



**REPORT TO
Utilities Rate Advisory Commission
City of Sacramento**

**1395 35th Ave. Sacramento, CA 95822
www.cityofsacramento.org/utilities**

**Discussion Calendar
October 26, 2011**

**Honorable Chair and Members of
Utilities Rate Advisory Commission**

Title: Community Engagement Update

Location/Council District: (Citywide)

Recommendation: Review and File

Contact: Jessica Hess, Media and Communication Specialist, 808-8260 Department of Utilities

Presenters: Jessica Hess

Department: Department of Utilities

Division: Administration

Organization No: 14001061

Description/Analysis

Issue: The Department of Utilities has launched a community engagement effort to educate the community regarding aging infrastructure, increasing state and federal regulations and mandates and the Department's fiscal strategy to address these ongoing needs. This report will provide the results of a recently completed survey of residents as well as provide a summary of work completed in Phase 1 of the effort. Commissioners will also hear plans for Phase 2 and Phase 3.

Rational for Recommendation: Staff believes Commissioners will play a key role



CITY OF SACRAMENTO
DEPARTMENT
OF UTILITIES

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in the community engagement efforts moving forward and would like them to be engaged and understanding of the process and how they can participate, if they desire.

Financial Considerations: The Department has contracted with Crocker and Crocker to help with the community engagement efforts.

Respectfully Submitted by: _____ /s/.Jessica Hess

Jessica Hess
Media and Communications Specialist

Attachments

1. Background
2. Phase 1 Summary Report
3. Survey Data Report

Attachment 1

Background

The City of Sacramento Department of Utilities (DOU) is engaging the community and seeking insights into the department's water, wastewater and solid waste utilities to help prepare a finance plan and eventually a potential rate adjustment to address its biggest challenges: aging infrastructure and increasing regulations and mandates. This effort is being called Your Utilities. Your Voice.

In recent years, DOU has undergone several audits and efficiency reviews resulting in cost savings, which has helped the department stave off rate increases this past year. However, some costs, such as state and federal mandates, are out of the department's control. The results from this survey will be used in a process to analyze utility rates in light of budgetary needs from higher costs, mandatory regulations and needed replacement of pipes, facilities and equipment.

The Department has identified two **goals** as outcomes of the effort:

- community engagement, understanding and support for the rate adjustment
- council support for the rate process and adjustment

The Department is implementing this community engagement process in three phases. Phase 1 consisted of research (phone survey, web survey and written survey) to gauge customer support of guiding principles to be used for the Water Wastewater Plan. Overwhelming, the data shows support for the developed guiding principles. A complete copy of the survey results can be found in Attachment 3. Additionally, during Phase 1, DOU began to outreach to the community and start a dialogue about the Department's challenges. The Department met with neighborhood associations, cultural organizations and business groups. In addition, the Department developed a website YourUtilitiesYourVoice.com which houses all materials created for this effort, additional background materials and videos produced to explain the challenge facing the Department and how funds are spent today. A draft summary report of Phase 1 can be found in Attachment 2.

Phase 2 of Your Utilities. Your Voice. takes place in October and November 2011 and will provide additional information about the Departments capital needs and regulatory requirements. It will feature tours of facilities, highlighting the Sacramento River Water Treatment Plant (in operation since 1924) and Sump 2 (in operation since 1927), online video tours, development of fact sheets, and continued meetings with the community.

Phase 3 of Your Utilities. Your Voice. will take place from December through February 2011's rate hearings. The program will feature additional community rate workshops, community meetings with neighborhood and business leaders and the development of

Attachment 1

fact sheet regarding the proposed adjustments. Two additional videos will be developed regarding the Department's efforts, including a video that explains the proposed rate adjustment, the CIP program and the financing strategy.

City of Sacramento, Department of Utilities

Your Utilities. Your Voice. Community Engagement Report Phase One--*Draft* **October 17, 2011—Draft 1**

Background

The City of Sacramento Department of Utilities is under way with a rate adjustment effort. Utilities is facing state and federal mandates, rising energy, chemical and materials costs, and a continued need to replace or repair aging infrastructure such as pipes, facilities and equipment. Utilities did not increase rates in the 2010/11 fiscal year due to efficiencies in its operations budget and is planning for a multi-year rate adjustment now to cover these costs while planning for the future.

As part of the community engagement process, Utilities has identified two **goals** as outcomes:

- community engagement, understanding and support for the rate adjustment
- council support for the rate process and adjustment

The department is underway with a three-phase education and engagement process with their residential and business customers about its rate adjustment process. The phases are:

1. Guiding Principles Development and Community and Stakeholder Engagement—September-October 2011(complete)
2. Rate Development Community and Stakeholder Engagement—October-December 2011
3. Continued Communication/Prop 218—December 2011-January 2012

Crocker & Crocker, formerly LucyCo Communications, has been assisting Utilities in the research, community and stakeholder engagement program. This report summarizes the efforts of Phase 1 of the community engagement process and research findings (online, phone and paper survey). Utilities will use the guiding principles as the basis for future programs and services, planning and rate analysis. Appendices are included in the back.

Phase 1 Activities

Guiding Principles Development, Community and Stakeholder Engagement and Input—September-October 2011

The community engagement and outreach phase consisted of **two components**:

- A comprehensive effort seeking customer insights into the department's guiding principles. The principles serve as the foundation for future planning, programs, services and rate analysis. Input was sought through an online survey, phone survey and paper survey.
- An outreach and engagement program reaching out to community groups, stakeholder organizations, business groups and the public to educate them about their water, sewer and solid waste utilities. The outreach was conducted through advertising, media relations, presentations, one-on-one discussions, roundtable meetings, e-blast communications, Facebook announcements, videos, websites, city council member communications and other means.

Utilities will submit findings from the surveys and engagement process to the URAC (seven residents appointed by the mayor and confirmed by the City Council), City Council, on its *Your*

UtilitiesYourVoice.com website, to community groups, through social media and news outlets, at presentations and through other outlets.

Phase 1 Key Findings

Business Outreach Starts an Important Dialog

Crocker & Crocker held discussions with members of the business community throughout the initial phase. Lucy Eidam Crocker held many one-on-one discussions to encourage business leaders to distribute the survey to their members, ask their feedback about areas where they would like more information and to engage the Downtown Sacramento Partnership, Sacramento Business Coalition and Sacramento Metro Chamber of Commerce. Although many business leaders expressed frustration that the specific amount of the rate increase was not immediately known, they were pleased that Utilities was starting the dialog early and was going to keep them apprised of the process. As outcomes of the outreach, the following key areas were identified as some of the key areas to follow up on:

- Business members have confusion about why past rate increases haven't funded CIPs.
- They want guarantee that rate increases would only include infrastructure improvements and regulatory compliance costs, not labor or other overhead costs.
- There is a concern that Utilities is not operating from a capital improvement plan.
- There is general frustration that rate increases are necessary, especially during tough economic times.
- There is a feeling that Utilities has not actually implemented its own operational efficiencies plan and businesses want to see specifically what they are.
- A theme emerged that exploring or actually contracting out services would be good.
- Many said Utilities is suffering from a bad brand (many different items were stated—past leadership, negative press, bad practices, etc.). Trust needs to be rebuilt and it won't happen overnight.
- Some wanted Utilities to discuss the various risks of inactivity (not conducting infrastructure improvements).
- There was a question about the utility user tax and its proportion in the general fund and other related topics.
- They want specific information about items such as the CIP programming guide, how much particular increases would affect various properties, businesses within their groups (run models) and a list of projects so they know what they are getting for the money, etc.

The business leaders were assured that their questions would be answered in the coming weeks and months, either through the Business Coalition or directly to their individual groups or both.

Guiding Principles Receive Exceptionally High Acceptance

The following section discusses the results of the research related to the ranking the importance of guiding principles. The research, conducted by market researching consulting group Michael Strategic Analysis, included a random sample telephone survey, a self selecting online survey and paper survey. The online survey has a slight skew to more affluent and politically attuned audiences. The paper survey was administered to gain responses from those who don't have online access or

were conducted in person. The phone survey was conducted to have a random sampling of utilities customers.

All the guiding principles ranked high in importance to respondents with three major clusters forming among the list. The principles involving customer service, clear rates, cost control and communications were most important and formed the top cluster. In a cluster slightly lower than the first cluster were principles involving environmental protection, credit rating protection, regulatory compliance and infrastructure investment. The third cluster, slightly lower than the second, were principles involving rates comparable with other communities in the region and rates that cover actual departmental costs.

The survey and clusters reveal a hierarchy of importance to customers. First, what impacts them directly. Second, the Department of Utilities operations. Finally, rate setting methods. While still high, business respondents' agreement with the principles was lower than householder respondents.

The findings demonstrate an agreement by customers of the fundamental principles that will be used to set policies, establish rates and determine services of the Department of Utilities. Guiding principles are a common tool in organizational development to ensure a collective and agreed upon set of key values to make future decisions, establish programs and set policies.

Customer Satisfaction is High

According to the research report, satisfaction of respondents to their water, sewer and solid waste services is above average to high. The higher ratings from the randomly selected telephone survey subsample are more representative of City utility users as a whole, considering the random sample methodology. The more affluent online survey respondents and the less affluent written survey respondents give lower, but still above average to high ratings. Overall, seven of every ten respondents rated customer satisfaction as above average or higher, while fewer than four percent gave ratings below average or lower. By city council district, the range of customer satisfaction is above average to high. In districts 1 and 4, customer satisfaction approaches being very high.

Generally speaking, utility customers focus on the services provided on a personal, daily basis when determining satisfaction levels and their satisfaction with the services remains high. Satisfaction is also a measurement of value – cost paid for services delivered. The relatively high satisfaction levels demonstrate a satisfaction with costs paid for services delivered. Departmental issues aired in news reports might have a marginal impact on overall satisfaction but news reports have more impact on community, political and business leaders who follow issues more closely.

Business and Community Engagement

Community Outreach

Together with the City of Sacramento Department of Utilities staff, Crocker & Crocker identified key stakeholder groups in the City of Sacramento in an effort to gain and solicit feedback regarding the City of Sacramento, Department of Utilities' guiding principles. For those groups who were available to meet prior to October 3, Utilities staff gave a brief presentation about the process, asked members to complete the online survey and answered questions. Groups who didn't have scheduled meetings were asked to share information about the survey and process to members, which many

did via email and Eblasts. For a listing of groups contacted during this outreach effort, see report appendix.

Business Outreach

The Sacramento Metro Chamber leads a group called the Sacramento Business Coalition, a relatively new group of approximately 25 business Sacramento organizations of other chambers of commerce, business improvement districts and organizations representing major business groups such as rental housing, hotels and restaurants.

Crocker & Crocker facilitated arranging an initial meeting with the Sacramento Business Coalition to introduce the guiding principles and rate adjustment process. The meeting was held September 26 and 13 business groups attended. Dave Brent and Jessica Hess discussed Utilities' commitment to working collaboratively with Coalition members to address their questions, return with new information at additional meetings and be candid and forthright. Equally important utilities staff committed addressing and considering their ideas. Additional meetings will take place in the next phase of the process and discussions are underway with the Metro Chamber about follow up steps. The following list represents the attendees at the September 26 meeting. For a listing of groups contacted during this outreach effort, see report appendix. Business organizations were asked to send survey information to their own members and thousands of contacts were reached:

- Sacramento Convention and Visitors Bureau
- Rental Housing Association of Sacramento Valley
- The River District
- California Restaurant Association
- Del Paso Boulevard Partnership
- Downtown Sacramento Partnership
- Slavic-American Chamber of Commerce
- Sacramento Asian-Pacific Chamber of Commerce
- Midtown Business Association
- Eye on Sacramento/Sacramento County Taxpayer's League
- Sacramento Hispanic Chamber of Commerce
- Natomas Chamber of Commerce

Outreach and Education

Media Relations

Media and Communications Specialist for the City of Sacramento Department of Utilities, Jessica Hess, issued a press release September 14, 2011 regarding the launch of "Your Utilities. Your Voice" initiative. This information was sent to:

- Sacramento City Council members, who in turn, sent information to their constituents through electronic newsletters.
- City of Sacramento government delivery distribution list (re-sent on September 27, 2011).

The press release or related information regarding the initiative was distributed to the following media outlets:

- The Sacramento Bee
- Sacramento Press
- Sacramento News & Review
- KCRA
- News 10
- CBS13
- Fox40
- KFBK
- Univision
- Capital Public Radio
- CBS Radio
- Entercom Radio
- Pocket News
- Natomas Buzz
- Inside Publications

The press release or related information was published by the follow media outlets:

Press Release: Sacramento Department of Utilities launches online survey to engage customers and get input on future priorities, September 14, 2011

Placement: The Time is now for Your Input about Utilities

- Sacramento Press, September 14, 2011

Placement: Sacramento utilities department seeks public input

- The Sacramento Bee, City Beat, September 27, 2011

Placement: Pipe Up

- Sacramento News and Review, September 29, 2011

Advertisement

Crocker & Crocker also developed a Sacramento Bee front page advertising sticker to further promote the online survey. It was placed on the Saturday edition of the Sacramento Bee (October 1) which reached subscribers within the City of Sacramento's eight council districts.

Website

Together with the City of Sacramento Department of Utilities staff, Crocker & Crocker created a website for "Your Utilities.Your Voice." The website was used as a portal providing information about the department's policies and priorities, access to the online survey, details about the rate adjustment process and other information. The video, flyer and survey were also readily accessible at YourUtilitiesYourVoice.com

Video

Crocker & Crocker created a video to provide a better understanding of the services, infrastructure and challenges faced by Utilities, and to encourage audiences to go online to take the survey. The video content focused on the department’s compliance mandates, aging infrastructure, costs, high levels of service and policies necessary to deliver the best service. The video also provided an overview of the department today and scenarios for the future based on funding demands and constraints. The video was accessible on YourUtilitiesYourVoice.com, the City of Sacramento YouTube channel and available to community and business groups for their use.

Outreach Materials

Several flyers were developed to educate customers about the upcoming rate adjustment process, how to become involved, how to complete the online survey and how to find out more information about the process moving forward. The flyer was available in English, Hmong, Russian and Spanish languages.

DRAFT

Appendix—Community Outreach

In an effort to solicit and gain feedback regarding the City of Sacramento, Department of Utilities' guiding principles, Crocker & Crocker reached out to community groups, including neighborhood groups and prominent ethnic communities within the City of Sacramento.

Outreach to community groups included:

- Land Park Community Association*
- Hollywood Park Neighborhood Association*
- Southeast Asia Assistance Center*
- Sacramento Asian American Minority, Inc.*
- Sacramento Hmong New Year*
- Hmong Women's Heritage Association*
- Yav Pem Suab Academy*
- Our Lady of Guadalupe Church*
- Mayor Kevin Johnson's monthly office hours
- Community Partnership Meetings facilitated by City of Sacramento staff in all eight city council districts:
 - September 12, 2011, South Natomas Community Center
 - September 14, 2011, Pannell Community Center
 - September 19, 2011, Belle Coolegge Community Center
 - September 21, 2011, George Sim Community Center
 - September 22, 2011, Kennedy High School
 - September 26, 2011, Clunie Community Center
 - September 28, 2011, Oak Park Community Center
 - September 29, 2011, Robertson Community Center
- Department of Utilities staff distributed information at the following community events:
 - September 17, 2011, Sacramento Department of Utilities Compost Seminar, Martin Luther King, Jr. Community Garden
 - October 1, 2011, Celebrate Sacramento, Florin Light Rail Station

*Denote in person meeting with Department of Utilities' staff and/or Crocker & Crocker staff.

Appendix—Business Community Outreach

In an effort to gain and solicit feedback regarding the City of Sacramento, Department of Utilities' guiding principles, Crocker & Crocker reached out to key business stakeholders and groups within the City of Sacramento. Ensuring adequate public outreach is essential to all phases of this project.

Outreach to business groups included:

- Sacramento Metro Chamber of Commerce
- Sacramento Business Coalition
- Downtown Sacramento Partnership
- Sacramento Convention & Visitors Bureau
- The River District
- Natomas Chamber of Commerce
- Rental Housing Association of Sacramento Valley
- Midtown Business Association
- Del Paso Boulevard Partnership
- Stockton Boulevard Partnership
- Oak Park Business Association
- Slavic-American Chamber of Commerce

The following groups distributed information regarding the initiative and online survey to their membership.

- Sacramento Metro Chamber of Commerce
- The River District
- Natomas Chamber of Commerce
- Midtown Business Association
- Del Paso Boulevard Partnership
- Slavic-American Chamber of Commerce
- Stockton Boulevard Partnership
- Oak Park Business Association

Attachment 3



Michael Strategic Analysis

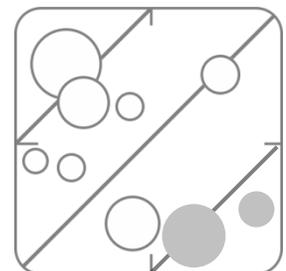
e mail@mcgmcg.com



Sacramento's William Land Park

City of Sacramento 2011 Community Engagement Survey

October, 2011



Michael Strategic Analysis
Product Preference Map®
One of the many ways
We reveal solutions

Attachment 3

*To help our clients
Surpass their aims*

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I. Summary

Survey Sample Provides Clear Actionable Results

The overall survey sample is one primarily of homeowners and of those responsible for paying utility bills in their households or businesses. The combination of high home ownership, very high direct involvement in paying City utility bills, and long tenure of City residence and City utilities use makes this a sample particularly well-informed to respond to this survey. The three survey subsamples — those gathered online, by telephone and by written response — represent three distinct demographic profiles which examined in contrast are especially useful for this survey. The three are the relatively affluent, politically attuned of the online subsample, the randomly selected representative respondents of the telephone subsample, and the lower-income ethnic minority respondents of the written subsample. The differences among these subsamples permit differential "fine-tuned" approaches to communicating to City utilities users.

Guiding Principles Receive Exceptionally High Acceptance

All of the Guiding Principles surveyed, even that of lowest importance to survey respondents, are rated highly by utilities users. The exceptionally high ratings which survey respondents accorded the Department of Utilities' ten Guiding Principles stem from the Principles being eminently sensible in the first place. Clearly, these Guiding Principles work for Sacramento utilities users. There is a cluster of top importance to respondents which includes four Principles involving customer service, clear rates, cost control, and communication in a virtual four-way tie. In a clearly lower cluster, again a virtual four-way tie, there are four Principles involving the environment, credit rating, compliance and infrastructure investment. Finally there is a distinctly lowest cluster of two Principles on rates comparable with other communities in the region and rates that cover actual departmental costs. The survey thus reveals clear relative importance to utilities users of (1) what directly impacts them, then (2) Department of Utilities operations, and then (3) rate setting methods. Business respondents' level of agreement with the Principles, while high, is lower than that of householders.

Customer Satisfaction High for Householders

Overall satisfaction of respondents with their City utility services is above average to high for householders and average to above average for businesses using City utilities. The higher ratings from the randomly selected telephone survey subsample are more representative of City utility users as a whole. The more affluent online survey respondents and the less affluent respondents of the written survey give lower, but still above average to high ratings. Overall, seven of every ten respondents rated customer satisfaction as above average or higher, while only about one in ten gave ratings of below average or lower. By City Council district, the range of customer satisfaction is from above average to high. In districts 1 and 4, customer satisfaction approaches being very high.

II. Background of This Engagement

Michael Strategic Analysis was contracted by Crocker & Crocker (formerly LucyCo Communications) to conduct online and telephone survey of utilities users of the City of Sacramento Department of Utilities. In addition, Crocker & Crocker conducted a similar written survey of two ethnic communities. The primary purpose of the surveys was to measure the degree of importance to survey respondents of ten Guiding Principles which the Department of Utilities plans to employ in designing and carrying out its programs. The survey also measured respondents' overall customer satisfaction with how utilities are provided, duration of utilities use, and several demographic indices.

III. Survey Population, Subsamples, and District and Language Sub-samples

Survey Population

The eligible population for the 2011 Community Engagement Survey consisted of all residences, businesses and other organizations within the City of Sacramento, i.e., any City of Sacramento utilities customer.

Survey Sample, Sub-samples and Sub-subsamples

The 2011 Community Engagement Survey was administered online, by telephone and on paper. Each of these means of administration has been treated as a subsample in analysis and is referred to as such in this report. Question 1 of all three surveys eliminated those contacted who no longer live or work in Sacramento.

Online Survey Subsample

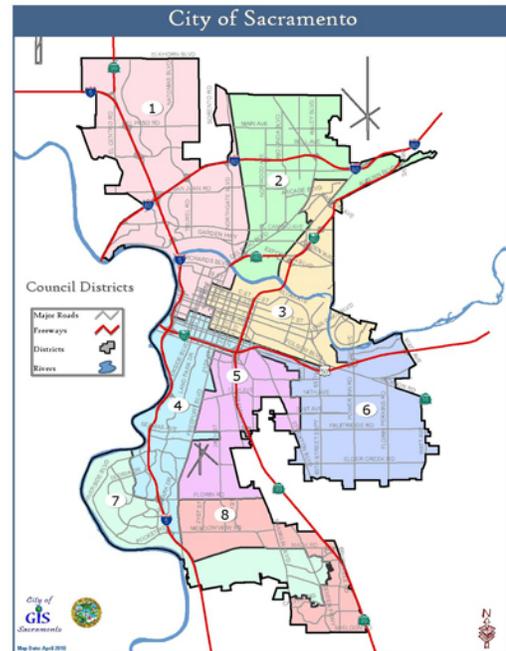
Invitations to participate in the online survey were emailed to constituents by the offices of some members of the Sacramento City Council and were placed in various mailed and published print media including *The Sacramento Bee*. The online survey gathered 581 responses somewhat skewed by disproportionately large numbers of responses from Council districts 3 and 5, and disproportionately smaller numbers of responses from districts 2 and 8.

Telephone Survey Subsample

The telephone survey was conducted by randomly calling numbers from a reverse Sacramento telephone book in which telephone numbers are ordered not by name but by street address. Callers divided the reverse directory by Sacramento City Council district and called every tenth number until collecting 50 responses in each district.

City Council District Sub-subsamples

District boundaries used in the telephone survey were those in effect when the survey was conducted in September, 2011, rather than new district boundaries which took effect October 6, 2011. Boundaries used were as in the map shown here.



The City specified that the telephone survey sample of 400 be stratified into 50 responses, 12.5 percent of the total, from each City Council district. This came close to being a stratification representative of the populations of the districts except in the case of District 1 which has experienced the most growth among the districts since the last redistricting. The following table indicates relative over- or under-representation of the telephone sample by district.

District	1	2	3	4	5	6	7	8	Totals
2009 Population	101,115	55,595	51,807	47,807	52,021	52,290	57,330	61,784	479,749
City-wide %	21.1%	11.6%	10.8%	10.0%	10.8%	10.9%	11.9%	12.9%	100.0%
Subsample %	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	100.0%
+/- %	-40.7%	7.9%	15.8%	25.4%	15.3%	14.7%	4.6%	-2.9%	0.0%

The way to interpret this table is, for example, that the 50 respondents of District 1 are 40.7 per-

cent fewer than would have been a proportionally representative sample for District 1. This is the only case among the districts in which lack of proportional representation could have skewed overall results from the telephone survey. However, analysis shows that this under-representation did not materially affect overall results or conclusions in the 2011 survey.

A summary of the counts and proportions of respondents by subsample who responded to question 22 on City Council districts is as in follows. In the later presentation of survey results here, it is primarily the telephone survey which should be relied on when considering results by district.

	Respondents Answering Question 22 By City Council District								Sum ¹
	1	2	3	4	5	6	7	8	
Online n	57	19	94	45	102	45	55	16	433
Online %	11.9%	4.0%	19.7%	9.4%	21.4%	9.4%	11.5%	3.4%	49.3%
Telephone n	50	50	50	50	50	50	50	50	400
Telephone %	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	45.5%
Written n	7	3	10	4	1	5	2	14	46
Written %	4.6%	2.0%	6.5%	2.6%	0.7%	3.3%	1.3%	9.2%	5.2%
Total, n	114	72	154	99	153	100	107	80	879
Total, %	13.0%	8.2%	17.5%	11.3%	17.4%	11.4%	12.2%	9.1%	100.0%

Written Survey Subsample

To offer the survey in languages other than English to Sacramentans who might not be aware of the online survey, a written survey was administered. Respondents were recruited at churches, in particular communities and by other means.

The Ethnic Sub-subsample

The written survey was targeted to Sacramento's Hmong, Russian and Spanish-speaking communities, and was offered in those languages and, for those respondents who preferred it, in English. However, there were no Russian speakers in the resulting written survey subsample. The written survey gathered 163 responses. Of the 138 who identified their native language in question 19 of all three surveys, just over half are Hmong utility users. The unintended preponderance of Hmong speakers among respondents provided a reasonably large sub-subsample and thus offered an opportunity to analyze this particular unique ethnic population of Sacramento utilities users.

The three surveys and their subsamples are summarized as follows.

	Sample Type	Characteristics
Online Survey	Self-selecting sample	Higher income. Politically attuned.
Telephone Survey	Stratified random sample	Most representative of Sacramento population
Written Survey	Cluster sample	Hmong and Hispanic clusters. Lower income.

To analyze possible differences in knowledge, attitudes and practices of survey respondents, survey data in most cases were disaggregated into online survey responses, telephone survey responses which reflect nearly equal district representation, and written survey responses which reflect mainly the experience with City utilities of Hmong and, to a lesser extent, Hispanic ethnic minorities. This form of disaggregation thus provides, respectively by these subsamples, the better informed experience, representative experience by district, and the experience of the two ethnic minorities.

¹ Percentages in this column are for an individual survey's proportion among the total of 922 respondents from all three subsamples.

Administration of the Survey

The online version of the 2011 Community Engagement Survey was formulated by Michael Strategic Analysis and administered in English from September 14 through October 3, 2011, at the website of Michael Strategic Analysis's online survey administration vendor, SurveyMonkey.com. The survey was accessible directly at SurveyMonkey.com or via YourUtilitiesYourVoice.com. The telephone version was the same as the online version and was administered in English from September 19 through 27 by Michael Strategic Analysis. The written version was formulated by Crocker & Crocker based on the online/telephone version, and was administered in Hmong and Spanish from September 15 through October 3 jointly by Crocker & Crocker and the City of Sacramento. All three forms of survey administration used essentially the same survey questions and answer choices as provided in section V of this report. Survey data were analyzed both in the aggregate and survey by survey by Michael Strategic Analysis proprietary survey analysis software customized for these surveys, and by personal inspection and analysis by a well qualified statistical analyst. Minor difficulties encountered in tabulating written survey results were corrected. Other than this, there were no difficulties encountered in collecting, tabulating or analyzing survey data.

IV. Resulting Degrees of Confidence in the Survey

Margins of Error

Three Levels of Accuracy

Statistically, there are three general levels of accuracy attainable from surveys.

Small Samples

The least accurate sample is what is referred to as a small sample which involves samples of less than 30. Small-sample analysis requires looser tools of analysis, sacrifices flexibility through use of these tools and results in the least confident conclusions.

Large Samples

At sample sizes of 30 and beyond, different, less sacrificing statistical tools may be used for analysis yielding less error and higher confidence in results.

Optimal Samples

A total sample size of 384 is necessary for a survey in order to guarantee never more than five percent error in the worst case, no matter the proportion examined for continuous variables. The worst case for error for a sample statistic occurs for a sample proportion of 50 percent; error for proportions other than 50 percent is less.

Reduction of Error Through the Sampling Fraction

When a significant fraction of a population is sampled, random error from the sample is reduced. In the extreme, when the entire population is sampled, i.e., a census is taken, random error is reduced to zero. In the present survey, error was reduced in this fashion in the negligible amounts in the next table. Please see the appendices for a discussion on error reduction from this effect. Following are the survey population size, district sub-sample population sizes, sampling fractions and random error reduction of the survey as a whole and of the district sub-samples. District populations for 2009, population growth rates and geographic boundaries may be found on the *Sacramento Bee* website at <http://www.sacbee.com/2011/01/14/3325183/map-sacramentos-city-council-districts.html>.

District	Population Size ² , N	Sample Size, n	Sampling Fraction, n/N	Random Error Reduction
1	101,115	114	0.11%	0.06%
2	55,595	72	0.13%	0.06%
3	51,807	154	0.30%	0.15%
4	47,807	99	0.21%	0.10%
5	52,021	153	0.29%	0.15%
6	52,290	100	0.19%	0.09%
7	57,330	107	0.19%	0.09%
8	61,784	80	0.13%	0.06%
Total	479,749	879 ³	0.18%	0.09%

Sample and Subsample Accuracies

Worst-case random error for survey results in which the entire sample responded in the 2011 Community Engagement Survey is shown in the following table. Random error is greater for questions to which only part of the sample responded. Levels of maximum random error with 95-percent confidence for the full sample and its subsamples including the minor error reduction from sampling fractions are as follows. As a reminder, the telephone survey was stratified by City Council district to provide 50 respondents per district.

Subsample or Sub-subsample	Respondents	Random Error
Online survey	581	4.1%
Telephone survey	400	4.9%
Written survey	163	7.7%
District 1, surveys aggregated	114	9.2%
District 2, surveys aggregated	72	11.5%
District 3, surveys aggregated	154	7.9%
District 4, surveys aggregated	99	9.8%
District 5, surveys aggregated	153	7.9%
District 6, surveys aggregated	100	9.8%
District 7, surveys aggregated	107	9.5%
District 8, surveys aggregated	80	11.0%
Any district, telephone survey	50	13.9%
Full sample	1,144	2.9%

Levels of random error in interpreting results for the full sample, the online subsample and the telephone subsample may be regarded as acceptable. Because of their smaller subsample and sub-subsample sizes as above, and consequently higher random error and broader confidence intervals, more cautious interpretation should be used in interpreting results from the written survey sample and individual district sub-subsamples.

Confidence Intervals For Survey Statistics

For Proportions

Comparisons of confidence intervals for proportions in the survey involving the full sample of 1,144 are shown as follows. The largest possibility for error occurs when the proportion is 50 percent, for example if, in a yes-or-no question, half answered yes, half no.

² As of 2009

³ Of the 1,144 survey respondents, district of residence or business was able to be collected from 879.

If the proportion of respondents answering a question a certain way is:	Then the 99% confidence interval for this proportion is:	And the 95% confidence interval for this proportion is:
5%	3.3% to 6.7%	3.7% to 6.3%
50%	46.2% to 53.8%	47.1% to 52.9%

Using Proportions in the Survey

Generally, proportions from the full sample and from the online and telephone subsamples may be used with good confidence and taken at face value. Proportions involving district or other sub-subsamples should be treated with caution because of their smaller sizes. Comparisons of proportions across two or more questions in the survey can be made if cautiously interpreted.

For Means

The confidence interval for a mean depends on the variance of the data from which the mean was calculated, that is, how scattered the data were about their mean. Some questions in the present survey involve means, for example, those using the one-to-ten Likert Scale ratings.

Maximum random error for any question involving a full-sample mean in this survey is from question 3 on duration of Sacramento utilities use. For this question, we have a 95-percent confidence interval of 22.76 ± 1.11 years, a range from 21.65 to 23.87 years. The interpretation of this is that we can be 95-percent confident that true mean is not less than 21.65 years nor more than 23.87 years, a comfortably narrow interval indicating high confidence in this mean even though it involves more random error than the mean from any other question using the full sample.

Minimum random error for any question involving a full-sample mean in this survey is from question 15 asking respondents' degree of importance attached to the Guiding Principle on the ease of understanding utility rates. For this question, we have a 95-percent confidence interval of 8.89 ± 0.11 Likert Scale rating points, a range from 8.78 to 9.00. The interpretation of this is that we can be 95-percent confident that the true mean rating is not less than 8.78 nor more than 9.00 on the ten-point scale, an exceptionally narrow interval permitting highly confident conclusions.

Using Means in The Survey

Means from the survey when involving the whole sample or the full online or telephone subsamples may be used with high confidence and taken at face value. Means from sub-subsamples of the survey should be treated more cautiously and used with reasonable confidence.

Overall Confidence Levels for This Survey

Because of the relatively large sample size of this survey, proportions, means and conclusions involving subsamples may generally be accepted with high confidence.

Further Care in Interpreting Survey Results

Please see the technical notes in an appendix here for additional advice on the general interpretation of results from surveys.

V. Results of the Survey

Format of Presentation of Responses

For Frequency Distributions

For questions the responses of which result in frequency distributions of proportions, summary statistics are presented as proportions in the following format.

	<u>Proportion</u>
Answer choice 1	%
— — —	%
Answer choice n	%

For Measures of Central Tendency⁴

For questions the responses of which resulted in the three measures of central tendency — the mean, median and mode — summary statistics are presented in the following format. Please see the appendices for a refresher on mean, median and mode.

	<u>Measure</u>
Mean	n.n
Median	n
Mode	n

For Measures of Dispersion

Two distributions with the same measures of central tendency might have their data differently dispersed, important for survey rating questions. Range is the interval between a question's lowest and highest responses. Standard deviation accounts for how widely dispersed data are around their mean. Please see the appendices for fuller explanations of measures of dispersion.

How to Interpret Ratings From a One-to-Ten Likert Scale

The following interpretation of a one-to-ten Likert Scale may be used to interpret survey ratings using this scale. "Average" appears twice since mean and median of a one-to-ten scale are 5.5.

<u>Rating</u>	<u>Meaning</u>	<u>Rating</u>	<u>Meaning</u>
10	Highest possible	5	Average
9	Very high	4	Below average
8	High	3	Low
7	Above average	2	Very low
6	Average	1	Lowest possible

Survey questions are shown below verbatim as they appeared in the online survey. In a few cases, question wording varied slightly from this in the telephone survey or written survey but the import of the question was not altered. Answer choices shown were identical among the three surveys and are taken verbatim from the survey instrument which respondents saw or heard.

Panel A- Respondent Qualifiers

Question 1

Which one of the following choices describes your situation as a City utilities user? If more than one choice fits your situation, please check the one which reflects highest City utilities use. The answer choices apply only to locations within the City of Sacramento.

Owner of a Sacramento home, apartment or condominium where you live	76.1%
Renter of a Sacramento home, apartment or condominium where you live.....	17.5%
Owner or employee of a Sacramento business or other organization	5.5%
I do not live or work in Sacramento (These respondents then exited the survey.)	0.9%

Question 2

⁴ In survey research reports, one sometimes sees only the mean shown. However, the mean is not always most revealing of the three measures, and so median and mode also need to be provided as here. See the snow blowers example in Appendix Two for a case in which using means only would be entirely misleading.

For whichever choice you made above, are you usually the one in the household, business or other organization who pays the monthly City utility bill?

	Online Survey	Telephone Survey	Written Survey	All ⁵
Yes	89.1%	90.0%	75.6%	87.4%
No	10.9%	10.0%	24.4%	12.5%

The lower incidence for written survey respondents is because of their larger household size as from question 18.

Question 3

How many years have you, your business or your organization been a user of City of Sacramento utilities? Please enter your answer as a numeral, for example, 10 rather than ten. For City utility use under a year, please enter 0.

	Online Survey	Telephone Survey	Written Survey	All
Mean	21.8	26.1	15.3	22.5
Median	20	21	11	20
Mode	10	50 ⁶	10	10

Question 4

How long have you lived or worked in the City of Sacramento? If both, please use the longer duration if they are different. Please enter your answer as a numeral, for example, 10 rather than ten. For presence under a year, please enter 0.

	Online Survey	Telephone Survey	Written Survey	All
Mean	26.3	32.2	18.0	27.3
Median	24	30	13	24
Mode	30	40	30	30

Summary on Respondent Qualifiers

The sample is primarily one of homeowners and of those responsible for paying utility bills in their households or businesses. That the proportion of homeowner respondents is higher than the known proportion of City residents who own their homes is due mainly to a non-problematic self-selection bias in the online survey. High home ownership, very high direct involvement in paying City utility bills, and long tenure of City residence and City utilities use make this a sample especially well-informed to respond to this survey.

Panel B- Customer Satisfaction

Question 5

Everything considered, what is your overall satisfaction level with services provided to you by the City of Sacramento Department of Utilities? Here, 1 means most unsatisfied and 10 means most satisfied.

	Online	Telephone	Written
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⁵ In some cases, proportions may not sum exactly to 100 percent due to rounding to one decimal place.

⁶ This is not an error.

	Survey	Survey	Survey	All
Mean	6.7	8.1	7.6	7.3
Median	7	8	8	8
Mode	8	10	8	8

Summary on Customer Satisfaction

Overall satisfaction of respondents with their City utility services is average (6) to high (8). However, the higher ratings from the randomly selected telephone survey subsample are more representative of City utility users as a whole. The more affluent online survey respondents and the less affluent written survey ethnic respondents give lower, but still above average to high ratings. Overall, seven of every ten respondents rated customer satisfaction 7 or higher, while fewer than four percent gave ratings below average or lower.

Panel C- Opinions on Guiding Principles for Utility Rate-Setting

The City would like to have your opinions on the following Guiding Principles for operation of City utilities which include water, sewer, and solid waste pick up for garbage, recycling, and green waste. The Guiding Principles will serve as the foundation for future programs and services, planning and utility rate analysis. For questions 6-15, please use a scale of 1 to 10. In these questions, 1 means not at all important and 10 means very important. Please enter your answer as a numeral, for example, 10 rather than ten. In these questions, you are not ranking the Guiding Principles one against another but rating each one individually according to its importance to you.

Question 6

To what extent is the following principle important to you: "The City's Department of Utilities will continue to provide high levels of service such as weekly garbage collection and timely response to water and sewer problems."

	Online Survey	Telephone Survey	Written Survey	All
Mean	9.0	8.9	8.8	8.9
Median	10	10	10	10
Mode	10	10	10	10

Question 7

To what extent is the following principle important to you: "The City's Department of Utilities will charge customers what it costs to provide services, build up and maintain reserves and pay for long-term construction projects."

	Online Survey	Telephone Survey	Written Survey	All
Mean	7.6	7.2	7.8	7.5
Median	8	7.5	8	8
Mode	10	10	10	10

Question 8

To what extent is the following principle important to you: "The City's Department of Utilities will use collected revenues to invest and upgrade aging water and sewer pipes, reservoirs and treatment plants to maintain quality service."

Online	Telephone	Written
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	Survey	Survey	Survey	All
Mean	8.3	8.1	8.1	8.2
Median	9	8	9	9
Mode	10	10	10	10

Question 9

To what extent is the following principle important to you: "The City's Department of Utilities will be as efficient as possible to help offset rising costs."

	Online Survey	Telephone Survey	Written Survey	All
Mean	9.2	8.5	8.6	8.8
Median	10	9	10	10
Mode	10	10	10	10

Question 10

To what extent is the following principle important to you: "The City's Department of Utilities will use collected revenues to comply with local, state and federal rules regarding trash disposal, landfills, recycling, water quality and protection of waterways and natural resources."

	Online Survey	Telephone Survey	Written Survey	All
Mean	8.3	8.4	8.4	8.3
Median	9	9	9	9
Mode	10	10	10	10

Question 11

To what extent is the following principle important to you: "The City's Department of Utilities will maintain good credit ratings and borrow at the lowest possible cost for construction projects."

	Online Survey	Telephone Survey	Written Survey	All
Mean	8.5	8.4	8.2	8.4
Median	9	9	9	9
Mode	10	10	10	10

Question 12

To what extent is the following principle important to you: "The City's Department of Utilities will maintain user rates that are comparable in the region and with rates of other communities of similar size, levels of service and age of pipes."

	Online Survey	Telephone Survey	Written Survey	All
Mean	7.8	8.0	7.9	7.9
Median	8	8	8	8
Mode	10	10	10	10

Question 13

To what extent is the following principle important to you: "The City's Department of Utilities will be a good environmental steward and protect local waterways, natural resources and community."

	Online Survey	Telephone Survey	Written Survey	All
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Mean	8.6	8.7	8.1	8.6
Median	10	9	8	9
Mode	10	10	10	10

Question 14

To what extent is the following principle important to you: "The City's Department of Utilities will communicate clearly with customers and include customers in discussions about the services provided to them."

	Online Survey	Telephone Survey	Written Survey	All
Mean	8.8	8.8	8.7	8.8
Median	10	10	10	10
Mode	10	10	10	10

Question 15

To what extent is the following principle important to you: "The City's Department of Utilities will provide rates that are easy to understand and offer options to help control utility bill costs."

	Online Survey	Telephone Survey	Written Survey	All
Mean	8.9	8.9	8.8	8.9
Median	10	10	10	10
Mode	10	10	10	10

Following are comparison scorings and rankings of the Guiding Principles of questions 6 to 15.

Question	Topic	Index ⁷	Rank
6	High level of customer service	96.4	1
15	Clear rates/help in controlling costs	96.3	2
9	Cost efficiency	96.2	3
14	Clear customer communication	95.9	4
13	Environmental stewardship	91.9	5
11	Credit rating/borrowing cost	91.4	6
10	Regulatory compliance	91.2	7
8	Investment in infrastructure	90.7	8
12	Competitive user rates	86.3	9
7	At-cost customer charges	84.8	10

All of the Guiding Principles, even that with the lowest ranking, are rated highly by utilities users.

- ✚ All of the Guiding Principles had a modal rating of 10, "highest possible."
- ✚ All but one (8, infrastructure investment) had 9, "very high," as the next-most common rating.
- ✚ All subsamples and sub-subsamples gave modal ratings of 10.
- ✚ Five of the ten Principles had over half of their individual respondent ratings at 10.
- ✚ Four of the ten Principles had median ratings of 10.
- ✚ The lowest median rating was 8, "high."

Summary on Guiding Principles for Utility Rate-Setting

⁷ The index is the sum of a Guiding Principle's mean, median and modal ratings normed to a maximum possible of 100.

In our opinion, the exceptionally high ratings which survey respondents have accorded these ten Guiding Principles stem from the Principles being eminently sensible in the first place. Clearly, these Guiding Principles work for Sacramento utilities users. There is a notable variance in the index scores for the ten Principles. A top cluster of importance to respondents which includes customer service, clear rates, cost control, and communication has indices between 95.9 and 96.4, a virtual four-way tie. In a lower cluster ranging from 90.6 to 91.8, again a virtual four-way tie, there are the environment, credit rating, compliance and infrastructure investment. Finally, there is a lowest cluster ranging from 84.7 to 86.0 on uninflated user rates. Thus revealed is clear relative importance to utilities users of (1) what directly impacts customers, then (2) Department of Utilities operations, and then (3) rate setting methods.

Panel D- Demographics

Question 16

Which is your gender? Again, you are taking this survey anonymously.

	Online Survey	Telephone Survey	Written Survey	All
Female	49.4%	55.5%	36.1%	49.7%
Male	50.6%	44.3%	63.9%	50.2%

Question 17

Please enter your ZIP code in the box below.

All ZIP codes representing one percent or more of responses are shown in the following table.

Online Survey		Telephone Survey		Written Survey	
ZIP Code	%	ZIP Code	%	ZIP Code	%
95831	12.1%	95831	13.0%	95822	19.5%
95819	11.3%	95819	12.3%	95823	11.9%
95818	10.3%	95820	10.0%	95832	8.2%
95822	10.0%	95823	9.0%	95831	6.3%
95816	9.4%	95822	8.5%	95834	5.7%
95820	6.9%	95838	8.5%	95828	5.0%
95817	6.7%	95833	7.8%	95838	5.0%
95833	6.1%	95826	7.3%	95835	4.4%
95835	4.8%	95818	5.0%	95824	3.8%
95826	4.4%	95824	4.3%	95826	3.8%
95823	3.1%	95835	3.8%	95819	3.1%
95815	2.5%	95815	3.3%	95816	2.5%
95811	2.3%	95832	2.5%	95821	2.5%
95814	2.3%	95817	1.8%	95825	2.5%
95838	1.9%	95834	1.5%	95757	1.9%
95834	1.5%	95821	1.0%	95820	1.9%
				95691	1.3%
				95811	1.3%
				95817	1.3%
				95818	1.3%

The highest concentration of respondents by ZIP code is among Hmong respondents in the written survey subsample who are concentrated in ZIP code 95822 bound roughly by Sutterville Road, Franklin Boulevard, Meadowview Road and Freeport Boulevard. It is also notable that the top-ranked ZIP codes from the online survey subsample are the affluent neighborhoods of Curtis Park, Land Park, East Sacramento, and the Pocket.⁸

Question 18

How many people including yourself live in your household? Please enter your answer as a numeral, for example, 2 rather than two.

	Online Survey	Telephone Survey	Written Survey	All
Mean	2.5	2.6	4.5	2.8
Median	2	2	4	2
Mode	2	2	2	2

The larger household size among written survey subsample respondents is attributable their lower income and multiple generations living together.

Question 19

Which one of the following languages, if any, other than English is most often spoken in your home?

Chinese	1.3%
Hmong	7.9%
Japanese	0.5%
Korean	0.4%
Russian	0.5%
Spanish	9.9%
Thai	0.1%
Vietnamese	0.3%
Other	4.5%
None other than English	74.5%

Question 20

Which one of the following choices best describes how you identify your ethnic background?

African-American	9.4%
Asian-American	12.6%
Non-Hispanic Caucasian	58.5%
Hispanic or Latino	10.6%
Native American, Native Alaskan or Pacific Islander	2.0%
More than one of the above	6.9%

Question 21

In which of the following categories was your 2010 household income before taxes?

\$0-\$50,000	\$150,001-\$200,000	\$300,001-\$350,000
\$50,001-\$100,000	\$200,001-\$250,000	\$350,001-\$400,000
\$100,001-\$150,000	\$250,001-\$300,000	\$400,001 or higher

⁸ See *The Sacramento Bee* web page previously cited or 2010 United States census data.

	Online Survey	Telephone Survey	Written Survey	All
Mean	\$126,263	\$79,125	\$79,807	\$100,445
Median	\$85,658	\$42,517	\$42,882	\$61,719
Mode	\$50,001-\$100,000	\$0-\$50,000	\$0-\$50,000	\$0-\$50,000

Median 2009 household income nationwide was \$60,088 and would be about the same in 2011. The mild constituent email list bias of the online subsample has been previously described here. The relatively high household income among written survey respondents is due to their average household size being twice as large, as from results of question 18, as that in the other two subsamples. Adjusting for this, we have as follows per capita income which presents a truer income picture of the three subsamples.

	Online Survey	Telephone Survey	Written Survey	All
Mean	\$50,505	\$30,433	\$17,735	\$35,873

Question 22

If you are aware of the Sacramento City Council district in which you live or work, please indicate it below. If you both live and work in Sacramento, please answer based on where you live.

	Online Survey	Telephone Survey	Written Survey	All
District 1, Angelique Ashby	11.9%	5.0%	4.6%	13.9%
District 2, Sandy Sheedy	4.0%	2.0%	2.0%	2.8%
District 3, Steve Cohn	19.7%	5.5%	6.5%	11.8%
District 4, Robert King Fong	9.4%	8.0%	2.6%	8.2%
District 5, Jay Schenirer	21.4%	2.8%	0.7%	11.3%
District 6, Kevin McCarty	9.4%	5.0%	3.3%	6.5%
District 7, Darrell Fong	11.5%	5.0%	1.3%	7.6%
District 8, Bonnie Pannell	3.4%	3.5%	9.2%	4.2%
Not sure	9.2%	63.3%	69.9%	33.8%

Again, results from the telephone subsample may be regarded as most reflective of the Sacramento population as a whole. The very high recognition of City Council district by online survey respondents is, in part, attributable to their being drawn mainly from email lists of City Council members and specifically invited to take the online survey. Also, the *Bee* advertisement and invitations to some business groups would have elicited more politically aware respondents.

Summary on Respondent Demographics

The three survey subsamples represent distinct demographic profiles which examined separately are particularly useful for this particular survey. The three are the relatively more affluent, politically attuned of the online subsample, the randomly selected representative respondents of the telephone subsample, and the lower-income ethnic communities of the written subsample. The differences among these subsamples permit differential "fine-tuned" approaches to communicating to City utilities users.

VI. Special Analyses

Does customer satisfaction vary by City Council district?

Yes, but satisfaction is above average or higher for all districts. From the results of the 2011 Community Engagement Survey, the City and members of the City Council would want to know levels of customer satisfaction district by district. The table here shows levels of customer satisfaction by district.

District	1	2 ⁹	3	4	5	6	7	8	All
Mean	7.1	6.9	6.8	7.4	6.9	7.5	6.8	7.6	7.3
Median	8	6	8	8	8	8	8	8	8
Mode	10	7	9	10	9	10, 8	9	8	8
Index	83.7	66.3	79.3	84.7	79.7	81.7	79.3	78.7	77.7

Excepting District 2 for which there were too few responses to question 22 to produce reliable statistics, the range in indices is from 79.3 to 84.7 indicating above average to high customer satisfaction. In districts 1 and 4, customer satisfaction is high to very high.

Do residential and business respondents show any differences between the two groups?

Yes. As would be expected, business respondents have higher incomes than householder respondents. Business owners have larger household sizes and have been in Sacramento and used City utilities not as long as householders. Business owners' customer satisfaction is nearly a point lower than that of householders but is nevertheless at the higher end of the average range. Overall importance of the ten Guiding Principles is nearly a Likert Scale point lower to business respondents than to householders. Mainly because the written survey was administered almost exclusively to Hmong and Hispanic respondents, business respondents in results pooled from the three surveys are much more ethnically diverse and far more likely to use English as a second language than householder respondents. The written survey showed a higher proportion identifying themselves as business owners than either other survey. The proportions are: written survey 9.9 percent, telephone survey 8.3 percent, and online survey 0.3 percent.

Measure	Businesses	Householders	Δ
Mean household income	\$132,927	\$99,224	\$33,703
Median household income	\$105,279	\$60,703	\$44,576
Modal household income	\$100,000-\$150,000	\$0-\$50,000	NA
Mean household size	4.7	2.7	2.0
Mean duration in Sacramento	14.0 years	28.1 years	14.1 years
Mean duration of City utilities use	15.7 years	22.9 years	7.2 years
Mean customer satisfaction rating	6.6, average	7.4, above average	0.8
Mean Guiding Principle rating	7.8, high	8.5, high to very high	0.7
Other than non-Hispanic Caucasian	61.9%	30.5%	31.4%
English not first language in the home	48.8%	24.2%	24.6%

The 63 business respondents comprise a small sub-sample for which maximum random error with 95-percent confidence is ±12.3 percent.

⁹ The District 2 response rate of 29 to question 22 is too low to have produced reliable statistics.

Appendix One- Survey Invitation, Welcome and Thank You

Invitations

Online Survey

The City of Sacramento is conducting a brief survey of users of City utilities such as water, trash pickup and street sweeping. Your anonymous participation in the survey will help the City in maintaining excellent customer service and in setting utility user rates. To take the survey, just click on the link below.

Telephone Survey

None

Written Survey

None

Welcomes

Online Survey

This survey is being conducted on behalf of the City of Sacramento which provides utility services to all households, businesses and organizations in the City. Services provided include water, sewer, drainage, street sweeping and solid waste pick up for garbage, recycling and green waste.

The goal of this anonymous survey is to collect opinions about the City's Department of Utilities' Guiding Principles. The Guiding Principles will help the Department prepare for future programs and services, planning and utility rate analysis. The results will be used in a process to analyze utility rates in light of budgetary needs from higher costs, mandatory regulations and needed replacement of pipes, facilities and equipment. Thank you for participating in this short survey.

Telephone Survey

My name is [first and last names]. I am calling on behalf of the City of Sacramento which provides utility services to all households, businesses and organizations in the City. These utility services include water, sewer, drainage, street sweeping and solid waste pick up for garbage, recycling and green waste. The goal of this anonymous survey is to collect opinions about the City's Department of Utilities' Guiding Principles which will help the Department prepare future programs and services, planning and utility rate analysis. Survey results will be used to analyze utility rates in light of the City's budgetary needs. Thank you for participating in this short survey.

Written Survey

This survey is being conducted on behalf of the City of Sacramento which provides utility services to all households, businesses and organizations in the City. Services provided include water, sewer, drainage, street sweeping and solid waste pick up for garbage, recycling and green waste.

The goal of this anonymous survey is to collect opinions about the City's Department of Utilities' Guiding Principles. The Guiding Principles will help the Department prepare for future programs and services, planning and utility rate analysis. The results will be used in a process to analyze utility rates in light of budgetary needs from higher costs, mandatory regulations and needed replacement of pipes, facilities and equipment. You can take the paper survey here or online at YourUtilitiesYourVoice.com. Thank you for participating. The survey must be received by October 3, 2011. Please mail completed surveys to the address on back.

Thank You

Online Survey

Thank you for participating in the City of Sacramento 2011 Community Engagement Survey about Utilities. [Respondent was then sent to the City of Sacramento website.]

Telephone Survey

Thank you very much for participating in the City of Sacramento 2011 Community Engagement Survey about Utilities. Your ratings and opinions will be a great help to the City in planning and providing utility services.

Written Survey

None

Appendix Two- Technical Notes

Measures of Central Tendency

We find it useful to refresh readers of survey reports on the differences among the three measures of central tendency of a series of data — the mean, the median and the mode. These three measures of central tendency are the most basic of statistics and among the most useful and frequently used. In reports on survey research, one sometimes sees only the mean shown as a measure of central tendency. However, the mean is not always the most revealing of these three measures, and so the median and mode also need to be provided in reporting survey research. See the example on snow blowers below for a case in which using means only would be entirely misleading.

Mean

The mean is the same as an average and is the sum of the observations in a data series divided by the number of observations. For example, a basketball player's scoring average per game played is calculated by adding all the points he or she has scored in a season and then dividing by the number of games played.

Median

The median is the middle observation of a ranked data series, and has as many observations above it as below it in the ranking. The median of the series 5, 50, 500, 5,000, 50,000 is 500 which has two observations on either side of it. The median of the series 1, 1, 1, 1, 2, 2, 3 is the last 1 which has three observations on either side of it. A median may be expressed as, for example, 8.5. While respondents in a one-to-ten Likert Scale choice have no answer choice of a rating of 8.5, this value as a median results when there are equally many responses with a rating of 8 or below as 9 or above.

Mode

The mode of a data series is the observation occurring most often in the series. In the second series above, the mode, is 1. The first series above has no mode as no one observation occurs most often. When data are categorized, the modal category is the one containing the highest number of observations. It is possible to have a bimodal distribution, one in which two observations tie as most frequent.

Measures of Dispersion

Range

The range of a data series consists of the lowest and highest observations. The range of the first series above is 5 to 50,000, and the range of the second is 1 to 3.

Standard Deviation

Standard deviation is the most common measure of dispersion of data. Standard deviation measures how scattered data are about their parent statistic such as a mean or proportion, or, conversely, how congested data are. One can see intuitively that the series 5, 50, 500, 5,000, 50,000 is far more dispersed than the series 1, 1, 1, 1, 2, 2, 3. Using the formula for the calculation of standard deviation, the standard deviations of these two series are, respectively, 21,840 and 0.7. Standard deviation and other measures of dispersion are useful in knowing how much to trust their parent statistics such as means and proportions. The lower the dispersion, the more confidence one can have in the statistic.

Variance

Variance is the square of standard deviation and is more useful for statistical calculation than is standard deviation in many cases.

Caution In Using Pooled Results

Most results presented in this report are reported on the basis of the results of subsamples disaggregated in the four ways previously described. The very design of the survey was to be able to differentiate expressed knowledge, attitudes and practices among subsamples. As presented, results from groups have also been pooled in portraying overall survey results for each question. For some questions in this survey, pooling can lead to misleading results, masking well-defined results of groups. The experiences of groups, and therefore their respective knowledge, attitudes and practices, can vary significantly, for example, by title level, and attempting to draw conclusions based on their mix of different experiences could sometimes be unwarranted.

As an exaggerated example, if a survey were conducted in Ottawa and Miami on the knowledge, attitudes and practices regarding snow blowers, pooling the two very different sets of results would not reflect the experiences of either group and would be entirely misleading in drawing any conclusions on snow blowers. Likewise, differences among subsamples in this survey could be blurred in some cases when their results are pooled, and pooled results can be misleading to the user if subjected to unsupported interpretations. Therefore, depending on the question, caution is urged in taking interpretations of pooled results too far.

How Unclassifiable Responses, Non-responses and Rounding Affect Disaggregations

Results of most questions in the 2011 surveys are presented for the entire sample along with subsample disaggregations. Depending on how respondents were classified for a given type of disaggregation, and whether or not they answered a given question, resulting statistics, for example mean ratings, may or may not seem consistent with one another despite their individual correctness. This would occur most often when comparing a mean from the entire sample versus means from disaggregations. This phenomenon is not known to have occurred in the 2011 surveys.

Unclassified respondents could arise in the sample if the respondent was unclear about classification. However, though this is a common occurrence in surveys, unclassified responses in this survey occurred infrequently. This presented no difficulties in analysis.

A second factor at work that also can cause a seeming disparity in survey statistics when in fact they are precise is that when not all respondents answer a given question and the non-response rate varies from subsample to subsample in disaggregations, this can seemingly distort resulting statistics when in fact the statistics are accurate.

A third factor is rounding of survey statistics. For example, two mean ratings to two-decimal precision might be 7.55 and 7.64, both of which rounded to one-decimal precision would show as 7.6. If one of these is the full-sample mean and the other is a subsample mean, and both are displayed as 7.6, this could appear to be an impossible equality between the two means when in fact they are different.

It is important to keep these three rather complex contingencies in mind when comparing a few of this report's summary statistics. Such is the world of statistics.

Appendix Three- Reduction of Sampling Error Trough the Sampling Fraction

Let n equal a sample size and N equal the size of the population from which the sample is drawn. When the sampling fraction, n/N , is more than five percent, random sampling error is reduced and therefore a smaller sample size to insure no more than a given percentage error, e , becomes possible. Then, the Finite Population Multiplier, FPM, reduces the standard error of a sampling statistic such as a mean or proportion as follows.

$$\text{FPM} = \sqrt{\frac{N - n}{N - 1}}$$

$$\text{Error reduction} = 1 - \text{FPM}$$

For example, The Michael Consulting Group once surveyed 105 of 1655 property owners in a community for an agency of a state government. In this case, random error from sampling was reduced as follows.

-  $n = 105$
-  $N = 1655$
-  $n/N = .063$

Thus, 6.3 percent of the population was sampled. While it is possible that the sample included more than one response from the same parcel, we still have 105 responses from 1655 parcels.

Then, using the formula above, the finite population multiplier, $\text{FPM} = .968$ and error is reduced by the complement of this, or 3.2 percent, not a very significant amount.

In another example, exactly half of the Fortune 500 companies responded to a survey. In this case,

-  $n = 250$
-  $N = 500$
-  $n/N = .500$

and the finite population multiplier is .707 leading to a 29.3 percent reduction in random error from sampling, an appreciable amount.