

Engaging Communities in Bridge Projects

Effective strategies for community engagement are evolving and can determine the success of a project

by Richard R. Dion, Bridge Museum

When embarking on a bridge project, owners, designers, and contractors alike should be aware of the role that local communities will play in determining whether the project succeeds. When government agencies and companies effectively engage the public, community members will understand issues related to structural requirements and have a voice in discussions about aesthetic choices, funding, and the project's impact on the locality. Encouraging public engagement also demonstrates that those involved in the project will act transparently and will be held accountable for their actions. In the digital age, sharing information is relatively simple, but genuine communication requires creative effort and an openness to dialogue.

Public Engagement by Government Agencies

From the most mundane off- and on-ramps to signature megaprojects,

bridges connect localities, regions, and countries. However, many citizens underestimate the roles that bridges play in our society and take transportation infrastructure for granted until there is a problem or a controversy, at which point they want to know what is happening, why it is happening, and who is responsible. Government agencies must also be prepared for questions regarding how taxpayer dollars are spent. Clearly, bridge owners and government agencies therefore need effective communication strategies to help the public understand the many factors involved in building and maintaining safe bridges.

Because infrastructure projects are largely funded by tax monies, government agencies must ensure that the process is transparent to the public, and costs are monitored and contained. If bridge owners or communities want to build a signature structure that is not only functional but also beautiful,

they will need to make a business case for any added costs for aesthetics. The decision-making policies and procedures of any bid process should be made public, and the benefits and risks of investments must be clearly communicated to citizens. On any project, government officials must also share information about the schedule, possible traffic delays, and other issues that need public input, such as where a bridge may be built and its potential impact on local communities. Otherwise, community relationships can become strained and cooperation is lost.

Websites and social media are convenient tools that government officials can use for communicating with the public. Many local authorities have YouTube channels and Facebook pages. Unfortunately, many posts about projects are not particularly engaging. It is important to keep in mind that the job of communicating to the public

The 35th Street Pedestrian Bridge in Chicago, Ill., unites the Bronzeville neighborhood with the Lake Michigan lakefront. The signature bridge is an asset to the community. The bridge is featured in the Fall 2018 issue of *ASPIRE*®. Photo: Dave Burk Photography.





To engage the community, the design-build team of the Interstate 91 Brattleboro Bridge led trail talks, visited local schools to present lessons on engineering and bridge construction, and included a Vermont-like stone finish to enhance the design. See the Winter 2018 issue of *ASPIRE* for more details. Photo: © Adam Cohen 2017, Figg Engineering Group.

is not over once an update is posted. Instead, those who post information must be open to feedback and ongoing dialogue.

In the rare instance that a bridge fails or must be taken out of service because of an accident or other situation, public agencies will take the lead in the response to the disaster, its investigation, and recovery efforts. At such times, these agencies must have a crisis management strategy already in place to ensure that the problems are not compounded by a lack of planning or poor communication.

While investigations are underway and remedies are being developed, agency representatives must update communications with users and communities constantly and consistently in terms that are understandable to the layperson. In tense situations, engineers may find it particularly difficult to effectively communicate technical information to the public; however, at such times, community members may be especially receptive to what an empathetic and well-spoken engineer can teach them about key aspects of

infrastructure. In the long run, informing the public during a crisis could lead to a new culture of maintenance and greater public appreciation of infrastructure.

Public Engagement by Companies

Although the design of a bridge for use by drivers, bikers, and pedestrians is important, other aspects of the project—including alternative routes during construction, disruptions to businesses, lane closures, and environmental impacts—are also crucial and need to be given due consideration by designers and contractors. In the United Kingdom, a voluntary program known as the Considerate Constructors Scheme has developed a *Code of Considerate Practice* that commits companies and construction sites to care about appearance, respect the community, protect the environment, secure everyone's safety, and value their workforce.¹ As suggested by the tenets of this code, companies need to demonstrate by their actions that they are good neighbors to others in the community.

Companies can benefit from transparently and frequently consulting with local communities in the time leading up to a bid proposal. Informal market research or more structured discussions with community leaders could help the company not only build relationships but also transform information into knowledge that can be reflected in the bid proposal, showing that the company has gone the extra mile to engage the public.

Once a project begins, ongoing education of the public fosters a good relationship between the contractor and the community. In major projects, visitor centers featuring project photos and three-dimensional models are relatively commonplace. However, in the digital age, companies and their stakeholder professionals can also use other tools to engage the public and demonstrate the scope and scale of a bridge project. Virtual reality, augmented reality (the overlay of a virtual object on real-world objects), and the use of drones can provide that experience.

Companies may also invest in outreach to schools and colleges in the community surrounding the project.

Efforts could include hosting field trips to the project site, having company representatives make classroom visits, or offering curriculum ideas that promote STEAM (science, technology, engineering, art/architecture, and mathematics) disciplines. Internships for college-level engineering and architecture students can also help to build community partnerships.

When considering public engagement strategies, companies must consider that a bridge project may deliver a service for millions of people and for generations to come. A project's success is arguably a company's greatest asset in business development elsewhere. A poorly executed job could be disastrous for a company. Instead of a culture of "design, deliver, defend," companies should strive for a "dialogue, design, deliver" culture, in which employees, shareholders, and communities will all reap the benefits.

Conclusion

When problems occur during a bridge project, they can spread quickly through traditional and social media. Local authorities may be bombarded by community members protesting decisions or complaining about the project's impact. Fortunately, strong community relationships and a culture of dialogue can help prevent problems during the project and head-off longer term issues. For this reason, it is crucial that government agencies and companies take the views of local communities into careful consideration.

Reference

1. Considerate Constructors Scheme. *Code of Considerate Practice*. <https://www.ccscheme.org.uk/ccs-ltd/code-of-considerate-practice-2>. Accessed October 23, 2018. 

EDITOR'S NOTE

The St. Croix River Crossing bridge, featured in the Fall 2018 issue of ASPIRE, is a great example of a several-decades-long process of community involvement.