

Harnessing Civic Tech & Data for Justice in St. Louis

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From 2014 to 2018, the Civic Tech and Data Collaborative brought together local government officials, civic technologists, and community data organizations across seven communities to explore how to harness data and technology to benefit low-income residents. Three national organizations with local networks—Living Cities, Code for America, and the National Neighborhood Indicators Partnership—guided the initiative. To provide real-world examples and lessons for the field, local collaboratives in Boston, St. Louis, and Washington, DC, created products that use data and technology in new ways to improve services or programs in their cities.



For more information on the Civic Tech & Data Collaborative visit livingcities.org/CTDC

The Ferguson Commission, reporting the results of the federal investigation after the shooting of Michael Brown, highlighted disparities in the impacts of warrants and summons on low-income people and people of color in the St. Louis region. St. Louis County has 90 municipalities and 84 courts, each with different data management systems and court processes. Residents had no easy way of locating information about their tickets or court dates across the area's numerous courts. Without these basic details, the impacts of a minor traffic ticket could lead to a spiral of negative consequences for residents, particularly those with few economic resources.

CivTech St. Louis, the Civic Tech and Data Collaborative in St. Louis, saw an opportunity to address one aspect of the systemic challenges between residents and law enforcement: difficulty finding information after receiving a municipal ticket. The CivTech St. Louis team recognized that data and technology could bridge the information gap and prevent people from going to jail for nonviolent, mostly traffic, offenses. The result was [YourSTLCourts](#), an open-source website and text tool that pulls real-time data on tickets from most St. Louis-area courts into a single clear interface. Residents can search by their citation number,

their driver's license number, or the location where they received their ticket. Additionally, a short message service (SMS) tool enables residents to receive text messages with court updates. The website also helps residents navigate the court system with information about what to expect in court and community service options.

“When someone is jailed for failure to pay tickets, the justice system has not removed a dangerous criminal from the streets. In many cases, it has simply removed a poor person from the streets. In these cases, the justice system also removes that poor person from their family, from their community, and in many cases, from their job. These sentences can have long-lasting, widely felt consequences, none of which directly impact community safety.”

— The Ferguson Commission¹

Working with Government Partners

CivTech St. Louis began as a partnership between Rise, a National Neighborhood Indicators Partnership partner; the St. Louis Economic Development Partnership; GlobalHack; and LaunchCode. Several months into the project, a coordinator with the Economic Development Partnership and the county's chief information officer, who had been a strong supporter, left their positions. The coordinator stayed involved, but the team struggled to identify a new government champion. After rebuilding connections, the team gained the county executive's approval and support.

The CivTech St. Louis team reached out to the county government's information technology (IT) departments to build relationships and better understand the systems. In speaking with IT and court staff, the team learned that the various jurisdictions in the county rely on at least five technology vendors to collect and manage ticket and warrant data. The St. Louis County government agreed to pilot the tool, and the technology vendor for St. Louis County, Tyler Technology, agreed to participate in the YourSTLCourts pilot. St. Louis County had an application program interface (API) that enabled the data to be securely transferred to the tool, but no singular person in the county

government oversaw coordinating or approving access to the data because, before the project, no one needed to use or share the entire court dataset.

Getting buy-in from officials in the criminal justice system was critical to the project's success. A presiding judge had to approve a new jurisdiction's participation in YourSTLCourts, and the team relied on a clerk to be an ambassador for obtaining that approval. In St. Louis County and other towns, the CivTech St. Louis team surveyed and interviewed court clerks, lawyers, and judges and presented at courts and monthly task force meetings. The information helped the team understand the criminal justice processes and demonstrated support for the champions of innovation and reform. Early in the project, the team also invited clerks and judges to a free summer barbecue. The event was a chance to let officials know about the project and talk informally. Several clerks and local judges attended and spoke about training, topics of interest, and the tool's release.

Assembling Diverse Voices and Talents

CivTech St. Louis established an advisory committee of diverse stakeholders who guided the tool's development and launch. Members included LaunchCode, city and county officials, and Open STL (the St. Louis Code for America Brigade). University professors of social work, criminal justice, and urban studies also participated.



CivTech St. Louis harnessed local technology talent from several sources. This was possible in part because one of the collaborative leaders had web development experience and could communicate easily with other technologists to coordinate the components of the project. Roles and contributions included the following:

- GlobalHack, a nonprofit organization that jump-starts community-focused software development, ran the initial weekend hackathon in September 2015 on municipal justice issues, resulting in the winning idea that later became YourSTLCourts.²
- Two developers from Daugherty Business Solutions, the winning GlobalHack team, donated time to help transform their initial platform into a robust public product.
- A paid local consultant developed most of the website's back-end and SMS text message feature.
- HandsUpUnited, a local community-based organization dedicated to social justice in low-income communities and communities of color, guided youth of color enrolled in its Tech Institute to design the user interface and draft the guidance on attending court and community service options.³
- LaunchCode, a local programming and workforce development organization, helped recruit a paid developer capable of detailed coding for the website development.

Connecting with Users

Before building the tool, the team partnered with the University of Missouri–St. Louis School of Social Work to better understand court users’ information needs. Social work students and CivTech St. Louis team members surveyed more than 350 court users at the courthouse regarding their experiences with the courts and their use of technology. The survey asked about challenges in coming to court to resolve tickets and users’ awareness of potential fines and fees, bench warrants, and jail time.⁴ Some residents cited barriers, such as lack of transportation or inflexible work schedules, that could be addressed only through policy changes. Other challenges that users reported directly influenced the tool’s development. More than one-quarter of respondents said they failed to appear in court because they forgot about their court date. When asked about communication technologies, 90 percent of respondents said they used text messaging, and 35 percent said text messaging was their preferred method of court contact. In response, the team included an SMS feature so users could sign up for alerts from YourSTLCourts and receive reminders about court dates. Respondents also shared what they wished they knew before they came to court, including guidance on what to wear, what to expect during the proceedings, and the option of community service. The final

YourSTLCourts website incorporated this content in the “Going to Court” section.

The team tested the prototype website’s usability with people exiting the courthouses, following the principles of the Civic User Testing Group (CUTGroup), a strategy developed by the Smart Chicago Collaborative that has residents test and provide feedback on prototypes of a tool.⁵ Drawing on resident recommendations, the team refined the user interface and navigation.

Investing in Communication

The website launched in May 2017 with St. Louis County data. From the outset, the team planned a multipronged communications strategy to get the word out to the county’s 1 million residents. These efforts included media outreach, advertising on a local radio station, distributing printed flyers, placing tear-off cards in courtrooms, hanging banners in libraries, and enlisting libraries to add the website icon to all public desktops. They also created a training video for county police officers who handed out YourSTLCourts fliers along with traffic tickets following the launch.

YOURSTLCOURTS

Moving Forward

CivTech St. Louis expanded the website in January 2018 to include data from 35 jurisdictions supported by Tyler Technology and a second vendor, covering nearly 75 percent of the target region's land area in St. Louis County and the City of St. Louis. The team's next steps are to include towns that use a third court system software vendor. CivTech St. Louis continues to raise awareness through community meetings and other opportunities and is implementing a community engagement plan and hiring a full-time director of engagement to reach more residents, shifting from broad communication to direct community engagement in areas with high concentrations

of unresolved tickets. The team is also exploring adapting the system across Missouri.

The advisory committee began discussing sustainability early in development and decided that establishing a nonprofit organization would be the best way to maintain YourSTLCourts and continue civic tech and data innovation in St. Louis. The efforts will be bolstered by coordination with other initiatives, including the MacArthur Foundation's Safety and Justice Challenge, a coalition of partners striving to reduce the number of people in jail while improving public safety.

Lessons Learned

In any collaborative civic tech project, organizers must be deliberate in how they organize their stakeholders. The YourSTLCourts development process included many partners with evolving roles and responsibilities. The St. Louis project co-leads offered this advice: “Consider a tiered approach [to structuring your collaborative] from the start. First, groups core to the collaborative doing the day-to-day work; second, groups in the community you inform and may turn to as champions; and third, organizations that you would like to reach out to but haven’t yet, like other municipalities.” Limit the number of partners involved in operations to only those needed to accomplish the project goal. Also important is targeting partnerships that bring a resource or skill set to the table, such as community engagement or subject-matter expertise. With so many moving pieces, the team had to be flexible with its timeline. There was staff turnover in the project team and the local government, and volunteers had irregular or shifting availability. Any collaborative should budget time, resources, and staff for changing circumstances.

In crafting technology with government, civic tech and data organizations must recognize that cities or small counties do not necessarily

have the funds, time, or capacity to publish their data, and collaborating with outside groups to do so takes time and is a political risk. Groups must demonstrate to government officials how new ideas for using data and technology can improve efficiency and relationships with residents. In this way, civic tech and data teams can cultivate government champions who will advocate for projects and help overcome bureaucratic hurdles. In St. Louis, officials recognized the time savings and convenience the tool would introduce to clerks’ workloads. Gaining support from presiding judges and the clerks that oversee the court system was critical to the realization of YourSTLCourts.

In outlining its scope of work, the St. Louis team recognized that working within government systems is different than designing for private-sector clients. Legacy systems, data challenges, or gatekeepers may be incongruent with typical technology-sector processes. To overcome these impediments, CivTech St. Louis networked with county officials to understand government processes and ways the YourSTLCourts tool could facilitate these processes.

Managing the players, engaging with government, and developing the tool required

resources beyond the original grant. The team acquired a total of \$240,000 in in-kind donations to augment the initial grant funding. GlobalHack donated \$89,000 to support the hackathon and initial product development. The University of Missouri–St. Louis estimated that the value of its student surveying time totaled \$20,000 (the in-kind faculty time was even more), and the Safety and Justice grant helped finance the text communication system and other website development.

YourSTLCourts empowers residents to locate information about their tickets and understand their options for resolving them, decreasing the number of residents who go to jail for avoidable offenses. The project also expanded the community’s ability to align interests of stakeholders across sectors, creatively fund activities, and launch a successful communications campaign. The new nonprofit gives the St. Louis region a powerful vehicle to activate these new skills and relationships to explore how data and tech can advance other social justice issues.

NOTES

1. See STL (2015).
2. See GlobalHack’s website at <https://globalhack.org/>.
3. See HandsUpUnited’s website at <http://www.handsupunited.org/>.
4. John Cruz and Laura Kinsell-Baer, “Engaging Hard-to-Reach Users in Designing Civic Tech,” Living Cities (blog), February 22, 2018, <https://www.livingcities.org/blog/1245-engaging-hard-to-reach-users-in-designing-civic-tech>.
5. See the Civic User Testing Group’s website at <http://www.cutgroup.org/>. See also O’Neil and SCC (2014).

REFERENCES

O'Neil and SCC (Daniel X. O'Neil and the Smart Chicago Collaborative). 2014. [The CUT Group: Civic User Testing Group as a New Model for UX Testing, Digital Skills Development, and Community Engagement in Civic Tech](#). Chicago: Smart Chicago Collaborative.

STL (St. Louis Positive Change). 2015. [Forward through Ferguson: A Path toward Racial Equity](#). St. Louis: STL.

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ABOUT THE NATIONAL PARTNERS



Living Cities harnesses the collective power of 18 of the world's largest foundations and financial institutions to develop and scale new approaches for creating opportunities for low-income people, particularly people of color, and improving the cities where they live. Its investments, applied research, networks, and convenings catalyze fresh thinking and combine support for innovative, local approaches with real-time sharing of learning to accelerate adoption in more places. Additional information can be found at www.livingcities.org.



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Coordinated by the Urban Institute, the National Neighborhood Indicators Partnership (NNIP) consists of independent organizations in 32 cities that share mission to help community stakeholders use neighborhood data for better decisionmaking, with a focus on assisting organizations and residents in low-income communities.



Code for America is a national nonprofit that believes government can work for the people, by the people, in the 21st century. We organize a network of people who build technology to further local governments' priorities of creating healthy, prosperous, and safe communities. Our goal: government services that are simple, effective, and easy to use, for everyone.

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