



# 2014 Quality Of Life Survey Statistical Analysis



May 2014



Derek L. Doughty, P.E.

***Chair***

Mitch Thrower

***Vice Chair***

Bowen A. Arnold

***Member at Large***

Stephanie A. Agliano

Stephen L. Benson, AICP

Theodore Trent Green, R.A.

Brian P. Hollands

Gary Pike

Jacqueline S. Wilds

Ray Young

Cathy Valdes, Ex Officio Member, School Board

Christina Hummel, Ex Officio Member, MacDill AFB

Ramond A. Chiamonte, AICP, *Executive Director*

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>OBJECTIVES</b>	<b>2</b>
<b>DEFINING QUALITY OF LIFE</b>	<b>2</b>
<b>THE NEED FOR SAMPLING</b>	<b>2</b>
<b>TABLE 1: QUALITY OF LIFE FACTORS</b>	<b>3</b>
<b>SAMPLING DESIGN</b>	<b>4</b>
<b>COMMENTS ON SAMPLING DESIGN</b>	<b>5</b>
<b>VALIDITY OF DATA</b>	<b>5</b>
<b>ANALYSES OF DATA</b>	<b>6</b>
<b>TABLE 2: DEFINITION OF QUALITY SCORES</b>	<b>6</b>
<b>TABLE 3: DEFINITION OF ATTENTION SCORES</b>	<b>7</b>
<b>SUMMARY RESULTS</b>	<b>7</b>
<b>ANALYSIS OF QUALITY RATINGS</b>	<b>7</b>
<b>ANALYSIS OF ATTENTION RATINGS</b>	<b>8</b>
<b>COMPARING QUALITY AND ATTENTION RATINGS</b>	<b>8</b>
<b>COMPARING HISTORICAL QUALITY RATINGS</b>	<b>8</b>
<b>COMPARING HISTORICAL ATTENTION RATINGS</b>	<b>8</b>
<b>QUESTIONS OF SPECIAL INTEREST</b>	<b>9</b>
<b>APPENDIX A: SUMMARY RESULTS</b>	<b>10</b>
<b>APPENDIX B: QUALITY RATINGS</b>	<b>12</b>

<b>APPENDIX C: ATTENTION RATINGS</b>	<b>14</b>
<b>APPENDIX D: QUALITY VS ATTENTION RATINGS</b>	<b>16</b>
<b>APPENDIX E: COMPARING HISTORICAL QUALITY RATINGS</b>	<b>18</b>
<b>APPENDIX F: COMPARING HISTORICAL ATTENTION RATINGS</b>	<b>21</b>
<b>APPENDIX G: EXTRA QUESTIONS</b>	<b>24</b>

## **EXECUTIVE SUMMARY**

The Quality of Life Survey began in 2002 as a way to measure public perception of Hillsborough County's quality of life. The 2014 survey marks the eleventh year of the survey.

Voter's rolls were used to identify residents in Hillsborough County. As of September, 2013, there were 756,681 Hillsborough County residents. Of these, two separate samples of 10,000 residents were randomly selected and mailed surveys. 651 surveys were returned from the first mailing and 547 were returned from the second mailing. Both samples were combined bringing the total sample size to 1,198 residents.

Respondents ranked each of sixteen factors (chosen by a focus group of Hillsborough County residents back in 2002) on a scale of one to five, indicating the change in each factor from a year ago. A complete list of factors can be found in **Table 1** and a definition of the rating scale used can be found in **Table 2**. In addition, each respondent was also asked to indicate whether or not a factor should receive more, the same, or less attention in the next calendar year (2014).

The quality ratings of the factors were analyzed and the results reported in **Appendix B**. Three of the factors – **Entertainment, The Arts, and Community Diversity** – rated as better than a year ago according to this year's survey. Nine factors – **Neighborhood and Family Support, Environment and Natural Resources, Education System, Economic Opportunities, Presence of Local Government in Our Lives, Security, Growth Management, Affordable Housing, and Transportation System** – rated as worse than a year ago.

The attention ratings of the factors were analyzed and the results reported in **Appendix C**. Only one factor – **Entertainment** – was recommended as receiving the same amount of attention in 2014 as in 2013. Every other factor was recommended to receive **more** attention in 2014 than in 2013.

The historical quality rating trends for each of the sixteen factors surveyed were analyzed and the results reported in **Appendix E**. Most of the factor ratings have remained pretty consistent over the eleven years that the survey has been taken. Three factors – **Economic Opportunity, Growth Management and Affordable Housing** – have ratings that have changed considerably (both up and down) when compared to the other factors. **Local Government Utilities** and **Growth Management** have shown the largest increases in the quality ratings over the eleven years the sample has been taken. **Entertainment** has shown the largest decrease in the quality ratings over the eleven years the sample has been taken.

The historical attention rating trends for each of the sixteen factors surveyed were analyzed and the results reported in **Appendix F**. Most of the attention ratings have remained pretty consistent over the eleven years that the survey has been taken. Three factors – **Economic Opportunity, Growth Management and Affordable Housing** – have ratings that have changed considerably (both up and down) when compared to the other factors. **Entertainment** has shown the largest increase in the attention ratings over the eleven years the sample has been taken. **Local Government Utilities** has shown the largest decrease in the attention ratings over the eleven years the sample has been taken.

## **OBJECTIVES**

The objective of the Quality of Life Survey was to determine the attitudes and perceptions of Hillsborough County residents concerning the quality of their lives. Specifically, the objective was to determine the direction residents felt they were moving – either getting better or getting worse – in regards to the quality of their lives. In addition, information was desired concerning where Hillsborough County residents perceived that government attention should be placed regarding the various dimensions of quality. Lastly, county residents were asked to give responses to four additional questions of particular interest to the county.

## **DEFINING QUALITY OF LIFE**

Before any data could be collected from residents, it was first necessary to determine a definition for “quality of life.” In late 2002, a focus group of Hillsborough County residents was formed that mirrored the county in terms of the age, sex, race, and geographical demographics of the county. This focus group was led through a day-long process in which they developed the dimensions of quality that were important to the citizens of Hillsborough County. The results of this focus group formed the basis of the questionnaire that was sent to Hillsborough County residents in 2003. These dimensions of quality are displayed in Table 1. This same questionnaire had been sent to Hillsborough County residents in each Quality of Life Survey administered since 2003. In the 2014 Quality of Life Survey, two of these factors, Healthcare and Non-Government Social Services, were not included as part of the survey.

## **THE NEED FOR SAMPLING**

The objective of this study is to gain knowledge concerning the perceptions of all Hillsborough County residents. It is impossible, however, to actually collect information from each one of these residents. That is why sampling a portion of the residents of Hillsborough County becomes necessary. The objective of the sampling is to collect data from a group that represents all Hillsborough County residents well. When done correctly, sampling produces results that are extremely accurate at a fraction of the cost of sampling all residents.

Inferential statistical techniques enable us to make inferences, or statements, about the population of all Hillsborough County residents based on the information contained in the smaller sample of the population we have collected data from. The trade-off of sampling is that we cannot obtain exact estimates of the population values we are interested in learning about. We obtain interval estimates that give a range of values where we can reasonably expect the population values to fall. The interval estimates are provided with a measure of reliability (we use 95% throughout this analysis) that indicates the percentage of time we would get accurate results if repeated samples were taken and analyzed.

## **TABLE 1: QUALITY OF LIFE FACTORS**

**Economic Opportunities:** To include opportunities to operate a business or find acceptable employment.

**Education System:** To include a public education system at all levels that is funded and staffed.

**Transportation System:** To include a system that moves people and goods with options ranging from roads to pedestrians to air travel to mass transit.

**Local Government Utilities:** To include drinking water, wastewater, drainage and other government operated utilities.

**Presence of Local Government in Our Lives:** To include collaboration among local governments, with simplicity and privacy for the average citizen as primary concerns.

**Environmental and Natural Resources:** To include sensitive lands, water availability and quality, and air quality.

**Government Services:** To include basic services such as police and fire protection, code enforcement, social services and consumer protection.

**Growth Management:** To include the availability of urban, suburban and rural lifestyles; resource management; and public participation in the regulatory process.

**Community Diversity:** To include an open and ready acceptance of all races, ethnicities and religions.

**Security:** To include safety in one's home or business and a feeling of security in public settings

**Healthcare:** To include the availability of quality, affordable healthcare for all residents

**Non-government Social Services:** To include the presence of charities and non-profit social service organizations.

**Entertainment:** To include sports, concerts and other forms of popular entertainment.

**Neighborhood and Family Support:** To include public and private groups that act to assist and protect neighborhoods, families and households of all types.

**Public Parks and Recreation:** To include all forms of outdoor public recreation opportunities and facilities.

**Affordable Housing:** To include rental and home ownership.

**Historic Preservation:** To include the preservation of historic buildings and sites.

**The Arts:** To include a variety of choices among the arts.

---

## **SAMPLING DESIGN**

The sampling design describes the method of data collection utilized. It takes into consideration several key elements that will be defined here – reliability, accuracy, sample size, universe, and sample.

**Reliability** – the ability of the estimates derived from the sample to be consistent upon repetition. The goal of sampling is to generate sample estimates with a high level (95%) of reliability.

**Accuracy** – the ability of the sample to estimate the desired universe values very closely. The goal of all analyses is to get the most accurate estimates possible constrained only by the amount of the sampling budget.

**Sample Size** – the size of the sample is determined by the desired reliability and accuracy of the client. After considering both the desired accuracy and reliability, the goal of the Quality of Life Survey was to collect data from at least 900 Hillsborough County residents.

**Universe** – the group of data that we are interested in learning about. The universe for the Quality of Life Survey was initially defined to be the group of 756,681 registered Hillsborough County residents that we had addresses for.

**Sample** – the subset of the universe that data has been collected from. The sample for the Quality of Life Survey is the set of 1,198 registered Hillsborough County residents that returned questionnaires to the Planning Commission.

**Sampling Method** – As mentioned above, our goal was to collect at least 900 questionnaires from Hillsborough County residents. We sent questionnaires to 10,000 registered Hillsborough County residents. These 10,000 residents were randomly sampled from the entire universe of all registered voters. An analysis of these 10,000 residents indicated that they represented very closely the universe of all registered voters in regards to both sex and race. Information concerning their age and geographical data was not available, so no analysis could be conducted concerning these variables. Due to the random technique utilized, it is believed that these variables would also match the universe values.

Of the 10,000 questionnaires mailed out, 651 completed questionnaires were returned. Because this didn't meet our desired 900 questionnaires, we mailed out an additional 10,000 questionnaires and received an additional 547 returned. The combined mailings resulted in a total sample size of 1,198 completed surveys.

### **Notes:**

The **confidence interval** is the plus-or-minus figure usually reported in newspaper or television opinion poll results. For example, if you use a confidence interval of 4 and 47% percent of your sample picks an answer you can be "sure" that if you had asked the question of the entire relevant population between 43% (47-4) and 51% (47+4) would have picked that answer. The wider the confidence interval you are willing to accept, the more certain you can be that the whole population answers would be within that range. For example, if you asked a sample of 1000 people in a city which brand of cola they preferred,



and 60% said Brand A, you can be very certain that between 40 and 80% of all the people in the city actually do prefer that brand, but you cannot be so sure that between 59 and 61% of the people in the city prefer the brand. The confidence interval calculations assume you have a genuine random sample of the relevant population. If your sample is not truly random, you cannot rely on the intervals. Non-random samples usually result from some flaw in the sampling procedure. An example of such a flaw is to only call people during the day, and miss almost everyone who works. For most purposes, the non-working population cannot be assumed to accurately represent the entire (working and non-working) population.

The **confidence level** tells you how sure you can be. It is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval. The 95% confidence level means you can be 95% certain; the 99% confidence level means you can be 99% certain. Most researchers use the 95% confidence level.

## **COMMENTS ON SAMPLING DESIGN**

The following three constraints were placed on the sampling design of this Survey.

- The objective of this Survey was to collect data from a representative group of Hillsborough County residents to be used to set a baseline for the quality of life information desired. In addition, we would like to be able to use this survey to identify changes from previous year's surveys.
- Anonymity was considered crucial to collecting accurate information from the respondents. No name, address, or demographic data was collected to insure the privacy of the individual and accuracy of the data.
- The reliability and accuracy of the results were determined by Planning Commission personnel and utilize realistic and acceptable statistical levels.

It is my opinion that the sampling technique used in this analysis is consistent with traditional statistical sampling methods. Given these constraints, the sample collected should yield information that is both accurate and reliable. Care must be taken not to use the information contained in this Survey for results in which it was never intended.

## **VALIDITY OF DATA**

One concern of this analysis is the validity of the data collected. Validity refers to the ability of the sample data to apply to the universe in question. Two different validity assessments were performed on the collected data. Both analyses involved a cross-validation technique known as data-splitting. In this technique, the collected data is split into two separate sets and the results of each set are compared using a measure of correlation between the results.

The first assessment split the group into two randomly selected subsets. The means for each of the quality measurements were calculated for each of these two subsets and the correlation coefficient

was calculated. As correlation coefficient values range between -1 (a perfect negative relationship) and +1 (a perfect positive relationship), with 0 representing no relationship between the variables, the calculated coefficient of .992908 indicates very valid results.

The second assessment split the group into subsets based upon when the questionnaire was returned. The first 651 questionnaires returned were included in the first subset and the remaining 547 questionnaires were included in the second subset. The means for each of the quality measurements were calculated for each of these two subsets and the correlation coefficient was calculated. The result this time was a calculated coefficient of 0.996293 which again indicates very valid results.

**ANALYSES OF DATA**

The questionnaire consists of eighteen individual dimensions of quality and one overall measure of quality. Each respondent was asked to rate on a five-point scale how they believed each dimension of quality compared to the same time last year. Throughout this report, these responses will be referred to as the Quality Rating for the dimensions of quality surveyed. The five-point scale that was used is shown in Table 2.

**TABLE 2: DEFINITION OF QUALITY SCORES**

SCORE	DEFINITIONS
1	The quality of that factor this year (2013) is <b>much worse than</b> the quality of that same factor last year (2012).
2	The quality of that factor this year (2013) is <b>worse than</b> the quality of that same factor last year (2012).
3	The quality of that factor this year (2013) is <b>about the same</b> as the quality of that same factor last year (2012).
4	The quality of that factor this year (2013) is <b>better than</b> the quality of that same factor last year (2012).
5	The quality of that factor this year (2013) is <b>much better than</b> the quality of that same factor last year (2012).

In addition, each respondent was asked to rate, from “A” to “C” the amount of attention that each dimension of quality should receive in 2014. Throughout this report, these responses will be referred to as the Attention Rating for the dimensions of quality surveyed. The ratings used are shown in Table 3.

**TABLE 3: DEFINITION OF ATTENTION SCORES**

SCORE	DEFINITIONS
A (3pts)	The factor should receive <b>more</b> attention in 2012
B (2pts)	The factor should receive the <b>same amount</b> of attention in 2012
C (1pt)	The factor should receive <b>less</b> attention in 2012

The letters were converted to numeric values where “A” was three points; “B” was two points; and “C” was one point. The responses for each of these variables were entered into a statistical software package and the results of these analyses are presented here.

### **SUMMARY RESULTS**

Appendix A presents the summary results of the data analysis. For each question on the questionnaire, the number of responses (sample size), the average of the responses (mean) and the margin of error are shown. The results are presented in the order they were listed on the questionnaire.

The mean of our sample gives us an estimate of the true mean response of all 756,681 Hillsborough County residents in our universe. By using the inferential statistical techniques discussed earlier, we can generate a 95% reliable estimate for the true mean value for the entire 756,681 residents. The interval estimate we obtain (found by using the mean plus-or-minus the margin of error shown in the provided Appendices) provides a measure of where this true mean value is likely to be found. All intervals stated throughout this report utilize a reliability level of 95%.

### **ANALYSIS OF QUALITY RATINGS**

Appendix B shows each of the sixteen sampled dimensions of quality and the results of the Quality Ratings collected. These dimensions have been ranked from highest to lowest mean Quality Rating. The higher the mean Quality Rating, the more favorably the dimension of quality compared to one year ago. Since a Quality Rating mean of three indicates that the dimension of quality compared exactly the same as one year ago, higher means indicate that the dimension of quality was viewed as better than one year ago. These dimensions of quality have been printed in red ink to ease their identification. Values of the Quality Rating mean below three indicate that the dimension of quality was viewed as worse than one year ago. These dimensions of quality have been printed in blue ink to ease their identification. Four dimensions of quality and (those printed in black ink) resulted in Quality Rating means that were too close to the value three to indicate a perception of either better or worse than one year ago. These dimensions of quality should be considered dimensions that are viewed as the same as one year ago.

Appendix B also includes a bar graph showing the results of the Quality Rating means.

## **ANALYSIS OF ATTENTION RATINGS**

Appendix C shows each of the sixteen sampled dimensions of quality and the results for the amount of attention the respondents stated should be paid to each in 2014. These dimensions have been ranked from highest to lowest mean Attention Rating. The higher the mean, the more the respondents believed attention should be given to the dimension of quality in 2014. Since an Attention Rating mean of two indicates that the dimension of quality should receive exactly the same amount of attention in 2014, higher means indicate that the respondents believed the dimension of quality should receive more attention in 2014. These dimensions of quality have been printed in red ink to ease their identification. Values of the Attention Rating mean below two indicate that the respondents believed the dimension of quality should receive less attention in 2014. No dimension of quality falls in this category. Only one dimension of quality (printed in black ink) resulted in an Attention Rating mean that was too close to the value two to indicate the respondent believed that either more or less attention should be paid in 2014. This dimension of quality is to be viewed by the respondents as desiring the same amount of attention in 2014 as last year.

Appendix C also includes a bar graph showing the results of the Attention Rating means.

## **COMPARING QUALITY AND ATTENTION RATINGS**

An analysis was conducted that compared each of the sixteen sampled Quality Ratings with their corresponding Attention Ratings. Appendix D provides a table listing each of the dimensions of quality and both the Quality Rating and the Attention Rating it received. Appendix D also shows a scatterplot of the results. It is interesting to note the negative relationship between these measures. As the Quality Rating is more favorable (i.e., a higher mean), the respondents believe less attention should be paid to the dimension of quality. As the Quality Rating is less favorable (i.e., a lower mean), the respondents believe more attention should be paid to the dimension of quality. While not an exact relationship, the correlation for these measurements is -0.6522. This correlation coefficient indicates a fairly strong negative relationship between the two measures collected in the questionnaire.

## **COMPARING HISTORICAL QUALITY RATINGS**

A further objective of this survey is to compare the 2014 Quality Ratings to the prior years' Quality Ratings to determine any shifts or trends in public perception of the listed dimensions of quality. Appendix E shows the mean Quality Ratings for each of the sixteen sampled dimensions of qualities for each of the prior years sampled. In addition, plots of the historical Quality Ratings are shown for each of the eighteen dimensions of quality.

## **COMPARING HISTORICAL ATTENTION RATINGS**

One final objective of this survey is to compare the 2014 Attention Ratings to the prior years' Attention Ratings to determine any shifts or trends in public perception of the listed dimensions of quality. Appendix F shows the mean Attention Ratings for each of the sixteen sampled dimensions of qualities

for each of the prior years sampled. In addition, plots of the historical Attention Ratings are shown for each of the eighteen dimensions of quality.

### **QUESTIONS OF SPECIAL INTEREST**

Several questions of special interest were added to the Quality of Life Survey. The topics included ranking methods for accommodating new growth, ranking transportation options for Hillsborough County's future, and ranking methods for paying for new infrastructure. The mean rankings for these questions are shown in Appendix G. For Questions 2 thru 4, the various categories are listed from highest to lowest mean ranking.

Within each question, the means were compared to determine if significant differences exist between the categories. The category(ies) that resulted in the significantly highest mean ranking(s) is/are shown in red in Appendix G. The category(ies) that resulted in the significantly lowest mean ranking(s) is/are shown in blue in Appendix G.

## **APPENDIX A: SUMMARY RESULTS**

<b>Facet of Quality of Life Measured</b>	<b>Sample Size</b>	<b>Mean</b>	<b>Margin of Error</b>
<b>Economic Opportunities</b>	1161	2.7778	±0.0537
<b>Attention to Economic Opportunities</b>	1067	2.7048	±0.0312
<b>Education System</b>	1159	2.7921	±0.0502
<b>Attention to Education System</b>	1069	2.6146	±0.0344
<b>Transportation System</b>	1167	2.6992	±0.0557
<b>Attention to Transportation System</b>	1081	2.5541	±0.0317
<b>Local Government Utilities</b>	1167	2.9957	±0.0434
<b>Attention to Local Government Utilities</b>	1075	2.2502	±0.0341
<b>Presence of Local Govt. in Our Lives</b>	1162	2.7659	±0.0483
<b>Attention to Presence of LG in our Lives</b>	1074	2.1527	±0.0421
<b>Environment and Natural Resources</b>	1165	2.8575	±0.0489
<b>Attention to Environmental and Natural Resources</b>	1078	2.4165	±0.0377
<b>Government Services</b>	1165	3.0215	±0.0493
<b>Attention to Government Services</b>	1084	2.3256	±0.0363
<b>Growth Management</b>	1155	2.7385	±0.0503
<b>Attention to Growth Management</b>	1081	2.3802	±0.0372
<b>Community Diversity</b>	1159	3.0578	±0.0523
<b>Attention to Community Diversity</b>	1082	2.1118	±0.0425
<b>Security</b>	1165	2.7648	±0.0538
<b>Attention to Security</b>	1092	2.4625	±0.0358

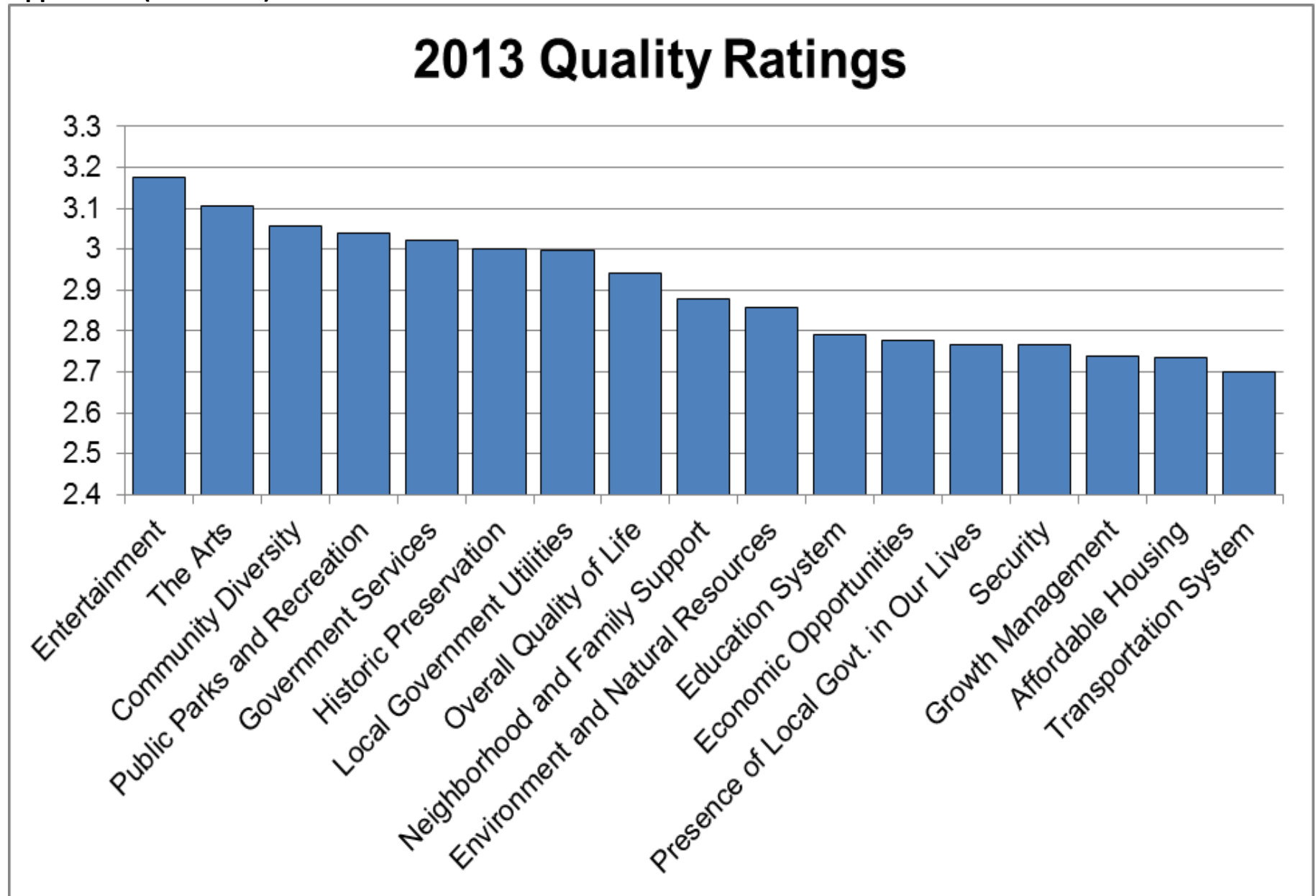
**Appendix A (continued)**

<b>Facet of Quality of Life Measured</b>	<b>Sample Size</b>	<b>Mean</b>	<b>Margin of Error</b>
<b>Healthcare</b>	--	--	--
<b>Attention to Healthcare</b>	--	--	--
<b>Non-Govt. Social Services</b>	--	--	--
<b>Attention to Non-Government Social Services</b>	--	--	--
<b>Entertainment</b>	1130	3.1752	±0.0463
<b>Attention to Entertainment</b>	1053	2.0199	±0.0412
<b>Neighborhood and Family Support</b>	1117	2.8765	±0.0466
<b>Attention to Neighborhood and Family Support</b>	1045	2.2986	±0.0409
<b>Public Parks and Recreation</b>	1131	3.0380	±0.0492
<b>Attention to Public Parks and Recreation</b>	1050	2.3819	±0.0378
<b>Affordable Housing</b>	1110	2.7351	±0.0560
<b>Attention to Affordable Housing</b>	1038	2.3170	±0.0424
<b>Historic Preservation</b>	1160	3.0000	±0.0457
<b>Attention to Historic Preservation</b>	1087	2.1270	±0.0405
<b>The Arts</b>	1159	3.1044	±0.0460
<b>Attention to The Arts</b>	1087	2.0902	±0.0405
<b>Overall Quality of Life</b>	1089	2.9412	±0.0509
<b>Attention to the Overall Quality of Life</b>	978	2.5286	±0.0361

## APPENDIX B: QUALITY RATINGS

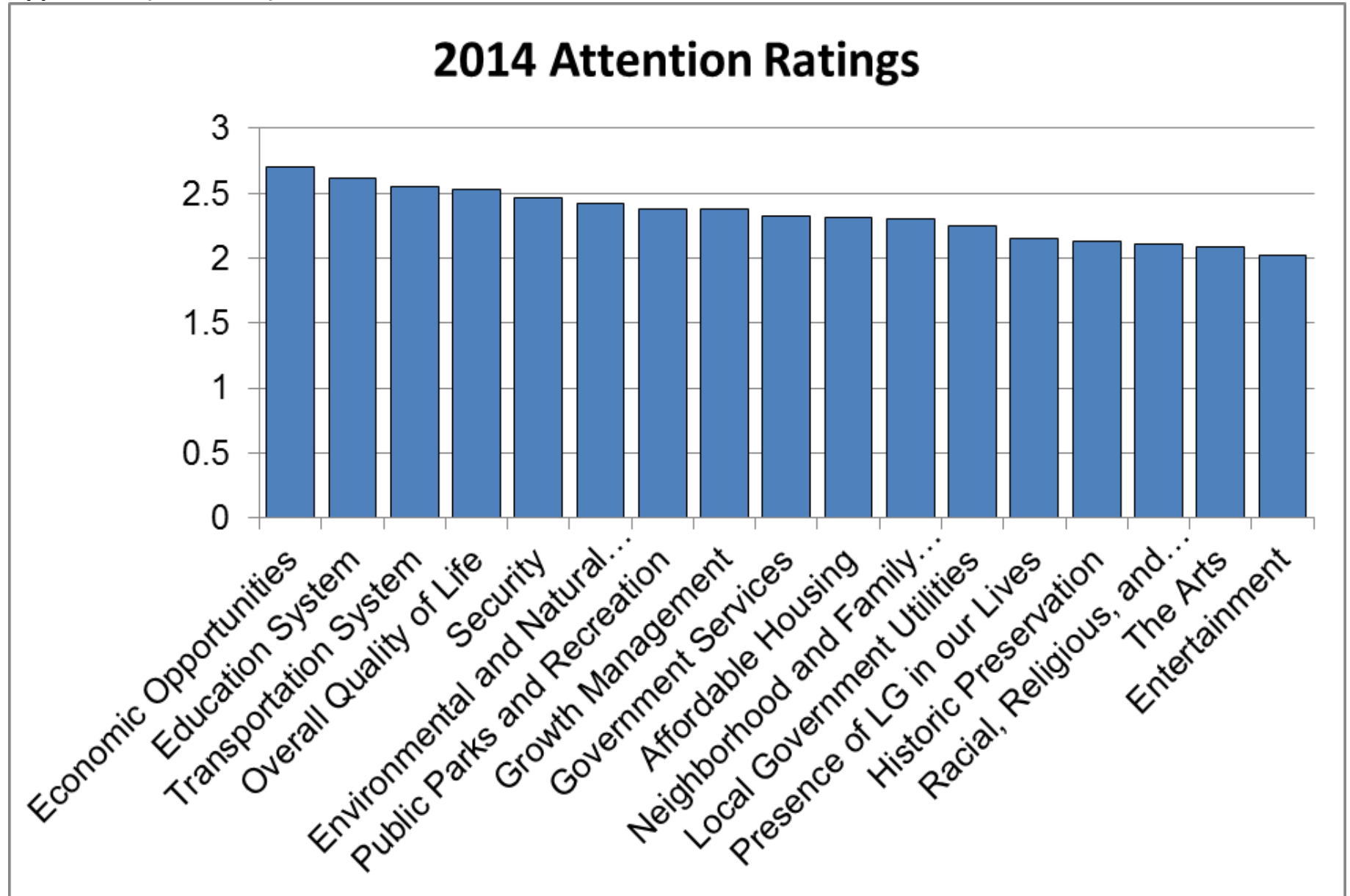
Facet of Quality of Life Measured	MEAN	Margin of Error	Public Perception
Entertainment	3.1752	±0.0463	Better
The Arts	3.1044	±0.0460	Better
Community Diversity	3.0578	±0.0523	Better
Public Parks and Recreation	3.0380	±0.0492	Same
Government Services	3.0215	±0.0493	Same
Historic Preservation	3.0000	±0.0457	Same
Local Government Utilities	2.9957	±0.0434	Same
Overall Quality of Life	2.9412	±0.0509	Worse
Neighborhood and Family Support	2.8765	±0.0466	Worse
Environment and Natural Resources	2.8575	±0.0489	Worse
Education System	2.7921	±0.0502	Worse
Economic Opportunities	2.7778	±0.0537	Worse
Presence of Local Govt. in Our Lives	2.7659	±0.0483	Worse
Security	2.7648	±0.0538	Worse
Growth Management	2.7385	±0.0503	Worse
Affordable Housing	2.7351	±0.0560	Worse
Transportation System	2.6992	±0.0557	Worse





## **APPENDIX C: ATTENTION RATINGS**

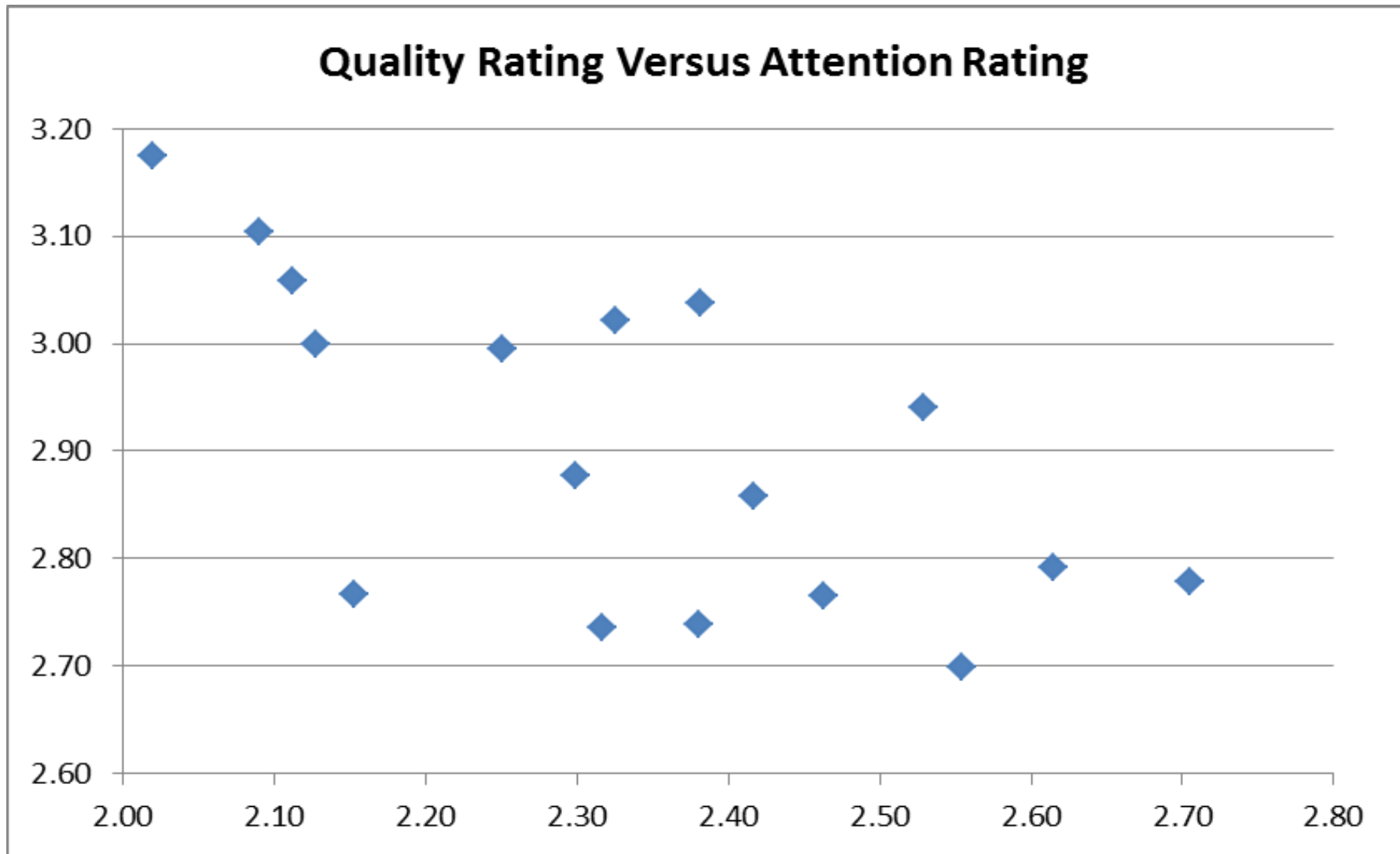
<b>Facet of Quality of Life Measured</b>	<b>Sample Size</b>	<b>MEAN</b>	<b>Margin of Error</b>	<b>Public Perception</b>
<b>Attention to Economic Opportunities</b>	<b>1067</b>	<b>2.7048</b>	<b>±0.0312</b>	<b>More</b>
<b>Attention to Education System</b>	<b>1069</b>	<b>2.6146</b>	<b>±0.0344</b>	<b>More</b>
<b>Attention to Transportation System</b>	<b>1081</b>	<b>2.5541</b>	<b>±0.0317</b>	<b>More</b>
<b>Attention to the Overall Quality of Life</b>	<b>978</b>	<b>2.5286</b>	<b>±0.0361</b>	<b>More</b>
<b>Attention to Security</b>	<b>1092</b>	<b>2.4625</b>	<b>±0.0358</b>	<b>More</b>
<b>Attention to Environmental and Natural Resources</b>	<b>1078</b>	<b>2.4165</b>	<b>±0.0377</b>	<b>More</b>
<b>Attention to Public Parks and Recreation</b>	<b>1050</b>	<b>2.3819</b>	<b>±0.0378</b>	<b>More</b>
<b>Attention to Growth Management</b>	<b>1081</b>	<b>2.3802</b>	<b>±0.0372</b>	<b>More</b>
<b>Attention to Government Services</b>	<b>1084</b>	<b>2.3256</b>	<b>±0.0363</b>	<b>More</b>
<b>Attention to Affordable Housing</b>	<b>1038</b>	<b>2.317</b>	<b>±0.0424</b>	<b>More</b>
<b>Attention to Neighborhood and Family Support</b>	<b>1045</b>	<b>2.2986</b>	<b>±0.0409</b>	<b>More</b>
<b>Attention to Local Government Utilities</b>	<b>1075</b>	<b>2.2502</b>	<b>±0.0341</b>	<b>More</b>
<b>Attention to Presence of LG in our Lives</b>	<b>1074</b>	<b>2.1527</b>	<b>±0.0421</b>	<b>More</b>
<b>Attention to Historic Preservation</b>	<b>1087</b>	<b>2.127</b>	<b>±0.0405</b>	<b>More</b>
<b>Attention to Community Diversity</b>	<b>1082</b>	<b>2.1118</b>	<b>±0.0425</b>	<b>More</b>
<b>Attention to The Arts</b>	<b>1087</b>	<b>2.0902</b>	<b>±0.0405</b>	<b>More</b>
<b>Attention to Entertainment</b>	<b>1053</b>	<b>2.0199</b>	<b>±0.0412</b>	<b>Same</b>



**APPENDIX D: QUALITY VS ATTENTION RATINGS**

<b>Facet of Quality of Life Measured</b>	<b>Attention Rating</b>	<b>Quality Rating</b>
Entertainment	2.0199	3.1752
The Arts	2.0902	3.1044
Community Diversity	2.1118	3.0578
Public Parks and Recreation	2.3819	3.0380
Government Services	2.3256	3.0215
Historic Preservation	2.1270	3.0000
Local Government Utilities	2.2502	2.9957
Neighborhood and Family Support	2.2986	2.8765
Environment and Natural Resources	2.4165	2.8575
Education System	2.6146	2.7921
Economic Opportunities	2.7048	2.7778
Presence of Local Govt. in Our Lives	2.1527	2.7659
Security	2.4625	2.7648
Growth Management	2.3802	2.7385
Affordable Housing	2.3170	2.7351
Transportation System	2.5541	2.6992
Overall Quality of Life	2.5286	2.9412

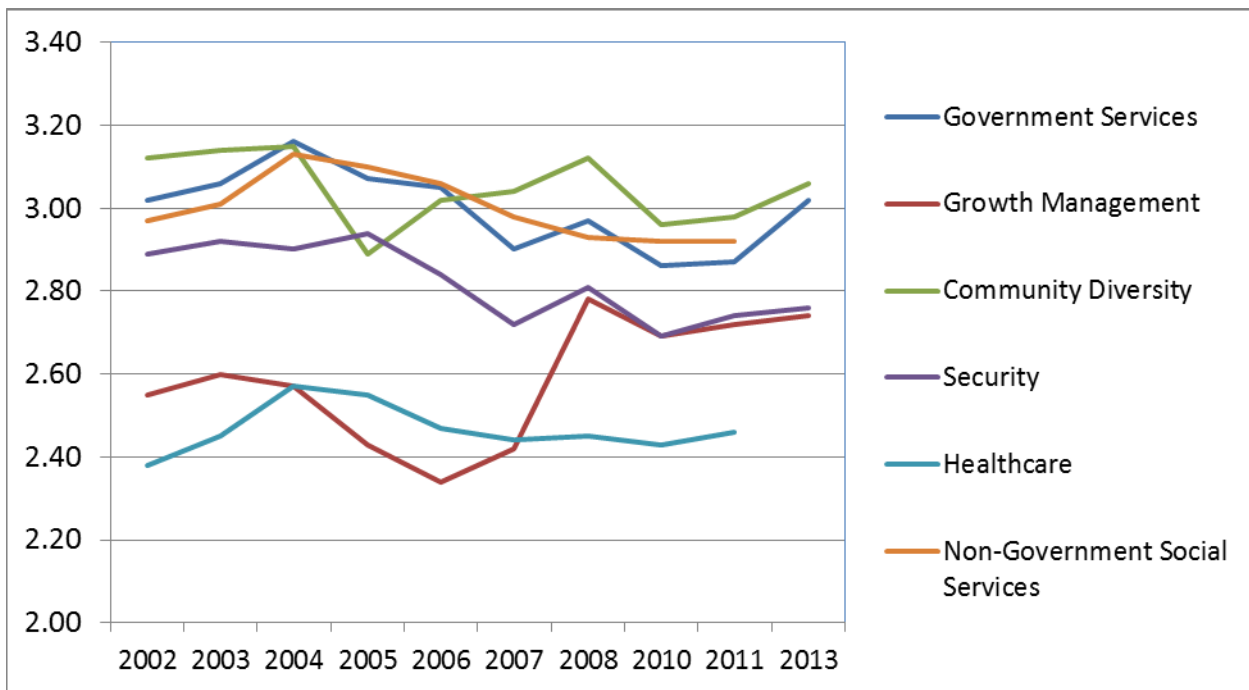
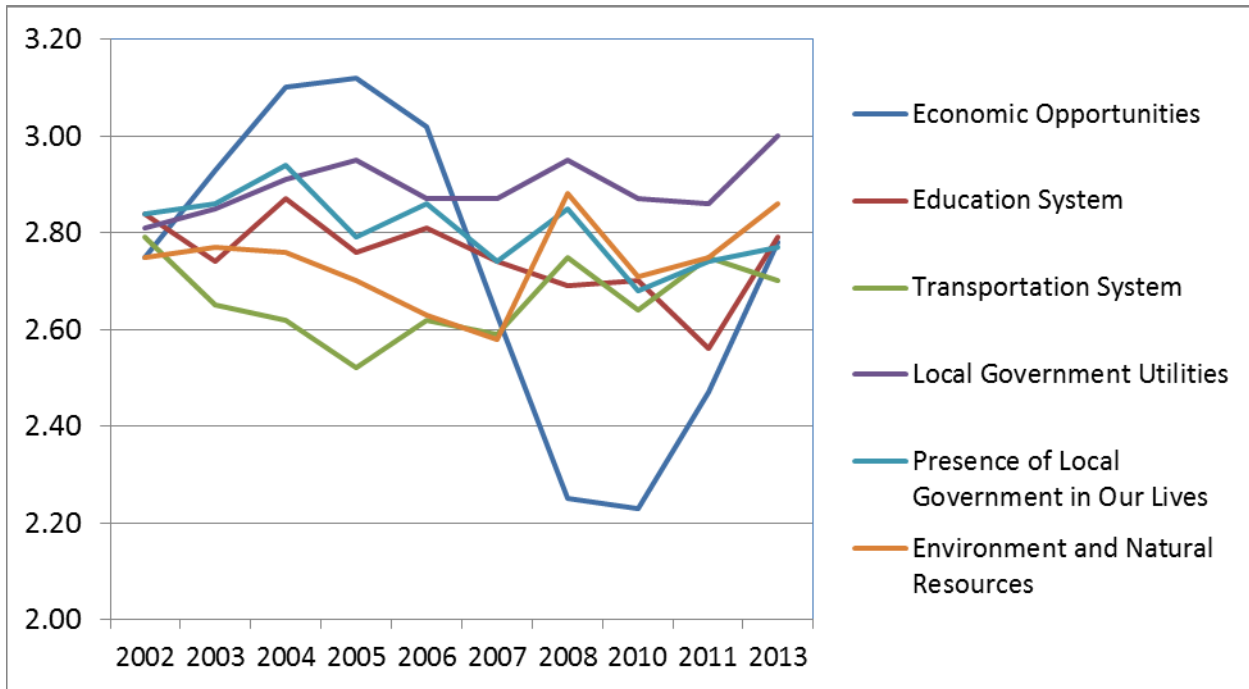
Appendix D (continued)



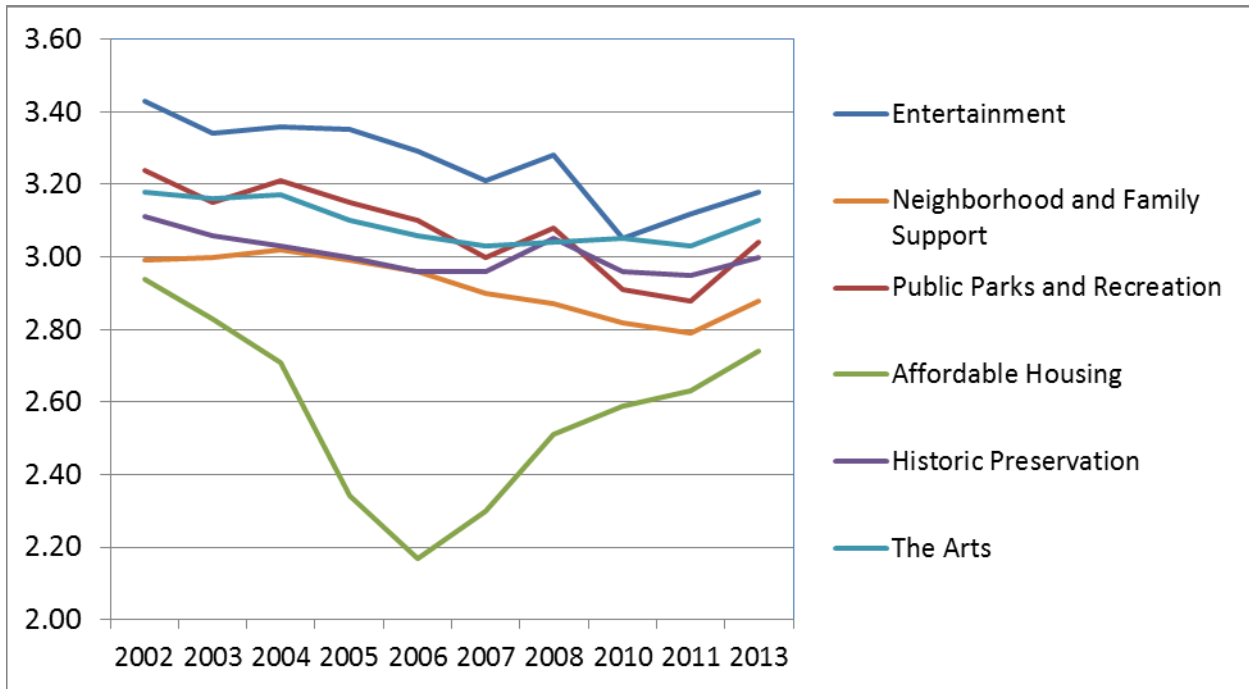
## **APPENDIX E: COMPARING HISTORICAL QUALITY RATINGS**

<b>Factor</b>	<b>Average Quality Score</b>									
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2010</b>	<b>2011</b>	<b>2014</b>
Economic Opportunities	2.75	2.93	3.10	3.12	3.02	2.63	2.25	2.23	2.47	2.78
Education System	2.84	2.74	2.87	2.76	2.81	2.74	2.69	2.70	2.56	2.79
Transportation System	2.79	2.65	2.62	2.52	2.62	2.59	2.75	2.64	2.75	2.70
Local Government Utilities	2.81	2.85	2.91	2.95	2.87	2.87	2.95	2.87	2.86	3.00
Presence of Local Government in Our Lives	2.84	2.86	2.94	2.79	2.86	2.74	2.85	2.68	2.74	2.77
Environment and Natural Resources	2.75	2.77	2.76	2.70	2.63	2.58	2.88	2.71	2.75	2.86
Government Services	3.02	3.06	3.16	3.07	3.05	2.90	2.97	2.86	2.87	3.02
Growth Management	2.55	2.60	2.57	2.43	2.34	2.42	2.78	2.69	2.72	2.74
Community Diversity	3.12	3.14	3.15	2.89	3.02	3.04	3.12	2.96	2.98	3.06
Security	2.89	2.92	2.90	2.94	2.84	2.72	2.81	2.69	2.74	2.76
Healthcare	2.38	2.45	2.57	2.55	2.47	2.44	2.45	2.43	2.46	--
Non-Government Social Services	2.97	3.01	3.13	3.10	3.06	2.98	2.93	2.92	2.92	--
Entertainment	3.43	3.34	3.36	3.35	3.29	3.21	3.28	3.05	3.12	3.18
Neighborhood and Family Support	2.99	3.00	3.02	2.99	2.96	2.90	2.87	2.82	2.79	2.88
Public Parks and Recreation	3.24	3.15	3.21	3.15	3.10	3.00	3.08	2.91	2.88	3.04
Affordable Housing	2.94	2.83	2.71	2.34	2.17	2.30	2.51	2.59	2.63	2.74
Historic Preservation	3.11	3.06	3.03	3.00	2.96	2.96	3.05	2.96	2.95	3.00
The Arts	3.18	3.16	3.17	3.10	3.06	3.03	3.04	3.05	3.03	3.10
<b>Overall Quality of Life</b>	<b>3.00</b>	<b>3.02</b>	<b>3.04</b>	<b>2.96</b>	<b>2.85</b>	<b>2.73</b>	<b>2.75</b>	<b>2.68</b>	<b>2.77</b>	<b>2.94</b>

## Appendix E (continued): Comparing Historical Quality Ratings



### Appendix E (continued): Comparing Historical Quality Ratings

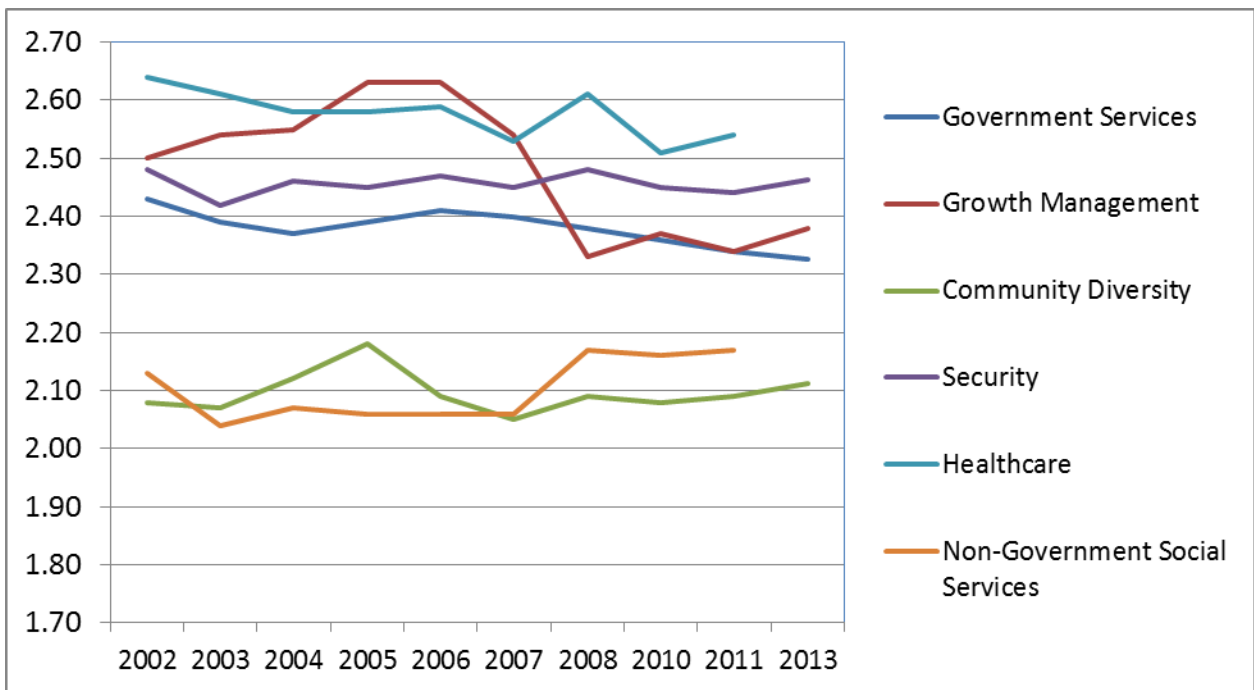
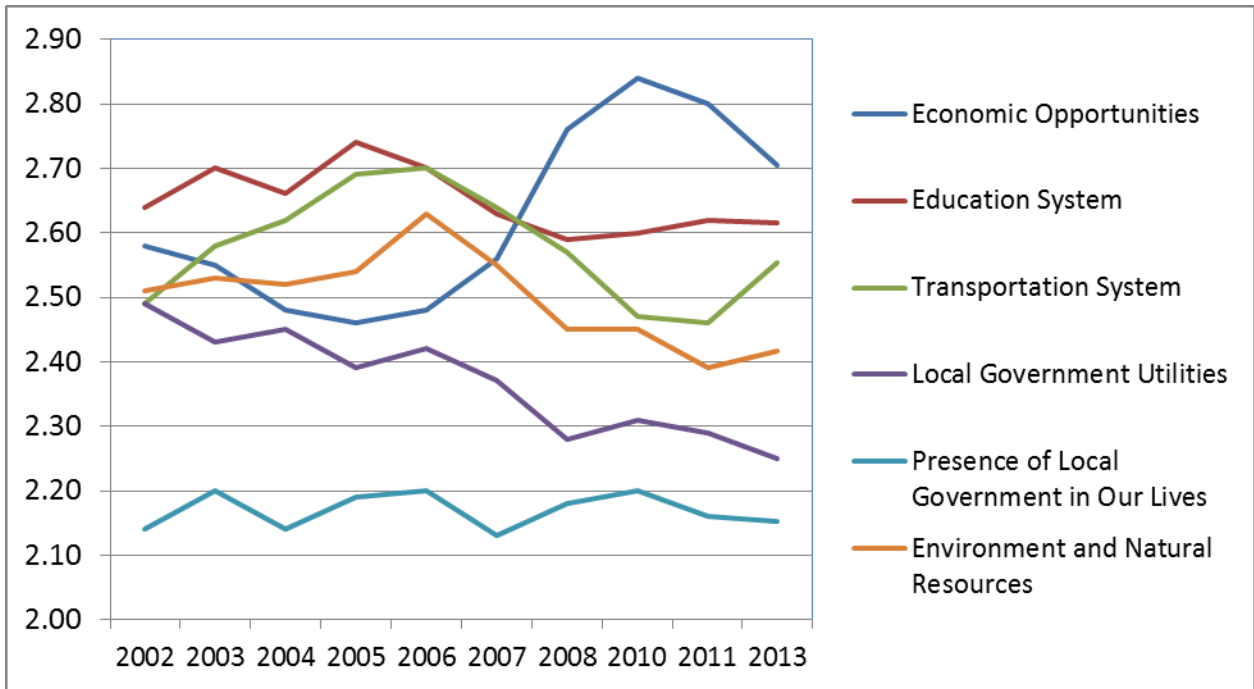




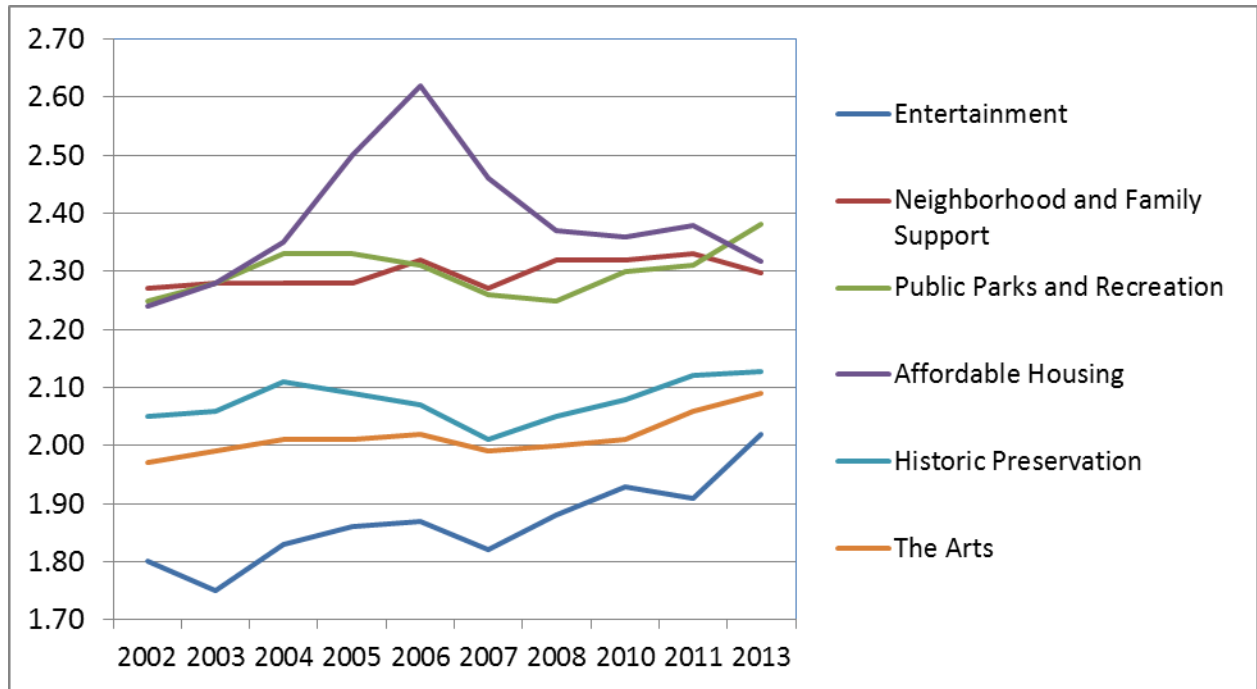
**APPENDIX F: COMPARING HISTORICAL ATTENTION RATINGS**

Factor	Average Attention Score									
	2002	2003	2004	2005	2006	2007	2008	2010	2011	2013
Economic Opportunities	2.58	2.55	2.48	2.46	2.48	2.56	2.76	2.84	2.80	2.70
Education System	2.64	2.70	2.66	2.74	2.70	2.63	2.59	2.60	2.62	2.61
Transportation System	2.49	2.58	2.62	2.69	2.70	2.64	2.57	2.47	2.46	2.55
Local Government Utilities	2.49	2.43	2.45	2.39	2.42	2.37	2.28	2.31	2.29	2.25
Presence of Local Government in Our Lives	2.14	2.20	2.14	2.19	2.20	2.13	2.18	2.20	2.16	2.15
Environment and Natural Resources	2.51	2.53	2.52	2.54	2.63	2.55	2.45	2.45	2.39	2.42
Government Services	2.43	2.39	2.37	2.39	2.41	2.40	2.38	2.36	2.34	2.33
Growth Management	2.50	2.54	2.55	2.63	2.63	2.54	2.33	2.37	2.34	2.38
Community Diversity	2.08	2.07	2.12	2.18	2.09	2.05	2.09	2.08	2.09	2.11
Security	2.48	2.42	2.46	2.45	2.47	2.45	2.48	2.45	2.44	2.46
Healthcare	2.64	2.61	2.58	2.58	2.59	2.53	2.61	2.51	2.54	--
Non-Government Social Services	2.13	2.04	2.07	2.06	2.06	2.06	2.17	2.16	2.17	--
Entertainment	1.80	1.75	1.83	1.86	1.87	1.82	1.88	1.93	1.91	2.02
Neighborhood and Family Support	2.27	2.28	2.28	2.28	2.32	2.27	2.32	2.32	2.33	2.30
Public Parks and Recreation	2.25	2.28	2.33	2.33	2.31	2.26	2.25	2.30	2.31	2.38
Affordable Housing	2.24	2.28	2.35	2.50	2.62	2.46	2.37	2.36	2.38	2.32
Historic Preservation	2.05	2.06	2.11	2.09	2.07	2.01	2.05	2.08	2.12	2.13
The Arts	1.97	1.99	2.01	2.01	2.02	1.99	2.00	2.01	2.06	2.09
<b>Overall Quality of Life</b>	<b>2.51</b>	<b>2.50</b>	<b>2.51</b>	<b>2.58</b>	<b>2.57</b>	<b>2.51</b>	<b>2.57</b>	<b>2.52</b>	<b>2.54</b>	<b>2.53</b>

**Appendix F (continued) - Comparing Historical Attention Ratings**



**Appendix F (continued) - Comparing Historical Attention Ratings**



## APPENDIX G: EXTRA QUESTIONS

Extra Question	Sample Size	Mean	Margin of Error	Rating
Question 1 - Level of Agreement	968	4.0176	±0.0773	--
<b>Q2: Redevelopment</b>	<b>1120</b>	<b>3.6473</b>	<b>±0.0691</b>	<b>Highest</b>
<b>Q2: Grow existing urban centers</b>	<b>1116</b>	<b>3.6039</b>	<b>±0.0717</b>	<b>Highest</b>
Q2: New mixed town centers	1113	3.3324	±0.0708	2 <sup>nd</sup> Highest
Q2: Fill in suburban area	1106	3.0488	±0.0731	3 <sup>rd</sup> Highest
<b>Q2: Development in rural area</b>	<b>1116</b>	<b>2.5735</b>	<b>±0.0809</b>	<b>Lowest</b>
<b>Q3: Smart traffic signals and better intersections</b>	<b>1164</b>	<b>4.1065</b>	<b>±0.0663</b>	<b>Highest</b>
Q3: Sidewalks, bike lanes, and trails	1163	3.7223	±0.0750	2 <sup>nd</sup> Highest
Q3: Express or bus rapid transit	1156	3.5839	±0.0761	2 <sup>nd</sup> /3 <sup>rd</sup> Highest
Q3: Commuter or light rail	1160	3.5483	±0.0891	3 <sup>rd</sup> Highest
Q3: Circulator buses and shuttles	1156	3.5329	±0.0735	3 <sup>rd</sup> Highest
<b>Q3: New express toll lanes</b>	<b>1141</b>	<b>2.9124</b>	<b>±0.0844</b>	<b>Lowest</b>
<b>Q4: No new taxes/maintain what we have</b>	<b>1130</b>	<b>3.4434</b>	<b>±0.0905</b>	<b>Highest</b>
<b>Q4: One-time fees on new development</b>	<b>1128</b>	<b>3.3998</b>	<b>±0.0819</b>	<b>Highest</b>
Q4: Tolls on new lanes	1123	2.943	±0.0834	2 <sup>nd</sup> Highest
Q4: Special assessment districts	1074	2.9106	±0.0799	2 <sup>nd</sup> Highest
Q4: Sales tax	1149	2.5231	±0.0838	3 <sup>rd</sup> Highest
Q4: Gas tax	1140	2.3377	±0.0828	4 <sup>th</sup> Highest
<b>Q4: Utility tax</b>	<b>1136</b>	<b>1.9648</b>	<b>±0.0684</b>	<b>Lowest</b>
<b>Q4: Property tax</b>	<b>1138</b>	<b>1.942</b>	<b>±0.0710</b>	<b>Lowest</b>