



# How to Engage Your Community with Health Data

## Hosting a 500 Cities Event

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*May 2017*

**This guide encourages community stakeholders to organize events around the 500 Cities data—27 indicators of adult health status, unhealthy behaviors, and prevention available at the census-tract level for 500 of America’s largest cities (Scally, Pettit, and Arena 2017). Building on the success of a national convening sponsored by the Robert Wood Johnson Foundation (RWJF) in December 2016, the suggestions here focus on engaging diverse audiences, learning about the data, and generating ideas on how to use the data to advance health.**

The following sections provide a brief introduction to the data and present primary considerations for organizing an event:

- Section 1: An overview of the 500 Cities data, describing the indicators on chronic disease, unhealthy behaviors, and preventive care; the estimation methods; and appropriate data uses
- Section 2: Details on planning an event, including considerations about goals, format, and speakers and participants to include in the activities
- Section 3: Additional resources available for local events and initiatives around the 500 Cities health data, including complementary health datasets and other small-area data on such topics as demographics, housing, employment, neighborhood assets, and environment

# Section 1. What You Need to Know about 500 Cities Data

The 500 Cities data are the first data that provide indicators of adult chronic disease, unhealthy behaviors, and preventive care at the census-tract level for a large portion of the United States. The Centers for Disease Control and Prevention (CDC) produced the 500 Cities data in consultation with RWJF and the CDC Foundation. The goals of the project were to

- provide high-quality estimates on risk factors that influence health status and health outcomes and use of preventive health services,
- enable identification of emerging health problems, and
- inform the development and implementation of effective and targeted health interventions in America's cities.

## How the Data Can Help You Plan, Target, and Act

The 500 Cities indicators provide cities useful estimates on key areas of health concerns that city leaders and partners can use to pinpoint geographic inequities; understand associations with other social, demographic, economic, and environmental issues; and prioritize local action and investments to improve health. Whether the need is to raise funds to address specific health problems, target planned investments to address health, or examine and modify programs to better align with needs, 500 Cities data can make it easier. Box 1 shares one example from a local YMCA that took early advantage of the new data to inform its programs. Here are four other possible scenarios that highlight how health-related partners tackling an array of issues in their cities and neighborhoods can use 500 Cities data.

- A diabetes coalition would like to find out where they should focus their outreach for healthy-eating classes. It could use the 500 Cities online mapping tool to examine the prevalence of diabetes among adults across its city's neighborhoods and identify where it would be most likely to reach diabetics. The coalition could refine its focus further by looking at areas with low rates of health insurance coverage from the American Community Survey.
- A smoking cessation organization is seeking a grant to expand its program to three new neighborhoods in its city. The funder requires the organization to justify its priority neighborhoods using available evidence. The organization could produce a table or a map using the 500 Cities online tools to show the relative prevalence of current smoking among adults across neighborhoods. It could then select the three neighborhoods with the highest estimated prevalence.
- A city government has limited resources to invest in new sidewalks. They want to target neighborhoods with low vehicle ownership, where walking is more likely, and a higher prevalence of poor adult physical health. The city could download the 500 Cities census-tract level indicators on the prevalence of adult obesity, no leisure-time physical activity, and physical health not good over the past 14 days. By then merging these data with American

Community Survey data on household vehicle availability at the census-tract level, it could identify neighborhoods with a concentration of these conditions to prioritize for sidewalk investments.

- A hospital is completing its community health needs assessment and wants to understand the health needs of the surrounding six census tracts that make up its primary service area. It would also like to understand how these data relate to the documented needs of the patients that it has in the neighborhood. Doctors can download all the 500 Cities data for their six census tracts, including unhealthy behaviors estimates for which they do not have robust patient data, and merge it with their patient data to assess where more screening may be needed for undertreated health concerns and where to focus outreach for preventive services.

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## BOX 1

### Putting the 500 Cities Data to Use: Old Colony YMCA, Brockton, Massachusetts

The Old Colony YMCA in Brockton, Massachusetts, has used the 500 Cities data to more accurately understand health outcomes on a neighborhood level. It found that a single neighborhood with a high prevalence of poor health outcomes actually had low rates of unhealthy behavior. Rather than investing in changing behaviors that seemed to be healthy already, leaders partnered locally to address other social determinants of health, including inadequate fresh food options and lack of jobs. They also found that another neighborhood with particularly high rates of adult diabetes also had a high rate of uninsured adults. As part of a coalition of 40 local organizations, the Old Colony YMCA is using the data to target its place-based programming and outreach activities during the Brockton Knocks Down Diabetes event held each June.

**Source:** Oktawia Wojcik, "The 500 Cities Project: New Data for Better Health," *Culture of Health* (blog), Robert Wood Johnson Foundation, February 23, 2017, [http://www.rwjf.org/en/culture-of-health/2017/02/the\\_500\\_cities\\_proje.html](http://www.rwjf.org/en/culture-of-health/2017/02/the_500_cities_proje.html).

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## Data Overview

To help address these and other scenarios, the 500 Cities data provide estimates for every census tract in each of the 500 largest US cities—at least one in every state. Each census tract is a small, relatively stable statistical geographic area with a population between 1,200 to 8,000 people and an optimum size of 4,000 people. Because census tracts are often used as proxies for neighborhoods, the remainder of the guide will refer to these small, subcity areas as neighborhood data. Estimates for census tracts with populations with fewer than 50 people were suppressed.

The cities covered in the data were selected based on 2010 Census population counts and cover about one-third of the 2010 national population of 300 million. These include cities, towns, villages, boroughs, and incorporated places that are within a state but may cross county boundaries. Because Hawaii has no incorporated places, the City and County of Honolulu were used. Finally, to ensure that all states had at least one city represented, the most populous city from Vermont, West Virginia, and

Wyoming were also included in the 500. City populations ranged from 42,417 (Burlington, Vermont) to 8,175,133 (New York City).

Within the 500 Cities data are estimates for 27 indicators of adult chronic disease related to unhealthy behaviors (5), health outcomes (13), and use of preventive services (9) (table 1). The measures and definitions are based on the Chronic Disease Indicators maintained and updated by the CDC. They are selected based on public health priorities to address the leading causes of morbidity and mortality, as well as national recommendations on critical preventive services.

**TABLE 1**  
**500 Cities Indicators by Category**

Unhealthy behavior	Health outcomes	Prevention measures
■ Binge drinking	■ Arthritis	■ Lack of health insurance
■ Smoking	■ Asthma	■ Routine checkup
■ No leisure-time physical activity	■ High blood pressure	■ Dental visit
■ Obesity	■ Cancer	■ High blood pressure medication
■ Sleeping less than 7 hours	■ High cholesterol	■ Cholesterol screening
	■ Chronic kidney disease	■ Mammography use (women)
	■ Chronic obstructive pulmonary disease	■ Papanicolaou smear (women)
	■ Coronary heart disease	■ Fecal occult blood test, sigmoidoscopy, or colonoscopy
	■ Diabetes	■ Core prevention services: <i>Men:</i> flu shot, PPV shot, colorectal cancer screening; <i>Women:</i> same as men, plus mammogram)
	■ Mental health not good	
	■ Physical health not good	
	■ All teeth lost	
	■ Stroke	

**Notes:** PPV = pneumococcal polysaccharides vaccine. For full definitions of the indicators, see “Measure Definitions,” 500 Cities, Centers for Disease Control and Prevention, last modified December 12, 2016, <https://www.cdc.gov/500cities/measure-definitions.htm>.

Estimates for each census tract were developed from the Behavioral Risk Factor Surveillance System data from 2013 and 2014, a state-level telephone survey that collects behavioral health data from adults ages 18 and older. These data were then used to predict the expected risk of health behaviors or conditions for 208 demographic groups (defined by age, gender, and race and ethnicity) using data from the US Census Bureau’s American Community Survey. These estimates were further adjusted by geographic location, such as state, county, and neighborhood. Centers for Disease Control analysts confirmed the strong internal consistency between modeled estimates and the survey-based county estimates. Other tests of the data showed consistency with state and local estimates from external data sources, specifically Missouri County-level, American Community Survey, and Centers for Medicare and Medicaid Services Medicare claims data.

## Data Strengths and Limitations

By using the modeling methodology, the small-area estimates provide new flexibility in viewing health data across multiple geographic scales. For example, cities can see health data according to their own boundaries now, rather than being limited to larger counties within which they may be located. Neighborhoods can finally see disaggregated data to identify disparities. Health stakeholders can view data across various geographies to mirror their service areas, whether it is multiple neighborhoods in a single city to multiple cities across several states. The method generates estimates for areas with small or no sample in the underlying survey data because of the model's ability to use other population characteristics to predict the health estimates. Thus, users can compare standardized indicators across cities and neighborhoods.

There are limitations to the estimates to consider before using the data. Most importantly, the data represent modeled estimates of expected prevalence and are not based on actual surveys or administrative data. This creates several complications. The estimates will have low reported margins of error because the model fits the underlying data well overall, but this does not necessarily mean the values are accurate for any specific neighborhood. For example, based on its specification, the model may underestimate neighborhoods with high prevalence and overestimate neighborhoods with low prevalence. Finally, modeled estimates cannot detect change over time or effects of local interventions, and therefore cannot be used for evaluating program or policy outcomes. The CDC is validating the 500 Cities data estimates in several cities by comparing them with census-tract level indicators based on unique local administrative or survey data. The results will be available on the 500 Cities website and should shed more light on any cautions in interpretation.

The 500 Cities indicators also do not cover all aspects of community health or disparities. The underlying survey data only include adults ages 18 and older, so there are no indicators of child health. The data exclude other important health indicators, such as mortality and life expectancy rates. Because of sample sizes, the data do not offer estimates by race and ethnicity and may mask important differences in health conditions among racial groups.

There are several approaches to address data limitations. Tapping into local knowledge is essential to making sense of the estimates. For example, knowing if there are institutions within the census tract that may affect estimates, such as prisons, nursing homes, and student dormitories, can reveal whether a particular subpopulation within a neighborhood might be driving estimates. By examining other sources of neighborhood-level data (section 3), one can verify the patterns shown in the 500 Cities data. If there is conflicting information, exploring local realities can shed light on why the actual conditions differ from the modeled estimates. Diving into additional data sources, such as local vital statistics, can fill in gaps on child health or other health indicators. Other local administrative data or data on program participants can also be used to monitor change or evaluate specific interventions.

## Section 2. Planning an Event

Many types of organizations, such as public health departments, applied university centers, health coalitions, United Ways, or community-based organizations, could organize successful local 500 Cities events. Hosting an event can bring diverse stakeholders together to develop a shared agenda, language, and data literacy around improving health and to advance actions to do so. People who may have never been in the same room can look at the same data, come to a shared understanding of the issues their residents face, and generate new ideas for advancing community health. The local event could highlight the uses for the 500 Cities neighborhood health data identified at the national event, including crafting stories for advocacy purposes, fostering cross-sector collaborations to address health disparities, identifying and developing plans to address health needs, prioritizing actions and allocating resources, and anticipating impacts of proposed local activities on health.

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### BOX 2

#### 500 Cities Resources for Your Event

- List of 500 cities, by state and population: <https://www.cdc.gov/500cities/pdf/500-Cities-Listed-by-State.pdf>
- Data portal: <https://chronicdata.cdc.gov/health-area/500-cities>
- Map and reports: <https://www.cdc.gov/500Cities/>
- Communication toolkit, including project fact sheet: <http://500cities.nptoolkit.org/>
- National conference proceedings: <http://www.urban.org/research/publication/500-cities-project>
- National conference plenary videos: <https://www.youtube.com/playlist?list=PLqF-bKPCi6CqL0aT631F48QYcdFOE6edF>
- National conference presentations: <http://www.cdcfoundation.org/500-cities-project-meetings>

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The 500 Cities project provides several resources online that could be useful in planning and hosting an event (box 2). In addition, boxes 3 through 6 provide concrete examples of how some groups have structured different types of events to advance health data at the national and local levels. Box 3 describes the national event that inspired this guide. Boxes 4 through 6 stimulate ideas about goals, format, and content, with examples of three data-centered community events that were hosted by local members of the National Neighborhood Indicators Partnership. Coordinated by the Urban Institute, the partnership consists of independent organizations in more than 30 cities with a shared mission to help

community stakeholders use neighborhood data for better decisionmaking, with a focus on assisting organizations and residents in underserved communities.

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### BOX 3

#### Hosting a National Event: The 500 Cities Conference, Dallas, Texas

The 500 Cities conference, sponsored by the Robert Wood Johnson Foundation in December 2016 sought to introduce the 500 Cities data to various potential users, as well as to foster cross-sector collaboration. To achieve this, the conference brought together public health professionals, community development and housing nonprofit organizations, data users, and others working across the spectrum of social determinants of health. To open the conference, two plenary speakers discussed the value of neighborhood health data from the perspective of the public health, followed by a presentation by the Centers for Disease Control and Prevention introducing the 500 Cities data and methods. Two panels, one featuring national health-related organizations and one highlighting local nontraditional partnerships around health, presented examples of using health data to target neighborhoods needing resources and support. Finally, a series of roundtable discussions gave participants the opportunity to respond to what they learned at the conference and discuss the new 500 Cities data and specific topics around health data and partnerships.

**Source:** Corianne Payton Scally, Kathy L.S. Pettit, and Olivia Arena, *500 Cities Project: Local Data for Better Health* (Washington, DC, Urban Institute, 2017).

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## Determining Goals and Meeting Format

Communities will have distinct reasons for bringing together stakeholders to learn about the data. Knowing the event's purpose, geographic scope, participant selection and familiarity, and time and resources will help organizers plan event details. It is important to ask the following questions.

- **What is the purpose of your event?** Is it to build trust, develop partnerships, facilitate dialogue, share information, build data literacy and skills, motivate action, develop a plan, or some other purpose? Do you want to focus on particular health indicators or have people understand the impact of the social determinants of health? What action or change in health-related behaviors, policies, or practices is desired as an event outcome? Do you want reach a broader audience with a particular message by inviting media coverage of the event? Some of these purposes can be easily achieved or combined in a single event, and others may be better addressed individually. The purpose will inform the remaining questions related to participants, format, and logistics. It will also effect what next steps participants are asked to take after the event is over.
- **What is the geographic scope of your event?** Are organizers focused on a single neighborhood, a set of neighborhoods, an entire city, multiple cities within a single state, or multiple cities across states? It may be useful to have multiple events addressing these different geographic

regions. Organizers will also want to choose an event location that is accessible to stakeholders throughout the selected region.

- **Who should participate?** Participants should be invited based on the event's purpose and should reflect the geographic scope. Inviting a broad cross section of participants, including both traditional and nontraditional health partners, can inspire innovative ideas and partnerships. Members of the focus neighborhoods and cities should be included as a critical resource, as these discussions directly affect their health and well-being. Understanding how well participants know each other in advance will also highlight whether time is needed for icebreakers and other open networking opportunities during the event. Knowing the audience will also inform the appropriate day and time for the event.
- **What is the level of participant knowledge of health or the geographies represented?** Is there a need to provide basic information around the value of health data or the neighborhoods and cities being discussed? Or is there already a shared understanding of the importance of health for neighborhood and city vitality? This would influence how the event begins and whether information-sharing presentations or discussions are needed to orient participants before diving deeper into the data and other event purposes.
- **How long should the event be?** Based on the purpose, targeted participants, and resources available to plan and implement the event, organizers will need a sense of what can be accomplished in a two-hour event versus an all-day convening.

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#### BOX 4

##### Hosting a Local Workshop: New Data for Better Neighborhood Health, Milwaukee, Wisconsin

In March 2017, the Milwaukee-based organization Data You Can Use held a convening focused on utilizing local health data with two dozen community organizers, residents, city health department staff, local United Way representatives, and health care practitioners. Katie Pritchard, from Data You Can Use, explained that the two-hour interactive session highlighted 500 Cities data as an example of an interactive health data tool that can produce maps for the local level. Facilitators provided hard copies of the 500 Cities variables list and an overview of the scope and limitations of the data. Using the interactive mapping component of 500 Cities, the training showed maps with rates of binge drinking, no leisure-time physical activity, and physical activity for Milwaukee tracts. Because the workshop was held in a university computer lab, participants could access the dataset and explore the neighborhood variation in different indicators during the event. As potential next steps, the event organizers want to engage neighborhood residents in interpreting the maps of a few of the 500 Cities indicators and discuss potential responses. They also want to examine the data alongside other neighborhood indicators from local and national sources.

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Once the above questions have good answers, organizers can select the format for the event to meet their goals. Events that can create a mix of content, with some time to discuss the data and some

time to discuss issues and programs, will help the 500 Cities data be a launching pad for a conversation about community needs and possible action.

- **Presentations and panels** enable speakers to convey information or examples of using data for community improvement. Topics could include the value of neighborhood health data; social determinants of health, such as housing, income, education, and environmental factors; an introduction to 500 Cities data; local data analysis; information on data sources around a particular health issue or target population; and successful data-driven partnerships to address a particular health issue.
- **Roundtable discussions** are facilitated small groups to focus on a topic. They are good for generating, exchanging, and debating ideas; sharing examples; identifying activities ripe for collaboration; and asking and answering specific questions.
- **Skill-building workshops** are events to build participants' capacity to use neighborhood data for action, covering topics such as how to visualize data with interactive websites, like Community Commons, or with tools like Excel or Tableau; how to conduct a health impact assessment; or how to use data to engage and mobilize the community. If the workshops will be hands-on, organizers should provide laptops or host in a computer lab.
- **Data and technology fairs** allow participants to visit several staffed stations to learn about or try out technology tools and websites, including American Community Survey data using American FactFinder, OnTheMap with employment data, and the 500 Cities interactive maps and data-download tool, discussed in section 3. This could also be a poster session talking about successful projects that used data or resource organizations that provided data or technical assistance.

Materials are available to share during the event, many of which are listed in box 2 above. From the 500 Cities conference materials, this includes videos of keynote speakers and slide presentations for the keynote speakers, national and local panels, and the CDC presentation on the data. The conference proceedings provide a summary of topics and ideas discussed throughout the day (Scally, Pettit, and Arena 2017). Through its Communications Toolkit, RWJF provides resources that can be adapted to publicize your event, including a fact sheet, key messages, social media language, and press materials. Towe and colleagues (2016) highlight cross-section collaborations around health, in a summary article sponsored by the Robert Wood Johnson Foundation. The foundation also has videos available highlighting winners of its Culture of Health Prize.<sup>1</sup> Organizations can also develop materials tailored for their community, such as a list of local data and action resources or short descriptions of action coalitions.

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## BOX 5

### Hosting a Regional Conference: Housing + Health Summit, Austin, Texas

Hosted by HousingWorks Austin, Children’s Optimal Health, and the Federal Reserve Bank of Dallas in November 2016, the Housing + Health Summit: Building Blocks of Equity and Opportunity is an example of a cross-sector event focused on improving community health. The 320 participants came from housing, education, social services, banking, health care, public health, and philanthropy. In the one-day event, speakers discussed the importance of affordable housing, addressing social determinants of health and how health industry investment in housing realizes health cost savings. Organizers selected a mix of keynotes, panels, and small-group breakouts to keep the participants engaged and encouraged them to network across sectors. The 500 Cities data were not available at this time, but Children’s Optimal Health illustrated variations across neighborhoods through maps of childhood asthma, child obesity, economic segregation, ethnic distribution, and chronic school absenteeism. HousingWorks provided county-level analysis of health and housing conditions in Central Texas.

**Source:** Awais Azhar, “Pathways to Health Housing in Austin, Texas,” Building Health Places Network, February 16, 2017, <http://www.buildhealthyplaces.org/whats-new/pathways-healthy-housing-austin-texas/>; “Housing + Health Summit: Building Blocks of Equity and Opportunity,” HousingWorks Austin, accessed April 17, 2017, <http://housingworksaustin.org/summit/>.

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## Identifying Partners and Speakers

Having multiple voices within cities and beyond will bring energy and expertise to an event bringing people together around data for health. Having diverse stakeholders involved as organizers, speakers, and participants encourages knowledge sharing, new ideas and partnerships, and broad and equitable representation in important conversations around neighborhood health and well-being. The following summarizes types of agencies and organizations that could be engaged, from local government to community partners to organizations traditionally less involved with local health needs but that still have a stake in addressing them.

- Government representatives
  - » Mayor or city manager
  - » City council
  - » Public health department (city, county, or state)
  - » City agencies (e.g., public safety, housing, environmental agencies)
  - » Public housing authority
  - » School district
  - » Regional councils of governments or planning agencies
- Community partners and advocates
  - » University partners in public health, urban planning, public policy, sociology, and other fields focusing on identifying and addressing health disparities and inequities
  - » Health care providers (e.g., hospitals and federally qualified health centers)

- » Housing and community development organizations (e.g., nonprofit community development corporations)
  - » Community service providers (e.g., YMCAs and local food banks)
  - » Community funders (e.g., local United Way or foundation staff)
  - » Advocacy groups around local issues (e.g., housing, education, violence prevention, and aging, and health issues such as smoking cessation, alcohol and substance abuse, food and nutrition, or diabetes management)
  - » Neighborhood associations and other resident-led groups
- Other partners
    - » Health insurance companies and Medicaid managed care organizations
    - » Major employers
    - » Religious communities and organizations
    - » Federal Reserve Bank community development offices
    - » US Census Bureau data dissemination specialists
    - » National associations of health care providers, public health officials, public redevelopment officials, community service providers, and the like

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## BOX 6

### **Building Citywide Data Literacy and Skills: Data Day, Baltimore, Maryland**

Annually, the Baltimore Neighborhood Indicators Alliance Jacob France Institute celebrates Data Day, a workshop to help communities expand their capacity to use technology and data to advance their goals. In 2016, the daylong convening centered on “Democratizing Access to Data for Neighborhoods.” The program featured a poster session on data and action resources and then a plenary panel on datasets on the city’s open data portal. At breakout sessions, participants explored local data as a means of engaging communities and supporting cross-sector initiatives and discussed the role local data can play in addressing such issues as safety, housing, arts and culture, economic development, and civic technology. Participants also engaged in skill-building workshops around finding resources in the library, researching for grants, and using American FactFinder.

Source: “Baltimore Data Day 2016 Agenda,” Baltimore Neighborhood Indicators Alliance,” accessed April 17, 2017, [http://bniajfi.org/data\\_day/2016agenda](http://bniajfi.org/data_day/2016agenda).

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## **After the Event**

Event organizers should help participants think through concrete next steps based on the purpose and desired outcomes. Dedicating some time during the event toward the end of the meeting for small-group discussion on what participants want to do next can facilitate follow-up activities. Next steps may already be identified if the event is part of a structured planning process with delineated steps and required outcomes, such as when a hospital conducts a community health needs assessment as a regulatory requirement. If it is not that straightforward, participants could brainstorm next steps based

on what they see in the data or new skills they have developed. Organizers can also collect ideas from a board where participants can post index cards with ideas or from questions on the meeting evaluation. Based on feedback, ideas for smaller working groups may emerge or for follow-up events centered on different activities than the first one.

To maintain momentum, the conversation started at the event should continue, and materials should be circulated to a broader audience. Event participants should be encouraged to share what they have learned about the data and their community or city with their colleagues and neighbors to inspire further discussion. At a minimum, any slides and handouts distributed at the event should be posted online, along with any videos made of the presentations. Posting and circulating event proceedings will encourage further dialogue and feedback. If media are invited, articles in the newspaper or spots on local radio and television can help share the lessons from the gathering. More informally, organizers can recruit participants with different perspectives to blog about the event.

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#### BOX 7

##### Other Partners as Resources

Other nonlocal partners may have resources available for your event, including speakers to provide presentations, workshops, or trainings. Two examples include the Census Bureau and the Federal Reserve.

- The Data Dissemination Branch of the Census Bureau is an outreach and training resource whose mission is to make Census statistics more accessible, useful, interesting, and relevant. Data dissemination specialists are available to provide free presentations, workshops, consultations, or trainings in person or via webinar. To identify the data dissemination specialist serving your area, contact 1-844-ASK-DATA or [census.askdata@census.gov](mailto:census.askdata@census.gov).
- Federal Reserve Community Development resources include regionally relevant data and events. Peruse their resources at <https://www.fedcommunities.org/>, and find your regional bank at <https://www.federalreserve.gov/consumerscommunities/comm-dev-system-map.htm>.

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## Section 3. Other Data and Action Resources

A key component of any workshop is educating participants about the 500 Cities data on health as well as other small-area datasets that provide important health context, including social determinants such as income, employment, housing, education, and nutrition. To help train participants on how to access and interpret data, the 500 Cities data are available to map and download on an interactive website released by the CDC. Additional nationally available data can also be highlighted during the workshop, as applicable. Finally, state and local partners, such as government agencies on health, housing, public safety, and education, can also provide neighborhood-level data helpful for creating a more comprehensive picture of neighborhood needs and resources that affect health.

## 500 Cities Online Data Tools

The 500 Cities Project website ([www.cdc.gov/500Cities](http://www.cdc.gov/500Cities)) provides a brief overview of the project and some helpful shortcuts for users looking for basic data and maps for each indicator across one or all cities of interest. From this site, users can view and download static map books of the indicators for each city, view data on an interactive map, generate reports comparing cities across indicators, and download the data. Users can also view a webinar on the methodology and follow links to CDC programs and interventions related to the health indicators included in the project.

The following summarizes the primary tools provided on the website that users can access for quickly displaying the data.

- **Map the data:** This tool allows users to quickly map neighborhood data across a single city, or city-level indicator values across a single state or all 500 cities by clicking on the map of the United States or selecting “View the Measure by Data.” The map is color coded according to the severity of the health indicator selected. By default, the color coding shows the data across seven value ranges, but this can be customized. Data values are displayed when users hover over a point or area on the map, or users can view the data table underlying the active map. At the time of writing, users cannot print the map or data displayed from this tool.
- **Compare city data:** For those interested in city-level data, the “Compare Cities Report” allows users to select a reference city and up to two additional cities to compare across all indicators. The indicators for each city are listed in a table next to national values for the United States.
- **View and filter data:** In the “500 Cities Data Portal,” data can be viewed and downloaded based on preexisting filters (noted by the blue icons). They are structured as a single observation per census tract per year for each indicator and are currently available for 2013 and 2014, with 2015 estimates scheduled for release in 2017. Advanced users can also use the interface to customize the filters within a city or neighborhood by year and indicator. Filtered data can be visualized using preset chart options or exported and saved for use within other applications.
- **Download maps for all measures by city:** Users can access a map book in PDF format for a single city containing static maps of all census tracts for each indicator using the current estimate. Users can open, save, or print this map book by selecting “Download Map for All Measures by City.”

## Other Health Data Sources

Several other national health indicator projects provided valuable information complementary to 500 Cities data. Many contain a greater number of indicators (table 2), but none provide them at a small-area geography like the 500 Cities data.

TABLE 2

## Comparing 500 Cities Data with Other Complementary Health Data Platforms

Dataset	Geographic level	Years available	Indicators	Frequency of release	Website
500 Cities	Census tracts and cities for 500 largest US cities	2013–14	27 indicators on unhealthy behaviors, health outcomes, and prevention	To be determined	<a href="https://www.dc.gov/500cities/index.htm">https://www.dc.gov/500cities/index.htm</a>
County Health Rankings	County	2010–present	Indicators of health outcomes for length of life and quality of life and health factors for behaviors, clinical care, social and economic factors, and physical environment	Annually	<a href="http://www.countyhealthrankings.org/">http://www.countyhealthrankings.org/</a>
America's Health Rankings	State	1990–present	34 measures of behavior, community and environment, state policy, clinical care, and health outcomes	Annually	<a href="http://www.americashealthrankings.org/">http://www.americashealthrankings.org/</a>
Chronic Disease Indicators	States and large metropolitan areas	1998–present	124 measures on chronic disease, health behaviors, and health outcomes	Annually	<a href="https://www.cdc.gov/cdi/">https://www.cdc.gov/cdi/</a>
Big Cities Health Coalition	28 large cities	2010–13	Over 50 indicators on behavioral health and substance abuse, cancer, chronic disease, environmental health, food safety, HIV/AIDS, infectious disease, injury and violence, maternal and child health, life expectancy or death rate, and demographics	Annually	<a href="http://bchi.bigcitieshealth.org/indicators/1826/2044">http://bchi.bigcitieshealth.org/indicators/1826/2044</a>
City Health Dashboard	4 cities, more planned	Various	26 measures on health outcomes, health behaviors, clinical care, social and economic factors, and the physical environment	To be determined	<a href="http://www.cityhealthdashboard.com/">http://www.cityhealthdashboard.com/</a>
Life Expectancy Data	Census tracts	2010–14 and 2011–15	Estimates of life expectancy at birth for census tracts	To be determined	Forthcoming in 2017

## Connect with Other Neighborhood-Level Data

When looking at health data, neighborhood and city stakeholders should see how these data compare with other types of data relevant to healthy neighborhoods, such as basic social and demographic data, housing, income and employment, neighborhood assets, and environment. Additional national sources and many local sources are available, depending on the purpose or question at hand.

Many datasets provide small-area data at the census-tract level or smaller.<sup>2</sup> These datasets include the following:

- **Multitopic data and tools:** Demographic, social, economic, and housing characteristics can be downloaded from the US Census Bureau’s American Community Survey data. For census tracts, the data are an average of five years of monthly surveys (<http://www.census.gov/acs/>) or American FactFinder (<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>). In addition, sites such as Community Commons (<http://www.communitycommons.org>) and PolicyMap (<http://www.policymap.com>) compile several data sources available down to the census-block-group level for mapping and charting.
- **Housing:** Census-tract data on home mortgage lending and borrower characteristics can be found in the Home Mortgage Disclosure Act data (<http://www.ffiec.gov/hmda>). The Picture of Subsidized Households data from the US Department of Housing and Urban Development (<http://www.huduser.org/portal/datasets/assthsg.html>) provides characteristics and counts of residents in public and subsidized housing units.
- **Income and employment:** Longitudinal Employer-Household Dynamics’s Origin-Destination Employment Statistics provides data on the number and characteristics of workers by location of residence and location of workplace, as well as commuter flows from block to block (<https://lehd.ces.census.gov/data/>). The OnTheMap tool helps users map these data (<https://onthemap.ces.census.gov/>). Zip Business Patterns give numbers of private businesses by business category and employees by industry type by zip code (<https://www.census.gov/programs-surveys/cbp.html>).
- **Neighborhood assets:** Several point data sources highlight assets such as schools, libraries, ([http://www.imls.gov/research/public\\_libraries\\_in\\_the\\_united\\_states\\_survey.aspx](http://www.imls.gov/research/public_libraries_in_the_united_states_survey.aspx)), and food retailers accepting Supplemental Nutrition Assistance Program for payment (<https://www.fns.usda.gov/snap/retailerlocator>).
- **Environment:** The US Environmental Protection Agency release various datasets on environmental indicators, including the Toxics Release Inventory (<http://www.epa.gov/tri/>) that provides information about hazardous waste sites, facilities that produce and release air pollutants or toxins, and permits to discharge to water. The agency also published Enforcement and Compliance History Online data on regulated facilities related to air emissions, surface water discharges, hazardous waste, and drinking water systems (<http://echo.epa.gov/>).

National datasets are a good starting point, but data available from state and local sources can also offer important data on neighborhood needs and assets. Groups are encouraged to connect with state and local agencies on public health, public safety, housing, economic development, and others, as well as school districts and other special districts to obtain additional data. This is especially necessary when the purpose is program evaluation, measuring change over time, or generating data for nonstandardized geographic boundaries. In addition, other private- and nonprofit-sector partners may have pertinent data, such as chambers of commerce, health care providers, real estate owners and managers, and community service providers. Universities, organizations in the National Neighborhood Indicators

Partnership, and other data intermediaries are great resources for accessing data and learning how to use it.

## Identify Policy and Program Resources

Identifying community needs and assets is an important first step. The next step is taking action. To do so, it is helpful to know what policies and programs have been tried elsewhere to improve local health outcomes in the same areas of concern to your community. Several comprehensive references, described below, provide detailed libraries of programs and interventions alongside evidence on their effectiveness.

**County Health Rankings and Roadmap Action Center,**  
<http://www.countyhealthrankings.org/roadmaps/action-center>

Funded by the Robert Wood Johnson Foundation and run by the University of Wisconsin Population Health Institute, this site, in addition to producing the annual County Health Rankings, provides resources to help communities assess needs and resources, focus on what is important, choose effective policies and programs, act on what is important, and evaluate actions by working together and communicating effectively. The What Works for Health tool, one of the resources, lets communities drill down to specific areas of health interest (e.g., health behaviors, clinical care, social and economic factors, and physical environment) and pull up different policies and programs targeting improvements. Each suggestion indicates whether it is supported by scientific evidence, whether the evidence is mixed or limited, or whether the suggestion represents expert opinion but has not necessarily faced rigorous evaluation.

**CDC Programs and Interventions,** <https://www.cdc.gov/500cities/programs-interventions.htm>

This site provides links to programs and interventions that the CDC runs, many of which pertain to indicators estimated in the 500 Cities data, including the National Asthma Control Program, National Diabetes Prevention Program, REACH (Racial and Ethnic Approaches to Community Health), and various mental health and substance use and abuse programs.

**CityHealth Project,** <http://www.cityhealth.org>

Funded by the de Beaumont Foundation, the CityHealth project assesses the health of America's 40 largest cities across nine policy areas that evidence points to as improving health outcomes: paid sick leave, high-quality universal prekindergarten, affordable housing and inclusionary zoning, complete streets, controlling alcohol sales, reducing young adult tobacco use, indoor smoking bans, food safety and restaurant inspection ratings system, and healthy food procurement policies in public facilities.

## Next Steps

This guide is meant to help stakeholders host an event featuring the 500 Cities data and tailored to their local context. Exchanging information about different health-related programs, spreading awareness about social determinants of health, and increasing data literacy can all support actions to reduce negative health behaviors and outcomes. The Robert Wood Johnson Foundation, CDC, and the CDC

Foundation will continue to promote the 500 Cities data as a resource to analyze neighborhood-level health conditions and mobilize local action. To inspire other local groups, the foundation will share stories about early uses of the data, such those in the boxes 3 through 5. National networks, such as the YMCA and United Way, will spread awareness about the availability and potential uses for the data.

The Robert Wood Johnson Foundation would like to hear how you use this guide and the 500 Cities data to address neighborhood health through cross-sector collaboration. Please send your examples and feedback to [500cities@cdc.gov](mailto:500cities@cdc.gov).

## Notes

1. “Culture of Health Prize videos search results,” RWJF, accessed April 17, 2017, [http://www.rwjf.org/en/search-results.html?cs=content\\_series%3Acoh-prize-winners](http://www.rwjf.org/en/search-results.html?cs=content_series%3Acoh-prize-winners).
2. Kathryn L.S. Pettit, “List of National Data Sets with Small-Area Data,” National Neighborhood Indicators Partnership, January 11, 2017, <http://www.neighborhoodindicators.org/library/catalog/list-national-data-sets-small-area-data>.

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- Sally, Corianne Payton, Kathryn L.S. Pettit, and Olivia Arena. 2017. *500 Cities Project: Local Data for Better Health*. Washington, DC: Urban Institute.
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## Acknowledgments

This brief was funded by the Robert Wood Johnson Foundation. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at [www.urban.org/support](http://www.urban.org/support).

We would like to extend special thanks to Oktawia Wojcik and Margaret Tait from the Robert Wood Johnson Foundation, who provided helpful comments to improve this brief. Leah Hendey, senior researcher at the Urban Institute, provided invaluable assistance as a technical reviewer for the report.

Olivia Arena, research assistant at the Urban Institute, provided research support on local event examples. Bernita Smith of the Atlanta Regional Commission provided the original inspiration for the guide. Katie Pritchard of Data You Can Use and Susan Millea of Children’s Optimal Health also shared useful input from their local perspective.



### ABOUT 500 CITIES

The 500 Cities project is a collaboration between the Centers for Disease Control and Prevention, the Robert Wood Johnson Foundation, and the CDC Foundation. The purpose of the 500 Cities Project is to provide city- and census-tract level small-area estimates for chronic disease risk factors, health outcomes, and clinical preventative service use for the largest 500 cities in the United States. The small-area estimates will allow cities and local health departments to better understand the burden and geographic distribution of health-related variables in their jurisdictions and assist them in planning public health interventions.



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