## Mapping civic engagement

**T** his book presents a straightforward proposition: Through maps, effective city leaders can tell stories that bring together individuals from the nonprofit, government, philanthropic, and business sectors and frame a narrative that prompts collective community action.

As mayor of Indianapolis from 1992 to 2000, co-author Stephen Goldsmith planned a series of controversial moves that involved using private-sector companies to bring management efficiencies to a range of city services. For example, by using an international water company to manage the wastewater system and working with the public labor union, the city could free up hundreds of millions of dollars for community investments. Yet these changes in the management of a public-private partnership by themselves did not generate enough support for council approval. Goldsmith needed to frame the project narrative around the benefits from the new management approach. The Building Better Neighborhoods campaign mapped each capital project that would be finished using the savings. To catalyze broad community action, the campaign placed blue-and-white signs in front of each affected sidewalk, police station, library, or park.

The strength of a narrative in these scenarios—the ability to inspire collaborative action—is best reinforced when maps tell stories. This book features examples that demonstrate the power of framing problems or initiatives through

a spatial lens to support multi-stakeholder and cross-sector networks. As the collaboration empowers individuals, civic groups, and city planners to work together, stimulating civic engagement, the resulting social capital strengthens the entire community. That engagement, in turn, creates locational intelligence that furthers shared goals.

In one example, discussed in chapter 4, health care professionals in Klamath County, Oregon, brought government and community players together in a broad effort to improve health. Another example, in chapter 7, shows how public officials inspired a range of governmental and volunteer organizations to protect Mississippi River watersheds. In both cases, the collaborating entities shared goals, information, maps, and other resources as part of an organized effort.

A unique property of maps is that they enable individuals to situate themselves in relationship to others. Spatial awareness helps them see that they share a common identity or challenge. The senior official who wishes to rally different stakeholders—whether members of an organization or voters of a city—must present wicked problems, such as homelessness or opioid addiction, in an informed and contextualized way. Visualizing questions and answers in a layered fashion enhances that conversation.

Maps encourage civic engagement because they help inform residents of neighborhood conditions, enable officials to track changes in those conditions over time, locate important community assets, and bring parties together to form and manage collaborations. For example, place-based engagement helps neighbors form new community groups or block clubs, clean up dirty streets and parks, and track areas of mutual concern such as home burglaries.

Place matters in cities. Civic participation strengthens connections between neighbors, creating a virtuous cycle in which participation creates optimism and coordinated action in the neighborhood, which in turn creates more participation. We can measure this progress not just by the thickening of civic infrastructure but also by the concrete results produced. The path to an effective collaboration doesn't begin with a map, an algorithm, or some elegant data-smart policy solution; it begins with people—residents, public officials, and nonprofit leaders endeavoring to solve a problem. Individuals can marshal support when they tell stories about their needs or unique situations and tell them in a way that draws others in.

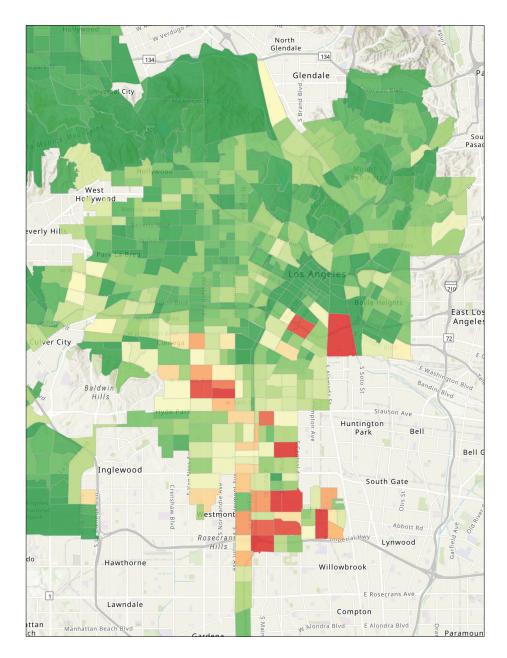
Community activists, city planners, residents, and nonprofit leaders often attend town meetings with their own perception of the facts through the lens of their situation or professional discipline. Prioritizing tasks is nearly impossible unless people can agree on what constitutes reality on the ground. For example, a traffic manual may suggest how to improve traffic flow, when neighbors just want a quieter block. Or a declining student population may lead public officials to close a school rather than examine why families are moving out of the community or sending their children to schools farther away. Consider the visual difference between a spreadsheet of the number of opioid overdoses compared to a mapped block-by-block depiction of 911 calls, concentrations of prescription opioids dispensed, capacity of treatment facilities, and so on. Only a compelling visualization of reality will change people's minds.

Maps show linkages, trends, and comparison to other areas, all of which can challenge conventionally held points of view, creating a shared (and often negotiated) understanding of the symptoms, causes, and potential solution sets for a given problem.

Maps with different layers of information serve as platforms for further collaboration. For example, a map showing the sanitary conditions of streets and sidewalks block by block and the city's comparative response by neighborhood, as shown in figure 2.1, in Los Angeles will drive place-based corrective action when the facts are presented for all to see.

## Formation: The role of social capital and place

Civic engagement strengthens social capital because it creates greater economic opportunity, neighborhood stability, happiness, and deepened reciprocal trust. For example, neighbors might unite to push their city to set aside a public park where their children can play, or share information on safe walking routes to school. University of Wisconsin professor Chris Holtkamp explores "the relationship of place and identity as an indicator of social capital in its own right." He adds, "Social capital can be defined as the networks and relationships among members of a community expressed through norms of behavior including altruism, trust, and reciprocity." Increasing social capital will produce deeper, more effective, and more numerous cross-sector collaborations. An article by Sohrab Rahimi and others in A Geographic Information System (GIS)-Based Analysis of Social Capital Data: Landscape Factors That Correlate with Trust supports the proposition that "geographic context has a significant association with overall trust."



**Figure 2.1.** This map, the Clean Streets Index Grid 2016, highlights problem streets throughout the city of Los Angeles. Green-colored parcels help users see which streets are in the best condition, while parcels that scale up from yellow, orange, and red help draw attention to the parcels with the worst street and sidewalk conditions that need targeted intervention.

In his book *Great American City*, Harvard professor Robert Sampson says that when neighbors talk with each other, life runs more smoothly. Leaders of cross-sector collaborations could follow seven of Sampson's 10 principles of social inquiry to produce better community outcomes:

- 1. Relentlessly focus on context, especially neighborhood inequality and social differentiation.
- Study neighborhood-level variations and adopt a systematic method of data collection that relies on multiple methods with public standards of measurement.
- Focus on social-interactional, social-psychological, organizational, and cultural mechanisms of city life rather than just individual attributes or traditional compositional features such as racial makeup and class.
- 4. Study dynamic processes of neighborhood structural change.
- 5. Simultaneously assess mechanisms of neighborhood social reproduction and cultural continuity.
- 6. [Go] beyond both the individual and the local to examine spatial mechanisms that cross neighborhood boundaries.
- Never lose sight of human concerns with public affairs and the improvement of city life—develop implications for community-level interventions.<sup>3</sup>

Place-based social capital increases the ability of the community to act collectively. And communities with more social capital benefit from these positive outcomes through greater economic advancement, lower crime rates, higher rates of education, and healthier populations. Conversely, low social capital in challenged neighborhoods can lead to adverse results, including more child abuse, less economic mobility, and less happiness than in similar communities.

These compelling findings present an important role for local government in promoting cohesive communities and optimistic residents. According to experts at Pennsylvania State University, characteristics of sustainable neighborhoods include investment in the local community and care of its residential properties. Developed open spaces, such as yards and parks, also may benefit from social capital formation. Finally, amenities such as libraries, museums, and schools may

help individuals develop social contacts within their community and increase their overall levels of trust.<sup>6</sup>

The American Planning Association (APA) looked at how to build social capital through urban design and planning.<sup>7</sup> The APA suggests including these design elements:

- Places that provide opportunity for networking and participation
- Traffic management and urban design to create safe places for children to play
- Encourage mingling through place making
- School and classroom size
- Open spaces, (pocket) parks, and yards
- Street condition
- The reduction of one-way streets and traffic speed
- Grass, trees, flowers, and convenient places for outside sitting
- "Eyes on the streets" buildings with street-level windows
- Home ownership
- Absence of vacant homes
- Shorter commute times or the opportunity to walk or bike to work
- Mixed-use infrastructure

The APA emphasizes the connection between urban design and social interaction to demonstrate how design, shape, form, and qualities of streets and urban spaces affect how people use them.

If social capital produces better health, more happiness, and economic mobility, then clearly, city officials should focus land use and street and building design efforts on building social capital. One example is the Front Porch Alliance in Indianapolis. The alliance mapped assets such as nonprofits, local businesses, and faith-based organizations in stressed neighborhoods and then structured collaborations to increase social capital in those targeted communities. It involved planning where new sidewalks would increase social interaction or make a child's walk to school safer, and where donated equipment and volunteers would turn a vacant lot where people used crack cocaine into a small playground. The Front

Porch Alliance considered how the city could support community leadership and enhance its credibility by responding quickly to place-based services requests. Similar activities occur in many American communities today.

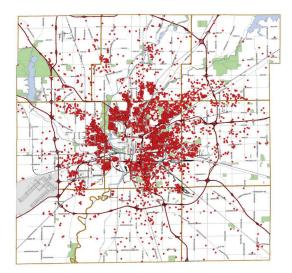


Figure 2.2

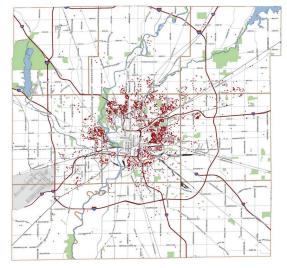


Figure 2.4

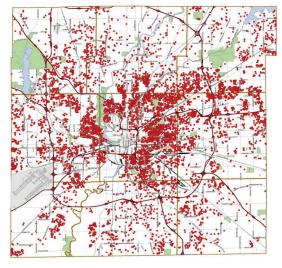


Figure 2.3

The Front Porch Alliance made these maps as part of the Abandoned Housing Initiative, with red dots identifying repair orders in the city of Indianapolis. Specifically, the red dots in figure 2.2 show hospital repair orders from 2005 to 2008. Figure 2.3 highlights home foreclosures in 2007, and figure 2.4 highlights properties with utilities disconnected for one year or more in 2007. The clustering of red dots helps identify priority areas in need of intervention.

## Using civic engagement to inspire collaboration

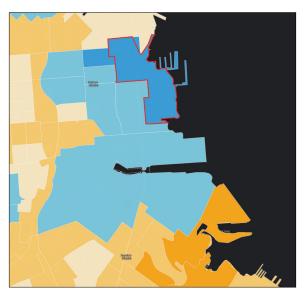
In addition to creating more social capital, collaborations that include civic engagement also can inspire action around a specific goal or campaign. To do this, leaders do not start with a blank slate; rather, their organizing efforts take place in the context of these existing conditions:

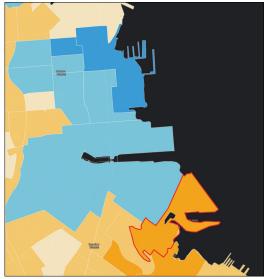
- Demographic factors such as race and poverty
- The normative and regulatory environment in which the potential participating organizations exist
- Previous failures of a single sector or organization to ameliorate the problem on its own
- Existing relationships among the potential players, which influence trust and the willingness of potential actors to participate with each other
- The existence of an accepted brokering organization or legitimate convener

An organized collective response must be well visualized, easily understood, and iterative. Whether groups form into collective agency is "not merely an issue of structural arrangements or antecedent conditions; it is a process of emergence resulting from communication processes that are distinct from market or hierarchical mechanisms of control."

Elected leaders need the capacity to call the public together to solve an important civic matter. Showing a map can provide a compelling tool for rallying support, whether it's a mayor advancing city aspirations or a community member leading a call to action.

In some cases, stories made in ArcGIS StoryMaps have depicted problems in a way that brings people together to solve complex problems. For example, the San Francisco map of wealth divides helped build the case for affordable housing by highlighting the needs of communities that do not share the prosperity otherwise found in the Bay Area.





**Figures 2.5 and 2.6.** The San Francisco map of wealth divides highlights disparities in household incomes in the Bay Area. Dark-blue shaded areas indicate higher levels of household income while yellow-shaded areas indicate lower levels of household income. In figure 2.5, *left*, the blue area marked with a red border is the former working-class neighborhood of Potrero Hill with a median household income of \$179,806. In figure 2.6, *right*, the yellow area marked with a red border identifies a nearby neighborhood with a median household income of \$16,703.

In another example, the story *Celebrating the Lost Loved Ones* illustrates the enormous personal cost of opioid addictions for families in a community and plays a part in generating coordinated responses to these tragedies. Cincinnati, Ohio, and the surrounding towns in Hamilton County mapped opioid overdose hot spots and created a publicly accessible dashboard showing near real-time updates of opioid-overdose-related emergency services calls. These real-time maps help first responders and citizens groups respond more quickly and strategically. The release of the dashboard has resulted in a 31 percent decline in EMS responses in Cincinnati, while Hamilton County reported a 42 percent reduction in emergency room visits.<sup>8</sup>