CIVIC TECH INITIATIVES:

A Landscape Review

National Conference on Citizenship
Connecting People. Strengthening Our Country.

ABOUT US

NATIONAL CONFERENCE ON CITIZENSHIP

The National Conference on Citizenship (NCoC) is a congressionally chartered organization dedicated to strengthening civic life in America. We pursue our mission through a nationwide network of partners involved in a cutting-edge civic health initiative, an innovative national service project, and our cross-sector conferences. At the core of our joint efforts is the belief that every person has the ability to help their community and country thrive.

Congress chartered NCoC in 1953 to harness the patriotic energy and civic involvement surrounding World War II. We've been dedicated to this charge ever since. In 2009, Congress named NCoC in the Edward M. Kennedy Serve America Act, once again memorializing our important role. This legislation codified and expanded our Civic Health Initiative (CHI) helping it become the nation's largest and most definitive measure of civic engagement.

NCoC's CHI is at the center of our work. Leveraging civic data made possible by the Corporation for National & Community Service, we have partnered with dozens of states, cities, and issue groups to draft reports and action plans to strengthen civic life. This initiative has also been an important incubator for programs such as the Civic Data Challenge and *The Civic 50*. Each program has used data and 21st century tools to create locally led, collective impact across our country. By 2020, we plan to integrate this pioneering initiative into ongoing partnerships in all 50 states and the District of Columbia.

CIVIC DATA CHALLENGE

In 2012, NCoC launched the first Civic Data Challenge – a crowd-sourcing initiative to turn the raw data of 'civic health' into useful applications and visualizations that have a direct impact on public decision-making. Throughout the course of managing two national data challenges, NCoC connected with a wide range of leaders and partners in the open data and "technology for good" communities. Their guidance and input, along with Challenge participant feedback, has helped shape these materials. More information is available at www.civicdatachallenge.org

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EXECUTIVE SUMMARY

Many nonprofits rely on data to inform their stakeholders, measure their impact, and to prioritize their resources. However, traditional data analysis, and reporting do not reflect the real-time information stream that stakeholders have become accustomed. Technology has advanced our capacity for sharing and visualizing data in faster, cheaper, and more easily digestible formats. There is a clear opportunity for nonprofits to take advantage of these solutions.

In recent years, open source and open data movements have built significant momentum around the principles of accessibility, collaboration, and transparency. They focus on using data and technology for the greater good. The open source movement promotes universal access to and redistribution of a product's blueprint, along with subsequent improvements. In general, open source refers to computer or internet-based programs developed through peer collaboration. The end product (source code, blueprints, and any supporting documentation) is made available to the general public for free use and modification. This movement is founded on the belief that certain data should be made freely available to the general public without restriction.

Building upon the open source and open data movements, there is an ever-growing array of opportunities to make data useful, accessible, and relevant. One helpful way to think of this is through the lens of "civic tech." The Knight Foundation defines this as the "nexus of technology, civic innovation, open government, and resident engagement.[1]" Under this umbrella, civic data that supports this technology is mined from social networks, community organizing platforms, government data, crowdfunded and crowdsourced assets, and peer-to-peer shared resources. As Micah Sifry, Director of Civic Hall, recently said, "Civic tech is a ripe moment where interest from different sectors of society and government is rising.[2]"

This review focuses on initiatives that address community challenges by leveraging technology and data. We will share our experience and lessons learned in creating the Civic Data Challenge, and will include examples of other nonprofit's ventures into the civic tech initiatives. These types of initiatives, discussed in more detail later, include:

- **Data, Apps, and Visualization Challenges:** Competitions where coders, designers, developers, researchers, and others create new websites, apps, visualizations or other products to access and present data in new ways.
- **Hackathons:** Events in which computer programmers and other professionals involved in software development, such as graphic designers, data experts, and project managers, collaborate intensively on a software project.
- **Cross-Sector Partnerships:** Opportunities for nonprofit organizations to tap into the talent, skill sets and resources of partners through pro-bono services, partnerships with higher education institutions, or collaborating with local volunteer networks.

Whether it's launching a national competition, or engaging a small group of local volunteers, these initiatives provide ways to tap into new talent and ideas that result in new solutions.

Key Takeways

- Civic tech initiatives are a new approach for nonprofits to take advantage of crowdsourced expertise and open source platforms as a way of making data come to life.
- Extensive networks of organizations, events, policy initiatives, and platforms have developed to support nonprofits in leveraging technology to meet the demands for greater data representation and use.
- Nonprofits can stay on the cutting edge of their field (and attract new audiences, partners, and funders) by engaging in civic tech initiatives.

Key Terms

Organizations that wish to dive deeper into this landscape need a basic understanding of the shared vocabulary. Here are a few key terms that frequently occur in the civic tech world:

- **Hacking or Civic Hacking** – The act of quickly improving the processes and systems of local government with new tools or approaches, conducted with cities, by citizens, as an act of citizenship.[3]
- **Hackathon** – A hackathon is an event, typically lasting 2-3 days, in which people meet to engage in collaborative computer programming.[4] Participants generally include computer programmers and other professionals involved in software development such as graphic designers, data experts, and project managers.
- **Open source** – "Something that can be modified because its design is publicly accessible.[5]" Open source can also designate a set of values, such as open exchange, collaborative participation, rapid prototyping, transparency, meritocracy, and community development.[6]
- **Open data** – Open data is data that can be freely used, reused, and redistributed by anyone - subject only, at most, to the requirement to attribute and share alike.[7]
- **Big data** – Big data is a popular term used to describe the exponential growth and availability of data, both structured and unstructured, that has come with the growing use and transparency of the Internet. Big data can be further defined by its volume, variability, and complexity of its sources and relationships.[8]
- **Data challenge** – A competition that provides incentives and a platform for software programmers, designers, and innovators to build innovative applications, visualizations, websites, or other tools using data.[9]
- **Social innovation** – "A novel solution to a social problem that is more effective, efficient, or sustainable than present solutions and for which the value created accrues primarily to society as a whole rather than private individuals.[10]"
- **"For good"** – Several professional groups will describe themselves as "for good" to indicate that they have a mission to provide their professional services in support of a social or common good. Popular combinations include data for good, tech for good, code for good, and design for good.
- **"Civic tech"** – As defined by the Knight Foundation, civic tech is the "nexus of technology, civic innovation, open government, and resident engagement." Under this umbrella, civic data is mined from social networks, community organizing platforms, government data, crowdfunded and crowdsourced assets, and peer-to-peer shared resources.

Civic tech initiatives are a new approach for nonprofits to take advantage of crowdsourced expertise and open source platforms to make data come to life.

INTRODUCTION

Many nonprofits rely on data to inform their stakeholders, measure their impact, and to prioritize their resources. However, traditional data analysis, visualization, representation and reporting do not reflect the real-time information stream that stakeholders have become accustomed to receiving. Technology has advanced our capacity for sharing and visualizing data in faster, cheaper, and more easily digestible formats. There is a clear opportunity for nonprofits to take advantage of these solutions.

There is an ever-growing array of opportunities to make data useful, accessible, and relevant. One helpful way to think of this range of models and initiatives is through the lens of "civic tech." "Civic tech" as defined by the Knight Foundation is the "nexus of technology, civic innovation, open government, and resident engagement." Under this umbrella, civic data is mined from social networks, community organizing platforms, government data, crowdfunded and crowdsourced assets, and peer-to-peer shared resources.

This review focuses on initiatives that address community challenges by leveraging technology and data. These initiatives are discussed in more detail later, and the end products that result can include new websites, applications, data visualizations, and other projects. Whether it's launching a national competition, or engaging with a small group of local volunteers, these initiatives provide ways to tap into new talent and ideas to create new solutions.

The Annie E. Casey Foundation and the National Conference on Citizenship (NCoC) partnered to develop tools and materials that nonprofits can adopt and use to engage in or build their own 'civic tech' initiative. This "Landscape Review" provides an overview of the growing 'civic tech' movement, makes the case for engagement, and outlines the key initiatives, players, and resources. It also provides guiding principles for how to get involved. An in-depth Toolkit accompanies the review. Developed out of the experiences of NCoC's Civic Data Challenge, it walks you step-by-step through the process of engaging in and running a civic tech initiative.

These materials highlight the takeaways and lessons learned from NCoC's Civic Data Challenge, as well as a vast network of partners and resources cited throughout. These lessons and guiding principles of the Civic Data Challenge are informed and reinforced by other resources. They provide a roadmap of emerging principles that are universal to civic tech initiatives of varying size, scope, and structure. For example, the Knight Foundation report on the role of contests for philanthropy offers many recommendations similar to the lessons learned by NCoC and other institutions that have implemented challenges.[6] As this movement grows, it is our hope that we can contribute a piece of this bigger picture of knowledge-sharing and information gathering to better support organizations interested in doing this work.

WHY JUMP IN?

Organizations must be able to understand and communicate civic tech's value proposition before getting involved. The National Conference on Citizenship (NCoC) is a data-driven organization that first entered into this space in 2012. That year we launched the first Civic Data Challenge – a crowd-sourcing initiative to turn the raw data of 'civic health' into useful applications and visualizations that have a direct impact on public decision-making. We had to "make the case" for getting involved in civic tech to board members, partners, funders, and constituents. The following benefits of civic tech initiatives resonated well with each audience, and apply broadly within this space:

- ***Making Data Useful*** - The driving purpose of these efforts is to make data useful and relevant to public problem solving. New applications allow users to access data in ways that shape their own decision-making about what bus to take, who to vote for, and how to fix a problem in their neighborhood. New data visualizations allow policymakers to quickly digest and interpret social trends—and raise public dialogue around the need for policy responses. New websites allow stakeholders from the public, private, and nonprofit sectors to see patterns and intersections in datasets, identify points of collaboration, and eliminate inefficiencies.

- ***Tapping into New Minds and Skillsets*** - These civic tech initiatives help expand the pool of people working on the same problems, challenges, and same datasets your organization confronts every day. Their creativity, insights, skill sets, and outside-the-box thinking can work wonders. The Civic Data Challenge in 2012 attracted a group of diverse participants including a group of undergrads from Berkeley, a community-based organization in the San Juan Islands, and an astrophysicist from NYU. Never before had NCoC imagined that such a group of individuals with such diverse backgrounds, education, skill sets, and perspectives would help us understand how to apply our data to their community's issues.

- ***Greater Social Good*** - The open source and open data movements are built upon the principles that transparency, collaboration, and accessibility can unlock the potential of data and technology to do good for society.

- ***Expanding Reach*** - Whether it's a weekend hackathon, corporate volunteer project, or year-long data challenge, these civic tech initiatives allow your organization to reach new audiences yet to be fully tapped. For NCoC, we were consistently amazed by the response we received from high-profile judges, prize sponsors, and promotional partners who were eager to support the Civic Data Challenge. These offers of support broke us into new spaces physically through speaking engagements at venues like DataWeek and a Better World by Design. They did so virtually through social media and new social networks. These new networks and relationships can yield an array of unforeseen benefits down the road.

- ***Staying Relevant*** - At NCoC, providing useful resources to our stakeholders is core to the success of our mission. If we are generating and analyzing useful data, but only making it accessible through reports that do not reach anyone, then we are not fulfilling our mission. Civic tech initiatives provide a critical opportunity to ensure that your data and your organization continue to remain relevant. They provide opportunities to present data in new ways by engaging new audiences to interact with the data and develop innovative interpretations. Using data for a greater good ultimately sustains data-driven organizations and opens up the possibility for new sources of support.

- ***Meaningful Volunteer Engagement*** - Participants in these initiatives see a wide range of benefits as well. These range from cash incentives, to promotion and recognition in their field, to skill and resume building. Often most important to participants is the opportunity to contribute their time and skills in ways that have an impact. By creating a space for individuals to do that, you're not only generating impact for your mission, but potentially building a new team of lifelong advocates and supporters. Challenges are a thoughtful way to engage the tech community and spot emerging trends.[11]

New websites allow stakeholders from the public, private, and nonprofit sectors to see patterns and intersections in datasets, identify points of collaboration, and eliminate inefficiencies.

Examples:

en.seeclickfix.com/

demo.outline.com/budget/balanced-state-budget-proposal

civicdatadenver.wix.com/civicdatayouth

CIVIC TECH INITIATIVES

Open source and open data movements have built significant momentum around the principles of accessibility, collaboration, and transparency.

The **open source movement** promotes universal access to and redistribution of a product's blueprint, along with any subsequent improvements to it. Open source refers to computer or internet-based programs developed through peer collaboration, and the end product (source code, blueprints, and any supporting documentation) is made available to the general public for free use and modification.

The **open data movement** is founded on the belief that certain data should be made freely available to the general public to use without restriction.

> ***On President Barack Obama's first day in office*** *on January 2009, he issued a memorandum on transparent and open government, declaring that "openness will strengthen our democracy and promote efficiency and effectiveness in government.[12]" Federal agencies were asked to outline a plan with specific objectives related to releasing data to the public, and civic transparency and collaboration.[13] As a result, we now have www.data.gov, a hub for "data, tools, and resources to conduct research, develop web and mobile applications, design data visualizations, and more.[4]" This is also a major objective of the Office of Science and Technology Policy (OSTP). President Obama appointed the first CIO and CTOs of the US to fulfill this objective.[14]*

It is important to remember that the goal behind these initiatives is ultimately to ***build capacity*** for your organization. Tapping into new volunteers and networks provides your organization the opportunity to create new tools and products that you may not otherwise have staff expertise or time to build. These initiatives also position your organization to be attractive to new funders and eligible for new grants.

Building upon the open source and open data movements, there is an ever-growing array of opportunities to make data useful, accessible, and relevant to public decision-making and problem solving. As Micah Sifry, Director of Civic Hall, recently said, "Civic tech is at a ripe moment where interest from different sectors of society and government is rising.[2]"

These types of initiatives can range from one-time hackathons, to online data competitions, to specialized engagements with tech-savvy volunteers. The end products can include new websites, applications, data visualizations and other projects. These can be high-quality, powerful tools for showcasing important and relevant data findings. However, it is up to the hosting organization to ensure that the products are shared and seen by policymakers, organizations, and leaders that can effect change. Whether it's launching a national competition, or engaging a small group of local volunteers, these initiatives provide ways to tap into new talent and ideas to create new solutions.

Civic tech initiatives reflect a wide range of capacity needed (staff, time, and resources) in order to be effective. Some initiatives, like a national data competition, can require months of planning and execution, and dedicated full-time staff. Others, like the engagement of a smaller group of dedicated volunteers, can happen without dedicating new staff or allocating new resources. Organizations interested in this movement should be encouraged to take even small steps in this direction. Tapping into a world of growing resources and volunteers can yield significant results.

Data, Apps, and Visualization Challenges

Data Challenges

Data challenges are initiatives held by organizations that want to increase awareness of their data sets and/or generate data-informed solutions to societal problems. There is a range of possible data challenge formats that can look very different depending on the goals of the hosting organization. Often, organizations use challenges as a crowd-sourcing initiative to tap into the expertise of data, coding, technology, and design professionals. In return, participants may receive cash and in-kind prizes, recognition, mentoring, and connections. Participants can also support their community in a meaningful way by using their skillsets. The Toolkit accompanying this Landscape Review will go into greater depth on the Civic Data Challenge model and lessons learned, but here are a few things to consider:

Potential Benefits

Data Challenges can be conducted online and can be very flexible in terms of scope, audience, and parameters. Challenges can run the span of days, weeks, or months. They can focus on a specific data set or community, or draw upon several datasets and be nationwide. One of their greatest benefits is they can inspire individuals to use data tools and resources for the first time. They give organizations the opportunity to crowd-source their own questions and issues and reach new audiences they would otherwise not engage in creative problem solving. Data challenges can help expand the reach and raise awareness of the data made available by an organization and its uses.

Potential Issues

The flexibility and online nature of data challenges, can also provide a limitation to more in-depth engagement. If parameters are too broad, and the questions not narrowly defined, submissions can run too far afield in what they provide. Without a focus on long-term engagement, challenge participants might only engage in a limited way. The host organization might miss opportunities for more meaningful contributions over the long term. Without carefully considering questions of interests, or user audiences, submissions might also be interesting or innovative—but ultimately not useful. These challenges can also be time and resource intensive to manage.

Apps Challenges

Similar to the above data challenges, apps challenges offer a specific call to action for participation to create new applications to meet specific parameters.

Potential Benefits

Apps Challenges are structured similarly to data challenges and competitions, while providing unique and specific outcomes. They provide excellent platforms to engage new audiences and skill sets in public problem solving. Apps challenges and cross-sector partnerships can generate sustainable solutions to emerging trends within community issues. For example, the Range app outlined in the case study on page 10 helps school-age youth to find free summer meals in their area. The app connects meal providers to their target audience of hungry youth. It also captures a snapshot of the supply and demand for free meal services.

Potential Issues

Apps Challenges need to be carefully thought through including: what are the goals, who is the audience, how to market the challenge, how to ensure adoption of apps into community, and how to evaluate the challenge and their impact. However, if not framed carefully, and with a plan for long-term impact, they can also yield results that ultimately aren't utilized.

Case Study: *The Range App: Caravan Studio's development of an app to help school age youth*

The Product

Range is a mobile app that displays the nearest time and location for school age youth to get a free summer meal. Range is built to make it exceptionally easy for trusted community messengers – people like librarians and clergy – to share information about summer lunch programs.

Food insecurity increases for youth during the summer. Only 1 in 6 kids who access the federaly-funded lunch programs access summer meals. As school lets out for the summer, youth lose the easy place to go to get a meal – the school cafeteria. Free summer meals are everywhere – in community parks, at pools, in apartment complexes, at libraries and, yes, sometimes even at schools that are otherwise closed for the summer months.

Caravan Studios, a division of TechSoup Global, launched Range on April 7, 2014. Data was updated weekly via a partnership with WhyHunger. At its height, Range had 42,000 summer meals and all areas of the United States were represented. By the end of summer, Range was installed on over 425 mobile devices.

Costs: Range cost approximately $20,000 to build and another $10,000 to maintain over the course of the summer. Outreach – including building a website and press kit, doing marketing to appropriate users, and engaging in public relations – also took time, but was incorporated into general outreach efforts and staff time.

Successes

It was crucial to engage with trusted community members such as librarians, staff of faith-based organizations, and youth outreach workers. Caravan provided these leaders with tools to encourage youth to use the app and to raise awareness of the resource within their networks.

Key Project Issues: This project required Caravan find appropriate data and a trustworthy partner that could translate the information into a robust app. Caravan worked with WhyHunger on the app development and concentrated on data that could be obtained at a national level. This was done to ensure the integrity of the data and product. Given the targeted audience, Caravan prioritized the accuracy and trustworthiness of the data to ensure that no user would go hungry.

Recommendations for other organizations:

- Use nationally vetted data.
- Have a clear plan for updating data on a regular basis.
- Simplify the app as much as possible to minimize maintenance costs.

Range is available for Windows, Android, and iOS mobile phones via **http://www.RangeApp.org**

Visualization Challenges

Data visualization challenges are generally online competitions that bring together data scientists and designers to analyze specific data sets and visualize their findings in transparent, informative, and inspirational ways.

Potential Benefits

Data visualization challenges are a very easy lift on the part of the hosting organization with relatively little maintenance required. You can use your website to house your data and promote your challenge. Or, you can partner with an organization that focuses on hosting data visualization challenges, such as Visualizing.org. Data visualization products are also easier to adopt and require much less maintenance than applications or software.

Unlike hackathons (outlined on page 12), participating nonprofits do not necessarily need a clear question or problem for competitors to address. Nonprofits just need to provide their data in a clean and accessible format.

Potential Issues

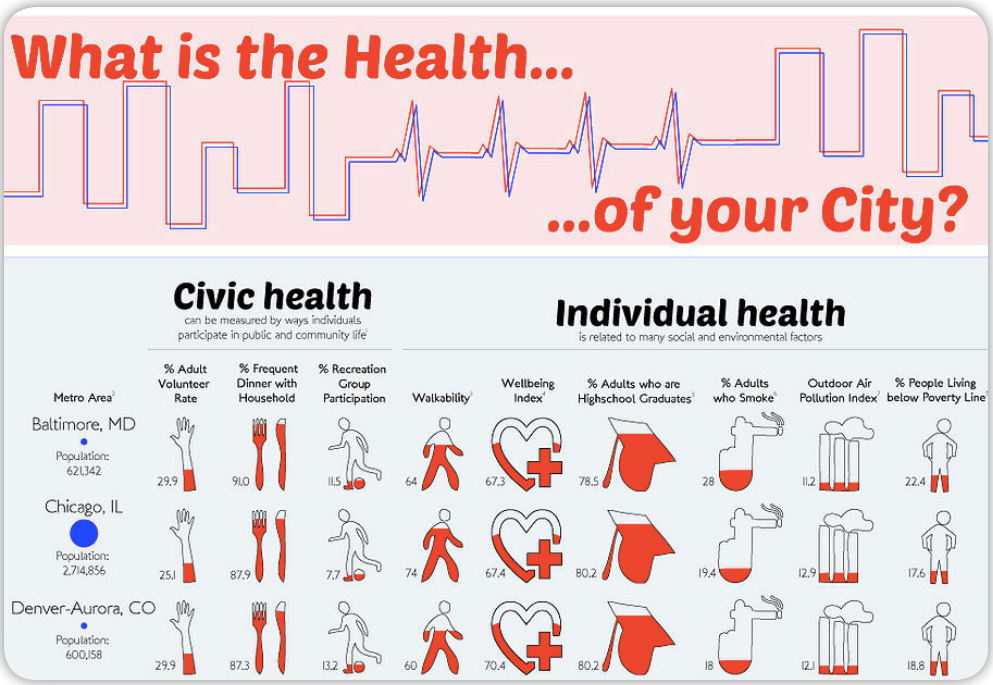
The visualizations may become quickly outdated as new data becomes available. Therefore hosting organizations will want to consider their timeline for sharing the images with stakeholders and their process for updating the visualizations. Hosting organizations will also need to find a balance of how much data participants require. This can help ensure that the product aligns with their mission or messaging while allowing for creativity.

Examples of Data Visualization Challenges:

Viz Challenge

Visualizing.org

Humanitarian Data Visualization Challenge



Civic Data Denver, 2013 Civic Data Challenge Finalist

*Additional examples of apps challenges, and other data competitions, can be found through Challenge.gov. Challenge.gov is "a technical platform and list of challenge and prize competitions, all of which are run by more than 69 agencies across federal government. These include technical, scientific, ideation, and creative competitions where the US government seeks innovative solutions from the public, bringing the best ideas and talent together to solve mission-centric problems." **The Range app,** developed by Caravan Studios, is an excellent example of how tech partners can develop tools to support the work of mission-driven organizations and meet a social need (Case Study on Page 10).*

Hackathons

A hackathon is an event where computer programmers and other professionals involved in software development, such as graphic designers, data experts, and project managers, collaborate intensively on a software project. The DC Action for Children's Data Tool (outlined in the case study on page 13) is an excellent example of how large and various datasets can be transformed into tools for better interpretation. Their Data Tool 1.0 and 2.0 maps were created out of a partnership with DataKind. In developing their Data Tools 1.0 and 2.0 with Datakind, they took several local and national datasets on crime, poverty, and community assets and overlaid the statistics onto neighborhood maps. These geographic representations of community characteristics helped stakeholders to better understand the range of issues facing their neighborhoods.

Potential Benefits

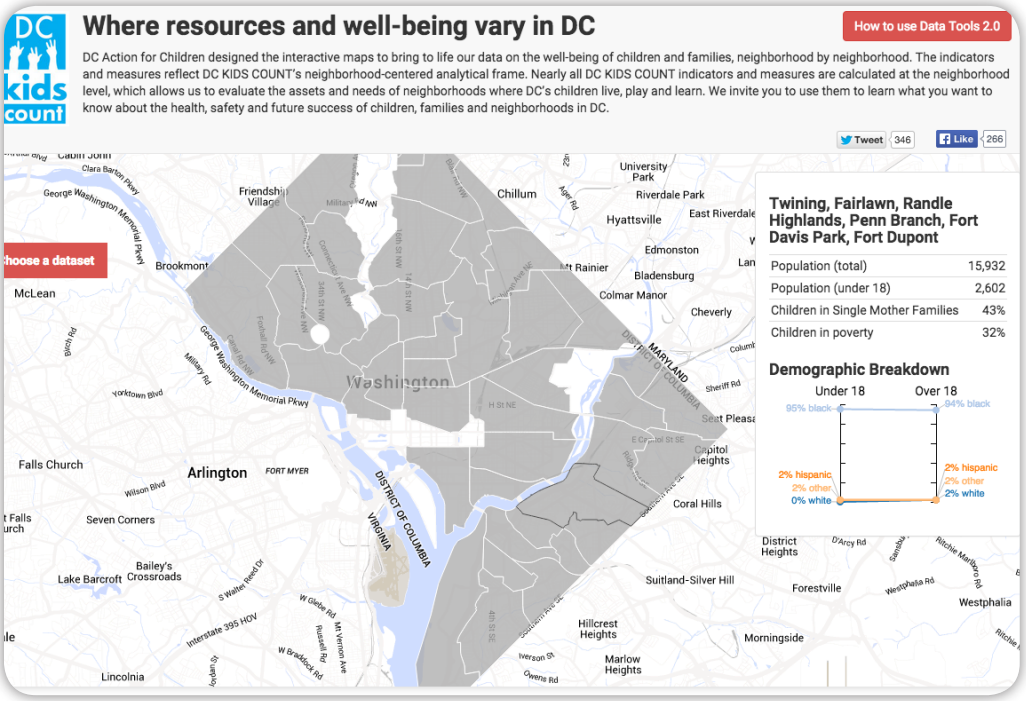
Hackathons can be a relatively easy lift for organizations just getting involved in the open data and data/tech for good scene. A hackathon generally takes place over one weekend, and can be a low time commitment. Hackathons are also fairly well established. There are organizations such as DataKind™, Code for America, and events like the National Day of Civic Hacking (see "Key Players" on page 19), which promote hackathon events and can partner with nonprofits who are interested in participating in a hackathon, but do not have the knowledge or resources to host their own.

Hackathons connect nonprofits with a pool of skilled volunteers. If the nonprofit can engage these volunteers in a specific project during the hackathon, these volunteers may decide to continue working on this project beyond the scope of the original event.

To effectively participate in a hackathon, nonprofits need to have a clearly defined problem that they want hackathon participants to solve. They also need to provide their data in a clean and usable format.

Potential Issues

Hackathons are generally held over a weekend. These events are characterized by a limited timeline and an "open call" for participants to be creative with the data. Due to these factors, products created within this timeframe may be more conceptual and not ready for immediate use. Therefore the hosting organization may not be able to immediately adopt or maintain products that are created from such an event.



DC Action for Children Data Tools 2.0

Case Study: *DC Action for Children Data Tools*

What sparked your decision to launch the initiative?
DC has the highest spending per pupil in public education and consistently faces intense scrutiny based on education reform efforts. Yet even with all the spending and reform efforts, the bottom line is outcomes for children are not improving. In a city where policy decisions that determine the allocation of resources and assets are guided by relationships and old-school politics, DC Action for Children chose to develop a project to bring much-needed transparency to DC government budget data.

We asked ourselves these questions. Why would this small (but mighty) team engage in this relatively new movement of big data analytics? How could this group move past the previous standards of data analysis that focused on past-tense trends and patterns? What can a nonprofit do to emulate the corporate sector and use big data to change the behaviors of consumers?

DC Action for Children approached DataKind with these questions, eventually developing a unique partnership with the group to establish a working relationship with over 20 dedicate pro-bono data scientists. DataKind helped to build DCAC's technological capacity and develop tools that would be relevant and informative to DCAC's wide range of consumers such as decision-makers, policy analysts, funders, and direct service providers.

The Project: Data Tools

The goal of Data Tools 1.0 was to create neighborhood-based maps to show that the success of many DC children is predetermined by their ZIP Code. Some DC neighborhoods have assets that enrich the lives of children, but others are characterized by high levels of poverty and the many challenges that come with it, including low performing schools, more violent crime, and less access to resources like healthy food, libraries, parks and recreation centers

To create Data Tools 1.0, DataKind scientists used mapping platforms and overlaps of several different data sources to create dynamic maps of resource disparities within the District. Datasets from the US Census Bureau, local administration offices, the Decennial Census, and American Community Survey were combined with geographical data, shapefiles for mapping, and data on community characteristics such as grocery stores, libraries, crime, and transportation from the DC Data Catalog. Local agencies, including the DC Office of the State Superintendent of Education and the DC Department of Health, provided additional information.

To obtain the neighborhood-level estimates, DataKind's data scientists used block-level population data to construct population weights for data at the block-group and neighborhood level. The DC Master Address Repository was used to geocode point data, such as locations of libraries and schools. ArcGIS was used to aggregate point data by neighborhood. Collaborators used MapBox to create neighborhood maps.

The Result:

Data Tool 1.0 was immediately successful, leading to an updated version in Data Tool 2.0. The response to the newly launched Data Tool 2.0 has been overwhelming, both locally and nationally. Local policy makers have relied heavily on the work and asked for the next iteration. The next phase of the project will bring accountability to public policy decisions and publicly funded programs.

The work has also been recognized as innovative by numerous organizations, including the Annie E. Casey Foundation (through the KIDS COUNT network), Rockefeller Foundation (Innovators Award), Global Editors Network (2013 Data Journalism Awards), IBM, and Amazon. DCAC continues to get inquiries from potential partners like The World Bank, the White House, and, most critically, parent groups.

Key project issue:
The creation of both the Data Tool 1.0 and 2.0 versions represent hundreds of hours of work and collaboration between DC Action for Children and the many talented DataKind volunteers. However, the project requires consistent updating and management from both arties to ensure that the data stays fresh and relevant.

Recommendations for other organizations:
Be creative, patient, and extremely clear on the desired outcomes of your data challenge.

Cross-Sector Partnerships

A number of tech and data corporations have responded to the trend in skills-based volunteering and have created opportunities for employees to support nonprofits in their tech and data needs. A wide range of opportunities exist to engage anywhere from one corporate volunteer, to a small group, in the data and technology needs of your organization. Additionally, organizations like DataKind and Code for America provide access to networks of skilled volunteers looking to support nonprofit organizations. The Texas Connector (on page 15) offers a good case study of how cross-sector partnerships can develop around civic tech.

Organizations like the **Taproot Foundation** are leading, mobilizing, and engaging professionals in pro bono service[15]. This includes a focus on supporting the information technology needs of the nonprofit sector.

NPower is a leading organization in this space that "mobilizes the tech community and provides individuals, nonprofits and schools opportunities to build tech skills and achieve their potential."[16] They do this both through professional development of the nonprofit sector, as well as pairing technology professionals with the needs of the nonprofit sector.

Potential Benefits

This model allows for specific, long-term engagement and can yield meaningful results. By working with a dedicated volunteer, or team of volunteers, the organization has the opportunity to build their capacity and meet specific data and technology needs. This model allows for more ongoing direction and input from stakeholders (as opposed to the limited and one-time input often offered by data challenges).

Potential Issues

Though this model can support a nonprofit's technology work, it is far from a cure-all for its capacity challenges. There are often very mundane and ongoing needs of nonprofit organizations (i.e. database transitions/management) that do not attract corporate volunteers. Standard tech support that is beyond an organization's budget or outside the skill-set of existing staff may also be unappealing to tech professionals. However, university partnerships could provide access to resources and students who are both knowledgeable and interested in building their experience on these types of engagements.

Accessing Talent Outside of Technology Hubs

Metro areas like San Francisco, Boston, Washington DC, and others are often thriving with civic tech initiatives and can access a large pool of talent and resources in surrounding areas. For nonprofits working in smaller cities, or more rural or remote areas, there are a number of avenues that can be pursued to develop strong civic tech initiatives in these communities:

Building an online community: *The beauty of many data challenges and competitions is that they generate a call to action that can be received by participants in communities across the country. The Civic Data Challenge received entries from participants spanning the entire country (including a team of teens in rural Alabama, undergraduates from the Bay Area, a community organization in the San Juan Islands, and even an astrophysicist in New York!). With a strong communications strategy, website, and social media campaign, you can effectively engage talent remotely from across the country.*

Corporate partnerships: *The 'Pro Bono Support' section outlines ways in which corporate partners can be engaged to contribute resources to solving tech challenges for nonprofit organizations. Even smaller businesses may have access to IT or data management staff that would be willing to volunteer their time to help with small projects.*

University partnerships: *Universities are teeming with talent and diverse skill sets. Students are often looking for opportunities to develop their skills and experiences. Consider what local higher education programs (graphic design, urban planning, software development, etc.) might be relevant to the problems your organization hopes to solve. Build relationships to see if you can engage student and faculty talent through internships, community-based learning courses, service programs, summer fellowships, and more.*

Case Study: *OneStar Foundation's Texas Connector*

The Product

OneStar Foundation's Texas Connector is an online nonprofit mapping tool that empowers communities, governments, funders and nonprofits to more effectively meet Texas' growing needs. Texas Connector combines an interactive GIS map and searchable database. It offers a unique platform on which initiative-specific data, such as civic engagement and volunteerism data, can be overlaid to create information-rich maps and reports. Users can print, email, or export search results to identify gaps in service, collaborative partners or complementary services. From researching community resources to analyzing local continua of care, Texas Connector's powerful combination of nonprofit and demographic data gives users insight to better understand regional issues and resources and more effectively tackle community challenges.

The Data Challenge: Building a Business Model out of the Texas Connector
Texas Connector is a program of OneStar Foundation, a statewide nonprofit whose mission is to build a stronger nonprofit sector in Texas by connecting partners and resources, promoting community solutions and coordinating and convening nonprofit networks. Texas Connector was awarded second place in the national Civic Data Challenge for its publication of civic engagement and volunteerism data through Texas Connector's mapping interface.

Erin Brackney Kremkus, MSW, Director of Research and Texas Connector manages the initiative, with support from OneStar's CEO and operations. Numerous collaborative partners have contributed to the success of the tool, including: the North Central Texas Council of Governments, primary technical developers, a strategic partnership consultant for the Houston region, and an AmeriCorps VISTA. Critical data partners such as 2-1-1 Texas/Health and Human Service Commission and GuideStar USA, Inc contribute datasets to the platform. Federal and state grants, private foundations, and subscription revenue fund Texas Connector's annual operating budget of approximately $450,000.

Key Successes and Issues

Since its statewide launch in 2012, Texas Connector has achieved many successes and encountered challenges. These have resulted in strategic shifts in both its business model and technical platform. Texas Connector's greatest successes are its unique collaborative model, longstanding public-private partnerships, and a user-friendly, customizable generalist platform.

Following its inception, and despite a strong demand from its original target audience, small faith- and community-based nonprofits, OneStar found that Texas Connector was often relegated to a "wish-list" item for these users, for whom data-driven decision-making was not a top budgeting priority. Therefore, in 2013, OneStar shifted its outreach focus to large-scale collaboratives and statewide entities, for which use of data was more integral to operations.

This "lesson-learned" and resulting strategic shift has led to several key partnerships, including:

- The Texas Department of Criminal Justice, which has a custom report generator and access for 1,800 parole and re-entry officers to assist with community resource referrals for clients; and,
- The Regional Healthcare Partnership 3 (RHP), a collaborative of hospital and health clinic systems in the Houston-area. They have selected Texas Connector as their technology solution to support patient navigation and healthcare staff in their work to increase primary/specialty care access for underserved populations and create a coordinated delivery model. OneStar designed and developed a publicly accessible portal on its Texas Connector platform that will offer a searchable database containing physician and healthcare clinic data from participating healthcare/hospital systems.

GUIDING PRINCIPLES

Our experience with the Civic Data Challenge helped surface a number of guiding principles that apply to the broader civic tech world. These principles were informed by our own work, and are also echoed in other helpful resources like the Knight Foundation report on "Why Contests Improve Philanthropy."

Regardless of the type of engagement you decide to pursue, we recommend considering the following carefully in planning and implementation. The Toolkit that accompanies this Landscape Review provides additional models and planning documents that help with each of these principles.[20]

- **Determine your goals carefully and provide a framework for how to be successful**
- **Understand what motivates your audience**
- **Emphasize volunteer communication and management**
- **Be an ambassador for your data**
- **Bridge the gap between users and developers**
- **Promote sustainability**

Determine your goals and provide a framework for success

Whether you host a challenge or work with volunteers on a specific project, it is important to present a clear goal. Participants and volunteers are not usually involved in the daily mission of your organization and they require clear direction to inform their work. The better defined your goal, the stronger the outcome will be.

Lessons Learned

At NCoC, our first Civic Data Challenge was too broad in scope. Our main goal was to build a community around our data – to get coders, developers, designers, and data scientists interested in civic health data. While we received a number of interesting submissions, we did not know how to best use them beyond the scope of the Challenge. The entries we received varied greatly in terms of quality and depth. We tried to do too many things at once - building an audience and creating different issue areas for people to address – without clearly defining the type of product we would like to see.

For our second Challenge, our goal was for teams to create products that could be used by communities to improve their civic health. We were transparent and clearly communicated this goal to participants through an in-depth rubric (included in the toolkit). While we received fewer submissions, the submissions were overall of a much higher caliber and more closely aligned to the mission of our organization and the goals of the initiative.

Understand what motivates your audience

Data challenges and other crowdsourcing initiatives attract a unique and diverse audience of skilled professionals who are motivated by a range of factors.

Lessons Learned

Through surveys of Civic Data Challenge participants, we found that participants were more likely motivated by a desire to meet new people and make an impact than to receive prizes. During a focus group, participants told us they preferred promotional/recognition opportunities, such as opportunities to present at conferences and placement in popular blogs and journals. These opportunities were seen as a way to build their profile and attract and potential investors for their work.

As a result, we sought out high-profile judges, new speaking engagements, and communications efforts as ways to recognize our participants' work. We shifted our focus toward ensuring their submissions would meet community needs. We de-emphasized prize money. Once you know your audience's motivation, you can structure your initiative to be more responsive to those incentives.

Emphasize volunteer communication and management

Participants come from a variety of professional backgrounds who may or may not be familiar with your mission or the issues your organization addresses. Additionally, they may use open data and open source terminology that feels unfamiliar. Take some time to learn open data and open source terminology as this will facilitate your conversations with participants and partners. Our Key Terms (page 5) is a good place to start. It's also important to be very clear and specific about your own goals and mission. Don't presume a level of familiarity with your organization's work or datasets. Take the time to orient your participants to the context and history of how you arrived at your current position.

A dedicated project manager can greatly facilitate communications between the hosting organization, user-audiences, and the participants. This person can help translate nonprofit goals into clear instructions for volunteers. The project manager can also build an environment where the nonprofit's expectations are managed, and the volunteers are given enough guidelines to work effectively.

A culture shift may be needed in communicating with participants in civic tech initiatives. Several project managers noted feeling like they needed to be more responsive late at night or on weekends (when participants are more likely focused on their projects). Having a project manager who is prepared to manage these expectations on both ends can be very helpful.

It is important to note that participants are action- and goal-oriented. They have already self-selected to volunteer their time. This is also a highly collaborative audience that seeks to continuously make products and programs better. They value transparency and openness. It is important to be flexible and open to feedback. Formal opportunities to provide feedback, such as through surveys and focus groups, will be appreciated and will help build a group of advocates around your program.

Be an ambassador for your data - no one understands your data like you.

It's also important to keep in mind, as with any volunteer-driven initiative, that your end product or vision will evolve as different participants and partners bring new ideas to the table. This potential to engage new minds, new eyes, and new skill sets is one of the greatest assets of civic tech initiatives. Being open to this process, receptive to feedback, and adaptable is key.

Organizations like Points of Light offer great resources for how to effectively manage skills-based volunteers. **(www.pointsoflight.org/corporate-institute/resources/skills-based-volunteering).**

Lessons Learned

NCoC learned a great deal about how best to engage participants in the Civic Data Challenge after year one. We learned it is necessary to provide more context and background on our data. This was done through a technical section on the website and the availability of research advisors. We needed to be more responsive to building community among the participants through a regular blog and Google group activity. We needed to be more responsive to input from the community, which was accomplished through surveys and focus groups. And, we needed to be flexible and responsive to the schedules and time constraints of participants, which was done by changing deadlines to respond to this input.

Be an ambassador for your data

No one understands your data like you. You know how it is collected and how it has transformed over the years. You know how people are currently using the data. You may even have ideas for how it could be better used. Communicate this information to your participants. They will be more engaged and create stronger products that truly highlight the worth of your data. You will also develop a strong group of advocates for your data.

Sharing reports that highlight key findings can be useful. Participants and volunteers, however have limited time and are often most interested in working with the raw data. Providing technical or data assistance webinars can help engage participants from a variety of skill-levels and ensure that everyone is analyzing your data correctly. Short videos or human-interest stories on how the data has already been used to make an impact can help motivate participants and further inform the creation of their products.

Lessons Learned

One of the greatest successes of the Civic Data Challenge was the opportunity to ensure civic health data reached new audiences across the country. We made our raw data available through the Civic Data Challenge, but also provided compiled findings for those interested, and technical documentation for how to engage with the data. We recruited advisors, some of whom consulted regularly on the data uses in our own research projects, to answer questions and support participants as needed.

Bridge the gap between users and developers

A common criticism of challenges, hackathons, and other crowdsourcing initiatives is that they create cool applications and tools that are not useful or interesting for their intended audience. The tools created may not adequately meet the needs of the user-audience or the user-audience may not have the resources required to adopt the tool. These issues need to be addressed early on. You can help bridge the gap between users and developers by facilitating connections and discussion.

Lessons Learned

The Civic Data Challenge attempted to match participants with interested community organizations through an interest survey. Other ideas for bridging the gap include spotlighting community issues through blog posts and webinars. You can also host in-person and online events where users and developers can interact with each other and brainstorm what types of products would be most responsive to community needs. In-person events could include informal mixers or un-conferences such as CityCamp (citycamp.govfresh.com). If resources are limited, partner with events that are already established. You can find key players in our Overview section. Online events could include Twitter chats and Google hangouts.

To be sustainable, a product needs to be adoptable and marketed.

Promote Sustainability

To be sustainable, a product needs to be adoptable and marketed.

Adoptable. As mentioned in the section above, the tools you create need to match with the resources and needs of the user-audience. Challenge participants and volunteers should be creating tools that are responsive to clearly identified needs or challenges. Facilitate connections between users and developers. Encourage participants to survey their target audience to gain a better understanding of the resources available to them. Doing this work from the outset is critical to ensure that products are used over time.

Marketed. No matter how well developed a product is, or how well it meets an important social need, if people do not know about it, they will never become users. Successful marketing can also draw the attention of investors who can help provide the funding necessary to maintain products.

Lessons Learned

We structured our second Civic Data Challenge to ensure end-user feedback was heard throughout. We started with an Ideation phase where participants submitted their concepts for what would be useful in their own community. We built an implementation phase of the Civic Data Challenge, so that participants had to work with community organizations to pilot and improve their tools according to user-community needs.

The teams that competed in the Civic Data Challenge included skilled designers, developers, coders, and data scientists. Notably absent from the group were communication and marketing experts. We sought to overcome this barrier by providing in-kind consulting services from app marketing experts as prizes to the most promising entries. We also shared free resources with participants, such as Social Good Guides – a collection of subject specific guides created for new startups (see page 23 of resources section). Our goal was to make sure that tools created were responsive to community needs and that participants were supported to ensure their tools reached those users.

HOW TO GET STARTED: *Key Players & Resources*

There are tremendous benefits to engaging in the civic tech space. It can create opportunities to use your data in new ways, generate dialogue, and spark action. The guiding principles outlined in this report can be helpful in planning, implementing and evaluating a wide range of initiatives.

Perhaps you see the value in this type of work, or even have an idea of the type of initiative you would like to develop. Regardless of your development stage, here are a few simple tips to get started:

1. Civic Tech Initiatives Toolkit: The toolkit which accompanies this landscape review provides those interested in engaging effectively in this space with the resources, materials, and planning questions needed to do so. The toolkit walks you through each section with questions to consider, lessons learned from the Civic Data Challenge, and materials and resources that can be modified for your purposes.

2. Key Players and Resources: The list below captures just some of the leading organizations, resources and events that support this type of work. To highlight just a few here:

- **Code for America (www.codeforamerica.org)**: Code for America builds open source technology and organizes a network of people dedicated to making government services simple, effective, and easy to use. Their programming includes the Brigade, which is city-centered network that engages participants through regular hack nights and events. They also have a Peer Network where local government innovators connect to share resources and best practices, and collaborate on common problems. Check out this map to find a Code for America chapter in your community.

Source: www.codeforamerica.org

- **DataKind™ (datakind.org):** DataKind™ was founded "in the hopes of creating a world in which every social organization has access to data capacity to better serve humanity."[18] DataKind™ helps social organizations gain access to highly trained data scientists, developers, and tech experts. Their programming includes:
  - DataCorps™, vetted data scientists, technologists, project managers, and designers who can engage with social organizations on a pro bono basis on specific projects.
  - DataDive™, a weekend event that teams selected social organizations that have a well-defined data problem with volunteer data scientists.

  Learn more and sign up to get involved here: **http://www.datakind.org/getinvolved/**

DataWeek

CODE for AMERICA

- **National Day of Civic Hacking (hackforchange.org)**: The National Day of Civic Hacking (NDoCH) is an annual event that brings together technologists, entrepreneurs, developers, and other engaged citizens to improve communities and the governments that serve them. The event is planned in coordination with the White House Office of Science and Technology Policy (OSTP) and sponsors. The NDoCH accepts proposals for events, challenges, and projects in which its network can participate. Sign up here: http://hackforchange.org/

- **CrisisCommons (crisiscommons.org)**: CrisisCommons is a global community of volunteers from technology, crisis response organizations, government agencies, and citizens. They build and use technology disaster response tools to improve resiliency and response before a crisis. CrisisCommons supports CrisisCamp. It is a global network of volunteers who use creative problem solving and open technologies to help people and communities in times and places of crisis. It began in March 2009 during the Haiti response. It now has a global network, which can be found at CrisisCamp Directory.

For others, check out the below website list or research what similar efforts might already exist in your community. The presence of data volunteers, hackathons, 'innovation hubs,' and other civic tech resources is growing — you might discover that an infrastructure for this work already exists in your community.

3. Connect With Others in Your Community: While connecting to existing resources is a great start, you don't have to work formally with a 'tech for good' or 'data for good' organization. As highlighted above, you may find that a local company or university provides the talent pool and resources you need to get started. Other ideas for great civic resources in your community might include:

- Community foundations
- Chambers of commerce
- Local economic development institutions or agencies
- Local government offices on civic innovation
- Community colleges

Additional resources and suggestions are included on the next page.

Networks & Events

Caravan Studios (caravanstudios.org)
Caravan Studios builds apps that help communities organize, access, and apply local resources to their most pressing problems.[19] They use an open, collaborative, and community-centered process to create products that meet clearly identified community needs. Their process includes 5 steps:

1. Generate - community convening surfaces pain points and ideas
2. Select - the community selects the best solution
3. Design - create prototypes and solicit community feedback
4. Build - develop a technology tool
5. Use - community use drives adoption and surfaces improvements[20]

CityCamp (citycamp.com)
CityCamp is a particpant-driven gathering focused on innovation and collaboration for municipal governments, community organizations, and citizens. CityCamps aim to bring together local government officials, municipal employees, experts, developers, designers, citizens, and journalists to share perspectives and insights about their cities. Their goal is to create outcomes that participants will act upon. CityCamp's website provides a playbook for creating your own CityCamp. This can also be used as a blueprint for creating similar outcome focused events.

Code for America (codeforamerica.org)
Code for America builds open source technology and organizes a network of people dedicated to making government services simple, effective, and easy to use. Their programing includes the Brigade, which is a city-centered network that engages participants through regular hack nights and events. They also have a Peer Network where local government innovators connect to share resources and best practices, and collaborate on common problems. They are a wealth of knowledge on open government initiatives.

DataKind™ (datakind.org)
DataKind™ was founded "in the hopes of creating a world in which every social organization has access to data capacity to better serve humanity.[18]" Datakind™ helps social organizations gain access to highly trained data scientists, developers, and tech experts. Their programing includes:

- DataCorps™, vetted data scientists, technologists, project managers, and designers who can engage with social organizations on a pro bono basis on specific projects.
- DataDive™, a weekend event that teams selected social organizations that have a well-defined data problem with volunteer data scientists.

DataWeek (dataweek.com)
DataWeek is an annual conference that brings together engineers, data experts, and executives to discuss the role of data and innovation in business, technology, and society. While DataWeek's audience is heavily technical- and skills-oriented, the organization is an advocate for initiatives similar to the Civic Data Challenge. Its participants seek to use their technical skills for social good.

GovFresh (govfresh.com)
GovFresh features public servant innovators, civic entrepreneurs, and the ideas and technology changing the way government works.[21]

Kaggle (kaggle.com)
Kaggle provides access to a large community of data scientists and, for a fee, will assist organizations interested in hosting a competition.

Meetup (meetup.com)
Meetup is a website that facilitates the gathering of neighbors to learn something, do something, or share something. We used this tool to learn of local groups that may be interested in participating in a data challenge. Groups included data, tech, and design experts looking for opportunities to learn new skills and volunteer their services.

National Day of Civic Hacking (hackforchange.org)
The National Day of Civic Hacking (NDoCH) is an annual event that takes place in over 83 cities across the nation.[22] The event brings together technologists, entrepreneurs, developers, and other engaged citizens to improve communities and the governments that serve them. The event is planned in coordination with the White House Office of Science and Technology Policy (OSTP) and sponsors. The NDoCH accepts proposals for events, challenges, and projects in which its network can participate.

Random Hacks of Kindness (rhok.org)
Random Hacks of Kindness (RHoK): a community of developers, geeks, and tech-savvy do-gooders around the world, working to develop software solutions that respond to the challenges facing humanity today.

Visualizing.org (visualizing.org)
Visualizing is a community of creative people making sense of complex issues through data and design.[23] The organization provides a platform for designers to showcase their work, and for organizations to host and publicize their data. Visualizing also hosts challenges for community members to create visualizations on different data sets and issues.

Visual.ly (visual.ly)
Visual.ly is a key player in the design sector. They work to connect organizations with designers, journalists, animators, and developers on specific projects for a fee.

Platforms & Tools

Github (github.com)
Github is an online repository of open-source code. Github users can subscribe or create free accounts to post and manage source code for apps, websites, and data tools.

Google Hangout
Google Hangout is a great, free tool for bringing together groups of 2 to 10 people in an online, video chat. You can also broadcast your Google Hangout by making it "on air" **(learn more here: https://www.google.com/+/learnmore/hangouts/onair.html)**. This can provide a substitute for on-ground events, particularly if your audience spans the nation.

Hootsuite (hootsuite.com)
Hootsuite is a subscription-based service that allows organizations and businesses to manage their social media across multiple platforms.

IdeaScale (ideascale.com)
IdeaScale is a "comprehensive innovation software that helps organizations identify great new ideas and bring them to life." The Civic Data Challenge used IdeaScale to help generate a public brainstorm during our Ideation phase.

Storify (storify.com)
Storify is an online platform that allows users to pull content and media from multiple sources to create a web "story" that can be easily shared. One of NCoC's partners created a storify of the Civic Data Challenge: **(storify.com/caravanstudios/civic-data-challenge-2013).**

ThunderClap (thunderclap.it)
Thunderclap is a "crowdspeaking platform," a social media amplifier that allows organizations to tap into their supporters' social networks to create a massive online campaign for an event or cause.

Additional Resources

Civic Apps Competition Handbook
Created by Kate Eyler-Werve and Virginia Carlson This guidebook provides a broad review of how to plan, organize, and trouble shoot apps competitions.

Civic Data Challenge (civicdatachallenge.org)
The Civic Data Challenge website links to a number of reports, resources, partners, and events that may be useful for your civic tech initiative.

Civic Hackathon Challenge Design Principles: Making Data Relevant and Useful for Individuals and Communities.
Created by the National Day of Civic Hacking, this document provides participants with a guideline for getting involved with communities and their data, and tips for how to make their data products meaningful.

Knight Foundation
The Emergence of Civic tech: investments in a Growing Field. **(slideshare.net/knightfoundation/knight-civictech)** and "Why Contests Improve Philanthropy. Six Lessons on Designing Public prizes for Impact". **(knightfoundation.org/media/uploads/publication_pdfs/KF-Contests-Report-lores.pdf)**

Let's Get Digital! 50 Tools for Online Public Engagement
A list of tools for online engagement that can be used to complement in-person events. **(communitymatters.org/blog/let%E2%80%99s-get-digital-50-tools-online-public-engagement)**

Points of Light (POL)
POL offers several resources on how to effectively manage skills-based volunteers across a variety of sectors and issues. **(pointsoflight.org/corporate-institute/resources/skills-based-volunteering)**

Social Good Guides (socialgoodguides.com)
Authored by industry experts, the Social Good Guides are a collection of subject specific guides created for startup changemakers. Guide topics include: legal primer, branding and identity, business plans, and marketing. These are especially useful for challenge participants who want to turn their entry into a startup.

Pro Bono Support

Catchafire (catchafire.org)
Catchafire is a skills-based volunteer-matching service designed to help nonprofits build capacity. Organizations can create a profile and determine their greatest strategic and operational needs like website design, volunteer management, and marketing strategy. Catchafire will then match nonprofits with volunteers willing to contribute their skills and time to a specific project.

Npower (npower.org)
Npower mobilizes the tech community and provides individuals, nonprofits, and schools opportunities to build tech skills and achieve their potential.[24] The organization connects technology professionals to higher ed institutions' and nonprofits through its Community Corps. They also provide technology training and education for underserved populations and veterans through their technology service corps.

Taproot Foundation (taprootfoundation.org)
Taproot's mission is to drives social change by leading, mobilizing, and engaging professionals in pro bono service.[25] The nonprofit organization makes business talent available to nonprofits by matching organizations with talented professionals and businesses that can provide the marketing, design, technology, management or strategic planning skills they need.

Funders

Innovation Endeavors (innovationendeavors.com)
Innovation Endeavors combines a venture fund with a unique approach to venture-creation in order to partner with entrepreneurs to build lasting technology companies. They work closely in support of the National Day of Civic Hacking.

John S. and James L. Knight Foundation (knightfoundation.org)
Knight Foundation supports transformational ideas that promote quality journalism, advance media innovation, engage communities and foster the arts.[26] In the past, they have been involved in different crowdsourcing tech initiatives. They have compiled their lessons learned, including an overview of investment trends, in a civic tech landscape review **(knightfoundation.org/features/civictech)**. Their current programming includes the Knight Prototype Fund, a program designed to give people with high-quality concepts for media and information projects grants of $35,000 and six months to take their idea to the demo stage along with a class of others facing a similar challenge.[27]

Sunlight Foundation (sunlightfoundation.com/about)
The Sunlight Foundation is a nonpartisan nonprofit that advocates for open government globally and uses technology to make government more accountable to all. To accomplish this mission, they create tools, open data, policy recommendations, journalism, and grant opportunities to expand access to vital government information and make public officials more accountable.

Government Resources

Challenge.gov
Challenge.gov is a technical platform and list of challenge and prize competitions, all of which are run by more than 69 agencies across federal government. These include technical, scientific, ideation, and creative competitions where the US government seeks innovative solutions from the public, bringing the best ideas and talent together to solve mission-centric problems.

White House Office of Science and Technology Policy: (whitehouse.gov/administration/eop/ostp)
The mission of the Office of Science and Technology Policy is threefold; first, to provide the President and his senior staff with accurate, relevant, and timely scientific and technical advice on all matters of consequence; second, to ensure that the policies of the Executive Branch are informed by sound science; and third, to ensure that the scientific and technical work of the Executive Branch is properly coordinated so as to provide the greatest benefit to society.

CONCLUSION

The growing civic tech movement reflects a changing world. Data users and stakeholders require more information that is readily at their fingertips. In order to keep up with this growing demand, organizations have a unique opportunity to tap into of resources, networks, and skill sets that allow them to evolve alongside their constituents. Civic tech initiatives provide a wealth of opportunities for nonprofits to generate new partnerships, resources, and brand awareness. Most importantly, they allow organizations to fully realize their mission by exploring new ways in which data can shape dialogue and action.

These initiatives can range from engaging a small group of volunteers to hosting a major national competition. There are entry points for every organization into this type of work, regardless of capacity, location, or funding. With even a small investment of time and resources, organizations can break through traditional (and potentially stalled) ways of using data to reach new audiences, spark new conversations, and create new action.

Accompanying this Landscape Review is a Toolkit which provides additional questions for consideration, resources, planning materials, and lessons learned for organizations wanting to build their own civic tech initiatives.

ENDNOTES

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NCoC

National Conference on Citizenship

Connecting People. Strengthening Our Country.