

## CASE STUDY

# FEMA BUILDING SCIENCE BRANCH



How Understanding Citizen Satisfaction

## Helps FEMA Build Disaster-Resilient Communities

### Background

The Building Science Branch of the Federal Emergency Management Agency (FEMA) has an important mission—to reduce loss of life and property by creating disaster-resilient communities across the United States. Building Science Branch experts provide risk reduction guidelines and technical support such as building code updates, lessons-learned studies, proper construction techniques, and disaster recovery advisories to help at-risk communities withstand, mitigate and recover from earthquakes, wind storms, floods, and other disasters. The Building Science Branch strives to minimize loss from disastrous events and guide hazard mitigation efforts across the country by delivering publications, presentations, training courses, building code improvements, and other outreach to states and local communities.

### The Challenge

One of the primary ways the Building Science Branch communicates important disaster mitigation methods and building related risks is via the distribution of publications and trainings. These products and services explain the most up-to-date codes and standards for new construction and the retrofit of existing buildings for a wide range of audiences including Federal agency employees, state and local officials, emergency managers, regulatory and industry organizations, professional builders, researchers, educators, students, private citizens, engineers, and homeowners.

To achieve its goals and improve publication performance, the Building Science Branch realized it needed to better understand the needs of its audiences by getting feedback on customer experience and satisfaction with using its publications. Most private sector companies track customer satisfaction to understand key links between the consumer experience, stronger brand loyalty, and increased sales. For the experts at the Building Science Branch, however, measuring customer satisfaction of their publications had a far greater purpose—they believed it had a direct impact on their ability to build better disaster-resilient communities and ultimately reduce damage and save lives.

“The ACSI score is valuable information because it gave us a quantitative measurement of how well our products and services perform. We find that the analysis of the satisfaction drivers and open-ended answers that come from the survey responses really bring the value of the ACSI methodology to life by helping us further understand the meaning behind the score.”

- Mai (Mike) Tong, Physical Scientist, FEMA Building Science Branch

## The Solution

By continuously monitoring citizen satisfaction and benchmarking performance against other government agencies and private sector companies, Federal agencies can pinpoint areas for service improvement, make better decisions, and prioritize how funds are spent in a targeted manner. Since 1999, the Federal government has relied on the American Customer Satisfaction Index (ACSI) as its “gold standard” metric for measuring citizen satisfaction. In 2007, FEMA began working with CFI Group, a founding partner of the ACSI methodology, on a number of agency-related satisfaction studies. Over a five-year span from 2011-2016, the Building Science Branch likewise engaged CFI Group to evaluate customer satisfaction levels for over 200 of its publications and select technical, non-technical, and new publications.

### The Building Science Branch trusted CFI Group’s patented ACSI method because it:

- ✔ Uses proven, empirical-based methodology to yield credible, precise, and reliable data.
- ✔ Measures and analyzes key drivers of satisfaction.
- ✔ Provides the impact between satisfaction and desired outcomes.
- ✔ Identifies weaknesses and strengths of the customer experience.
- ✔ Employs cause-and-effect algorithms to generate actionable recommendations.
- ✔ Provides unbiased benchmarking across the private and public sectors.

For the Building Science Branch’s publications, the survey covered topics such as content and value of individual publications, comparison to expectations, desired outcomes, related training, printing and technical quality, and the ordering process. CFI Group then created cause-and-effect models based on key drivers of the surveyed citizens’ experience with the publications, identifying their performance and impact on their specific ACSI scores.

## The Results

In general, Building Science Branch’s ACSI results trended higher than many other Federal agencies. Still, CFI Group helped drill down a level deeper to understand how to improve its scores even further. For example, the most recent CFI Group’s study found that three aspects of its publications—understandability, usability, and availability of publications—scored relatively lower than other areas and these were therefore highlighted as opportunities for future improvement.

### Specifically, the Building Science Branch moved forward to incorporate these process changes:

- ✔ Include more front-end material within their documents to help consumers better understand the publications.
- ✔ Maintain publications with up-to-date information and new knowledge to provide the best and most cost-effective technologies and methods for hazard mitigation efforts.
- ✔ Deliver more in-person and webinar training sessions in conjunction with the launch of a new publication.
- ✔ Provide additional ways to deliver digital versions of more publications such as downloads and USB drives.
- ✔ Survey citizens who rely on internet information to learn about their needs and preference to access the publications.
- ✔ Assess need of the publications at disaster-hit communities through federally declared disasters.

FEMA’s use of CFI Group’s patented ACSI methodology has helped maintain its position as a shining star among Federal government agencies. Scores for FEMA publications remain very high, even as the surveys’ focus for different types of publications changes year over year. In 2014, the Building Science Branch’s printed publications scored an 83 on the ACSI, well above the overall Federal government’s score of 66. The “likelihood to both recommend and order additional Building Science Branch publications” continued to trend at exceptionally high levels, indicating FEMA’s Building Science Branch is fulfilling its mission of helping to create disaster-resilient communities throughout the country.