n=618)	2014 Number and Percent Playing the Game (n=425)	Change in Percentage from 2013
Lotto Texas	451 (73.0%)	288 (67.8%)	-5.2%
Texas Lottery Scratch-off Tickets	377 (61.0%)	245 (57.6%)	-3.4%
Mega Millions	363 (58.7%)	220 (52.3%)	-6.4%
Powerball	333 (53.9%)	167 (39.3%)	-14.6%
Cash 5	131 (21.2%)	99 (23.3%)	2.1%
Pick 3 Day	110 (17.8%)	79 (18.6%)	0.8%
Texas Two Step	75 (12.1%)	54 (12.7%)	0.6%
Megaplier Feature with Mega Millions	97 (15.7%)	37 (8.7%)	-7.0%
All or Nothing	57 (9.2%)	27 (6.4%)	-2.8%
Extra! Feature with Lotto Texas	31 (5.0%)	21 (4.9%)	-0.1%
Power Play Feature with Powerball	74 (12.0%)	15 (3.5%)	-8.5%
Sum It Up Feature with Pick 3 Day	17 (2.8%)	11 (2.6%)	-0.2%
Daily 4 Day	17 (2.8%)	9 (2.1%)	-0.7%
Daily 4 Night	8 (1.3%)	9 (2.1%)	0.8%
Pick 3 Night	7 (1.1%)	5 (1.2%)	0.1%
Sum It Up Feature with Pick 3 Night	6 (1.0%)	4 (0.9%)	-0.1%
Sum It Up Feature with Daily 4 Day	5 (0.8%)	3 (0.7%)	-0.1%
Sum It Up Feature with Daily 4 Night	2 (0.3%)	3 (0.7%)	0.4%

Note: Games are shown in decreasing order of popularity based on 2014 percentages.

Lotto Texas was the most popular Texas Lottery game in 2014: sixty-eight percent (67.8) of past-year lottery players had played this most popular game, as shown in Table 5. The second-most popular choice among lottery players was Texas Lottery Scratch-off tickets, at 57.6 percent. Mega Millions was also popular, as over half of past-year lottery players played this game (52.3%). Unlike the previous year, the Texas Lottery game/feature that recorded the greatest increase in 2014 participation rate was Cash 5 (2.1 percentage point increase). On the other hand, Powerball suffered the largest decline in participation rate between 2013 and 2014 (14.6 percentage points lower), followed by the Mega Millions add-on feature Megaplier and Mega Millions (a decrease of 7 percentage points and 6.4 percentage points, respectively). The participation rates for All or Nothing and the Extra! Feature with Lotto Texas were lower in 2014 than in 2013 (a reduction of 2.8 percentage points and 0.1 percentage point, respectively).



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

2007

2006

2005

2004 2003

0%

10%



33.9%

33.3%

40%

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

17.6%

21.7%

20.0%

30%

20%

Sources: Hobby Center for Public Policy 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 survey data and additional survey reports 2003-2006.

Figure 2 shows nearly nineteen percent (18.6) of past-year players played Pick 3 Day, a slight increase over the previous year. The participation rates for Pick 3 Day among lottery players had been lower than twenty-five percent since 2007.

50%

60%

70%

80%

90%

100%



Figure 3 Frequency of Purchasing Pick 3 Day Tickets (n=79)



As shown in Figure 3, about thirty-two percent (31.6) of the past-year players that bought Pick 3 Day tickets purchased them at least once a week. Another fifteen percent (15.2) purchased tickets at least once a month, which was 3.9 percentage points lower than the frequency recorded in 2013. Some fifty-three percent (53.2) of the respondents purchased the tickets only a few times a year, which was not much different from the previous year.

#### Table 6

### Average Number of Times Played Pick 3 Day

	Average Number of Times Played	
Played Pick 3 Day	2014	2013
Per week for weekly past-year players <sup>9</sup>	2.13	2.12
Per month for monthly past-year players <sup>10</sup>	7.08	5.76
Per year for yearly past-year players	21.93	15.77

The weekly players of Pick 3 Day played this game an average number of 2.13 times per week, monthly players at an average number of 7.08 times per month, and yearly players at an



average of 21.93. Although the 2014 average of the weekly players was similar to the previous year's average (2.12 times), the 2014 averages for monthly players and yearly players were larger than the 2013 averages (5.76 and 15.77, respectively).

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 7 Dollars Spent on Pick 3 Day

	Dollars Spent	
Pick 3 Day	2014	2013
Average spent per play	\$5.70	\$7.62
Average spent per month (mean) <sup>12</sup>	19.27	18.77
Average spent per month (median)	5.00	4.00

As shown in Table 7, Pick 3 Day players spent an average of \$5.70 per play, which was \$1.92 less than the previous year. Those who reported playing the game on a monthly basis spent an average of \$19.27 per month, or \$0.50 more than in 2013. Half of the respondents were likely to spend \$5.00 or more a month on playing Pick 3 Day (compared to the \$4.00 in 2013). The permonth figures were for those respondents who reported playing the game on a monthly or more frequent (i.e., weekly) basis.

As shown in Table 8, there was a 0.8 percentage point increase among past-year players reporting playing Pick 3 Day in 2014 as compared to 2013 (18.6 percent and 17.8 percent, respectively). However, the difference was not statistically significant.

- The differences in education between past-year players who played Pick 3 Day in 2014 and those who did not were statistically significant. Pick 3 Day past-year players who had less than a high school diploma recorded the highest participation rate (40.0 percent), which was 10.8 percentage points higher than the 29.2 percent in the previous year. In comparison, participation rates for the past-year players who had some college, a college degree, and a graduate degree were much lower in 2014–20.6 percent, 16.5 percent, and17.5 percent, respectively.
- There were no statistically significant differences between past-year players who played Pick 3 Day in 2014 and those who did not by income, race, Hispanic origin, gender, age, and employment status.



#### Table 8

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

Pick 3 Day	Percentage Played Game Among Past Year Players	Median Dollars Spent
Year		
2014	18.6 (n=79)	\$5.00
2013	17.8 (n=110)	3.00
2014 Demographics		
Education*		
Less than high school diploma	40.0 (n=6)	4.00
High school diploma	20.6 (n=27)	4.00
Some college	16.5 (n=17)	10.00
College degree	17.5 (n=24)	5.00
Graduate degree	13	
Income		
Less than \$12,000		
\$12,000 to \$19,999	50.0 (n=6)	6.00
\$20,000 to \$29,999		
\$30,000 to \$39,999		
\$40,000 to \$49,999		
\$50,000 to \$50,999		
\$60,000 to \$74,999		
\$75,000 to \$100,000		
More than \$100,000	19.7 (n=12)	4.50
Race		
White	12.6 (n=33)	5.00
Black	35.7 (n=25)	5.00
Hispanic	22.2 (n=16)	4.00
Asian		
Native American Indian		
Other		
Hispanic Origin		
Yes	22.9 (n=16)	4.00
No	17.0 (n=60)	5.00
Gender		
Female	16.6 (n=38)	4.50
Male	19.3 (n=40)	5.00



### Table 8 (continued)

Age		
18 to 24		
25 to 34	21.2 (n=7)	32.00
35 to 44	28.6 (n=10)	3.00
45 to 54	19.4 (n=12)	5.00
55 to 64	11.2 (n=12)	7.50
65 or older	15.1 (n=21)	1.00
Employment Status		
Employed full/part time	17.1 (n=36)	5.00
Unemployed		
Retired	16.6 (n=29)	4.00

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

### Figure 4 Years Playing Pick 3 Day (n=74)



Figure 4 indicates that two-thirds (66.2 percent) of the respondents that played Pick 3 Day reported playing it for more than five years. The proportion was slightly higher than the 62.7 percent that reported playing Pick 3 Day for more than five years in the 2013 survey. Nearly eighteen percent (17.6) of the respondents indicated playing Pick 3 Day for less than two years.



### **IIIC CASH 5 RESULTS**

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



Sources: Hobby Center for Public Policy 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 survey data and additional survey reports 2001-2006.

Figure 5 indicates that 23.2 percent of the lottery games past-year players reported playing Cash 5 in 2014. This participation rate was 2.0 percentage points higher than in 2013.



Figure 6 Frequency of Purchasing Cash 5 Tickets (n=99)



Figure 6 illustrates that 21.2 percent of the respondents that purchased Cash 5 tickets bought them at least once a week and about 17.2 percent purchased the tickets at least once a month. Nearly sixty-two percent (61.6) did so just a few times a year. The three frequencies of purchasing Cash 5 tickets were similar in 2013 and 2014.

# Table 9Average Number of Times Played Cash 5

	Average Number of Times Played	
Played Cash 5	2014	2013
Per week for weekly past-year players	2.50	1.84
Per month for monthly past-year players <sup>14</sup>	5.95	4.55
Per year for yearly past-year players <sup>15</sup>	19.94	19.24

As shown in Table 9, weekly players of Cash 5 played an average number of 2.50 times per week. Monthly players played this game 5.95 times per month on average. Both frequencies were larger than the frequencies for 2013 (1.84 times and 4.55 times, respectively). Yearly players played the game 19.94 times per year on average, which was similar to 2013.



### Table 10 Dollars Spent on Cash 5

	Dollars Spent	
Cash 5	2014	2013
Average spent per play	\$5.68	\$5.79
Average spent per month (mean) <sup>16</sup>	14.76	10.22
Average spent per month (median)	4.00	4.00

As reported in Table 10, Cash 5 players spent an average of \$5.68 per play, which was similar to the amount spent last year (\$5.79). Those who reported playing the game at a monthly or more frequent basis spent an average of \$14.76 per month, which was an increase of \$4.54 from 2013. Half of the respondents were likely to spend \$4.00 or more a month on playing Cash 5, which was the same value reported in the previous year.

Table 11 on the next page shows that there was a small increase in the participation rate from 21.2 percent in 2013 to 23.2 percent in 2014 for the Cash 5 game. However, the difference between the two years was statistically not significant.

- Among all the demographic factors, only the difference in gender between past-year respondents who played Cash 5 and those who did not was statistically significant. Some twenty-seven percent (27.1) of females reported playing Cash 5 but only nineteen percent (19.0) of males reported doing so. The participation rates, however, were similar to those reported in the previous year.
- The differences between past-year players who purchased Cash 5 tickets and those who did not were statistically not significant by education, income, race, Hispanic origin, age, and employment status.



Table 11

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

Cash 5	Percentage Played Game Among Past Year Players	Median Dollars Spent
Year		
2014	23.2 (n=99)	\$3.00
2013	21.2 (n=131)	4.00
2014 Demographics		
Education		
Less than high school diploma		
High school diploma	29.5 (n=38)	2.00
Some college	22.8 (n=23)	4.00
College degree	21.2 (n=28)	3.00
Graduate degree	15.6 (n=7)	<sup>17</sup>
Income		
Less than \$12,000		
\$12,000 to \$19,999		
\$20,000 to \$29,999		
\$30,000 to \$39,999		
\$40,000 to \$49,999		
\$50,000 to \$50,999	32.1 (n=9)	7.00
\$60,000 to \$74,999	29.2 (n=7)	2.00
\$75,000 to \$100,000		
More than \$100,000	27.9 (n=17)	
Race		
White	18.8 (n=48)	3.50
Black	32.8 (n=22)	1.00
Hispanic	31.4 (n=22)	3.00
Asian		
Native American Indian		
Other		
Hispanic Origin		
Yes	30.9 (n=21)	3.00
No	21.3 (n=73)	3.00
Gender*	× /	
Female	27.1 (n=61)	3.00
Male	19.0 (n=38)	3.00



### Table 11 (continued)

Age		
18 to 24		
25 to 34	25.0 (n=8)	6.00
35 to 44	20.6 (n=7)	
45 to 54	26.2 (n=16)	3.00
55 to 64	19.8 (n=21)	1.00
65 or older	25.4 (n=35)	3.00
Employment Status		
Employed full/part time	19.1 (n=39)	4.00
Unemployed		
Retired	27.2 (n=47)	3.00

Note: \* p < 0.05. There was a statistically significant difference between past-year players and non-players by gender.

### Figure 7 Years Playing Cash 5 (n=97)



Figure 7 shows seventy-three percent (73.2) of the respondents who played Cash 5 during the past year reported playing it for more than five years, which was 3.0 percentage points less than the previous year's 76.2 percent. Another 9.3 percent of respondents reported having played Cash 5 for less than two years.



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





Sources: Hobby Center for Public Policy 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 survey data and additional survey reports 2001-2006.

As shown in Figure 8, nearly sixty-eight percent (67.8) of past-year players bought Lotto Texas in 2014. The participation rate was 5.2 percentage points lower than in 2013 (73.0 percent).


Figure 9 Frequency of Purchasing Lotto Texas Tickets (n=288)



Figure 9 indicates that nearly thirty-three percent (32.6) of the respondents that purchased Lotto Texas tickets purchased them at least once a week. Slightly more than 22 percent (22.2) purchased the tickets at least once a month, and about half of the respondents (45.2 percent) indicated having purchased Lotto Texas tickets a few times a year.

## Table 12Average Number of Times Played Lotto Texas

	Average Number of Times Played	
Played Lotto Texas	2014	2013
Per week for weekly past-year players	1.54	1.50
Per month for monthly past-year players	4.90	5.69
Per year for yearly past-year players <sup>18</sup>	27.00	25.77

The data in Table 12 indicate that weekly players of Lotto Texas bought the game 1.54 times per week while monthly players did so 4.90 times per month on average. Both frequencies



were similar to those in the previous year. Yearly players recorded playing slightly more frequently this year than last year with an average of 27.00 times played.

## Table 13Dollars Spent on Lotto Texas

	Dollars Spent	
Lotto Texas	2014	2013
Average spent per play <sup>19</sup>	\$5.38	\$6.01
Average spent per month (mean) <sup>20</sup>	12.08	13.69
Average spent per month (median)	5.00	5.00

Lotto Texas players spent an average of \$5.38 per play, which was \$.63 less than in 2013 (Table 13). Those who reported playing the game on a monthly or more frequent basis spent an average of \$12.08 per month, or \$1.61 less than the average amount recorded in the previous year. Approximately half of the respondents were likely to spend \$5.00 or more a month on playing Lotto Texas, exactly the same as in 2013.

The data in Table 14 on the next page show that the 5.2 percentage points decrease in the participation rates for Lotto Texas between 2013 (73.0 percent) and 2014 (67.8 percent) was statistically significant.

However, the present survey did not find any statistically significant differences between pastyear players who played Lotto Texas in 2014 and those who did not for all the demographic factors: education, income, race, Hispanic origin, gender, age, and employment status.

Perhaps worth mentioning, though, was the participation rate for females had decreased from 74.4 percent in 2013 to 65.0 percent in 2014. There were also notable decreases in the participation rates this year for Lotto Texas past-year players who were White and those who were Black-7.1 percentage points and 18.2 percentage points, respectively-over the previous year.



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

Lotto Texas	Percentage Played Game Among Past Year Players	Median Dollars Spent
Year*		
2014	67.8 (n=288)	\$4.00
2013	73.0 (n=451)	5.00
2014 Demographics		
Education		
Less than high school diploma	53.3 (n=8)	3.50
High school diploma	70.5 (n=91)	5.00
Some college	64.0 (n=64)	5.00
College degree	68.4 (n=91)	2.00
Graduate degree	67.4 (n=31)	2.00
Income		
Less than \$12,000	53.3 (n=8)	1.50
\$12,000 to \$19,999	75.0 (n=9)	
\$20,000 to \$29,999	62.5 (n=10)	3.00
\$30,000 to \$39,999	68.8 (n=11)	5.00
\$40,000 to \$49,999	75.0 (n=12)	18.00
\$50,000 to \$50,999	78.6 (n= 22)	6.00
\$60,000 to \$74,999	76.0 (n=19)	8.00
\$75,000 to \$100,000	64.3 (n=18)	5.00
More than \$100,000	75.4 (n=46)	3.00
Race		
White	66.5 (n=171)	5.00
Black	62.1 (n=41)	2.00
Hispanic	73.2 (n=52)	4.00
Asian		
Native American Indian		
Other		
Hispanic Origin		
Yes	71.0 (n=49)	5.00
No	67.3 (n=231)	4.00
Gender		
Female	65.0 (n=147)	2.00
Male	70.0 (n=140)	5.00



### Table 14 (continued)

Age		
18 to 24		
25 to 34	57.6 (n=19)	3.00
35 to 44	68.6 (n=24)	5.00
45 to 54	72.9 (n=43)	5.00
55 to 64	75.5 (n=80)	4.00
65 or older	64.2 (n=88)	4.50
Employment Status		
Employed full/part time	72.7 (n=149)	4.00
Unemployed	53.3 (n=8)	4.50
Retired	64.5 (n=111)	5.00

Note: There was no statistically significant difference between past-year players and non-players by demographics.

### Figure 10 Years Playing Lotto Texas (n=287)



In Figure 10, some 87.1 percent of the respondents who played Lotto Texas in the past year reported playing it for more than five years. This was 4.6 percentage points greater than 2013. Only 3.5 percent of the respondents reported having played Lotto Texas for less than two years.



### IIIe. EXTRA! FEATURE WITH LOTTO TEXAS RESULTS

### Percentage of Past-Year Players Purchasing Extra! Feature with Lotto Texas

A total of five percent (4.9) of past-year lottery players reported purchasing Extra! Feature with Lotto Texas, almost the same as the previous year when the add-on feature was first introduced.





Figure 11 shows that among those who purchased the Extra! Feature with Lotto Texas, nearly twenty-nine percent (28.6) of them did it at least once a week, whereas the other seventy-one percent (71.4) purchased the feature at least once a month.



## Table 15Average Number of Times Purchased Extra! Feature with Lotto Texas

Purchased Extra! Feature with Lotto	Average Number of Times Purchased	
Texas	2014	2013
Per week for weekly past-year players	1.83	1.67
Per month for monthly past-year players	4.56	3.27

The weekly past-year players picked Extra! feature with Lotto Texas 1.83 times per week on average (Table 15). The monthly players added the feature 4.56 times per month as compared to the 3.27 times in the previous year.

## Table 16Dollars Spent on Extra! Feature with Lotto Texas

	Dollars Spent	
Extra! Feature with Lotto Texas	2014	2013
Average spent per play	\$4.74	\$10.55
Average spent per month (mean)	9.22	6.17
Average spent per month (median)	5.00	4.00

Table 16 shows that Extra! feature players spent an average of \$4.74 per play, a drop of \$5.81 from the previous year. Those who reported adding the feature on a monthly or more frequent basis spent an average of \$9.22 per month. Half of the respondents were likely to spend \$5.00 or less a month on Extra! feature.

Table 17 shows that there was no difference in the participation rate (5.0 percent) between 2013 and 2014 for Extra! feature with Lotto Texas.

None of the differences between past-year players who purchased Extra! feature and those who did not was statistically significant in 2014 for any of the demographic factors of education, income, race, Hispanic origin, gender, and employment status.



Extra! Feature with Lotto Texas: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics

Extra! Feature with Lotto Texas	Percentage Played Game Among Past Year Players	Median Dollars Spent
Year		
2014	5.0 (n=21)	
2013	5.0 (n=31)	\$4.00
2014 Demographics		
Education		
Less than high school diploma		
High school diploma	5.5 (n=7)	
Some college	6.1 (n=6)	2.00
College degree	4.6 (n=6)	0.50
Graduate degree		
Income		
Less than \$12,000		
\$12,000 to \$19,999		
\$20,000 to \$29,999		
\$30,000 to \$39,999		
\$40,000 to \$49,999		
\$50,000 to \$59,999		
\$60,000 to \$74,999		
\$75,000 to \$100,000		
More than \$100,000		
Race		
White	5.2 (n=13)	
Black		
Hispanic		
Asian		
Native American Indian		
Other		
Hispanic Origin		
Yes		
No	4.8 (n=16)	
Gender		
Female	6.7 (n=15)	
Male	3.1 (n=6)	



### Table 17 (continued)

Age		
18 to 24		
25 to 34		
35 to 44		
45 to 54		
55 to 64		
65 or older		
Employment Status		
Employed full/part time	6.4 (n=13)	
Unemployed		
Retired		

Note: There was no statistically significant difference between past-year players and non-players by demographics.



### **IIIF. TEXAS LOTTERY SCRATCH-OFF TICKETS RESULTS**





Sources: Hobby Center for Public Policy 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 survey data and additional survey reports 2001-2006.

Figure 12 illustrates that nearly fifty-eight percent (57.6) of the past-year players bought Texas Lottery scratch-off games, which was 3.4 percentage points lower than the rate reported in 2013.



Figure 13 Frequency of Purchasing Texas Lottery Scratch-off Tickets (n=245)



Figure 13 indicates that 29.4 percent of respondents purchased Texas Lottery scratch-off games at least once a week. A total of 22 percent purchased the tickets at least once a month and nearly half of respondents (48.6 percent) reported purchasing tickets a few times a year.

 Table 18

 Average Number of Times Played Texas Lottery Scratch-off Tickets

	Average Number of Times Played	
Played Texas Lottery Scratch-off Tickets	2014	2013
Per week for weekly past-year players <sup>21</sup>	2.45	2.04
Per month for monthly past-year players <sup>22</sup>	7.19	6.01
Per year for yearly past-year players <sup>23</sup>	23.57	23.78

According to Table 18, the weekly past-year players of the Texas Lottery scratch-off tickets played an average number of 2.45 times per week which was similar to the 2.04 times in 2013. Monthly players played an average number of 7.19 times per month. The yearly players played



an average number of 23.57 times per year, which was not much different from the previous year.

## Table 19Dollars Spent on Texas Lottery Scratch-off Tickets

	Dollars Spent	
Texas Lottery Scratch-off Tickets	2014	2013
Average spent per play	\$7.64	\$7.88
Average spent per month (mean)	20.74	17.39
Average spent per month (median)	5.00	5.00

As shown in Table 19, Texas Lottery scratch-off tickets players spent an average of \$7.64 per play in 2014, which was almost the same as in 2013. Those who played scratch-off games on a monthly or more frequent basis spent an average of \$20.74 per month, an increase of \$3.35 from 2013. Half of the respondents spent \$5.00 or more per month playing Texas Lottery scratch-off tickets, which was the same as the median for 2013.

Table 20 shows a slight decrease in the overall participation rates between 2013 and 2014 (61.0 percent and 57.6 percent, respectively) for Texas Lottery scratch-off tickets. However, this difference was not statistically significant.

- The difference between the past-year players who played Texas Lottery scratch-off tickets and those who did not was statistically significant by education. There was a decreasing trend in participation rates from lower educational level to higher educational level among Texas Lottery scratch-off tickets players. Specifically, those with less than a high school diploma had a participation rate of seventy-three percent (73.3), which was more than 10 percentage points higher than last year. In contrast, past-year players with graduate degrees reported the lowest participation rate of 43.5 percent which was similar to 2013.
- As in 2013, there was a statistically significant difference between the past-year players and non-players by gender. Females recorded a participation rate of 65.3 percent, while males had a much lower participation rate of 50.5 percent. Both percentages, however, were not much different from the previous year.
- The differences between past-year players who purchased Texas Lottery scratch-off tickets and those who did not were statistically not significant in 2014 for the remaining demographic factors analyzed (income, race, Hispanic origin, age, and employment status).



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 Game Among Past Year Players	Median Dollars Spent
Year		
2014	57.6 (n=245)	\$5.00
2013	61.0 (n=377)	5.00
2014 Demographics		
Education**		
Less than high school diploma	73.3 (n=11)	5.00
High school diploma	66.9 (n=85)	5.00
Some college	57.6 (n=57)	5.00
College degree	55.4 (n=72)	5.00
Graduate degree	43.5 (n=20)	
Income		
Less than \$12,000	53.3 (n=8)	4.00
\$12,000 to \$19,999	58.3 (n=7)	10.00
\$20,000 to \$29,999	62.5 (n=10)	5.00
\$30,000 to \$39,999	75.0 (n=12)	
\$40,000 to \$49,999	68.8 (n=11)	20.00
\$50,000 to \$59,999	60.7 (n= 17)	8.00
\$60,000 to \$74,999	68.0 (n=17)	10.00
\$75,000 to \$100,000	55.5 (n=15)	5.00
More than \$100,000	48.3 (n=29)	3.00
Race		
White	56.1 (n=142)	5.00
Black	70.8 (n=46)	5.00
Hispanic	61.4 (n=43)	5.00
Asian		
Native American Indian		
Other		
Hispanic Origin		
Yes	60.3 (n=41)	5.00
No	57.7 (n=195)	5.00
Gender**		
Female	65.3 (n=145)	5.00
Male	50.5 (n=100)	8.00



### Table 20 (continued)

Age		
18 to 24		
25 to 34	68.8 (n=22)	25.00
35 to 44	75.8 (n=25)	10.00
45 to 54	53.3 (n=32)	5.00
55 to 64	45.3 (n=48)	4.50
65 or older	66.7 (n=90)	4.00
Employment Status		
Employed full/part time	54.0 (n=109)	5.00
Unemployed	73.3 (n=11)	40.00
Retired	63.7 (n=109)	4.00

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

#### Figure 14 Years Playing Texas Lottery Scratch-off Games (n=244)



Consistent with the previous year, a high proportion (86.5 percent) of the respondents who played Texas Lottery scratch-off tickets reported playing them for more than 5 years (Figure 14). In comparison, less than three percent (2.5) of respondents reported having played Texas Lottery scratch-off tickets for just one year or less.



### **IIIg. TEXAS TWO STEP RESULTS**



### Figure 15 Percentage of Past-Year Players Playing Texas Two Step

Sources: Hobby Center for Public Policy 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 survey data and additional survey reports 2003-2006.

As indicated in Figure 15, 12.7 percent of the past-year players reported playing Texas Two Step in 2014, which was not much different from the participation rate recorded in 2013.



Figure 16 Frequency of Purchasing Texas Two Step Tickets (n=54)



Figure 16 shows exactly one third (33.3 percent) of Texas Two Step players purchased tickets for the game at least once a week. Nearly seventeen percent (16.7) reported that they purchased tickets for Texas Two Step at least once a month. Half of the players purchased tickets a few times a year.

## Table 21Average Number of Times Played Texas Two Step

	Average Number of Times Played	
Played Texas Two Step	2014	2013
Per week for weekly past-year players <sup>24</sup>	1.50	3.83
Per month for monthly past-year players	4.18	4.90
Per year for yearly past-year players	26.05	21.17

As shown in Table 21, weekly players of Texas Two Step played an average number of 1.50 times per week, a decrease of 2.33 times as compared to last year. Monthly players of Texas Two Step reported playing the game 4.18 times per month, and yearly players recorded 26.05 times per year.



## Table 22Dollars Spent on Texas Two Step

	Dollars Spent	
Texas Two Step	2014	2013
Average spent per play	\$5.34	\$4.09
Average spent per month (mean)	12.74	8.39
Average spent per month (median)	4.00	4.00

The respondents who played Texas Two Step spent an average of \$5.34 per play, up \$1.25 from the previous year (Table 22). Those who reported playing the game on a monthly or more frequent basis spent an average of \$12.74 per month. The median monthly expenditure for 2014 was \$4.00, which was the same as the median for 2013.

The data in Table 23 on the next page indicate that there was no statistically significant difference in the overall participation rates for Texas Two Step between 2013 (12.1 percent) and 2014 (12.7 percent).

Similar to 2013, there were no statistically significant differences in all demographic categories of education, income, race, Hispanic origin, gender, age, and employment status between pastyear players who played Texas Two Step and those who did not.

Two demographic categories are worth discussing. First, although the participation rate of past-year White players (10.3 percent) was much lower than that of Hispanic players (18.3 percent) and Black players (16.7 percent) rates, the differences by race did not reach a significant level. Second, those respondents who were employed full/part time had a participation rate of 3.2 percentage points lower than those who were retired, but the difference was not significant.



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

Texas Two Step	Percentage Played Game Among Past Year Players	Median Dollars Spent
Year		
2014	12.7 (n=54)	\$1.50
2013	12.1 (n=75)	3.00
2014 Demographics		
Education		
Less than high school diploma		
High school diploma	14.0 (n=18)	3.00
Some college	13.3 (n=13)	5.00
College degree	11.5 (n=15)	
Graduate degree	13.0 (n=6)	2.00
Income		
Less than \$12,000		
\$12,000 to \$19,999		
\$20,000 to \$29,999		
\$30,000 to \$39,999		
\$40,000 to \$49,999		
\$50,000 to \$59,999		
\$60,000 to \$74,999		
\$75,000 to \$100,000		
More than \$100,000	16.9 (n=10)	4.00
Race		
White	10.3 (n=26)	1.00
Black	16.7 (n=11)	4.00
Hispanic	18.3 (n=13)	2.00
Asian		
Native American Indian		
Other		
Hispanic Origin		
Yes	15.9 (n=11)	4.00
No	12.1 (n=41)	1.00
Gender		
Female	12.6 (n=28)	1.00
Male	13.1 (n=26)	4.00



### Table 23 (continued)

Age		
18 to 24		
25 to 34		
35 to 44	17.6 (n=6)	3.00
45 to 54	11.9 (n=7)	5.00
55 to 64	8.6 (n=9)	
65 or older	17.6 (n=24)	1.00
Employment Status		
Employed full/part time	11.4 (n=23)	2.00
Unemployed		
Retired	14.6 (n=25)	1.00

Note: There was no statistically significant difference between past-year players and non-players by demographics.

### Figure 17 Years Playing Texas Two Step (n=54)



Figure 17 illustrates that 70.4 percent of respondents reported that they had bought Texas Two Step for more than five years, while 9.3 percent of respondents reported having played Texas Two Step for less than two years.



### IIIh. MEGA MILLIONS RESULTS





Sources: Hobby Center for Public Policy 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014 survey data and additional survey reports 2004-2006.

As indicated in Figure 18, slightly over half (51.8 percent) of past-year players played Mega Millions, a decline of 6.9 percentage points over the participation rate the previous year.



Figure 19 Frequency of Purchasing Mega Millions Tickets (n=220)



As seen in Figure 19, a total of 19.6 percent of respondents reported that they purchased Mega Millions tickets at least once a week. Another 18.6 percent said that they purchased Mega Millions tickets at least once a month. The remaining 61.8 percent reported purchasing the tickets a few times a year.

## Table 24Average Number of Times Played Mega Millions

	Average Number of Times Played	
Played Mega Millions	2014	2013
Per week for weekly past-year players	1.37	1.33
Per month for monthly past-year players <sup>25</sup>	3.57	3.09
Per year for yearly past-year players <sup>26</sup>	18.37	18.74

Table 24 shows that the weekly players of Mega Millions played the game an average number of 1.37 times per week. Monthly players did so 3.57 times per month on average, and yearly players 18.37 times per year on average. All three averages were not much different from those recorded in the previous year.



## Table 25Dollars Spent on Mega Millions

	Dollars Spent	
Mega Millions	2014	2013
Average spent per play	\$5.21	\$6.11
Average spent per month (mean)	8.95	8.37
Average spent per month (median)	4.00	3.00

As seen in Table 25, Mega Millions players spent an average of \$5.21 per play in 2014, which was \$0.90 lower than in 2013 (\$6.11). Those who reported playing the game on a monthly or more frequent basis spent an average of \$8.95 per month which was similar to last year. Approximately half of the respondents spent \$4.00 or more a month on purchasing Mega Millions tickets, which was \$1.00 more than in 2013.

Table 26 indicates that there was a decrease of 6.9 percentage points in the participation rates for Mega Millions between 2013 (58.7 percent) and 2014 (51.8 percent). The difference in the participation rates was statistically significant.

- With regard to the demographic factors, the difference in Hispanic origin between past-year respondents who played Mega Millions and those who did not was statistically significant. Specifically, 63.2 percent of Hispanics reported playing Mega Millions, but only 50.0 percent of non-Hispanics reported doing so, a difference of 13.2 percentage points.
- Another demographic factor for which a significant difference between past-year respondents who played Mega Millions and those who did not was found was employment status. The difference was notable between respondents who were employed full/part time (58.4 percent) and those who were retired (46.8 percent).
- The differences between past-year players who purchased Mega Millions and those who did not were statistically not significant by education, income, race, gender, and age.



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

Mega Millions	Percentage Played Game Among Past Year Players	Median Dollars Spent
Year*		
2014	51.8 (n=220)	\$2.50
2013	58.7 (n=363)	2.00
2014 Demographics		
Education		
Less than high school diploma	50.0 (n=7)	1.00
High school diploma	46.5 (n=60)	5.00
Some college	52.5 (n=52)	3.00
College degree	55.0 (n=71)	2.00
Graduate degree	60.9 (n=28)	1.50
Income		
Less than \$12,000	60.0 (n=9)	2.00
\$12,000 to \$19,999	75.0 (n=9)	
\$20,000 to \$29,999	43.8 (n=7)	
\$30,000 to \$39,999	56.3 (n=9)	3.00
\$40,000 to \$49,999	56.3 (n=9)	8.00
\$50,000 to \$59,999	57.1 (n=16)	1.00
\$60,000 to \$74,999	48.0 (n=12)	5.00
\$75.000 to \$100.000	63.0 (n=17)	2.00
More than \$100,000	67.8 (n=40)	1.00
Race		
White	50.0 (n=126)	2.50
Black	53.0 (n=35)	2.00
Hispanic	60.0 (n=42)	4.00
Asian	,	
Native American Indian		
Other	100.0 (n=6)	3.00
Hispanic Origin*		
Yes	63.2 (n=43)	4.00
No	50.0 (n=169)	2.00
Gender		
Female	51.8 (n=115)	2.00
Male	53.0 (n=105)	4.00



### Table 26 (continued)

Age		
18 to 24		
25 to 34	50.0 (n=16)	1.50
35 to 44	55.9 (n=19)	5.00
45 to 54	67.8 (n=40)	2.00
55 to 64	58.1 (n=61)	2.00
65 or older	45.6 (n=62)	2.00
Employment Status*		
Employed full/part time	58.4 (n=118)	2.00
Unemployed	46.7 (n=7)	3.00
Retired	46.8 (n=80)	2.50

Note: \* p < 0.05. There were statistically significant differences between past-year players and non-players by Hispanic origin and employment status.

### Figure 20 Years Playing Mega Millions (n=214)



As shown in Figure 20, 70.1 percent of the respondents reported that they had been playing Mega Millions for more than five years. Another 11.6 percent of the respondents reported having played Mega Millions for less than two years.



### **IIII. MEGAPLIER FEATURE WITH MEGA MILLIONS RESULTS**

Figure 21

Percentage of Past-Year Players Purchasing Megaplier Feature with Mega Millions Tickets



Sources: Hobby Center for Public Policy 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014 survey data and additional survey reports 2004-2006.

Figure 21 illustrates that 8.7 percent of the past-year players purchased Megaplier, the Mega Millions add-on feature, in 2014. This rate was a 7.0 percentage-point decline from 2013.



Figure 22 Frequency of Purchasing Megaplier Feature with Mega Millions Tickets (n=37)



As indicated in Figure 22, over three quarters (75.7 percent) of respondents who purchased Megaplier with their Mega Millions tickets in 2014 indicated that they did so a few times a year, while 13.5 percent of the respondents chose the feature at least once a week, and another 10.8 percent purchased the feature at least once a month.

## Table 27Average Number of Times Purchased Megaplier Feature with Mega Millions

Purchased Megaplier Feature with Mega	Average Number of Times Purchased	
Millions	2014	2013
Per week for weekly past-year players	1.50	1.75
Per month for monthly past-year players	4.80	2.95
Per year for yearly past-year players <sup>27</sup>	11.47	17.83

The data in Table 27 show that the weekly players who added the Megaplier feature with Mega Millions chose the feature an average number of 1.50 times per week. The monthly players did



so 4.80 times per month on average. The yearly players added the feature 11.47 times per year on average, which was much lower than the 17.83 times reported in 2013.

## Table 28Dollars Spent on Megaplier Feature with Mega Millions

	Dollars Spent	
Megaplier Feature with Mega Millions	2014	2013
Average spent per play <sup>28</sup>	\$5.56	\$6.40
Average spent per month (mean) <sup>29</sup>	12.44	7.70
Average spent per month (median)	4.00	4.00

As shown in Table 28, respondents who purchased the Megaplier feature with Mega Millions spent an average of \$5.56 per play, slightly lower than in 2013 (\$6.40). Those who reported adding the feature on a monthly or more frequent basis spent an average of \$12.44 per month, as compared to \$7.70 last year. Approximately half of the respondents were likely to spend \$4.00 or more a month on Megaplier, which was the same as the amount reported in 2013.

Table 29 indicates that there was a statistically significant decrease in the participation rates between 2013 and 2014 for the Megaplier feature with Mega Millions (from 15.7 percent to 8.7 percent).

- Among the demographic factors, only the difference in race between past-year respondents who purchased the Megaplier feature with Mega Millions and those who did not was statistically significant. Respondents who were White had a participation rate of 11.1 percent, which was lower than the 14.3 percent recorded in the 2013 report. The participation rates for other age groups, however, were not reported due to the small subsample sizes (fewer than 6).
- The differences between past-year players who purchased the Megaplier feature with Mega Millions and those who did not were found to be statistically not significant by education, income, Hispanic origin, gender, age, and employment status.



Megaplier Feature with Mega Millions: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics

Megaplier Feature with Mega Millions	Percentage Played Game Among Past Year Players	Median Dollars Spent
Year**		
2014	8.7 (n=37)	
2013	15.7 (n=97)	\$3.00
2014 Demographics		
Education		
Less than high school diploma		
High school diploma	7.0 (n=9)	2.00
Some college	6.1 (n=6)	
College degree	9.3 (n=12)	3.50
Graduate degree	17.8 (n=8)	
Income		
Less than \$12,000		
\$12,000 to \$19,999		
\$20,000 to \$29,999		
\$30,000 to \$39,999		
\$40,000 to \$49,999		
\$50,000 to \$59,999		
\$60,000 to \$74,999		
\$75,000 to \$100,000		
More than \$100,000	11.7 (n=7)	
Race**		
White	11.1 (n=28)	
Black		
Hispanic		
Asian		
Native American Indian		
Other		
Hispanic Origin		
Yes		
No	9.5 (n=32)	
Gender		
Female	9.5 (n=21)	2.00
Male	8.1 (n=16)	



### Table 29 (continued)

Age		
18 to 24		
25 to 34		
35 to 44		
45 to 54		
55 to 64		
65 or older	10.4 (n=14)	3.00
Employment Status		
Employed full/part time	10.9 (n=22)	
Unemployed		
Retired	6.5 (n=11)	

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

Figure 23 Years Purchasing Megaplier Feature with Mega Millions Tickets (n=35)



Figure 23 shows that 60.0 percent of the respondents who added Megaplier to their Mega Millions tickets did so for more than five years, an increase of 6.8 percentage points compared to the previous year's statistic. A total of 11.5 percent of the players indicated adding the feature for less than two years.



### **IIIJ. POWERBALL RESULTS**

### Percentage of Past-Year Players Playing Powerball

In 2014, forty percent (39.3) of the past-year lottery players reported that they played the Powerball game. This percentage was about fifteen percentage points (14.6) lower than the one recorded in 2013 (53.9 percent).

Figure 24 Frequency of Purchasing Powerball Tickets (n=167)



A total of 21.0 percent of the respondents who purchased Powerball tickets purchased them at least once a week, an increase of 3.6 percentage points from 2013 (Figure 24). Another 18.0 percent purchased the tickets at least once a month. The remaining 61.0 percent of the respondents indicated having purchased Powerball tickets a few times a year, a decrease of 4.5 percentage points from last year (65.5 percent).



## Table 30Average Number of Times Played Powerball

	Average Number of Times Played	
Played Powerball	2014	2013
Per week for weekly past-year players <sup>30</sup>	1.51	1.41
Per month for monthly past-year players <sup>31</sup>	4.28	3.75
Per year for yearly past-year players	19.53	16.32

As shown in Table 30, weekly players of Powerball played the game an average number of 1.51 times per week. Monthly players did so 4.28 times per month on average. Yearly players bought tickets 19.53 times per year on average. The three average numbers were slightly different from those reported in the 2013 report.

## Table 31Dollars Spent on Powerball

	Dollars Spent	
Powerball	2014	2013
Average spent per play	\$5.54	\$6.27
Average spent per month (mean)	10.43	7.76
Average spent per month (median)	5.00	4.00

As can be seen in Table 31, Powerball players spent an average of \$5.54 per play, which represented a small decrease of \$0.73 compared to the value in 2013 (\$6.27). Those who reported playing the game on a monthly or more frequent basis spent an average of \$10.43 per month, which was \$2.67 more than 2013. Approximately half of the respondents were likely to spend \$5.00 or more a month on Powerball, which was higher than the median in 2013 (\$4.00).

Table 32 shows the results for Powerball participation by demographics. We found that the participation rate in 2014 had decreased by 14.6 percentage points from 2013. As in the previous year, the difference between the two years was statistically significant.

However, none of the differences between past-year players who played Powerball and those who did not in 2014 was statistically significant by the demographic factors of education, income, race, Hispanic origin, gender, age, and employment status.

Although there was a 7.3 percentage-point difference in the participation rates for Powerball between past-year players who were employed full/part time and those who were retired, the difference did not reach a significant level. Likewise, the participation rate for Hispanics was 7.6 percentage points higher than non-Hispanics, but the difference was not statistically significant.



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

Powerball	Percentage Played Game Among Past Year Players	Median Dollars Spent
Year***		
2014	39.3 (n=167)	\$2.00
2013	53.9 (n=333)	2.00
2014 Demographics		
Education		
Less than high school diploma		
High school diploma	41.1 (n=53)	5.00
Some college	40.8 (n=40)	3.00
College degree	43.0 (n=55)	2.00
Graduate degree	34.8 (n=16)	
Income		
Less than \$12,000		
\$12,000 to \$19,999	58.3 (n=7)	
\$20,000 to \$29,999		
\$30,000 to \$39,999	43.8 (n=7)	2.00
\$40,000 to \$49,999	56.3 (n=9)	8.00
\$50,000 to \$50,999	53.6 (n=15)	2.00
\$60,000 to \$74,999	44.0 (n=11)	8.00
\$75,000 to \$100,000	63.0 (n=17)	3.00
More than \$100,000	38.3 (n=23)	5.00
Race		
White	39.4 (n=98)	2.00
Black	37.9 (n=25)	2.00
Hispanic	41.4 (n=29)	2.00
Asian		
Native American Indian		
Other	100.0 (n=6)	2.00
Hispanic Origin		
Yes	46.3 (n=31)	2.00
No	38.7 (n=130)	2.00
Gender		
Female	38.0 (n=84)	2.00
Male	42.3 (n=83)	3.00



### Table 32 (continued)

Age		
18 to 24		
25 to 34	31.3 (n=10)	2.50
35 to 44	41.2 (n=14)	5.00
45 to 54	52.5 (n=31)	2.00
55 to 64	42.5 (n=45)	2.00
65 or older	38.1 (n=51)	4.00
Employment Status		
Employed full/part time	42.4 (n=86)	2.00
Unemployed	46.7 (n=7)	5.00
Retired	35.1 (n=59)	2.00

Note: \*\*\* p < 0.001. There was no statistically significant difference between past-year players and non-players by demographics.

### Figure 25 Years Playing Powerball (n=162)



Figure 25 indicates that 73.5 percent of the respondents mentioned that they had been playing Powerball for more than five years, a large increase of 18 percentage points over the previous year. A total of 12.4 percent of respondents reported having played Powerball for less than two years, which was 5 percentage points lower than in 2013.



### **IIIK. POWER PLAY FEATURE WITH POWERBALL RESULTS**

### Percentage of Past-Year Players Purchasing Power Play Feature with Powerball

Exactly 3.5 percent of the past-year lottery players indicated that they added the Power Play feature to their Powerball purchases in 2014. This percentage was 8.5 percentage points lower than the previous year's participation rate.



### Figure 26 Frequency of Purchasing Power Play Feature with Powerball Tickets (n=15)

As shown in Figure 26, 40.0 percent of the respondents who added the Power Play feature to their Powerball ticket purchases did so at least once a week, which was 19.7 percentage points larger than 2013. A large proportion of respondents, 46.7 percent, purchased the feature a few times a year, a decrease of 18.2 percentage points from last year. The remaining 13.3 percent added the feature at least once a month, a slight decrease of 1.6 percentage points compared to the previous year.



## Table 33Average Number of Times Purchased Power Play Feature with Powerball

Purchased Power Play Feature with	Average Number of Times Purchased	
Powerball	2014	2013
Per week for weekly past-year players	1.67	1.91
Per month for monthly past-year players <sup>32</sup>	5.86	3.64
Per year for yearly past-year players <sup>33</sup>	23.00	21.31

As seen in Table 33, weekly players of the Power Play add-on feature reported selecting this feature 1.67 times per week on average, a decrease of 0.24 times over last year (1.91 times). Monthly players reported an average number of 5.86 per month, an increase of 2.22 times from 2013 (3.64 times). Yearly players reported picking the feature an average number of 23.00 times per year, which was 1.69 times more than in 2013 (21.31 times).

### Table 34Dollars Spent on Power Play Feature with Powerball

	Dollars Spent	
Power Play Feature with Powerball	2014	2013
Average spent per play	\$8.80	\$5.92
Average spent per month (mean)	21.73	8.42
Average spent per month (median)	20.00	4.00

Table 34 shows that respondents selecting Power Play feature spent an average of \$8.80 per play. Those who reported purchasing the feature on a monthly or more frequent basis spent an average of \$21.73 per month. Approximately half of the respondents were likely to spend \$20.00 or more a month on the Power Play feature. All three average numbers were substantially larger than their corresponding ones in 2013 (\$5.92, \$8.42 and \$4.00, respectively).

Table 35 on the next page reflects that there was a decrease of 8.5 percentage points in the overall participation rates for the Power Play feature with Powerball between 2014 and 2013 (3.5 percent and 12.0 percent, respectively). The difference between the two years was statistically significant.

The present survey did not report any statistically significant differences between past-year players who chose the Power Play feature with Powerball in 2014 and those who did not for all the demographic factors: education, income, race, Hispanic origin, gender, age, and employment status.



## Power Play Feature with Powerball: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics

Power Play Feature with Powerball	Percentage Played Game Among Past Year Players	Median Dollars Spent
Year***		
2014	3.5 (n=15)	\$10.00
2013	12.0 (n=74)	3.50
2014 Demographics		
Education		
Less than high school diploma		
High school diploma		
Some college		
College degree	6.3 (n=8)	15.00
Graduate degree		
Income		
Less than \$12,000		
\$12,000 to \$19,999		
\$20,000 to \$29,999		
\$30,000 to \$39,999		
\$40,000 to \$49,999		
\$50,000 to \$50,999		
\$60,000 to \$74,999		
\$75,000 to \$100,000		
More than \$100,000		
Race		
White	4.0 (n=10)	17.00
Black		
Hispanic		
Asian		
Native American Indian		
Other		
Hispanic Origin		
Yes		
No	3.6 (n=12)	3.50
Gender		
Female	4.1 (n=9)	20.00
Male	3.1 (n=6)	5.00



### Table 35 (continued)

Age		
18 to 24		
25 to 34		
35 to 44		
45 to 54		
55 to 64		
65 or older	4.5 (n=6)	27.00
Employment Status		
Employed full/part time		
Unemployed		
Retired	3.6 (n=6)	25.00

Note: \*\*\*p<0.001. There was no statistically significant difference between past-year players and non-players by demographics.

### Figure 27 Years Purchasing Power Play Feature with Powerball Tickets (n=15)



As shown in Figure 27, 60.0 percent of respondents indicated that they had purchased the Power Play feature for more than five years, which was similar to the previous year. On the other hand, 20.0 percent of the respondents reported having purchased the Power Play feature for less than two years, an increase of 6.3 percentage points from 2013.


# **IIII. ALL OR NOTHING RESULTS**

# Percentage of Past-Year Players Playing All or Nothing

In 2014, a total of twenty-seven (27), or 6.4 percent, of the past-year lottery players reported playing All or Nothing.

#### Figure 28 Frequency of Purchasing All or Nothing Tickets (n=27)



Figure 28 illustrates that 7.4 percent of respondents that played All or Nothing purchased the tickets at least once a week. Another 14.8 percent purchased the tickets at least once a month. The remaining 77.8 percent reported playing the game a few times a year.



# Table 36Average Number of Times Played All or Nothing

	Average Number	of Times Played
Played All or Nothing	2014	2013
Per week for weekly past-year players	3.00	1.82
Per month for monthly past-year players <sup>34</sup>	7.71	5.89
Per year for yearly past-year players <sup>35</sup>	6.72	9.77

Table 36 indicates that weekly players played All or Nothing an average number of 3.00 times per week, and monthly players did so an average number of 7.71 times per month. Yearly players played All or Nothing an average number of 6.72 times per year.

### Table 37 Dollars Spent on All or Nothing

	Dollars Spent		
All or Nothing	2014	2013	
Average spent per play	\$5.12	\$4.71	
Average spent per month (mean) <sup>36</sup>	6.95	12.68	
Average spent per month (median)	2.00	2.00	

All or Nothing players spent an average of \$5.12 per play, up \$0.41 from 2013. Those who reported playing the game on a monthly or more frequent basis spent an average of \$6.95 per month. Roughly half of the respondents were likely to spend \$2.00 or less a month on playing All or Nothing, the same as in 2013 (Table 37).

The data in Table 38 indicate that there was a decrease of 2.8 percentage points in the overall participation rates for All or Nothing between 2013 and 2014. The difference between the two years, however, was not statistically significant.

We did not find any statistically significant differences between past-year players who played All or Nothing in 2014 and those who did not for all the demographic factors of education, income, race, Hispanic origin, gender, age, and employment status.



### Table 38

All or Nothing: Lottery Play and Median Dollars Spent per Month by Past-Year Player Demographics

All or Nothing	Percentage Played Game Among Past Year Players	Median Dollars Spent
Year		
2014	6.4 (n=27)	
2013	9.2 (n=57)	\$2.00
2014 Demographics		
Education		
Less than high school diploma		
High school diploma	8.6 (n=11)	
Some college		
College degree	6.8 (n=9)	
Graduate degree		
Income		
Less than \$12,000		
\$12,000 to \$19,999		
\$20,000 to \$29,999		
\$30,000 to \$39,999		
\$40,000 to \$49,999		
\$50,000 to \$50,999	28.6 (n=8)	
\$60,000 to \$74,999		
\$75,000 to \$100,000		
More than \$100,000		
Race		
White	6.3 (n=16)	
Black	9.2 (n=6)	0.50
Hispanic	/	
Asian		
Native American Indian		
Other		
Hispanic Origin		
Yes		
No	6.8 (n=23)	
Gender		
Female	6.2 (n=14)	0.50
Male	6.6 (n=13)	



# Table 38 (continued)

Ago		
Aye		
18 to 24		
25 to 34		
35 to 44		
45 to 54	10.0 (n=6)	1.00
55 to 64	8.5 (n=9)	
65 or older	5.9 (n=8)	0.50
Employment Status		
Employed full/part time	7.8 (n=16)	
Unemployed		
Retired	4.1 (n=7)	

Note: There was no statistically significant difference between past-year players and non-players by demographics.



# **IV. SUMMARY**

The Texas Lottery Commission 2014 Demographic Study of Texas Lottery Players surveyed a total of 1,701 Texas citizens aged 18 years and older between August 4th and September 13th, 2014. The Texas Lottery participation rate for 2014 was 25.0 percent, which was significantly lower (by 11.5 percentage points) than the 36.5 percent in the previous year.

There were statistically significant differences between the samples of past-year players and non-players of Texas Lottery games in 2014 with regard to employment status, race, Hispanic origin and education (see Table 2). However, differences between past-year players and non-players by income, own or rent home, age, marital status, children under 18 living in household, number of children under 18 living in household, gender and occupation were statistically not significant. Among past-year players, differences in the percent playing any game were statistically significant for education, race and employment status, but not for the other demographic factors (see Table 3).

In comparison to 2013, a total of eight games and features reported a decline in their respective participation rate in 2014 (see Table 1). The participation rates of Powerball and its add-on feature, Power Play, which had the largest increases in 2013, had the biggest reversal of trend of 14.6 and 8.5 percentage points, respectively, in 2014. On the other hand, only three games–Cash 5, Pick 3 Day, and Texas 2 Step–had very small increases in their participation rates from 2013 to 2014. Once again, Lotto Texas was the most popular game among all games/features, with a participation rate of 67.8 percent in 2014. The Power Play feature with Powerball had the highest average spent per play of \$8.80 by past-year players. Similar to past years, most players had participated in Texas lottery games for more than five years.

In terms of demographic factors, the difference between past-year players and non-players was significant by education for Texas Lottery scratch-off tickets but not for other games/features. The difference by race was statistically significant for the Megaplier feature with Mega Millions. On the other hand, the difference in Hispanic origin was significant for the Mega Millions game. Participation rates also differed by gender for Cash 5 and Texas Lottery scratch-off tickets. Lastly, the difference by employment status was statistically significant for Mega Millions only.

The lottery sales districts with the highest and the lowest participation rates in any Texas Lottery games in 2014 were Dallas South (38.6 percent) and Tyler (15.4 percent) (see Table 4). All except one (Dallas South) of the lottery sales districts experienced a decrease in the participation rate from 2013 to 2014. The biggest decreases in participation rates belonged to the sales districts of El Paso and San Antonio; each declined 21.4 percentage points. The differences in participation rates between 2014 and 2013 were statistically significant for the lottery sales districts of Dallas North, El Paso, Fort Worth, Houston East, McAllen, San Antonio, Tyler and Waco.



## APPENDIX

#### Table A

Number and Percentage of Respondents Playing by Demographics and Cell Phone/ Landline Users, 2013 - 2014

Category	2013 Number and Percent Playing	2014 Number and Percent Playing	Change in Percentage from 2013
Cell Phone/Landline Users			
Cell Phone***	38.9 (n=308)	26.0 (n=160)	-12.9
Landline***	34.4 (n=310)	24.4 (n=265)	-10.0
Education			
Less than high school diploma	24.2 (n=24)	20.9 (n=14)	-3.3
High school diploma***	39.0 (n=158)	29.8 (n=129)	-9.2
Some college***	39.4 (n=151)	25.8 (n=99)	-13.6
College degree***	38.3 (n=179)	22.5 (n=132)	-15.8
Graduate degree**	31.1 (n=99)	21.0 (n=46)	-10.1
Income			
Under \$12,000	30.6 (n=22)	33.3 (n=15)	2.7
\$12,000 to \$19,999*	36.7 (n=33)	20.3 (n=12)	-16.4
\$20,000 to \$29,999*	42.7 (n=41)	28.6 (n=16)	-14.1
\$30,000 to \$39,999	40.0 (n=28)	23.9 (n=16)	-16.1
\$40,000 to \$49,999**	52.2 (n=35)	28.1 (n=16)	-24.1
\$50,000 to \$59,999	46.3 (n=38)	35.4 (n=28)	-10.9
\$60,000 to \$74,999	39.7 (n=31)	37.9 (n=25)	-1.8
\$75,000 to \$100,000**	44.4 (n=56)	25.9 (n=28)	-18.5
More than \$100,000*	36.6 (n=87)	27.9 (n=61)	-8.7
Race			
White***	36.6 (n=396)	22.2 (n=255)	-14.4
Black	34.4 (n=76)	31.0 (n=66)	-3.4
Hispanic**	41.7 (n=105)	30.4 (n=70)	-11.3
Asian	29.7 (n=11)	26.1 (n=6)	-3.6
Native American Indian	40.0 (n=6)	20.0 (n=3)	-20.0
Other	25.9 (n=7)	23.1 (n=6)	-2.8
Hispanic Origin			
Yes***	41.9 (n=116)	29.7 (n=68)	-12.2
No***	35.6 (n=490)	23.7 (n=341)	-11.9



#### Table A (continued)

Category	2013 Number and Percent Playing	2014 Number and Percent Playing	Change in Percentage from 2013
Gender			
Female***	32.5 (n=300)	23.4 (n=225)	-9.1
Male***	41.2 (n=315)	26.9 (n=198)	-14.3
Age			
18 to 24	21.1 (n=19)	13.5 (n=7)	-7.6
25 to 34	31.9 (n=43)	32.7 (n=32)	0.8
35 to 44**	41.2 (n=63)	26.1 (n=34)	-15.1
45 to 54**	41.7 (n=103)	26.4 (n=60)	-15.3
55 to 64***	45.7 (n=148)	30.8 (n=106)	-14.9
65 or older***	34.7 (n=202)	21.5 (n=136)	-13.2
Employment Status			
Employed full/part time***	40.2 (n=327)	26.9 (n=205)	-13.3
Unemployed	27.0 (n=24)	22.4 (n=15)	-4.6
Retired***	34.2 (n=228)	22.2 (n=171)	-12.0

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

The statistical test is for the change in the predicted probabilities of playing any Texas lottery games from 2013 to 2014 for the subcategory.

The percentage figure in each cell is the proportion of past-year players among all respondents (past-year players and non-players) for the sub-category.

Table A shows the numbers and percentages of respondents playing any game by demographics and cell phone and landline users for 2013 and 2014. The last column is the change in percentage from 2013. The table is used to examine the possible factors-based on the survey data-that contribute to the decrease of 11.5 percentage points in the overall participation rate between 2013 and 2014.

We first examined the sample, for the reason that there was a big drop (10.6 percentage points) in the proportion of cell phone users from last year. In Table A, both cell phone and landline users who played any games had double-digit percentage-point decreases in their participation rates from 2013 to 2014. The decreases in both categories were statistically significant. The preliminary analysis implied that the smaller subsample of cell phone users in 2014, by itself, was perhaps not a determining factor contributing to the decrease in the overall participation rate.

We further examined the demographic factors of the respondents who played any game. The results showed substantial decreases in the percentages playing any game in various demographic categories from 2013 to 2014. Both males and females had a sizable and significant decrease in their respective participation rates. In terms of race, White respondents who played any game, as well as their Hispanic counterparts, reported a significant drop in their respective participation rates. Respondents who were employed full/part time or retired also played significantly fewer games in 2014 as compared to 2013.



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In terms of education, 2014 respondents who had at least a high school diploma did not play any of the lottery games as much as those from last year. The decreases in the participation rates were statistically significant. As for the income categories, there were significant decreases in the participation rates among the lower-, middle-, as well as higher income groups. Lastly, respondents belonging to the age groups of 35 to 44 and above who played any games all had double-digit percentage-point decreases in their participation rates between 2013 and 2014.

In summary, the preceding findings implied that the large decrease in the overall participation rate in the Texas lottery games between 2013 and 2014 was not a result of the difference in the samples by cell phone/landline respondents. Based on the survey data, there were substantial decreases in the participation rates regardless of gender, education, income, and employment status. Only Whites and Hispanics had a significant drop in their participation rates, but not Blacks and other racial groups. Respondents who were in their mid-thirties or above also played significantly fewer games compared to the previous year.

It should be noted that the preliminary analysis, though informative, is by no means conclusive with regard to the factors contributing to the change in the participation rates. A detailed understanding of the mechanism behind the change would require more sophisticated analysis which is beyond the scope of the current study. Moreover, other factors, such as the larger economic and social conditions, or the marketing effects of the lottery games, may play a part in the drop in the participation rate. However, such contextual data are not captured in the survey.



# Table BSample Population by Texas County37(n=1,606)

County	Count	Percentage
Anderson	5	0.13
Angelina	7	0.44
Archer	2	0.12
Armstrong	2	0.12
Austin	6	0.37
Bastrop	3	0.19
Bee	4	0.25
Bexar	81	5.04
Bosque	3	0.19
Bowie	5	0.31
Brazoria	32	1.99
Brewster	1	0.06
Brown	6	0.37
Burleson	1	0.06
Caldwell	4	0.25
Calhoun	5	0.31
Callahan	1	0.06
Cameron	12	0.75
Camp	1	0.06
Carson	1	0.06
Cass	3	0.19
Chambers	1	0.06
Clay	1	0.06
Collin	38	2.37
Colorado	4	0.25
Comal	4	0.25
Comanche	1	0.06
Cooke	1	0.06
Coryell	5	0.31
Dallas	123	7.66
Dawson	2	0.12
Deaf Smith	4	0.25
Denton	38	2.37
Eastland	1	0.06
Ector	8	0.50
Ellis	11	0.68

County	Count	Percentage
Erath	2	0.12
Fannin	2	0.12
Fayette	3	0.19
Fort Bend	50	3.11
Franklin	1	0.06
Gaines	1	0.06
Galveston	22	1.37
Goliad	2	0.12
Gray	1	0.06
Grayson	14	0.87
Gregg	7	0.44
Guadalupe	5	0.31
Hale	2	0.12
Hamilton	1	0.06
Hardin	5	0.31
Harris	297	18.49
Harrison	4	0.25
Haskell	4	0.25
Hays	10	0.62
Henderson	13	0.81
Hidalgo	24	1.49
Hill	6	0.37
Hood	3	0.19
Hopkins	1	0.06
Houston	2	0.12
Howard	2	0.13
Hunt	8	0.50
Hutchinson	5	0.31
Jasper	3	0.19
Jefferson	21	1.31
Jim Wells	3	0.19
Johnson	10	0.62
Jones	1	0.06
Kerr	7	0.44
Kimble	1	0.06
Lamar	2	0.12



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County	Count	Percentage
Lampasas	1	0.06
Lavaca	3	0.19
Lee	1	0.06
Liberty	7	0.44
Lubbock	21	1.31
Mason	2	0.12
Matagorda	3	0.19
McLennan	16	1.00
Medina	1	0.06
Midland	7	0.44
Milam	3	0.19
Mills	1	0.06
Mitchell	1	0.06
Montgomery	28	1.74
Morris	1	0.06
Nacogdoches	7	0.44
Nueces	11	0.68
Orange	11	0.68
Palo Pinto	5	0.31
Panola	1	0.06
Parker	7	0.44
Polk	5	0.31
Potter	6	0.37
Rains	1	0.06
Randall	9	0.56
Robertson	5	0.31
Rockwall	1	0.06
Rusk	5	0.31
San Jacinto	3	0.19
San Patricio	3	0.19
Shelby	4	0.25
Smith	14	0.87
Tarrant	94	5.85
Taylor	10	0.62
Terrell	1	0.06

County	Count	Percentage
Titus	1	0.06
Tom Green	10	0.62
Travis	63	3.92
Tyler	3	0.19
Val Verde	3	0.19
Van Zandt	3	0.19
Victoria	8	0.50
Walker	5	0.31
Washington	5	0.31
Webb	8	0.50
Wharton	4	0.26
Wheeler	7	0.44
Wichita	8	0.50
Williamson	27	1.68
Wise	11	0.68
Wood	6	0.37



# Table C Counties by Lottery Sales District

	1				
Austin	Cooke	Lubbock	Midland	Willacy	Lamar
District	Denton	District	Mitchell	Zapata	Leon
(Counties)	Foard	(Counties)	Moore	San Antonio	Madison
Bastrop	Hardeman	Andrews	Motley	District	Marion
Blanco	Hood	Armstrong	Nolan	(Counties)	Morris
Brazos	Jack	Bailey	Ochiltree	Atascosa	Nacogdoches
Burleson	Johnson	Briscoe	Oldham	Bandera	Newton
Caldwell	Montague	Brown	Parmer	Bexar	Panola
Fayette	Palo Pinto	Callahan	Potter	Caldwell	Polk
Grimes	Parker	Carson	Randall	Colorado	Rains
Hays	Tarrant	Castro	Reagan	Comal	Red River
Lee	Throckmorton	Childress	Roberts	De Witt	Rusk
Travis	Wichita	Cochran	Runnels	Dimmit	Sabine
Washington	Wilbarger	Coke	Schleicher	Edwards	San Augustine
Williamson	Wise	Coleman	Scurry	Fayette	Shelby
Dallas North	Young	Collingsworth	Shackelford	Frio	Smith
District	Houston East	Concho	Sherman	Gillespie	Titus
(Counties)	District	Cottle	Stephens	Gonzales	Trinity
Collin	(Counties)	Crane	Sterling	Guadalupe	Tyler
Cooke	Chambers	Crockett	Stonewall	Karnes	Unshur
Dallas	Galveston	Crosby	Sutton	Kendall	Van Zandt
Denton	Hardin	Dallam	Swisher	Kerr	Wood
Fannin	Harris	Dawson	Taylor	Kinnev	Waco
Gravson	lasner	Deaf Smith	Terry		District
Hood	lefferson	Dickons	Tom Green		(Counties)
Hunt	Liberty	Donley	Unton	Mayorick	(Countes) Boll
Rockwall	Montgomery	Eastland	Wheeler	McMullen	Blanco
Tarrant	Newton	Ector	Voakum	Medina	Bosque
Dallas South	Orango	Ector	McAllon	Pool	Burnot
Dallas South District	San Jacinto	Flored	District	Livelde	Camoron
	Houston	Coince		Wilson	Comonoho
(Cournes)	Northwost	Garra	(Countes)	Zavala	Convoll
Dallas	District	Gaiza	Alansas	Zavaia	Eastland
		Glasscock	Dee	District	Edstiditu
El Paso Distrist	(Counties)	Gray	Dexai	District	EIIIS
District	Austin	Hale	Brooks	(Counties)	Freestone
(Counties)	Fort Bend	Hall	Cainoun	Anderson	Hamilton
Brewster	Harris	Hansford	Cameron	Angelina	HIII
Culberson	Liberty	Haskell	Duvai	Bowie	HOOD
El Paso	Nontgomery	Hemphili	Gollad	Camp	Jonnson
Hudspeth	San Jacinto	HOCKIEY	Hidaigo	Cass	Lampasas
Jen Davis	vvalker	Howard	HIII	Cherokee	Limestone
Pecos	vvaller	Hutchinson	Jackson	Dallas	Liano
Presidio	Houston	Irion	JIM Hogg	Deita	Mason
Reeves	Southwest	Jones	Jim vveiis	Franklin	Milere
Terrell	District	Kimble	Kieberg	Freestone	Iviliam
vvard	(Counties)	KNOX	La Salle	Gregg	IVIIIIS
	Austin	Lamb	Live Oak	Harrison	Navarro
Fort Worth	Brazoria	Lipscomb	Nueces	Henderson	Robertson
District	Fort Bend	Lubbock	Refugio	Hopkins	San Saba
(Counties)	Galveston	Lynn	San Patricio	Houston	Somervell
Archer	Harris	Martin	Starr	Hunt	Tarrant
Baylor	Matagorda	McCulloch	Victoria	Jasper	Williamson
Clay	Wharton	Menard	Webb	Kaufman	



#### Notes

<sup>1</sup> All or Nothing was first introduced in September 2012, withdrawn from sale in June 2013, and then reintroduced in late August 2013; since then the game has been on sale continuously.

<sup>3</sup> Information regarding the cell phone and landline findings associated with the 2014 Texas Lottery survey is available upon request from the University of Houston Hobby Center for Public Policy (HCPP).

<sup>4</sup> The proportion of cell phone users is determined by a variety of studies in the past few years. Two recent studies discussed the increase in cell phone usage in the United States: 1) Federal Communications Commission. 2012. "Local Telephone Competition: Status as of June 30, 2011." Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission. Washington, DC.; and 2) Blumberg, Stephen J., and Julian V. Luke. 2011. "Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December 2010." Division of Health Interview Statistics, National Center for Health Statistics.

<sup>5</sup> Note that discrepancies between total sample size and various variables are due to respondents either refusing to answer or saying they did not know.

<sup>6</sup> There was a sizable decrease in the number of respondents who reported that they participated in any of the Texas Lottery games during the past year in 2014 from the number who reported that they participated in 2013. In addition, the difference was statistically significant.

The 2013 population estimate for persons 18 years and older in Texas was 19,412,974. The source for this estimate is the U.S. Census Bureau (http://quickfacts.census.gov/qfd/states/48000.html).

<sup>8</sup> The decrease in the participation rates from 2013 to 2014 was statistically significant.

<sup>9</sup> The figure excludes respondents that indicated they played Pick 3 Day 24 or more times per week. If those respondents are included, the average weekly time the respondents play the game is 5.84.

<sup>10</sup> The figure excludes respondents that indicated they played Pick 3 Day 60 or more times per month. If those respondents are included, the average monthly time the respondents play the game is 12.51. <sup>11</sup> We follow this coding method for each game/feature regarding average time played.

<sup>12</sup> This figure excludes respondents that indicated they spent a monthly average of \$300 or more on Pick 3 Day. If those respondents are included, the monthly average spent of Pick 3 Day is \$27.82. <sup>13</sup> There were only five or fewer respondents in this sub-category and therefore it is not reported. This

reporting rule is used both for percentage played and for median dollars spent by demographics in all

subsequent tables.<sup>14</sup> The figure excludes the respondents that indicated having played Cash Five more than 30 times per month. If those respondents are included, the average number of games played is 10.59 per month. <sup>15</sup> The figure excludes the respondents that indicated having played Cash Five 356 or more times per

year. If those respondents are included, the average number of games played is 36.93 per year. <sup>16</sup> The figure excludes the respondents that indicated having spent \$620 per month on Cash Five. If those

respondents are included, the monthly average spent on Cash Five is \$21.88.

<sup>17</sup> All or the majority (including the median of the sample) of the past-year players in this sub-category did not indicate the dollars spent for the game (they gave a zero dollar answer). Therefore, we are not able to report the median dollars spent. This reporting rule is used for median dollars spent by demographics in all subsequent tables.

<sup>18</sup> The figure excludes the respondents that indicated having played Lotto Texas 200 or more times per year. If those respondents are included, the average number of games played is 29.39 per year. <sup>19</sup> The average spent per play on Lotto Texas excludes the respondent who indicated he or she spends

an average of \$455 per play. If this respondent is included, the average spent per play would be \$6.98. <sup>20</sup> The average dollars spent per month on Lotto Texas excludes respondents that report spending an

average of \$455 or greater. If these respondents are included, the average amount spent per month on

Lotto Texas is \$15.74. <sup>21</sup> The average number of times playing Texas Lottery scratch-off tickets per week excludes the respondent who indicated he or she played 20 times per week. If the respondent is included, the average number of times playing the game is 2.68 per week.



See Section 1 for discussion of statistical significance.

<sup>22</sup> The average number of times playing Texas Lottery scratch-off tickets per month excludes the respondent who indicated that he or she played 31 or more times per month. If the respondent is included, the average number of times playing the game is 9.30 per month.

<sup>23</sup> The average number of times playing Texas Lottery scratch-off tickets per year excludes the respondent who indicated that he or she played 260 or more times per year. If the respondent is included, the average number of times playing the game is 41.14 times per year.

<sup>24</sup> The average number of times playing Texas Two Step excludes the respondent that indicated having played 9 times a week. If this respondent is included, the average number of games played is 1.89 per week.

<sup>25</sup> The average number of times playing Mega Millions excludes the respondents that indicated having played 52 or more Mega Million games per month. If those respondents are included, the average number of games played is 5.75 per month.
<sup>26</sup> The average number of times playing Mega Millions excludes the respondents that indicated having

<sup>26</sup> The average number of times playing Mega Millions excludes the respondents that indicated having played 200 Mega Million games per year. If those respondents are included, the average number of times playing the game is 20.04 per year.

<sup>27</sup> The average number of times purchasing Megaplier with Mega Millions per year excludes the respondents who indicated having purchased the add-on feature144 times per year. If those respondents are included, the average number of times of purchase is 15.26 per year.

<sup>28</sup> The average spent per play on the Megaplier feature with Mega Millions excludes the respondent who indicated he or she spends an average of \$200 per play. If this respondent is included, the average spent per play would be \$11.45.
<sup>29</sup> The average spent per month on the Megaplier feature with Mega Millions excludes the respondent

<sup>29</sup> The average spent per month on the Megaplier feature with Mega Millions excludes the respondent who indicated he or she spends an average of \$200 per month. If this respondent is included, the average spent per play would be \$22.32.
<sup>30</sup> The average number of times playing Powerball excludes the respondents that indicated having played

<sup>30</sup> The average number of times playing Powerball excludes the respondents that indicated having played Powerball games 8 times per week. If those respondents are included, the average number of games played is 1.68.

<sup>31</sup> The average number of times playing Powerball excludes the respondents that indicated having played Powerball games 32 times per month. If those respondents are included, the average number of games played is 4.67.

<sup>32</sup> The average number of times adding the Power Play feature to Powerball tickets of monthly past-year players excludes the respondents who indicated that they did so 52 times per month. If those respondents are included, the average number is 11.63 times per month.
 <sup>33</sup> The average number of times adding Power Play to Powerball tickets of yearly past-year players

<sup>33</sup> The average number of times adding Power Play to Powerball tickets of yearly past-year players excludes the respondents who indicated that they did so 72 times per year. If those respondents are included, the average number is 26.27 times per year.

<sup>34</sup> The average number of times playing All or Nothing of monthly past-year players excludes the respondent who indicated having played 36 times a month. If this respondent is included, the average number of times playing the game is 11.25 times a month.

<sup>35</sup> The average number of times playing All or Nothing of yearly past-year players excludes the respondents who indicated that they played 105 or more times a year. If those respondents are included, the average number of times playing the game is 21.22 times a year.

<sup>36</sup> The table excludes the respondent that claimed to have spent \$200 on All or Nothing per month. If this respondent is included, the average number of dollars spent for purchasing the tickets is \$16.6 per month.

 $^{37}$  The discrepancy between the sample in Table A (n=1,606) and the total sample (n=1,709) is due to respondents stating that they "did not know" or were "unsure" of their county of residence. Some refused to answer the question. The respondents came from 123 out of 254 counties, approximately 48.4 percent of the counties in Texas.

