



Healthy Communities Assessment Tool (HCAT) Administrator's Guide

Developed by
Healthy Housing Solutions, Inc. and
ICF International

for the

U.S. Department of Housing and Urban Development (HUD)
Office of Lead Hazard Control and Healthy Homes



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Section 1. Introduction

The Healthy Communities Transformation Initiative (HCTI)

In 2012, the Office of Lead Hazard Control and Healthy Homes (OLHCHH) at the U.S. Department of Housing and Urban Development (HUD) launched the Healthy Communities Transformation Initiative (HCTI) to help improve the health systems and physical, social, and economic service structures that support healthy living and behaviors in our communities. The HCTI created two key instruments: the Healthy Communities Index (HCI) and its companion Healthy Communities Assessment Tool (HCAT).

1.1 Healthy Communities Index (HCI)

The HCI is a set of core, evidence-based indicators designed to assess and track community health at the neighborhood level. It is comprised of indicators that drive community health, i.e., the social, economic, and environmental “determinants” of health or measures strongly correlated with health outcomes, rather than what many may consider “health” indicators such as the percent of the population with diabetes, asthma or other chronic diseases.

All HCI indicators were selected to meet the following criteria:

Nexus to Health: Strong relationship to multiple health outcomes and to Healthy People 2020.

Data Availability: Nationally available at a neighborhood level resolution with a uniform methodology.

Actionable: Assignable to a specific party; implementable within < 5 years; and technically feasible.

Community Relevance: Strong connection to identified community priorities; track record of use.

More than 200 diverse indicators went through a rigorous research and review process; 43 were ultimately selected for the HCI. Thirty-one of the HCI indicators are considered core priority (i.e., every community should include them as a “base” to assess and monitor neighborhood health), six are considered core optional (i.e., while key to the assessment process, they may not be essential markers for every community), and six are considered demographic and contextual measures. Core indicators are ranked individually as well as cumulatively to create an overall neighborhood rank based on the number of neighborhoods within a city. Where data are not already available at the neighborhood level for the ranked indicators, the smallest geospatial level available is used to ensure that indicator values accurately capture neighborhood level detail.

Indicators included in the HCI as contextual and demographic measures are not ranked nor included in the overall ranking of neighborhoods; instead they provide relative or “contextual” information key to understanding some of the potential challenges and/or opportunities within a neighborhood.

1.2 Healthy Communities Assessment Tool (HCAT)

The HCAT uses the HCI core indicators to compare neighborhoods by ranking them according to how well they address key drivers of community health such as access to parks, educational attainments and transportation issues. A comparison of individual HCI indicators is also provided, which allows users to determine where neighborhoods need to focus efforts to improve their community health. Rankings are provided both numerically, based on the number of neighborhoods within the city (e.g., 7 out of 55), as well as visually using a three-tiered system of bottom (red), middle (yellow) and top (green).



The HCAT aggregates indicator data to the neighborhood level based on the geographic level at which the data has been added to the tool, (i.e., data is loaded at varying geospatial levels ranging from Census block, Census block group, and Census Tract to Zip Code Tabulation Area (ZCTA)); whether the data should be averaged, population weighted (weighted average) or summed; and whether or not the value is considered an inverse measure (i.e., lower values rank higher than high values). The HCAT also provides a detailed description of each HCI indicator, identifying the indicator's connection to health, its data source(s), any potential limitations, and, finally, evidence to support its inclusion in the HCI.

Neighborhood descriptions and contextual indicators anchor each neighborhood page to provide context and insight about how to assess the overall neighborhood rank as well as its individual indicator rankings.

Using the HCAT Guide

This guide describes the various components of the HCAT and provides instructions on how to manage them. It is targeted to City site administrators responsible for uploading and maintaining HCAT content and data for their respective city. Cities adopting the HCAT must download the tool and "stand it up" on their own servers or a Cloud service such as Amazon or Acquia (System Requirements and Download Installation Instructions may be found in Section 3. HCAT Download and Installation Guide). Cities must also define neighborhood boundaries according to the Census block, block group, tract and ZCTAs which comprise each city neighborhood (i.e., create a neighborhood definition file based on geospatial boundaries); develop narrative descriptions of the neighborhoods (i.e., create a neighborhood details file which includes locational information); and collect the data necessary for the individual indicators in the HCAT. This guide provides instructions detailing how to complete each of these tasks along with tips to facilitate and improve the functionality of the HCAT.

This guide is divided into six major sections:

- Understanding the HCAT Layout;
- HCAT Download and Installation Instructions;
- Neighborhood definition and indicator file specifications;
- Processes for adding and managing content;
- Indicator data collection steps; and
- Field Specification Guide Tables and General Rules describing each website component with formatting instructions.

Once the HCAT is stood up on City/Agency hosting servers, a majority of the set-up effort focuses on determining the City's neighborhood boundaries, developing narrative content to describe the neighborhoods and collecting data, and then uploading this information into the HCAT. The HCAT is prepopulated with domain descriptions, and HCI indicator descriptions. **AS DATA IS UNIQUE TO EACH CITY/COMMUNITY ADOPTING THE HCAT, NO INDICATOR DATA VALUES ARE PREPOPULATED.**

Jurisdictions "personalize" the HCAT for their respective cities by loading an iconic image of their city as well as logos and contact information specific to the City/Lead Agency to the HCAT landing page.



Section 2. Navigating the HCAT

The HCAT is broken into several public facing pages via five tabs: the Landing or “Home” page, the “About” page, the “Search Neighborhoods” page, the “Indicators” page, and a “Resources” page. Additionally, the site has numerous administrator pages that may only be accessed by Users with administrative rights provided by the City's HCAT Primary Administrator. Although the bulk of this guide provides instruction on the administrative pages that populate the public facing pages, it is helpful to understand the framework of the site and where different information can be found before heading to the administrative pages or downloading the HCAT.

2.1 Home Tab

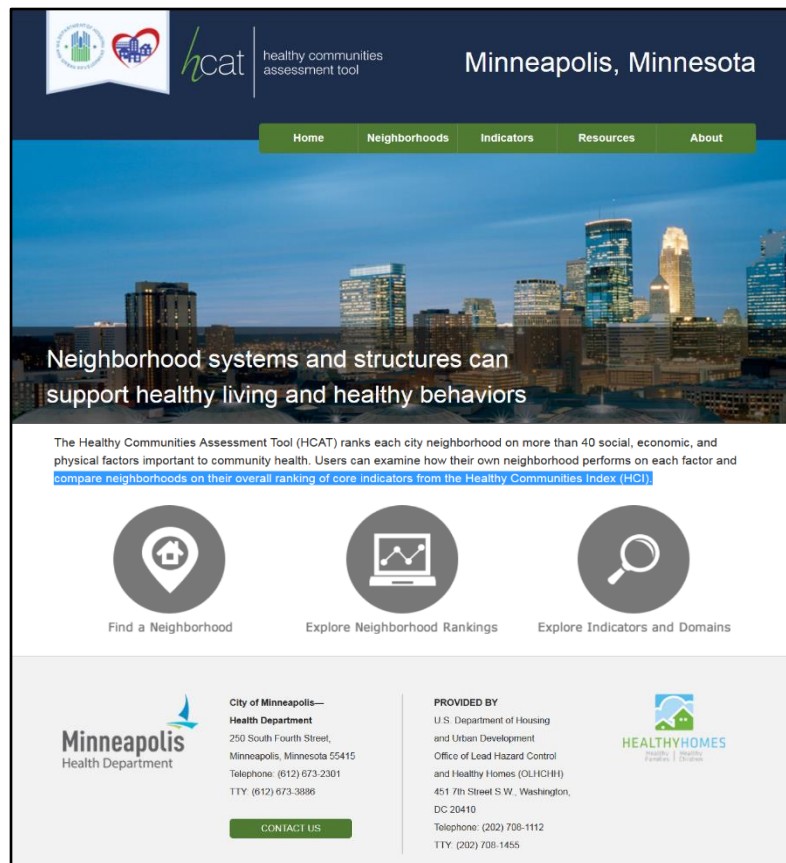
The Home page provides links to everything a public user needs to navigate the site. It provides a brief description of the HCAT; links to learn more about the HCTI and key terms used throughout the website and related materials; links to specific information about the HCAT and HCI Indicators and their ranking system; and links to resources and HCAT data available for download. Users can access specific information either via the tabs at the top of the Home Page or by scrolling down to icons at the bottom of the page.

2.2 Neighborhood Tab

Users navigate to their Neighborhood Pages by either clicking on the *Neighborhoods* tab or the *Find a Neighborhood* or *Explore Neighborhood Rankings* icons. Both the *Neighborhoods* tab and the *Explore Neighborhood Rankings* icon take users to a listing of all of the City's neighborhoods. The listing shows each neighborhood's ranking based on the overall number of city neighborhoods, along with visual cues (green, red, yellow) as to where the rank falls (top, middle, bottom, respectively).

The *Find a Neighborhood* icon sends users to a map of the city with pins that show the location of each neighborhood. Users may also enter an address to find a specific neighborhood.

NOTE: Neighborhoods and rankings will not show up on the City map or the neighborhood ranking page until neighborhood definition and detail files and indicator data have been uploaded by the City HCAT Administrator.





This example shows all the neighborhoods in a specific city, along with their ranking both as a value and visually, i.e., showing what tier (top, middle, bottom) the neighborhood ranked in comparison to other City neighborhoods.

Users can click on the hyperlinked neighborhood title to go to specific neighborhood pages.

A City contact box featuring the City's logo (or lead agency logo) along with HUD contact information is posted at the bottom of all site pages.

EXPLORE NEIGHBORHOODS

[Compare](#)

You may compare up to 3 neighborhoods at a time

Neighborhood	Rank	Tier
Allendale/Irvington/S. Hilton	32	Middle
Beechfield/Ten Hills/West Hills	23	Middle
Belair-Edison	34	Middle
Brooklyn/Curtis Bay/Hawkins Point	55	Bottom
Canton	5	Top
Cedonia/Frankford	26	Middle
Cherry Hill	42	Bottom
Chinquapin Park/Belvedere	5	Top
Claremont/Armistead	51	Bottom
Clifton-Berea	40	Bottom
Cross-Country/Cheswold	7	Top
Dickeville/Franklinton	38	Bottom

Select a neighborhood to see more detailed ratings or compare up to 3 neighborhoods at a time.

Search for an address to see suggested neighborhoods.

See how your neighborhood rates among state and national goals.

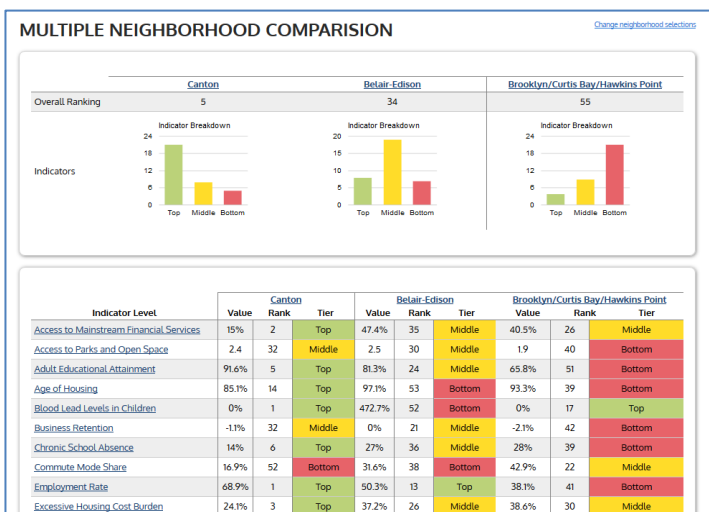
Green for the top rankings.
Yellow for the middle rankings.
Red for the bottom rankings.

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HEALTHYHOMES
Healthy Families | Healthy Children

Compare Multiple Neighborhoods



Users can also compare up to three neighborhoods by selecting the neighborhoods from the list and clicking "Compare" or by selecting "Compare Multiple Neighborhoods" underneath the Overall Ranking badge on a specific neighborhood page.



Link to Specific Neighborhood Pages

[Home](#) [Neighborhoods](#) [Indicators](#) [Resources](#) [About](#)

Overall Ranking
14
of
25
Compare Multiple Neighborhoods

Elmwood

Elmwood is located in the southwest quadrant of Providence. It is bounded by the neighborhoods of Upper and Lower South Providence to its east, the West End and Reservoir to the west, and South Elmwood to its south. Elmwood is known for being home to a diverse community, notably a large population of immigrants to the area. The neighborhood grew dramatically during the 19th century as a historically upscale area, which has led to newer residents in recent years coming in to renovate some of the historic properties. Today, Elmwood remains one of the city's more ethnically, culturally and racially diverse neighborhoods. The ethnic and cultural diversity of the neighborhood is reflected in the commercial uses lining Elmwood Avenue and Broad Street, making these street two of the most interesting and dynamic thoroughfares in the city.

Indicator Breakdown

Indicator Details

Indicators -	Primary Domain	Indicator Value	Rank	Tier
Access to Mainstream Financial Services	Economic Health	-%	-	Data N/A
Access to Parks and Open Space	Natural Areas	3.5%	15	Middle
Adult Educational Attainment	Educational Opportunities	64.9%	18	Bottom
Age of Housing	Housing	83.8%	11	Middle
Blood Lead Levels in Children	Housing	-%	-	Data N/A
Business Retention	Economic Health	-0.0%	1	Top
Chronic School Absence	Health Systems and Public Safety	30.7%	14	Middle
Commute Mode Share	Transportation	29.8%	15	Middle
Employment Rate	Employment Opportunities	48.9%	21	Bottom
Excessive Housing Cost Burden	Housing	51.5%	23	Bottom
Food Desert	Neighborhood Characteristics	100.0%	15	Middle
High School Graduation Rate	Educational Opportunities	75.0%	8	Top
Household Transportation Costs	Transportation	17.2%	9	Middle
Local Business Vitality	Economic Health	55.6%	11	Middle
Long-Term Unemployment	Employment Opportunities	6.0%	7	Top
Low Birth Weight	Health Systems and Public Safety	-%	-	Data N/A
Motor Vehicle Collisions	Health Systems and Public Safety	34.9	15	Middle
Offsite Alcohol Outlets	Neighborhood Characteristics	9.1	16	Middle
Pedestrian Connectivity	Transportation	149.2	5	Top
Preschool Enrollment	Educational Opportunities	17.2%	22	Bottom
Preventable Hospitalizations	Health Systems and Public Safety	-	-	Data N/A
Proximity to Brownfield Sites	Environmental Hazards	0.0%	1	Top
Proximity to Superfund Sites	Environmental Hazards	-%	-	Data N/A
Public Assisted Households	Employment Opportunities	0.6	18	Bottom
Reading Proficiency	Educational Opportunities	51.3%	18	Bottom
Residential Mobility	Social Cohesion	76.0%	16	Middle

Demographic and Contextual Indicators

	Neighborhood	City Wide
Concentrated Poverty	32.9%	29%
Income Inequality	0.5	0.50
Life Expectancy	-	78.8
Population	12,834	178,042
Racial and Ethnic Diversity	1.3	1.44

These measures, while clearly significant to community health, may not fit the criteria of "actionable" at the neighborhood level or data may only be available at a city-wide level. Because individual neighborhoods may not have a direct impact on these measures, they have been excluded from the Neighborhood's overall ranking. However, they are documented to provide "context" for the neighborhood which could potentially identify alternative avenues to improve community health.

Compare Indicator to Targets

Select an Indicator...

See how the selected neighborhoods compare to state and national goals for a specific indicator.

Submit

Neighborhood pages provide the overall neighborhood ranking based on the number of neighborhoods within the city, a description of the neighborhood, and a chart indicating how the indicators break down according to tiers. Additionally, the page lists all of the HCI indicators with their neighborhood value and ranking compared to other City neighborhoods, along with a visual representation of tiers (Top, Middle, Bottom).

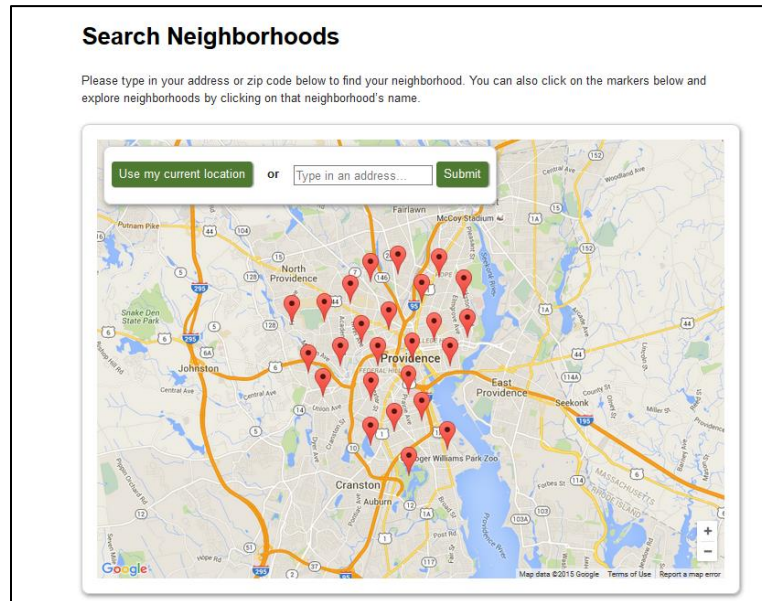
Demographic and Contextual Indicators, both neighborhood specific (as available) and city-wide, are displayed in a box to the right of the core ranked indicators. Beneath the contextual indicator box, if the City features a comparative target for

any indicator, users may select the indicator to determine how the neighborhood value fares when compared to either a City-selected national, state or regional target.

Information about specific indicators, including what the indicator measurement means and how the indicator impacts health, may be found by selecting the hyperlinked title of the indicator.



2.3 Find a Neighborhood Icon



Once a jurisdiction's neighborhood definition file and neighborhood details file are uploaded, specific neighborhood locations can be identified from the *Find a Neighborhood* icon located on the bottom of the *Home* page (see NOTE below). The jurisdiction's "Search Neighborhood" map will look similar to the image below, with pins marking the location of each neighborhood. Positioning a mouse over a pin shows the specific name of the neighborhood and its rank. Clicking on the neighborhood name takes the user to the specific Neighborhood's page.

NOTE: No map is displayed until the neighborhood definition file is uploaded (See Sections 4.1 and 6.1(e) on pages 21 and 35, respectively) and the neighborhood locations identified (See Section 4.3 and 6.4(f) on pages 22 and 36, respectively).

2.4 Indicators Tab

Clicking on the *Indicators* tab at the top of any page or the *Explore Indicators and Domains* icon at the bottom of the *Home* page takes the user to the Domain and Indicators page. Information about each HCI domain and the type of issues it addresses, as well as short descriptions of each of the HCI indicators assigned to the Domain are found on this page. Although indicators are assigned a "primary" domain, many indicators within the HCI cross domains and disciplines.

The vast majority of the content for the Domain and Indicators page has been prepopulated. However, if a City wants to add local indicators and/or revise indicator descriptions to facilitate local understanding, additions and/or

HCI DOMAINS AND INDICATORS

The Healthy Communities Assessment Tool (HCAT) provides planners, community development and neighborhood advocates, and policy makers an understandable way to evaluate community health. The HCAT provides a cumulative ranking of the social, physical and economic environment of every neighborhood based on Healthy Community Index (HCI) core indicators: the higher the rank (i.e., 1 is best), the more supportive the community is of human health and well-being. For example, a neighborhood with an HCAT score of 26 (out of 55 neighborhoods) could be considered to be healthier or have better health prospects than half of the other neighborhoods in the city. Demographic and contextual indicators are not included in the neighborhood score. [Note: In instances where indicator values are tied between neighborhoods, the same ranking will be assigned, e.g., an indicator returns the following five values for neighborhoods A through E, respectively, 93%, 87%, 87%, 84% and 79%. The indicator ranking would follow as A=1, B and C =2, D=4, and E=5.]

The HCAT further splits HCI indicators into three tiers (or tertiles): top, middle and bottom, to show how each indicator ranks relative to other neighborhoods and provide a clearer picture of which determinants of community health are having the greatest effect on the neighborhood's ranking.

The HCAT also allows users to compare specific indicators to pre-determined benchmarks or goals such as Healthy People 2020 or a City or State designated target (as available).

[Learn more about the development of the HCAT.](#)

DEMOGRAPHIC AND CONTEXTUAL



Demographic and contextual measures are designed to provide an understanding of the overall community and some of the challenges (and opportunities) that specific neighborhoods may encounter. Indicators assigned as demographic and contextual measures have an impact on neighborhood health, but there is limited to no capacity to significantly impact or change them at the neighborhood level. All of the demographic and contextual measures were reviewed across HCI domains, found to be broader than one domain, and fundamentally vital to community health. Although indicators represented in this domain will not be included in neighborhood rankings/scores, nor will the indicators appear in neighborhood comparisons. These measures are simply meant to provide contextual information essential to understanding a neighborhood and its potential to impact key factors of community health.


Indicators	Short Description
Concentrated Poverty	Proportion of residents at or below the national poverty level.
Income Inequality	A measure of the distribution of income (i.e., the gap between rich and poor).
Life Expectancy	Life expectancy is the average number of years an individual can expect to live
Park Quality	Comprehensive rating system measuring how U.S. cities are meeting the need for quality parks.
Population	Number of residents within the neighborhood compared to the overall city.



change are easily made to these pages. The HCAT City Administrators can add additional domain(s) and indicator(s) using instructions found in Section 6.1 (b) on page 30. Data Source(s) would also need to be updated to reflect the data source used for the new indicator(s); instructions can be found on page 29.¹

More detailed information about each HCI indicator can be found via the Indicator's hyperlinked title on the Indicator and Domain Page.


EDUCATIONAL OPPORTUNITIES



Indicators within the Educational Opportunities domain measure how well our systems are training community residents and giving them the tools necessary to move up the economic ladder. Numerous studies have documented the strong relationship between educational opportunities and health, including several reviews examining educational attainment, educational health resources, education accessibility, and school environment. Most people value health highly and health benefits related to education often outweigh financial benefits. Education factors with a connection to community health span the stages or levels of education, including early childhood, K-12, and adult education. Education indicators related to health range from the ratio of teachers to students and the percent of residents with higher levels of education, to the types of extracurricular and after-school activities available. Indicators within the HCI Educational Opportunities domain address educational attainment and key childhood education measures that are found to be indicators of potential education achievement.

Indicators	Short Description
Adult Educational Attainment	Proportion of neighborhood adults, aged 25 and older, with a high school diploma (or equivalent).
High School Graduation Rate	Proportion of students entering neighborhood secondary schools that graduate.
Preschool Enrollment	Proportion of three and four year-olds in the neighborhood enrolled in preschool.
Reading Proficiency	Proportion of third or fourth grade students meeting or exceeding "proficient" reading levels on standardized assessments in neighborhood schools.
School Readiness Scores	Proportion of neighborhood kindergarteners prepared for first grade.

EMPLOYMENT OPPORTUNITIES



Employment measures can range from occupational training to rates of employment and job satisfaction. Numerous studies show a strong correlation between employment and health, with causal impacts going in both directions, i.e., employment effects health and health effects employment. Economic security, be it through employment or other means, has been shown to be one of the strongest and most consistent predictors of health and disease. Although there are references in literature to the health impacts of job satisfaction, jobs and housing balance, and

Indicator Description Links

Adult Educational Attainment

Adult educational attainment measures the population 25 years and older that have received their high school diploma (or its equivalent). Educational attainment can be tied to influences on health such as employment outcomes, income, and health behaviors, which have been linked to increased physical and mental health. Data demonstrates that the death rate declines for men and women with higher educational attainment and a person's chances of being in very good or excellent health are greater with each higher level of educational attainment. Educational attainment has also been shown to have a multi-generational impact: children of mothers with higher levels of education tend to have better health compared to the offspring of mothers with lower educational attainment. Although in the educational opportunities domain, educational attainment is also strongly linked to employment, economic health and neighborhood characteristics. Although data for this indicator is available from the U.S. Census, cities may use locally available data as appropriate.

Neighborhood▲	Indicator Value	Rank
Blackstone	96.1%	3
Charles	77.4%	9
College Hill	97.9%	2
Downtown	77.7%	8
Elmhurst	88.0%	7
Elmwood	64.9%	18
Federal Hill	68.3%	16
Fox Point	92.4%	4
Hartford	60.6%	21
Hope	92.0%	5
Lower South Providence	62.1%	20
Manton	59.8%	22
Mount Hope	88.6%	6
Mount Pleasant	69.8%	15

Key Citations:

1. Backlund E, Sorlie PD, Johnson NJ. A comparison of the relationships of education and income with mortality: the National Longitudinal Mortality Study. Soc Sci Med. 1999;49(10):1373-84.
2. Pappas G, Queen S, Hadden W, Fisher G. 1993. The increasing disparity in mortality between socioeconomic groups in the US, 1960 and 1986. New England Journal of Medicine; 329:103-109.
3. Robert Wood Johnson Foundation (2011). Education Matters for Health. Accessed December 13, 2012. Available at: www.rwjf.org/en/research-publications/find-rwjf-research/2011/06/what-shapes-health/education-matters-

Individual indicator pages provide a detailed description of the indicator, including its connection to community health, and Key Citations from the HCI literature review. This page also includes a chart with the indicator values for every neighborhood along with their comparative ranking for the specific indicator.

¹ These are the same instructions for updating the Data Source if an alternative source than that suggested for existing HCI Indicators is used.



2.5 Resources Tab

Resources

HCI & HCAT Resources

Information regarding the development of the Healthy Community Index (HCI) and Healthy Community Assessment Tool (HCAT) can be found here, along with information about potential uses of the HCI and HCAT, User guides for data collection and the HCAT, other selected sustainable indicator projects, and ongoing information and research related to healthy communities.

- Framework and Assumptions Used to Develop the HCI
- HCTI Project Overview
- National Advisory Panel (NAP) biographies
- Potential Uses of the HCI / HCAT
- Other Community Indicator Projects
- Using the Shannon-Wiener Index to Compute Racial/Ethnic Diversity
- ZIP to ZCTA Crosswalk

Minneapolis & Minnesota Specific Resources

- City of Minneapolis Open Data Portal
- City of Minneapolis MinneAtlasApp
- MapIT Minneapolis
- Results Minneapolis
- Minnesota Compass
- Center for Earth Energy & Democracy (CEED) Environmental Justice Mapping Tool
- oneMinneapolis – Minneapolis Foundation Community Indicators
- Kids Count Data Center - Minneapolis Data
- Minnesota OPENDATA
- Minnesota Public Health Data Access Portal
- Metro GIS DataFinder
- Community Commons
- Other Useful Information and Links

Community Health Initiative Resources

Below you will find a handful of resources intended to help you understand the impact of community and the built environment on health and well-being, as well as ways to impact the factors that influence community health. These resources have been assigned to domains to assist you in finding information, however you may find some links in more than one domain as they impact more than a single domain area.

General Resources

Clicking on the *Resources* tab takes users to the Resources and Data Download page. Links to documents with information about the HCTI, how the indicators were selected and other various information relating to the project can be found here.

Communities interested in adding additional information, specific to their jurisdiction or to community health may add it here. Additional resources and links to best practices related to indicators and community health issues can also be found here.

In addition to Domain specific resources, there are links to a variety of general community health and community indicator resources as well as links to potential funding resources.

Scrolling down the page, past the Resource links, users will find the Data Download links, where they can download assessment data such as the neighborhood definition file, neighborhood rankings and the values of all the indicators in the HCI.

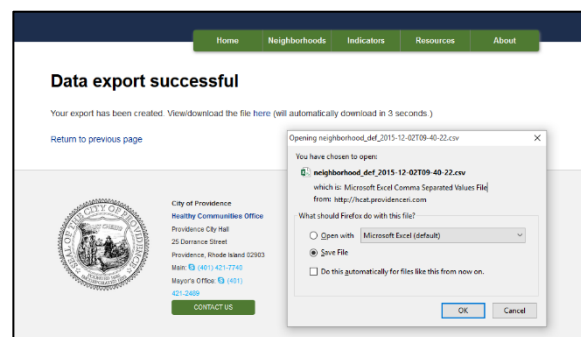
Download Assessment Data

The Healthy Communities Index (HCI) neighborhood rankings and indicator values are available for download below. Data used in the HCI and Healthy Communities Assessment Tool (HCAT) come from a variety of sources which may be updated periodically. However, as data in the HCI and HCAT are not automatically updated, data available from the HCAT may not represent the most current indicator values available. For users interested in learning more about the data sources and/or recreating the HCI with the most current data, information about the data source and steps to collect the data for each indicator are provided below.

[Neighborhood Definition File](#)[Download Overall Neighborhood Rankings and Values](#)[Download Overall Indicators](#)

Indicator Data Download Locations

When a user selects a data download, an excel worksheet is exported.





Users interested in learning about the data sources and the collection steps necessary for each indicator can scroll past the Data Download section, where specific collection steps for each indicator included in the HCAT may be found.

Each data source contains a hyperlink which will lead users to more information, as available, about that particular source, such as what organization collects it, the geospatial levels available, and the frequency it is updated.

Communities that add indicators to the HCAT should revise the data source page to include information about the data source used for the indicator as well as the data collection steps necessary for the specific indicator(s).

Download Assessment Data

The Healthy Communities Index (HCI) neighborhood rankings and indicator values are available for download below. Data used in the HCI and Healthy Communities Assessment Tool (HCAT) come from a variety of sources which may be updated periodically. However, as data in the HCI and HCAT are not automatically updated, data available from the HCAT may not represent the most current indicator values available. For users interested in learning more about the data sources and/or recreating the HCI with the most current data, information about the data source and steps to collect the data for each indicator are provided below.

[Neighborhood Definition File](#) [Download Overall Neighborhood Rankings and Values](#) [Download Overall Indicators](#)

Indicator Data Download Locations

Indicators	Download Location	Additional Information
Access to Mainstream Financial Services	CFED Bank On	CFE Bank On information can be found at www.joinbankon.org/#/resources#bank-on-national-account-standards . The Pew Charitable Trust also has some data and resources available at http://www.pewtrusts.org/en/projects/consumer-banking
Access to Parks and Open Space	Local Data Request, Parks GIS Data	Most local governments have GIS data available on local parks; NAVTEQ offers an alternative commercial GIS database. Data Source: Local data/Census TIGER Shapefile Data Collection Steps: 1. Use GIS software to open the most recent TIGER Shapefile at the census block level. 2. Select "census blocks" to create neighborhood layers. 3. Calculate the non-weighted centroid for each census block. 4. Input polygon data on park and open space locations from a local parks department or from private data sources. 5. Calculate the non-weighted centroid for each park polygon. 6. Create a 0.5 mile buffer around each census blocks and report the count of parks within 1/2 mile from each census block centroid. Alternative: Determine the percentage of parks and green space within a .5 mile buffer of the census block and average. Data Source: Table S1501: Educational Attainment ACS 5-year Estimates (Most recent year) Data Collection Steps:

2.6 About Tab

The *About* tab provides information specific to the Healthy Communities Transformation Initiative (HCTI), along with minor details about the HCI and HCAT (more detailed information about the tools and the HCAT ranking system are provided in the *Indicators* tab). It also provides a glossary of key terms related to the HCAT, the HCI indicators, and community health. The vast majority of the content for this page is prepopulated. As necessary, City may also add terms to the glossary to assist users understand terminology related to their specific community health issues.

ABOUT THE HEALTHY COMMUNITIES TRANSFORMATION INITIATIVE (HCTI)

The Healthy Communities Transformation Initiative (HCTI), developed by HUD's Office of Lead Hazard Control and Healthy Homes (OLHCHH), was created to help improve the health systems and the physical, social, and economic service structures that support healthy living and healthy behaviors in our communities.

Across the country, communities are trying to promote sustainable and healthy neighborhoods to improve the well-being of residents. But what determines whether or not a community is healthy? Is it the number of people with disease? Or is it factors such as parks and schools, housing, access to retail services, and transportation, or the condition of the surrounding environment? Identifying the right indicators to track and evaluate the health of our neighborhoods can be daunting because there are very few reliable, standard measures that look at the range of physical and social factors that impact neighborhood health. As more communities take on the challenge of integrating health into community planning and development, there is an increasing need for a standard set of neighborhood-level indicators to help identify baseline conditions, prioritize investments, and evaluate progress towards community health goals.

The HCTI offers two innovative tools: the Healthy Communities Index (HCI) and the Healthy Communities Assessment Tool (HCAT), to help cities assess the physical, social, and economic roots of health of their communities. The tools provide a standard, comprehensive, and practical approach to measuring the most important determinants of health at the neighborhood level. Understanding and tracking these measures can help cities determine the range of policies and programs necessary to help improve community health and residents' quality of life.

The main objective of the HCTI is to create a unified national effort that:

- Defines neighborhood criteria and measurements of community health;
- Supports healthy communities research; and
- Showcases promising best practices for healthy communities.

Healthy Communities Index (HCI)

HUD created the HCI to respond to the lack of uniform, evidence-based community health indicators that many cities encountered when they attempted to evaluate the health and well-being of their community. HCI indicators measure the social, economic, and physical factors that impact community health. Using the World Health Organization (WHO) definition of health, the HCI was developed to measure "community" health versus "individual" health and its indicators represent neighborhood-level health versus individual-level health.

The HCI framework defines what constitutes a healthy community along with the range of neighborhood-level conditions that support human development and health outcomes. The framework established ten categories or "domains" that broadly represent the various sectors that influence the health of a community, including: Economic Health, Educational Opportunities, Employment Opportunities, Environmental Hazards, Housing, Natural Areas, Neighborhood Characteristics, Health Systems and Public Safety, Social Cohesion, and Transportation. Although indicators within the HCI are assigned to a specific primary domain, the most robust indicators actually cross domains. Primary as well as any secondary domains are identified in the HCAT for each indicator.

Created with input from a [National Advisory Panel \(NAP\)](#) of experts from disciplines related to community development and health, HUD and the NAP used a rigorous evaluation process to select indicators for the HCI: they reviewed each indicator according to the availability of data to measure it at the neighborhood level; how strong its connection was to health; and whether it has an established relationship to national public health objectives. Every HCI indicator was also evaluated for its ability to be easily understood, relevance to communities of different sizes, and power to motivate and create policy and program change. A robust and evidence-based national standard, communities can use the HCI as a starting point to identify and prioritize community health issues and monitor changes over time. [Read more about the framework and assumptions used to determine HCI indicators.](#)

Healthy Communities Assessment Tool (HCAT)

The HCAT was developed as a complimentary tool to the HCI to illustrate which factors impact a neighborhood's health and help cities engage community stakeholders in community health issues. Using a cumulative ranking of HCI core indicators, the HCAT provides a single measure that shows how neighborhoods compare to one another and how indicators influence the rankings. The HCAT further provides the values and rankings of individual HCI indicators to help cities and neighborhood stakeholders identify which measures should be addressed to improve the overall neighborhood ranking. [Learn more about the HCAT.](#)

Healthy Communities Glossary

Term	Definition
Access to Opportunity	The availability, without regard to race, socio-economic status, age or gender, of community services, housing, employment, healthy food, amenities, information, and institutions that support full realization of human potential.
Active Living Community (ALC)	A community designed to encourage residents to engage in physical activities during their daily routines by making destinations easily accessible via biking, walking and/or good transit access.



Section 3. HCAT Download and Installation Guide

The following instructions outline the HCAT installation process, including what the system requires, how to run the installation script, and steps required after the installation script has completed to set up the Healthy Communities Assessment Tool (HCAT).

NOTE: Entities downloading the HCAT are responsible ongoing Drupal maintenance and updates as well as for updating Drupal core and contributing modules immediately after setting up the tool to ensure that all modules work properly.

3.1 Systems Requirements

The HCAT was built in the Drupal (Version 7.38) content management system.

Drupal-based systems call for the following minimum requirements:

Storage

15 MB. 100 MB of dedicated disk space is recommended for the HCAT system.

Webserver

The HCAT runs on an Apache webserver, which can be set up either inside an organization's IT infrastructure or in the “cloud”.

Database

MySQL (MySQL 5.0.15 or higher) with PDO.

Programming Language

PHP 5.2.5 or higher (5.4 or higher is recommended). PHP is the language used to run the Drupal-based HCAT application.

Please see [Drupal system requirements](#) for the latest Drupal requirements. Cities can also go to [Drupal's Installation Guide](#) page for post download information. Cities should setup Cron jobs to help maintain the site's assets for search results, check for Drupal core and modules updates, and remove temporary files. Links to these resources are embedded in the Portal's HCAT download site.

Please note that entities adopting and downloading the HCAT are responsible for updating core and contributing modules whenever there is a security update and/or patch from Drupal.



3.2

3.3 Downloading the HCAT

The following steps are required to download and setup the website:

3.3 (a) Downloading the HCAT from the Portal

Clicking on the **HCAT Download** tab navigates users to the registration page. Completing this form allows HUD to track who is downloading the tool and, as available, offer additional technical assistance or notify users of tool updates, as well as alert them to others in their jurisdiction who may already be using the HCAT. Once the form is completed and submitted, users will receive a user password which will allow access to the HCAT download page, which provides specific instructions (as shown below) and zip files needed to setup an HCAT site.

3.3 (b) Download and Extract HCAT Install files

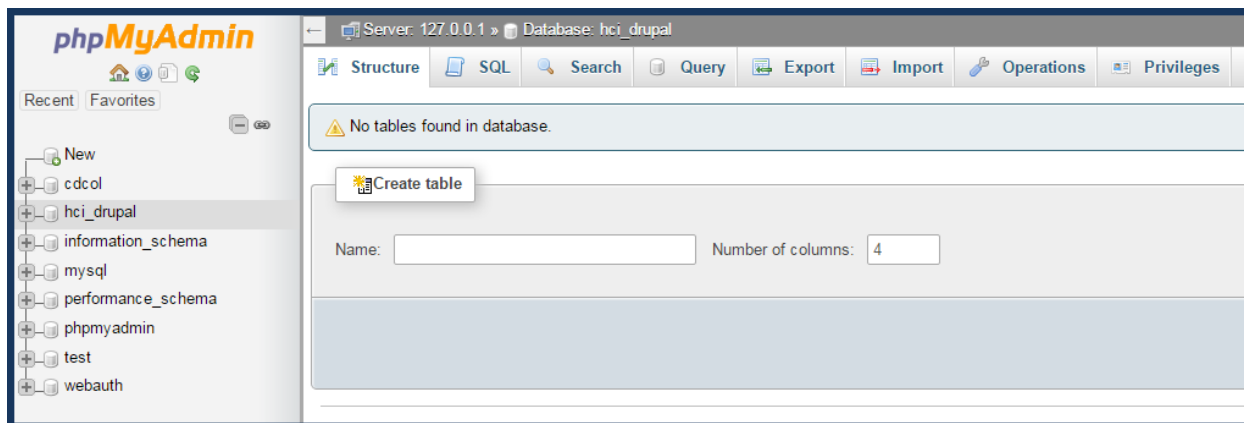
The HCAT zip files contain Drupal Core, contributed modules, and all the files needed to setup the HCAT.

The extraction contains two directories:

- **HCAT_DB** – this includes another zip file containing the MySQL script file that will be used to create the HCAT database in MySQL.
- **HCAT_Drupal** – This contains the Drupal directory files that will be installed on the webserver.

3.3 (c) Create the Database for the HCAT

Create the HCAT Database using the command line or a DB tool such as phpMyAdmin as shown in the screenshot below. All that is required is a new empty database. You can name it what you want.





The extracted HCAT_DB directory will contain a zip file titled **hcat.sql.gz**. You will need to import this file into MySQL either by using a MySQL command line or using the import file interface in phpMyAdmin as shown below.

Server: 127.0.0.1 » Database: hci_drupal

Structure SQL Search Query Export Import Operations Privileges Routines Events Triggers Tracking

Importing into the database "hci_drupal"

File to Import:

File may be compressed (gzip, bzip2, zip) or uncompressed.
A compressed file's name must end in `.[format].[compression]` Example: `.sql.zip`

Browse your computer: **Choose File** hci_drupal_...B-20.sql.gz (Max: 5,120KiB)

You may also drag and drop a file on any page.

Character set of the file: utf-8

Partial Import:

☒ Allow the interruption of an import in case the script detects it is close to the PHP timeout limit. (This might be a good way to import large files, however it can break transactions.)

Skip this number of queries (for SQL) or lines (for other formats), starting from the first one: 0

Format:

SQL

Format-Specific Options:

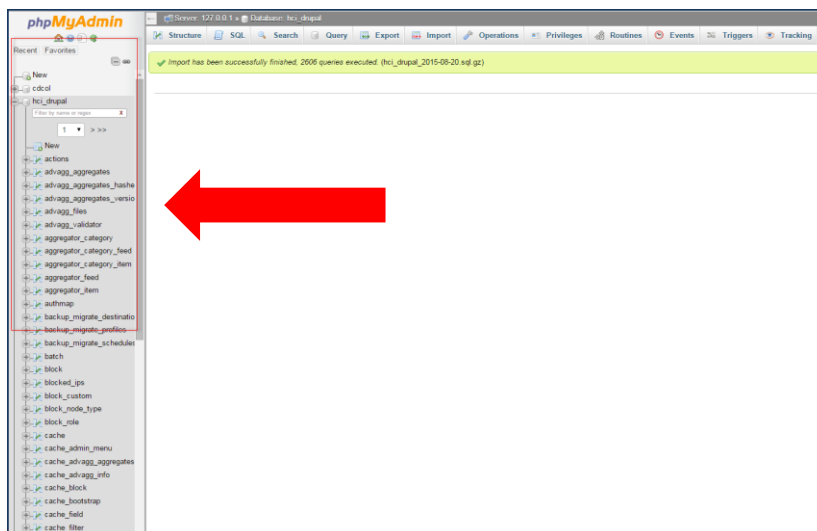
SQL compatibility mode: NONE

☒ Do not use AUTO_INCREMENT for zero values

☐ Read as multibytes

Go

If the import is successful, all the necessary database tables will be displayed as shown in the example in the following figure:





3.3 (d) Setting up the Drupal Directory

HCTI_Drupal contains the Drupal code that is copied to your webserver.

Once you copy the contents it will contain recognizable Drupal directories.

The Drupal directory includes a **/sites/default/default.settings.php** file. This file should be copied and saved as **/sites/default/settings.php** in the same directory. Once the settings.php file is created, the database information will be created in this file.

Replace **\$databases = array();** with the following:

```
$databases = array (
  'default' =>
    array (
      'default' =>
        array (
          'database' => 'yourdatabasename',
          'username' => 'mysqluser',
          'password' => 'mysqlpassword',
          'host' => 'localhost',
          'port' => '',
          'driver' => 'mysql',
          'prefix' => '',
        ),
      ),
    ),
);
```

Use the same database name that was used to create the database above. The Username and Password should be the same as the MySQL administrator account or a similar MySQL account.

3.3 (e) Modify Server Files

Based on the systems being hosted on an Apache-run webserver, modify the VirtualHost file on the server to specify the path for HCTI files.

Sample vhost file

```
<VirtualHost *:8080>
  ServerAdmin webmaster@dummy-host2.example.com
  DocumentRoot "C:/xampp/htdocs/hcat/hci_drupal"
  ServerName hci_drupal
  ErrorLog "logs/dummy-host2.example.com-error.log"
  CustomLog "logs/dummy-host2.example.com-access.log" common
</VirtualHost>
```

Start the Apache and MySQL Servers



3.4 Launching and Configuring the HCAT

Launch the HCAT site by typing in the City's designated HCAT URL in your browser. If the installation is successful, the following Home page will be displayed:

3.4 (a) Logon to the HCAT as the Administrator

To access the HCAT's administrative settings, add "/user" after the site's url, e.g., www.HCAT-yourcityname.gov/user



The following information is used to login as an administrator:

Username: HUD_HCAT

Password: HCAT2015

3.4 (b) Create Media File System settings.

Once logged on as Administrator the Media File System directory locations need to be configured.

Access the Media File System configuration page.

> Configuration > Media > File System

The Drupal installation does not include the following HCAT directories, which will need to be added. Note: system directory locations may vary depending on the hosting environment.

Private File System Path and Temporary directory can be located anywhere on your webserver. Best practices are for these to be outside of the Drupal website path.

The file system settings have to be referenced starting at the server root (not the website root). If there are not specific file locations on the webserver, it will be necessary to create directories for them. They can be created within the Drupal website directory using the following steps:

- [your website root] / var/media/private



- [your website root] / tmp

Make both directories writeable and readable.

The Public File System Path is standard and should not change. See below for an example configuration.

The screenshot shows the 'File system' configuration page in Drupal. It contains four sections: 'Public file system path' with a text input field containing 'sites/default/files/public'; 'Private file system path' with a text input field containing '/var/www/html/hcat/var/media/private'; 'Temporary directory' with a text input field containing 'var/www/html/hcat/tmp'; and 'Default download method' with two radio buttons. The first radio button, 'Public local files served by the webserver.', is selected. Below the radio buttons is a descriptive text: 'This setting is used as the preferred download method. The use of public files is more efficient, but does not provide any access control.' At the bottom of the form is a 'Save configuration' button.

Save the file settings configuration.

3.4 (c) Additional Drupal Set Up

The following steps links to specific Drupal installation procedures necessary to ensure the smooth running and maintenance of the HCAT site.

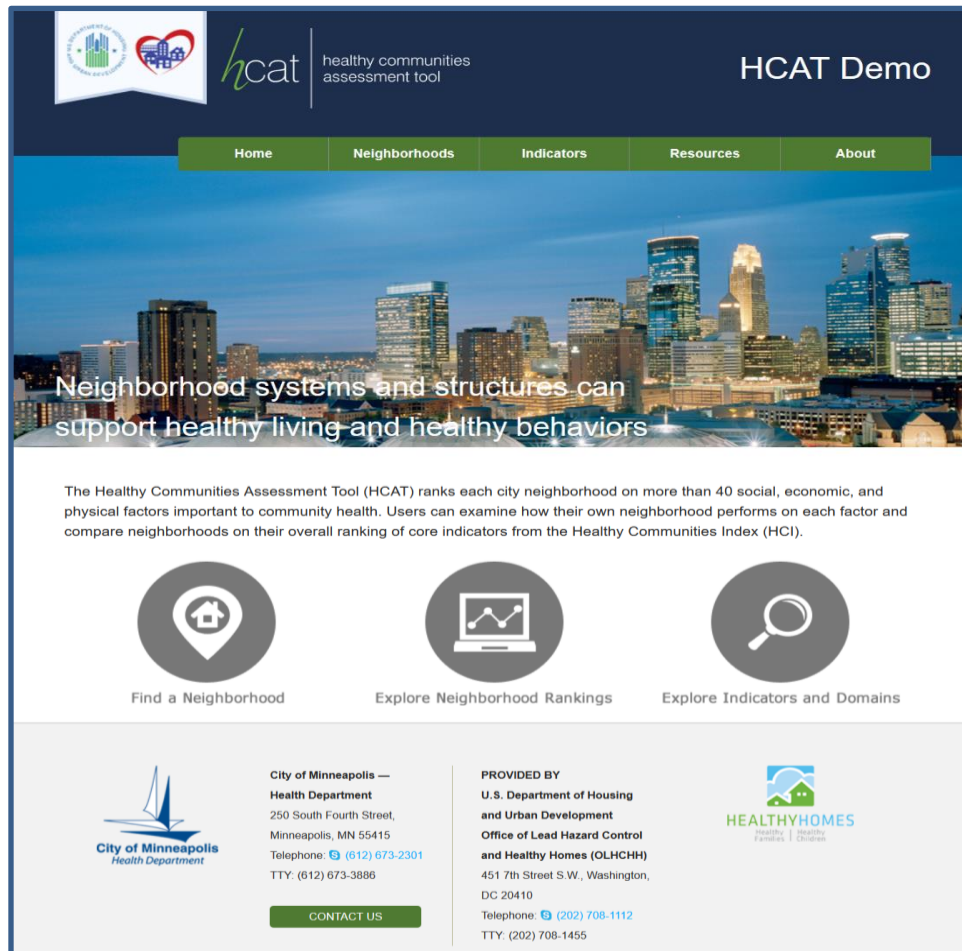
- [Setting up cron](#)
- [Configure clean URLs](#)
- [After Installation](#)
- [Additional topics](#)

Additional Drupal setup information is available on the [Drupal Site](#).



3.5 ReLaunch the HCAT

Once the Drupal programs have been updated, reLaunch the HCAT site by typing in the City's designated HCAT URL in the browser. If the installation is successful, the following Home page will be displayed:



3.5 (a) Access the HCAT Administrative Settings

Once the site has been accessed, the Username and Password can be changed as well as additional users assigned.

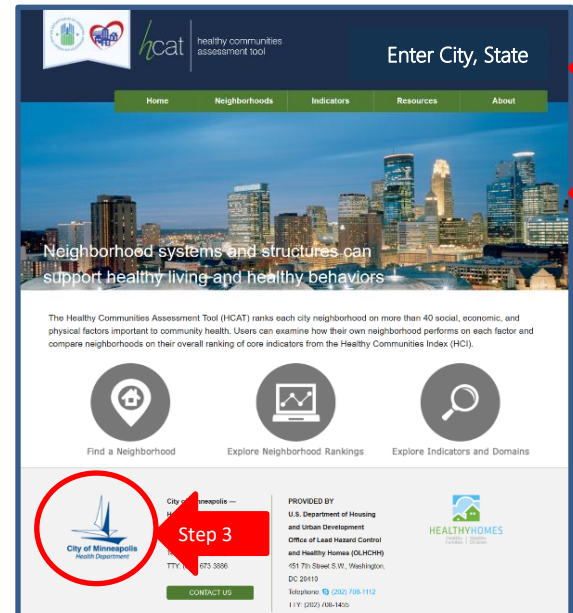


3.5 (b) Changing the Landing Page Image and Logo

Cities adopting the HCAT customize the image on the landing/home page and add the City's logo using the following steps:

1. Updates to the City and State name are made in **page.tpl.php** located in `/sites/all/themes/hci_zen/templates/page.tpl.php`
2. The Background Image is updated by uploading a new image to this location: `/sites/all/themes/hci_zen/images/hero-img.png`

The new image name must match the image name in the images folder or the file name needs to be updated in SASS file.

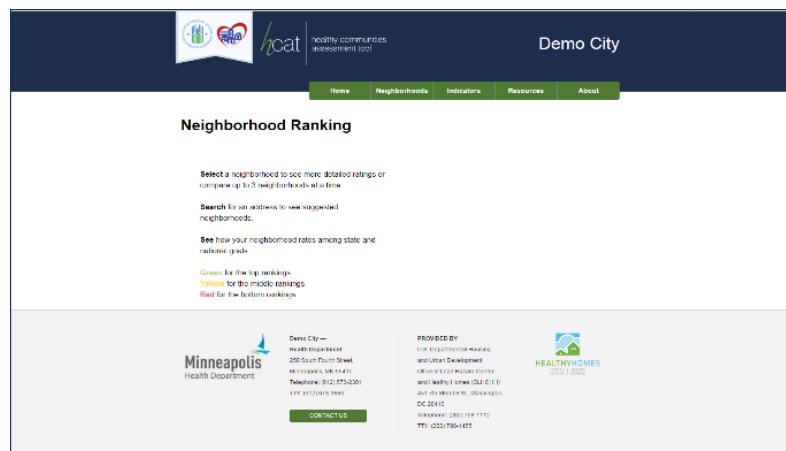


3. To upload the City's logo, the City HCAT developer will need to make the change in the `region-footer.tpl.php` file located at: `sites/all/themes/hci_zen/templates/region-footer.tpl.php`. This file will need to be updated to match the image name being uploaded.

City-specific information will also need to be updated in the footer block on the landing page.

4. Once these changes have been made to the landing page, the City HCAT developer must also re-center the Google map which will display City neighborhoods. This is done by going to: <https://YOURWEBSITEURL/admin/config/services/gmap>. Your city's center longitude and latitude can be entered in the **Default Center** field, or you can simply move the Google map to show your specific city/community and it will automatically select a Default Center for the city.

NOTE: Although the HCAT site is now established, it is still simply a template. Until the neighborhood description file and indicator data have been uploaded to the site, no neighborhoods will be listed nor indicator values displayed. HCI domain and indicator descriptions will be visible on the *Indicators* tab (because they are prepopulated), but no specific information on neighborhoods such as location or ranking will be visible via the *Neighborhood* tab (as shown by the example). Sections 4 through 9 provide in-depth instructions about how to set up neighborhoods and collect data.





Section 4. Data File Specifications

Each city identifies its own neighborhood boundaries based on Census blocks, block groups, tracts, and ZCTAs². If the city planning department does not have preordained neighborhoods or the pilot city lead agency determines they are not appropriate for the HCAT, neighborhoods should be defined, as feasible, according to residents' perception of neighborhood and natural boundaries to ensure individuals recognize and identify areas as specific neighborhoods.

As the collection of HCI indicator data is at various geospatial levels ranging from neighborhoods and Census block to ZCTAs, a major function built into the HCAT is the ability to aggregate indicator data to the neighborhood level regardless of the geospatial level at which it was collected. However, to map the data accurately, HCAT administrators must create a neighborhood definition that assigns each of these geospatial levels to the appropriate neighborhood. Cities must also create individual HCI indicator files which allows the HCAT to map (i.e., aggregate) the data value to the appropriate neighborhood based on the neighborhood definition file.

Similar to the core, ranked indicators, Demographic and Contextual indicators are uploaded as data value files, however City-specific data must be added to both the description of the indicator as well as in the City Wide indicator box at the bottom of the indicator details page. City Administrators must go to the "Edit Content" section on the HCAT Dashboard to make these adjustments.

The Neighborhood Details file provides the location of each neighborhood using latitude and longitude values, neighborhood-specific descriptions, and an image (e.g., a neighborhood map or iconic image). Unlike the neighborhood definition and indicator files, neighborhood details may be revised/updated by an HCAT administrator on the neighborhood page as necessary once the initial file has been loaded. However, it is important to note that if the revisions are not also imbedded into the Neighborhood Details file, subsequent revisions using updates to the Neighborhood Details file will not include the manual changes. Additionally, while changes to the description, locational centroids and images may be made at any time, Neighborhood names must always match the name used in the Neighborhood Definition File (NDF) or indicator data recalculations will not be able to function properly.

Although all data files will need to be uploaded to the HCAT as comma separated value files (i.e., csv format), the following instructions anticipate that data will initially be collected in Excel and then converted to a CSV format [See Footnote for additional instructions if files are built in a CSV program³].

² Initially data only available at the ZIP code level was to be converted to ZCTA to aggregate the data to the neighborhood level. However HUD offers a ZIP to Census Tract crosswalk that should be used to convert ZIP data to a census comparative geography. If a city is not using ZCTAs for any of their geographies, the column itself must still be in the neighborhood definition file, but no values need to be entered.

³ If a CSV program is used to build data files (rather than Excel), values in the Field ID should be separated by a comma. If an alpha/numeric field (e.g., neighborhood) value contains a comma within the value, surround the value in quotation marks (e.g., Clifton, Berea would be submitted in the file as "Clifton, Berea"). Additionally, a carriage return is required after the neighborhood value to signify the end of the row – not a comma; there should be no additional carriage returns, commas, or special characters after the final row.



General File Specification Definitions

- **Field ID:** Exact value of the 1st row field name in the csv file.
- **Position:** Column location within the CSV file, which maps the data within the application.
- **Required:** If “Yes” data must be submitted for this field.
- **Type:** Only Numeric characters are allowed or both Alpha and Numeric characters are allowed.
- **Length:** Although the system does not validate length, the indicated length for each field can be used as a data-side validation to ensure additional spaces are not causing a no match. “NA” indicates no set length.

4.1 Creating the Neighborhood Definition File (NDF)

The Neighborhood Definition File (NDF) is effectively the "map" the HCAT uses to allocate information to the correct neighborhood. Each jurisdiction determines their own neighborhood boundaries and distributes census blocks, block groups, tracts and ZCTA to the appropriate neighborhood(s).

Neighborhood Definition File Specifications

Field ID	Position	Required?	Type	Length	Notes
block_fips_code	1	Yes	Numeric	15	2-digit state; 3-digit county; 6-digit tract; 1-digit block group; 3-digit block.
block_population	2	Yes	Numeric	NA	Count of population at block level.
census_tract	3	Yes	Numeric	11	2-digit state; 3-digit county; 6-digit tract.
Zcta	4	Yes	Numeric	NA	ZCTA's are 5 characters in size, however the tool does not prevent lengths longer than 5 (e.g. zip + 4)
census_block_group	5	Yes	Numeric	12	2-digit state; 3-digit county; 6-digit tract; 1-digit block group.
neighborhood	6	Yes	Alpha/Numeric	NA	Verify correct neighborhood spellings exactly match geography_id field in the indicator value file.

NOTE: Even if no data is loaded at ZCTA level, the column must still be in the Neighborhood Definition File for the NDF to properly function.

File Guidelines

- Only one neighborhood definition file may be used in the HCAT.
- The neighborhood definition file must be comprehensive of all blocks and neighborhoods within a given City. If a set of blocks is not included, the map functionality will be impacted and users trying to find neighborhoods within those blocks will be unsuccessful.
- If there are blocks determined not to be in or part of a neighborhood, they should not be included in the neighborhood definition file.



- The first row should contain the column headers exactly as indicated in the Field ID Column (i.e., same spelling, same underscore, etc.; subsequent rows are block level and block-level equivalent values (i.e., the census or block group assigned to the specified block).
- Neighborhoods will not show up in the HCAT until the Neighborhood Definition File has been uploaded, i.e., neighborhood descriptions and locations can not be added to the HCAT until the neighborhood definition file is uploaded).
- Once a neighborhood definition file has been uploaded, neighborhoods **cannot** be added to the list without revising and reloading the neighborhood definition file.
- **NOTE:** If a neighborhood definition file rollback and reload is necessary for any reason, content related to neighborhood descriptions and/or locations must also be reloaded, either as a bulk Neighborhood Details update or manually (see Section 8.2 for more details).

Neighborhood Definition File Examples:

Excel Prior to CSV Conversion (or CSV file opened in Excel)

block_fips_code	block_population	census_tract	zcta	census_block_group	Neighborhood
245100101001000	84	24510010100	21224	245100101001	Canton
245100102001000	112	24510010200	21224	245100102001	Patterson Park North & East
245100102001004	0	24510010200	21224	245100102001	Patterson Park North & East
245100105001000	91	24510010500	21231	245100105001	Fells Point
245100301001000	73	24510030100	21231	245100301001	Harbor East/Little Italy
245100301001001	0	24510030100	21231	245100301001	Harbor East/Little Italy
245100401001005	0	24510040100	21202	245100401001	Downtown/Seton Hill
245100401001006	114	24510040100	21202	245100401001	Downtown/Seton Hill

NOTE: If ZCTAs are not being used, the column may be left blank, i.e., no values need to be entered in the cells, e.g.:

block_fips_code	block_population	census_tract	zcta	census_block_group	Neighborhood
245100101001000	84	24510010100		245100101001	Canton

CSV Program example (See Footnote 3 on page 18):

```
'block_fips_code,block_population,census_tract,zcta,census_block_group,neighborhood'
'245100101001000,84,24510010100,21224,245100101001,Canton'
'245100102001000,112,24510010200,21224,245100102001,Patterson Park North & East'
'245100102001004,0,24510010200,21224,245100102001,Patterson Park North & East'
'245100105001000,91,24510010500,21231,245100105001,Fells Point'
'245100301001000,73,24510030100,21231,245100301001,Harbor East/Little Italy'
'245100301001001,0,24510030100,21231,245100301001,Harbor East/Little Italy'
'245100401001003,0,24510040100,21202,245100401001,Downtown/Seton Hill'
'245100401001006,114,24510040100,21202,245100401001,Downtown/Seton Hill'
<end of file>
```



NOTE: If ZCTAs are not used, the column may be left blank, i.e., no values entered in the cells, e.g.:

'block_fips_code,block_population,census_tract,zcta,census_block_group,neighborhood'
'245100101001000,84,24510010100,,245100101001,Canton'

As indicated by the highlighted area, two commas in a row show that the column has been left blank.

4.2 Creating Indicator Files

Indicator files provide the data values for each indicator. Indicator data will be collected at various geospatial scales; the HCAT assigns and aggregates the data to the neighborhood level using the NDF.

Indicator File Specifications

Field ID	Position	Required?	Type	Length	Notes
geography_id	1	Yes	Numeric	NA	Must correspond to value provided in neighborhood definition file.
indicator_value	2	Yes	Alpha/ Numeric	NA	For % values, the decimal equivalent (e.g. .890 for 89%) must be used. The HCAT multiplies the decimal value by 100 for %-based indicators. ⁴ All other values are recorded as submitted.

File Guidelines

- Each indicator has only one file.
- The geography_id used in the indicator file must correspond with the same field in the indicator details. Otherwise, a “no match” situation will occur and the indicator will be excluded from the ranking calculation.
- If a geographic level has no data/indicator value, that row should be deleted. For example, a census tract with no occupied housing units cannot have households paying an excessive rent burden. The calculation would return #DIV/0!. That row should be deleted from the file. However, “0” is a value (i.e., zero households are paying an excessive rent burden). If the value returned/calculated is “0”, the row remains in the file and is counted in the HCAT aggregation.

Indicator File Examples:

Excel (or CSV file opened in Excel) Using Various Geospatial Level and Data Types

Number - Block FIPS Code		Dichotomous– Census Tract		Percent – Neighborhood	
geography_id	indicator_value	geography_id	indicator_value	geography_id	indicator_value
245100101001000	2	24510010100	0	Allendale/Irvington/ S. Hilton	0.27
245100101001001	2	24510010200	0	Beechfield/Ten Hills/West Hills	0.21
245100101001002	3	24510010300	0	Belair-Edison	0.27
245100101001003	3	24510010400	0	Brooklyn/Curtis	
245100101001004	3	24510010500	1	Bay/Hawkins Point	0.28
245100101001005	3	24510020100	1	Canton	0.14
245100101001006	2	24510020200	1	Cedonia/Frankford	0.22
245100101001007	2	24510020300	0		



CSV Program example (See Footnote 3 on page 18):

<u>Number - Block FIPS Code</u>	<u>Dichotomous- Census Tract</u>	<u>Percent - Neighborhood</u>
geography_id, indicator_value	geography_id, indicator_value	'geography_id, indicator_value'
'245100101001000, 2'	'24510010100, 0'	'Allendale/Irvington/S. Hilton, 0.27'
'245100101001001, 2'	'24510010200, 0'	'Beechfield/Ten Hills/West Hills, 0.21'
'245100101001002, 3'	'24510010300, 0'	'Belair-Edison, 0.27'
'245100101001003, 3'	'24510010400, 0'	'Brooklyn/Curtis Bay/Hawkins Point, 0.28'
'245100101001004, 3'	'24510010500, 1'	'Canton, 0.14'
'245100101001005, 3'	'24510020100, 1'	'Cedonia/Frankford, 0.22'
'245100101001006, 2'	'24510020200, 1'	<end of file>
'245100101001007, 2'	'24510020300, 0'	
<end of file>	<end of file>	

Data File Tips

- All data files must be formatted as Comma Separated Value (CSV) files.
- When working in Excel, be mindful that Excel can add formatting elements that may cause the values to become incorrect or the file unusable.
- All data, including numbers, must be read as text to avoid Excel's default, which is to convert long numbers to a scientific number format. One method to ensure that numbers are recorded as text is to copy the data from the geography_id column into a program such as Notebook or Text Pad, then copy the data back into Excel with the column assigned as "Text." This will ensure numbers are formatted as text.
- There should be no extraneous notes, markings, etc. in any cell in the document except those with the required data.
- Neighborhood spellings in the Neighborhood Definition file must exactly match those used in the Indicator files and vice versa (e.g., Clifton, Berea must be consistently listed as Clifton, Berea in all files, not as Clifton-Berea, Clifton/Berea or any other variation).
- If a local data source is used instead of a suggested data source, please document the source and any calculations necessary to determine the appropriate value.

4.3 Creating the Neighborhood Details File

The Neighborhood Details File provides descriptive information about each City neighborhood. It includes a brief description of the neighborhood, from the type of housing and retail to interesting facts about how the neighborhood developed. Neighborhood descriptions should be brief (i.e., no more than a paragraph or two), engaging, and highlight distinctive features of the neighborhood. This file also provides locational centroid information used in the *Find Your Neighborhood* icon to illustrate where neighborhoods are located across the City. Finally, it also features a neighborhood image (either a map or iconic neighborhood picture) that represents how the neighborhood fits into the overall city.



Neighborhood Details File Specifications

Field ID	Position	Required?	Type	Length	Notes
body	1	Yes	Alpha/Numeric	NA	Quotes and possessive symbols must be "straight" versus smart or curly; paragraphs and line breaks must be marked with html code ; html code must be used for any non-standard symbols (e.g., registered ® or copyright ©)
latitude	2	Yes	Numeric	NA	Presented as a positive number
longitude	3	Yes	Numeric	NA	Presented as negative number
map	4	Yes	gif, jpeg, jpg, or png	NA	Altho the column indicates "map," the image loaded to the HCAT may be a map or an iconic image of the specific neighborhood. It may not be more than 60MB in size. Image name must exactly match the name of the image file (gif, jpeg, jpg or png) loaded to the HCAT.
neighborhood	5	Yes	Alpha/Numeric	NA	Verify neighborhood spellings exactly match neighborhood field in the neighborhood definition file.

File Guidelines

- Only one neighborhood details file may be used in the HCAT.
- The neighborhood details file must include the latitude and longitude information for all neighborhoods; if this information is not included, the map functionality found in the "Find Your Neighborhood" icon will be not work and users trying to find neighborhoods will be unsuccessful.
- The first row must contain the column headers exactly as shown in the Field ID column; subsequent rows are neighborhood specific information (i.e., the neighborhood description, lat/long, and image associated with each neighborhood).
- Body text may not include any non-Drupal compatible symbols such as "smart" or "curley" quotes – single (i.e., apostrophes) or double (quotation marks). All quotes and apostrophes must be entered as "straight" quotes. Special symbols such as © or ® must be entered using



HTML code (e.g., Park Score[®] would be entered as Park Score®). Double-hyphens (i.e., -- or EM marks) should be revised as a single hyphen (e.g., "-")

- HTML line break codes must be used to delineate multiple paragraphs (e.g.
 provides a manual line break;

 will provide paragraph spacing.
- Neighborhood names must exactly match the neighborhood names used in the neighborhood definition file for the HCAT to assign the information to the correct neighborhood.
- No extraneous markings may be on columns or rows beyond those being used in the file (e.g., if data was in an adjoining column or row, that column or row must be deleted, not merely cleared of the data.
- The names of the maps or images used in the maps column must be identical to the image file name (i.e., Emory.jpg not Emory.png).

Neighborhood Details File Example:

Excel (or CSV file created/opened in Excel) Example

body	latitude	longitude	map	neighborhood
Located in the southwest corner of the city, Armatage is built up with mostly single-family housing and some multifamily buildings. The neighborhood also has a park with a community center. The retail space in the neighborhood consists of individual neighborhood stores and is mostly located along Penn Avenue South. The great majority of housing was built between 1949 and 1969, while about 5 percent of the dwellings were built before World War II. To learn more about the neighborhood association visit: www.armatage.org	44.89846	-93.3112	Armatage.jpg	Armatage
The Audubon Park neighborhood is located in northeast Minneapolis. The park and neighborhood are named in honor of John James Audubon, a great American naturalist and ornithologist. A majority of the houses in this relatively hilly neighborhood were built in the 1940s. To learn more about the neighborhood association visit: www.audubonneighborhood.org	45.01826	-93.2384	Audubon_Park.jpg	Audubon Park
The Bancroft neighborhood is located south of Powderhorn Lake. The neighborhood is named for George Bancroft, an American historian born in 1800. The neighborhood consists mostly of single-family houses built before 1940. The neighborhood also has some commercial development along Bloomington Avenue and 38th Street. To learn more about the neighborhood association visit: www.bancroftneighborhood.org	44.93053	-93.2592	Bancroft.jpg	Bancroft

CSV Program example (See Footnote 3 on page 18):

```
'body, latitude, longitude, map, neighborhood'
'Located in the southwest corner of the city, Armatage is built up with mostly single-family housing and some multifamily buildings. The neighborhood also has a park with a community center. The retail space in the neighborhood consists of individual neighborhood stores and is mostly located along Penn Avenue South. The great majority of housing was built between 1949 and 1969, while about 5 percent of the dwellings were built before World War II.<br><br>To learn more about the neighborhood association visit: www.armatage.org, 44.89846, -93.3112, Armatage.jpg, Armatage'
'The Audubon Park neighborhood is located in northeast Minneapolis. The park and neighborhood are named in honor of John James Audubon, a great American naturalist and ornithologist. A majority of the houses in this relatively hilly neighborhood were built in the 1940s.<br><br>To learn more about the neighborhood association visit: www.audubonneighborhood.org, 45.01826, -93.2384, Audubon_Park.jpg, Audubon Park'
'The Bancroft neighborhood is located south of Powderhorn Lake. The neighborhood is named for George Bancroft, an American historian born in 1800. The neighborhood consists mostly of single-family houses built before 1940. The neighborhood also has some commercial development along Bloomington Avenue and 38th Street.<br><br>To learn more about the neighborhood association visit: www.bancroftneighborhood.org, 44.93053, -93.2592, Bancroft.jpg, Bancroft'
<end of file>
```

Data File Tips

- All neighborhood detail files must be formatted as Comma Separated Value (CSV) files.
- When working in Excel, be mindful that Excel can add formatting elements that may cause the values to become incorrect or the file unusable.



- All data, including numbers, must be read as text to avoid Excel's default, which is to convert long numbers to a scientific number format. One method to ensure that numbers are recorded as text is to copy the data from the latitude and longitude columns into a program such as Windows Notepad or Text Pad, then copy the data back into Excel with the column identified as a "text" column. This will ensure numbers are formatted as text.
- There should be no extraneous notes, markings, etc. in any cell in the document except those with required data.
- Neighborhood names in the neighborhood column must exactly match the Neighborhood spellings in the Neighborhood Definition file (e.g., Clifton, Berea must be consistently listed as Clifton, Berea in all files, not as Clifton-Berea, Clifton/Berea or any other variation).
- Text from the body column will appear as the Neighborhood description on Neighborhood specific pages.
- Images identified in the map column must be uploaded to the HCAT image folder (See Section 6.1 (f) on page 36 for upload instructions).



Section 5. Logging onto the HCAT as an Administrator

5.1 Account and Password Creation

When an account has been created for an HCAT administrator, the user receives an email providing a username and a link to follow to setting their password. This link may only be used once to log in and will lead you to a page to set your password.

5.1 (a) Accessing the HCAT Site as an Administrator

Add the following text to the end of the City's HCAT site URL: `"/user"` to log on as the site administrator, e.g., <https://hcat-YOURCITY.gov/user>. Log in with your username and password.

5.1 (b) Request New Password

- If you forget your password, select the tab on the User Account page entitled "Request new password" and enter your username or email address.
- The City HCAT Administrator will send an email to the user's email address with a link to follow to create a new password. Note that this link is a one-time login, which will expire within 24 hours.
- Enter and confirm your new password and click [Save].

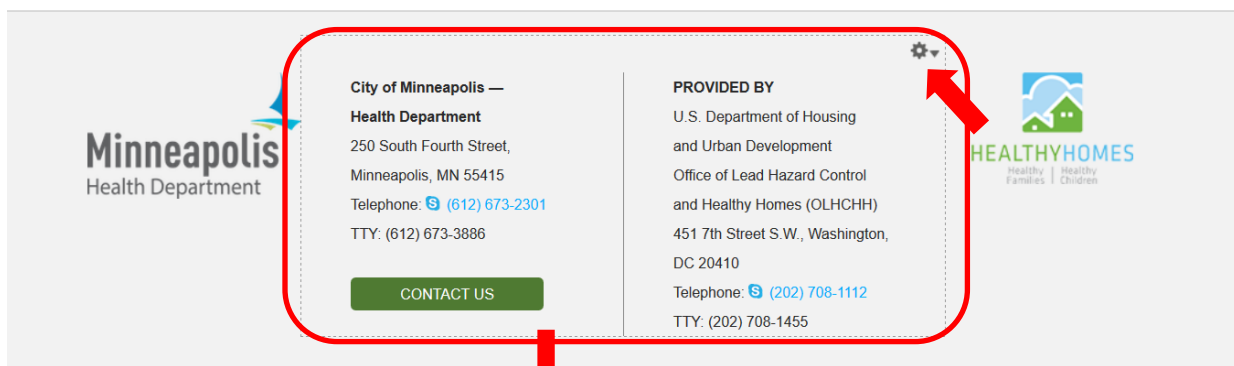
5.2 Putting the City's Mark on the HCAT

Each City downloading the HCAT receives an individualized HCAT website, which is updated by the City (or lead agency) to feature City-specific maps, logos, and images. The footer at the bottom of each site



page prominently features the City (or lead agency's) logo along with City/Agency specific contact information. Logos in the page footer (i.e., the City/agency's logo) must be added by the City HCAT Developer and should be loaded at the same time the City image is loaded (See Section 0 on page 16 for more information). However, contact information on the footer can be loaded by the HCAT Administrator loading neighborhood information and indicator values with that level of administrative permissions.

Hovering a mouse over the box reveals a "sprocket;" click on the sprocket and select "configure block" to add/update the information in the contact box.



'Footer Text' block

Block title

The title of the block as shown to the user.

Block description *

A brief description of your block. Used on the [Blocks administration page](#).

Block body *

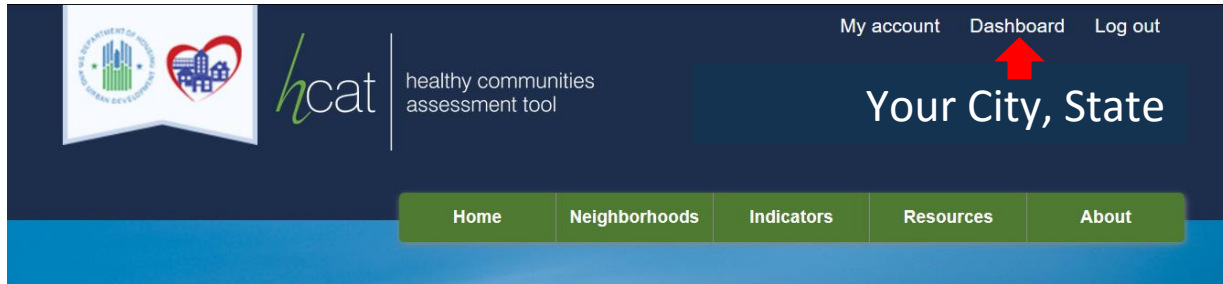
```
<div id="footer-text">
  <div id="first-par">
    <p><b>City of Minneapolis —<br><img alt="Minneapolis Health Department logo" data-bbox="338 615 355 625"/>Health Department</b></p>
    <p>250 South Fourth Street,<br>Minneapolis, MN 55415<br>Telephone: (612) 673-2301<br>TTY: (612) 673-3886</p>
    <p>&nbsp;</p>
    <p><a id="footer-contact" class="btn btn-green" href="mailto:health@minneapolismn.gov">Contact us</a></p>
  </div>
  <div id="second-par">
    <p><b>PROVIDED BY</b></p>
    <p>U.S. Department of Housing<br>and Urban Development</p>
    <p>Office of Lead Hazard Control<br>and Healthy Homes (OLHCHH)</p>
    <p>451 7th Street S.W., Washington, DC 20410<br>Telephone: (202) 708-1112<br>TTY: (202) 708-1455</p>
  </div>
</div>
```

- Enter contact information for the City in highlighted area of the [Block body] field.
- To maintain the contact box format, contact updates and revisions must be done within the confines of the coding.
- Other selections in the "Footer Text Block" should remain the same to maintain the boxes format.
- Select "Save" at the bottom of the page.



Section 6. Adding Content to the HCAT

All HCAT content and data are added, edited, and managed on the sites' Dashboard page, which is accessed via the "Dashboard" link on the top right side of the webpages.



6.1 Adding Content

Most HCAT content and indicator data values are added via the "ADD CONTENT" box on the dashboard page. Select one of the links as displayed in the screenshot below to add the corresponding content, as described on the following pages.

Dashboard

Manage Content

Type

Title	Type	Edit link
Blackstone	Neighborhood	Edit
Charles	Neighborhood	Edit
College Hill	Neighborhood	Edit
Downtown	Neighborhood	Edit
Elmhurst	Neighborhood	Edit
Elmwood	Neighborhood	Edit
Federal Hill	Neighborhood	Edit
Fox Point	Neighborhood	Edit
Hartford	Neighborhood	Edit
Hope	Neighborhood	Edit

1 2 3 next › last »

ADD CONTENT

Please click on the content types below to add new Content.

[Data Sources](#) [Domain](#) [Indicator](#) [Upload Indicator Values](#) [Upload Neighborhood Definitions](#) [Upload Neighborhood Details](#)

Site Tools

[Recalculate Ranks](#) [Indicator Values File Manager](#) [Neighborhood Definition File Manager](#) [Neighborhood Details File Manager](#) [Indicator Data](#) [Badge Icon](#)



6.1 (a) Adding Indicator Data Sources

ADD CONTENT

Please click on the content types below to add new Content.

Data Sources Domain Indicator Upload Indicator Values Upload Neighborhood Definitions Upload

Neighborhood Details Upload

HCI Indicator data sources and descriptions available at the national level are pre-population (i.e., preloaded)

in the HCAT. However, local data sources with descriptions will need to be added. Additionally, if a City intends to add non-HCI indicators to the HCAT, the data sources for those indicators must also be added. Please note: all indicators included in the HCAT, with the exception of Demographic and Contextual indicators, will be included in the overall neighborhood rankings. If non-HCI indicators are added to the HCAT, they can be added under an existing domain or a new domain determined by the local community. Indicator descriptions along with their connection to healthy communities and related citations should be included similar to how HCI indicators have been detailed.

[Add content](#)

CREATE DATA SOURCES

Title *

Body ([Edit summary](#))

Text format: **Filtered HTML**

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: <a> <cite> <blockquote> <code>
- Lines and paragraphs break automatically.

This field not relevant as the URL will take users straight to the source.

Uri

Title URL

The link title is limited to 128 characters maximum.

Save

- In the [Title] field, enter the name of the Data Source.
- In the [Body] field, provide a description of the Data Source.
- In the [Title] section, add the Title of the data source.
- In the [URL] section, provide the title of the data source link and the sites website/URL.
- Select "Save."



6.1 (b) Adding a Domain

The HCAT includes pre-determined domains. Cities interested in adding additional Domains to the HCAT enter them into the HCAT as follows:

- In the [Title] field, enter the name of the Domain.
- Images associated with the Domains may be uploaded by selecting the "Browse" button and adding an appropriate image; as feasible, it is recommended that an image aligned with your specific City be used.
- Select "Choose File" and browse to the image file. Files must be less than 128MB and must be in png, gif, jpg, or jpeg format.
- Select "Upload."
- In the [Body] field, enter the text description of the Domain.
- Select "Save."

ADD CONTENT

Please click on the content types below to add new Content.

Data Sources Domain Indicator Upload Indicator Values Upload Neighborhood Definitions Upload

Neighborhood Details

Site Tools

Recalculate Ranks Indicator Values File Manager Neighborhood Definition File Manager Neighborhood Details File Manager Indicator Data Badge Icon

[Add content](#)

CREATE DOMAIN

Title *

Image *

[Browse...](#) No file selected. [Upload](#)

Files must be less than 60 MB.
Allowed file types: png gif jpg jpeg.

Body ([Edit summary](#))

Text format: Filtered HTML

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: <a> <cite> <blockquote> <code> <dl> <dt> <dd>

- Lines and paragraphs break automatically.

Use the 'Summary' description for the short description to be used on preview areas.

- Images, links, and other formatting options can be implemented here.
- Use the 'Body' area to show text on the right column below the indicator settings detail box.
- Images, links, and other formatting options can be implemented here.

[Save](#)

NOTE: If a City adds a new domain, the Neighborhood Definition File must be "rolled back" and reloaded to recognize the new domain. See Section 7.3, page 39 for instructions on how to roll back the NDF and then re-import the same file (a new NDF is not necessary) to reset the tool.

6.1 (c) Adding Indicator Descriptions and Relevant Data Information

The HCAT includes pre-determined HCI indicators. Cities interested in expanding the list of indicators included in the HCAT may add the indicator(s) to an existing domain or add additional Domains to the HCAT. If an indicator

ADD CONTENT

Please click on the content types below to add new Content.

Data Sources Domain Indicator Upload Indicator Values Upload Neighborhood Definitions Upload

Neighborhood Details

Site Tools

Recalculate Ranks Indicator Values File Manager Neighborhood Definition File Manager Neighborhood Details File Manager Indicator Data Badge Icon



will be assigned to a new domain, that domain should be added to the HCAT as outlined in Section 5.1 (b) above prior to adding the new indicator. The following provides instructions to add indicator descriptions and other relevant information:

- In the [Title] field, enter the name of the Indicator.
- Check [Contextual Indicator] only if the City has decided to add additional Demographic and Contextual Indicators. Otherwise leave blank
- In the [Title Description] field, enter a detailed description of the indicator.
- Select FULL HTML from the dropdown menu for the text format used to enter the short description.
- Next to the [Description] field, Click on “Edit Summary” and enter a short description of the indicator.
- In the [Description] field, as feasible, enter citations supporting the evidence base of the indicator. Information should be coded in the following manner:

```
<p><strong>Key Citations:</strong>  
<ol><li>CITATION</li>  
<li>CITATION</li></ol></p>
```
- Select FULL HTML from the dropdown menu for the text format used to enter the narrative description.
- Select Data Sources used for the indicator by checking the Data Sources shown (as data sources are added to the HCAT, they are listed).
- In the [Public Data Sources Description] field, enter the data source of the indicator and each step necessary to collect and calculate (as necessary) indicator data.
- Select FULL HTML from the dropdown menu for the text format used to enter the data collection steps in the Public Data Sources Description field.
- In the [Admin Data Sources Description] field, enter technical information about the indicator. This information is only accessible to individuals with administrator rights.

Create Indicators

Title

☐ Contextual Indicator

Title Description

Text format: Filtered HTML [More information about text formats](#)

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: <a> <code> <blockquote> <code>
- Lines and paragraphs break automatically.

This text will appear on the indicator details page, just below the title.

Summary [\(Edit summary\)](#)

Leave blank to use trimmed value of full text as the summary.

Description

Text format: Filtered HTML [More information about text formats](#)

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: <a> <code> <blockquote> <code>
- Lines and paragraphs break automatically.

Use the 'Summary' description for the short description on indicators.

- Check the 'indicators' page to determine how long is appropriate for the summary text.
- Use the 'Description' area to show text on the right column below the indicator settings detail box.
- Images, links, and other formatting options can be implemented here.

Data Sources

- ☐ US Census Data: Factfinder2
- ☐ CFED Bank On
- ☐ U.S. Census TIGER Shapfiles
- ☐ National Center for Education Statistics
- ☐ USDA Food Access Research Atlas
- ☐ HUD Location Affordability Index (LAI)
- ☐ NHTSA Fatality Analysis Reporting System (FARS)
- ☐ Local Data Request
- ☐ U.S. EPA Cleanups in My Community
- ☐ SEDAC with Center for International Earth Science Information Network
- ☐ FHWA Highway Performance Monitoring System (HPMS)
- ☐ EPA Toxic Release Inventory (TRI)
- ☐ EPA Risk-Screening Environmental Indicators (RSEI)
- ☐ National Incident-Based Reporting System (NIBRS)
- ☐ National Land Cover Database 2011 (NLCD2011)
- ☐ EPA Smart Location Database
- ☐ Self-Sufficiency Standard
- ☐ Park Score

If applicable, select from this list of common data sources that were used in gathering data for this indicator.

Public Data Sources Description

Text format: Filtered HTML [More information about text formats](#)

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: <a> <code> <blockquote> <code>
- Lines and paragraphs break automatically.

This description will show on the 'data' page under the column 'additional data'.

- Images, links, and other formatting options can be implemented here.

Admin Data Sources Description

Text format: Filtered HTML [More information about text formats](#)

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: <a> <code> <blockquote> <code>
- Lines and paragraphs break automatically.

This field can be used to capture any important internal information about this data source relevant to its use on the HCAT site. This information is not publicly accessible, and is only viewable when the content manager is authenticated and managing the site.



- Select FULL HTML from the dropdown menu for the text format used to provide technical information about the indicator.
- Use the [Primary Domain] drop down menu to select the domain the indicator should align with on the “Domain and Indicators” page. As HCI Domains and Indicators are already prepopulated in the HCAT, added indicators should be assigned to the “Local” Domain.
- Under [Secondary Domain(s)], check additional domains the indicator influences.
- In the [Indicator Level] drop down menu, select the geospatial level at which the indicator is measured. To correctly calculate rankings, this field must match the geography_id value type in the uploaded indicator file.
- In the [Inverse Measurement] drop down menu, select “No” if high values are considered positive for this indicator; select “Yes” if high values are considered negative (e.g., a high incidence of crime is a negative, while a high graduation rate is a positive).
- In the [Aggregation Method] drop down menu, select how the indicator should be aggregated to the neighborhood level. NOTE: If the indicator value is already at the neighborhood level, select “Sum”.⁵
 - **Sum:** Sums values across the designated indicator level (ZCTA, census block-group-tract).
 - **Unweighted Average:** Averages values across the designated indicator level (ZCTA, census block-group-tract).
 - **Weighted Average:** Distributes the indicator value across the indicator level proportionate to its geographic population, and then sums the value (ZCTA, census block-group-tract).
- In the [Indicator Weight] field, enter a numerical value, according to the following:
 - 0 = not factored in calculations or rankings.
 - 1 = default setting

The screenshot shows a web form for configuring an indicator. It includes sections for Primary Domain (a dropdown menu), Secondary Domain(s) (a list of checkboxes for various domains like Transportation, Social Cohesion, etc.), Indicator Level (a dropdown menu), Inverse Measurement (a Yes/No selection), Aggregation Method (a dropdown menu with Sum, Unweighted Average, and Weighted Average), Indicator Weight (a text input field), and Unit of Measurement (a text input field). There are also sections for Target Indicator 1 and Target Indicator 2, each with a label and a value input field. A City Wide Value section is at the bottom. A 'Save' button is located at the bottom right of the form.

⁵ This is simply a protocol measure. Selecting “Neighborhood” in the **Indicator Level** field overrides any aggregation method.



- 2+ = adds higher value when calculating and ranking. Only use 2 or higher on indicators that have greater value (i.e., are more important than the other indicators) to the City.
- In the [Unit of Measurement] field, enter the unit of measurement that should be suffixed at the end of the calculated value and displayed in the indicator value column. **NOTE:** Units of measurement may be left blank if the City feels the indicator table is confusing/too busy.
- In the [Target Indicator 1] field, enter the label for the first indicator comparison, such as a national or regional goal (e.g. Healthy People 2020, MetroChallenge 2015).
- In the [Target Indicator 1 Value] field, enter the target indicator's numeric value.
- In the [Target Indicator 2] field, enter the label for the second indicator comparison, such as a state or local level (e.g., Maryland 2020).
- In the [Target Indicator 2 Value] field, enter the target indicator's numeric value.
- If the City has added a new Demographic and Contextual Indicator, enter the city-wide value for the Indicator. This data will be repeated for all neighborhoods.
- Select "Save."

NOTE: If a City adds a new indicator(s), the Neighborhood Definition File must be "rolled back" and reloaded to recognize the new indicator(s). See Section 7.3, page 39 for instructions on how to roll back the NDF and then re-import the same file (a new NDF is not necessary) to reset the tool.

6.1 (d) Uploading Indicator Value Files

Although HCI indicators details are pre-populated, as each communities' data values are unique, Cities must collect the data for each indicator and upload it to the tool. Data collection steps can be found in Section 9.2 beginning on page 49. Data are collected at various geospatial levels: Census block, Census block group, Census Tract, ZIP and Neighborhood. The HCAT aggregates data not collected at the neighborhood level to the neighborhood level using the neighborhood definition file. Once the data for each indicator have been collected and calculated as necessary, the values must be uploaded to the HCAT by going to the "ADD CONTENT" section of the dashboard. Detailed instructions about how to create indicator data csv files may be found in Section 3.2 on page 21. These files are then loaded to the HCAT in the following manner from the Dashboard page:

ADD CONTENT

Please click on the content types below to add new Content.

Data Sources Domain Indicator **Upload Indicator Values** Upload Neighborhood Definitions Upload

- In the [Title] field, enter the name of the indicator.
- In the [Indicators] field, select the indicator from the drop-down menu, e.g., "Chronic School Absence."
- Select "Choose File" and browse to the file on your computer hard drive, desktop, or network. Files must be less than 60 MB and in CSV format.
- Select "Upload."
- Select "Save."

[Add content](#)

CREATE INDICATOR VALUES

Title *

Indicators *

Indicator Values *

Choose File No file chosen

Files must be less than 60 MB.

Allowed file types: csv.

Upload

Save



As shown below, the upload status of indicator values to the HCAT is indicated in the INDICATORVALUES table.

INDICATORVALUES

✓

Your operation is running in the background. You may refresh the dashboard page to check on its progress.

<input type="checkbox"/>	Task	Status	Items	Imported
<input type="checkbox"/>	adulthood_100769	Idle	624	0
<input type="checkbox"/>	ageofhou_100770	Idle	623	0
<input type="checkbox"/>	commutem_100771	Idle	626	0
<input type="checkbox"/>	excessiv_100772	Idle	623	0
<input type="checkbox"/>	localbus_100773	Idle	106	0
<input type="checkbox"/>	offsitea_100774	Idle	106	0
<input type="checkbox"/>	resident_100775	Idle	628	0
<input type="checkbox"/>	travelti_100776	Idle	628	0
<input type="checkbox"/>	vacancyr_100777	Idle	628	0

Operations

Import

Execute

Choose an operation to run on all selections above:

- Although “uploaded” to the site, indicator values are dormant (i.e., not actually *in* the HCAT database) until they are “imported.” To facilitate the import, it is recommended that all indicator value files be uploaded and imported together.
- Check the boxes next to all of the indicators to be imported to the HCAT database.
- Choose “Import” from the dropdown menu in the Operations box, and select “Execute.”
- Check progress and verify upload by selecting “Dashboard,” scrolling to the bottom of the page, and selecting “Indicator Values File Manager” in the SITE TOOLS box (See Section 7.2 for details).
- If a file is properly imported to the database, the value in the “Imported” column will match the value listed in the “Items” column (which represents the number of rows within the uploaded file).
- Please note that the Task column (or file queue) lists indicator value files not according to the file name, but according to Drupal programming protocol, which only uses the first seven characters of the CSV file name. In cases where there are two indicators with the same first seven characters (e.g., Access to Mainstream Financial Services and Access to Parks and Open Space), users can determine which file is in queue by clicking on the task itself and selecting “Source” from the menu on the left side; the full filename will then be displayed.
- If an indicator values file does not load properly or errors are found once the file is uploaded (e.g., data entered in whole numbers versus decimals for percent values, or rows of geographic levels with no data were not deleted from the file), go Section 7. Data Management (page 37) for instructions to reset and/or reload the indicator data file.



6.1 (e) Uploading the Neighborhood Definition File (NDF)

Detailed instructions on how to create the CSV Neighborhood Definition File (NDF) (i.e., the required file format to load neighborhood boundary geographies and population) may be found in Section 3.1 on page 19.

ADD CONTENT

Please click on the content types below to add new Content.

Data Sources Domain Indicator Upload Indicator Values Upload Neighborhood Definitions Upload Neighborhood Details

- In the [Title] field, enter the name of the file, e.g., “Baltimore Neighborhood Definitions”. Only one neighborhood definition file may be added. It is the main tool the HCAT uses to map data and content to neighborhoods.

Create Neighborhood Definitions

Title *

Neighborhood Definition *

Browse... No file selected. Upload

Files must be less than 128 MB.
Allowed file types: .csv.

Save

- Select “Choose File” and browse to the file on your computer hard drive, desktop, or network. The file must be less than 128 MB and in CVS format.
- Select “Upload.”
- Select “Save.”
- Once the file has saved to the HCAT, the user will automatically be directed to the “Task Import” page. Check the box next to the saved neighborhood definition file, select “Import” from the dropdown list in “Operations” and “Execute.” Depending on the size of the neighborhood definition file, this may take a little bit of time.
- If a neighborhood definition file does not load properly or needs revisions after it has been loaded, go to Section 7. Data Management (page 37) for further instructions about how to address resetting and reloading the neighborhood definition file.

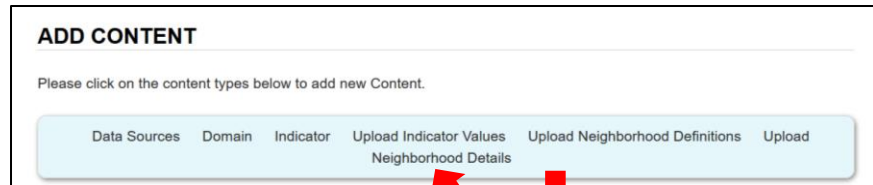
In addition to defining neighborhood boundaries to properly map and aggregate HCAT indicators, Cities also develop a narrative description of each neighborhood for their respective HCAT neighborhood page and centroids (i.e., latitude and longitude points) that indicate where the neighborhood is located. However, neighborhood descriptions, images and centroid will only portray on the HCAT once the Neighborhood Definition CSV file has been uploaded to the HCAT. **NOTE: Neighborhood names must exactly match the neighborhood definition file and can not be changed after it is loaded**, e.g., when adding or editing the neighborhood’s description. If the neighborhood name is changed, the neighborhood definition file will no longer “read” the indicators data files to properly aggregate data or attribute it to the correct neighborhood. See Section 5.1(g) to learn about bulk uploads of the neighborhood details file.



6.1 (f) Uploading the Neighborhood Details File

Neighborhood descriptions should be brief (i.e., no more than a paragraph or two), engaging, and highlight distinctive features of the neighborhood. In addition to the description, the neighborhood details file includes neighborhood images (either a map or iconic neighborhood picture) and locations.

Neighborhood descriptions may be added to the HCAT via the Add Content section in two ways: either as a bulk upload using a CSV file or manually entering neighborhood-by-neighborhood. Detailed instructions on how to create the CSV file necessary to upload Neighborhood Details (i.e., descriptions, images and locational centroids) in bulk format may be found in Section 3.3 on page 22. Alternatively, instructions to load neighborhood details one neighborhood at a time, or to revise/update neighborhood details once they have been loaded to the HCAT, may be found in Section 7.4: Managing and Updating the Neighborhood Details File, page 40.



- In the [Title] field, enter the name of the file, e.g., “Baltimore Neighborhood Details”. Only one neighborhood details file is recognized by the tool. It links to the neighborhood geographies specified in the NDF to map neighborhood descriptions and locations to the neighborhood pages as well as to neighborhood pins identified in the *Find Your Neighborhood* map icon found on the *Home* page.
- Select “Choose File” to navigate to the file. The file must be less than 128 MB and in CVS format.
- Select “Upload.”
- Map or neighborhood images are added to the "MAPS" section either by clicking on "add files" and navigating to the host folder, selecting the files and clicking "open" or by highlighting and dragging files from the host folder into the map section. Image files may only be png, jpg, jpeg, or gif format.
- After the files have been migrated to the Map Section, select "Start Upload" and “Save.”
- Once the file has saved to the HCAT, the user will automatically be directed to the “Task Import” page. Check the box next to the saved neighborhood details file, select “Import” from the dropdown list in “Operations” and select “Execute.” Depending on the size of the neighborhood details file, this may take a little bit of time.

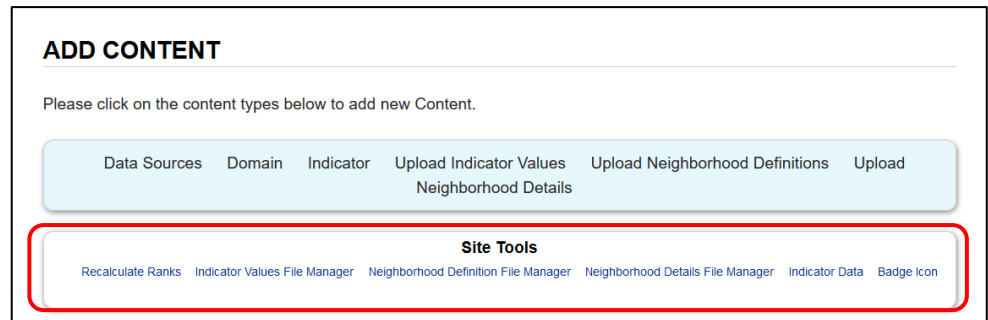


If a neighborhood details file does not load properly or needs revisions after it has been loaded, go to Section 7.4: Managing and Updating the Neighborhood Details File (page 40) for further instructions.

Section 7. Data Management

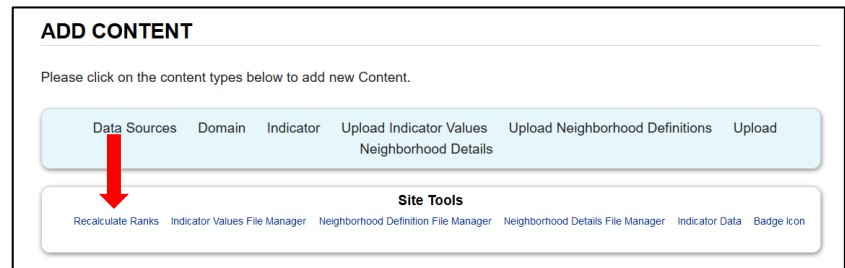
Neighborhood Definition, Indicator Value, and Neighborhood Details files are uploaded to the HCAT via the “Add Content” box on the Dashboard page (See Section 5 for upload details).

After the files have been added to the HCAT, they are managed, i.e., monitored, revised, corrected, and updated via the HCAT “Site Tools.” “Site Tools” are also used to calculate (and recalculate⁶) HCI Indicator and Neighborhood rankings. The tools are found at the bottom of the Administrative Dashboard page.



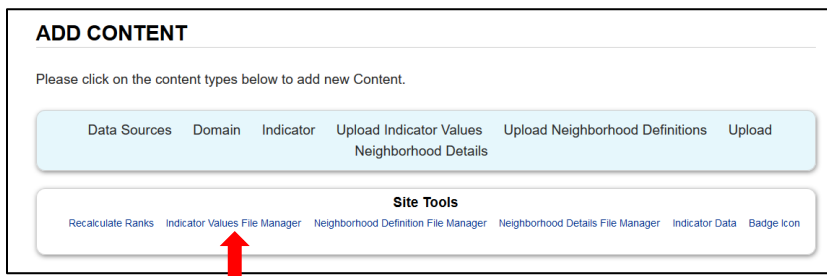
7.1 Calculating Indicator and Neighborhood Rankings

Once the NDF and all HCI Indicator value files are uploaded to the HCAT, Neighborhood and Indicator Rankings are calculated by selecting “Recalculate Rank.” **NOTE:** Navigating to another page on the site during the recalculation process will stop the calculation process.



Every time changes are made to indicator values (i.e., new indicator files are uploaded and imported) or the neighborhood definition file revised, rankings must be recalculated using this function. The calculations process may take anywhere from an hour or two to twenty-four hours, depending on the volume of data uploaded into the system.

7.2 Managing and Updating Indicator Value Files



Selecting “Indicator Value File Manager” links to an INDICATORVALUES screen, which lists all Indicator value files uploaded to the HCAT. Only files with values in the “Imported” column matching the “Items” column are active (i.e.,

⁶ Rankings must be “recalculated” any time changes are made to indicator values.



loaded) in the tool. NOTE: This is a key clue if data values are not portraying. If a file is not properly configured, the tool can not import the data.

The value of the imported column will match the value in the items column if the import is successful; otherwise, the import has not completed or there is a problem with the import. Note: A single file needs at least two to three minutes to import; give the process more time when multiple files are imported together.

INDICATORVALUES				
<input type="checkbox"/>	Task	Status	Items	Imported
<input type="checkbox"/>	acessto_22132	Idle	13598	0 X
<input type="checkbox"/>	acessto_69292	Idle	200	200
<input type="checkbox"/>	acessto_69293	Idle	13598	13598 ✓
<input type="checkbox"/>	ageofhou_22133	Idle	198	0
<input type="checkbox"/>	ageofhou_69289	Idle	198	198
<input type="checkbox"/>	alcoholo_69294	Idle	31	0
<input type="checkbox"/>	alcoholo_69322	Idle	31	0

Please note that the file names listed in the Task column (or file queue) are truncated according to Drupal programming protocol, which only uses the first seven characters in the file name. In cases where there are two indicators with the same first seven characters (e.g., Access to Mainstream Financial Services and Access to Parks and Open Space), users can determine which file is in queue by clicking on the task itself and selecting "Source" from the menu on the left side; the full filename is then displayed.

INDICATORVALUES

<input type="checkbox"/>	Task	Status	Items	Imported
<input type="checkbox"/>	acessto_22132	Idle	13598	0
<input type="checkbox"/>	acessto_69292	Idle	200	200
<input type="checkbox"/>	acessto_69293	Idle	13598	13598
<input type="checkbox"/>	ageofhou_22133	Idle	198	0

ACESSTO_22132

Overview

Destination
4 mapped.

Source
2 mapped.

Mapping: Done
By priority: 3 OK.

Mapping: DNM
By priority: 1 OK.

These are the fields available from the source of this migration task. The machine names listed here are those available to be used as the second parameter to \$this->addFieldMapping() in your Migration class constructor. Unmapped fields are red.

Query

public://indicator_vales/Access to Parks and Open Spaces.csv

Machine name	Description
geography_id (PK)	geography_id
indicator_value (PK)	indicator_value

Updating or Revising an Indicator Value File

If an indicator value file must be updated, does not load properly, or errors are found in the file after it has been imported (e.g., data entered in whole number versus decimal for percent values or rows of geographic levels with no data were included), it must be re-loaded and re-imported into the database. However, prior to uploading new data for an Indicator, previously uploaded data must be removed – or rolled back – from the database (i.e., a new upload **does not** override previously imported data).

Click on "Dashboard" and select "Indicator Values File Manager" at the bottom of the page. From the INDICATORVALUES table, select the indicator(s) that need to be corrected or updated by checking the



Operations

Rollback

Execute

Choose an operation to run on all selections above:

- Import
Imports all previously unprocessed records from the source, plus any records marked for update, into destination Drupal objects.
- Rollback
Deletes all Drupal objects created by the import.
- Stop
Cleanly interrupts any import or rollback processes that may currently be running.
- Reset
Sometimes a process may fail to stop cleanly, and be left stuck in an Importing or Rolling Back status. Choose Reset to clear the status and permit other operations to proceed.
- Remove migration settings
Removes all information about a migration group or task, while preserving any content that has already been imported.

box next to the most recently loaded file. Select “Rollback” in the Operations dropdown menu, and “Execute.” Although the file name will still appear in the list, the “Imported” value will reset to “0” and the data will no longer be in the HCAT database. To upload the corrected indicator values file, follow the steps for “Uploading an Indicator Values File” on page 33.

7.3 Managing and Updating the Neighborhood Definition File

Occasionally, a neighborhood definition file needs to be revised due to problems with the file itself or changes in neighborhood boundaries.

Selecting the “Neighborhood Definition File Manager” in the SITE TOOLS box leads to the list of

Uploaded Neighborhood Definition files. The only active neighborhood definition file is the file in which the value in the “Items” column matches the value in the “Imported” column.

ADD CONTENT

Please click on the content types below to add new Content.

Data Sources Domain Indicator Upload Indicator Values Upload Neighborhood Definitions Upload Neighborhood Details

Site Tools

Recalculate Ranks Indicator Values File Manager **Neighborhood Definition File Manager** Neighborhood Details File Manager Indicator Data Badge Icon

NEIGHBORHOODDEFINITIONS

Task	Status	Items	Imported
2ndfltrt_85010	Idle	13641	13641
baltimore_14640	Idle	0	0
baltimore_16260	Idle	0	0
baltimore_178	Idle	0	0
baltimore_201	Idle	0	0
bltnrfr_85006	Idle	13586	0
neighbor_18082	Idle	0	0
neighbor_22136	Idle	0	0
neighbor_53612	Idle	13586	0
neighbor_69323	Idle	13586	0

Operations

Rollback

Import

Rollback

Stop

Reset

Remove migration settings

Choose an operation to run on all selections above:

- Import
Imports all previously unprocessed records from the source, plus any records marked for update, into destination Drupal objects.
- Rollback
Deletes all Drupal objects created by the import.
- Stop
Cleanly interrupts any import or rollback processes that may currently be running.
- Reset
Sometimes a process may fail to stop cleanly, and be left stuck in an Importing or Rolling Back status. Choose Reset to clear the status and permit other operations to proceed.
- Remove migration settings
Removes all information about a migration group or task, while preserving any content that has already been imported.

Prior to uploading a new CSV neighborhood definition file, data from the out-of-date or incorrect file must be cleared from the HCAT database by “rolling back” the current file in use.

- Select the active neighborhood definition file.
- Select “Rollback” from the Operations drop down menu and select “Execute.”
- Select “Rollback” from the Operations drop down menu and select “Execute.”
- Upload the new neighborhood definition file (See instructions in Section 5, page 35).

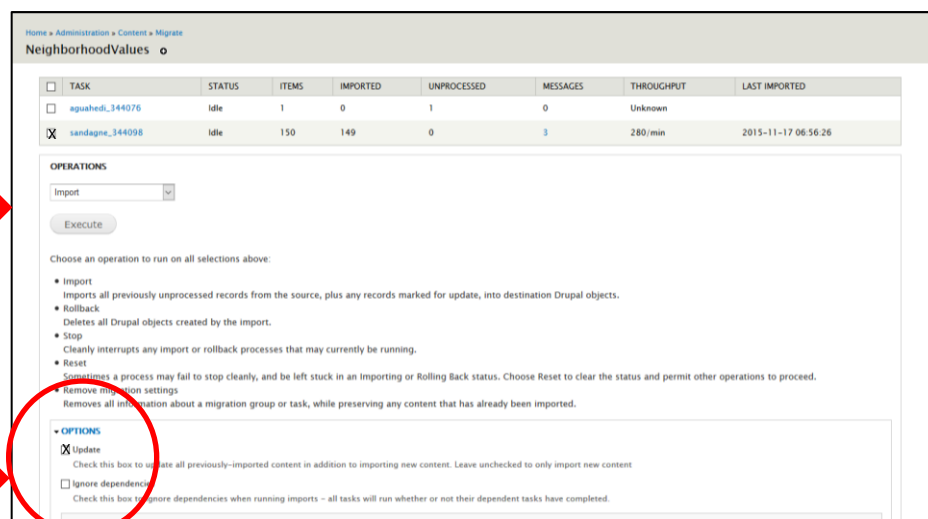
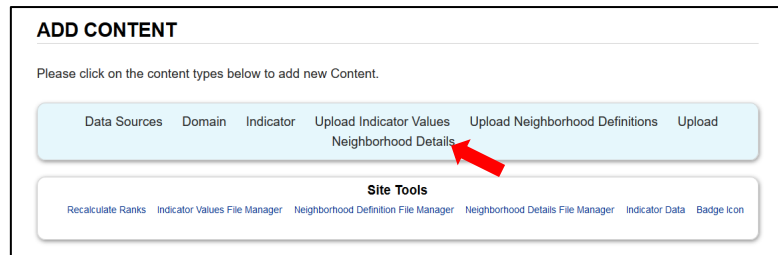
- When the new NDF has been uploaded, click on the “Neighborhood Definition File Manager” to import the file into the HCAT. **NOTE:** It may take up to an hour or more to import.



7.4 Managing and Updating the Neighborhood Details File

Although changes to the content on neighborhood specific pages can be edited/revised using the Manage Content section of the Dashboard (see Section 7.2 for more details), if a bulk upload of neighborhood details does not load properly, the file must be corrected/revised using the Site

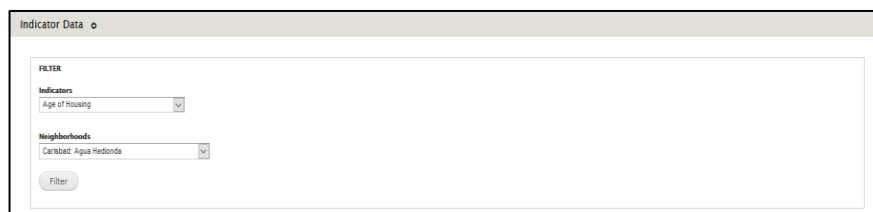
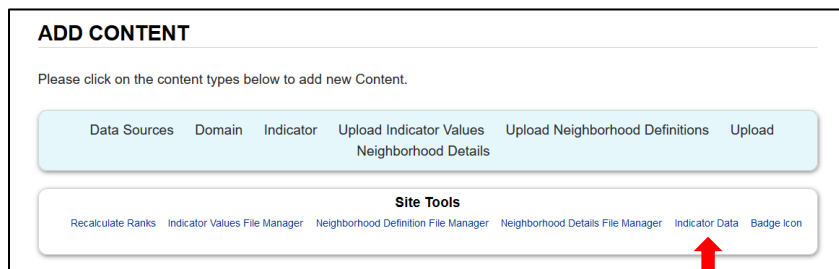
Tools manager. Files may not load properly because of extraneous markings in the csv file or formatting that is not supported by the Drupal program (e.g., "smart" quotes, ©, etc).



Once the revised Neighborhood Details file is loaded to the HCAT via the Add Content section. The HCAT Administrator will automatically direct to the "Neighborhood Values" page. When a revised file is loaded, the HCAT Administrator must select "OPTIONS" and check "Update" before Importing the file.

7.5 Reviewing Loaded Indicator Data

Occasionally it is helpful to review the data for a specific indicator to ensure the right values have been loaded. Selecting "Indicator Data" from the Site Tools leads the HCAT Administrator to a window that provides a dropdown menu of all loaded indicator values along with a dropdown list of all loaded Neighborhoods.



If data for a specific indicator and/or neighborhood seems incorrect, the HCAT Administrator uses the Indicator Data tool to review



loaded indicator data. Once the Administrator has navigated to the indicator and neighborhood in question, selecting "Filter" provides the information from the indicator value and neighborhood definition files used to calculate the indicator value for the neighborhood.

Indicator Data

FILTER

Indicators
Age of Housing

Neighborhoods
Carlsbad Agua Hedionda

Filter

Indicator Data

FILTER

Indicators
Age of Housing

Neighborhoods
Carlsbad Agua Hedionda

Filter

CSV Export

CENSUS BLOCK	BLOCK POPULATION	CENSUS TRACT	GEOGRAPHY ID	INDICATOR VALUE
060730179005005	0.00	06073017900	06073017900	0.750241702
060730221001011	0.00	06073022100	06073022100	0.020331728
060730178132001	0.00	06073017813	06073017813	0.317976965
060730178132000	0.00	06073017813	06073017813	0.317976965
060730221001012	0.00	06073022100	06073022100	0.020331728
060730221001009	0.00	06073022100	06073022100	0.020331728
060730178101018	0.00	06073017810	06073017810	0.634906093
060730221001014	0.00	06073022100	06073022100	0.020331728
060730221001013	0.00	06073022100	06073022100	0.020331728

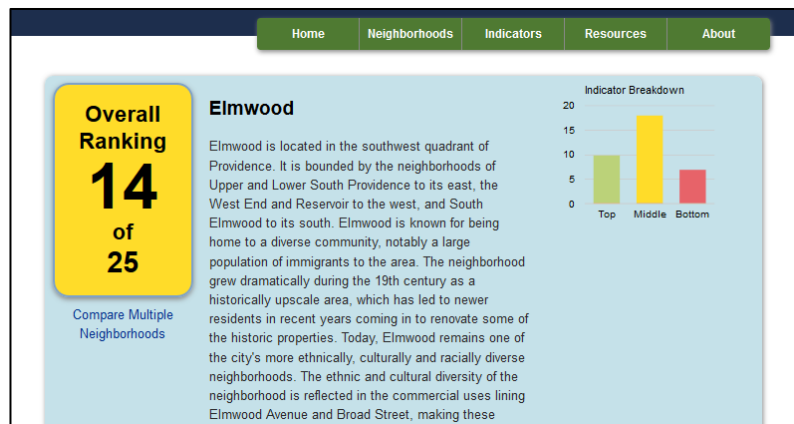
The HCAT Administrator can determine whether revisions/corrections to the Indicator Value File need to be made, and where, before going through the process of revising and reloading the file.



7.6 Turning the Neighborhood Ranking Badge On/Off

During the pilot stage of the HCAT, some of the Pilot Cities raised concerns about the reaction and potential impact of the Overall Neighborhood Ranking badge on the neighborhood pages. Although some Cities and users found the badge useful and informative, others found that it could be off-setting to communities working to improve their neighborhood conditions.

Rather than remove the badge for all Cities, HUD provided a provision to allow Cities to "turn" the badge off if they choose. Neighborhoods will still be ranked according to the cumulative value of their neighborhood indicators and users interested in finding that information can readily find it on the *Neighborhood* page.



ADD CONTENT

Please click on the content types below to add new Content.

Data Sources	Domain	Indicator	Upload Indicator Values	Upload Neighborhood Definitions	Upload Neighborhood Details
--------------	--------	-----------	-------------------------	---------------------------------	-----------------------------

Site Tools

Recalculate Ranks	Indicator Values File Manager	Neighborhood Definition File Manager	Neighborhood Details File Manager	Indicator Data	Badge Icon
-------------------	-------------------------------	--------------------------------------	-----------------------------------	----------------	------------

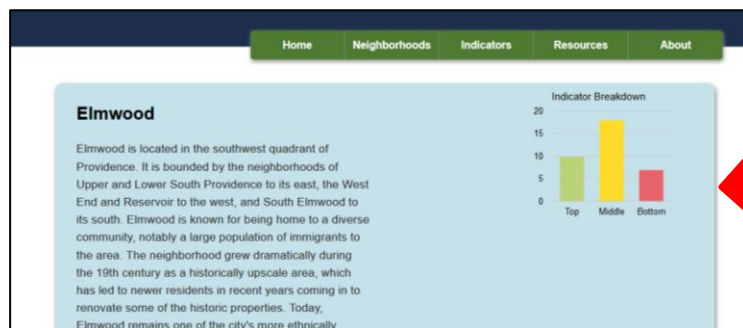
The Overall Ranking Badge is on by default. Cities interested in removing the badge navigate to the option to turn off the badge via "Badge Icon" in the Site Tools section.

- Remove the check from the Neighborhood Badge Icon Box
- Select "Save"

Badge Icon

☒ Uncheck Box to Hide Neighborhood Badge Icon

Save





Section 8. Managing HCAT Data and Content

At various points in time, data and content entered into the HCAT will need updates, corrections or revisions. HCAT data and content are managed via the “Dashboard” link on the top right of the home page. All content previously entered into the HCAT can be managed (i.e., edited, updated, revised) via the MANAGE CONTENT on the Dashboard box.

Content is available by scrolling down to the bottom of the page and scrolling through all the various pages of content or, alternatively, users can select the specific content type to modify via the “Type” dropdown menu and selecting “Apply.”

When a specific type of content is identified, only pages relevant to that particular “type” of content are available in the “Manage Content” section (see example to the left).

Although HCAT site administrators have access

to modify nearly all content on the HCAT, the most frequent type of content requiring edits are: *Neighborhood* (i.e., to add descriptions and images of specific city neighborhoods), *Data Sources* (e.g., to update information about local HCI Indicator data sources), and *Indicators*. Additionally, although most of the information on the *Basic Page* site is content specifically relevant to the HCTI and its tools, the HCI and HCAT, local jurisdictions may also be interested in adding additional resources to the HCAT *Resource* page, which is done by selecting *Resources* on the Basic Page menu.

8.1 General Management Notes

Updates/Revisions to all content pages follow similar methodology, and are fairly self-explanatory. When revising text with formatting codes, it is important make the changes *within* any existing code boundaries (i.e., make sure formatting and link codes are maintained) or update the codes accordingly.

Throughout the HCAT, text format instructions (Filtered HTML, Full HTML, or Plain HTML) follow content boxes. Selecting the various options from the dropdown menu provides more specific information about the capacity of each type of HTML format. Each Text Format box also includes a link to “More information about text formats” which outlines codes to use to make formatting changes to your text.



Text format **Filtered HTML** [More information about text formats ?](#)

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: <a> <cite> <blockquote> <code> <dl> <dt> <dd>

- Lines and paragraphs break automatically.

Text format **Filtered HTML** [More information about text formats ?](#)

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: <a> <cite> <blockquote> <code> <dl> <dt> <dd>

- Lines and paragraphs break automatically.

COMPOSE TIPS

Text Formats

Filtered HTML

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: <a> <cite> <blockquote> <code> <dl> <dt> <dd>

This site allows HTML content. While learning all of HTML may feel intimidating, learning how to use a very small number of the most basic HTML "tags" is very easy. This table provides examples for each tag that is enabled on this site.

For more information see W3C's [HTML Specifications](#) or use your favorite search engine to find other sites that explain HTML.

Tag Description	You Type	You Get
Anchors are used to make links to other pages.	<code>Healthy Communities Assessment Tool</code>	Healthy Communities Assessment Tool
Emphasized	<code>Emphasized</code>	<i>Emphasized</i>
Strong	<code>Strong</code>	Strong
Cited	<code><cite>Cited</cite></code>	<i>Cited</i>
Block quoted	<code><blockquote>Block quoted</blockquote></code>	Block quoted
Coded text used to show programming source code	<code><code>Coded</code></code>	Coded
Unordered list - use the to begin each list item	<code> First item Second item </code>	<ul style="list-style-type: none">First itemSecond item
Ordered list - use the to begin each list item	<code> First item Second item </code>	<ol style="list-style-type: none">First itemSecond item
No help provided for tag <i>li</i> .		
Definition lists are similar to other HTML lists. <dl> begins the definition list, <dt> begins the definition term and <dd> begins the definition description.	<code><dl> <dt>First term</dt> <dd>First definition</dd> <dt>Second term</dt> <dd>Second definition</dd> </dl></code>	First term First definition Second term Second definition
No help provided for tag <i>dt</i> .		
No help provided for tag <i>dd</i> .		

Most unusual characters can be directly entered without any problems.

If you do encounter problems, try using HTML character entities. A common example looks like & for an ampersand & character. For a full list of entities see HTML's [entities](#) page. Some of the available characters include:



8.2 Managing and Editing Neighborhood Content and Images

Neighborhood descriptions will not portray on the HCAT until the Neighborhood Definition File has been uploaded (see instructions on page 35). Descriptions can be added in bulk (see Section 4.3, page 22) or they can be added manually neighborhood-by-neighborhood. Descriptions should be brief (i.e., no more than a paragraph or two), engaging, and highlight distinctive features of the neighborhood. In addition to the description, the neighborhood page features the overall neighborhood ranking; a chart detailing the breakdown of indicators by tier (top, middle, bottom); a listing of each indicator with their specific neighborhood value and ranking compared to indicator values of other neighborhoods within the city; a table portraying the demographic and contextual indicators; an image representing the neighborhood (either a map or icon neighborhood picture); and an area for cities to show how indicators compare with national and/or local targets.

Descriptions can be added or edited (if previously added in bulk) via the “Manage Content” section by selecting “Neighborhoods” from the dropdown “Type” menu, “Apply,” and “Edit” next to the neighborhood name.

DASHBOARD

MANAGE CONTENT

Type: Neighborhood

Apply

Title	Type	Edit link
Allendale/Irvington/S. Hilton	Neighborhood	Edit
Beechfield/Ten Hills/West Hills	Neighborhood	Edit
Belair-Edison	Neighborhood	Edit
Brooklyn/Curtis Bay/Hawkins Point	Neighborhood	Edit
Canton	Neighborhood	Edit
Cedonia/Frankford	Neighborhood	Edit
Cherry Hill	Neighborhood	Edit
Chinquapin Park/Belvedere	Neighborhood	Edit
Claremont/Armistead	Neighborhood	Edit
Clifton-Berea	Neighborhood	Edit

Academy Hills

EDIT NEIGHBORHOOD ACADEMY HILLS

View

Edit

Neighborhood Title *

Neighborhood Map

Browse

No file selected.

Upload

Files must be less than 60 MB.

Allowed file types: png gif jpg jpeg.

Body [\(Edit summary\)](#)

Text format: Filtered HTML

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: <a> <cite> <blockquote> <code>
- Lines and paragraphs break automatically.

City *

Baltimore

Images or maps representative of the neighborhood can be added or changed by selecting the image via “browse” to access the directory and file for your image and then selecting “Upload.” Allowable image types include: gif, jpeg, jpg, and png.

The neighborhood description is entered in the “Body” and text formatting (Filtered HTML) is selected beneath the body.



NOTE: Neighborhood names must not be changed once the neighborhood definition file has been loaded, e.g., when adding the neighborhood's description. If the name is altered, the neighborhood definition file will no longer "read" indicator data files loaded at the neighborhood level.

8.2 (a) Manually Inputting Neighborhood Locations

Select the [Location] hyperlink and additional fields appear to add neighborhood latitude and longitude information. Identify the neighborhood location by inserting a place or address specific to the neighborhood, which will be translated into County, coordinates, and a link in Google maps.

Alternatively, a predetermined latitude/longitude centroid for the neighborhood may be entered.

Academy Hills

EDIT NEIGHBORHOOD ACADEMY HILLS

[Location](#)

Location name
e.g. a place of business, venue, meeting point

Street

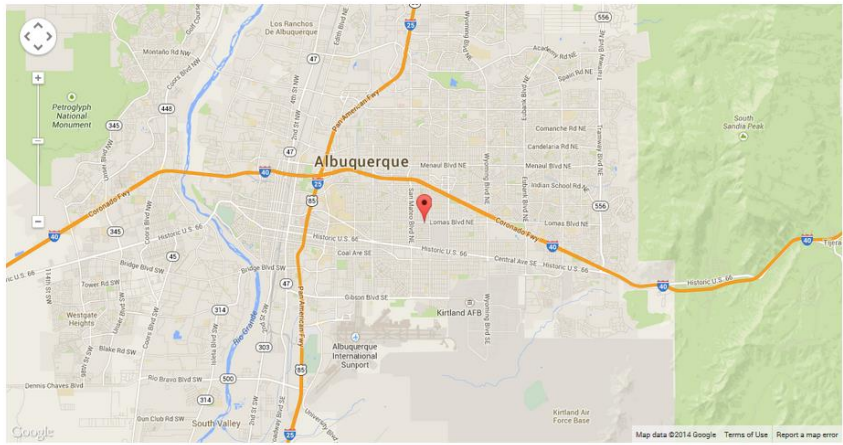
Additional

City

State/Province

Postal code

Country



Latitude

Longitude

If you wish to supply your own latitude and longitude, you may enter them above. If you leave these fields blank, the system will attempt to determine a latitude and longitude for you from the entered address. To have the system recalculate your location from the address, for example if you change the address, delete the values for these fields.

You may set the location by clicking on the map, or dragging the location marker. To clear the location and cause it to be recalculated, click on the marker.

[Save](#) [View changes](#)

8.3 Basic Page Modifications

HCAT Basic Pages are prepopulated with key information about the HCTI, the HCI, and the HCAT. Information available from the *Resource* tab is also edited here. The *Resource* page is prepopulated with links specifically about the framework of the HCI and HCAT, links to data and data collection steps, as well as a variety of resources and links Cities can tap into to address how to "move the needle" on some of the HCI indicators. It also offers a place for HCAT Cities to add and share local resources such as links to articles, announcements and best practices between neighborhoods.



- In the [Type] drop down, choose “Basic page” and select “Apply.”
- To view the page contents, select the hyperlinked title of the “Resources” page.
- To edit page contents, either:
 - Select the hyperlinked “edit”, or
 - Select the hyperlinked title of the page to view, e.g., “Resources,” and the “edit” tab.

DASHBOARD

MANAGE CONTENT

Type Apply

Title	Type	Edit Link
About the Healthy Communities Transformation Initiative (HCTI)	Basic page	Edit
Demographic and Contextual Indicators	Basic page	Edit
Home Page	Basic page	Edit
Resources	Basic page	Edit

← Double-Click or Select “Edit”

- To add the additional Resources available on the HCAT Portal Landing page, select "Additional Resources Version 2" to access the resources in html code. Replace all of the content currently in the Resources body with the information downloaded from Version 2. It will keep the content and html codes used in the previous version as well as load all of the additional resources specific to each HCAT domain.
- To add, edit or revise copy in [Body], maintain the codes specified in the Resources content, i.e., ensure changes are made within the codes to keep formatting in place. If additions to the body need to be made (e.g., to add specific local Resources), duplicate the formatting codes as necessary. **NOTE:** Local data collection steps recorded in the “Data Sources” page will automatically be shown on the “Resources” page.
- To compare versions prior to saving the changes, select [View Changes].
- Select [Save] to save changes.

[Resources](#)

EDIT BASIC PAGE RESOURCES

View Edit

Title *

Resources

Body ([Edit summary](#))

Information regarding the development of the Healthy Community Index (HCI) and Healthy Community Assessment Tool (HCAT) can be found here, along with information about potential uses of the HCI and HCAT, User guides for data collection and the HCAT, other selected sustainable indicator projects, and ongoing information and research related to healthy communities.

```
<ul>
<li><a href="/sites/default/files/public/HCI%20Framework%20and%20Assumptions.pdf" target="_blank">Framework and Assumptions Used to Develop the HCI</a></li>
<li><a href="/sites/default/files/public/HCI%20project%20overview.updated%202014.pdf" target="_blank">HCTI Project Overview</a></li>
<li><a href="/sites/default/files/public/07NAP%20bios%20%28v9%29.pdf" target="_blank">National Advisory Panel (NAP) biographies</a></li>
<li><a href="/sites/default/files/public/HCAT%20Uses.pdf" target="_blank">Potential Uses of the HCI / HCAT</a></li>
<li><a href="/sites/default/files/public/Community%20Indicator%20Projects.pdf" target="_blank">Other Community Indicator Projects</a></li>
<li><a href="http://udsmapper.org/zcta-crosswalk.cfm">ZIP to ZCTA Crosswalk</a></li>
</ul>
```



8.4 Modifying Indicator Descriptions/Details

The features available when “Indicators” is selected from the [Type] dropdown menu are unique to this “Manage Content” section. Unlike other sections, which are restricted to edits specific to the identified type (e.g., Domain), “Indicators” allows related elements such as data sources and domain to be edited in addition to the Indicator’s calculating attributes and text. **NOTE:** Indicator value updates/edits (i.e., data updates) are made through the “Site Tools” area. Instructions to revise indicator values can be found in Section 7.2.

- To edit Indicator description contents, data sources, domains, target goals or any other indicator specific characteristic, either:
 - Select the hyperlinked “edit”; or
 - Select the hyperlinked “Indicator” title and the “edit” tab.

DASHBOARD

MANAGE CONTENT

Type: Indicators Apply

Title	Type	Primary Domain	Indicator Level	Inverse Measurement	Aggregation Method	Indicator Weight	Unit of Measurement	Data Sources	Edit Link
Access to Mainstream Financial Services	Indicators	Economic Health	Census Tract	Yes	Weighted Average	1.00	%	CFED Bank On	Edit
Access to Parks and Open Space	Indicators	Natural Areas	Census Block	No	Unweighted Average	1.00		U.S. Census TIGER Shapefiles, Local Data Request	Edit
Adult Educational Attainment	Indicators	Educational Opportunities	Census Tract	No	Weighted Average	1.00	%	US Census Data: Factfinder2	Edit
Age of Housing	Indicators	Housing	Census Tract	Yes	Unweighted Average	1.00	%	US Census Data: Factfinder2	Edit
Blood Lead Levels in Children	Indicators	Housing	Neighborhood	Yes	Weighted Average	1.00	%	Local Data Request	Edit
Business Retention	Indicators	Economic Health	ZCTA	No	Unweighted Average	1.00	%	US Census Data: Factfinder2	Edit
Chronic School Absence	Indicators	Health Systems and Public Safety	Neighborhood	Yes	Weighted Average	1.00	%	U.S. Census TIGER Shapefiles, National Center for Education Statistics, Local Data Request	Edit
Commute Mode Share	Indicators	Transportation	Census Tract	No	Weighted Average	1.00	%	US Census Data: Factfinder2	Edit
Employment Rate	Indicators	Employment Opportunities	Census Tract	No	Weighted Average	1.00	%	US Census Data: Factfinder2	Edit
Excessive Housing Cost Burden	Indicators	Housing	Census Tract	Yes	Weighted Average	1.00	%	US Census Data: Factfinder2	Edit

1 2 3 4 next last »

- To compare versions prior to saving the changes, select [View Changes].
- Select [Save] to save changes.



If an alternative content area is selected for editing from the Indicator page (e.g., domains, data sources), be aware that the edits are not restricted only to the corresponding indicator listed in the selected row of the chart, i.e., changes will be universal.

NOTE: Indicator data values are not revised via the “Manage Content” section of the Dashboard, but through the Indicator Value Files Manager in the Site Tools. Please see Section 7.2, page 37 for details.

Section 9. HCI Indicator Data Sources and Data Collection Steps

9.1 Data Sources:

Source	URL
CFED Bank On	http://www.joinbankon.org/#/resources#bank-on-national-account-standards
EPA Cleanups in My Community	http://ofmpub.epa.gov/apex/cimc/f?p=cimc:63
EPA Risk-Screening Environmental Indicators (RSEI)	http://www.epa.gov/oppt/rsei/pubs/get_rsei.html
EPA Smart Location Database	http://www.epa.gov/smartgrowth/smartlocationdatabase.htm#SLD
EPA Toxic Release Inventory (TRI)	http://www.epa.gov/enviro/facts/tri/customized.html
FHA Highway Performance Monitoring Systems	http://www.fhwa.dot.gov/policyinformation/hpms/shapefiles.s.cfm
HUD Location Affordability Index	http://locationaffordability.info/lai.aspx?url=download.php
National Center for Education Statistics	http://nces.ed.gov/ccd/pubschuniv.asp
National Incident-Based Reporting System (NIBRS)	http://www.fbi.gov/about-us/cjis/ucr/nibrs/2012
National Land Cover Database	http://www.mrlc.gov/nlcd11_data.php
NHTSA Fatality Analysis Reporting System	http://www.nhtsa.gov/FARS
SEDCA with Center for International Earth Science Institute	http://sedac.ciesin.columbia.edu/data/set/superfund-epa-national-priorities-list-ciesin-mod-2008/data-download
U.S. Census Data: Factfinder2	www.factfinder2.census.gov
U.S. Census Shapefiles	http://www.census.gov/cgi-bin/geo/shapefiles2013/main
USDA Food Research Atlas	http://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data.aspx#.U8knCrGHM1I

NOTE: Please be aware that some links are to specific years. Please make adjustments as necessary to the most recent data available.

9.2 Indicator Data Collection Guidelines

The following data collection steps were designed to ensure data collected and input into the HCAT uses the same data sources and/or use similar methods to calculate data values to confirm their comparability. Although an attempt was made to provide detailed step-by-step instructions, especially for steps relating to indicators requiring GIS, users should feel free to use the methodology with which



they are most comfortable. The collection steps are not meant to be prescriptive; many data analysts may wish to use alternative data collection methods. Most importantly, ***if a local data source more accurately captures the intent of the indicator, Cities should use the local source*** (to ensure transparency, please add details about the source and any related collection steps to the HCAT data sources and indicator data collection steps).

Several HCI indicators use the U.S. Census Fact Finder 2 database, which requires standard collection steps; some indicators may even utilize the same Census table. To minimize collection efforts, it is suggested that Administrators read through all data source and collection steps to determine which indicators use which tables and sources prior to starting the collection process. **NOTE:** As feasible, indicators should use the most recent 5-year ACS data (i.e., 2013 or later) period for indicator data.

9.2 (a) Zip Code to Census Tract Crosswalk

Numerous HCI Indicators are collected at the Zip Code level. To be compatible with the geographic boundaries used for HCAT neighborhoods, the data must be converted to a Census geography such as Census Tract. HUD has developed a zip to tract "crosswalk" which is available at http://www.huduser.org/portal/datasets/usps_crosswalk.html. As Census tracts and zip codes may change, the crosswalk allows users to select the Data Year and Quarter they are interested in using. It is recommended that the crosswalk quarter and year used is aligned as closely as possible to same Census 5-year data period.

The U.S. Postal Service provides a zip code database that provides estimated population for every zip code at <http://www.unitedstateszipcodes.org/zip-code-database/>. This information can be combined, as necessary, with the HUD crosswalk to more accurately assign data values to the correct census tract. Data analysts can use the "VLOOKUP" mapping tool available on Excel to assign the population and data values from the crosswalk to determine the ratio of the Zip code data to assign to the appropriate Census Tract.

NOTE: Information about the geographic level the used to post HCAT indicators has been pre-populated, i.e., data source and collection information are posted on the administrative areas of the HCAT. Data collection steps identify the geographic level each indicator is uploaded into the HCAT (e.g., Census tract, block group, neighborhood, etc.). If a City uses an alternative data source and/or geographic level than that suggested in the data collection steps (i.e., data is available at the Census Tract level versus neighborhood level), please update indicator information in the dashboard to reflect the change so that the HCAT aggregates the data properly.

9.2 (b) HCI Indicator Collection Steps

Indicator	Data Source	Data Collection Steps
Access to Mainstream Financial Services	CFED Bank On	Data Source: CFED Bank On Data Collection Steps: CFED recently changed their reporting from census tract level to PUMA. However local entities can still determine the number of un and un-banked households using the methodology available from CFED, BankOn, and the Cities for Financial Empowerment Fund



Indicator	Data Source	Data Collection Steps
		<p>CFE Bank On information can be found at http://www.joinbankon.org/#/resources#bank-on-national-account-standards</p> <p>Information about the number of households lacking adequate banking access can also be gathered from the FDIC: https://www.fdic.gov/householdsurvey/.</p>
Access to Parks and Open Space	Local Data Request, U.S. Census TIGER Shapefiles	<p>Data Source: Local data/Census TIGER Shapefile</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Use GIS software to open the most recent TIGER Shapefile at the census block level. 2. Select "census blocks" to create neighborhood layers. 3. Calculate the non-weighted centroid for each census block. 4. Input polygon data on park and open space locations from a local parks department or from private data sources. 5. Calculate the non-weighted centroid for each park polygon. 6. Create a 0.5 mile buffer around each census blocks and report the count of parks within ½ mile from each census block centroid. <p>Alternative: Determine the percentage of parks and green space within a half-mile buffer of the census block and average.</p>
Adult Educational Attainment	US Census Data: Factfinder2	<p>Data Source: Table S1501: Educational Attainment most recent ACS 5-year Estimates</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Select Advanced Search, select "Show me All" 2. Search for table in topic or table name. 3. Under geographies, select Census tract - 140, state, and all census tracts. 4: Click Download, OK and open zip folder. 5: Report data from Column CD: Total; Estimate; Percent high school graduate or higher. <p>Data also available in Column JF in Table DP02: SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES</p>
Age of Housing	US Census Data: Factfinder2	<p>Data Source: Table: DP04 Selected Housing Characteristics most recent year ACS 5-Yr Estimates</p> <p>Data Collection Steps:</p> <p>Select columns-</p> <p>BL: Estimate; YEAR STRUCTURE BUILT - Total housing units</p> <p>CF: Estimate; YEAR STRUCTURE BUILT - Built 1970 to 1979</p> <p>CJ: Estimate; YEAR STRUCTURE BUILT - Built 1960 to 1969</p> <p>CN: Estimate; YEAR STRUCTURE BUILT - Built 1950 to 1959</p>



Indicator	Data Source	Data Collection Steps
		CR: Estimate; YEAR STRUCTURE BUILT - Built 1940 to 1949 CV: Estimate; YEAR STRUCTURE BUILT - Built 1939 or earlier Sum the YEAR STRUCTURE BUILT columns of years prior to 1980 and divide by YEAR STRUCTURE BUILT - Total housing units.
Blood Lead Levels in Children	Local Data Request	Data Source: Local Request to the State Environment or Health agency. Data Collection Steps: Some state and local health departments may be reluctant to share blood lead data at the address level due to privacy concerns; however, they may be willing to report aggregate data at the census block or tract level.
Business Retention	US Census Data: Factfinder2	Table: 20XX County Business Patterns: ZIP Code Business Statistics: Total for Zip Code Table: 20YY County Business Patterns: ZIP Code Business Statistics: Total for Zip Code (As indicated by the XX and the YY, the specific table number changes year to year CBXX00CZ11) Data Collection Steps: 1. Record the number of establishments in current year using aggregate totals from all zip codes in the geographic area. i.e., city/county/MSA, desired. 2. Record the number of establishments in the previous year 3. Use Zip Code to Census Tract Crosswalk to determine appropriate Census tract for data collected in ZIP code form. See "Resources" for information re: using Zip to Census Tract crosswalks. 4. Use the formula below to calculate the percent increase or decrease in the number of business establishments within the Census Tract: $\frac{(\# \text{ of establishments current year } 20XX - \# \text{ of establishments in previous year } 20YY)}{(\# \text{ of establishments in current year } 20XX)}$ ALT Measure: Local economic data may provide a more refined (i.e., geospatial level) and accurate measure of business retention/loss.
Chronic School Absence	Local Data Request, U.S. Census TIGER Shapefiles, National Center	U.S. Census Shapefiles with U.S. Department of Education's National Center for Education Statistics and local school data request. Data Collection Steps: 1. Download the most recent census block level Tiger/line Shapefile available using GIS software.



Indicator	Data Source	Data Collection Steps
	for Education Statistics	<p>2. Select "census blocks" to create neighborhood layers for local jurisdiction.</p> <p>3. Determine school locations using data available from the National Center for Education Statistics.</p> <p>4. Input school locations and assign each school to a neighborhood based on census block.</p> <p>5. Local Data Request: Obtain school level estimates for chronic absence from the school district or state board of education. Also, request data on school student population. If the state or school district does not compute or track this indicator, ask them to do the calculation.</p> <p>6. Chronic absence for each neighborhood is the average of values for chronic absence schools assigned to the neighborhood. If data on school student population is available, compute a weighted average by weighting for school based on its student population.</p>
Commute Mode Share	US Census Data: Factfinder2	<p>Data Source: Factfinder2</p> <p>Table: B08301 Means of Transportation to Work most recent ACS 5-year estimates</p> <p>Data Collection Steps:</p> <p>1. Select Geographies: Census Tract - 140, state, county, and census tracts within city.</p> <p>2. Click download to create a zip file.</p> <p>3. Sum the values in fields "Carpooled" (Column J), "Public Transportation (excluding taxicab)" (Column V), "Bicycle" (Column AL), and "Walked" (Column AN), and divide by the "Total" (Column D) field.</p> <p>Also available from Table DP03: Selected Economic Characteristics.</p>
Concentrated Poverty	US Census Data: Factfinder2	<p>Table: S1701: Poverty Status in the past 12 months ACS 5-year estimates (most recent year available)</p> <p>Data Collection Steps:</p> <p>NOTE: As this is a demographic and contextual measure, data is collected at both the City level as well as at the Census tract level.</p> <p>1. Select Geography (Place -160), Select your city, Add to the selection.</p> <p>2. Select geography (Census Tract – 140), Select your State, County(ies), and all Census Tracts within selected County(ies), Add to the Selection.</p> <p>3. Click download and OK to create a zip file ("with_ann.csv" will be the file with data).</p> <p>4. Save Columns B (Id2) and H (Percent below poverty level; Estimate; Population for whom poverty status is</p>



Indicator	Data Source	Data Collection Steps
		determined) NOTE: The number will need to be converted to a decimal prior to loading it into the HCAT (e.g., if the number is portrayed as 14.4, it needs to be entered a .144 prior to loading to the HCAT). NOTE: City specific data is generally found in the last row on the file.
Employment Rate	US Census Data: Factfinder2	Data Source: Table S2301: Employment Status most recent ACS 5-year Estimates Data Collection Steps: 1. Select Geographies: Census Tract 140, State, County, All Census Tracts within County. 2. Download. 3. The Employment Rate is found in column H: Employed; Estimate; Population 16 years and over.
Excessive Housing Cost Burden	US Census Data: Factfinder2	Data Source: Table: DP04 Selected Housing Characteristics most recent ACS 5-Yr Estimates Data Collection Steps: 1. Go to Factfinder2, Advanced Search, "Show me all" 2. Search for table DP04. 3. Under geographies, select census tract 140, state, county and all census tracts for the county(ies) specific to jurisdiction/city. Add to selection. 4. Select DP04 Selected Housing Characteristics most recent ACS 5-year estimates 5. Select "Download," "OK" to create a zip file, and "Download" to open the zip folder with the file. 6. The following columns are necessary to determine excessive housing cost burden: Column B: Census tract FIPS code Column H: Estimate; HOUSING OCCUPANCY - Occupied housing units Column QJ: Estimate; SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (SMOCAPI) - 35.0 percent or more – <i>this column represents the number of owners with a mortgage</i> Column RT: Estimate; SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (SMOCAPI) - 35.0 percent or more - <i>this column represents the number of owners without a mortgage</i> Column UN: Estimate; GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI) - 35.0 percent or more. 7. Sum columns QJ, RT, and UN, and divide the total by column H (Occupied housing units) to determine percent of households with excessive housing cost burden.



Indicator	Data Source	Data Collection Steps
Food Desert	USDA Food Access Research Atlas	<p>Data Source: USDA Food Deserts.</p> <p>Data collection steps:</p> <ol style="list-style-type: none">1. Download the Food Access Research Atlas Data File2. Delete geographic rows not relevant to jurisdiction3. Select the following Columns: Column A provides census tract number Column E (LILATracts_halfAnd10) which identifies Low Income/Low Access census tracts at 0.5 mile (urban) or 10 miles (rural) areas (LILATracts_1And10) in a dichotomous fashion (0=not a food desert, 1=food desert).4. Report values from Column E. <p>The HCAT averages the number of census tracts without access to affordable or good-quality fresh food to determine the proportion of the neighborhood considered a food desert.</p> <p>For more information on Food Deserts and the USDA data: https://apps.ams.usda.gov/fooddeserts/foodDeserts.aspx</p>
High School Graduation Rate	Local Data Request	<p>Local Data Request</p> <p>Data Collection Steps:</p> <p>Data commonly calculated by local school districts and often are often available through the website of the local school district or state Department of Education.</p> <p>Most graduation rates are published at the school level; schools are assigned to the neighborhood regardless of where students originate. The integration of data between traditional public schools versus charter schools varies across districts, consequently charter school data, as well as data for students attending private or parochial schools, may need to be calculated separately.</p>
Household Transportation Costs	HUD Location Affordability Index (LAI)	<p>HUD's Location Affordability Index</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none">1. Select "Download Data" from the dropdown menu on the "Location Affordability Index" tab.2. Download the Census block group data for your specific MSA.3. Select - Column A: blkgrp (the geographic ID) Column Z: hh_type1_t (percent of household income a typical regional household spends on transportation)
Income Inequality	US Census Data: Factfinder2	<p>Table B19083: Gini Index of Inequality</p> <p>Data are available at both the City level as well as Census Tract.</p> <ol style="list-style-type: none">1. Select Geography (Place -160), your city. Add to your selection.



Indicator	Data Source	Data Collection Steps
		<p>2. Select geography (Census Tract – 140), Select your State, County(ies), and all Census Tracts within selected County(ies). Add to your Selection.</p> <p>3. Select Table B19083, most recent 5 year estimates;</p> <p>4. Select “Download” and OK to create a zip file.</p> <p>5. Select Columns:</p> <p>Columns B (Id2)</p> <p>D (Estimate; Gini Index)</p> <p>NOTE: City data will either be found in the last row of the table.</p>
Life Expectancy	Local Data Request	<p>Data for either Life Expectancy or the alternative measure, Year of Potential Life Lost (YPLL), are available via local or state vital statistics systems, which requires a local data request. This indicator is most likely only available at the City level; however, if a city is interested in displaying the value at the neighborhood level, the Robert Wood Johnson Foundation may be able to provide some guidance about acquiring data at a smaller geographic scale. RWJ has been researching the impact location has on life expectancy and has produced maps in several jurisdictions depicting the results at a smaller scale than City-wide (see http://www.rwjf.org/en/about-rwjf/newsroom/features-and-articles/Commission/resources/city-maps.html for more information).</p>
Local Business Vitality	US Census Data: Factfinder2	<p>Data Source: Table: CBXX00CZ21: ZIP Code Business Statistics: Total for Zip Code 20XX Business Patterns (use most recently available year as indicated by "XX")</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none">1. Under geographies, select 5-digit Zip Codes - 861, state, and zip codes either 1) specific to your jurisdiction or 2) for the entire state (the list will automatically be culled in the process of converting to Census Tracts). Click "Add to your selection" and Close. [A list of local area zip codes may be found at https://tools.usps.com/go/ZipLookupAction!input.action]2. Go to “Industry Codes” and check Code 00: Total for All Sectors. Select “Add” to add it to the selection.3. Click Download, Download, OK to create zip folder and open file.4. Sort data to find and record - (a) total number of establishments (code 1 in column



Indicator	Data Source	Data Collection Steps
		<p>G: "Employment Size of Establishment") for each zip code.</p> <p>(b) number of establishments with 0-4 employees (code 212 in column G: "Employment Size of Establishment") for each zip code; and</p> <p>7: Use Zip Code to Census Tract Crosswalk to determine appropriate allocation of data to Census tracts. See Zip Code to Census Tract Crosswalk on page 50 for more information.</p> <p>8: Divide the total number of establishments with 0-4 employees (code 212) by the total number of businesses (code 1) for each Census Tract.</p>
Long-Term Unemployment	US Census Data: Factfinder2	<p>Table S2303: WORK STATUS IN THE PAST 12 MONTHS</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Under "Refine your search results", Enter S2303: WORK STATUS IN THE PAST 12 MONTHS. 2. In Geographies (left hand menu), select "Census tract - 140, state, county, and all census tracts within the specified county. Add to selection and close. 3. Select table S2303 Work Status in the Past 12 months ACS 5-year estimates (most recent year available). 5. Download, Download, and OK to build file folder. 6. Record the percent imputed of "Work status in the past 12 months for the population 16 years and over."
Low Birth Weight	Local Data Request	<p>Local Data Request</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Contact the state or local vital record agency to determine if they estimate and publish low-weight birth rates for the desired geography (ZIP will be converted to Census Tract). A list of vital record offices for all 50 states is available from the Center for Disease Control (CDC): http://www.cdc.gov/nchs/w2w.htm. 2. If the agency does not report low birth weight, request the following data to do the computation: <ul style="list-style-type: none"> (a) Annual count of live births at lowest available geographic level (at least ZIP). (b) Annual count of births with low birth weight (live births where baby is less than 2,500 grams). 3. Divide the number of low birth weight births by the number of live births for each geographic area (e.g., ZIP). 4. If data is at zip code level, use crosswalk to convert to Census Tract.
Motor Vehicle Collisions	U.S. Census TIGER Shapefiles,	<p>Local Data Request and National Data Sources</p> <p>Data Collection Steps:</p>



Indicator	Data Source	Data Collection Steps
	NHTSA Fatality Analysis Reporting System (FARS)	<p>NOTE: Variable should include both fatalities and injuries resulting from motor vehicle collisions.</p> <ol style="list-style-type: none">1. Request motor vehicle collision injury and fatality data for the past five years from local law enforcement agency. Information is generally recorded in police accident reports (PAR), which include information about the circumstances of the collision, the location, the parties involved, and the injuries. Alternatively, comprehensive data on non-fatal injuries are maintained by State transportation, health, or public safety agencies. As necessary, supplement data on motor vehicle collision fatalities from FARS*. One record for each fatality or person injured should be created with the precise location of the collision (i.e., indicator count should equal total number of fatalities and injuries, not the number of collisions).2. If the location of the motor vehicle collision is not already geo-coded, geocode location to determine appropriate census block.3. Use GIS software to download the most recent census block level Tiger/line Shapefile.4. Select "census blocks" to create neighborhood layers.5. Assign fatalities and injuries to census blocks.6. Divide the count in each census block by the census block population and the number of years of data provided (this produces a census block level annual rate of fatalities and injuries).7. Multiply the census block level annual rate determined in Step 6 by 100,000. This produces indicator data comparable to HHS's Healthy People 2020 and other potential targets. <p>* If injury data are not available from the local law enforcement/transportation agency and the City needs to rely on FARS data, then change the name of the indicator to "Annual Rate of MV Fatalities" (versus both fatalities and injuries) and note on data assessment.</p>
Offsite Alcohol Outlets	US Census Data: Factfinder2	<p>Table: CBXX00CZ21: ZIP Code Business Statistics: Total for Zip Code Business Patterns by Employment Size Class ("XX" represents the most current year available)</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none">1. Under "Refine your search results" Enter: ZIP Code Business Statistics: Total for Zip Code in the table section.3: Under Geographies (left hand menu), select 5-digit Zip Codes - 861, state, and zip codes either 1) specific to your



Indicator	Data Source	Data Collection Steps
		<p>jurisdiction or 2) for the entire state (the list will need to be culled to city specific zip codes once it is downloaded). Click "Add to your selection" and Close.</p> <p>[List of local area zip codes: https://tools.usps.com/go/ZipLookupAction!input.action].</p> <p>4. Under Industry Codes (lower left hand menu), select Individual codes, 445310: Beer, wine and liquor stores.</p> <p>5. Click Download, Download, OK to create zip folder and open file.</p> <p>6. Sort data to find total number of industry 445310 establishments (code 1 in column G: Employment Size of Establishments) in Zip codes within the jurisdiction.</p> <p>7: Use Zip Code to Census Tract Crosswalk to determine appropriate tracts for data collected in ZIP code form. See "Resources" for information re: using Zip to Census Tract crosswalks or use www.huduser.org/portal/datasets/usps_crosswalk.html.</p> <p>8: Use the following formula to determine the number of alcohol outlets per 10,000 people: $\frac{[\text{total number of industry 445310 establishments}]}{[\text{Census Tract population} / 10,000]}$</p>
Park Quality⁷	Trust for Public Land Park Score®/Local Data	<p>Park Score® is available from The Trust for Public Land (TPL) for the 75 largest cities in the U.S. It is only available at the City-Wide level.</p> <p>Data Collection:</p> <ol style="list-style-type: none"> Go to http://parkscore.tpl.org/city.php and select your city from the City Profile dropdown list. Scroll down to the chart – Your city's Park Score® will be found in the far-right column. <p>More information about the methodology can be found at: http://parkscore.tpl.org/methodology.php</p>
Pedestrian Connectivity	EPA Smart Location Database	<p>EPA's Smart Location Database (SLD)</p> <p>D3 (Design) variables from the SLD are used to determine pedestrian connectivity. D3 variables measure urban design in terms of street network density (D3a...) and street intersection density (D3b...) by orientation (automobile, multimodal, or pedestrian). The denominator used for D3a calculations is total block group area (Ac_Tot); the denominator used for D3b calculations is total land area (Ac_Land). D3b variables also summarize</p>

⁷ The HCTI suggests using the Trust for Public Land's Park Score as the data source for Park Quality, which is only available City-Wide. However, should a City have a local data source relatively equivalent to Park Score, they are free to use it at either both the neighborhood and City-wide level or simply at the City-Wide.



Indicator	Data Source	Data Collection Steps
		<p>total intersection density, weighted to reflect connectivity for pedestrian and bicycle travel. Although intersection density is often used as an indicator of walkable urban design, it is important to note that the source data (NAVTEQ) provides no information regarding the presence or quality of sidewalks.</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Use GIS software to download the EPA Smart Location Database nationwide Shapefile. 2. Cull data for specific City's census blocks. 3. Select columns - <ul style="list-style-type: none"> B (GEOID10) – this column provides the geographic ID (census block FIPS) CP (D3bpo3) and CQ (D3bpo4)– these columns provide the number of pedestrian-oriented intersections summed for each census block group where the number of intersection legs are equal to three and where the number of legs are greater than three. 4. Record the sum of Columns CP (Db3op3) and CQ (D3bpo4).
Population	U.S. Census: Factfinder2	<p>U.S. Census Block Group Table B01003: Total Population – most recent 5-year estimates</p> <ol style="list-style-type: none"> 1. Select Geography (Place -160), your city. Add to your selection 2. Select geography (Block Group - 150), your State, County(ies), and all Block Groups within selected County(ies). Add to your Selection 3. Select Table B01003, most recent 5 year estimates; Select “Download,” OK to create a zip file 4. Column B (id2) provides the block group number; Column D (provides the estimated population)
Preschool Enrollment	U.S. Census: Factfinder2, Local Data Request	<p>U.S. Census Tract or Local Data U.S. Census Table S1401 5-year ACS estimate (for the most recent year available).</p> <p>Although there may be more accurate local data for this indicator, the U.S. Census tracks school enrollment for 3 and 4 year olds, which can be used as a good alternative.</p> <p>Table/Topic: School Enrollment (Table S1401)</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. U.S. Census FactFinder 2, Click on Advanced Search, Show me All 2. Under "Refine your search results" Enter “S1401” under topic/ table.



Indicator	Data Source	Data Collection Steps
		<p>3. Under Geographies (left hand menu), select Census Tract- 140, your state, the county(ies) specific to your jurisdiction, and All census tracts within county (ies). Click "Add to your selection" and "Close" in the upper right corner of the selection panel.</p> <p>4. Select Table S1401 most recent year 5-year ACS</p> <p>5. Click Download, Download, OK to create zip folder and open file.</p> <p>6. Select column BF titled "Total; Estimate; Percent of age group enrolled in school - 3 and 4 years"</p>
Preventable Hospitalizations	Local Data Request	<p>Local/State Data Request:</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Request age-adjusted preventable hospitalization rates from City or State health department at a Zip or alternative smaller geographical census unit. 2. If the health department does not estimate the rates or cannot estimate preventable hospitalization rates at the ZIP or a smaller census geographic area, request annual counts of hospitalization discharges for a three to five year period. Assess preventable discharges according to the set of Prevention Quality Indicators (PQIs) used by the Agency for Healthcare Research and Quality (AHRQ).
Proximity to Brownfield Sites	U.S. Census TIGER Shapefiles, U.S. EPA Cleanups in My Community	<p>U.S. Census with EPA Cleanups on My Community mapping tool</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Use GIS software to download the most recent census block level Tiger/line shapefile. 2. Select "census blocks" to create neighborhood layers. 3. Input Brownfield locations using EPA's Cleanups in My Community mapping tool. 4. Calculate non-weighted centroid for each census block. 5. Place 500 ft circular buffer around each Brownfield. 6. If Brownfield buffer contains census block centroid the block is coded with a '1', otherwise the block is coded as '0'.
Proximity to Superfund Sites	U.S. Census TIGER Shapefiles, SEDAC with Center International Earth Science Information Network	<p>U.S. Census with Center for International Earth Science Information Network Data</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Use GIS software to download the most recent census block level Tiger/line Shapefile. 2. Select "census blocks" to create neighborhood layers. 3. Input location of NPL Superfund sites at CIESIN. 4. Calculate non-weighted centroid for each census block. 5. Place 1 km circular buffer around each site.



Indicator	Data Source	Data Collection Steps
		6. If buffer contains census block centroid the block is coded as "1," otherwise the block is coded as "0."
Public Assisted Households	US Census: Factfinder2	<p>US Census Factfinder.</p> <p>Table DP03 Selected Economic Characteristics</p> <p>Step 1. Go to http://factfinder2.census.gov/ and select "Advanced Search, Show Me All."</p> <p>Step 2. In the "Refine your search results" box, enter Table DP03 Selected Economic Characteristics under "topic or table name" and your State and select "Go."</p> <p>Step 3. From "geographies" select Census tract (140) for the county in which your City is located.</p> <p>Step 4: From the resulting table, select the following columns:</p> <ul style="list-style-type: none"> Column GV: Total Households Column JT: Supplemental Security Income (SSI) Column KB: Cash Public Assistance Column KJ: Food Stamps/SNAP <p>Step 5: Sum Columns JT, KB, and KJ and divide by Column GV to determine the percent of households within the Census tract receiving public assistance.</p>
Racial/Ethnic Diversity	US Census: Factfinder2	<p>Table QTP4: Race, Combinations of Two Races, and Not Hispanic or Latino – most recent SF1</p> <p>Data Steps:</p> <ol style="list-style-type: none"> 1. Select Geography (Place -160), your city. Add to your selection. 2. Select geography (Census Block – 100) Select your State, the County(ies) representing your City, and all Census Blocks within selected County(ies). Add to your Selection. 3. Select the most recent Table QT-P4: Race, Combinations of Two Races, and Not Hispanic or Latino 4. Select "Download," Click OK to create a zip file 5. Calculation of the Shannon-Weiner Diversity Index requires several columns from Table QTP4 and a bit of calculation prior to loading the value to the HCAT. <p>Step 1: Select the following Columns:</p> <ul style="list-style-type: none"> • Column B (Id2) • Column D (Total population) • Column H (Total - Number; Total population - One race) • Column J (Not Hispanic or Latino-Number; Total Population – One Race)



Indicator	Data Source	Data Collection Steps
		<ul style="list-style-type: none"> • Column N (Not Hispanic or Latino-Number; Total Population – One Race – White) • Column R (Not Hispanic or Latino-Number; Total Population – One Race – Black or African American) • Column V (Not Hispanic or Latino-Number; Total Population – One Race – American Indian and Alaska Native) • Column Z (Not Hispanic or Latino-Number; Total Population – One Race – Asian) • Column AD (Not Hispanic or Latino-Number; Total Population – One Race – Native Hawaiian and Other Pacific Islander) • Column AH (Not Hispanic or Latino-Number; Total Population – One Race – Some Other Race) • Column AJ (Total - Number; Total Population – Two or More Races) <p>Step 2: Subtract Column D (Not Hispanic or Latino - Number; Total population - One race) from Column C (Total - Number; Total population - One race) to determine Total Hispanic Population. Delete the Columns marked: "Total - Number; Total population - One race" and " Not Hispanic or Latino - Number; Total population - One race". The only columns remaining should be Id2, Total Population, each race/ethnicity – one race, other race, and two or more races (10 columns including the geography)</p> <p>Step 3: Using the neighborhood definition file columns for Block and Neighborhood, assign Neighborhoods to the Census Blocks</p> <p>Step 4: Using the Excel Pivot Table function, sum the number of residents for each race/ethnic group for every neighborhood.</p> <p>Step 5: Create the diversity Spreadsheet using the following steps:</p> <ol style="list-style-type: none"> a) Divide the population of each race/ethnic group by the total population (at both the city level and for each neighborhood). b) If the resulting number is zero for a race/ethnic group, the value is zero; otherwise find the natural logarithm of the value (i.e., IMLN in excel) using the following if/then excel function: =IF (COLUMN/ROW=0, 0, IMLN(COLUMN/ROW [e.g., =IF(L2=0,0,IMLN(L2)] c) Multiple the results found in Step b) by the results of Step a) [e.g., =L2 X T2]



Indicator	Data Source	Data Collection Steps
		<p>d) The inverse sum of the races/ethnicities represents the diversity index [e.g., $-\text{SUM}(\text{AB2:AI2})$]</p> <p>An example of how to compute the Shannon-Wiener Diversity Index can be found in the Appendix.</p>
Reading Proficiency	Local Data Request	<p>Data Request to the Local School District(s)</p> <p>Data Collection Steps:</p> <p>Depending on the school district, testing for reading proficiency is done at either 3rd or 4th grade. The percent of students meeting or exceeding proficiency is calculated by dividing the number of students who met or exceeded “proficient” reading levels by the total number of students taking the test.</p> <ol style="list-style-type: none"> 1. Request reading proficiency data per school or census tract from the local school district(s). 2. Assign school(s) to census tract/neighborhood regardless of where students attending the school reside.
Residential Mobility	US Census Data: Factfinder2	<p>U.S. Census FactFinder</p> <p>Table DP02: SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Select Advanced Search, “Show Me All”. 2. Under "refine your search results, topic or table", Enter DP02: Selected Social Characteristics 3. Under Geographies, select Census tract - 140, state, county, and all county census tracts. Add to selection. 4. Click “Download.” When file is complete, click "Download" to access zip folder with data. 6. Select Column B (Id1) for geographic FIPS Code (census tract) and Column LF (Percent; RESIDENCE 1 YEAR AGO - Same house).
Residential Proximity to Traffic	U.S. Census TIGER Shapefiles, FHA Highway Performance Monitoring System (HPMS)	<p>U.S. Census with Federal Highway Administration Highway Performance Monitoring System</p> <p>Data Steps:</p> <ol style="list-style-type: none"> 1. Use GIS software to download the most recent census block level Tiger/line Shapefile available. 2. Select "census blocks" to create neighborhood layers. 3. Overlay with federal and state highway shapefiles from FHA HPMS. These files include an estimate of volume determined by the annual average daily traffic (AADT). 4. Calculate non-weighted centroid for each census block. 5. Create buffers around 100, 200, and 300 meters each census block centroid. 6. Assess whether volumes on any road within a buffer



Indicator	Data Source	Data Collection Steps
		<p>exceeds the following volume thresholds:</p> <ul style="list-style-type: none"> - 30K AADT on any road within 100 meters of the centroid; - 75K AADT within 200 meters; and - 150K AADT within 300 meters. <p>7. Assign the block a value of "0" if no volume/buffers are exceeded. Assign "1" if any volume/buffer threshold is exceeded.</p>
School Proximity to Traffic	Local Data Request, U.S. Census TIGER Shapefiles, National Center for Education Statistics, FHA Highway Performance Monitoring System (HPMS)	<p>U.S. Census with Federal Highway Administration, USDE National Center for Education Statistics and local data.</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Use GIS software to open the most recent census block level Tiger/line Shapefile. 2. Select "census blocks" to create neighborhood layers. 3. Input school locations available from the National Center for Education Statistics (available at: http://nces.ed.gov/datatools/). 4. Assign schools to neighborhood based on census block. 5. Use FHA HPMS to overlay federal and state highway shapefiles. These files provide an estimate of annual average daily traffic (i.e., traffic volume). 6. Create buffers at three distances: 100, 200, 300 meters around each school. 7. Assess whether volumes on any road within a buffer exceeds the following thresholds: <ul style="list-style-type: none"> - 30k AADT on any road within 100 meters of the school; - 75k AADT within 200 meters; and - 150k AADT within 300 meters. 8. Assign the school a value of "1" if a volume/buffer is exceeded; otherwise assign a value of "0." 9. Neighborhood value is determined by summing the number of schools that exceed the volume threshold and dividing that value by the total number of schools within the neighborhood.
School Readiness Scores	Local Data Request	<p>Data Request to the Local School District(s)</p> <p>Although data are collected via in-school assessments, the practice of collecting the data is not universal and there are a variety of variety of assessment tools employed. Comparison of the data may be difficult in cities with multiple school districts if the data are not collected in a uniform manner.</p> <ol style="list-style-type: none"> 1. Request school readiness data from the local school district(s) at the school or census tract level. 2. Assign school(s) data/score to census



Indicator	Data Source	Data Collection Steps
		tract/neighborhood regardless of where students attending the school reside.
Self-Sufficiency Standard	Self-Sufficiency Standard	<p>Self-Sufficiency Standard (Center for Women's Welfare)/US Census Factfinder/ Local Data</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Visit http://www.selfsufficiencystandard.org/pubs.html to find out if Self-Sufficiency Standard research is available for your state. If it is, contact the Center for Women's Welfare (CWW) or the agency/organization responsible for the collection to determine if (and request) data available at the census tract level. 2. If data have not been collected for your State or are unavailable at the census tract level, guidance to calculate the data is available at: http://www.selfsufficiencystandard.org/standard.html#howis. Much of the data necessary to calculate the standard is available from www.factfinder2.census.gov. Table DP03 Selected Economic Characteristics 2012 ACS 5-year estimates.
Toxic Releases from Facilities	U.S. Census TIGER Shapefiles, EPA Toxic Release Inventory (TRI)	<p>EPA Toxic Release Inventory (TRI)/Census TIGER Shapefile</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Use GIS software to download the most recent census block level Tiger/line Shapefile. 2. Select "census blocks" to create neighborhood layers. 3. Calculate non-weighted centroid for each census block. 4. Access TRI Facilities data at: http://www.epa.gov/enviro/facts/tri/customized.html. 5. Input TRI facilities into GIS program using - <ul style="list-style-type: none"> • Facility Latitude • Facility Longitude • Pref Latitude (use this over Facility Latitude if populated) • Pref Longitude (use this over Facility Longitude if populated) 6. Place 1km circular buffer around each facility. 7. If facility buffer contains/touches census block centroid assign a value of "1," otherwise assign a value of "0."
Transit Accessibility	EPA Smart Location Database	<p>Data Source: EPA's Smart Location Database (SLD)</p> <p>EPA's Smart Location Database (SLD)</p> <p>The D4 (Transit Measures) variables from the SLD measure transit availability, proximity, frequency, and density. Two data sources are used to calculate transit metrics: Transit service data from more than 200 transit agencies across the United States, including the geographic location of all transit stops as well as the service schedules for all routes</p>



Indicator	Data Source	Data Collection Steps
		<p>that serve those stops; and Point location data for all existing fixed-guideway transit service in the U.S.</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Use GIS software to download the EPA Smart Location Database nationwide Shapefile. 2. Cull data for specific City's census block groups. 3. Report data from Column GEOID10 – this column provides the geographic ID (census block group FIPS). 4: Report data from Column D4c – this column provides Transit Accessibility data (i.e., ACS wa). <p><u>Note:</u> these data can be extracted to Excel as necessary from GIS software.</p>
Travel Time to Work	US Census Data: Factfinder2	<p>Table: S0801 Commuting Characteristics by Sex 20XX ACS 5-year Estimates (XX=most recent data available)</p> <p>Select Column: JN - Total; Estimate; TRAVEL TIME TO WORK; Mean travel time to work (minutes).</p> <p>Also available from Table DP03 Selected Economic Characteristics, Column CV.</p>
Tree Cover	U.S. Census TIGER Shapefiles, National Land Cover Database 2011 (NLCD2011)	<p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Use GIS software to open the most recent census TIGER/line Shapefile. 2. Select "census blocks" to create neighborhood layers. 3. Download the NLCD 2011 USFS Tree Canopy Cartographic Layer [<u>NOTE:</u> this is a national database with a long download. Pilot Cities may also access state specific data at: https://www.dropbox.com/sh/qye4szm9n00sz7c/AAB4MjWpIAo_SBqmPsEby6v2a?dl=0] 4. Overlay the NLCD .img file with the TIGER Shapefile (Note: the NLCD data may need to be re-projected or geo-referenced for it to align correctly). 5. Use the spatial analyst > extract by mask tool to select the portions of the NLCD .img file that lie within the boundary of the census block (or neighborhood). This will produce a new .img file specifically for the city, making it unnecessary to process the entire nationwide dataset. 6. Use the conversion > raster to polygon tool to convert the resulting .img file to a shapefile based on the "value" field in the .img file. This creates a shapefile with polygons for each of the raster cells. Title this file TC_polygon. The percentage of the each polygon that is covered by tree canopy, in values from 0-100, will be in the GRIDCODE field.



Indicator	Data Source	Data Collection Steps
		<p>7. Use the dissolve tool on the resulting shapefile to consolidate cells with the same value.</p> <p>8. Use an analysis > overlay > spatial join tool to join TC_Polygon and the census block or neighborhood shapefile. Use TC_polygon as the target field and the neighborhood/census block shapefile as the join field and select JOIN_ONE_TO_MANY in the Join operation menu. Name the output TC_nhood. TC_nhood will be a new shapefile with the neighborhood name or ID number appended to each polygon from the TC_polygon file.</p> <p>9. Create a new field in the TC_nhood attribute table titled AREA_AC. Right-click the heading of this field, select Calculate Geometry..., and select Area in the Property menu and Acres in the Units menu.</p> <p>10. Create another new field in the TC-nhood attribute table titled COVER. Right-click the heading of this field, select Field Calculator... and set this field equal to $(GRIDCODE * AREA_AC) / 100$.</p> <p>11. Use the summarize command to get a table with a sum of COVER and AREA_AC by neighborhood.</p> <p>12. In the resulting table, use the field calculator to divide COVER by AREA_AC. This provides the percent of the neighborhood with tree cover.</p>
Vacancy Rates	US Census Data: Factfinder2	<p>Table DP04 Selected Housing Characteristics 20XX ACS 5-year estimates (most recent available data)</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Select geographies: Census Tract -140, state, county, All county census tracts. 2. Download file. 3. Record data from column N: HOUSING OCCUPANCY - Vacant housing units.
Violent Crime	National Incident-Based Reporting System (NIBRS)	<p>Local/National Incident-Based Reporting System (NIBRS)</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Request counts of violent crimes* by census tract from local law enforcement agency or state criminal justice reporting system. Alternatively, the FBI's Uniform Crime Reporting (UCR) tabulations can also be obtained via the National Incident-Based Reporting System (NIBRS) or a data request to the state-specific contacts listed here: http://www.jrsa.org/ibrrc/state-profiles. 2. Record the count of violent crimes per census tract divided by per capita (1000) tract population.



Indicator	Data Source	Data Collection Steps
		NOTE: Violent crimes include criminal homicide, forcible rape (or attempt), armed robbery, aggravated assault, and assault with intent to commit murder.
Voter Participation	Local Data Request	<p>Local/State Board of Elections</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Submit a data request to the local or state board of elections for the number of residents at the census tract or block group level who voted in the last general election. At a minimum, data should be collected at zip code level. 2. Divide the number of residents that voted by the number of eligible residents within the geographic area (i.e., residents over 18 years of age and, depending upon the jurisdiction, who have not committed a felon. Note: check state election rules to determine if convicted felons are eligible to vote/register to vote). <p>NOTE: If the elections office cannot provide data on eligible voters, please just use data on voters in the last general election divided by number of registered voters.</p>
Walkability	Local Data Request; Proprietary metrics; EPA Smart Location Database	<p>Local Data or Proprietary Score; EPA Smart Location Database</p> <p>Some local jurisdictions may compute walkability scores for their communities or have access to metrics such as Streetsmart Walkscore or Maponics Walkability. Alternatively, walkability may be computed using the EPA Smart Location Database, which provides variables such as employment densities for various land uses, densities of population and housing, density of pedestrian oriented streets and intersections, auto-ownership, and the frequency of transit, which can be used to compute walkability. While several of the measures influence the intensity of walking, employment density provides a simple and available neighborhood proxy for potentially walkable destinations.</p> <p>Computation</p> <ol style="list-style-type: none"> 1. Access EPA Smart Location Data for the jurisdiction. The SLD can be downloaded as a single file geodatabase at EPA's Environmental Dataset Gateway (https://edg.epa.gov/metadata/catalog/main/home.page) 2. Select data for the jurisdiction from the FIPS census block group geography variable in the EPA SLD (GEOID10). 3. (Optional) Non-residential commercial areas such as malls will have high levels of retail employment density but may not be a part of a neighborhood. To exclude these



Indicator	Data Source	Data Collection Steps
		<p>areas, filter out the block groups that have no residential uses (e.g., using the EPA SLD residential density variable - D1a).</p> <p>4. Neighborhood serving employment density EDn is calculated simply as the sum of the following three employment density variables (D1c8_Ret10, D1c8_Ent10, D1c8_Ed10) to create a combined employment density for retail, entertainment, and educational neighborhood uses (CEDnu):</p> $EDn = D1c8_Ret10 + D1c8_Ent10 + D1c8_Ed10$ <p>Because most block groups have very little neighborhoods serving commercial uses, the EDn variable will be left skewed. Averaging the block level variable at the neighborhood level will reduce the skew while still accurately estimating the relative rank of neighborhood walkability.</p> <p>A user guide for the EPA's SLD can be accessed at: www.epa.gov/smartgrowth/pdf/sld_userguide.pdf</p>



Section 10. Functionality – Field Definitions and Business Rules

This section provides field definitions and tables along with business rules for each type of content (e.g., Contextual Indicators, Data Sources, Domain, Indicator, Upload Indicator Values, Upload Neighborhood Definition). Tables detail specific information for each field type; required fields are marked with an asterisk. Business rules identify the party responsible for changing/updating the field and the frequency in which it should be updated.

10.1 Data Sources

Field Definitions

Field	Description	Formatting	Example
Title*	Title of the Data Source	Plain Text	
Body		HTML or Plain Text	
Description*	Description of the sources along with any relevant information as to why it was chosen for the HCI.	HTML formatting	
Text Format	Choose Filtered HTML, Full HTML, Plain Text	Select from drop down.	

Business Rules

Frequency: variable

Who: Both the City Developer and City HCAT administrator may create, edit, or delete a Data Source.

How to Modify: A Data Source is edited by navigating to the “Dashboard”; selecting “Data Sources” from the [Type] drop down under “Manage Content”; selecting “Apply”; and then selecting the “edit” hyperlink to the right of the Data Source or by double-clicking the hyperlinked title of the data source (See Section 8. Managing HCAT Data and Content on page 43 for details).

DASHBOARD

MANAGE CONTENT

Type

Title	Type	Edit link
CFED Bank On	Data Sources	Edit
EPA Risk-Screening Environmental Indicators (RSEI)	Data Sources	Edit
EPA Smart Location Database	Data Sources	Edit

* Required Field



Note: Only data sources being used by an indicator are displayed on the *Resources* page in the “Indicator Data Download Locations” section.

10.2 Domains

Field Definitions

Field	Description	Format	Example
Title*	Title of the Domain	Text	Economic Health
Image*	Icon image corresponding to the Domain	png format	 Current size: 185p x 186p
Alternate Text	Text describing the uploaded image, which will be used by screen readers, search engines, or when the image cannot be loaded.	Text	Economic health - charts and graphs
Title	Text used as a tool tip when the user hovers the mouse over the image.	Text	Click to browse Economic Health Indicators
Body	Narrative description of a Domain	HTML or Plain Text	Economic health indicators measure the fiscal well-being of a community and its residents, and have a strong influence on community health. Numerous economic factors affect health outcomes. Indicators within this domain focus on economic growth and status, such as business retention and vitality, and access to mainstream financial services, because they reflect a community’s purchasing power, ability to reduce poverty, and availability of public services, all of which contribute to health outcomes. Recent studies show that increased expenditures on programs and infrastructure that expand access to active living opportunities have direct health outcomes. This supports the case for increasing local government expenditures on programs and infrastructure to help promote residents’ physical activity. Other economic factors, such as income inequality and unemployment, significantly overlap with other domains, such as employment and education opportunities;

* Required Field



Field	Description	Format	Example
			indicators addressing these factors can be found under other domains.
Text Format	Choose Filtered HTML, Full HTML, Plain Text	Select from drop down.	

Business Rules

Frequency: Infrequent.

Who:

- HCAT Developer shall add content and indicators to the original HTML template.
- City HCAT Developers and Administrators may add additional domains, which would include indicators specific to their community (Instructions for adding a Domain are available on in Section 6 above, page on page 30).

How to Modify: A Domain is edited by navigating to the “Dashboard”; selecting “Domain” from the [Type] drop down under “Manage Content”; selecting “Apply”; and then selecting the “edit” hyperlink to the right of the Domain or double-clicking the hyperlinked title of the Domain (See Section 8. Managing HCAT Data and Content on page 43 for details).

DASHBOARD

MANAGE CONTENT

Type

Domain

Apply

Title	Type	Edit link
Economic Health	Domain	Edit
Educational Opportunities	Domain	Edit
Employment Opportunities	Domain	Edit
Environmental Hazards	Domain	Edit
Health Systems and Public Safety	Domain	Edit
Housing	Domain	Edit
Natural Areas	Domain	Edit
Neighborhood Characteristics	Domain	Edit
Social Cohesion	Domain	Edit
Transportation	Domain	Edit



10.3 Indicators

10.3 (a) Indicator Descriptions

Field Definitions

Field	Description	Format	Example
Title*	Title of the indicator	Text	Household Transportation Costs
Contextual Indicator	Distinguishes between HCI Core Indicators, which are ranked, and Demographic and Contextual indicators which are not.	Checkbox.	Check ONLY if indicator is being added as demographic and contextual indicator and should not be ranked.
Title Description	Description of the indicator. Text appears on the indicator details page, just below the title.	Text	Definition of the indicator along with what it measures, with examples as feasible; Basic information about the data source used to measure the indicator; Nexus to health; and Rationale for inclusion. Descriptions should also list the indicators' secondary domains and identify whether the indicator is considered an "inverse" measure, i.e., a higher value is a negative versus a positive outcome.
Text Format	Choose Filtered HTML, Full HTML, Plain Text	Select from drop down.	
Summary	<ul style="list-style-type: none"> Short description of the indicator. Images, links, and other formatting options can also be inserted here. 	HTML or Plain Text	Proportion of household income spent on transportation.
Description	<ul style="list-style-type: none"> A listing of the Key Citations related to the indicator. Text appears on the right column below the indicator settings detail box. Requires some coding per the example. See "Information about text formatting" for additional details about codes. Images, links, and other formatting options can be implemented here. 	HTML or Plain Text	<p><p> Key Citations:
1. Ewing R, Cervero R. Travel and the built environment: a meta-analysis. Journal of the American Planning Association. 2010; 76:3(2010):265-294.</p>
Text Format	Choose Filtered HTML, Full HTML, Plain Text	Select from drop down.	

* Required Field



Field	Description	Format	Example
Data Sources	Checklist of Available Data Sources	Check all that apply.	
Public Data Sources Description	<ul style="list-style-type: none"> This field is used to provide step-by-step instructions for data collection. Description will display on the resource and data page under the column 'additional data'. This information is publically accessible. 	text	<p>Data Source: HUD's Location Affordability Index</p> <p>Data Collection Steps:</p> <ol style="list-style-type: none"> 1. Select "Download Data" from the dropdown menu on the "Location Affordability Index" tab. 2. Download the Census block group data for your your specific MSA. 3. Select - <ul style="list-style-type: none"> Column A: blkgrp (the geographic ID) Column Z: hh_type1_t (percent of household income a typical regional household spends on transportation).
Text Format	Choose Filtered HTML, Full HTML, Plain Text	Select from drop down.	
Admin Data Sources Description	<ul style="list-style-type: none"> This field is used to provide additional technical instructions for data collection as well as to capture any important internal information about this data source relevant to its use on the HCAT site. This information is not publically accessible, and is only viewable when the content manager is authenticated and managing the site. 		<p>Data availability: Census block group level data are available for both metropolitan and rural areas from HUD's recently released Version 2 of the Location Affordability Index (LAI).</p> <p>HUD's Location Affordability Index</p> <p>Download Census block group data for specific MSA.</p> <p>Delete any rows with census tracts not relevant to City</p> <p>Columns needed</p> <p>Column A: blkgrp (the geographic ID)</p> <p>Column T: hh_type1_t (the transportation costs for a typical regional household)</p> <p>Prior to uploading data from column T (percent of household income a typical regional</p>



Field	Description	Format	Example
			household spends on transportation), the data needs to be converted to decimal (i.e., multiply by .01). Information about indicator inclusion, such as rational, actionability, evidence base to support the indicator's inclusion, and any potential "stretch" or alternative measures that should be considered in the future (i.e., if data becomes readily available).
Text Format	Choose Filtered HTML, Full HTML, Plain Text	Select from drop down.	
Primary Domain	The domain the indicator will align with on the indicators page.	Select from drop down.	Transportation
Secondary Domain(s)	This is for informational purposes only on the indicator details page.	Check all that apply.	Neighborhood Characteristics; Housing; Employment Opportunities; Environmental Hazards; Education Opportunities
Indicator Level	<ul style="list-style-type: none"> This field setting needs to match the geography_id value type in the indicator file for the HCAT to (a) align with the appropriate geographical level and (b) to aggregate to the neighborhood level properly. If the value in the indicator file does not match the indicator value assigned in the HCAT, it will not be able to correctly rank indicators between neighborhoods. 	Select from drop down.	Census Block
Inverse Measurement	<ul style="list-style-type: none"> No: Larger numbers ranked higher. Yes: Smaller numbers ranked higher. 	Select from drop down.	Yes – the lower the household transportation cost the better
Aggregation Method	<ul style="list-style-type: none"> Sum: Sum the values across the designated indicator level (neighborhood, ZCTA, census block, block group, or tract). Unweighted Average: Average the values across the designated 	Select from drop down.	Weighted Average, i.e., population weighted



Field	Description	Format	Example
	<p>indicator level (neighborhood, ZCTA, census block, block group, or tract).</p> <ul style="list-style-type: none"> ▪ Weighted Average: Distribute the indicator value across the indicator level proportionate to population, and then sum for the designated indicator level (neighborhood, ZCTA, census block, block group, or tract). 		
Indicator Weight	<ul style="list-style-type: none"> ▪ 0 = not factored in calculations or rankings. ▪ 1 = default setting. ▪ 2+ = adds higher value when calculating and ranking. Only use 2 or higher on indicators that are more important than the rest. 	Numerical value	Cities may change to meet local criteria
Unit of Measurement	<ul style="list-style-type: none"> ▪ This value will be suffixed at the end of the calculated value and displayed in the indicator values column. ▪ If there should be a space between the value and the unit of measurement, add a space in this field prior to the value. ▪ The following Units of measurements cause additional functions to calculate: % = the indicator value will be multiplied by 100 prior to suffixing the "%." 		%
Target Indicator 1	This is the label for the first indicator comparison, such as a comparison at a national or regional level.	text	Center for Neighborhood Technology recommends no more than 15%
Target Indicator 1 Value	<ul style="list-style-type: none"> ▪ This is the value of the target indicator. ▪ This value will be added to indicator comparison graphs as well as neighborhood comparison graphs. 	Numerical value	15%
Target Indicator 2	This is the label for the second indicator comparison, such as a comparison at a state or local level.	text	Maryland 2020 Goal



Field	Description	Format	Example
Target Indicator 1 Value	<ul style="list-style-type: none"> This is the value of the target indicator. This value will be added to indicator comparison graphs as well as neighborhood comparison graphs. 	Numerical value	12%

Business Rules

Frequency: variable

Who:

- Both City HCAT developer and HCAT administrator may create, edit, or delete an Indicator.

How to Modify: An Indicator is modified by navigating to the “Dashboard”; selecting “Indicator” from the [Type] drop down under “Manage Content”; selecting “Apply”; and then selecting the “edit” hyperlink to the right of the Indicator to edit or by double-clicking on the hyperlinked title of the indicator (See Section 8. Managing HCAT Data and Content on page 43 for details).

MANAGE CONTENT

Type Indicators Apply

Title	Type	Primary Domain	Indicator Level	Inverse Measurement	Aggregation Method	Indicator Weight	Unit of Measurement	Edit link
Access to Mainstream Financial Services	Indicators	Economic Health	Census Tract	No	Weighted Average	1.00	%	edit
Access to Parks and Open Space	Indicators	Natural Areas	Census Block	No	Unweighted Average	1.00		edit
Adult Educational Attainment	Indicators	Educational Opportunities	Census Tract	No	Weighted Average	1.00	%	edit

NOTE: The "HCAT Matrix" in the Appendix provides a table that shows how HCI Indicators were initially set up for the HCAT. It can also provide a quick reference to ensure that various indicator levels are aligned with the geospatial level at which local jurisdictions loaded them (or if the level needs to be revised).

10.3 (b) Indicator Data Values

Field Definitions

Field ID	Position	Required?	Type	Length	Notes
geography_id	1	Yes	Numeric	NA	Must correspond to value provided in neighborhood definition file.
indicator_value	2	Yes	Alpha/Numeric	NA	For % values, the decimal equivalent (e.g., .89 for 89%) must be used. The



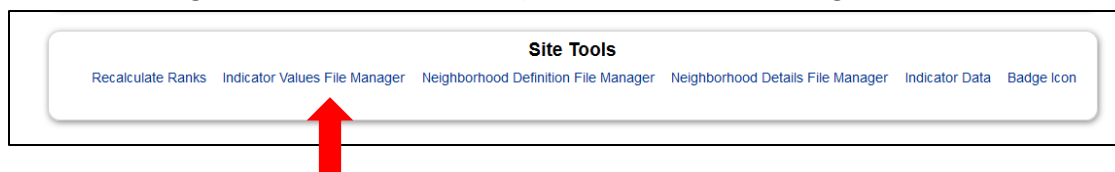
HCTI multiplies the decimal value by .01 for percentage-based indicators.⁸ All other values are formatted as submitted.

Business Rules

Frequency: variable

Who: HCAT developer and HCAT City administrator may upload indicator data files.

How to Modify: An Indicator can be modified by navigating to the Dashboard and selecting “Indicator Value File Manager” in the “Site Tools” box (See Section 7. Data Management for more details).



10.4 Neighborhood Files

10.4 (a) Neighborhood Definition Files

Field Definitions

Field ID	Position	Required?	Type	Length	Notes
block_fips_code	1	Yes	Numeric	15	2 digit state; 3 digit county; 6 digit tract; 1 digit block group; 3 digit block.
block_population	2	Yes	Numeric	NA	Count of population at block level.
census_tract	3	Yes	Numeric	11	2 digit state; 3 digit county; 6 digit tract.
zcta	4	Yes	Numeric	NA	ZCTA's are 5 characters in size; however, the tool does not prevent lengths longer than 5 (e.g., zip + 4).
census_block_group	5	Yes	Numeric	12	2 digit state; 3 digit county; 6 digit tract; 1 digit block group.
Neighborhood	6	Yes	Alpha/Numeric	NA	Verify correct neighborhood spellings to match indicator file geography_id field

⁸ Some data sources may provide the indicator value already in percent format (i.e., 89.1%) in which case the **data must be converted** to decimal format *before* being uploaded to the HCAT (i.e., .891).

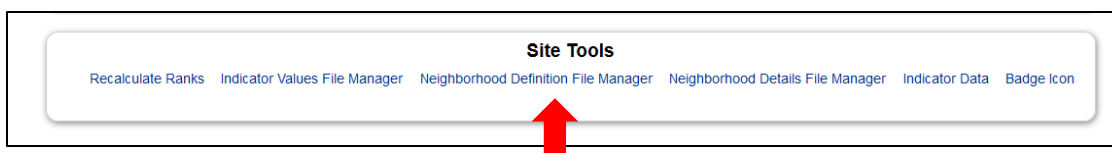


Business Rules

Frequency: Rarely. Once the City HCAT developer/administrator uploads the neighborhood definition file, it would only be changed if neighborhood boundaries changed or if errors were found in the original data file.



Who: City HCAT Developer/Administrator uploads the neighborhood definition file.

How to Modify: A neighborhood definition file is modified by navigating to the Dashboard and selecting “Neighborhood Definition File Manager” in the “SITE TOOLS” box (See Section 7. Data Management for details).





10.4 (b) Neighborhood Descriptions and Image File

Neighborhood Details File (Used for Bulk Upload of Neighborhood details)

Field	Description	Format	Example
body	Narrative description of the Neighborhood	Text	Located just east of the University of New Mexico campus and close to downtown, Nob Hill runs from Lomas Boulevard on the north to Garfield Avenue and Zuni Road on the south. It stretches between Washington Street on the east to Girard Boulevard on the west. It is best known for its unique galleries and shops, vibrant nightlife, and great used and vintage clothing stores.
latitude	Presented as a positive number	Numeric	35.073
longitude	Presented as negative number	Numeric	-106.568
map	Map or Iconic image corresponding to the Neighborhood	gif, jpeg, jpg, or png	 
neighborhood	Neighborhood name which corresponds with NDF	Text	Nob Hill



Neighborhood Details Definitions (used for individual neighborhood uploads and/or edits)

Field	Description	Format	Example
Title*	Neighborhood Name	Text	Nob Hill
Neighborhood Map or Image	Map or Iconic image corresponding to the Neighborhood	.png .jpg .jpeg .gif	 
Body	Narrative description of the Neighborhood	HTML or Plain Text	Located just east of the University of New Mexico campus and close to downtown, Nob Hill runs from Lomas Boulevard on the north to Garfield Avenue and Zuni Road on the south. It stretches between Washington Street on the east to Girard Boulevard on the west. It is best known for its unique galleries and shops, vibrant nightlife, and great used and vintage clothing stores.
Text Format	Choose Filtered HTML, Full HTML, Plain Text	Select from drop down.	
City*	Name of City		
Location	Identification of neighborhood locations on Google Map	Numeric	35.073, -106.568

Business Rules

Frequency: Rarely/As needed to reflect neighborhood changes.

Who: City HCAT Administrator updates the neighborhood description file, related images and neighborhood location points.

How to Modify: Neighborhood description files are modified by navigating to the Dashboard and selecting "Neighborhood" in dropdown list in the "MANAGE CONTENT" box and selecting "edit" for the neighborhood to edit or double-clicking on the neighborhood name (See *Section 7. Managing HCAT Content* for details). **NOTE:** Neighborhood names must not be changed once the neighborhood definition file has been loaded, e.g., when adding neighborhood descriptions. If the name is altered, the neighborhood definition file will no longer "read" indicators that are loaded at the neighborhood level.

* Required Field



MANAGE CONTENT

Type Neighborhood Apply

Title	Type	Edit link
Allendale/Irvington/S. Hilton	Neighborhood	Edit
Beechfield/Ten Hills/West Hills	Neighborhood	Edit
Belair-Edison	Neighborhood	Edit
Brooklyn/Curtis Bay/Hawkins Point	Neighborhood	Edit
Canton	Neighborhood	Edit
Cedonia/Frankford	Neighborhood	Edit
Cherry Hill	Neighborhood	Edit
Chinquapin Park/Belvedere	Neighborhood	Edit
Claremont/Armistead	Neighborhood	Edit
Clifton-Berea	Neighborhood	Edit

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APPENDIX



Frequently Asked Questions (FAQs)

Is it acceptable to use local data rather than nationally available data?

Yes! If local data is more accurate and up-to-date, use it versus the nationally available data.

Is it necessary to use the data source identified and/or follow the data collection steps exactly?

No – the data collection methodology/steps provided in the Administrative Guide are simply meant as a guide to help cities that need assistance find data for the indicators. Data analysts should feel free to use whatever steps they feel comfortable with to collect indicator data (e.g., there may be better steps to geocode some of the data requiring GIS). Additionally, while the steps provide instruction for collecting data from nationally available sources, many cities have much better data available to them at the local and/or state level – by all means use the better data source available. For example, when the pilot Minneapolis HCAT was populated, data from the EPA was initially used to calculate proximity to Brownfields; however, it was found that state data was much more accurate, so the indicator was updated with state data.

Similarly, an indicator may specify a specific target (e.g., Chronic School Absence = 10% days absent), but the data collected locally uses a slightly different definition (e.g., “truancy” which may be 5% or 15% school days absent). Please use the local data available and revise the indicator description and referenced source as necessary.

Are any of the HCI indicators prepopulated in the Tool?

No. As each data set is unique to the City/community adopting the HCAT, it was impossible to preload any indicator data into the tool.

Why aren't state and national targets designated for all of the HCI indicators?

Local administrators/stakeholders determine what, if any, targets they would like to include in the HCAT. Not all Cities and/or States have target guidelines for all of the HCAT indicators used in the HCAT. And while Healthy People 2020 have several indicators similar to those included in the HCI, not all are included and/or an exact match to HCI indicator.

What types of formats can be used for images and/or maps?

Maps and images should be in one of the following formats: gif, jpg, jpeg, or png. PDFs are not an accepted format type

If a neighborhood has more than one school, how should Reading Proficiency be determined?

The score/number received from a school within the neighborhood (or the school district) should be based on the population of students taking the test. Averaging scores from all the schools would be the best way to aggregate it to the neighborhood level.

Should values that will be displayed as percentages be in decimal form or percent form?

Values should be uploaded to the HCAT in decimal form (eg., 79.2 should be entered as .792). The HCAT automatically converts the value after any necessary aggregation calculations.

Should RCRA Correction Action sites be included in the Proximity to Brownfield sites count?

Yes, RCRA Corrective Action sites should be included.





Calculating Racial/Ethnic Diversity using the Shannon-Wiener Index

US Census Factfinder2: Table QTP4, most recent SF1 year

Data Collection Steps:

Step 1: Select

- Column B (Id2)
- Column H (Total - Number; Total population - One race)
- Column J (Not Hispanic or Latino-Number; Total Population – One Race)
- Column N (Not Hispanic or Latino-Number; Total Population – One Race – White)
- Column R (Not Hispanic or Latino-Number; Total Population – One Race – Black or African American)
- Column V (Not Hispanic or Latino-Number; Total Population – One Race – American Indian and Alaska Native)
- Column Z (Not Hispanic or Latino-Number; Total Population – One Race – Asian)
- Column AD (Not Hispanic or Latino-Number; Total Population – One Race – Native Hawaiian and Other Pacific Islander)
- Column AH (Not Hispanic or Latino-Number; Total Population – One Race – Some Other Race)
- Column AJ (Total - Number; Total Population – Two or More Races)

Step 2: Subtracting Column J from Column H to determine Total Hispanic Population

Step 3: Using the neighborhood definition file columns for Block and Neighborhood, assign Neighborhoods to the Census Blocks

Step 4: Using the Excel Pivot Table function, sum the number of residents for each race/ethnic group for every neighborhood.

Step 5: Create the diversity Spreadsheet using the following steps (see model on next page):

- a) Divide the population of each race/ethnic group by the total population (at both the city level and for each neighborhood).
- b) If the resulting number is zero for a race/ethnic group, the value is zero; otherwise find the natural logarithm of the value (i.e., IMLN in excel) using the following if/then excel function:
`=IF (COLUMN/ROW=0, 0, IMLN(COLUMN/ROW [e.g., =IF(L2=0,0,IMLN(L2)])`
- c) Multiple the results found in Step b) by the results of Step a) [e.g., =L2 X T2]
- d) The inverse sum of the races/ethnicities represents the diversity index [e.g., =-SUM(AB2:A12)]



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The following calculations determine the Index (repeat column/equation for each race/ethnic group within the city/neighborhood):

A	B	C	D	E	F	G
City/ Neighborhood	TOTAL POPULATION	TOTAL POPULATION RACE/ETHNICITY (One column for each Race/Ethnic Group)	PERCENT of OVERALL POPULATION (One column for each Race/ Ethnic Group)	ALGORITHM for RACE/ETHNICITY (Excel Function: One column for each Race/ Ethnic Group)	RACIAL/ETHNIC DIVERSIFICATION (Excel Function: One column for each Race/ Ethnic Group)	DIVERSITY INDEX (Inverse Sum of Columns "F")
City XX	XXXX	XXX	= C/B	=IF(D=0,0,IMLN(D))	=C*E	=Sum(F:X)
Neighborhood A	XXXX	XXX	= C/B	=IF(D=0,0,IMLN(D))	=C*E	=Sum(F:X)
Neighborhood B	XXXX	XXX	= C/B	=IF(D=0,0,IMLN(D))	=C*E	=Sum(F:X)

Excel Sample:



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City / Neighborhood	Total Population	DIVERSITY INDEX	White	Black/ African American	Hispanic or Latino (any race)	American Indian/ Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Other Race	Two or More Races
ANY CITY, ANY STATE	3095313	=D22	1500047	146600	927866	14098	328058	13504	6715	158425
NEIGHBORHOOD A	6530	=D23	3495	1155	973	60	449	40	26	332
NEIGHBORHOOD B	15035	=D24	11811	159	2014	185	303	36	8	519
Step 1: Calculate what percent of overall population is each race/ethnicity			White	Black/ African American	Hispanic or Latino (any race)	American Indian/ Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Other Race	Two or More Races
		ANY CITY, ANY STATE	=D2/\$B2	=E2/\$B2	=F2/\$B2	=G2/\$B2	=H2/\$B2	=I2/\$B2	=J2/\$B2	=K2/\$B2
		NEIGHBORHOOD A	=D3/\$B3	=E3/\$B3	=F3/\$B3	=G3/\$B3	=H3/\$B3	=I3/\$B3	=J3/\$B3	=K3/\$B3
		NEIGHBORHOOD B	=D4/\$B4	=E4/\$B4	=F4/\$B4	=G4/\$B4	=H4/\$B4	=I4/\$B4	=J4/\$B4	=K4/\$B4
Step 2: a) Divide the population of each race/ethnic group by the total population (at both the city level and for each neighborhood). b) If the resulting number is zero for a race/ethnic group, the value is zero;			White	Black/ African American	Hispanic or Latino (any race)	American Indian/ Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Other Race	Two or More Races
		ANY CITY, ANY STATE	=IF(D7=0,0,IMLN(D7))	=IF(E7=0,0,IMLN(E7))	=IF(F7=0,0,IMLN(F7))	=IF(G7=0,0,IMLN(G7))	=IF(H7=0,0,IMLN(H7))	=IF(I7=0,0,IMLN(I7))	=IF(J7=0,0,IMLN(J7))	=IF(K7=0,0,IMLN(K7))
		NEIGHBORHOOD A	=IF(D8=0,0,IMLN(D8))	=IF(E8=0,0,IMLN(E8))	=IF(F8=0,0,IMLN(F8))	=IF(G8=0,0,IMLN(G8))	=IF(H8=0,0,IMLN(H8))	=IF(I8=0,0,IMLN(I8))	=IF(J8=0,0,IMLN(J8))	=IF(K8=0,0,IMLN(K8))
		NEIGHBORHOOD B	=IF(D9=0,0,IMLN(D9))	=IF(E9=0,0,IMLN(E9))	=IF(F9=0,0,IMLN(F9))	=IF(G9=0,0,IMLN(G9))	=IF(H9=0,0,IMLN(H9))	=IF(I9=0,0,IMLN(I9))	=IF(J9=0,0,IMLN(J9))	=IF(K9=0,0,IMLN(K9))
Step 3: Multiply the results found in Step 1 by the results of Step 2			White	Black/ African American	Hispanic or Latino (any race)	American Indian/ Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Other Race	Two or More Races
			=D7*D12	=E7*E12	=F7*F12	=G7*G12	=H7*H12	=I7*I12	=J7*J12	=K7*K12
			=D8*D13	=E8*E13	=F8*F13	=G8*G13	=H8*H13	=I8*I13	=J8*J13	=K8*K13
			=D9*D14	=E9*E14	=F9*F14	=G9*G14	=H9*H14	=I9*I14	=J9*J14	=K9*K14
Step 4: The inverse sum of the races/ethnicities			DIVERSITY INDEX							
			=SUM(D17:K17)							
			=SUM(D18:K18)							
			=SUM(D19:K19)							



HCAT Matrix

The HCAT Matrix is a configuration control tool. It should be updated by individual Cities to reflect changes in data sources, HCAT Input geography (e.g., Census tract vs Census Block) based on the availability and use of local data, as well as any necessary changes in neighborhood aggregation methods based on use of different data than that recommended (e.g., state database with more accurate count of Brownfield sites). Whereas the HCAT can be edited fairly simply, the matrix helps identify individual City rules (as necessary) to maintain configuration standards. The matrix shown here is the default.

			HCAT Input Format				Aggregation Method				
Indicator	Indicator Definition	HCAT Input Geography	Percent (Decimal)	Rate	Dichotomous	Score Number	Sum	Average	Population Weighted Average	Inverse Measure Y/N	Unit of Measurement
Core: Priority											
Access to Parks and Open Space	Average number of parks within ½ mile of households OR average amount of green space within ½ mile of household.	Census Block				x		X		N	
Adult Educational Attainment	Proportion of adults, aged 25 or older, with a high school diploma or higher.	Census Tract	X						X	N	%
Age of Housing	Proportion of homes constructed prior to 1980.	Census Tract	X					X		Y	%
Business Retention	Rate of increase/decrease in the number of businesses.	Census Tract	X					X		N	%
Chronic School Absence	Proportion of students chronically absent from school from neighborhood schools.	Neighborhood	X				NO AGGREGATION NECESSARY			Y	%
Commute Mode Share	Proportion of workers commuting by transit, bicycle, foot, or carpool.	Census Tract	X						X	N	%
Excessive Housing Cost Burden	Proportion of households whose gross housing costs are 35 percent or more of their household income.	Census Tract	X						X	Y	%



Healthy Communities Transformation Initiative (HCTI)

			HCAT Input Format				Aggregation Method				
Indicator	Indicator Definition	HCAT Input Geography	Percent (Decimal)	Rate	Dichotomous	Score Number	Sum	Average	Population Weighted Average	Inverse Measure Y/N	Unit of Measurement
Food Desert	Share of neighborhood that is low income and more than .5 or 1 mile from supermarkets and grocery stores (depending on community).	Census Tract			X			X		Y	%
HS Graduation Rate	Proportion of students entering neighborhood high schools that graduate.	Neighborhood	X				NO AGGREGATION NECESSARY			N	%
Household Transportation Costs	Proportion of household income allocated to transportation.	Census Block	X						X	Y	%
Local Business Vitality	Proportion of small, locally-owned businesses (0-4 EEs).	Census Tract	X					X		N	%
Long-Term Unemployment	Proportion of individuals out of work for more than 12 months.	Census Tract	X						X	Y	%
Low Birth Weight	Proportion of live births with low birth weight (<2500 grams).	Census Tract	X					X		Y	%
Motor Vehicle Collisions	Annual incidence of motor vehicle collision injuries and fatalities per capita for all modes of transportation on public roadways and right-of-ways.	Census Block		X				X		Y	%
Offsite Alcohol Outlets	Number of liquor stores for "off-site" alcohol consumption per 10,000 residents.	Census Tract				X		X		Y	
Pedestrian Connectivity	Density of pedestrian-oriented intersections within a neighborhood.	Census Block		X		X		X		N	
Preschool Enrollment	Proportion of three and four year-olds enrolled in preschool.	Census Tract	X					X		N	%



Healthy Communities Transformation Initiative (HCTI)

			HCAT Input Format				Aggregation Method				
Indicator	Indicator Definition	HCAT Input Geography	Percent (Decimal)	Rate	Dichotomous	Score Number	Sum	Average	Population Weighted Average	Inverse Measure Y/N	Unit of Measurement
Preventable Hospitalizations	Age-standardized acute care hospitalization rate for conditions where appropriate ambulatory care prevents or reduces the need for admission to the hospital per 100,000 population under age 75 years.	Census Tract		X					X	Y	%
Public Assisted Households											
Reading Proficiency	Proportion of third or fourth grade students meeting or exceeding “proficient” reading levels on standardized assessment in neighborhood schools.	Neighborhood	X				NO AGGREGATION NECESSARY			N	%
Residential Mobility	Proportion of population age one year and older living the same house as one year ago.	Census Tract	X						X	N	%
Residential Proximity to Traffic	Proportion of a residential neighborhood located near heavy traffic roadways.	Census Block			X			X		Y	%
School Proximity to Traffic	Proportion of neighborhood schools with close proximity to heavy road traffic.	Neighborhood			X		NO AGGREGATION NECESSARY			Y	%
Self-Sufficiency Standard	Proportion of employed workers earning a self-sufficiency wage.	Census Tract	X						X	N	%
Toxic Releases from Facilities	Proportion of neighborhood in close proximity to reported toxic air emissions.	Census Block			X			X		N	%



Healthy Communities Transformation Initiative (HCTI)

			HCAT Input Format				Aggregation Method				
Indicator	Indicator Definition	HCAT Input Geography	Percent (Decimal)	Rate	Dichotomous	Score Number	Sum	Average	Population Weighted Average	Inverse Measure Y/N	Unit of Measurement
Transit Accessibility	Proportion of the neighborhood within a quarter-mile of a well-served transit station.	Census Block				X		X		N	
Travel Time to Work	Average travel time to work.	Census Tract				X		X		Y	%
Tree Cover	Proportion of neighborhood covered by trees.	Neighborhood	X				NO AGGREGATION NECESSARY			N	%
Vacancy Rate	Proportion of vacant residential properties.	Census Tract	X					X		Y	%
Violent Crime	Annual rate of reported violent incidents per capita (1000 population).	Census Tract		X				X		Y	
Voter Participation	Proportion of voting eligible population who voted in last election.	Census Tract	X						X	N	%
Walkability	Pedestrian-friendly proportion of the neighborhood, i.e., offers good street and sidewalk connections, with access to amenities and common destinations.	Census Block Group				X		X		N	
Core: Optional											
Access to Mainstream Financial Services	Proportion of households without adequate access to banking services.	Census Tract	X						X	Y	%
Blood Lead Levels in Children	Proportion of tested children with a blood lead level over 5ug/dL.	Census Tract	X					X		Y	%
Employment Rate	Proportion of working age population (16- 64 years) who are employed.	Census Tract	X						X	N	%



Healthy Communities Transformation Initiative (HCTI)

			HCAT Input Format				Aggregation Method				
Indicator	Indicator Definition	HCAT Input Geography	Percent (Decimal)	Rate	Dichotomous	Score Number	Sum	Average	Population Weighted Average	Inverse Measure Y/N	Unit of Measurement
Proximity to Brownfield Sites	Proportion of neighborhood (blocks) within 1km of a brownfields site.	Census Block			X			X		Y	%
Proximity to Superfund Sites	Proportion of neighborhood (blocks) within 1km of an active Superfund site.	Census Block			X			X		Y	%
School Readiness Scores	Proportion of kindergarteners ready for first grade.	Neighborhood	X				NO AGGREGATION NECESSARY			N	%
DEMOGRAPHIC AND CONTEXTUAL INDICATORS											
Concentrated Poverty	Proportion of residents below the poverty level.	Census Block	X						X		%
Income Inequality	A measure of the distribution of income (i.e., gap between the rich and the poor).	City / Census Tract	X					X			%
Life Expectancy	Number of years of potential life lost per capita.	City/Census Tract		X					X		
Park Quality	Proprietary TPL score that integrates and evaluates park acreage, land share, spending per resident, playgrounds, and park proximity.	City				X	NO AGGREGATION NECESSARY				
Population											
Racial/ Ethnic Diversity	Measure to which racial/ ethnic groups are concentrated in an area.	Neighborhood	X				NO AGGREGATION NECESSARY				%