

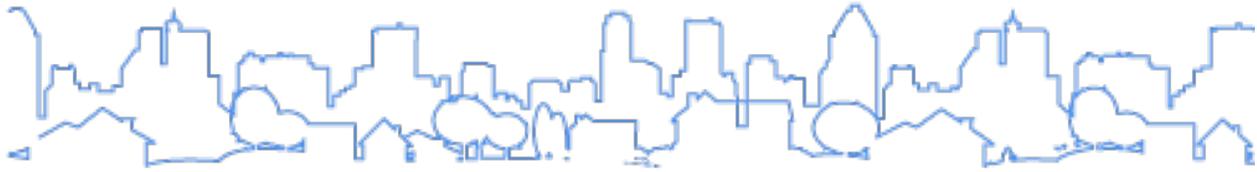


*The eCon Planning Suite:*

# **A Desk Guide for Using CPD Maps**







## TABLE OF CONTENTS

<b>Introduction.....</b>	<b>1</b>
<b>Accessing CPD Maps.....</b>	<b>2</b>
The Guide Me Wizard.....	2
Basic Navigation .....	4
<b>Navigating CPD Maps and Functionality .....</b>	<b>8</b>
Map Selection Widget .....	8
Legend Widget .....	12
Print Widget .....	13
Identify Widget.....	14
Reports Widget .....	20
Grantee Summary Widget.....	23
Map Query Widget.....	25
<b>Data Provided by HUD in CPD Maps .....</b>	<b>29</b>
Demographic Data.....	30
Housing Needs.....	30
Housing Supply.....	30
Economic Context .....	31
Special Needs .....	31
<b>Telling Your Story With Maps and Data .....</b>	<b>31</b>
Low- and Moderate-Income Concentrations .....	32
Areas of Minority Concentration.....	33
Target Areas .....	37
Need for Low-Income Rental Housing.....	39
Need for Housing Rehabilitation .....	40
Using Change Indicators to Support Market Analysis in CPD maps .....	41
<b>Appendix 1: Map Layers.....</b>	<b>44</b>
<b>Appendix 2: Map Query Variables .....</b>	<b>48</b>
<b>Appendix 3: Report Data Sets.....</b>	<b>51</b>
<b>Appendix 4: CPD Maps Glossary .....</b>	<b>71</b>



## INTRODUCTION

Every year, state, county, and local governments across the country receive block grants for community development and affordable housing from the U.S. Department of Housing and Urban Development (HUD). Each grantee agrees to develop a comprehensive planning document called a Consolidated Plan as a condition of receiving the funds. The Consolidated Plan identifies each community's most pressing needs in the areas of community development, affordable housing, and homelessness. It also lays out a strategy describing how available funding will be used to address the community's needs.

Given the scope of the Consolidated Plan, grantees are required to collect and analyze large amounts of data to determine their priority needs and current market conditions. In an effort to make the data collection and analysis process easier for their grantees, HUD's Office of Community Planning and Development (CPD) has developed the eCon Planning Suite, a collection of online tools to help the grantees create market-driven, leveraged housing and community development plans and to streamline the entire grants management cycle into a cohesive planning framework.

One of the new tools in the eCon Planning Suite is the CPD Maps website. CPD Maps offers a large amount of data in a way that is easy to access. The website allows grantees and the general public to easily search, query, and display information to identify trends and analyze the needs of their community. In addition to updated U.S. Census data, CPD Maps also includes data sets that highlight the accomplishments and results of HUD programs by displaying Community Development Block Grant (CDBG), HOME Investment Partnerships Program (HOME), and other HUD-funded community assets.

Improved access to the data in CPD Maps mapping tool will help grantees more easily assess local needs and market conditions. As grantees gain a deeper understanding of their affordable housing and community development needs, they will be better able to set priorities, target resources, and track outcomes. Moreover, CPD Maps is available to the public to facilitate meaningful community input and participation. The mapping and data reporting tools in CPD Maps work with the Consolidated Plan Template in IDIS Online, another tool in the eCon Planning Suite. Guidance for using these tools together is provided in this manual, as well as in the Manual for the Con Plan Template.

This Guide is designed to provide grantees with a basic overview of the functions of CPD Maps and how to use the tool to create maps and data sets that will support the development of their Consolidated Plan. It also contains reference information on the included data sets and useful examples of creating maps commonly used in Consolidated Plans, such as areas of low- and moderate-income (Low-Mod) concentrations.



## ACCESSING CPD MAPS

CPD Maps is a mapping tool available on the Internet at <http://egis.hud.gov/cpdmaps>. It is compatible with any Internet browser that supports Adobe Flash. If you use an Internet browser that is not compatible with CPD Maps, the following message will be displayed: “Either scripts and active content are not permitted to run or Adobe Flash Player version 10.0.0 or greater is not installed.” Please work with your Information Technology (IT) support staff to resolve the issue.



### THE GUIDE ME WIZARD

---

When you first open CPD Maps, the page will display the Guide Me Wizard. The Guide Me Wizard will help you create a map by selecting the area you want to view and the types of information to include. By using the Guide Me Wizard, you will have access to additional functionality for the other widgets:

- For the Map Selection widget, you can illustrate theme classifications based on the geographies in the selected jurisdiction.
- For the Map Query widget, you can query at the census tract level. You can also limit the query to the geographies within the selected grantee.
- For the Reports widget, you can use the selected grantee’s jurisdiction, county, or state as a reference data set to compare to your selected target area.

To use the Guide Me Wizard to create a map, follow these steps:

1. Select the grantee type you want to view on the map. The system includes grantees that receive the following funding types: CDBG, Emergency Shelter/Solutions Grant (ESG), HOME, Housing Opportunities for Persons with AIDS (HOPWA), Continuum of Care (CoC), and Units of General Local Government (UGLG) that participate in state programs. In the first section, place a check next to each type of grantee you want to include in the search results.
2. Select a state to search for all of the grantees in a state or enter a full street address. Click Next. The Status message at the bottom of the dialog box will tell you if the system is “waiting for input” or processing the request.
3. On the next screen, the system will list the results of the search by grantee name and fund type. Select the grantee you want to display on the map and click Next. Alternatively, Double clicking on the grantee name will close the Guide Me Wizard and display a base map of the grantee



selected without additional data. After completing step three, you can click the Finish button at any point to display the map without making additional map feature selections described below.

4. The next page will ask what type of data to display on the map, including existing inventory and data that describe need. For inventory, you can choose from Housing Stock, Homeless Housing and Facilities, Non-homeless Special Needs Housing and Facilities, and Community Development Assets. For need, you can choose from Housing, Homeless, Non-homeless Special Needs, and Community Development.
5. The next page will ask you to set a Geographic Scale for thematic data. A thematic map layer will color a geography, such as a county, based on a data variable, such as Median Household Income. First, select the geographic level at which the data will be presented: Census Tract (default), County, or State. Data presented in thematic maps will be broken up into ranges according to the distribution of that characteristic at the national, regional, or local jurisdiction level, depending on which geographic scale you choose. Regional data is based on the Bureau of Economic Analysis (BEA) and typically references the micro or metropolitan statistical area. By selecting “Grantee jurisdiction data” for a local map, you may see more variation in the data across the local area, which may more clearly highlight differences across the area you are viewing than if you select “National data.”
6. On the next page, choose which “point-based” map layers to include on the map. To select a map layer, click on the box next to it. Each layer selected will be displayed on the map and in the legend when you click “Finish”. To change the display settings for a map layer, click on the globe icon  displayed to the right of the data set/layer. When finished, click Next.
7. On the next page, choose which “outline-based” map layers to include on the map. To select a map layer, click on the box next to it. As you select each layer, the legend will add it and indicate how the data will appear on the map. To change the display settings for a map layer, click on the globe icon  displayed to the right of the data set/layer. When finished, click Next.
8. On the next page, choose which “theme-based” map layer to include on the map. You can only select one theme-based layer. Theme-based data sets will shade areas, such as census tracts, based on the underlying data. For example, if you choose the “Median Household Income” map layer, the map will display census tracts according to the median income of each tract. To select a data set/map layer, click on the box next to it. The legend will add each layer selected and indicate how the data will appear on the map. To change the display settings for a map layer, click on the globe icon  displayed to the right of the data set/layer. When finished, click Finish to display the map.



When finished, the system will display the map, the legend, and the grantee summary (see page 22). You can further customize its appearance and the information included using the Map Selection widget (see page 7).

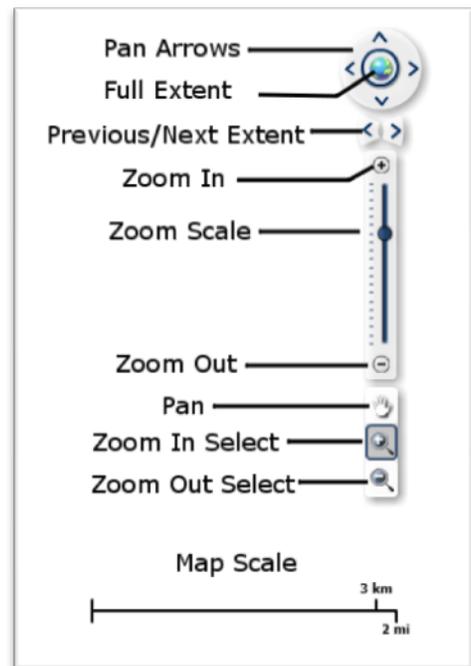
## BASIC NAVIGATION

The area of the map you can visibly see on your screen is the **map extent**. You can change this view with the Pan and Zoom tools. The Pan tools will change the center of the map extent, and the Zoom tools will change the level of detail or scale of the map. In this section, you will learn about the pan, zoom, and background layer settings of CPD Maps.

### PAN AND ZOOM

You will find tools for panning and zooming in the toolbar displayed in the upper left corner of the map. The tool you select will be highlighted. For example, in the screenshot, the Zoom In Select button is highlighted.

- **Pan Arrows:** The Pan Arrows will move the center of the map north, east, west, or south. You can also click on the blank sections of the circle between the Pan Arrows to pan northeast, southeast, southwest, or northwest.
- **Full Extent:** The Full Extent button will zoom to the largest geography available, which will display a global map.
- **Previous/Next Extent:** These buttons are similar to the previous and forward buttons on your Web browser. CPD Maps maintains a list of the previous zooms and pans you make. The Previous Extent button will redraw the map using the last scale (zoom) and map center (pan). If you use the Previous Extent button to go back through your list of extents, the Next Extent button will take you forward through the list.
- **Zoom In:** The Zoom In button will zoom in one level to display the center of the map in greater detail.





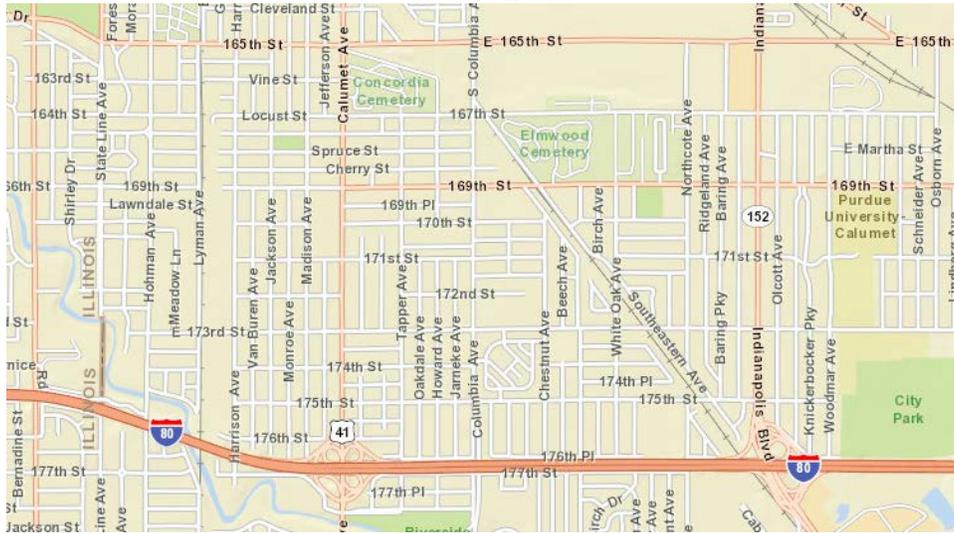
- **Zoom Scale:** The Zoom Scale indicates at what zoom level (scale) the map is displayed. You can change the scale by clicking and dragging on the slider. CPD Maps will display the scale (e.g., 1:1,000 means 1 inch on the map represents 1,000 inches). To zoom out and view a larger area, click and drag the slider down. To zoom in and view a smaller area, click and drag the slider up.
- **Zoom Out:** The Zoom Out button will zoom out one level to display a larger geographic area around the center of the map. Take note that some data layers may disappear from the map when zooming out. When this happens, the data layer's information in the Legend will grey out. You will need to zoom in to re-display the data layer.
- **Pan:** The Pan tool changes the geographic center of the map. To use the Pan tool, click and drag any portion of the map. The map will move with the mouse.
- **Zoom In Select:** The Zoom In Select tool allows you to zoom in on a specific area of the map by clicking and dragging a box around the area that you want to focus on.
- **Zoom Out Select:** The Zoom Out Select tool allows you to quickly zoom out. To use the Zoom Out Select tool, click and drag a box on the map. Draw a small box if you want to zoom out to a much larger area (e.g., from a neighborhood level to the state level). Draw a large box if you only want to zoom out slightly (e.g., from a neighborhood to the city level).

---

## BACKGROUND LAYERS

You can choose between three background layers: Streets, Aerial, or Basic.

The Streets layer is the default background layer and provides a map similar to other online map sites such as Google Maps and MapQuest. Depending on the scale of the map (the zoom) and the area being viewed, the Streets layer can include street names, street address ranges, bodies of water, points of interest, and landmarks such as parks and shopping centers.



The Aerial layer provides an aerial photo of the area. The level of detail in the photo will increase as you zoom in. The Aerial layer does not provide any labeling. There are several screenshot software packages that can capture the image and allow you to add your own annotations, similar to the screenshot below.

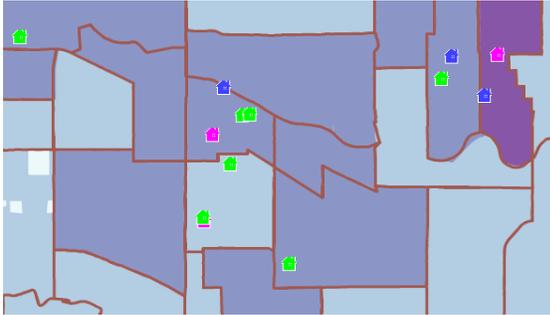


NOTE: annotations added.

The Basic background layer presents some detail, but not as much as the Streets background. It is useful when you want a clean background that will not distract the viewer from the other information presented, such as color themes. The maps below present cost-burden data as a color theme but with different settings. In the left-hand map, the background is set to Basic and the color theme is set to 100 percent opacity. To learn how to change the opacity of a map layer, please refer to Customizing Maps on page 9. This more clearly displays the cost-burden data but does not provide the viewer with any



geographic reference such as street names. In the right-hand map, the background is set to Streets and the color theme is set to 50 percent opacity. The viewer now has a geographic reference, but the tradeoff is that the cost-burden theme is less clear.





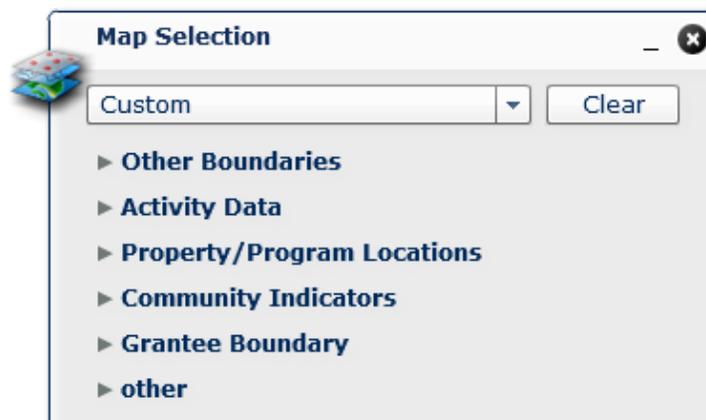
## NAVIGATING CPD MAPS AND FUNCTIONALITY

Widgets provide most of CPD Maps' functionality. The widgets are displayed across the top of the map and include Map Selection, Legend, Print, Identify, Reports, Guide Me, Grantee Summary, and Map Query. Simply click on a widget to open it. If this does not open the widget, the widget must already be open but minimized on the screen. When a widget is minimized, a line will appear under its icon in the toolbar. The icon that represents the widget also will appear somewhere on the map. Click on the icon to open the minimized widget.



### MAP SELECTION WIDGET

The Map Selection widget allows you to view different data layers on the map. A complete list of the available data layers is provided in Appendix 1. Please note that some map layers contain a large amount of data, which may cause a delay before the system displays the selected layer.





At the top of the Map Selection widget, a dropdown box allows you to choose a prepared map that includes combinations of data layers to communicate a specific theme or idea or prepare a customized map using data layers included in the Map Selection widget. Each data layer is displayed in one of three different ways. Data is displayed as either a thematic shading of the census tract or other geography (theme-based data), boundary outline of the census tract or other geography (outline-based data), or point-based indicators indicating the location of the data element (point-based data), such as a multifamily property development. Each option from the dropdown menu is explained below. The data elements associated with the prepared maps are listed for each topic.

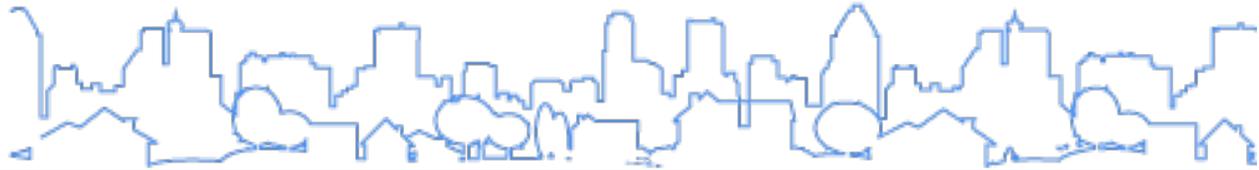
- **Custom:** If Custom is selected, the user selects the data to be presented based on the choices offered within the Map Selection widget. A complete list of each layer is available in Appendix 1. Click on the triangles to the left of the data categories to view the associated layers available. To add a data layer, click the box next to the layer.



- **Guide Me:** If Guide Me is selected, the system will open the Guide Me Wizard to select the geography and different data sets to display. Please see page 2 for more details on the Guide Me Wizard.
- **Homebuyer Zones:**
  - Theme-based layer: Median Home Value
  - Outline-based layer: Vacancy Rates greater than 7%
- **Need for Rental Rehabilitation:**
  - Theme-based layer: Percent of Rental Housing Built before 1980
  - Outline-based layer: Low- and Moderate-income Census Tracts
- **Rental Market Near Transit:**
  - Theme-based layer: Change in Median Rent



- Outline-based layer: Low- and Moderate-income Census Tracts
- Point-based layer: Transit Lines, Transit Stations, HOME Activities (Rental), HUD Multifamily Properties, and LIHTC Properties
- **Housing Affordability Near Transit:**
  - Theme-based layer: Percent of Renter Units Affordable to 50% AMI
  - Outline-based layer: Low- and Moderate-income Census Tracts
  - Point-based layer: Transit Lines, Transit Stations, HOME Activities (Rental), HUD Multifamily Properties, and LIHTC Properties
- **Constrained Rental Supply:**
  - Theme-based layer: Change in Population
  - Outline-based layer: Difficult to Develop Areas
  - Point-based layer: Transit Lines and Transit Stations
- **Workforce Development Opportunity:**
  - Outline-based layer: Low- and Moderate-income Census Tracts
  - Point-based layer: CDBG Economic Development Activities and CDBG Public Service Activities
- **Workers with Long Commutes:**
  - Theme-based layer: Percent of Commute Time greater than 60 Minutes
  - Outline-based layer: Low- and Moderate-income Census Tracts
  - Point-based layer: Transit Lines and Transit Stations
- **Risk of Homelessness from Increased Rent:**
  - Theme-based layer: Change in Median Rent
  - Outline-based layer: Low- and Moderate-income Census Tracts
  - Point-based layer: HOME Activities (Rental), HUD Multifamily Properties, and LIHTC Properties
- **Risk of Homelessness from Housing Instability:**
  - Theme-based layer: Percent of Extremely Low-income Households with Overcrowding
  - Point-based layer: HOME Activities (Rental), HUD Multifamily Properties, and LIHTC Properties



## CUSTOMIZING MAPS

CPD Maps allows you to customize the  appearance of data layers. To change the display settings for a data/map layer, click on the globe icon displayed to the right of the data set. For some data layers, you will only be able to adjust the transparency/opacity of the layer.

For some theme-based layers, you can customize the level of geography and the number and range of the data classification breaks or “class breaks.” It is important to note that small adjustments to the number of classes and the breakpoint between the classes can significantly alter the information, trends, and patterns conveyed on the map.

**% Unemployment Settings**

transparent opaque

Show thematic data by: Census Tract

- National data
- Regional data
- Grantee jurisdiction data

Data will be broken up into ranges according to the distribution of that characteristic at the national, regional or local jurisdiction level, depending on which geographic scale you choose. Ranges will be displayed in the map legend.

Classification type: 5 Natural Breaks

Class break 1: less than or equal to 4.01

Class break 2: from 4.01 to 11.77

Class break 3: from 11.77 to 26.21

Class break 4: from 26.21 to 60.98

Class break 5: greater than 60.98

Units: %

Back



The system will automatically create the ranges for each “class break” based on the geography selected. Data will be broken up into ranges according to the distribution of that characteristic at the national, regional, or local jurisdiction level, depending on which geographic scale you choose. Ranges will be displayed in the map legend. The map in the background will immediately update based on the selections made.

You can modify the theme by choosing the number of classes (from two classes to five classes) and how to set the breaks between classes. Natural Breaks is the default classification. Other options include Equal Intervals, Geometrical Intervals, Quantiles, and Custom.

- **Natural Breaks:** To create natural breaks, the system identifies breakpoints by looking for groupings and patterns in the underlying data to minimize the variations within each class.
- **Equal Intervals:** This classification makes the range of each class the same. For example, if you were classifying census tracts into three categories using population, and the populations of the census tracts ranged from 0 to 300, the three classes would be 0 to 100, 100 to 200, and 200 to 300.
- **Geometrical Intervals:** This classification sets class breaks based on an algorithm that ensures that each class range has approximately the same number of values with each class and that the change between intervals is fairly consistent.
- **Quantiles:** This classification changes the range of each class so that each class contains the same number of geographies. For example, if you were classifying 30 census tracts into 3 categories, the system would create breakpoints to ensure that 10 census tracts fell into each category.
- **Custom:** This setting allows you to manually set the break values between each class. If you decide to customize the classification, the ranges you select should maximize the between-class differences and minimize the within-class differences.



## LEGEND WIDGET

---

The Legend widget will display the Legend for the map.

- If no data layers are displayed on the map, the Legend will display the “No Visible Layers” icon.
- If you have added a data layer but changed the zoom level to a point where the data is no longer displayed, the data’s information in the legend will dim.



## PRINT WIDGET

---

The Print widget allows you to send the displayed map to a printer or export the map to a .pdf file. Note that you must manually enter the “.pdf” extension when naming your file. If you accessed CPD Maps from the Consolidated Plan screens within the Integrated Disbursement and Information System (IDIS), the Print widget will also give you the option to Export the map to IDIS. The Print widget allows you to give the map a Title and a Subtitle.

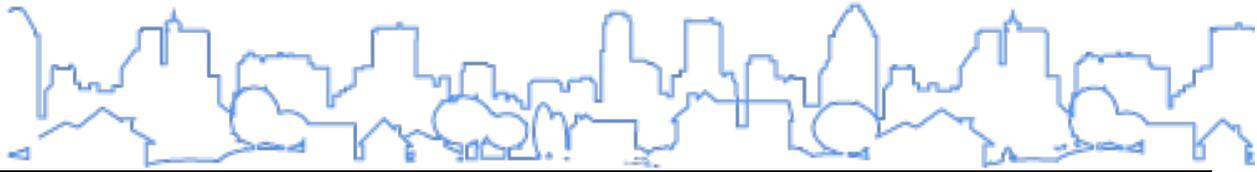


## IDENTIFY WIDGET

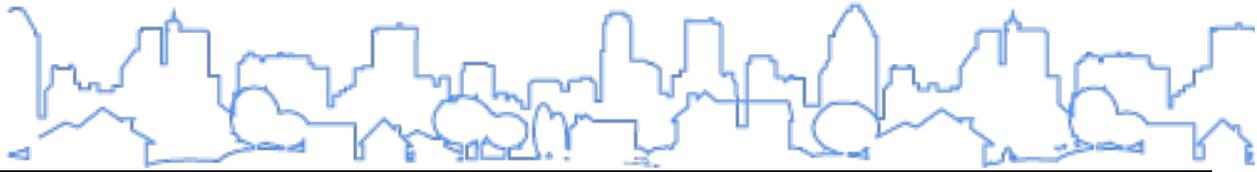
---

The Identify widget will display underlying data for a selected geography related to the layer displayed on the map. Thus, before using the widget, select a desired data layer to be displayed on the map. Once the data layer is displayed on the map, click on the geography using the widget and a dialogue box will display the supporting data associated with that layer.

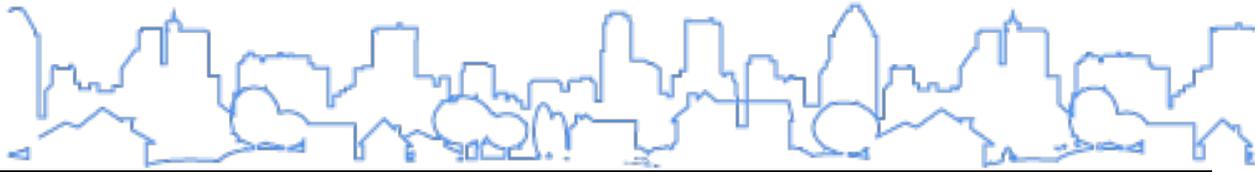
Map Layer(s)	Identify Results
MPO	<ul style="list-style-type: none"><li>• MPO Name</li><li>• Staff Agency, City, and State</li><li>• Transportation Management Area</li><li>• Stations</li><li>• Website</li><li>• Population</li><li>• Number of Urbanized Areas Served</li><li>• Primary Urbanized Area Served</li><li>• Urbanized Areas Served</li></ul>
Transit Stations	<ul style="list-style-type: none"><li>• Station Name</li><li>• Street Address, City</li><li>• Urbanized Area</li><li>• Status of Station</li><li>• Source of Data</li></ul>
Transit Links	<ul style="list-style-type: none"><li>• State FIPS</li><li>• Transit Type</li><li>• System</li><li>• Routes Served</li><li>• GRD_ELEV (Elevated)</li><li>• Urbanized Area</li><li>• Amtrak</li><li>• Status</li><li>• Source</li></ul>



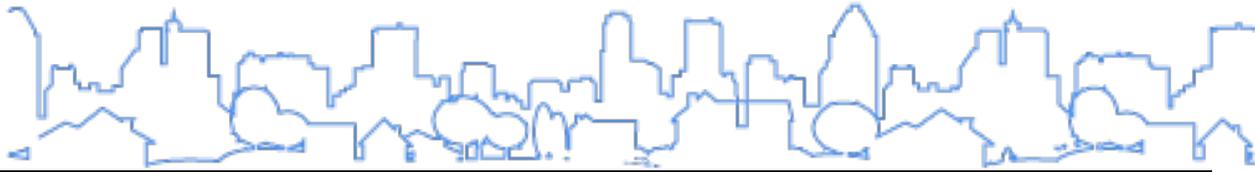
Map Layer(s)	Identify Results
Clean Water Needs Survey	<ul style="list-style-type: none"> <li>• State</li> <li>• Septic Needs</li> <li>• Nonpoint Needs</li> <li>• WWTP Needs</li> <li>• WPipe Needs</li> <li>• CSO Storm Needs</li> <li>• WQ Total Needs</li> </ul>
100 & 500 year Flood Plain	<ul style="list-style-type: none"> <li>• None</li> </ul>
Census Tracts	<ul style="list-style-type: none"> <li>• Census Tract Number</li> </ul>
Census Tract Change 2000 to 2009	<ul style="list-style-type: none"> <li>• % Point Change in Unemployment Rate</li> <li>• % Point Change in Homeownership Rate</li> <li>• % Point Change in Vacancy Rate</li> <li>• % Point Change in Rental Vacancy Rate</li> <li>• % Point Change in For Sale Vacancy Rate</li> <li>• % Point Change in Poverty Rate</li> <li>• % Change in Population</li> <li>• % Change in Median Household Income</li> <li>• % Change in Housing Units</li> <li>• % Change in Households</li> <li>• % Change in Real Contract Rent</li> <li>• % Change in Real Median Home value</li> <li>• % Change in Population (age 0-17)</li> <li>• % Change in Population (age 18-24)</li> <li>• % Change in Population (age 25-64)</li> <li>• % Change in Population (age 65 and over)</li> </ul>
Congressional District	<ul style="list-style-type: none"> <li>• State</li> <li>• District Number</li> <li>• Current Representative</li> </ul>



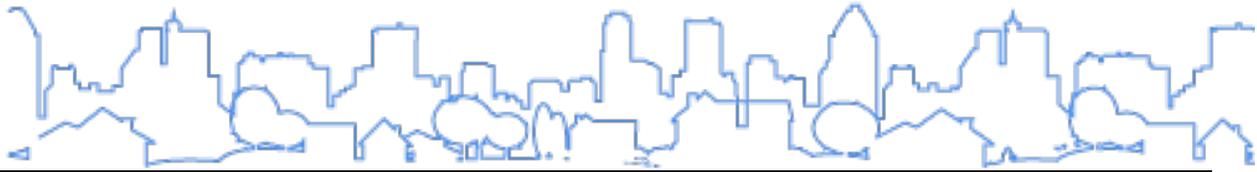
Map Layer(s)	Identify Results
CDBG Activities Funding CDBG Activities Count	<ul style="list-style-type: none"> <li>• Census Tract Number</li> <li>• Total Acquisition Count</li> <li>• Total Acquisition Funding</li> <li>• Total Housing Count</li> <li>• Total Housing Funding</li> <li>• Total Public Improvements Count</li> <li>• Total Public Improvements Funding</li> <li>• Total Public Services Count</li> <li>• Total Public Services Funding</li> <li>• Total Other Activities Count</li> <li>• Total Other Activities Funding</li> <li>• Total Activities</li> <li>• Total Funding</li> </ul>
CDBG Acquisition Activities CDBG Economic Development Activities CDBG Housing Activities CDBG Public Improvement Activities CDBG Public Service Activities CDBG Other Activities	<ul style="list-style-type: none"> <li>• Activity Name</li> <li>• Activity Type</li> <li>• Completion Date</li> <li>• Total Funds</li> <li>• Grantee Name</li> </ul>
HOME Activities Funding HOME Activities Count	<ul style="list-style-type: none"> <li>• Tract</li> <li>• Total Count</li> <li>• Total Funding</li> <li>• Homebuyer Assistance Count</li> <li>• Homebuyer Assistance Funding</li> <li>• Homeowner Rehab Count</li> <li>• Homeowner Rehab Funding</li> <li>• Tenant-Based Rental Assistance Count</li> <li>• Tenant-Based Rental Assistance Funding</li> <li>• Multifamily Rental Count</li> <li>• Multifamily Rental Funding</li> </ul>
HOME Activities (Rental)	<ul style="list-style-type: none"> <li>• Grantee Name</li> <li>• Total Units</li> <li>• Total HOME Units</li> <li>• Total HOME Funds</li> <li>• Completion Date</li> </ul>



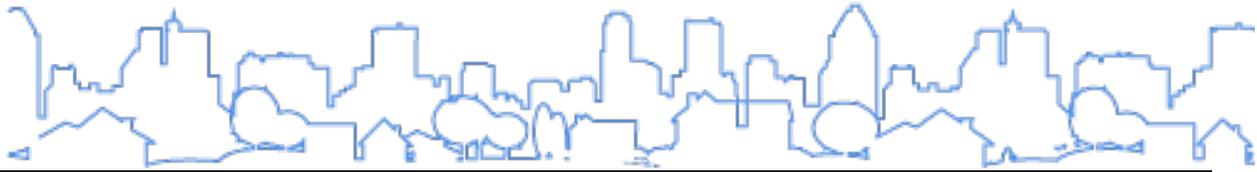
Map Layer(s)	Identify Results
NSP1 Target Areas NSP2 Target Areas	<ul style="list-style-type: none"> <li>• Grantee Name</li> <li>• NSP Grant #</li> <li>• Grant Amount</li> </ul>
NSP Completed Activities	<ul style="list-style-type: none"> <li>• Construction Activities</li> <li>• Homebuyer Assistance Activities</li> <li>• Demolition Activities</li> <li>• Land Bank Activities</li> <li>• Acquisition Activities</li> <li>• Other Activities</li> <li>• Total NSP Activities</li> </ul>
FHA REO Properties by Block Group	<ul style="list-style-type: none"> <li>• State, County, Tract, Block Group</li> <li>• REO Count</li> </ul>
HUD Multifamily Properties	<ul style="list-style-type: none"> <li>• Property Name</li> <li>• Number of Units</li> <li>• Number of Assisted Units</li> </ul>
Public Housing Developments	<ul style="list-style-type: none"> <li>• Development Name</li> <li>• Occupancy Rate</li> <li>• Number of Units</li> </ul>
Low Income Housing Tax Credit (LIHTC) Properties	<ul style="list-style-type: none"> <li>• Project Name</li> <li>• Total Number of Units</li> <li>• Total Number of Low-Income Units</li> <li>• Year Placed in Service</li> <li>• Total Dollar Amount of HOME Funds</li> <li>• Total Dollar Amount of CDBG Funds</li> </ul>
Poverty Rate % Commute Time > 60 minutes Housing Cost Burden % Unemployment Median Household Income	Socioeconomic <ul style="list-style-type: none"> <li>• Poverty Rate</li> <li>• % Commute Time &gt; 60 minutes</li> <li>• Housing Cost Burden</li> <li>• Median Household Income</li> <li>• % Unemployment</li> </ul>



Map Layer(s)	Identify Results
Longitudinal Employer-Household Dynamics (LED) (Data)	<ul style="list-style-type: none"> <li>• Change in Total Jobs</li> <li>• Change Change in Construction Jobs</li> <li>• Change in Manufacturing Jobs</li> <li>• Change in Wholesale Trade Jobs</li> <li>• Change in Retail Trade Jobs</li> <li>• Change in Transportation and Warehousing Jobs</li> <li>• Change in Information Jobs</li> <li>• Change in Finance, Insurance, and Real Estate Jobs</li> <li>• Change in Professional, Scientific, and Management Services Jobs</li> <li>• Change in Education and Health Care Services Jobs</li> <li>• Change in Arts, Entertainment, Accommodations Jobs</li> <li>• Change in in Agriculture, Mining, Oil and Gas Extraction Jobs</li> <li>• Other Services Jobs</li> </ul>
Average Household Size Total Households % Non-English Speaking All Race/Ethnicity layers	<ul style="list-style-type: none"> <li>• White alone (not Hispanic)</li> <li>• Black or African American alone (not Hispanic)</li> <li>• American Indian / Alaskan Native alone (not Hispanic)</li> <li>• Asian alone (not Hispanic)</li> <li>• Native Hawaiian / Pacific Islander alone (not Hispanic)</li> <li>• Some other race alone (not Hispanic)</li> <li>• Two or more races (not Hispanic)</li> <li>• Persons of Hispanic origin</li> <li>• Total Households</li> <li>• Average Household Size</li> <li>• % Non-English Speaking</li> </ul>
All Housing Supply layers	<ul style="list-style-type: none"> <li>• % Renter Occupied Housing</li> <li>• Median Contract Rent</li> <li>• Vacancy Rate</li> <li>• % Rental Housing Built Before 1949</li> <li>• % of structures with 20 or more units</li> <li>• % Rental Housing Built Before 1980</li> <li>• % Owner Occupied Housing</li> <li>• % Renter Units with 3 or more bedrooms</li> <li>• Median Home Value</li> <li>• % Owner Units with 3 or more bedrooms</li> <li>• % of structures with 5-19 units</li> </ul>



Map Layer(s)	Identify Results
All Housing Need / CHAS layers	<ul style="list-style-type: none"> <li>• % of Moderate Income (MI) Households With Overcrowding</li> <li>• % of Owner Units Affordable to 100% HAMFI</li> <li>• % of Renter units Affordable to 50% HAMFI</li> <li>• % of MI Households with Substandard Housing</li> <li>• % Renter units Affordable to 30% HAMFI</li> <li>• % Owner units Affordable to 80% HAMFI</li> <li>• Moderate Income Households (0-80% AMI)</li> <li>• Low Income Households (0-50% AMI)</li> <li>• % of Moderate Income (MI) Households With Any of the Four Severe Housing Problems</li> <li>• % of Owner Units Affordable to 50% HAMFI</li> <li>• % of Low Income (LI) Households With Severe Cost Burden</li> <li>• % of Low Income (LI) Households With Substandard Housing</li> <li>• % of Renter units Affordable to 80% HAMFI</li> <li>• % of Low Income (LI) Households With Overcrowding</li> <li>• % of Low Income (LI) Households With Any of the Four Severe Housing Problems</li> </ul>
Voucher Concentration	<ul style="list-style-type: none"> <li>• Number of Vouchers</li> <li>• Vouchers as a % of Total Housing Units</li> </ul>
Low-Mod Census Tracts	<ul style="list-style-type: none"> <li>• Census Tract Number</li> <li>• % Low-Mod</li> <li>• % Low-Mod (Uncapped)</li> </ul>
Grantee Boundary	<ul style="list-style-type: none"> <li>• Grantee Name</li> <li>• CDBG Amount</li> <li>• HOME Amount</li> <li>• ESG Amount</li> <li>• HOPWA Amount</li> </ul>
Continuum of Care	<ul style="list-style-type: none"> <li>• Continuum Name</li> <li>• Pro Rate Need</li> </ul>
Difficult to Develop Underserved Areas Qualified Census Tracts	<ul style="list-style-type: none"> <li>• None</li> </ul>
SCRIP Grantees	<ul style="list-style-type: none"> <li>• Grant Number</li> <li>• Applicant</li> <li>• City and State</li> <li>• Status</li> <li>• Funding</li> </ul>



Map Layer(s)	Identify Results
Choice Grantees	<ul style="list-style-type: none"> <li>• Grant Number</li> <li>• Lead Applicant</li> <li>• Co-Applicant</li> <li>• Project City and State</li> <li>• Existing PHA Development</li> <li>• Grant Type</li> <li>• Grant Year</li> </ul>
Rural Innovation Fund	<ul style="list-style-type: none"> <li>• Grantee</li> <li>• Grant Type</li> <li>• Grant Amount</li> </ul>
Challenge Grantees	<ul style="list-style-type: none"> <li>• Grant Number</li> <li>• Legal name</li> <li>• Street Address, City, State, and Zip</li> <li>• HUD Funding</li> <li>• DOT Funding</li> <li>• Total award</li> <li>• Leverage</li> <li>• Type</li> <li>• Status</li> </ul>
Communities Containing Colonias	<ul style="list-style-type: none"> <li>• Name</li> </ul>



## REPORTS WIDGET

---

The Reports widget will generate an Excel file containing data sets for a selected area. The area can include one or more geography. You also have the option of including a reference data set in the report. For example, assume you want to compare the data for a neighborhood and the jurisdiction as a whole. Using the Reports widget, you would select the census tracts that include the neighborhood as the target jurisdiction, and then select the jurisdiction as the reference data.

To use the Reports widget, take the following steps:



1. Select one or more target jurisdictions on the map to include in the results. To select a target jurisdiction:

Target jurisdiction level:

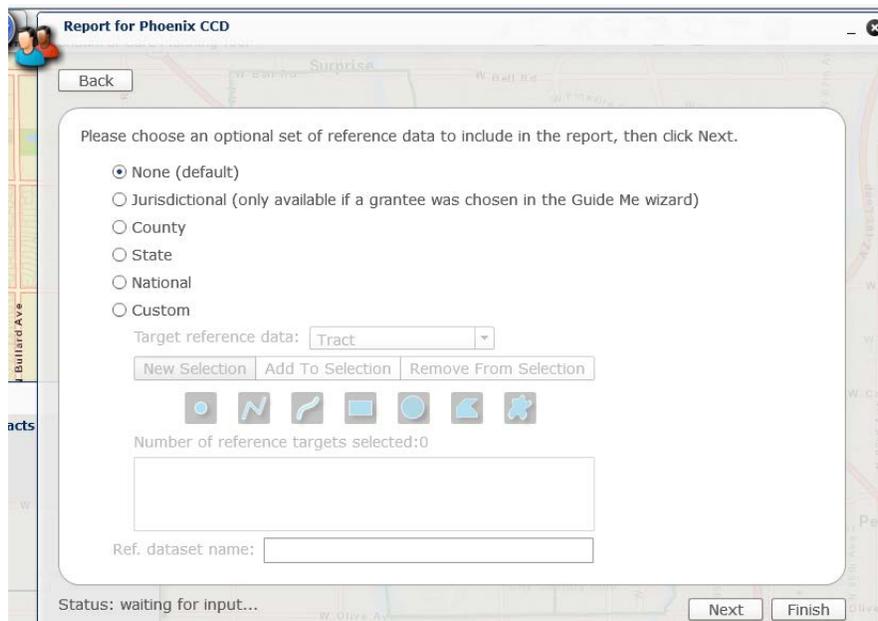
      

Number of targets selected: 51

- a. Select the level of data aggregation from the drop-down menu labeled “Target jurisdiction level.” Options include Census Tract, Place, County Subdivision, County, State, National, CDBG grantee, HOME grantee, ESG grantee, HOPWA grantee, Continuum of Care (CoC), or UGLG.
- b. The dialog box lists three buttons: New Selection, Add to Selection, and Remove from Selection. Use New Selection if you have not yet selected an area or to replace your current selection. Use Add to Selection if you have an area selected and you want to select additional areas. Use Remove from Selection to remove one or more areas from your existing selection.
- c. Use one of the seven tools provided to select your area of interest. You can select by Point, Line, Freehand Line, Rectangle, Circle, Polygon, and Freehand Polygon. Use the Point tool to select a single area. The Line and Freehand Line tools are helpful for selecting all areas along a corridor such as a street. Use the Rectangle and Circle tools to select areas within a given distance of a point. Use the Polygon or Freehand Polygon tool to select irregularly shaped areas. Take note that the resulting data set will include the data for all geographies that touch the line or shape drawn. For example, if you draw a rectangle that includes half of Census Tract 101 and half of Census Tract 102, the resulting data set will include the data for all of Census Tracts 101 and 102. The tool does not have the capability to return data for partial census tracts.
- d. After selecting a tool, the dialog box will minimize so you can view the map. It also will give you tips on how to use each selection tool.



- e. When finished with the selection, the system will highlight the selected areas on the map and list all of the selected areas in the dialog box. Use the Add to Selection and Remove from Selection buttons as needed to revise your selected area. When finished, click Next.
2. Choose an optional set of reference data: None (default), Jurisdictional, County, State, National, or Custom. To choose a custom reference set, you will use the same selection tools described above. Once you have made your selection, click Next.



3. The dialog box will list the types of information you can include on the report. Place a check next to each section you want to include on the report. Please refer to Appendix 3 of this manual for a list of each data element. When finished, click the next button.



Please choose the types of information you want included in the report, then click Next or Finish.

<input checked="" type="checkbox"/> Demographics	<input checked="" type="checkbox"/> Housing needs
<input checked="" type="checkbox"/> Basic summary	<input checked="" type="checkbox"/> Housing needs
<input checked="" type="checkbox"/> Person-level information	<input checked="" type="checkbox"/> Housing problems
<input checked="" type="checkbox"/> Household-level information	<input checked="" type="checkbox"/> Cost burden
<input checked="" type="checkbox"/> Family-level information	<input checked="" type="checkbox"/> Crowding
<input checked="" type="checkbox"/> Housing Supply	<input checked="" type="checkbox"/> Special Needs
<input checked="" type="checkbox"/> Summary of housing stock characteristics	<input checked="" type="checkbox"/> Homelessness
<input checked="" type="checkbox"/> Simple tabulations of housing characteristics	<input checked="" type="checkbox"/> HOPWA
<input checked="" type="checkbox"/> Cross-tabulations of multiple characteristics	
<input checked="" type="checkbox"/> Economic Context	<input type="button" value="Uncheck All"/> <input type="button" value="Check All"/>
<input checked="" type="checkbox"/> Summary information about economic conditions	
<input checked="" type="checkbox"/> Simple tabulations of economic conditions	
<input checked="" type="checkbox"/> Educational attainment	

- The next screen will allow you to provide a title and subtitle to the report. Click the Finish button to generate the report. The report will open in a new browser window or directly into Microsoft Excel. If you do not have Excel, you can download and install the Excel viewer software using the link provided through CPD Maps. Your browser's pop-up blocker may prevent this window from opening. If so, adjust your browser settings to allow pop-ups for this site:

<http://egis.hud.gov/cpdmaps/>.

To export the data to IDIS, click the Export to IDIS button. This button is only available when CPD Maps was accessed from IDIS Online.

Once the report is open, click the "X" in the upper right corner of the Reports widget to close the window.

- In Excel, the data will be organized in several worksheets. Use the tabs across the bottom of the page to navigate between worksheets. The data shown are the aggregate totals of the areas selected. When more than one area is selected, data elements that measure averages, such as Average Household Size, will be listed as (N/A).

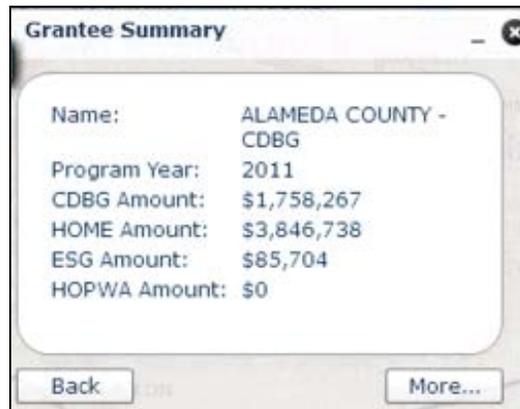


## GRANTEE SUMMARY WIDGET

---



The Grantee Summary widget displays a dialog box listing CPD allocations for the grantee previously selected via the Guide Me Wizard. The widget automatically appears after using the Guide Me Wizard.



By clicking the More button in the lower right corner of the widget, a more detailed summary will be displayed, including:

- A history of the five most recent years of grant allocations
- Summary data including total population, median household income, median contract rent, and median value of owner-occupied units
- Number and percent of households by income level
- Fair Market Rents
- HOME Rent Limits



**Grantee Summary**

**Name: ALAMEDA COUNTY - CDBG**

Grant Name	2007	2008	2009	2010	2011
CDBG	N/A	N/A	N/A	N/A	N/A
HOME	N/A	N/A	N/A	N/A	N/A
ESG	N/A	N/A	N/A	N/A	N/A
HOPWA	N/A	N/A	N/A	N/A	N/A
<b>Total</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

HUD

Total Grantee Population: N/A  
 Median Household Income in the Last 12 Months: N/A  
 Median Contract Rent: N/A  
 Median Value Owner-occupied Housing Units: N/A

2005-09 ACS

Number of Households by HUD Area Median Family Income (HAMFI)	Number
Extremely Low Income Households (< 30% HAMFI)	N/A
Very Low Income Households (30-50% HAMFI)	N/A
Low Income Households (50-80% HAMFI)	N/A
Moderate Income Households (80-100% HAMFI)	N/A

2010 CHAS

Percent of Households by HUD Area Median Family Income	%
Households Earning Less than 30% HAMFI	N/A
Households Earning Less than 50% HAMFI	N/A
Households Earning Less than 80% HAMFI	N/A
Households Earning Less than 100% HAMFI	N/A

2010 CHAS

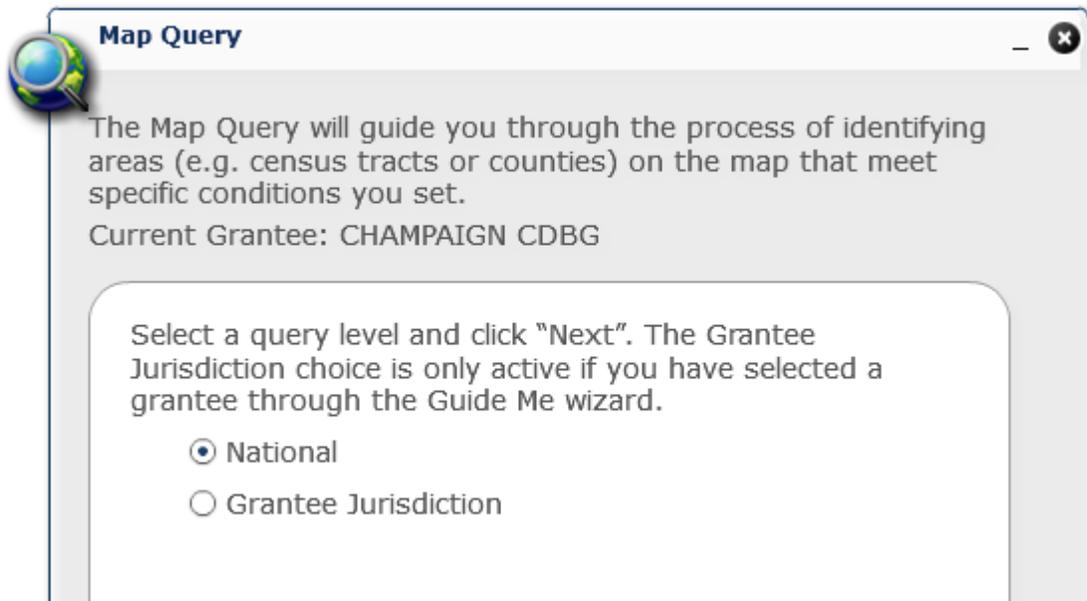
Fair Market Rents (2011) Area Name	0 Bedrooms	1 Bedrooms	2 Bedrooms	3 Bedrooms	4+ Bedrooms



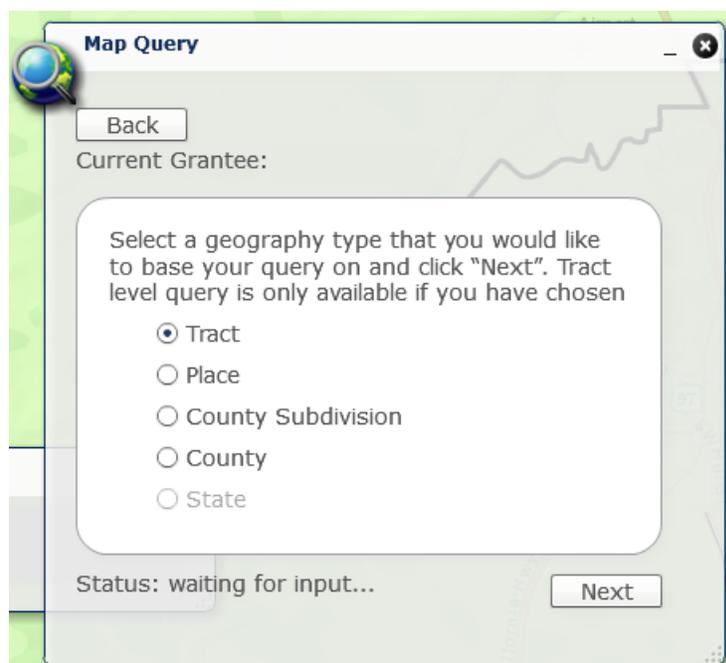
## MAP QUERY WIDGET

The Map Query widget will help you identify geographies, such as census tracts or counties that are similar to each other based on selected criteria. For example, a state grantee can use the Map Query widget to find the counties with the lowest median household incomes.

1. In the first dialog box, select National or Grantee Jurisdiction as the query level. The Grantee Jurisdiction level will be available only if you used the Guide Me Wizard to select a grantee.

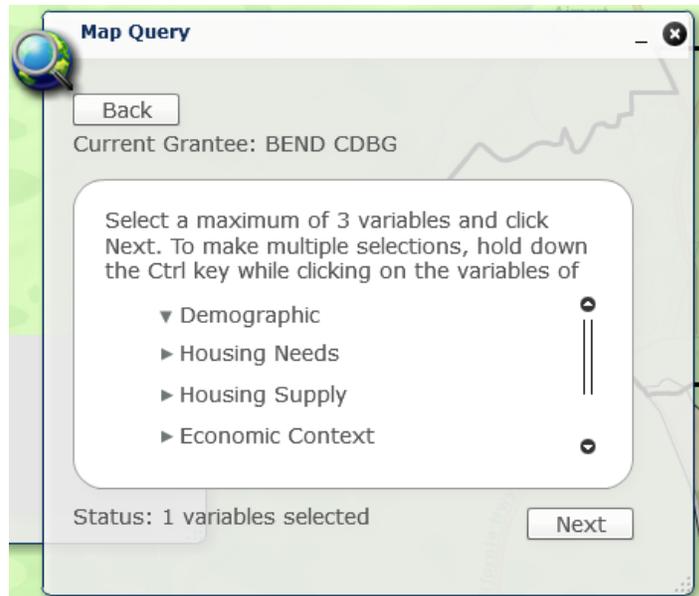


2. In the second dialog box, select the type of geography that you would like to query. Current choices include Census Tract, Place, County Subdivision, County, and State. Some geography types may be unavailable based on the query level you selected in the previous step. For example, Census Tracts cannot be queried when using the National query level. Census Tracts can only be queried when you have used the Guide Me Wizard to select a grantee and selected Grantee Jurisdiction as the query level.





3. In the third dialog box, select the data variable that you would like to query. You can select up to three variables. To select more than one variable, press the Ctrl key on your keyboard when you click on the second and third variable. To see a list of all the variables available, refer to Appendix 2. When finished, click Next.



4. In the fourth dialog box, you can define the query range for each data variable you selected by changing the minimum and maximum. The widget will initially display the minimum and maximum for each data variable and the Result Count at the bottom of the box. The Result Count is the number of geographies that fall between the minimum and maximum values. The Result Count will be updated as you change the minimum and maximum values. When done, click Finish.



**Map Query**

Back

Current Grantee: CHAMPAIGN CDBG

Change the minimum and maximum for each variable to set query parameters. Use the Tab key or mouse to move from parameter to the next. "Result Count" will update to show the number of areas that meet criteria set by the user. Click Finish

**% of renter units built 1949 or earlier : lies between**  
Minimum: 0  -  Maximum:

**% of renter units built before 1980 : lies between**  
Minimum: 0  -  Maximum:

Result Count : 23 out of 23

Status: waiting for input...

Finish

5. The final dialog box will list the results of the query. In the background, the map will redraw and highlight all of the geographies that met the query parameters. At this point, the widget offers several different features:
  - a. If you click on one of the geographies listed in the result set, the system will redraw the map to focus and highlight the selected geography.
  - b. If you click on a highlighted census tract on the map, the corresponding result will be highlighted in the widget.
  - c. If you click on the column headers for the result set, the results will be sorted by that column. To reverse the sort order (i.e. from ascending to descending), click on the column header again.
  - d. If you click on Back, you will be returned to the previous step where you can edit the query parameters.



**Map Query**

Back

Current Grantee: CHAMPAIGN CDBG

The map will display all of the areas that meet query conditions. Zoom in or out on the map to view the areas. Select one of the results below to zoom to that area on the

% of renter units b	% of renter units b	Tract
0	25.53	17019001204
3.1	64.88	17019001301
0	0	17019010602
<b>25.89</b>	<b>84.22</b>	<b>17019001000</b>
0	5.68	17019000902
0	0	17019001205
1.12	10.55	17019000800

**Query Criteria - Hide**  
% of renter units built 1949 or earlier lies between 0 and 71.5  
% of renter units built before 1980 lies between 0 and 94.46  
Result Count : 23 out of 23

Status: waiting for input...

6. If you close the Map Query widget, the map will no longer highlight the geographies within the result set. However, the query is saved and will be displayed again if you open the Map Query widget during the same session.

## DATA PROVIDED BY HUD IN CPD MAPS

One of the main functions of CPD Maps is to provide current data to grantees to facilitate place-based, data-driven planning. At this time, much of the demographic data is from the American Community Survey (ACS), conducted from 2005 to 2009 by the U.S. Census Bureau. Other data sources include, but are not limited to:

- Point-In-Time (PIT) and Homeless Inventory Chart (HIC) data for homeless data
- CDC HIV Surveillance Data and CAPERs for HOPWA data
- IDIS for HOME and CDBG data
- Other HUD information systems, such as the Public Housing Information Center (PIC), the Integrated Real Estate Management System (IREMS), and the LIHTC database
- Flood Plain information from FEMA



There are three ways to access data in CPD Maps: the Identify widget, the Map Query widget, and the Reports widget. Of the three methods, the Reports widget has the most comprehensive data set. A brief summary of the data available in the Reports widget is provided below. For a detailed list of each variable, please refer to Appendix 3. The Identify widget will provide only a small number of key data variables. However, some data sets (or map layers), such as the CDBG and HOME activity information, can be accessed only through the Identify widget.

- Use the Identify widget to quickly display information for a selected geographic feature. The Identify widget will reveal the information underlying the data currently displayed on the map.
- Use the Map Query widget to find geographies based on the underlying data sets.
- Use the Reports widget to generate a data report that you can save as a PDF or export to Microsoft Excel. The Reports widget can aggregate the data for several geographies. This is helpful for determining the data for a target area that is comprised of several census tracts.

## DEMOGRAPHIC DATA

---

The Demographic tab under the Reports widget includes eight data tables from the 2005-2009 ACS that provide basic information such as total population and total households. The summary table provides total households, population, homeownership rate, and median income. Person-level data includes persons in poverty, race, ethnicity, and age. Household-level data includes the number of households with children and elderly, and the number of households by income level. Family-level data includes poverty by tenure, and household type by income level.

## HOUSING NEEDS

---

The Housing Needs tab under the Reports widget includes twelve data tables from the 2005-2009 CHAS data set detailing the four housing problems tracked by HUD: (1) units lacking complete plumbing facilities, (2) units lacking complete kitchen facilities, (3) cost burdened units, defined as units where housing costs are greater than 30 percent of household income, and (4) crowded units, defined as units where there are more than one person per room.

For most of the tables, data is provided at four income levels: 0–30% AMI, 30–50% AMI, 50–80% AMI, and 80–100% AMI and tenure (renter and owner). Cost burden and severe cost burden data is also provided by tenure and household type (small related, large related, elderly, and other).

## HOUSING SUPPLY

---

The Housing Supply tab under the Reports widget includes eleven data tables from the 2005-2009 CHAS data set that provide a wide array of tabulations. The summary table provides a snapshot of the



number, age, and cost of housing. The simple tabulations include a breakdown of units by structure type, size (by number of bedrooms), and contract rent. The cross-tabulation tables include data for household size by tenure, age by tenure, housing problems by tenure, and the number of units affordable to different income levels.

## ECONOMIC CONTEXT

---

The Economic Context tab under the Reports widget includes eight data tables describing employment, unemployment, travel time to work, educational attainment, and income data. Unemployment data is tabulated by age group. Employment data is tabulated by type of occupation and median income for each occupation. Educational attainment data is tabulated by age, participation in the labor force, and income earned.

## SPECIAL NEEDS

---

Special Needs tab under the Reports widget includes homelessness data for Continuum of Care grantees and HOPWA data for HOPWA jurisdictions.

The homelessness dataset includes the number of persons experiencing homelessness on a given night for both sheltered and unsheltered populations. This data is based on Point In Time (PIT) information collected by HUD. The homelessness data set also includes the Homeless Inventory Chart (HIC), which details the number of beds by clientele and shelter type (emergency year-round, emergency seasonal/voucher, transitional, permanent supportive, and permanent supportive under development).

The HOPWA dataset includes four tables based on CDC Surveillance Data, HOPWA CAPER reports, and HOPWA Beneficiary Verification Worksheets. The CDC Surveillance Data includes cumulative cases of AIDS reported, new AIDS cases, rate per population, persons living with HIV, new HIV cases, and rate per population. The HOPWA Beneficiary data includes number of persons served by eligible activity and estimates of unmet need.

## TELLING YOUR STORY WITH MAPS AND DATA

Maps can help you describe your community's housing and community development needs in ways that can be difficult to do with a narrative or charts and graphs. When data is mapped, geographic trends and patterns emerge that will help you identify your community's needs and chart strategies for addressing them. Different data sets can also be combined on a map to show connections between the two.

This section will discuss five basic maps you can use to explore and analyze your communities. These maps are a starting point. You can always add and change the data to create a map that is more meaningful and informative to you. The Guide Me Wizard or the Map Selection widget can be used to help create these maps.



## LOW- AND MODERATE-INCOME CONCENTRATIONS

---

**NOTE:** CPD Maps data should not be used to determine CDBG eligibility using the Low- Mod Area (LMA) national objective. The Low-Mod Census Tracts layer of data in CPD Maps is limited to Census Tract level data (as opposed to the Block Group level data). The layer also does not account for grantees that qualify as exception communities (grantees who can use CDBG in areas where less than 51 percent of the population is at the low-moderate income level). Until HUD releases updated LMA data, grantees should continue to use 2000 data or conduct a local survey to determine LMA eligibility.

CPD Maps provides three levels of income data based on 2009 ACS data: Extremely Low Income (0–30 percent AMI), Low Income (0–50 percent AMI) and Moderate Income (0–80 percent AMI). Each of these income layers is available in the Community Indicators – Housing Need section of the Map Selection widget.

For each income level, the following data sets are available:

- % Low Income Households
- % of Low Income Households With Any of the Housing Problems
- % of Low Income Households With Substandard Housing
- % of Low Income Households With Overcrowding
- % of Low Income Households With Severe Cost Burden

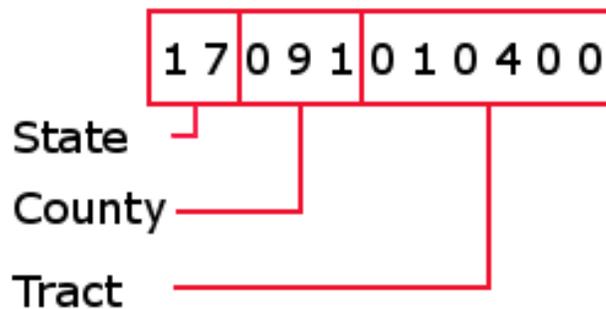
---

### USING THE GUIDE ME AND IDENTIFY WIDGET

1. Use the Guide Me Wizard to select your grantee. For detailed instruction on using the Guide Me Wizard, please turn to page 2.
2. For Inventory/Need, select Housing Stock and Housing.
3. For Geographic Scale, show thematic data by Census Tract and base symbology on Grantee jurisdiction data.
4. For point-based data, choose any data of interest.
5. For outline-based data, choose Census Tracts.
6. For theme-based data, navigate to Community Indicators – Housing Need and place a check next to % Extreme Low Income Households. The display settings for each data set, which will display as a map layer, can be modified by using the globe icon  displayed to the right of the data set. When finished, click Finish to display the map.
7. Once the map is displayed (the color theme may take up to a minute to display), locate a census tract with a relatively high proportion of extremely low income households. Use the Pan and Zoom tools to focus the map on the selected census tract.



8. Select the Identify widget and click on the tract. The Results box will provide the following information under the CHAS tab:
- % of Moderate Income (MI) Households With Severe Cost Burden
  - % of Low Income (LI) Households With Overcrowding
  - Low Income Households
  - % of Low Income (LI) Households With Substandard Housing
  - % of Moderate Income (MI) Households With Substandard Housing
  - Moderate Income Households
  - % of Moderate Income (MI) Households With Any of the 4 Severe Housing Problems
  - % of Low Income (LI) Households With Severe Cost Burden
  - % of Moderate Income (MI) Households With Overcrowding
  - % of Low Income (LI) Households With Any of the 4 Severe Housing Problems



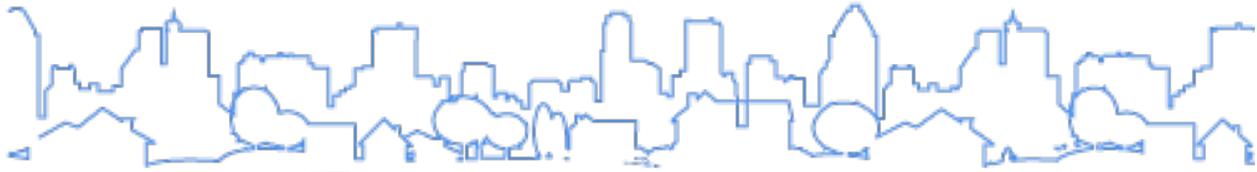
To identify the Census Tract number, click on the Census Tract tab. The Tract number displayed will include both the State Code and County Code as well.

## AREAS OF MINORITY CONCENTRATION

---

The Consolidated Plan regulations at 24 CFR Part 91.210 require that grantees define the term “area of minority concentration” and then identify and describe those areas in the jurisdiction that meet the definition. CPD Maps provides several ways to map this data.

The Guide Me Wizard can help you create color-themed maps that depict concentrations of each race and ethnicity. The color themes are based on the race/ethnicity’s percentage of the total population of the census tract. By default, the census tracts will be classified into five categories using the Natural Breaks classification system. You can edit the number of categories and the ranges of each category by

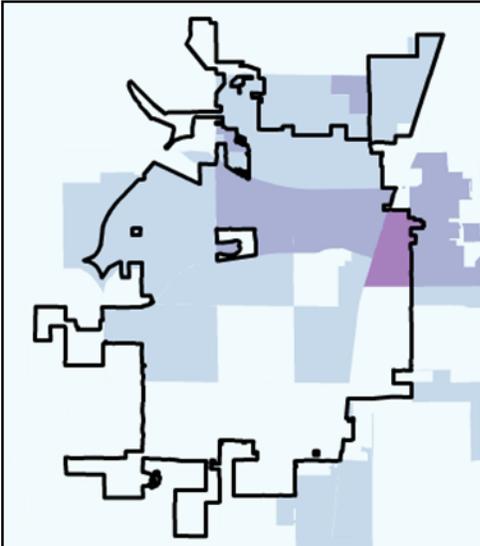


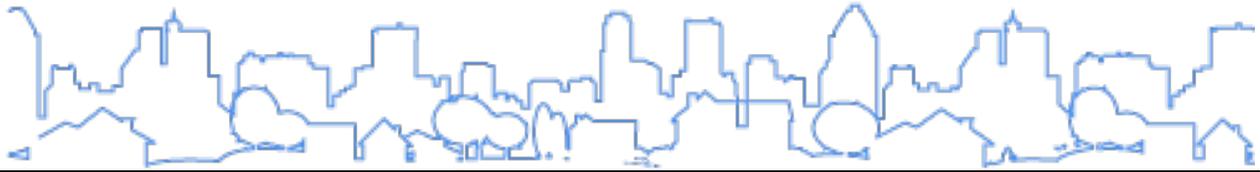
clicking on the globe icon  displayed to the right of the data set in the Map Selection widget. As you can see in the table below, the map will look very different based on the classification used.

The Natural Breaks classification looks for groupings and patterns in the underlying data to minimize the variations within each class. This is the default classification and it is a good starting point for creating a custom classification.

The Equal Intervals option makes the range of each class the same. For example, if you used four classes at equal intervals to display a race/ethnicity's percentage of the population, you would have four categories with the following ranges: 0–25%, 25–50%, 50–75%, and 75–100%.

The Quantiles classification changes the range of each class so that each class contains the same number of geographies. Assuming you have 100 census tracts in your jurisdiction and you used 4 classes with quantiles to display a race/ethnicity's percentage of the population, the first category would contain the 25% census tracts where the race/ethnicity's percentage of the population was the lowest. The last category would contain the 25% census tracts where the race/ethnicity's percentage of the population was the highest or most concentrated.

<p><b>Natural Breaks</b></p> <p>Classes:</p> <p>0 to 10%</p> <p>10 to 33%</p> <p>33 to 67%</p> <p>67 to 100%</p>	
------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------



<p><b>Quantiles</b></p> <p>Classes:</p> <p>0%</p> <p>0 to 3%</p> <p>3 to 15%</p> <p>&gt; 15%</p>	
<p><b>Equal Intervals</b></p> <p>Classes:</p> <p>0 to 25%</p> <p>25 to 50%</p> <p>50 to 100%</p>	

## USING THE MAP QUERY WIDGET

Grantees may also consider using the Map Query widget in conjunction with the color-themed maps to identify areas of minority concentration.

1. Click on the Map Query widget. On the first page, select Grantee Jurisdiction as the query level.
2. On the second page, select Tract as the query geography.
3. On the third page, select the following variables (remember to hold down the Ctrl key when selecting the second and third variables):
  - a. Demographic > Summary Information > Total Households



- b. Demographic > Person-level Information > Race/Ethnicity > % White Alone (not Hispanic)  
By selecting this variable, you can identify areas where the total minority populations are concentrated.
    - c. Demographic > Person-level Information > Race/Ethnicity > Any of the race/ethnicity categories
4. On the fourth page, in the fourth dialog box, leave the query ranges at their default. This way, the results will include all of your tracts and you will be able to sort all of your tracts by the three variables selected. Click Finish to move to the final page.
5. The final dialog box will list all of the tracts. If you click on the column headers for the results set, the results will be sorted by that column. If you click on one of the geographies listed in the results set, the system will redraw the map to focus and highlight the selected geography.
6. Once you get a sense for the ranges of concentrations, you can click on the Back button to return to the previous step to edit the query parameters.

**Map Query**

Back

Current Grantee: CHAMPAIGN CDBG

The map will display all of the areas that meet query conditions. Zoom in or out on the map to view the areas. Select one of the results below to zoom to that area on the

% of renter units b	% of renter units t	Tract
0	25.53	17019001204
3.1	64.88	17019001301
0	0	17019010602
25.89	84.22	17019001000
0	5.68	17019000902
0	0	17019001205
1.12	10.55	17019000800

**Query Criteria - Hide**  
% of renter units built 1949 or earlier lies between 0 and 71.5  
% of renter units built before 1980 lies between 0 and 94.46  
Result Count : 23 out of 23

Status: waiting for input...



## TARGET AREAS

---

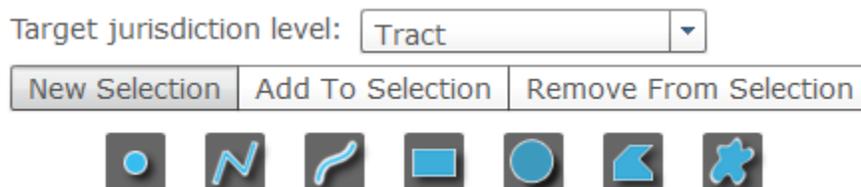
The Consolidated Plan regulations at 24 CFR 91.215(a) require grantees to indicate their general priorities for allocating investment geographically within the jurisdiction. Although target areas are not required, grantees are strongly encouraged to identify locally designated target areas where revitalization, foreclosure recovery efforts, or transit-oriented development are carried out through multiple activities in a concentrated and coordinated manner.

Concentrating resources to focus on a specific area of need can have a multiplier effect where the whole is greater than the sum of the individual activities. For example, if a program rehabilitates 10 homes throughout a city, the overall visual effect is negligible. However, if all 10 homes are located on the same street or in the same neighborhood, the program has benefitted not just the individual homeowners but the overall appearance of the neighborhood as well.

In the Consolidated Plan, a grantee can identify five types of target areas: a Neighborhood Revitalization Strategy Area (NRSA) for entitlement grantees, a Community Revitalization Strategy Area (CRSA) for state grantees, a Community Development Financial Institution (CDFI) target area, a Local Target Area, and Other Target Area. Both the NRSA and CDFI designations give the grantee flexibility within the CDBG regulations in terms of meeting national objectives.

The Reports widget in CPD Maps can help you analyze the data of your community and experiment with combining census tracts into a target area. The Reports tool will aggregate the data from the census tracts into one report that you can compare to the grantee as a whole, the county, or the state.

1. Click on the Reports widget. On the first page, select one or more census tracts to include by using one of the seven tools provided to select your area of interest. You can select by Point, Line, Freehand Line, Rectangle, Circle, Polygon, and Freehand Polygon. Use the Point tool to select a single area. The Line and Freehand Line tools are helpful for selecting all areas along a corridor such as a street. The Rectangle and Circle tool are useful in selecting areas within a given distance of a point. Use the Polygon or Freehand Polygon tool to select irregular shaped areas. When finished, click Next.





2. On the second page, choose Jurisdictional or County as the reference data set. By doing so, the final report will contain data for both your target area and the reference set so differences and discrepancies can be highlighted.
3. The next page will list the types of information you can include in the report. Place a check next to each section that you want to include in the report. Please refer to Appendix 3 of this manual for a description of each data element.

**Report for Phoenix CCD**

Back

Please choose the types of information you want included in the report, then click Next or Finish.

- Demographics
  - Basic summary
  - Person-level information
  - Household-level information
  - Family-level information
- Housing Supply
  - Summary of housing stock characteristics
  - Simple tabulations of housing characteristics
  - Cross-tabulations of multiple characteristics
- Economic Context
  - Summary information about economic conditions
  - Simple tabulations of economic conditions
  - Educational attainment
  - Business by Sector
- Housing needs
  - Housing needs
  - Housing problems
  - Cost burden
  - Crowding
- Special Needs
  - Homelessness
  - HOPWA

Uncheck All Check All

Status: waiting for input...

Next Finish

4. Click the Next button to view the final step. Provide the report with a name and click Finish.
5. The system will open the report in a new browser window or directly in Microsoft Excel. The data will be organized in worksheets. Use the tabs at the bottom of the screen to navigate between worksheets. The worksheets will contain data for both the census tracts selected and the reference set. The data for the census tracts is totaled for each variable. When more than one area is selected, data elements that measure averages, such as Average Household size, will be listed as N/A. If you would like to redraw the target area, use the Back button to return to the page where you selected the census tracts. Use the Add to Selection and Remove from Selection buttons as needed to revise your selected area.
6. Review the Excel file for any variables where the selected target area is significantly different than your reference area. To help make these comparisons, use Excel to create tables and charts.



## NEED FOR LOW-INCOME RENTAL HOUSING

---

Several different variables in CPD Maps can help explain the need for low-income rental housing. One of the most straightforward approaches is to use cost burden data. A household's cost burden is defined as the percentage of annual household income needed to pay housing costs. A household that pays less than 30 percent of income for housing has "affordable" housing and is not "cost-burdened." Households spending more than 30 percent of income for housing costs are considered to be "cost-burdened." Households spending more than 50 percent are considered to be "severely cost-burdened."

Part of the overall purpose of the Consolidated Plan is to reduce "the isolation of income groups within a community or geographical area through the spatial de-concentration of housing opportunities for persons of lower income". In this spirit, grantees can use the data available in CPD Maps to not only identify areas within their jurisdiction that have large concentrations of low-income renters, but also identify areas that have a lack of affordable rental housing.

---

### USING THE REPORTS WIDGET

The Reports widget has several data sets that can help you identify concentrations of low-income renters and also areas that lack affordable rental units:

- Housing Supply – Number and percentage of renter-occupied units by contract rent
- Housing Supply – Renter-occupied units by contract rent and bedrooms
- Housing Supply – Number of occupied housing units by tenure and presence of selected housing conditions
- Housing Supply – Units Affordable to Households (by income level)
- Housing Needs – Housing Problems (renter) (multiple tables)
- Housing Needs – Cost Burden > 30% (renter) (by household type and income level)
- Housing Needs – Cost Burden > 50% (renter) (by household type and income level)

---

### USING THE MAP QUERY WIDGET

The Map Query widget will allow you to identify geographies based on their underlying data. The following variables can help grantees identify concentrations of low-income households with high cost burdens, and geographies in their jurisdiction with a lack of affordable rental units:

- Demographic -> Household level -> % of households with income below 50% HAMFI
- Housing Needs -> Housing Problems -> % of households with cost burden (paying > 30%)
- Housing Needs -> Housing Problems -> % of households with severe cost burden (paying > 50%)



- Housing Supply -> Characteristics of Housing Stock -> Housing Affordability by Tenure -> Renter units affordable to 30% HAMFI
- Housing Supply -> Characteristics of Housing Stock -> Housing Affordability by Tenure -> Renter units affordable to 50% HAMFI

---

## NEED FOR HOUSING REHABILITATION

---

Housing Rehabilitation is a common use of CDBG and HOME funds. Grantees can use the age of housing stock as a proxy for the condition of housing. A general rule of thumb is housing over 30 years old is likely to need rehabilitation.

---

### USING THE MAP SELECTION WIDGET

The Map Selection widget provides a map called the “Need for Rental Rehabilitation”. To view this map, open the Map Selection widget and select “Need for Rental Rehabilitation” from the dropdown menu at the top of the widget. The map will add a color-themed map layer displaying the percentage of rental housing in each census tract that was built before 1980. The map will also add an outline-theme layer that depicts census tracts where more than 50% of the population qualifies as low-moderate income (earning less than 80% of the area median income).

---

### USING THE REPORTS WIDGET

The Reports widget has several data sets that can help you identify concentrations of older housing stock:

- Housing Supply – Median age of structure for renter-occupied units (part of the first table within Housing Supply, entitled “Summary Information for Characteristics of the Housing Stock)
- Housing Supply – Number of occupied units by tenure and year structure built

---

### USING THE MAP QUERY WIDGET

The Map Query widget will allow you to identify geographies based on their underlying data. The following variables can help grantees identify concentrations of older housing stock:

- Housing Supply -> Characteristics of Housing Stock -> % of owner units built 1949 or earlier
- Housing Supply -> Characteristics of Housing Stock -> % of renter units built 1949 or earlier
- Housing Supply -> Characteristics of Housing Stock -> % of renter units built before 1980



## USING CHANGE INDICATORS TO SUPPORT MARKET ANALYSIS IN CPD MAPS

---

The Consolidated Plan regulations require that grantees engage in a market analysis to ensure that funded projects are appropriate to the housing and labor market conditions in the local economy. CPD Maps offers a range of tools to support grantees in this part of their planning process.

An important element of market analysis involves gathering and interpreting information about the choices being made by private investors in real estate, ranging from owner occupants to landlords to business owners. Their choices reveal demand in the market, and are reflected by such factors as income, property values, employment—and particularly by changes in these patterns of investment.

As a result, among the most important data for a grantee to consider are *trends*—i.e., changes in population, housing, and economic conditions *over time*—and how these trends affect the local housing and employment market.

Beginning in April 2012, CPD Maps has incorporated a number of census tract level “change indicators” that help display variations in the community and identify growing and declining areas. The current indicators in CPD Maps are based on changes over the period 2000-2009, and will be updated as new data becomes available.

The change indicators in CPD Maps enable users to create maps that address questions about market trends in three major areas:

- **Economic trends:** In what parts of the community is the unemployment rate increasing or decreasing? Where is the total number of jobs increasing or decreasing? Which employment sectors are growing or shrinking? (e.g., Manufacturing? Education and Health? Retail?) And in what parts of the community are these employment characteristics changing (i.e., growing or declining) the most?
- **Demographic trends:** In what parts of the community is population increasing or decreasing? Among which age groups? Where is poverty increasing or decreasing? Where is income going up or down? Where is the number of housing units growing or declining? And in which neighborhoods are these trends most pronounced?
- **Housing supply trends:** Where are home values or rents increasing or decreasing? Where is the vacancy rate growing or shrinking? Where is the number of occupied housing units going up or down? And where are these changes most extreme?

By evaluating these trends, grantees can conduct a more effective analysis of market conditions. They can anticipate future pressures on home affordability, prioritize areas for long-term demolition and



redevelopment strategies, identify neighborhoods with likely future appreciation, and locate target areas near jobs in growing economic sectors.

The following examples include housing market conditions, as illuminated by these change indicators, along with strategies grantees might use in response:

- *Where housing values are high and increasing*, grantees may want to develop units for long-term affordability;
- *Where values are moderate and stable*, grantees may be able to promote owner-occupancy with modest per-unit subsidies for homebuyer assistance and moderate rehabilitation;
- *Where values are low but the neighborhood is anchored by increasing employment opportunities and/or access to transportation*, grantees may decide that a tightly targeted revitalization strategy will attract future private investment;
- *Where values are low and declining and vacancy is high and increasing*, grantees may elect to focus on blight removal and land banking for future redevelopment.

Additionally, by providing a measure of the *scale* of these trends, CPD Maps can help grantees identify areas where they can realistically expect to affect investment choice in the broader market through a reasonable CPD investment.

---

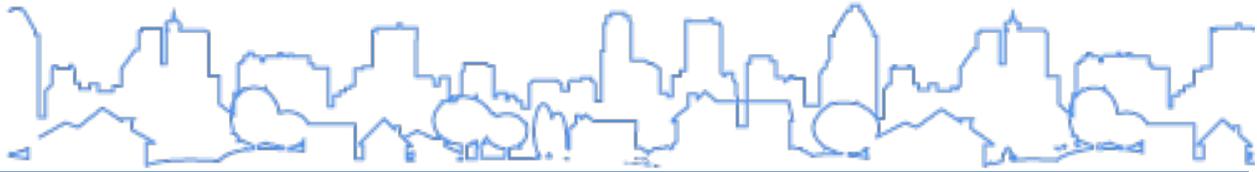
## USING THE MAP SELECTION WIDGET

The Map Selection widget provides change indicators under the categories of “Economic Development,” “Demographic: General,” and “Housing Supply.” Select one of these change indicators as the thematic layer, along with additional outline-based or point-based layers. Select only one change indicator for a given map. As with other thematic layers, click on the globe icon  displayed to the right of the data set/layer to change the classification type for the thematic layer, or to change the class breaks between colors to ensure that the thematic map is appropriate for your community.

---

## USING THE REPORTS WIDGET

Although the 2000-2009 change indicators described above are not currently available through the Reports Widget in CPD Maps, these reports include several related data sets showing current data. Market trends can be identified in these reports by comparing the selected target geography with appropriate “reference” geography, such as the surrounding county or the state. These comparisons illustrate the competitive pressures on the target geography for investment compared to other markets in the region. A number of data sets under the categories of “Demographic,” “Economic Context,” and “Housing Supply” may offer salient comparisons.



## USING THE MAP QUERY WIDGET

The Map Query Widget provides access to several data sets useful for market analysis. Since Map Query allows users to set a range for up to three variables, it can help identify census tracts where a number of characteristics converge to offer a high potential for appropriate targeting of CPD resources. For example, a grantee seeking to use HOME funds to develop a walk-to-work program with local employers might look for census tracts that meet the following three characteristics:

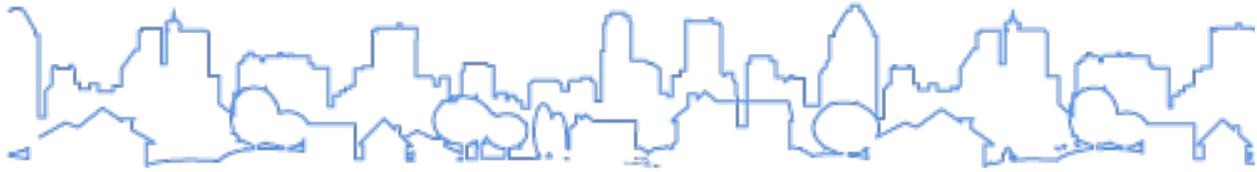
- Change in total jobs > 0 (i.e., growth in the number of jobs);
- At least 20% of owner-occupied units affordable at 80% of area median income; and
- Average travel time to work less than 20 minutes.

Note, however, that the appropriate variables and the selected ranges must be customized for specific communities and types of projects.



## APPENDIX 1: MAP LAYERS

- Transportation
  - Metropolitan Planning Organization (MPO)
  - AMTRAK Lines
  - Transit Lines
  - Transit Stations
  - AMTRAK Stations
  
- Environment
  - State Clean Water Needs Survey (CWNS):
  - 100 Year Flood Plain
  - 500 Year Flood Plain
  
- Activity Data
  - CDBG
    - CDBG Activities Funding
    - CDBG Activity Count
    - CDBG Acquisition Activities
    - CDBG Economic Development Activities
    - CDBG Housing Activities
    - CDBG Public Improvement Activities
    - CDBG Public Service Activities
    - Other CDBG Activities
  - HOME
    - HOME Activities Funding
    - HOME Activities Count
    - HOME Activities (Rental)
  - Other
    - Voucher Concentration
    - NSP Completed Activities
    - FHA REO
    - Public Housing Developments
    - Low Income Housing Tax Credit Properties
    - HUD Multifamily Properties
  
- Community Indicators
  - Economic Development



- % Commute Time >60 minutes
- % Unemployment
- % Point Change: Unemployment Rate
- Change in Total Jobs
- Change in Agriculture, Mining, Oil and Gas Extraction Jobs
- Change in Construction Jobs
- Change in Manufacturing Jobs
- Change in Wholesale Trade Jobs
- Change in Retail Trade Jobs
- Change in Transportation and Warehousing Jobs
- Change in Information Jobs
- Change in Finance, Insurance, and Real Estate Jobs
- Change in Professional, Scientific, and Management Services Jobs
- Change in Education and Health Care Services Jobs
- Change in Arts, Entertainment, Accommodations Jobs
- Change in Other Services Jobs
- Demographic
  - Race/Ethnicity
    - White alone (not Hispanic)
    - Black or African American alone (not Hispanic)
    - American Indian / Alaskan Native alone (not Hispanic)
    - Asian alone (not Hispanic)
    - Native Hawaiian / Pacific Islander alone (not Hispanic)
    - Some other race alone (not Hispanic)
    - Two or more races (not Hispanic)
    - Persons of Hispanic origin
  - General
    - Median Household Income
    - Poverty Rate
    - Total Households
    - Average Household Size
    - % Non-English Speaking
    - Change in Housing Units
    - Change in Median HH Income
    - % Point Change: Poverty Rate
    - Change in Population
    - Change in Population Age 0-17
    - Change in Population Age 18-24
    - Change in Population Age 25-65



- Change in Population Age 65+
- Housing Supply
  - % Rental Housing Built Before 1980
  - % Rental Housing Built Before 1949
  - Median Home Value
  - % Owner Occupied Housing
  - Median Contract Rent
  - % Renter Occupied Housing
  - Vacancy Rate
  - % Renter units with 3 or more bedrooms
  - % Owner units with 3 or more bedrooms
  - % of structures with 5-19 units
  - % of structures with 20 or more units
  - Change in Median Home Value
  - % Point Change: Owner Occupied
  - Change in Median Rent
  - % Point Change: Vacancy Rate
  - % Point Change: Rental Vacancy Rate
  - % Point Change: Owner Vacancy Rate
  - Change in Occupied Units
  - Vacancy Rate > 10%
  - Vacancy Rate > 7%
- Housing Need
  - Affordability
    - % Renter units affordable to 30% HAMFI
    - % Renter units affordable to 50% HAMFI
    - % Renter units affordable to 80% HAMFI
    - % Owner units affordable to 30% HAMFI
    - % Owner units affordable to 50% HAMFI
    - % Owner units affordable to 80% HAMFI
    - Housing Cost Burden
  - Extremely Low Income
    - % Extremely Low-Income (ELI) Households
    - % of ELI Households With Any of 4 Severe Housing Problems
    - % of ELI Households With Substandard Housing
    - % of ELI Households With Overcrowding
    - % of ELI Households With Severe Cost Burden
  - Moderate Income
    - % Moderate-Income (MI) Households

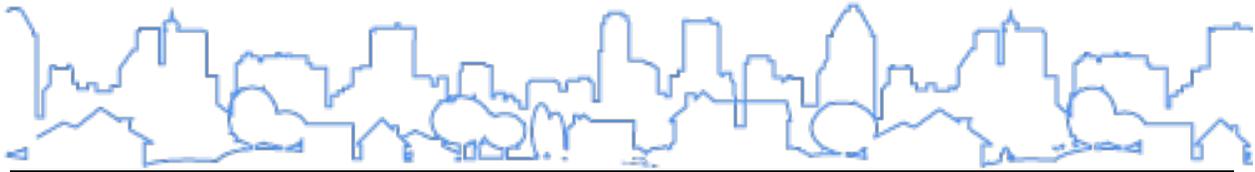


- % of MI Households With Any of 4 Severe Housing Problems
- % of MI Households With Substandard Housing
- % of MI Households With Overcrowding
- % of MI Households With Severe Cost Burden
- Low Income
  - % Low-Income (LI) Households
  - % of LI Households With Any of 4 Severe Housing Problems
  - % of LI Households With Substandard Housing
  - % of LI Households With Overcrowding
  - % of LI Households With Severe Cost Burden
- Boundaries
  - Grantee Boundaries
    - CDBG Grantee
    - HOME Grantee
    - ESG Grantee
    - HOPWA Grantee
    - Continuum of Care (CoC)
    - Unit of General Local Government (UGLG)
  - Other
    - NSP1 Target Areas
    - NSP2 Target Areas
    - SCRP Grantees
    - Choice Grantees
    - Census Tracts
    - Low-Mod Census Tracts:
    - 112<sup>th</sup> Congressional Districts
    - Underserved Areas:
    - Qualified Census Tracts:
    - Difficult to Develop Areas:
    - Rural Innovation Fund
    - Communities Containing Colonias
    - Challenge Grantees
- Other
  - Census Tract Labels
  - 112<sup>th</sup> Congressional Districts Label

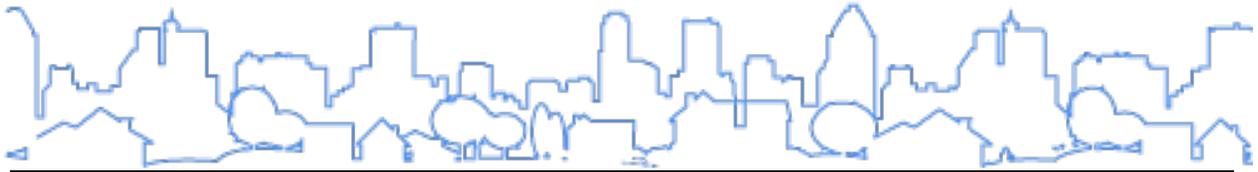


## APPENDIX 2: MAP QUERY VARIABLES

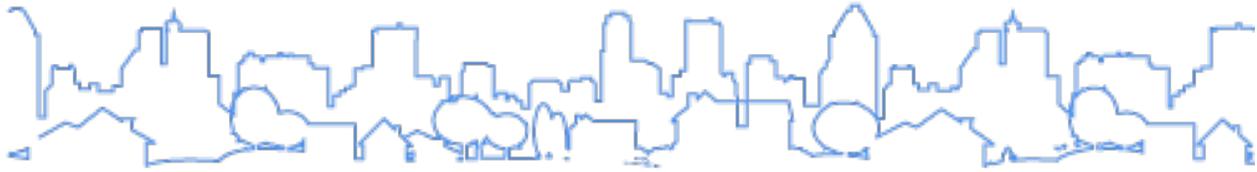
<b>Demographic Summary</b>
Total Population
Total Households
Homeownership Rate
Average Household Size over occupied housing units
Median Household Income in past 12 months
<b>Demographic Person-level Information</b>
% of population over 5 years that speak English 'not at all'
Poverty Rate
Race/Ethnicity
Age
<b>Demographic Household Level Information</b>
% of households with one or more people under 18 years
% of households with one or more people 60 years and over
% of one person households
% of households with income = 30% HAMFI
% of households with income = 50% HAMFI
% of households with income = 80% HAMFI
% of households with income = 100% HAMFI
<b>Housing Needs – Housing Problems</b>
% of households with 1 of 4 housing problems
% of households with 1 of 4 severe housing problems



% of households with substandard housing
% of households with overcrowding
% of households with cost burden (paying > 30%)
% of households with severe cost burden (paying > 50%)
# of households at risk of homelessness (multiple unrelated renter households with overcrowding)
<b>Housing Supply</b>
Total Housing Units
Vacancy Rate
Median value of owner occupied units
Median contract rent for renter occupied units
Median number of rooms
% of owner units built 1949 or earlier
% of renter units built 1949 or earlier
% of renter units built before 1980
% of renter units with 3 or more bedrooms
% of owner units with 3 or more bedrooms
<b>Housing Affordability by Tenure</b>
Renter units affordable to 30% HAMFI
Renter units affordable to 50% HAMFI
Renter units affordable to 80% HAMFI
Owner units affordable to 50% HAMFI
Owner units affordable to 80% HAMFI
Owner units affordable to 100% HAMFI
<b>Economic Context</b>
Unemployment Rate
Average Travel Time to Work
Unemployment by Age Group



Travel Time to Work
Educational Attainment by Employment Status
Change in Employment



## APPENDIX 3: REPORT DATA SETS

### DEMOGRAPHIC

#### BASIC SUMMARY

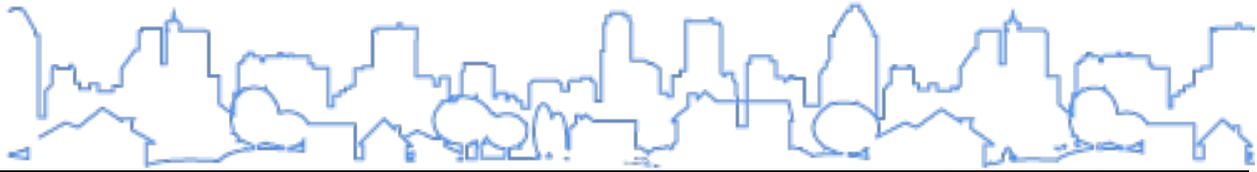
Some data correlates with Table 1 of the Needs Assessment of the Consolidated Plan template.

Summary Information for Basic Demographic and Socioeconomic Characteristics	Target(s)
Total Population:	
Total Households:	
Homeownership Rate:	
Average Household Size of Occupied Housing Units:	
Average Household Size of Owner occupied Housing Units:	
Average Household Size of Renter occupied Housing Units:	
Median Household Income In The Past 12 Months:	
Aggregate Household Income In The Past 12 Months:	
Median Family Income In The Past 12 Months:	
Median Nonfamily Household Income In The Past 12 Months:	
2005–09 ACS	

#### PERSON-LEVEL

Data can be used to support Anti-Poverty Strategy of the Strategic Plan.

Person-level Information	Number	Percent
Population 5 years and over that speak English 'not at all':		
Persons in Poverty (Universe: Persons whose poverty status is determined):		
Poverty Rate:		
Persons in Poverty in Family Households:		



Persons in Poverty in non-Family Households:		
2005–09 ACS		

No associated table in the Consolidated Plan template.

Race	Number	Percent
White alone (not Hispanic)		
Black or African American alone (not Hispanic)		
American Indian and Alaska Native alone (not Hispanic)		
Asian alone (not Hispanic)		
Native Hawaiian and Other Pacific Islander alone (not Hispanic)		
Some other race alone (not Hispanic)		
Two or more races (not Hispanic)		
Persons of Hispanic Origin		
Total		
2005–09 ACS		

No associated table in the Consolidated Plan template.

Age	Number	Percent
Population Age 0–17		
Population Age 18–24		
Population Age 25–64		
Population Age 65 and over		
Total		
2005–09 ACS		




---

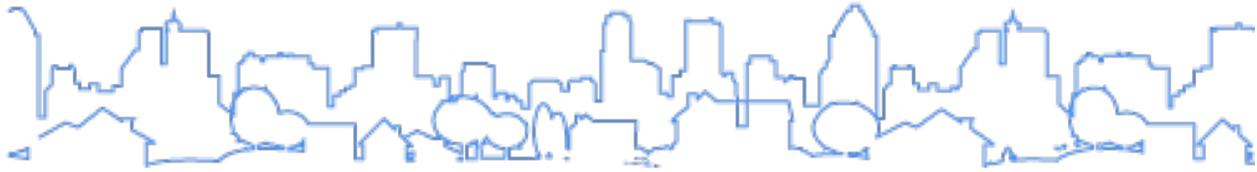
**HOUSEHOLD-LEVEL**

No associated table in the Consolidated Plan template.

<b>Household Information</b>	<b>Number</b>	<b>Percent</b>
Households with one or more people under 18 years:		
Households with one or more people 60 years and over:		
One person Household:		
2005–09 ACS		

No associated table in the Consolidated Plan template.

<b>Household Income in the Past 12 Months</b>	<b>Number</b>	<b>Percent</b>
Less than \$14,999		
\$15,000 to \$24,999		
\$25,000 to \$34,999		
\$35,000 to \$44,999		
\$45,000 to \$59,999		
\$60,000 to \$74,999		
\$75,000 to \$99,999		
\$100,000 to \$124,999		
\$125,000 to \$149,999		
\$150,000 or more		
Total		
2005–09 ACS		



**FAMILY-LEVEL**

Data can be used to support Anti-Poverty Strategy of the Strategic Plan.

<b>Family-level Information</b>	<b>Number</b>	<b>Percent</b>
Families with Income in the past 12 months below poverty level:		
Families in poverty, owner occupants:		
Families in poverty, renter occupants:		
2005–09 ACS		

Correlates with Table 3 of the Needs Assessment of the Consolidated Plan template.

	<b>0–30% HAMFI</b>	<b>&gt;30–50% HAMFI</b>	<b>&gt;50–80% HAMFI</b>	<b>&gt;80– 100% HAMFI</b>	<b>&gt;100% HAMFI</b>
Total Households					No Data
Small Family Households*					No Data
Large Family Households*					No Data
Household contains at least one person 62–74 years of age					
Household contains at least one person age 75 or older					
Households with one or more children 6 years old or younger*					No Data
*the highest income category for these family types is >80% HAMFI					
2005–09 CHAS					



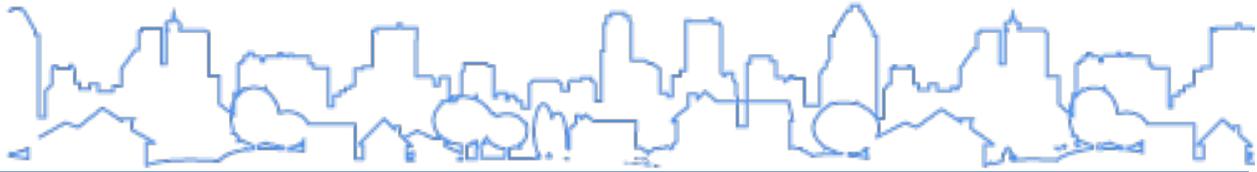
## HOUSING NEEDS

Correlates with Table 1 of the Needs Assessment of the Consolidated Plan template.

Occupancy	Number	Percentage
Households with 1 or more occupants per room		
Owner Households with 1.00 or less occupants per room		
Owner Households with 1.01 to 1.50 occupants per room		
Owner Households with 1.51 or more occupants per room		
Renter Households with 1.00 or less occupants per room		
Renter Households with 1.01 to 1.50 occupants per room		
Renter Households with 1.51 or more occupants per room		
2005–09 ACS		

No associated table in the Consolidated Plan template.

Costs	Number	Percentage
Paying > 30%		
Earning Less than \$34,999 paying > 30%		
Earning More Than \$35,000 paying > 30%		
Owner Occupied Earning Less than \$35,000 paying > 30%		
Owner Occupied Earning More than \$35,000 paying > 30%		
Renter Occupied Earning Less than \$35,000 paying > 30%		
Renter Occupied Earning More than \$35,000 paying > 30%		
2005–09 ACS		



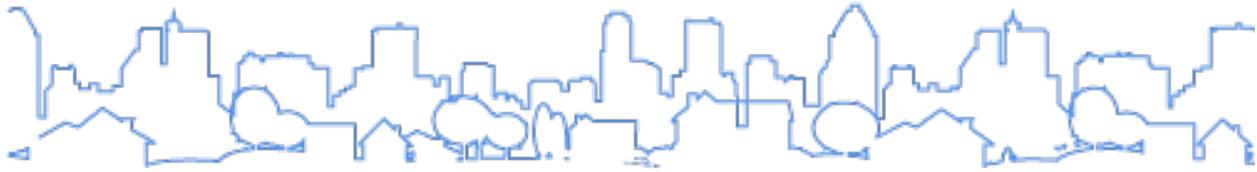
## HOUSING PROBLEMS

Correlates with Table 1 of the Needs Assessment of the Consolidated Plan template.

<b>Households with one of the listed needs (renter)</b>	<b>0–30% AMI</b>	<b>30–50% AMI</b>	<b>50–80% AMI</b>	<b>80–100% AMI</b>	<b>Total</b>
Substandard Housing – Lacking complete plumbing or kitchen facilities					
Severely Overcrowded – With >1.51 people per room (and complete kitchen and plumbing)					
Overcrowded – With 1.01-1.5 people per room (and none of the above problems)					
Housing cost burden greater than 50% of income (and none of the above problems)					
Housing cost burden greater than 30% of income (and none of the above problems)					
Zero/negative Income (and none of the above problems)					
2005–09 CHAS					

Correlates with Table 1 of the Needs Assessment of the Consolidated Plan template.

<b>Households with one of the listed needs (owner)</b>	<b>0–30% AMI</b>	<b>30–50% AMI</b>	<b>50–80% AMI</b>	<b>80–100% AMI</b>	<b>Total</b>
Substandard Housing – Lacking complete plumbing or kitchen facilities					
Severely Overcrowded – With >1.51 people per room (and complete kitchen and plumbing)					
Overcrowded – With 1.01-1.5 people per room (and none of the above problems)					
Housing cost burden greater than 50% of income (and none of the above problems)					
Housing cost burden greater than 30% of income (and none of the above problems)					



Zero/negative Income (and none of the above problems)					
2005–09 CHAS					

Correlates with Table 2 of the Needs Assessment of the Consolidated Plan template.

<b>Households with one or more Housing problems: Lacks kitchen or bathroom, Overcrowding, cost burden (renter)</b>	<b>0–30% AMI</b>	<b>30–50% AMI</b>	<b>50–80% AMI</b>	<b>80–100% AMI</b>	<b>Total</b>
Having 1 or more of four housing problems					
Having none of four housing problems					
Household has negative income, but none of the other housing problems					
2005–09 CHAS					

Correlates with Table 2 of the Needs Assessment of the Consolidated Plan template.

<b>Households with one or more Housing problems: Lacks kitchen or bathroom, Overcrowding, cost burden (owner)</b>	<b>0–30% AMI</b>	<b>30–50% AMI</b>	<b>50–80% AMI</b>	<b>80–100% AMI</b>	<b>Total</b>
Having 1 or more of four housing problems					
Having none of four housing problems					
Household has negative income, but none of the other housing problems					
2005–09 CHAS					



## COST BURDEN

Correlates with Table 6 of the Needs Assessment of the Consolidated Plan template.

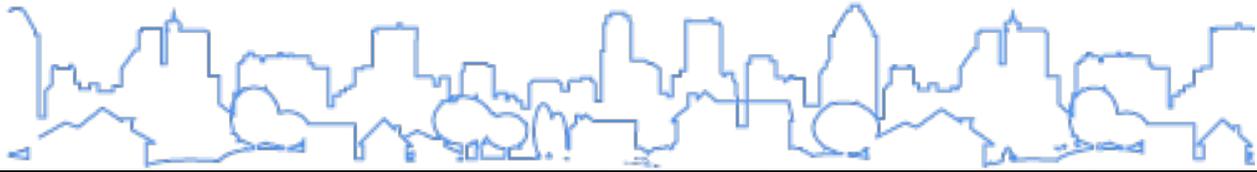
<b>Cost Burden &gt; 30% (renter)</b>	<b>0–30% AMI</b>	<b>30–50% AMI</b>	<b>50–80% AMI</b>	<b>Total</b>
Small Related				
Large Related				
Elderly				
Other				
Total need by income				
2005–09 CHAS				

Correlates with Table 6 of the Needs Assessment of the Consolidated Plan template.

<b>Cost Burden &gt; 30% (owner)</b>	<b>0–30% AMI</b>	<b>30–50% AMI</b>	<b>50–80% AMI</b>	<b>Total</b>
Small Related				
Large Related				
Elderly				
Other				
Total need by income				
2005–09 CHAS				

Correlates with Table 7 of the Needs Assessment of the Consolidated Plan template.

<b>Cost Burden &gt; 50% (renter)</b>	<b>0–30% AMI</b>	<b>30–50% AMI</b>	<b>50–80% AMI</b>	<b>Total</b>
Small Related				
Large Related				
Elderly				
Other				



Total need by income				
2005–09 CHAS				

Correlates with Table 7 of the Needs Assessment of the Consolidated Plan template.

<b>Cost Burden &gt; 50% (owner)</b>	<b>0–30% AMI</b>	<b>30–50% AMI</b>	<b>50–80% AMI</b>	<b>Total</b>
Small Related				
Large Related				
Elderly				
Other				
Total need by income				
2005–09 CHAS				

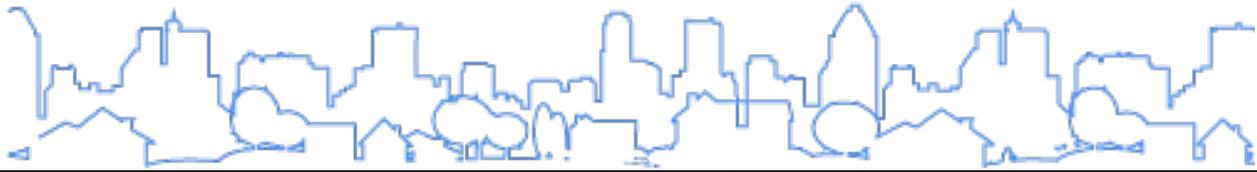
## CROWDING

Correlates with Table 8 of the Needs Assessment of the Consolidated Plan template.

<b>Crowding - More than one person per room (renter)</b>	<b>0–30% AMI</b>	<b>30–50% AMI</b>	<b>50–80% AMI</b>	<b>80–100% AMI</b>	<b>Total</b>
Single family households					
Multiple, unrelated family households					
Other, non-family households					
Total need by income					
2005–09 CHAS					

Correlates with Table 8 of the Needs Assessment of the Consolidated Plan template.

<b>Crowding – More than one person per room (owner)</b>	<b>0–30% AMI</b>	<b>30–50% AMI</b>	<b>50–80% AMI</b>	<b>80–100% AMI</b>	<b>Total</b>
Single family households					
Multiple, unrelated family households					



Other, non-family households					
Total need by income					
2005–09 CHAS					

## HOUSING SUPPLY

### SUMMARY INFORMATION FOR CHARACTERISTICS OF THE HOUSING STOCK

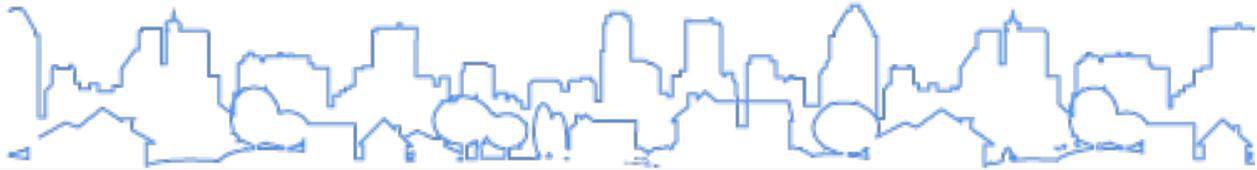
Correlates with Table 3 of the Housing Market Analysis of the Consolidated Plan template.

Summary Information for Characteristics of the Housing Stock	Target(s)
Total housing units	
Vacancy Rate	
Median value for owner-occupied units	
Median value for owner-occupied units with a mortgage	
Median value for owner-occupied units without a mortgage	
Median contract rent for renter-occupied units	
Median age of structure for renter-occupied units	
Median number of rooms for owner-occupied units	
Median number of rooms for renter-occupied units	
2005–09 ACS	

### SIMPLE TABULATIONS OF HOUSING CHARACTERISTICS

Partially correlates with Table 1 of the Housing Market Analysis of the Consolidated Plan template.

Number and percentage of occupied housing units by structure type	Number	Percentage
1-unit Detached		
1-unit Attached		
2 to 4 Units		



5 to 19 Units		
20 or More Units		
Other (mobile home, RV, etc.)		
Total		
2005–09 ACS		

Partially correlates with Table 2 of the Housing Market Analysis of the Consolidated Plan template.

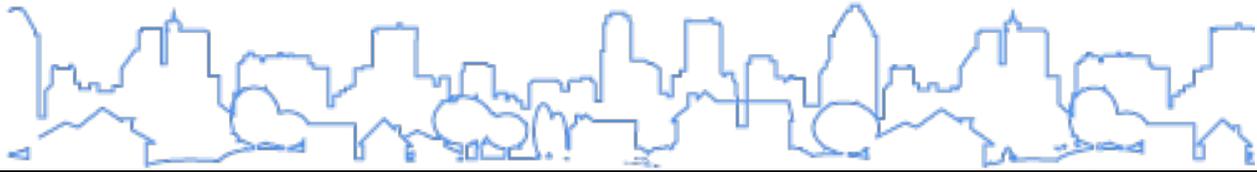
Number and percentage of occupied housing units by bedrooms	Number	Percentage
No bedroom		
1 bedroom		
2 bedrooms		
3+ bedrooms		
Total		
2005–09 ACS		

Captured by Table 2 of the Housing Market Analysis of the Consolidated Plan template.

Number and percentage of owner-occupied housing units by bedrooms	Number	Percentage
No bedroom		
1 bedroom		
2 bedrooms		
3+ bedrooms		
Total		
2005–09 ACS		

Captured by Table 2 of the Housing Market Analysis of the Consolidated Plan template.

Number and percentage of renter-occupied housing units by bedrooms	Number	Percentage
No bedroom		



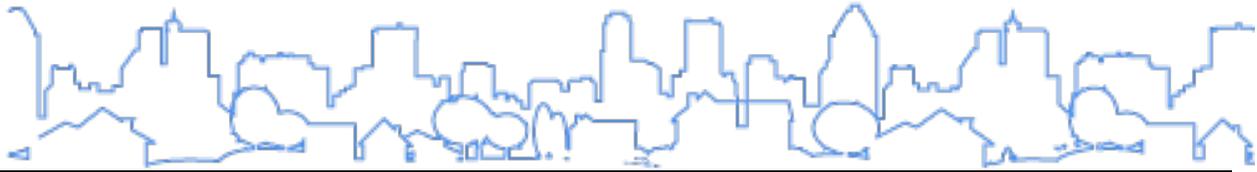
1 bedroom		
2 bedrooms		
3+ bedrooms		
Total		
2005–09 ACS		

Partially correlates with Table 4 of the Housing Market Analysis of the Consolidated Plan template.

Number and percentage of renter-occupied units by contract rent	Number	Percentage
No cash rent		
\$0–\$499		
\$500–\$599		
\$600–\$699		
\$700–\$799		
\$800–\$899		
\$900–\$999		
\$1000–\$1249		
\$1250–\$1499		
\$1500–\$1999		
\$2000 or More		
Total		
2005–09 ACS		

Partially correlates with Table 4 of the Housing Market Analysis of the Consolidated Plan template.

Renter-occupied units by contract rent and bedrooms	Bedrooms	Number	Percent
Less Than \$200	None		
Less Than \$200	1		
Less Than \$200	2		
Less Than \$200	3+		



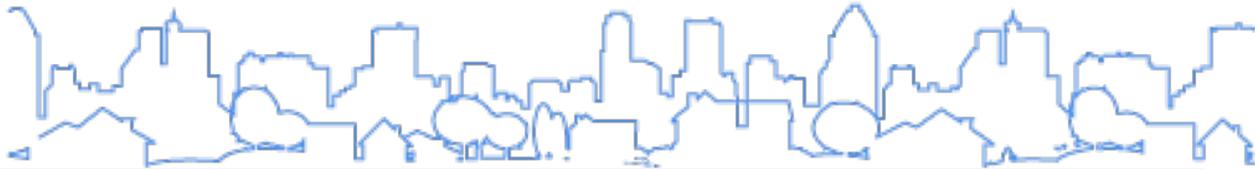
\$200–\$499	None		
\$200–\$499	1		
\$200–\$499	2		
\$200–\$499	3+		
\$500–\$999	None		
\$500–\$999	1		
\$500–\$999	2		
\$500–\$999	3+		
\$1000 or More	None		
\$1000 or More	1		
\$1000 or More	2		
\$1000 or More	3+		
No Cash Rent	None		
No Cash Rent	1		
No Cash Rent	2		
No Cash Rent	3+		
2005–09 ACS			

---

### CROSS-TABULATIONS OF MULTIPLE CHARACTERISTICS

No associated table in the Consolidated Plan template.

Number of occupied housing units by tenure and household size	Owner	Renter	Total
	# and %	# and %	# and %
1 Person Household			
2 Person Household			
3 Person Household			
4 Person Household			
5 Person Household			
6+ Person Household			



Total			
2005–09 ACS			

Correlates with Table 8 of the Housing Market Analysis of the Consolidated Plan template.

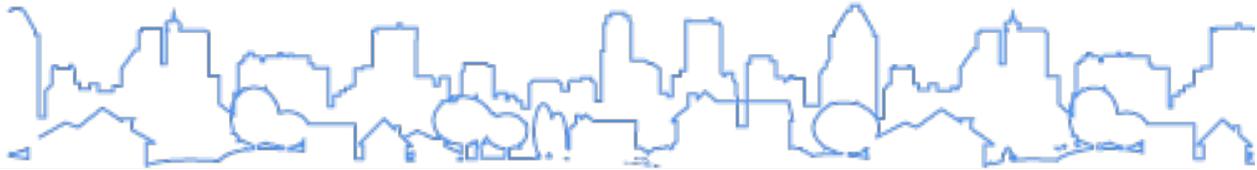
Number of occupied housing units by tenure and year structure built	Owner	Renter	Total
	# and %	# and %	# and %
Built 2000 or later			
Built 1980–1999			
Built 1950–1979			
Built 1949 or earlier			
Total			
2005–09 ACS			

Correlates with Table 7 of the Housing Market Analysis of the Consolidated Plan template.

Number of occupied housing units by tenure and presence of selected housing conditions	Owner	Renter	Total
	# and %	# and %	# and %
None of the selected housing conditions			
1 selected conditions			
2 selected conditions			
3 selected conditions			
4 selected conditions			
Total			
Selected housing conditions = (1) lacks complete plumbing facilities, (2) lacks complete kitchen facilities, (3) housing costs greater than 30 percent of household income, (4) more than one person per room.			

Correlates with Table 5 of the Housing Market Analysis of the Consolidated Plan template.

Units Affordable to Households Earning	Owner	Renter
----------------------------------------	-------	--------



30% HAMFI		
50% HAMFI		
80% HAMFI		
100% HAMFI		
2005–09 CHAS		

## ECONOMIC CONTEXT

### SUMMARY OF INFORMATION ABOUT ECONOMIC CONDITIONS

Correlates with Table 17 of the Housing Market Analysis of the Consolidated Plan template.

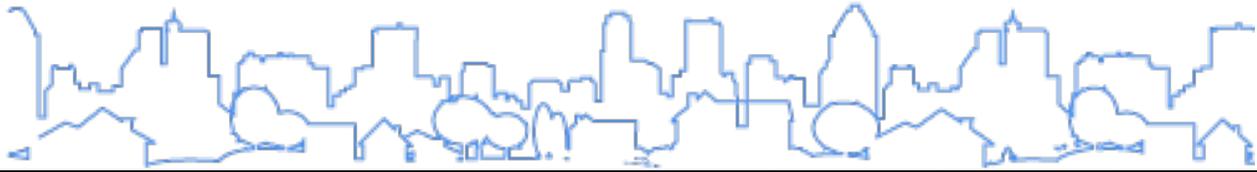
Summary Information about Economic Conditions	Target(s)
Total In Civilian Labor Force	
Civilian employed population 16 years and over	
Unemployment Rate	
Average travel time to work	
2005–09 ACS	

### SIMPLE TABULATIONS OF ECONOMIC CONDITIONS

No associated table in Consolidated Plan template.

Unemployment by Age Group	Number	Percent
Age 16–24		
Age 25–65		
Over Age 65		
Total		
2005–09 ACS		

Correlates with Table 18 of the Housing Market Analysis of the Consolidated Plan template.



Occupation	Number	Percentage	Median Income
Management, business, and financial occupations			
Farming, fishing and forestry occupations			Available 2012
Service occupations			
Sales and office occupations			
Construction, extraction, maintenance, and repair occupations			
Production, transportation, and material moving occupations			
Total			
2005–09 ACS			

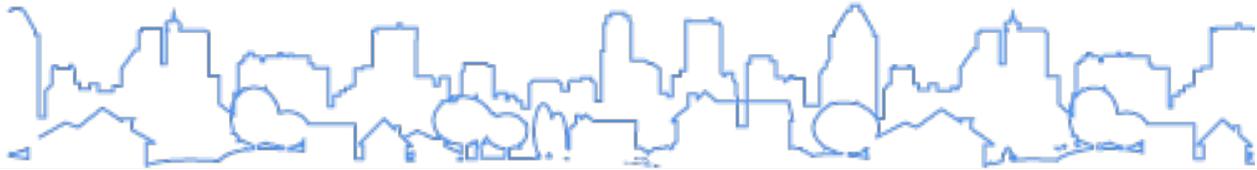
Correlates with Table 19 of the Housing Market Analysis of the Consolidated Plan template.

Travel Time to work	Number	Percentage
Less than 30 minutes		
30 to 59 minutes		
60 or more minutes		
Total		
2005–09 ACS		

## EDUCATIONAL ATTAINMENT

Correlates with Table 21 of the Housing Market Analysis of the Consolidated Plan template.

Educational Attainment	Age 18–24	Age 25–34	Age 35–44	Age 45–64	Age 65+
Less than 9th grade					
9th to 12th grade no diploma					
High school graduate, GED, or alternative					
Some college, no degree					
Associate’s degree					



Bachelor's degree					
Graduate or professional degree					
2005–09 ACS					

Correlates with Table 22 of the Housing Market Analysis of the Consolidated Plan template.

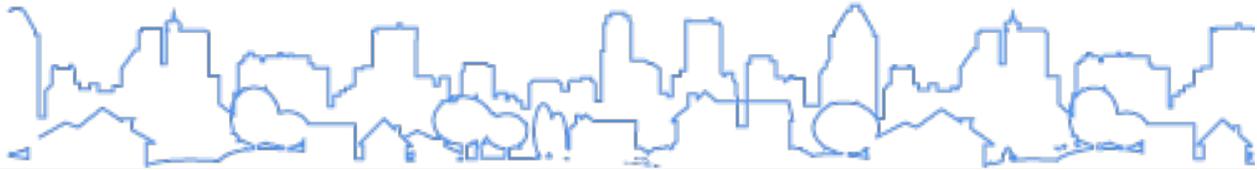
<b>Educational Attainment</b>	<b>Median Earnings in the Past 12 Months</b>
Less than high school graduate	
High school graduate (includes equivalency)	
Some college or Associate's degree	
Bachelor's degree	
Graduate or professional degree	
2005–09 ACS	

Correlates with Table 20 of the Housing Market Analysis of the Consolidated Plan template.

<b>Educational Attainment</b>	<b>In Labor Force Civilian Employed</b>	<b>In Labor Force – Unemployed</b>	<b>Not In Labor Force</b>
Less than high school graduate			
High school graduate (includes equivalency)			
Some college or Associate's degree			
Bachelor's degree or higher			
2005–09 ACS			

No associated table in Consolidated Plan template.

<b>Business by Sector</b>	<b>Number of Workers</b>	<b>Number of Jobs</b>	<b>Share of Workers (%)</b>	<b>Share of Jobs (%)</b>	<b>Jobs Less Workers (%)</b>
Agriculture, Mining, Oil and Gas Extraction					
Arts, Entertainment, Accommodations					



Construction					
Education and Health Care Services					
Finance, Insurance, and Real Estate					
Information					
Manufacturing					
Other Services [except Public Administration]					
Professional, Scientific, Management Services					
Public Administration					
Retail Trade					
Transportation and Warehousing					
Wholesale Trade					
Total					
2005–09 ACS					

## SPECIAL NEEDS

---

### HOMELESSNESS

The homelessness data is only available for Continuum of Care jurisdictions.

Correlates with Table 23 of the Needs Assessment of the Consolidated Plan template.

<b>Population experiencing homelessness on a given night</b>	<b>Sheltered</b>	<b>Unsheltered</b>
Persons in Households with Adult(s) and Child(ren)		
Persons in Households with Only Children		
Persons in Households with only Adults		
Chronically Homeless Individuals		
Chronically Homeless Families		
Veterans		
2010 Point in Time (PIT) Data		



Correlates with Table 13 of the Housing Market Analysis of the Consolidated Plan template.

Facilities Targeted to Homeless Persons	Emergency Shelter Year Round Beds (Current and New)	Emergency Shelter Voucher/ Seasonal/ Overflow Beds	Transitional Housing Beds (Current and New)	Permanent Supportive Housing Beds (Current and New)	Permanent Supportive Housing Beds Under Development
Households with Adult(s) and Children					
Households with Only Children					
Households with Only Adults					
Chronically Homeless Households					
Veterans					
2010 Homeless Inventory Chart (HIC)					

## HOPWA

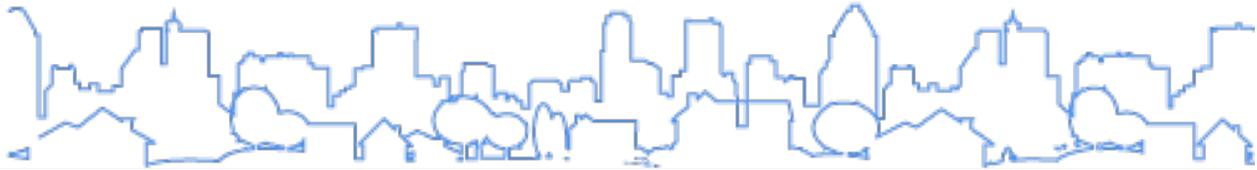
The HOPWA data is only available for HOPWA target jurisdictions.

Correlates with Table 26 of the Needs Assessment of the Consolidated Plan template.

Cumulative cases of AIDS reported	
Cumulative cases of AIDS reported	
Area incidence of AIDS	Available 2012
Rate per population	Available 2012
Number of new cases prior year (3 years of data)	
Rate per population (3 years of data)	
CDC Surveillance Data	

Correlates with Table 26 of the Needs Assessment of the Consolidated Plan template.

Current HOPWA Surveillance Data



Number of Persons living with HIV (PLWH)	
Area Prevalence (PLWH per population)	Available 2012
Number of new HIV cases reported last year	Available 2012
CDC HIV Surveillance Data	

Correlates with Table 14 of the Housing Market Analysis of the Consolidated Plan template.

Type of HOPWA Assistance	Number of Units Designated or Available for People with HIV/AIDS and their families
Tenant based rental assistance	
Permanent housing in facilities	
Short-term Rent, Mortgage, and Utility	
Short-term or transitional housing facilities	
Permanent housing placement	
HOPWA Grantee CAPER and HOPWA Beneficiary Verification Worksheet	

Correlates with Table 27 of the Needs Assessment of the Consolidated Plan template.

Type of HOPWA Assistance	Estimates of Unmet Need
Tenant based rental assistance	
Short-term Rent, Mortgage, and Utility	
Facility Based Housing (Permanent, short-term or transitional)	
HOPWA Grantee CAPER and HOPWA Beneficiary Verification Worksheet	



## APPENDIX 4: CPD MAPS GLOSSARY

**American Communities Survey (ACS):** An ongoing survey that provides data every year -- giving communities the current information they need to plan investments and services. Information from the survey generates data that help determine how more than \$400 billion in federal and state funds are distributed each year.

**Annual Action Plan:** The Consolidated Plan is carried out through Annual Action Plans, which provide a concise summary of the actions, activities, and the specific federal and non-federal resources that will be used each year to address the priority needs and specific goals identified by the Consolidated Plan.

**Consolidated Annual Performance Evaluation Report (CAPER):** Report used by grantees to indicate accomplishments and progress toward Consolidated Plan goals in the prior year.

**Census Tract:** A geographic region defined for the purpose of taking the census.

**Comprehensive Housing Affordability Strategy (CHAS):** Custom tabulations of Census data not typically included in standard Census data products. The data demonstrates the extent of housing needs and problems, especially for low-income households.

**Consolidated Plan:** The 3- to 5-year Consolidated Plan describes the jurisdiction's community development priorities and multiyear goals based on an assessment of housing and community development needs, an analysis of housing and economic market conditions and available resources.

**Custom Breaks:** User creates custom data classification breaks for data layers illustrated through the Map Selection widget.

**Equal Intervals:** Makes the data classification breaks for data layers exhibited through the Map Selection widget the same for each break.

**Geometric Intervals:** Makes the data classification breaks for data layers exhibited through the Map Selection widget so that each class range has approximately the same number of values with each class and that the change between intervals is fairly consistent.

**Identify Widget:** Displays underlying data for a selected geography.

**Map Selection Widget:** Allows users to view different data layers on the map.

**Map Query Widget:** Provides access to a number of data sets useful for market analysis.

**Median:** The middle number in a given sequence of numbers.



Natural Breaks: System establishes data classification breaks for data layers exhibited through the Map Selection widget by looking for groupings and patterns in the underlying data to minimize the variations within each class.

Outline-based Layer: Data indicated by boundary outline of the census tract or other geography.

Point-based Layer: Data indicated by point marker over location of the activity.

Quantiles: Data classification breaks for data layers exhibited through the Map Selection widget by changing the range of each class so that each class contains the same number of geographies.

Theme-based Layer: Data indicated by thematic shading over the census tract or other geography.