



# User Guide

Affirmatively Furthering Fair Housing Data and Mapping Tool v. 3.1

**U.S. Department of Housing and Urban Development**

July 2016



## Solution Information

	Information
Solution Name	Affirmatively Furthering Fair Housing Mapping Tool
Solution Acronym	AFFHT
Project Number	HUDN00309520X
Document Owner	Kathleen Cheeseman
Primary Segment Sponsor	Todd Richardson
Version/Release Number	3.1

## Document History

Version No.	Date	Author	Revision Description
1.0	7/19/16	Tricia Ruiz	Revision & Updates
2.0	7/20/16	Vivek Srivastav	Final



## Table of Contents

1. Getting Started.....	5
1.1 Software Version .....	5
1.2 Solution Requirements .....	5
1.3 Access Information .....	5
1.4 Logging On .....	5
1.5 Solution Menu .....	5
1.6 Changing User ID and Password .....	6
1.7 Exit Solution .....	6
2. Using the Solution (Online) .....	6
2.1 Map 1 Race/Ethnicity – Current (2010) race/ethnicity dot density map for Jurisdiction and Region with R/ECAPs .....	8
2.2 Map 2 Race/Ethnicity Trends – Past (1990 and 2000) race/ethnicity dot density maps for Jurisdiction and Region with R/ECAPs .....	9
2.3 Map 3 National Origin – Current five most populous national origin groups dot density map for Jurisdiction and Region with R/ECAPs .....	10
2.4 Map 4 LEP – LEP persons by 5 most populous languages dot density map for Jurisdiction and Region with R/ECAPs .....	10
2.5 Map 5 Publicly Supported Housing and Race/Ethnicity – Public Housing, Project-Based Section 8, Other Multifamily, and LIHTC locations mapped with race/ethnicity dot density map with R/ECAPs, distinguishing categories of publicly supported housing by color, for the Jurisdiction and Region .....	11
2.6 Map 6 Housing Choice Vouchers and Race/Ethnicity – Housing Choice Vouchers thematic map with race/ethnicity dot density map and R/ECAPs, for the Jurisdiction and Region .....	13
2.7 Map 7 Housing Burden and Race/Ethnicity – Households experiencing one or more housing burdens i thematic map in Jurisdiction and Region with race/ethnicity dot density map and R/ECAPs .....	14
2.8 Map 8 Housing Burden and National Origin – Households experiencing one or more housing burdens thematic map in Jurisdiction and Region with national origin dot density map and R/ECAPs.....	15
2.9 Map 9 Demographics and School Proficiency – School proficiency thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs.....	15
2.10 Map 10 Demographics and Job Proximity – Job proximity thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs.....	16
2.11 Map 11 Demographics and Labor Market Engagement – Labor engagement thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs.....	17
2.12 Map 12 Demographics and Transit Trips – Transit proximity thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs.....	18
2.13 Map 13 Demographics and Low Transportation Cost – Low transportation cost thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs .....	19
2.14 Map 14 Demographics and Poverty – Low poverty thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs.....	20
2.15 Map 15 Demographics and Environmental Health – Environmental health thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps with R/ECAPs.....	21
2.16 Map 16 Disability by Type - Dot density map of the population of persons with disabilities by persons with vision, hearing, cognitive, ambulatory, self-care, and independent living difficulties with R/ECAPs for Jurisdiction and Region .....	22



2.17 Map 17 Disability by Age Group – All persons with disabilities by age range (5-17; 18-64; and 65+) dot density map with R/ECAPs for Jurisdiction and Region .....	23
2.18 Zoom In/Out .....	23
2.19 Select a Grantee.....	23
2.20 Map Information.....	24
2.21 Map Layers - Legend .....	25
2.22 Map Layers - Table of Contents .....	25
2.23 Dot Density Renderer .....	26
2.24 Specify Background Button.....	26
2.25 AFFHT Maps Button .....	27
2.26 Toggle Jurisdiction/Region Button .....	27
2.27 Select Map Variation (not applicable to all maps) .....	29
2.28 Map Variations Button.....	29
2.29 Hide/Show Legend Area on Map .....	29
<b>3. Report Capabilities.....</b>	<b>30</b>
3.1 Report Procedures.....	31
3.1.1 Tables Button .....	31
3.1.2 Generate Table .....	31
3.1.3 Table 1 – Demographics.....	32
3.1.4 Table 2 - Demographic Trends .....	33
3.1.5 Table 3 - Racial/Ethnic Dissimilarity Trends .....	33
3.1.6 Table 4 – R/ECAP Demographics.....	34
3.1.7 Table 5 – Publicly Supported Housing Units by Program Category .....	34
3.1.8 Table 6 – Publicly Supported Housing Residents by Race/Ethnicity .....	35
3.1.9 Table 7 – R/ECAP and Non-R/ECAP Demographics by Publicly Supported Housing Program Category....	35
3.1.10 Table 8 – Demographics of Publicly Supported Housing Developments by Program Category .....	36
3.1.11 Table 9 - Demographics of Households with Disproportionate Housing Needs.....	36
3.1.12 Table 10 - Demographics of Households with Severe Housing Cost Burden .....	37
3.1.13 Table 11 – Publicly Supported Housing by Program Category: Units by Number of Bedrooms and Number of Children .....	37
3.1.14 Table 12 – Opportunity Indicators by Race/Ethnicity .....	38
3.1.15 Table 13 – Disability by Type .....	38
3.1.16 Table 14 – Disability by Age Group .....	39
3.1.17 Table 15 - Disability by Publicly Supported Housing Program Category.....	40
<b>4. Getting Help .....</b>	<b>40</b>

# 1. Getting Started

## 1.1 Software Version

3.1

## 1.2 Solution Requirements

In order to access and view AFFHT, a PC or mobile device with a supported browser and Internet access is required.

## 1.3 Access Information

AFFHT is a public-facing application. There are no user classes, profiles, or access restrictions such that all users have the same functional permissions.

## 1.4 Logging On

Go to the AFFHT site at:

<https://egis.hud.gov/affht>

## 1.5 Solution Menu

### The Affirmatively Furthering Fair Housing Data and Mapping Tool (AFFHT)

The options below are available via the introduction page (application wizard) after entering state and jurisdiction criteria.



The screenshot shows the 'Affirmatively Furthering Fair Housing Tool' application wizard. It has three main steps: 'Step 1: Pick your state', 'Step 2: Pick your jurisdiction', and 'Step 3: Choose a Map'. Red arrows point from text labels to the corresponding input fields in the wizard. The 'Pick your state:' label points to the state selection dropdown. The 'Pick your jurisdiction:' label points to the jurisdiction selection dropdown, which currently shows 'District of Columbia (DC), (FIPS)'. The 'Choose a Map:' label points to the 'Choose a Map' button at the bottom right. Below the jurisdiction dropdown, there is a 'Region' section showing 'Washington-Arlington-Alexandria, DC-VA-MD-WY' and buttons for 'Jurisdiction' and 'Region'.

The Affirmatively Furthering Fair Housing Tool will provide the following options:

- **Map 1** – Race/Ethnicity
- **Map 2** – Race/Ethnicity Trends
- **Map 3** – National Origin
- **Map 4** – LEP
- **Map 5** – Publicly Supported Housing and Race/Ethnicity
- **Map 6** – Housing Choice Vouchers and Race/Ethnicity
- **Map 7** – Housing Burden and Race/Ethnicity
- **Map 8** – Housing Burden and National Origin
- **Map 9** – Demographics and School Proficiency
- **Map 10** – Demographics and Job Proximity
- **Map 11** – Demographics and Labor Market
- **Map 12** – Demographics and Transit Trips
- **Map 13** – Demographics and Low Transportation Cost
- **Map 14** – Demographics and Poverty
- **Map 15** – Demographics and Environmental Health
- **Map 16** – Disability by Type
- **Map 17** – Disability by Age Group



## 1.6 Changing User ID and Password

There is no user login needed to use AFFHT.

## 1.7 Exit Solution

You can log out of the application at any time by closing the Web browser. After exiting the application, you can log into the application again by opening a new Web browser session and entering the AFFHT URL.

## 2. Using the Solution (Online)

### HOW TO USE THIS GUIDE

The AFFHT User Guide lays out basic descriptions of functions within the tool. While the guide does not detail all possible outcomes of the various functions, it provides an introduction to each function and basic guidelines to assist in troubleshooting unexpected results or errors. The user guide is formatted to follow the order of AFFHT's functional tabs as they appear on the Choose a Map page. However, users already familiar with the topics where assistance is needed can see the table of contents to find the appropriate section of the guide.

### ACCESSING AFFHT

There is only one path to reach the AFFHT mapping and reporting tool:

<https://egis.hud.gov/affht>

## The Affirmatively Furthering Fair Housing Data and Mapping Tool (AFFHT) & Application Wizard

The following options are available via the Choose a Map page after entering state and jurisdiction criteria:

- **Map 1 Race/Ethnicity** – Current (2010) race/ethnicity dot density map for Jurisdiction and Region with R/ECAPs
- **Map 2 Race/Ethnicity Trends** – Past (1990 and 2000) race/ethnicity dot density maps for Jurisdiction and Region with R/ECAPs
- **Map 3 National Origin** – Current 5 most populous national origin groups dot density map for Jurisdiction and Region with R/ECAPs
- **Map 4 LEP** – LEP persons by 5 most populous languages dot density map for Jurisdiction and Region with R/ECAPs
- **Map 5 Publicly Supported Housing and Race/Ethnicity** – Public Housing, Project-Based Section 8, Other Multifamily, and LIHTC locations mapped with race/ethnicity dot density map with R/ECAPs and distinguishing categories of publicly supported housing by color for the Jurisdiction and Region
- **Map 6 Housing Choice Vouchers and Race/Ethnicity** – Housing Choice Vouchers thematic map with race/ethnicity dot density map and R/ECAPs, for the Jurisdiction and Region
- **Map 7 Housing Burden and Race/Ethnicity** – Households experiencing one or more housing burdens thematic map in Jurisdiction and Region with race/ethnicity dot density map and R/ECAPs
- **Map 8 Housing Burden and National Origin** – Households experiencing one or more housing burdens thematic map in Jurisdiction and Region with national origin dot density map and R/ECAPs
- **Map 9 Demographics and School Proficiency** – School proficiency thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs
- **Map 10 Demographics and Job Proximity** – Job proximity thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs
- **Map 11 Demographics and Labor Market Engagement** – Labor engagement thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs
- **Map 12 Demographics and Transit Trips** – Transit proximity thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs



- **Map 13 Demographics and Low Transportation Cost** – Low transportation cost thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs
- **Map 14 Demographics and Poverty** – Low poverty thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs
- **Map 15 Demographics and Environmental Health** – Environmental health thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps with R/ECAPs
- **Map 16 Disability by Type** – Population of persons with disabilities dot density map by persons with vision, hearing, cognitive, ambulatory, self-care, and independent living difficulties with R/ECAPs for Jurisdiction and Region
- **Map 17 Disability by Age Group** – All persons with disabilities by age range (5-17; 18-64; and 65+) dot Map 14 Demographics and Poverty density map with R/ECAPs for Jurisdiction and Region

## 2.1 Map 1 Race/Ethnicity – Current (2010) race/ethnicity dot density map for Jurisdiction and Region with R/ECAPs

To locate information regarding Current race/ethnicity dot density map for Jurisdiction and Region with R/ECAPs, click the Map 1- Race/Ethnicity button located on the Choose a Map page.



Select the Go to Map Button located at the bottom right of the application wizard.



## 2.2 Map 2 Race/Ethnicity Trends – Past (1990 and 2000) race/ethnicity dot density maps for Jurisdiction and Region with R/ECAPs

To locate information regarding past race/ethnicity dot density map for Jurisdiction and Region with R/ECAPS, click the Map 2- Race/Ethnicity Trends button located on the application wizard.



Select the Go to Map Button Located at the bottom right of the application wizard.

The Select Map Variation screen will open. You can choose between Race/Ethnicity Trends, 1990 or Race/Ethnicity Trends, 2000.

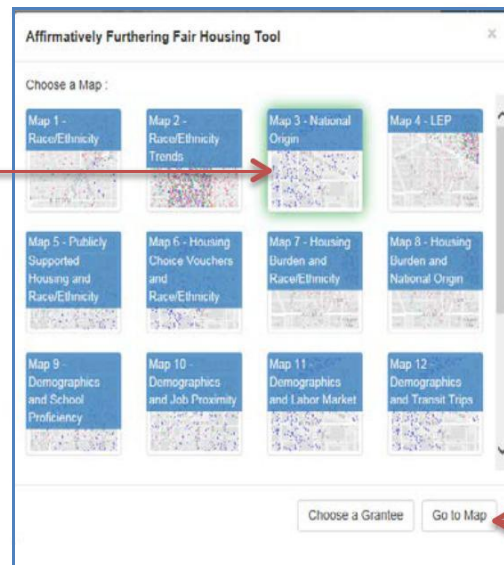


Select the Go to Map Button located at the bottom right of the application wizard.

## 2.3 Map 3 National Origin – Current 5 most populous national origin groups dot density map for Jurisdiction and Region with R/ECAPs

To locate information regarding Current national origin (5 most populous) dot density map for Jurisdiction and Region with R/ECAPs, click the Map 3 - National Origin button located on the application wizard.

Select the Go to Map Button located at the bottom right of the application wizard.



## 2.4 Map 4 LEP – LEP persons by 5 most populous languages dot density map for Jurisdiction and Region with R/ECAPs

To locate information regarding LEP persons speaking the 5 most commonly used languages for Jurisdiction and Region with R/ECAPs, click the Map 4 - LEP button located on the application wizard.

Select the Go to Map Button located at the bottom right of the application wizard.



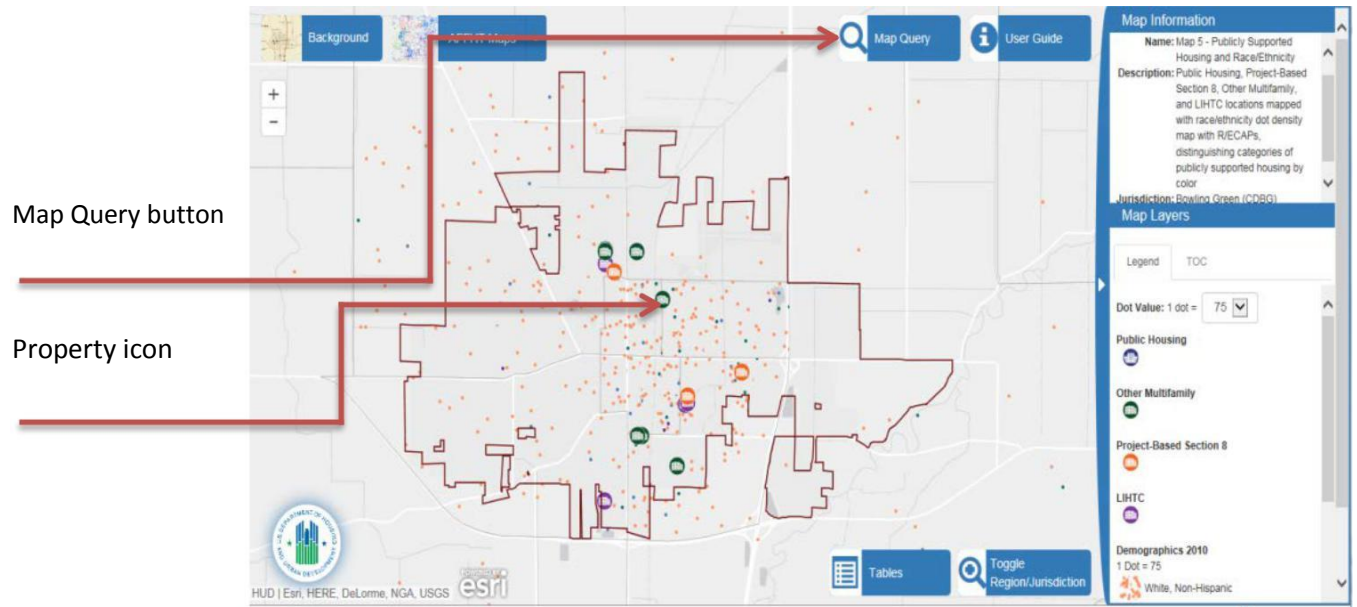
## 2.5 Map 5 Publicly Supported Housing and Race/Ethnicity – Public Housing, Project-Based Section 8, Other Multifamily, and LIHTC locations mapped with race/ethnicity dot density map with R/ECAPs, distinguishing categories of publicly supported housing by color, for the Jurisdiction and Region

To locate information regarding Public Housing, Project-Based Section 8, Other Multifamily, and LIHTC locations mapped with race/ethnicity dot density map with R/ECAPs and to distinguish categories of publicly supported housing by color, click the Map 5 – Publicly Supported Housing and Race/Ethnicity button located on the application wizard.

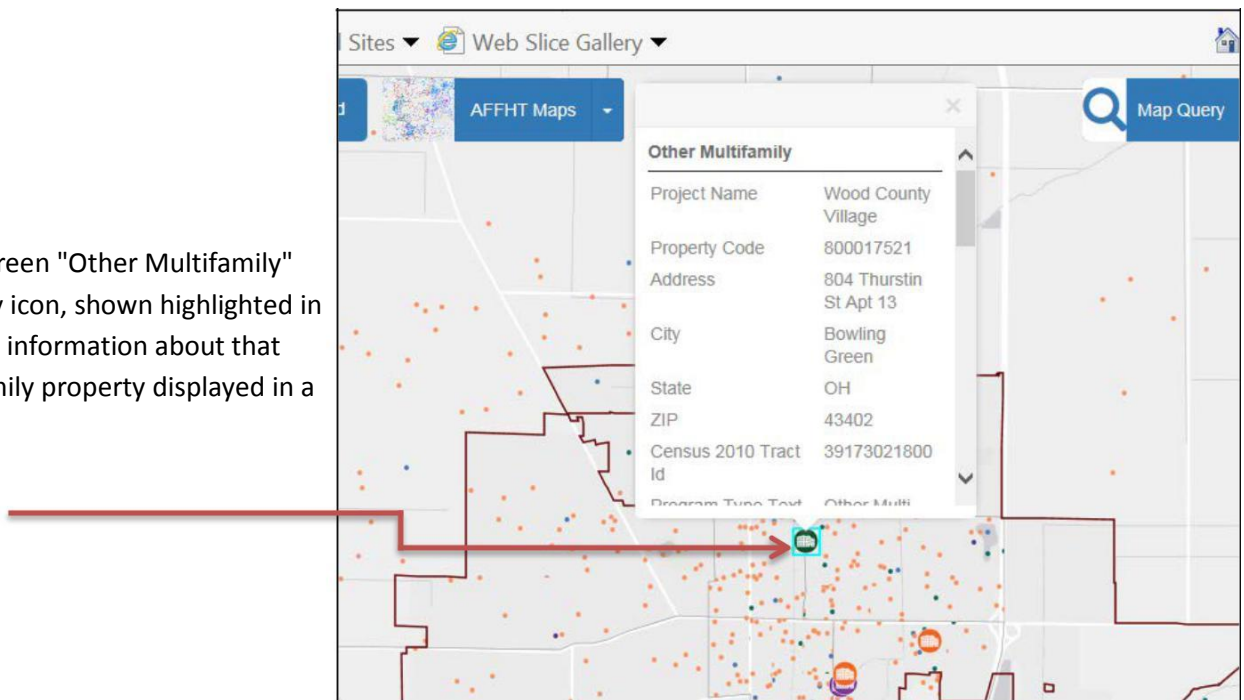


Select the Go to Map Button located at the bottom right of the application wizard.

Map 5 contains both the Map Query feature and property icons with popup information.



Click a green "Other Multifamily" property icon, shown highlighted in blue, for information about that multifamily property displayed in a popup.



Click the Map Query button to open the Map Query form. Data from the popup will appear in the form. You can alter parameters before running the query.

**AFFHT Map Query** ✕

**Criterion:** Percent Asian ▼

**Area:** Jurisdiction ▼

**Development between:** 0.00 **and** 0.00 Avg: 0.00

**Tract between:** 0.74 **and** 2.06 Avg: 1.67

**Development Type:** Other Multifamily ▼

**Record Count:** 4 matching records

Click the Run Query button Run Query to display the results in a grid:

**Query Results** ✕

Export to Excel

Project Name	Property Asian Pct	Tract Asian Pct
Wood Lane Apartments	0%	2.06%
The Residence Connection	0%	2.03%
Wood County Village	0%	0.74%

**Summary**

Property Asian Pct between 0.00 and 0.00

Tract Asian Pct between 0.74 and 2.06

Results: 4 matching records Properties

You can use the Export to Excel button Export to Excel to generate an Excel spreadsheet in addition to viewing on screen/in the grid.

## 2.6 Map 6 Housing Choice Vouchers and Race/Ethnicity – Housing Choice Vouchers thematic map with race/ethnicity dot density map and R/ECAPs, for the Jurisdiction and Region

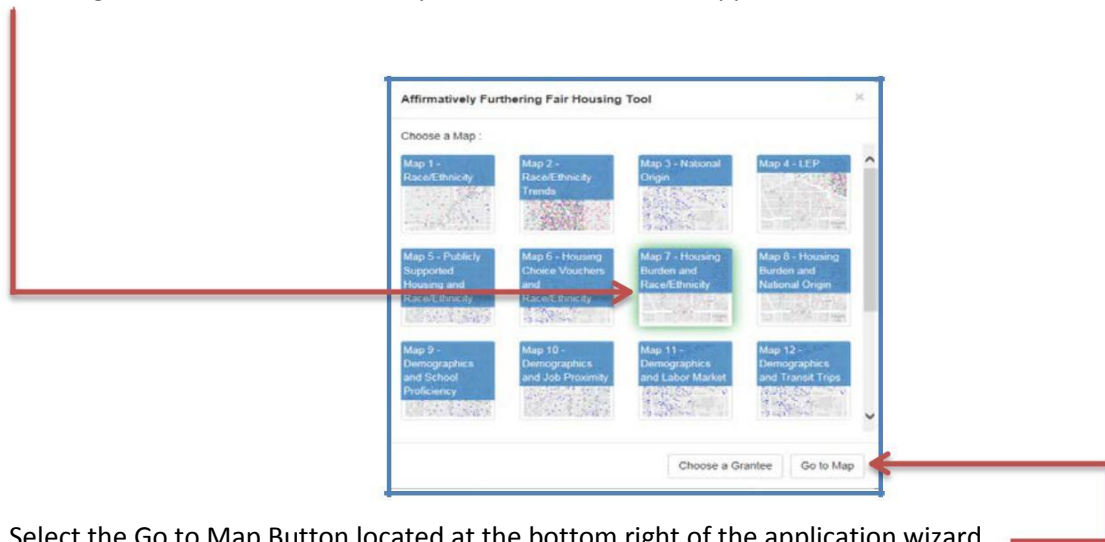
To locate information regarding housing choice voucher thematic map with race/ethnicity dot density map and R/ECAPs, click the Map 6 - Housing Choice Vouchers and Race/Ethnicity button located on the application wizard.



Select the Go to Map button located at the bottom right of the application wizard.

## 2.7 Map 7 Housing Burden and Race/Ethnicity – Households experiencing one or more housing burdens thematic map in Jurisdiction and Region with race/ethnicity dot density map and R/ECAPs

To locate the thematic map with information regarding households experiencing one or more housing burdens in Jurisdiction and Region with R/ECAPs and race/ethnicity dot density, click the Map 7 - Housing Burden and Race/Ethnicity button located on the application wizard.



Select the Go to Map Button located at the bottom right of the application wizard.



## 2.8 Map 8 Housing Burden and National Origin – Households experiencing one or more housing burdens thematic map in Jurisdiction and Region with national origin dot density map and R/ECAPs

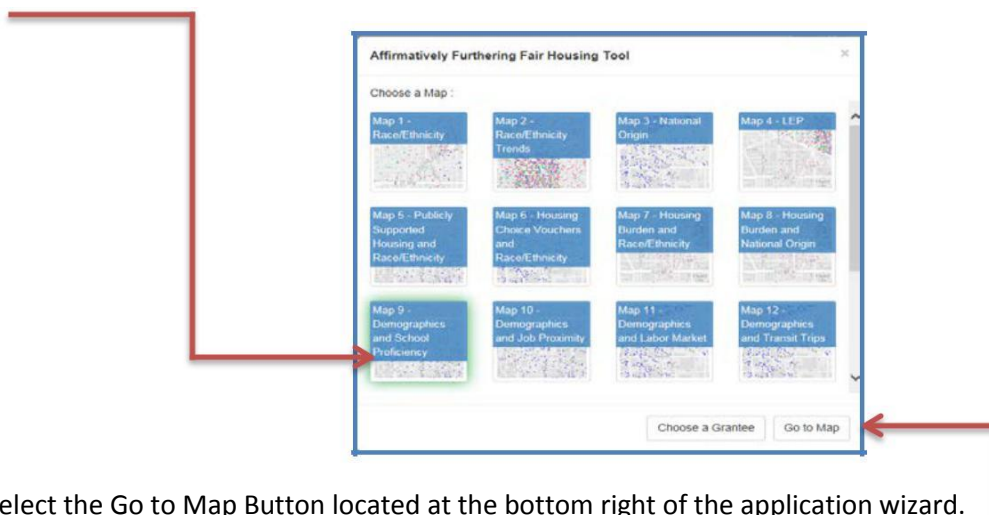
To locate the thematic map with information regarding households experiencing one or more housing burdens in Jurisdiction and Region with R/ECAPs and national origin dot density, click the Map 8 - Housing Burden and National Origin button located on the application wizard.



Select the Go to Map Button located at the bottom right of the application wizard.

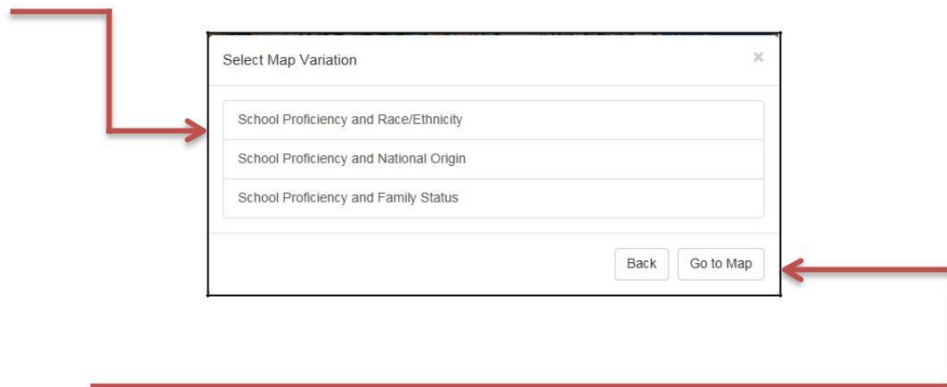
## 2.9 Map 9 Demographics and School Proficiency – School proficiency thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs

To locate information regarding school proficiency index for Jurisdiction and Region with race, ethnicity, national origin, family status, and R/ECAPs, click the Map 9 - Demographics and School Proficiency button located on the application wizard.



Select the Go to Map Button located at the bottom right of the application wizard.

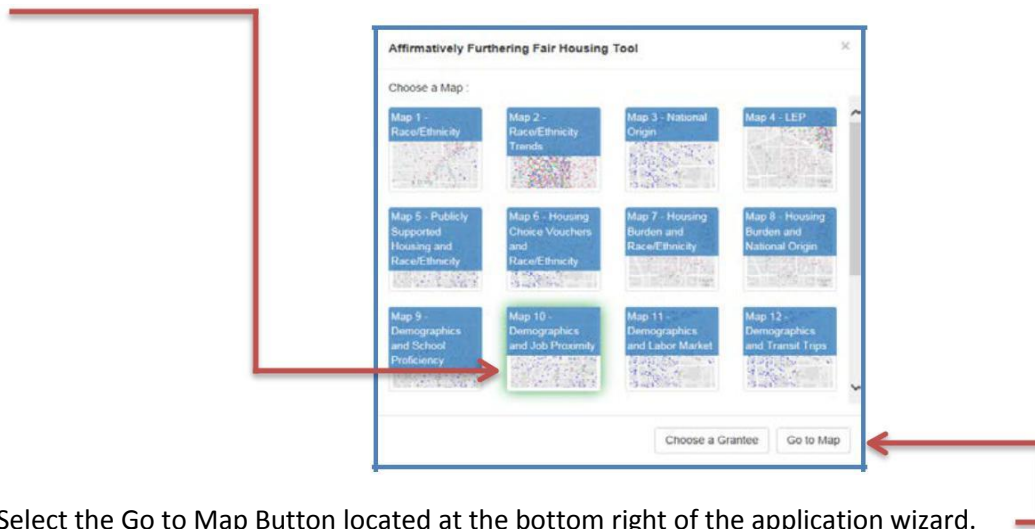
The Select Map Variation screen comes up. You can choose School Proficiency and Race/Ethnicity, School Proficiency and National Origin, or School Proficiency and Family Status.



Select the Go to Map Button located at the bottom right of the application wizard.

## 2.10 Map 10 Demographics and Job Proximity – Job proximity thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs

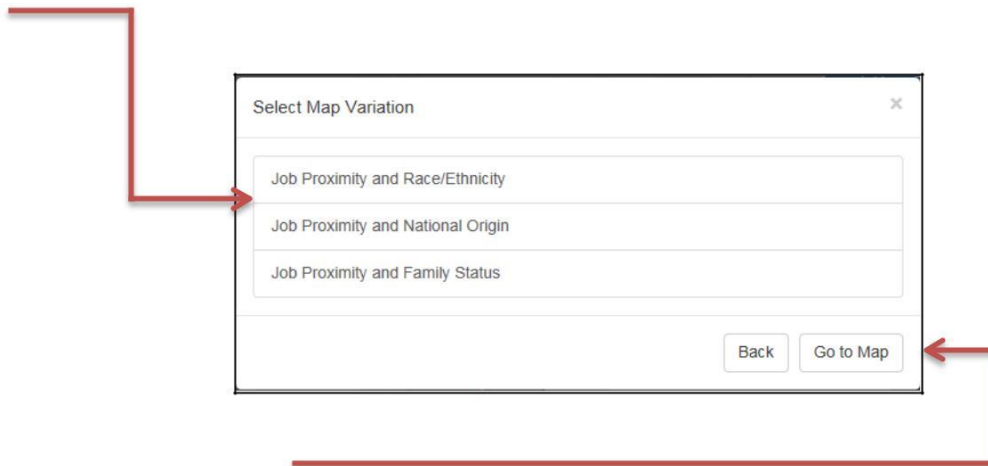
To locate information regarding jobs proximity index for Jurisdiction and Region with race/ethnicity, national origin, family status and R/ECAPs, click the Map 10 - Demographics and Jobs Proximity button located on the application wizard.



Select the Go to Map Button located at the bottom right of the application wizard.



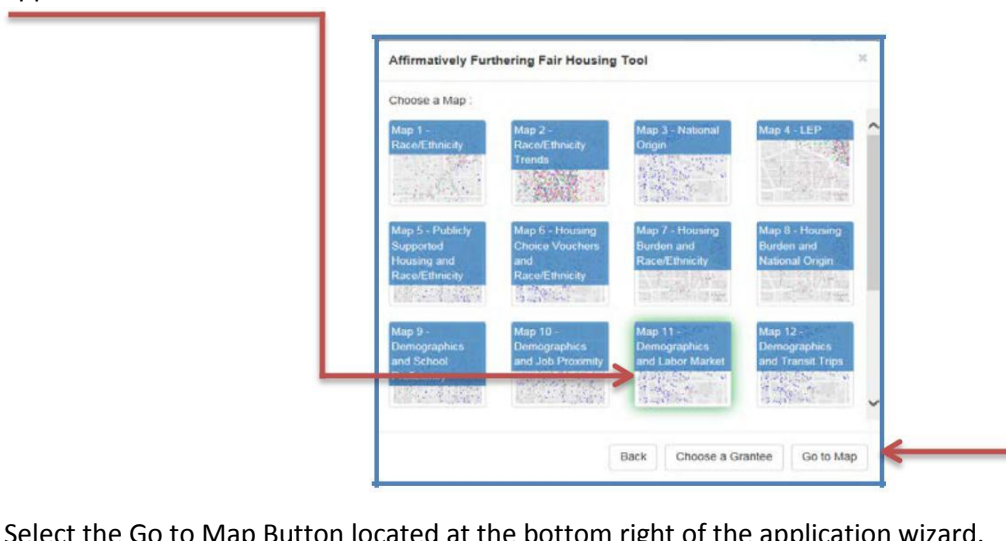
The Select Map Variation screen will appear, allowing you to choose Job Proximity and Race/Ethnicity, Job Proximity and National Origin, or Job Proximity and Family Status.



Select the Go to Map Button located at the bottom right of the application wizard.

## 2.11 Map 11 Demographics and Labor Market Engagement – Labor engagement thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs

To locate information regarding labor engagement index with race/ethnicity, national origin, family status and R/ECAP's, click the Map 11 - Demographics and Labor Market button located on the application wizard.



Select the Go to Map Button located at the bottom right of the application wizard.

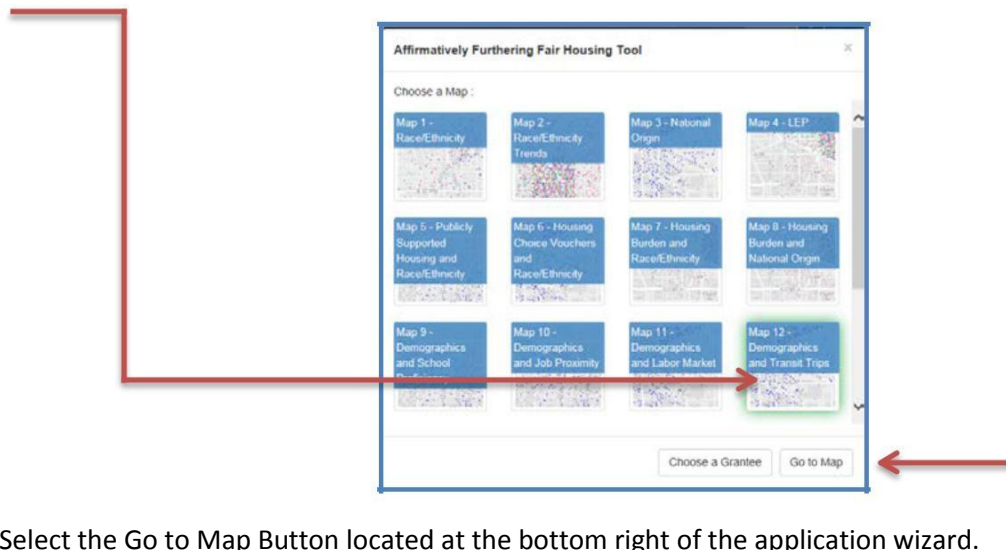
The Select Map Variation screen will appear, allowing you to choose Labor Market and Race/Ethnicity, Labor Market and National Origin, or Labor Market and Family Status.



Select the Go to Map Button located at the bottom right of the application wizard.

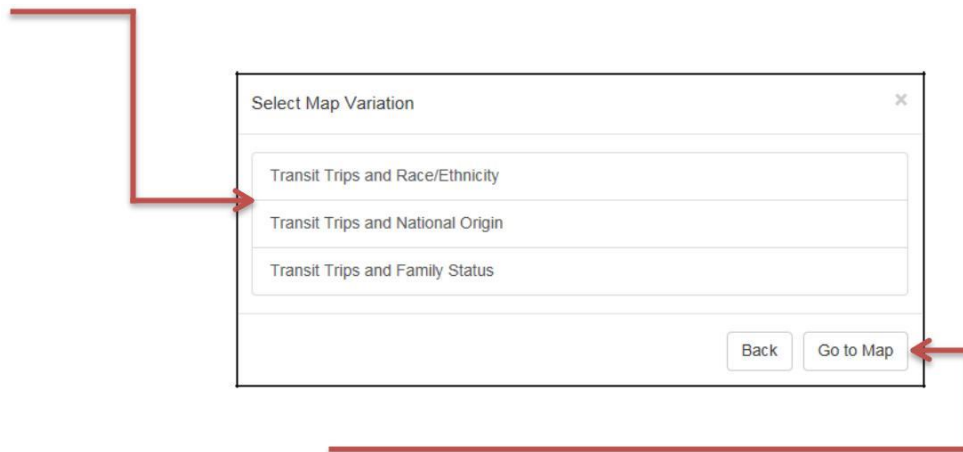
## 2.12 Map 12 Demographics and Transit Trips – Transit proximity thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs

To locate information regarding the transit trips index for jurisdiction and region with race/ethnicity, national origin, family status and R/ECAPs, click the Map 12- Demographics and Transit Trips button located on the application wizard.



Select the Go to Map Button located at the bottom right of the application wizard.

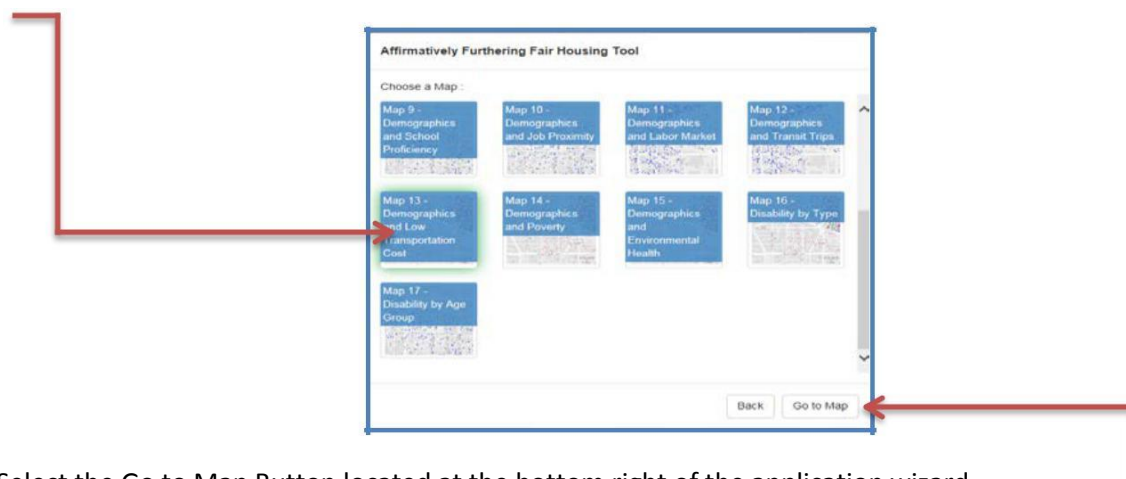
The Select Map Variation screen will appear, allowing you to choose Transit Trips and Race/Ethnicity, Transit Trips and National Origin, or Transit Trips and Family Status.



Select the Go to Map Button located at the bottom right of the application wizard.

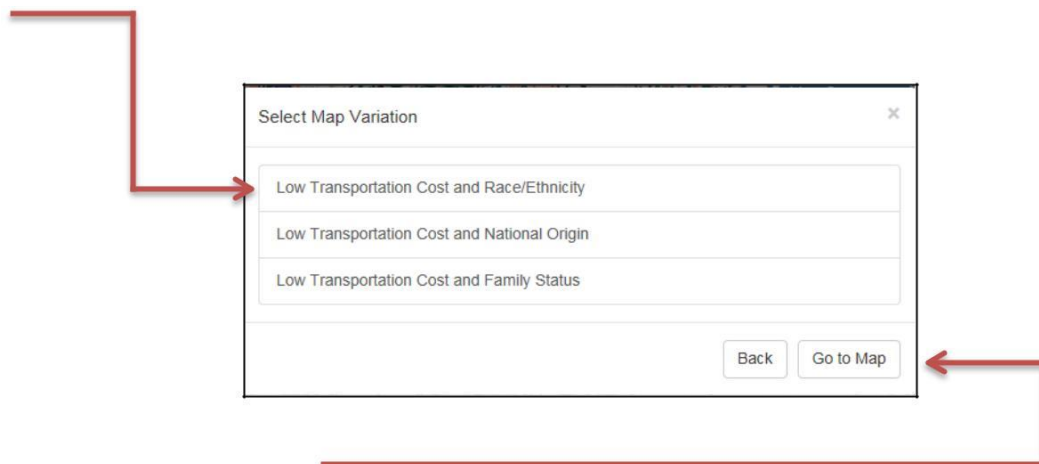
## 2.13 Map 13 Demographics and Low Transportation Cost – Low transportation cost thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs

To locate information regarding transportation cost index with race/ethnicity, national origin, family status and R/ECAPs, click the Map 13 - Demographics and Low Transportation Cost button located on the application wizard.



Select the Go to Map Button located at the bottom right of the application wizard.

The Select Map Variation screen will appear, allowing you to choose Low Transportation Cost and Race/Ethnicity, Low Transportation Cost and National Origin, or Low Transportation Cost and Family Status.



Select the Go to Map Button located at the bottom right of the application wizard.

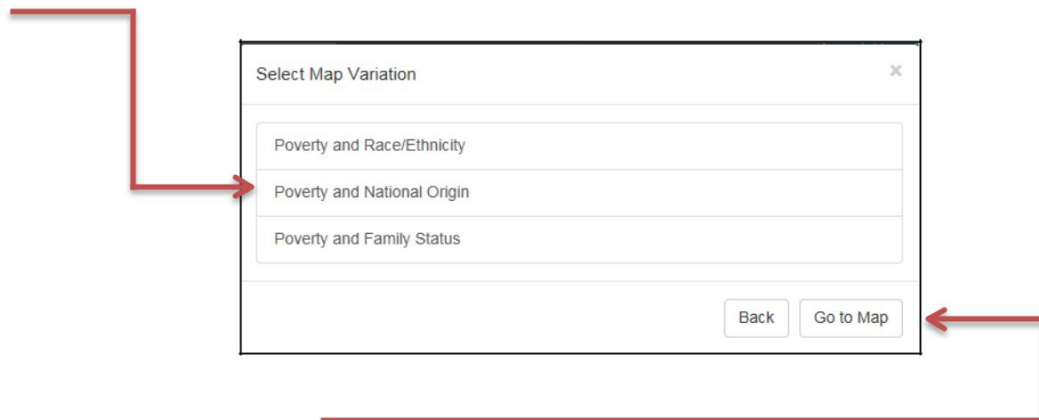
## 2.14 Map 14 Demographics and Poverty – Low poverty thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps and R/ECAPs

To locate information regarding poverty index with race/ethnicity, national origin, family status and R/ECAPs, click the Map 14 - Demographics and Poverty button located on the application wizard.



Select the Go to Map Button located at the bottom right of the application wizard.

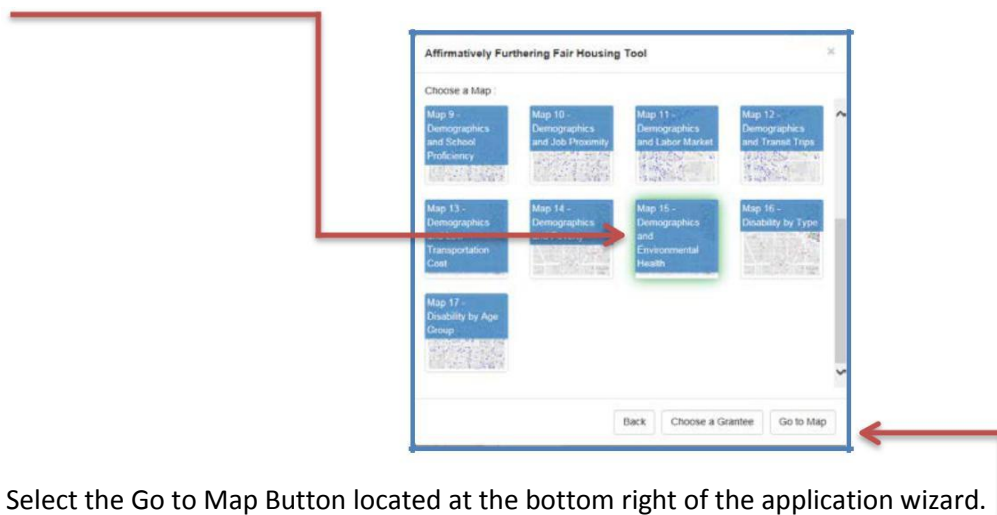
The Select Map Variation screen will appear, allowing you to choose Poverty and Race/Ethnicity, Poverty and National Origin, or Poverty and Family Status.



Select the Go to Map Button located at the bottom right of the application wizard.

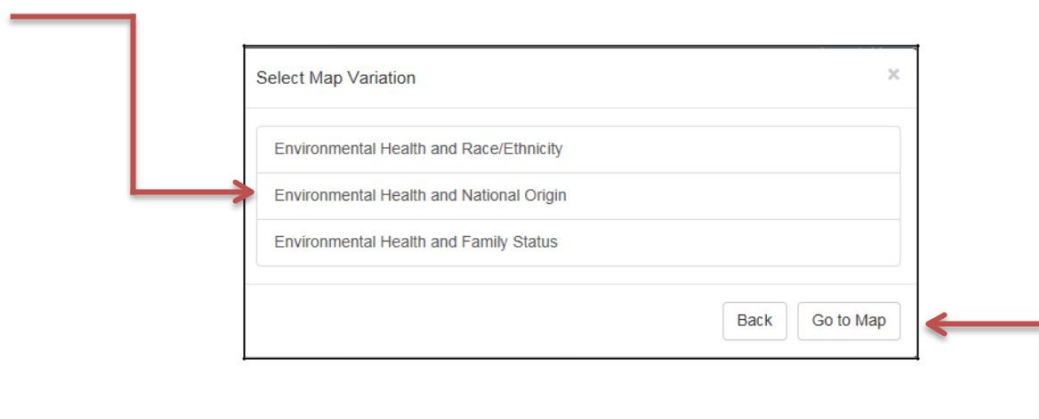
## 2.15 Map 15 Demographics and Environmental Health – Environmental health thematic map for Jurisdiction and Region with race/ethnicity, national origin, and family status maps with R/ECAPs

To locate information regarding environmental health index with race/ethnicity, national origin, family status and R/ECAPs, click the Map 15 – Demographics and Environmental Health button located on the application wizard.



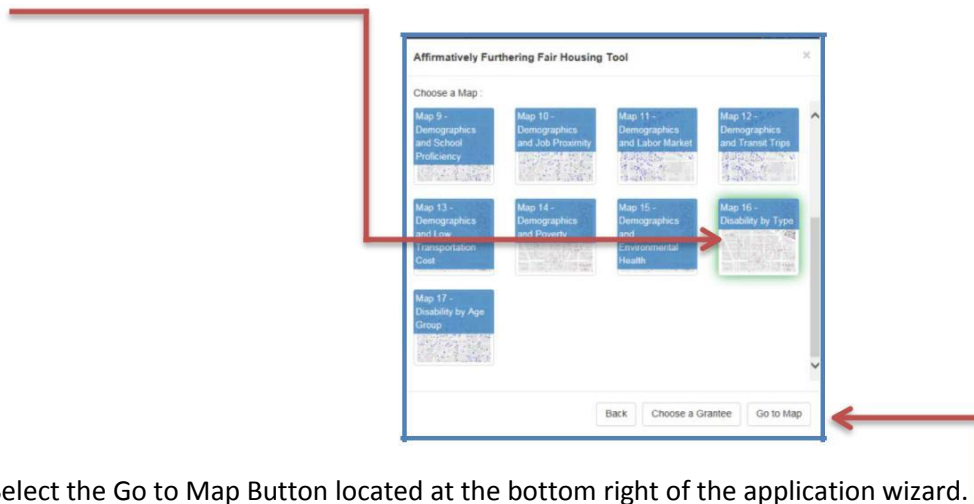
Select the Go to Map Button located at the bottom right of the application wizard.

The Select Map Variation screen will appear, allowing you to choose Environmental Health and Race/Ethnicity, Environmental Health and National Origin, or Environmental Health and Family Status. Click the Go to Map button located at the bottom right of the screen.



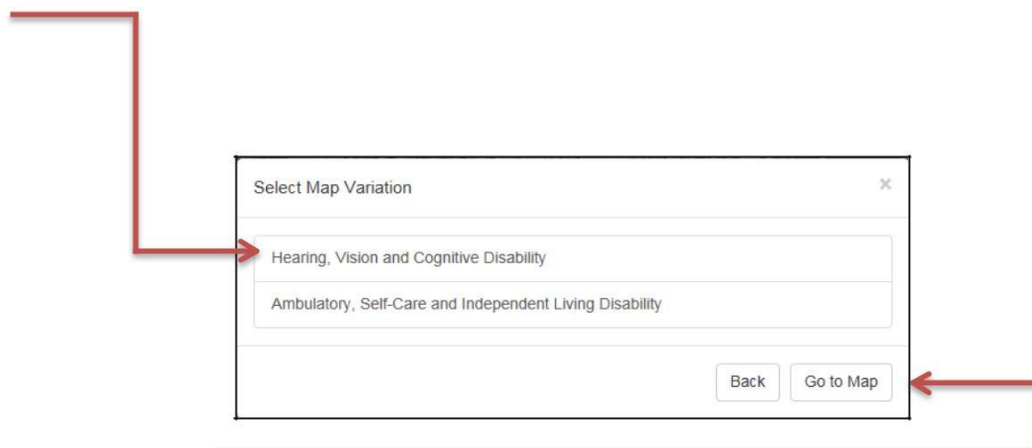
## 2.16 Map 16 Disability by Type - Dot density map of the population of persons with disabilities by persons with vision, hearing, cognitive, ambulatory, self-care, and independent living difficulties with R/ECAPs for Jurisdiction and Region

To locate information regarding population of persons with disabilities by persons with vision, hearing, cognitive, ambulatory, self-care, and independent living difficulties with R/ECAPs for Jurisdiction and Region, click the Map 16 - Disability by Type button located on the application wizard.



Select the Go to Map Button located at the bottom right of the application wizard.

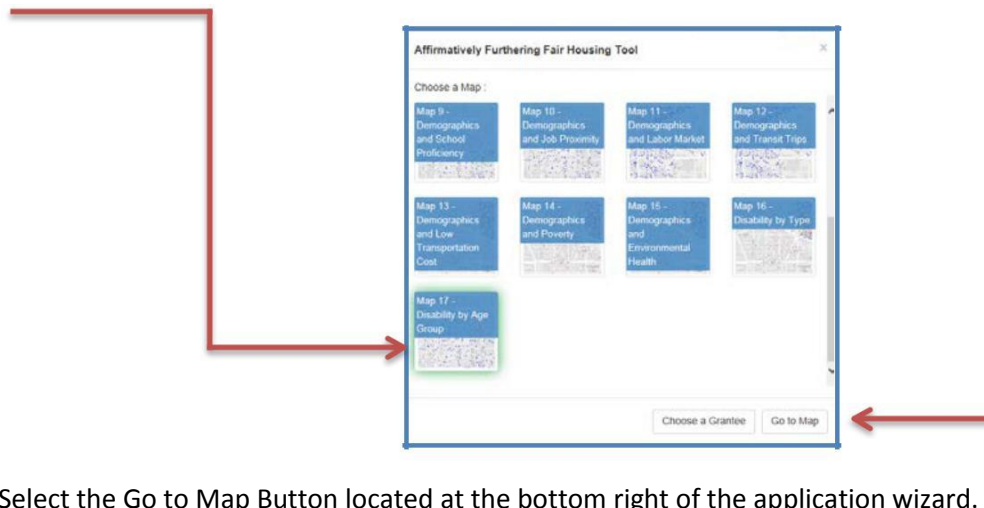
The Select Map Variation screen will appear, allowing you to choose Hearing, Vision and Cognitive Disability, or Ambulatory, Self-Care and Independent Living Disability.



Select the Go to Map Button located at the bottom right of the application wizard.

## 2.17 Map 17 Disability by Age Group – All persons with disabilities by age range (5-17; 18-64; and 65+) dot density map with R/ECAPs for Jurisdiction and Region

To locate information regarding all persons with disabilities by age range (5-17, 18-64, 65+) with R/ECAPs, click the Map 17 – Disability by Age Group button located on the application wizard.



Select the Go to Map Button located at the bottom right of the application wizard.

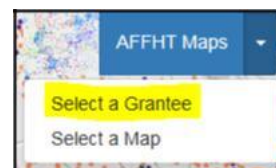
## 2.18 Zoom In/Out

There are several ways to zoom in or out on the map. Use the zoom buttons located on the map toolbar or double-click anywhere in the map to zoom in or out one level or to center your screen on the mouse cursor.



## 2.19 Select a Grantee

The Select a Grantee screen, as shown below, is the landing page for AFFHT. It allows users to view the list of Grantees by State and Jurisdiction from the drop-down menus. You can return to the Select a Grantee screen from any screen within AFFHT by selecting the AFFHT Maps button and clicking “Select a Grantee” in the dropdown.



The following options are presented users:

- A state selection dropdown
- A jurisdiction selection dropdown
- A toggle slider that allows users to select either Jurisdiction or Region for view type
- The option to select “Go to Map,” which will display items the user has selected and “Choose a Map,” which will allow the user to return to the map wizard.

Affirmatively Furthering Fair Housing Tool

Step 1: Pick your state.  
OH

Step 2: Pick your jurisdiction  
Akron (CDBG, HOME, ESG)  
Alliance (CDBG)  
Barberton (CDBG)  
Bowling Green (CDBG)

Region: Akron, OH
Jurisdiction
Region

Choose a Map
Go to Map

## 2.20 Map Information

Map Information

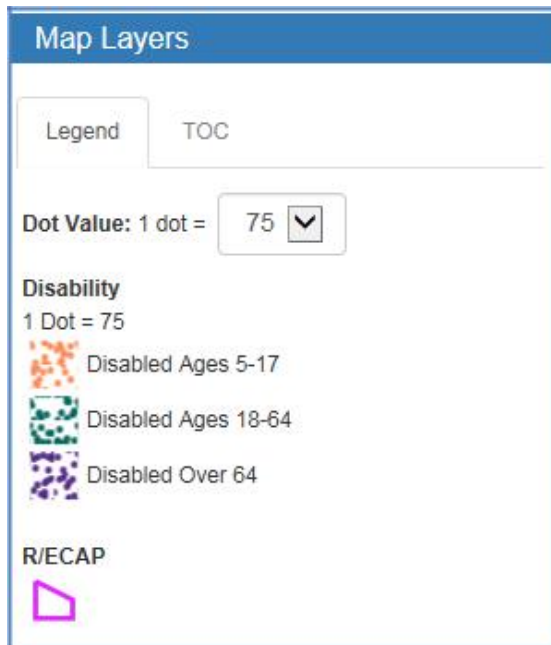
Bowling Green (CDBG)  
**Name:** Map 17 - Disability by Age Group  
**Description:** All persons with disabilities by age range (5-17)(18-64)(65+) with R/ECAPs  
**Jurisdiction:** Bowling Green (CDBG)  
**Region:** Toledo, OH

The Map Information box provides the user with detailed information as to what information they are currently viewing. This information might include:

- Map Number
- Map Name
- Map Description
- Jurisdiction
- Region

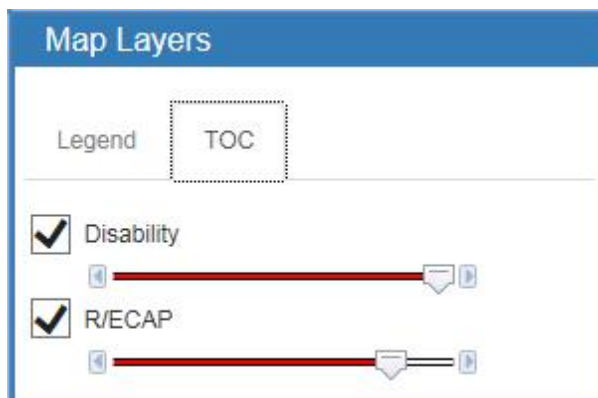


## 2.21 Map Layers - Legend



The Legend indicates the symbolism, classifications, and color for each selected map layer.

## 2.22 Map Layers - Table of Contents



The Table of Contents lists every layer on the map to show what the features in each layer represent.

## 2.23 Dot Density Renderer



The Dot Density Renderer included in the legend allows for the creation of dot density visualizations on data. Users can use dot density maps to visualize the variation in spatial density of a discrete spatial phenomenon. The Dot Density Renderer is adjusted via a drop-down menu that allows the user to choose one value from a list. When the drop-down list is inactive, it displays a single value. When activated, it displays a list of values in a drop-down menu, from which the user may select one. The Dot Density Renderer can be adjusted in increments of 5, starting at 1 and ending at 100. By default, the Dot Density Renderer is set to 75.

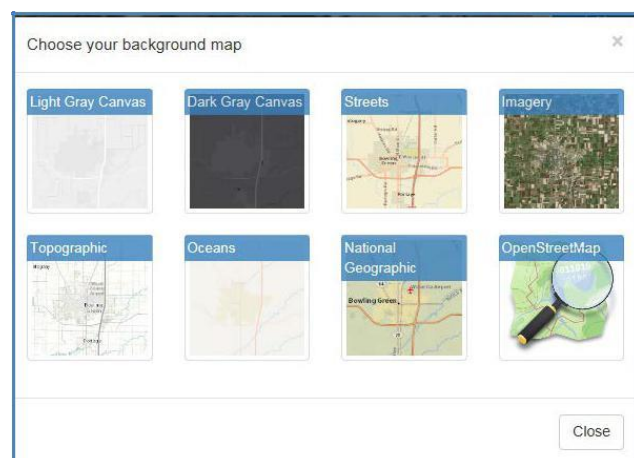
**Note: Dots are plotted randomly within tracts or block groups and do not represent actual locations.**

## 2.24 Specify Background Button



By clicking the Background button, users can specify one of 8 detail levels for a displayed map background:

- **Light Gray Canvas** – Draws attention to thematic content by providing a neutral background with minimal colors, labels, and features
- **Dark Gray Canvas** – Draws attention to thematic content by providing a dark background with minimal colors, labels, and features
- **Streets** – Presents highway-level data for world and street-level data
- **Imagery** – Displays imagery plus layers showing boundaries, places, and transportation, including street names
- **Topographic** – Displays topographic maps, which include boundaries, cities, water features, physiographic features, parks, landmarks, transportation, and buildings
- **Oceans** – Displays as a basemap that includes bathymetry, surface and subsurface feature names, and derived depths. This map is designed to be



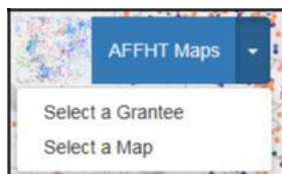
used as a basemap by marine GIS professionals and as a reference map by users interested in ocean data.

- **National Geographic** – Displays as a general reference map for information and educational purposes. This map is also designed to be used as a basemap by GIS professionals and other users for creating Web maps and Web mapping applications
- **OpenStreetMap** – Displays a map based upon a collaborative project that creates a free, editable map of the world

## 2.25 AFFHT Maps Button



By clicking the AFFHT Maps button, users can select one of 17 maps. The drop-down menu on this button not only allows you to select a map, but also to change grantees. Choose Select a Grantee to choose State and Jurisdiction, and choose Select a Map to navigate directly to the Choose a Map screen.

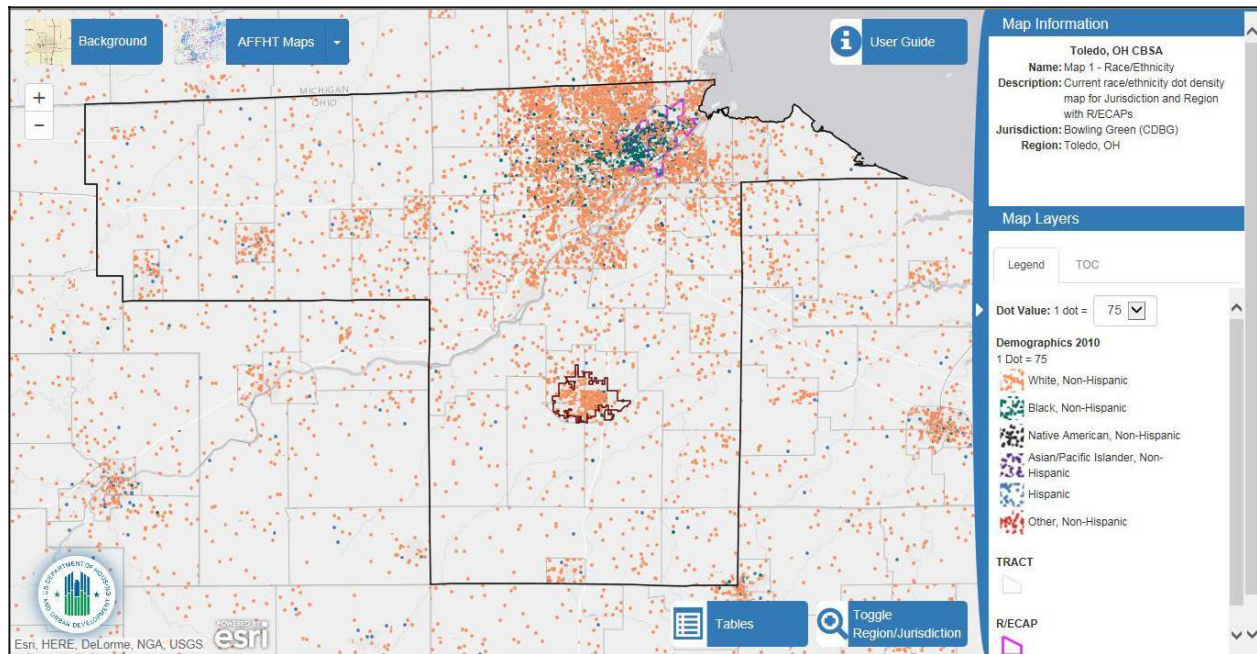


## 2.26 Toggle Jurisdiction/Region Button

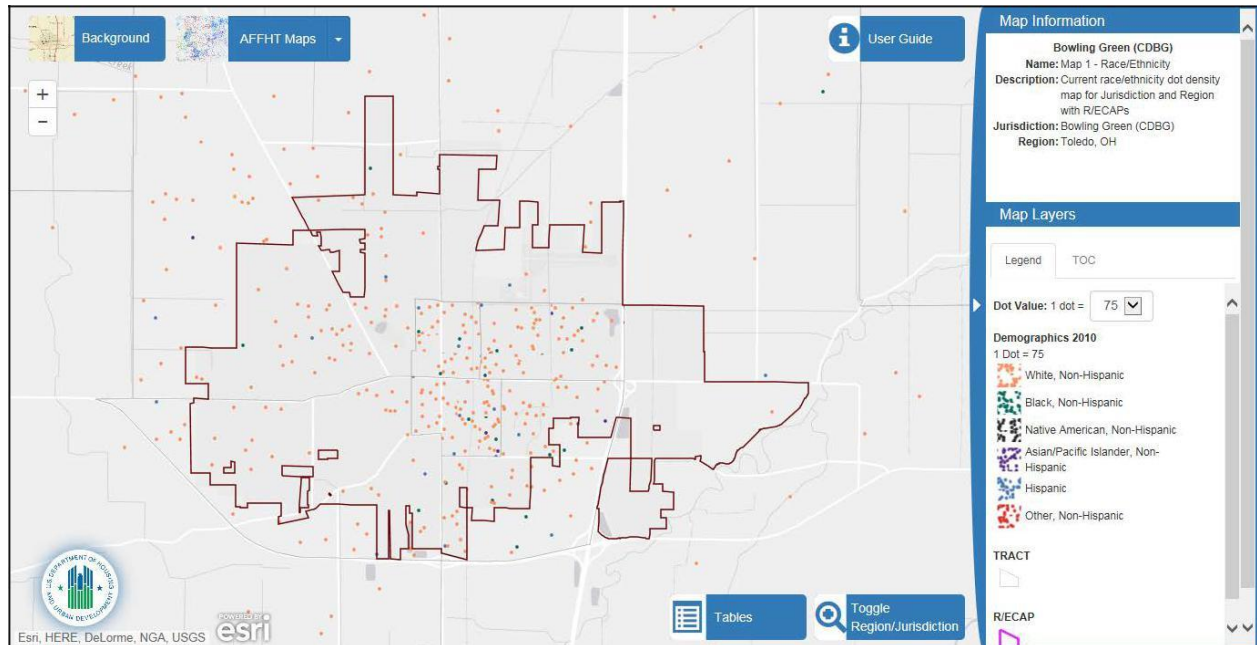


The Toggle Jurisdiction/Region button allows users to switch back and forth between two alternate views on the screen: regional view and jurisdictional view.

## Regional View

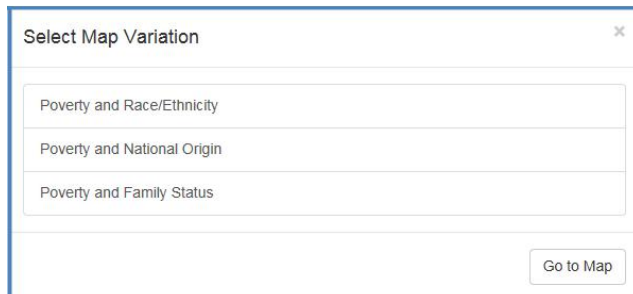


## Jurisdictional View



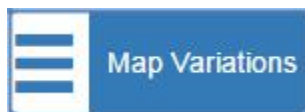
## 2.27 Select Map Variation (not applicable to all maps)

The Select Map Variation pop-up window allows users to choose amongst variations of the selected map. Select the correct map variation that is appropriate, then select Go to Map.



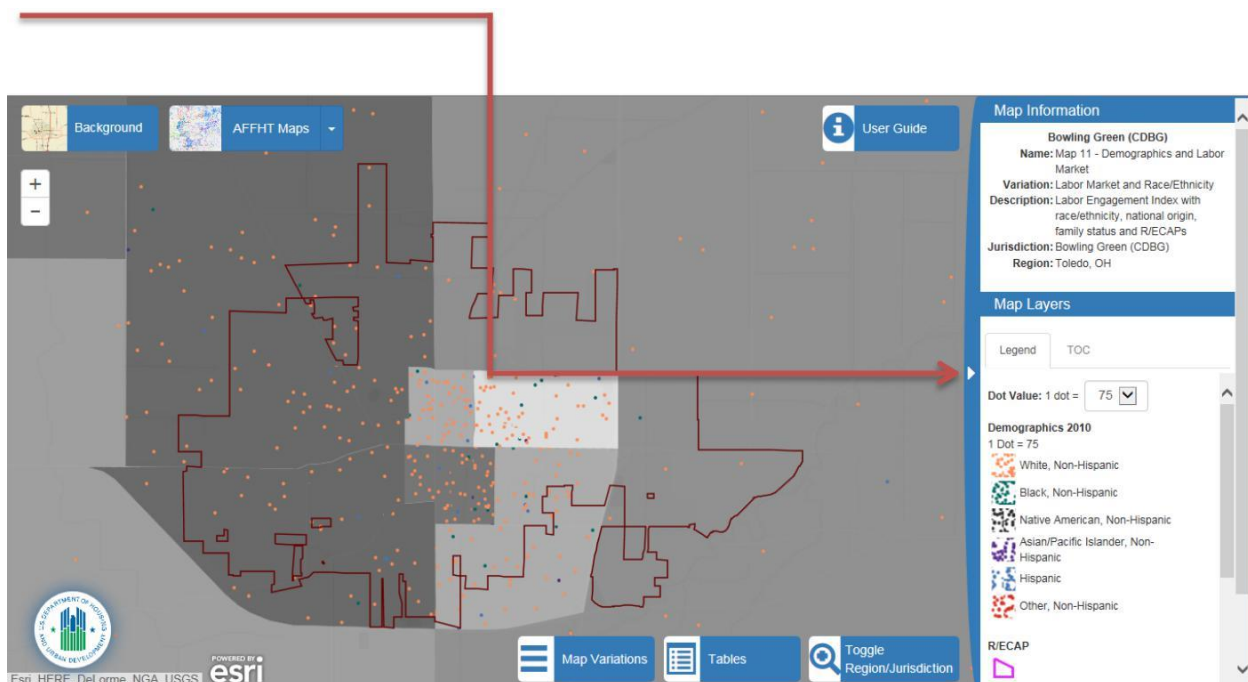
## 2.28 Map Variations Button

The *Map Variations* button allows users to choose amongst variations of the selected map.



## 2.29 Hide/Show Legend Area on Map

Users can hide or display the Legend area by clicking the arrow at the edge of the Legend area as shown below. When the clicked, the Legend area disappears. When clicked again, the Legend area reappears.





### 3. Report Capabilities

The following reports are available:

- Table 1 Demographics – Tabular demographic data for Jurisdiction and Region (including total population, the number and percentage of persons by race/ethnicity, national origin [10 most populous], LEP [10 most populous], disability [by disability type], sex, age range [under 18, 18-64, 65+], and households with children)
- Table 2 Demographic Trends – Tabular demographic trend data for Jurisdiction and Region (including the number and percentage of persons by race/ethnicity, total national origin [foreign born], total LEP, sex, age range [under 18, 18-64, 65+], and households with children)
- Table 3 Racial/Ethnic Dissimilarity – Tabular race/ethnicity dissimilarity index for Jurisdiction and Region
- Table 4 R/ECAP Demographics – Tabular data for the percentage of racial/ethnic groups, families with children, and national origin groups (10 most populous) for the Jurisdiction and Region who reside in R/ECAPs.
- Table 5 Publicly Supported Housing Units by Program Category – Tabular data for total units by 4 categories of publicly supported housing in the Jurisdiction (Public Housing, Project-Based Section 8, Other Multifamily, Housing Choice Voucher [HCV] Program) for the Jurisdiction
- Table 6 Publicly Supported Housing Residents by Race/Ethnicity – Tabular race/ethnicity data for 4 categories of publicly supported housing (Public Housing, Project-Based Section 8, Other Multifamily, HCV) in the Jurisdiction compared to the population as a whole, and to persons earning 30% AMI, in the Jurisdiction
- Table 7 R/ECAP and Non-R/ECAP Demographics by Publicly Supported Housing Program Category – Tabular data on publicly supported housing units and R/ECAPs for the Jurisdiction
- Table 8 Demographics of Publicly Supported Housing Developments by Program Category – Development-level demographics by Public Housing, Project-Based Section 8, and Other Multifamily for the Jurisdiction
- Table 9 Demographics of Households with Disproportionate Housing Needs – Tabular data of total households in the Jurisdiction and Region and the total number and percentage of households experiencing one or more housing burdens by race/ethnicity and family size in the Jurisdiction and Region
- Table 10 Demographics of Households with Severe Housing Cost Burden – Tabular data of the total number of households in the Jurisdiction and Region and the number and percentage of households experiencing severe housing burdens by race/ethnicity for the Jurisdiction and Region
- Table 11 Publicly Supported Housing by Program Category: Units by Number of Bedrooms and Number of Children – Tabular data on the number of bedrooms for units of 4 categories of

publicly supported housing (Public Housing, Project-Based Section 8, Other Multifamily, HCV) for the Jurisdiction

- Table 12 Opportunity Indicators by Race/Ethnicity – Tabular data of opportunity indices for school proficiency, jobs proximity, labor-market engagement, transit trips, low transportation cost, low poverty, and environmental health for the Jurisdiction and Region by race/ethnicity and among households below the Federal poverty line
- Table 13 Disability by Type – Tabular data of persons with vision, hearing, cognitive, ambulatory, self-care, and independent living disabilities for the Jurisdiction and Region
- Table 14 Disability by Age Group – Tabular data of persons with disabilities by age range (5-17, 18-64, and 65+) for the Jurisdiction and Region
- Table 15 Disability by Publicly Supported Housing Program Category – Tabular data on disability and publicly supported housing for the Jurisdiction and Region

## 3.1 Report Procedures

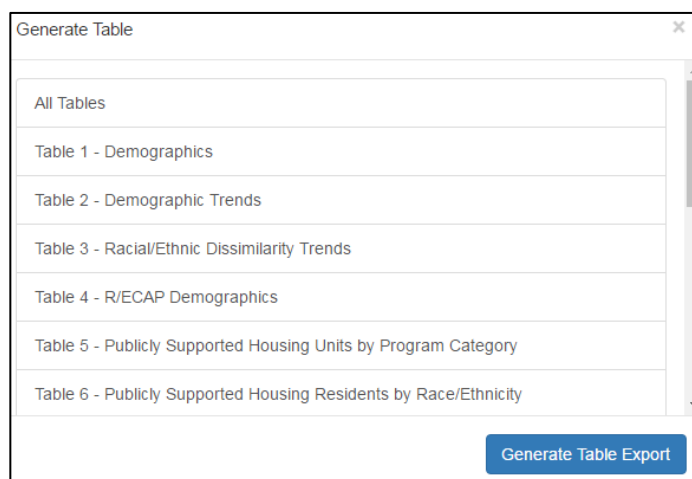
### 3.1.1 Tables Button

The Tables button allows the user to access reports.



### 3.1.2 Generate Table

The Generate Table pop-up allows users to choose amongst 15 different tables and export the results to an Excel file. You can choose one table from which to export files, or you can select All Tables to see information from every table.



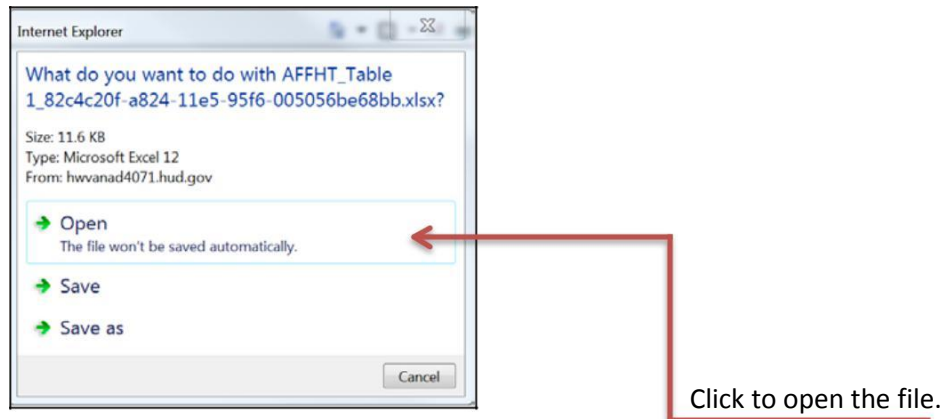
After you click the Generate Table Export button



you will get a Generating Table File... message until the Download Table File clickable link

[Download Table File](#) appears when the Excel file is ready to download. Click the link to download

the file. Depending on your browser, you will get a message similar to the one below asking what you want to do with the file. Shown is an example from Internet Explorer.

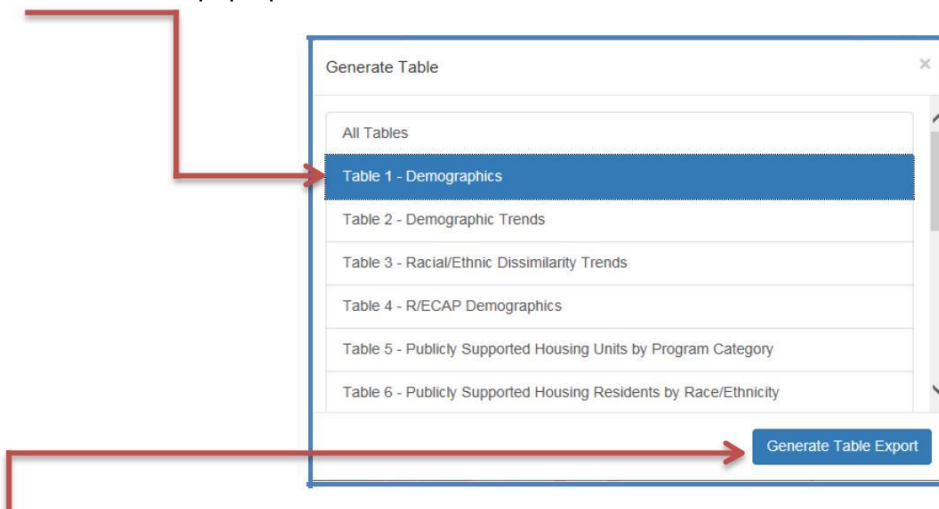


The popup will close. You may then close the Excel file and go back to the Generate Table popup.

The following sections show how to select and generate a report for each table.

### 3.1.3 Table 1 – Demographics

To access information regarding demographics, click the Table 1 - Demographics button located in the Generate Table pop-up.



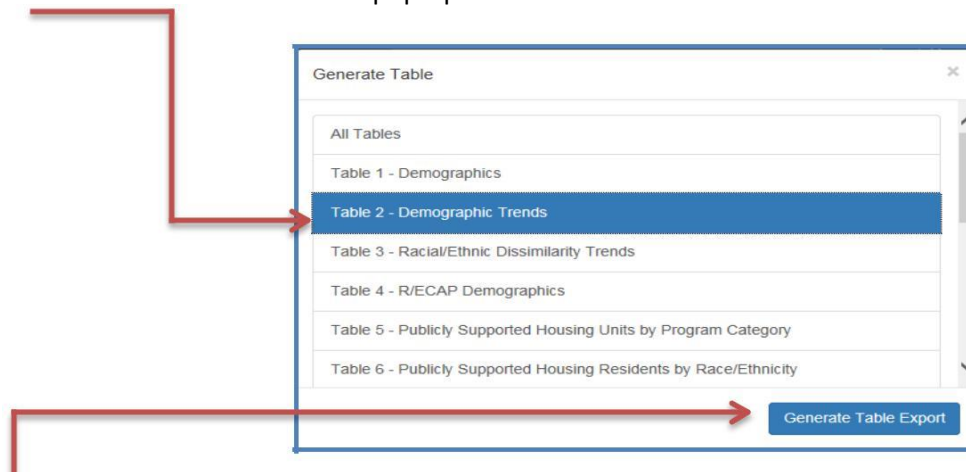
Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.



### 3.1.4 Table 2 - Demographics Trends

To access information regarding demographic trends, click the Table 2 - Demographics Trends button located in the Generate Table pop-up.



Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.5 Table 3 - Racial/Ethnic Dissimilarity Trends

To access information regarding Racial/Ethnic Dissimilarity Trends, click the Table 4- Racial/Ethnic Dissimilarity Trends button located in the Generate Table pop-up.

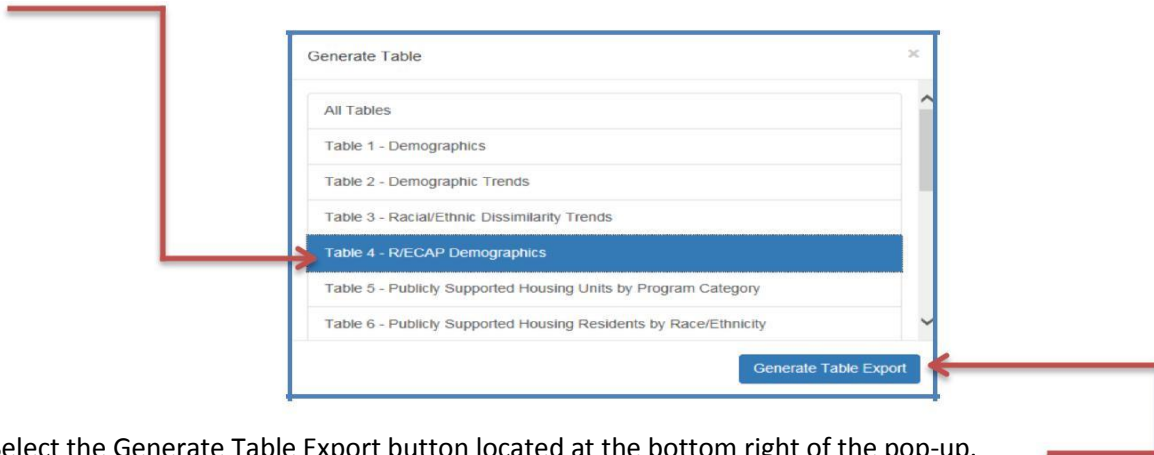


Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.6 Table 4 – R/ECAP Demographics

To access information regarding R/ECAP Demographics, click the Table 4 – R/ECAP Demographics button located in the Generate Table pop-up.



Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.7 Table 5 – Publicly Supported Housing Units by Program Category

To access information regarding Publicly Supported Housing Units by Program Category, click the Table 5 – Publicly Supported Housing Units by Program Category button located in the Generate Table pop-up.

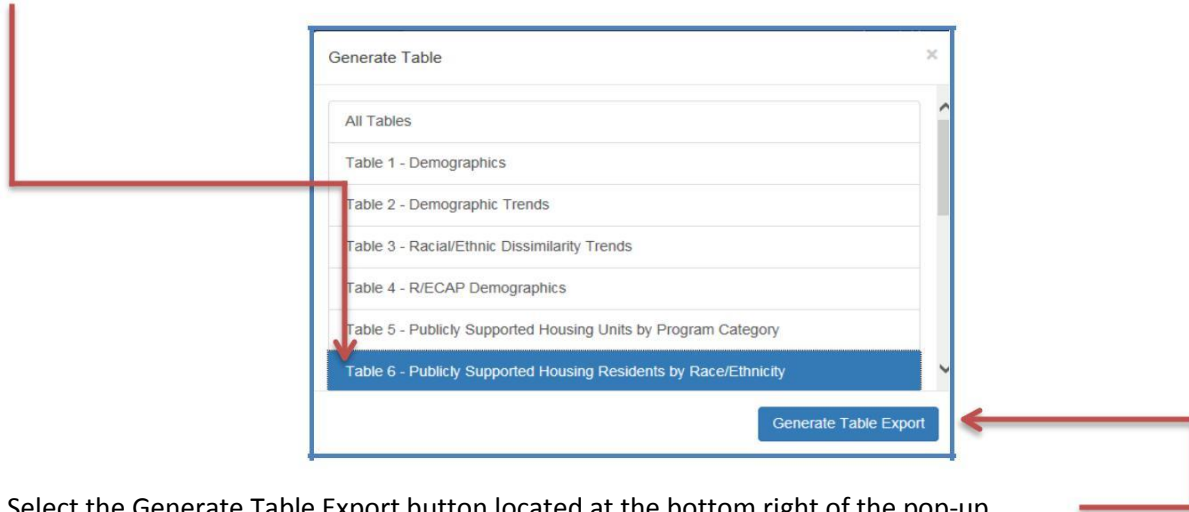


Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.8 Table 6 – Publicly Supported Housing Residents by Race/Ethnicity

To access information regarding Publicly Supported Housing Residents by Race/Ethnicity, click Table 6 - Publicly Supported Housing Residents by Race/Ethnicity button located in the Generate Table pop-up.

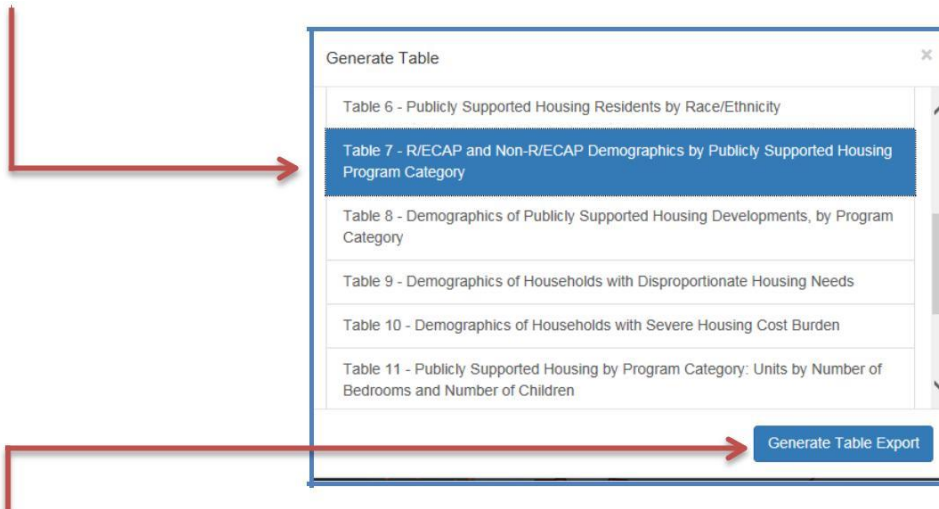


Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.9 Table 7 – R/ECAP and Non-R/ECAP Demographics by Publicly Supported Housing Program Category

To access information regarding R/ECAP and Non-R/ECAP Demographics by Publicly Supported Housing Program Category, click the Table 7 - R/ECAP and Non-R/ECAP Demographics by Publicly Supported Housing Program Category button located in the Generate Table pop-up.

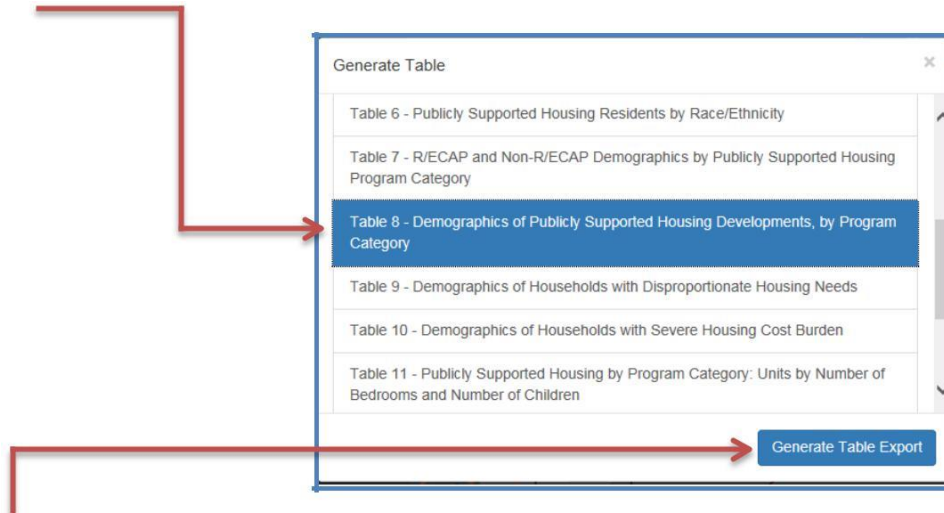


Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.10 Table 8 – Demographics of Publicly Supported Housing Developments by Program Category

To access information regarding Demographics of Publicly Supported Housing Developments by Program Category, click the Table 8 - Demographics of Publicly Supported Housing Developments by Program Category button located in the Generate Table pop-up.

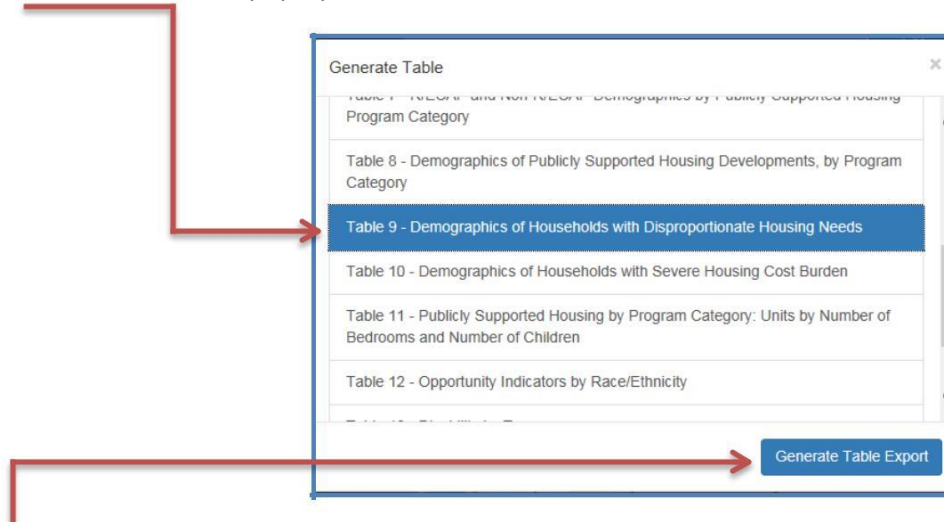


Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.11 Table 9 - Demographics of Households with Disproportionate Housing Needs

To access information regarding Demographics of Households with Disproportionate Housing Needs, click the Table 9 - Demographics of Households with Disproportionate Housing Needs button located in the Generate Table pop-up.

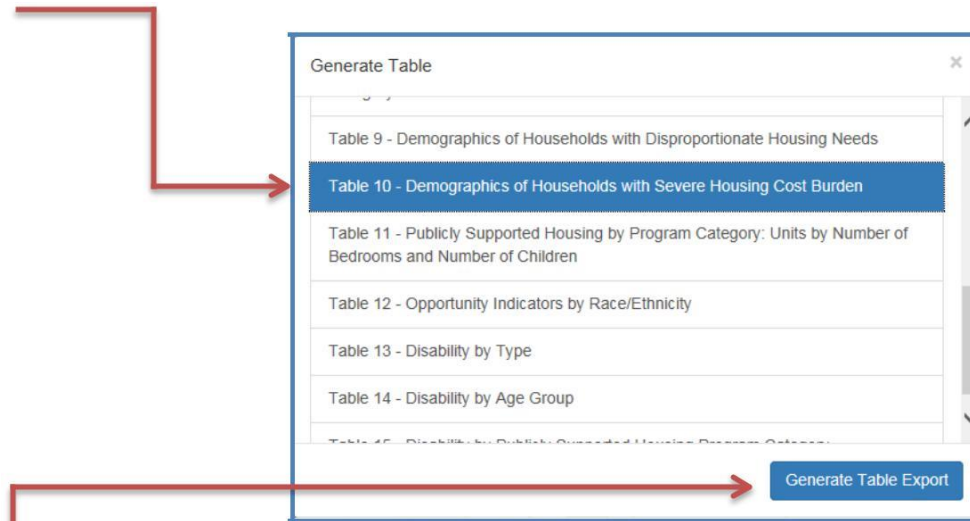


Select the Generate Export Table button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.12 Table 10 - Demographics of Households with Severe Housing Cost Burden

To access information regarding Demographics of Households with Severe Housing Cost Burden, click the Table 10 - Demographics of Households with Severe Housing Cost Burden button located in the Generate Table pop-up.

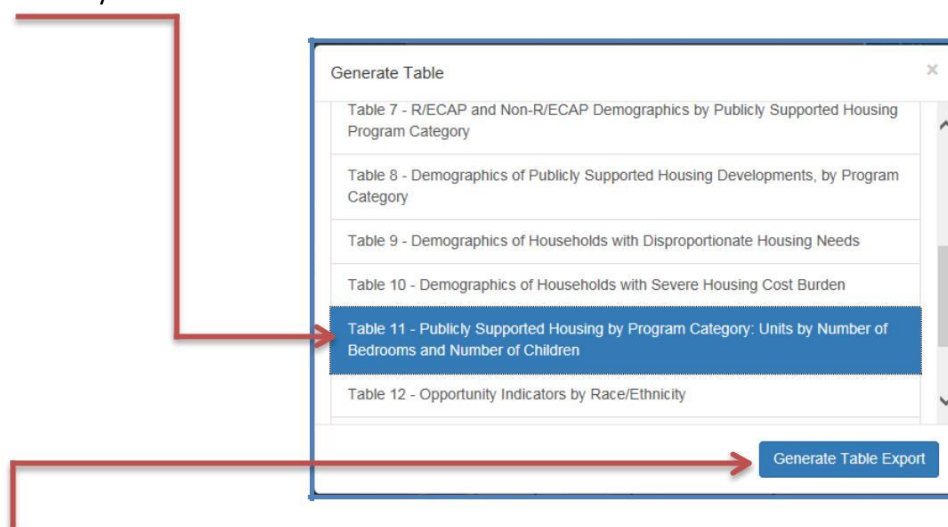


Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.13 Table 11 - Publicly Supported Housing by Program Category: Units by Number of Bedrooms and Number of Children

To access information regarding Publicly Supported Housing by Program Category: Units by Number of Bedrooms and Number of Children, click Table 11 - Publicly Supported Housing by Program Category: Units by Number of Bedrooms and Number of Children button located in the Generate Table pop-up.

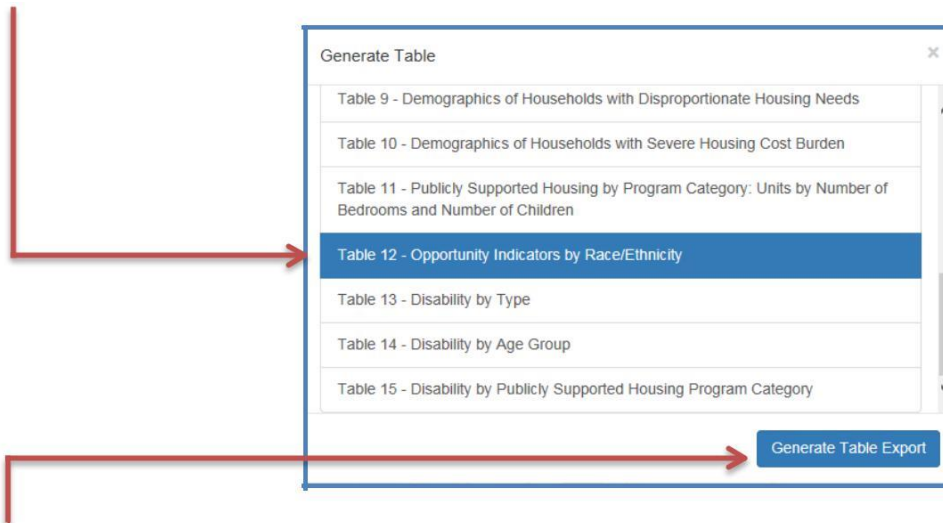


Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening or saving the generated Excel file.

### 3.1.14 Table 12 – Opportunity Indicators by Race/Ethnicity

To access information regarding the Opportunity Indicators by Race/Ethnicity, click the Table 12 - Opportunity Indicators by Race/Ethnicity button located in the Generate Table pop-up.

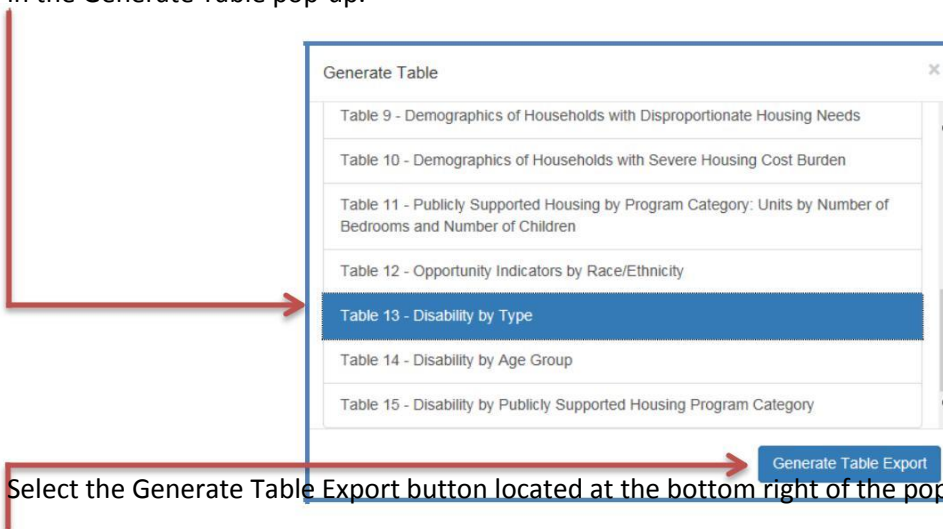


Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.15 Table 13 – Disability by Type

To access information regarding Disability by Type, click the Table 13 – Disability by Type button located in the Generate Table pop-up.

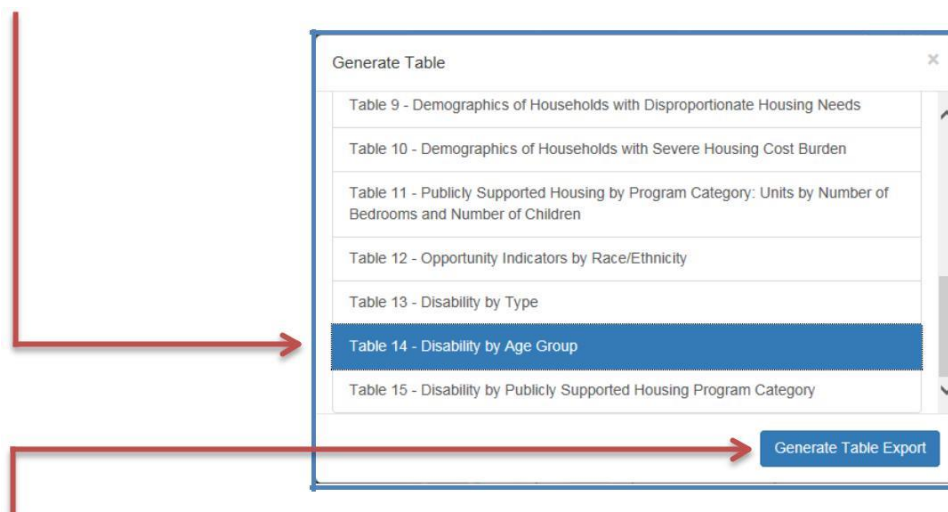


Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.16 Table 14 – Disability by Age Group

To access information regarding Disability by Age Group, click the Table 14 - Disability by Age Group button located in the Generate Table pop-up.

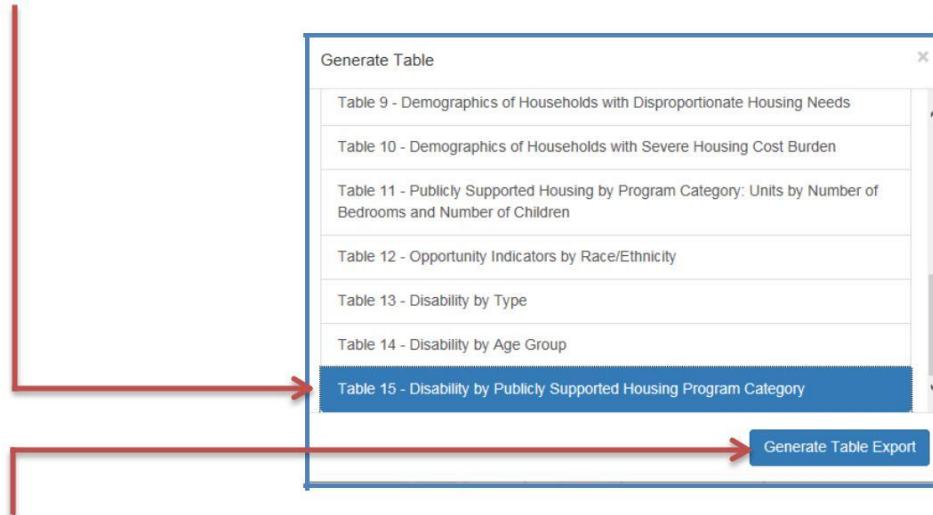


Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

### 3.1.17 Table 15 - Disability by Publicly Supported Housing Program Category

To access information regarding Disability by Publicly Supported Housing Program Category, click the Table 15 - Disability by Publicly Supported Housing Program Category button located in the Generate Table pop-up.



Select the Generate Table Export button located at the bottom right of the pop-up.

Follow instructions in section 3.1.2 for opening and saving the generated Excel file.

## 4. Getting Help

For other information on the AFFH Data and Mapping Tool, please see additional resources on the HUD Exchange page, under the tab “AFFH Data and Mapping”:

<https://www.hudexchange.info/programs/affh/resources/>

If you have any questions regarding the AFFH Data and Mapping Tool, please go to the HUD Exchange by visiting <https://www.hudexchange.info/affh>, and submit your question through the Ask-A-Question feature. HUD staff will work to provide you with answers. Please stay connected to HUD Exchange to access AFFH resources such as trainings, fact sheets, and guidance materials.