

CITY OF GRAND JUNCTION HOUSEHOLD SURVEY 2005

EXECUTIVE SUMMARY

The City of Grand Junction contracted Dr. Jerry Moorman, marketing research consultant, to conduct a mail-based, self-reported opinion survey of City residents to determine their perceptions regarding certain aspects of living in Grand Junction. The survey was a follow-up project to research done in 2001 and 2003. The intent was to not only measure opinions in 2005 but to provide longitudinal data between the three surveys. The areas of greatest interest were:

- ✓ quality of life,
- ✓ conditions and services in Grand Junction,
- ✓ drinking water,
- ✓ safety, and
- ✓ City of Grand Junction employees.

Included in the following report are research methodology, an explanation of statistical accuracy, survey results including data analysis and explanation, and instrumentation.

Meetings with City Administrators started in January, 2005, to plan the research project. The questionnaire used in the previous studies was reviewed by the consultant and the City. Very minor changes were made to the questionnaire and it was approved in final form (Appendix A) by the City.

A decision was made by the City to mail the questionnaire to an unduplicated list of all utility customers. Questionnaires were mailed on April 19, 2005. Respondents were given seven days to return the instrument. An actual cut-off date of May 10, 2005, was established for receipt of questionnaires that would be used in final data analysis.

A data-entry system was designed, created, and tested by the researchers for use in analyzing data. Data entry began immediately and continued throughout the process. Data entry utilized a two-level verification process. After the data were entered, they were hand-checked a second time for accuracy. This process was necessary because of the large volume of data. Approximately 125,160 items had to be entered to create the final data pool.

After the data were entered and verified, it was analyzed using SPSS 11.5, one of the most academically respected statistical software packages available. The

primary statistical procedures used were descriptive statistics, crosstabulations, and analysis of variance.

The survey yielded 4,470 completed questionnaires. Using the number of surveys mailed, the survey yielded a confidence interval of 1.33 at the 95% confidence level. When this survey was conducted in 2001, the confidence interval was 1.60. For the 2003 survey, the confidence interval was 1.47. Since these numbers have little meaning to the average reader, I have included a brief explanation of each.

The confidence interval is the plus-or-minus figure often reported in media opinion poll results. For example, if you use the survey's confidence interval of 1.33 and 50 percent of your sample picks an answer, you can be "sure" that if you had asked the question of the entire relevant population, between 48.67% ($50-1.33$) and 51.33% ($50+1.33$) would have picked that answer.

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.

When you put the confidence level and the confidence interval together, you can say that you are 95% sure that the true percentage of the population who would pick the answer is between 48.67% and 51.33% (using the example above).

A confidence interval of 5 is usually the accepted norm in opinion-based research. The lower the confidence interval, the better. The confidence interval of this research, 1.33, is extremely low and indicates a very high degree of accuracy.

The presentation of data in the report follows the order found in the questionnaire. Descriptive data and explanations are included for each section. Where percentages are reported, either "percent" or "valid percent" was used as the researcher deemed appropriate. Crosstabulations are included where it is useful to examine sub-group responses. A section on significance testing using analysis of variance is also included.

As variance within categories is reported, the following definitions were used:

little variance: 0 - .19; minor variance: .20 - .49;
moderate variance: .50 - .99; high variance: 1.0 and up.

Respondents were asked to use a rating scale of 1 - 5 while completing most questions on the questionnaire. The number 1 represents a "poor" rating while 5 represents an "excellent" rating. Respondents could pick any number from 1 - 5

or N/O for “no opinion.” After the 23 questions were answered, demographic data were gathered.

Data from the both the 2001 and 2003 Household Surveys are also presented in most tables for longitudinal comparison purposes. With the exception of minor changes in two questions between the 2001 and the subsequent surveys, the Household questionnaires are the same. By placing results from all three years together, the reader can readily identify longitudinal changes over time. To examine changes across the three survey periods, analysis of variance (ANOVA) statistical analysis was computed where appropriate to determine statistically significant changes. Those significant changes are discussed as suitable. Complete significance tables and a glossary of significance testing terms are included in Appendix B for readers desiring more in-depth information.

DATA HIGHLIGHTS

An overwhelming percentage (79%) of Grand Junction households rated quality of life as good or excellent in 2005. This is down a little from 2003. A very small percentage (2.9%) rated quality of life as poor or below average. This is up a little from 2003. In 2005, there was minor variance in quality of life based on Zip Code of residence.

Grand Junction households were asked the question, “In general, how well do you think the City of Grand Junction provides services?” An above average rating of 3.70 was achieved. This was a little decrease from 2003 when the mean was 3.74. In 2005, there was moderate variance in provision of services based on Zip Code of residence: 81504 was lowest at 3.43; 81502 was highest at 4.00. Upward movement occurred in four of the seven means from 2003 data.

Next, households were asked to rate individual City services. The following table provides an overview of the responses.

City Services	2001 Mean	2003 Mean	2005 Mean
Street Maintenance and Repair	3.27	3.26	3.20
Street Sweeping	3.24	3.53	3.42
Traffic Management	2.89	2.88	2.93
Fire Protection	4.03	4.18	4.20
Emergency Medical Services	4.13	4.24	4.20
Delivery of Police Services	3.63	3.68	3.55
Enforcement of Traffic Laws	3.20	3.12	3.03
Crime Prevention	3.28	3.23	3.20
Appearance of City Parks	4.27	4.09	4.11
Recreation Programs	3.90	3.91	3.93
Trash Collection	4.16	4.28	4.25
Weed Control	2.98	2.86	2.79
Junk and Rubbish Control	3.15	3.08	2.88
Storm Water Collection System	2.49	3.20	3.45
*Water Service		4.14	4.09
*Water Quality	3.76		

*The question on water was reworded in 2003 and added in the City Services block of questions in both 2003 and 2005.

Households felt some City services were provided better than others. Opinions ranged from a low means of 2.79 for Weed Control to a high means of 4.25 for Trash Collection. Several others including Fire Protection, Emergency Medical Services, Appearance of City Parks, and Water Service were above the 4.0 level. Ten ratings decreased from 2003 and five increased.

When all three survey periods are examined, Street Maintenance and Repair, Enforcement of Traffic Laws, Crime Prevention, Weed Control, and Junk and Rubbish Control all had downward trends. Three of the five, however, have means above the rating mid-point reflecting above average ratings. Junk and Rubbish Control, however, dropped below the rating mid-point in 2005 reflecting less than average ratings.

Fire Protection, Recreation Programs, and Storm Water Collection System all had upward trends. It is noteworthy that Storm Water Collection System increased from a mean of 2.49 in 2001 to a mean of 3.45 in 2005.

In addition to examining overall means for services, crosstabulations were conducted to examine delivery of individual services based on Zip Code of residence. All crosstabulations are included in the report. Analysis indicated moderate variance based on Zip Code of residence in the following services:

Street Maintenance and Repair, Street Sweeping, Junk and Rubbish Control, Storm Water Collection System, and Quality of Water Service. With the exception of Junk and Rubbish Control, all means are above the rating mid-point in 2005.

There were minor changes made to this section of the questionnaire in 2003. A new question, "Who Supplies Your Trash Collection?" was added. Data in 2005 reveal that the City supplies trash collection to 57.6% of respondents.

In 2003, two changes were made regarding water. The first change reworded the question from "How Do You Rate The Quality of Your Drinking Water?" in 2001 to "How Do You Rate The Quality of Your Water Service?" in 2003. Overall mean in 2003 was 4.14. In 2005, the overall mean was a little lower at 4.09.

The second change regarding water dealt with suppliers. The 2003 question provided only two options: City and Other. There was little variance in the 2003 respondents' answers with means of 4.13 and 4.14 respectively. In 2005, the means were 4.12 for the City and 4.06 for Other.

The next question concerned neighborhood safety. With a 2005 mean of 3.96, overall perception remains high that someone walking in a City neighborhood is safe. This mean was 3.97 in 2001 and 2003. Several crosstabulations were conducted on 2005 data to further investigate neighborhood safety and are included in the report. Data generally support that residents across all ages feel someone would be safe walking in their neighborhood.

The next three questions were preceded by the statement, "If you have had telephone or in-person contact with a City of Grand Junction employee within the last 12 months, please rate the following three employee traits by circling the number that most closely represents your opinion. N/O represents no contact."

Again in 2005, data support that City employees are very courteous and provide services in a timely and helpful fashion. All means are above the mid-point. Each shows a little downward movement from 2003. Several crosstabulations were conducted to further examine City employee traits and are included in the report. There is moderate variance in the three areas based on age.

The next section of the report dealt with statistical significance testing using analysis of variance. Questions 1-13, 15-17 and 20-23 were examined across the three rating periods to determine if the results were statistically significant based on year of survey.

	2001 Mean	2003 Mean	2005 Mean	Significance
Quality of Life	4.02	4.05	4.01	.093
Provision of Services	3.62	3.74	3.70	.000*
Street Maintenance and Repair	3.27	3.26	3.20	.002*
Street Sweeping	3.24	3.53	3.42	.000*
Traffic Management	2.89	2.88	2.93	.100
Fire Protection	4.03	4.18	4.20	.000*
Emergency Medical Services	4.13	4.24	4.20	.000*
Delivery of Police Services	3.63	3.68	3.55	.000*
Enforcement of Traffic Laws	3.20	3.12	3.03	.000*
Crime Prevention	3.28	3.23	3.20	.003*
Appearance of City Parks	4.27	4.09	4.11	.000*
Recreation Programs	3.90	3.91	3.93	.409
Trash Collection	4.16	4.28	4.25	.000*
Weed Control	2.98	2.86	2.79	.000*
Junk and Rubbish Control	3.15	3.08	2.88	.000*
Storm Water Collection System	2.49	3.20	3.45	.000*
*Water Service		4.14	4.09	NA
*Water Quality	3.76			NA
Neighborhood Walking Safety	3.97	3.97	3.96	.908
City Employee Courteousness	4.05	4.14	4.12	.012*
City Employee Helpfulness	3.90	4.01	3.98	.005*
City Employee Timeliness	3.72	3.87	3.86	.000*

*Statistically Significant at the .05 level

A finding is described as **statistically significant** when it can be demonstrated that the probability of obtaining such a difference by chance only, is relatively low, usually less than 5 out of 100.

There were 16 statistically significant differences among the 20 questions tested. (See Appendix B for complete results by question) It is important to note, however, that only three of the 20 means were below the rating mid-point of 3 on

the 1-5 scale. Any rating above the mid-point is generally viewed as a positive rating. Of the three below the mid-point, traffic management is showing a little overall increase over the three survey periods while weed control is showing a little overall decrease and junk and rubbish control is showing a minor overall decrease. The biggest decreases over the three-year period were in junk and rubbish control (-.27), weed control (-.19), and enforcement of traffic laws (-.17). In the report, trend data is discussed for each individual question.

The next four questions concerned respondent demographics. In 2005, respondents were majority female (53.5%) with 5.1% of respondents not answering this question. Gender distribution was closer in 2003 than 2005

In 2005, 49.2% of respondents were 60 years of age and older, with 28.9% 70+. This is a decrease from 2003 when 49.7% of respondents were 60 years of age and older, with 30.7% 70+.

In 2003, 46.5% had lived in Grand Junction 21+ years and 33.3% had lived in Grand Junction 10 years or less. In 2005, 45.5% had lived in Grand Junction 21+ years and 33.1% had lived in Grand Junction 10 years or less.

As in 2003, 2005 Zip Code distribution was not even with small responses from 81502 (.2%), 81503 Orchard Mesa (5.5%), and 81505 (7.7%). The number of respondents from each Zip Code area should be carefully factored into any conclusions reached based on research data.

The last part of the questionnaire gave the respondents a chance to make "Other Comments." This important communication tool was used by many people.

SUMMARY

Research results leave little doubt that Grand Junction households, with few exceptions, enjoy a very good quality of life. Perception of overall services was above average, quality of water service was high, the City's neighborhoods were considered exceptionally safe, and City employees were courteous, timely and helpful. Data strongly suggest household respondents consider Grand Junction a great place to live. Even though many of the changes between the three surveys are statistically significant, an examination of means generally shows an above average opinion of City services, safety, and employee traits.