Report on the BEA.gov Customer Satisfaction Survey

FY 2009
The Bureau of Economic Analysis (BEA) is committed to delivering the most accurate and timely economic statistics and presenting these statistics in the most relevant way possible. To assess customers’ opinions about its statistical products, customer service, and Web site, BEA has conducted annual surveys since 2000. These surveys allow BEA to establish a reliable, continuous metric for measuring the satisfaction of site visitors; diagnose and prioritize areas for improvement by identifying the impact of change on satisfaction and site visitors’ future behaviors; and proactively identify Web site areas for improvement.

The outcomes of these surveys have served as catalysts for new strategic planning goals and spurred Bureau-wide improvement efforts. Many recent Web site improvements have been prompted by survey results, including Frequently Asked Questions enhancements, search engine refinement, and plain-language communications products aimed at clarifying economic understanding for non-economists.

The surveys were placed on highly trafficked pages to garner the best opportunity for responses. In the summer of 2009, BEA increased the number of major Web pages that present the survey to 11. These changes were made to enhance the understanding of our users’ needs and interests and to gather further data on Web pages launched during this timeframe.

BEA’s customer diversity has continued to be a key characteristic during the nine year collection period. As with the previous years’ survey responses, BEA learned that everyone from economists and statisticians, to students and educators, to domestic and international financiers use BEA economic statistics. The information obtained from this year’s survey will be used to further improve Web site usability and content, and to tailor outreach efforts to meet the needs of BEA’s user groups. The FY 2009 customer survey was conducted on the BEA Web site from October 1, 2008, through September 30, 2009 providing multiple statistically-relevant sample sets of users. There were 6,310 respondents during this time period and the response rate for completing the survey was 4.3%.

BEA Web Site

According to the Federal Consulting Group, which tracks customer satisfaction with Web sites, BEA.gov is among the best-scoring Federal news and information sites. Of the survey respondents, 50% of those visitors are looking for general information on the U.S. economy and 29% are using BEA interactive data tables.

Customer Satisfaction

The Customer Satisfaction Surveys have helped BEA meet customers’ expectations. Customer survey respondents were asked to rank their satisfaction with BEA’s products and services on a 10-point scale, with 1–5 being ‘unsatisfied;’ 6–7 being ‘somewhat satisfied;’ 8–9 being ‘moderately satisfied;’ and 10 being ‘very satisfied.’ This 10-point scale is then converted to a 100-point scale.
Educators showed the highest level of satisfaction giving it a score of 75. Economists and statisticians scored the site a 70 with reporters and news professionals rounding out the top scores with a 69.

### Survey Results

<table>
<thead>
<tr>
<th>Elements</th>
<th>Impact on Customer Satisfaction</th>
<th>Number of respondents: 6,310</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>83</td>
<td>70</td>
</tr>
<tr>
<td>Functionality</td>
<td>74</td>
<td>1.8</td>
</tr>
<tr>
<td>Look and Feel</td>
<td>87</td>
<td>1.8</td>
</tr>
<tr>
<td>Navigation</td>
<td>86</td>
<td>1.8</td>
</tr>
<tr>
<td>Site Performance</td>
<td>82</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Survey respondents also reported their satisfaction with specific elements of the site such as content, functionality, look and feel, navigation, and site performance. BEA’s content and site performance continue to rank the highest in satisfaction scores of the survey respondents. Visitors also indicated that they were very likely to return to the site and recommend BEA’s Web site to others.

The overall satisfaction score of BEA.gov visitors was 70 (out of 100). This is comparable to other Federal Government agencies that typically report satisfaction scores from 65–72. On the OMB’s 5-point customer satisfaction scoring index, BEA’s score is equivalent to 4.2, demonstrating our continued commitment to maintaining a customer satisfaction score above 4.0. This year’s score matched our 2008 score. BEA continues to strive to achieve the highest level of customer satisfaction.

### Customer Demographics

BEA’s online survey obtains anonymous information about its customers. The four largest data user groups among respondents in 2009 were: economists & statisticians (31%); students (21%); general public (15%); educators (10%); and state and local government officials (4%).

For 33% of the visitors who completed the survey it was their first time visiting the BEA site. Other visitors noted that they visited the site once a month (30%), once a week (18%), every 6 months or less (16%), or daily (3%). Search engines drove the majority of the traffic to the site along with other governmental Web sites or a college course/professor recommendation.

### Next steps

BEA continues to monitor the survey results and responses on a monthly basis. This allows the agency to make recommendations for changes to the Web site and other informational content. Based on what has been gathered in 2009, BEA will be implementing several enhancements to its Web site along with implementing new survey questions. For 2010, additional Web pages will be added to the list of current pages that present the survey to visitors, and BEA will participate in the Federal Government Transparency Index adding additional questions to the survey.
About ForeSee Results

The Bureau of Economic Analysis uses a Web-based survey instrument that is conducted by Foresee Results, a market leader in online customer satisfaction measurement and management and specializing in converting satisfaction data into user-driven Web development strategies. Using the methodology of the University of Michigan’s American Customer Satisfaction Index (ACSI), ForeSee Results has created a model that scientifically quantifies the elements that drive online customer satisfaction and predicts future behaviors, including the likelihood to return to the site or recommend the site to others. This contractor’s methodologies and survey instruments are OMB approved.

There are several key characteristics of ForeSee Results’ survey design:

The use of multiple item scales
Instead of relying on the answer to a single question to measure customer perceptions for a particular attribute, or “element” (which typically results in a rather large confidence interval), ForeSee Results asks multiple questions to derive a score for each measured element. For example, rather than asking respondents to “Please rate your overall satisfaction with the functionality of this Web site” to derive a score for Functionality, respondents are asked to rate the “usefulness of services”, the “convenience of services” and the “ability to accomplish what you wanted to”. Not only is the information gathered more specific and actionable, but combining a number of correlated measures together into an element also reduces the confidence interval around the mean score, enabling us to detect true changes in scores over repeated measurement periods.

Element questions before satisfaction and future behavior questions
ForeSee Results asks all questions relating to specific site elements before asking questions relating to overall satisfaction and future behaviors. This is to help ensure that overall site satisfaction is rated based on respondents’ experiences with the various site elements.

Performance ratings of attributes on 10-point scales
ForeSee Results employs the use of 10-point scales (with an option of Don’t Know, where applicable) to help maximize the precision of the scores and to extract greater amounts of information from skewed data.

The use of partial (partitioned) questionnaires: ForeSee Results’ proprietary technology allows us to partition a 30-to-40 question customer satisfaction survey model into 12-to-20 question Imputation is used to fill in the missing data based on responses to common questions. Only taking about two minutes to complete, this drastically reduced questionnaire length improves survey response rates. The result is a means of gathering accurate and precise data that is far less intrusive than traditional market research surveys.

Derived impacts rather than self-rated importance
Self-rated importance, (e.g. “Please rate the importance of site performance on your Web experience), is a traditional market research approach that can provide misleading, unreliable results. Using its proprietary methodology, ForeSee Results uses derived impacts to estimate the amount of change in satisfaction that will occur with an improvement in a quality component (such as site performance).

Imputation: What is it and why does it work?
Imputation is a broad class of statistical methods for estimating the missing values in a data set using the information that is available. In essence, imputation allows us to use people’s responses to the questions they ARE asked to PREDICT how they would have answered the questions that they WEREN’T asked. There are a number of common methods for handling missing data. The method utilized by ForeSee Results is sophisticated method that takes into account the relationships in its customer satisfaction model and inter-correlations in the data.

In simplest terms, imputation works because the survey partitions are set up in such a way that there is sufficient information about the inter-correlations of all the questions in the data to estimate the necessary predictions.

Why does the survey use a sample of 300?
Based on thorough research Foresee Results determined that a sample of 300 is the most optimized in terms of both minimizing measurement error and expediting data collection. This sample size ensures stable and precise impacts and scores. Scores are typically (+/−) 2 points at a 95% confidence interval. It is important to note that the determination of an appropriate sample size is a statistical formula and is not dependent upon population size.

How does Foresee Results know that the survey questions are the “right” questions?
To create its core list customer satisfaction survey model, ForeSee Results went through a rigorous question development process. This process included qualitative, one-on-one interviews with a variety of Internet users, with a follow-up survey to validate the findings. In general there are three types of validity that we apply to the assessment of the survey. First, do the questions have “face validity” that is do they make sense. Second, construct validity is evaluated by examining whether the questions that comprise each element group together statistically in the way we expect them to group. And third discriminate validity is examined and assessed to determine if the various groups are statistically independent from each other (i.e., low inter-correlations between elements).