

User Instructions for the Prototype Geospatial Tool for the Proposed Affirmatively Furthering Fair Housing Rule

Introduction:

The proposed AFFH Rule outlines a process whereby program participants will use HUD-provided data, along with any local supplementation, to assess fair housing conditions, identify determinants perpetuating fair housing barriers, and establish fair housing goals in the assessment of fair housing (AFH) that will inform future investment plans. The purpose of this prototype tool is to demonstrate baseline capability and how the data HUD plans to provide program participants will facilitate successful completion of the proposed AFH and help grantees fulfill their AFFH obligations. Note, this version is just a prototype for demonstration purposes and does not include all the full roster of anticipated features such as the ability to create standard data tables and custom reports. Based on feedback received during the 60 days of public comment, HUD will work on a more robust version to share during the final stage of the rulemaking process.

Basic capabilities/functionality:

- **Navigating the Map:** The prototype geospatial tool employs a simple pan and zoom functionality. The landing page starts with Chicago, Illinois, yet you can access any location in the United States by clicking your mouse on the map and dragging it to move to a different community. You can also use your mouse wheel to zoom in and out. To zoom in on a specific area, hold down the shift key and use the mouse to draw a square around the location you want to see in more detail. The level of detail on the map will increase as you zoom in, revealing streets, landmarks, building footprints, etc.

- **Selecting Data Layers from the Table of Contents:** Data layers are organized categorically in a vertical table on the left-hand side of screen. If you click on the + sign for a category, it will expand and show a menu of available sub-layers. If you click -, the sub-layers will disappear from the menu. For a layer to display, you need to click the main category box (a checkmark will appear) and then check any sub-level layers you want to see on the map. Note, if you are zoomed out too far and try to expand a category, the sub-layers will not appear. You may need to wait a few moments for the selected data layer(s) to appear. If for some reason the data layer does not render, try closing your browser and open a new browser session and return to the site. The following lists all of the main categories with their sub-layers. For more detailed information about data sources and methodology, HUD has provided a detailed document available with the proposed Rule on the Federal Register site:
 - Voucher Locations: This category only has one data set and uses dot density to show voucher concentrations with one green dot equaling 20 voucher locations within a tract.
 - Voucher Locations
 - Subsidized Housing: This category has three data sets and uses symbols to show locations of the following types of subsidized housing.
 - LIHTC Properties
 - Multifamily-Assisted Housing
 - Public Housing
 - Children: This category has six data sets using dot density to show concentrations of children by race/ethnicity with one dot equaling 75 children.
 - White Not-Hispanic Children
 - Black/African-American Children

- Hispanic Children
 - Asian Children
 - American Indian Children
 - Pacific Islander/Hawaiian Children
- Disability: This category has seven data sets and uses dot density to show concentrations of persons with disability by five disability types and also by race/ethnicity.
 - Sensory Disability
 - Physical Disability
 - Mental Disability
 - Selfcare Disability
 - Errands Disability
 - Work Disability
 - Disability by Race/Ethnicity
- Elderly: This category has six data sets using dot density to show where elderly persons by race are concentrated with one dot equaling 75 persons.
 - White Not-Hispanic Elderly
 - Black/African-American Elderly
 - Hispanic Elderly
 - Asian Elderly
 - American Indian Elderly
 - Pacific Islander/Hawaiian Elderly
- Limited English Proficiency (LEP): This category has one data set using dot density to show concentrations of LEP individuals with one dot equaling 50 persons.
 - Limited English Proficiency
- Non-Elderly Adults, Living Alone: This category has six data sets using dot density to show concentrations of non-elderly adults living alone with one dot equaling 75 persons.
 - White Not-Hispanic Living Alone
 - Black/African-American Living Alone
 - Hispanic Living Alone
 - Asian Living Alone
 - American Living Alone
 - Pacific Islander/Hawaiian Living Alone
- Poor Population: This category has thirteen data sets split using dot density to show concentrations of elderly persons in poverty by race/ethnicity and children in poverty by race/ethnicity with one dot equaling 50 persons.
 - Poor White Not-Hispanic Elderly
 - Poor Black Elderly
 - Poor Hispanic Elderly
 - Poor Asian Elderly
 - Poor American Indian Elderly
 - Poor Pacific Islander Elderly
 - Poor White Not-Hispanic Elderly
 - Poor White Not-Hispanic Child
 - Poor Black Child
 - Poor Hispanic Child
 - Poor Asian Child

- Poor American Indian Child
 - Poor Pacific Islander Child
 - Race Ethnicity (2010): This category has seven data sets using dot density to show concentrations in 2010 by race/ethnicity of all persons and by individual race/ethnicity with one dot equaling 75 persons.
 - Race/Ethnicity (2010) All Persons
 - White Not-Hispanic Population
 - Black/African-American Population
 - Hispanic Population
 - Asian Population
 - American Indian Population
 - Pacific Islander/Hawaiian Population
 - Race Ethnicity Historical: This category has three data sets using dot density to show concentrations in 2000, 1990, and 1980 for white, black, and Hispanic persons with one dot equaling 75 persons.
 - Race/Ethnicity 2000
 - Race/Ethnicity 1990
 - Race/Ethnicity 1980
 - Community Assets and Stressors: This category has six data sets using colored deciles to illustrate greater/lesser access or exposure to specific assets and stressors. Colors in the 1-10 range indicate limited access to an asset/more exposure to a stressor while colors in the 91-100 palette indicate greater access to an asset/minimal exposure to a stressor.
 - Poverty
 - School Proficiency
 - Labor Market Engagement
 - Job Access (NOTE: Data for the state of Massachusetts and Puerto Rico is not available because these states and territories are not in regular production through the Census Bureau's LEHD Origin-Destination Employment Statistics (LODES) program (see <http://lehd.ces.census.gov/onthemap/LODES7/LODESTechDoc7.0.pdf> for more information on LODES).)
 - Transit Access (NOTE: HUD incorporated data from over 200 U.S. transit agencies available through the General Transit Feed Specification (GTFS) exchange maintained by <http://www.gtfs-data-exchange.com/>. If transit agencies do not report into the GTFS exchange their service will not be captured in the HUD transit measure and this sub-layer will not show anything.)
 - Health Hazard Exposure
 - Racially/Ethnically-Concentrated Area of Poverty: This category has one data set wherein census tracts that meet the HUD R/ECAP definition show up as red.
 - Racially/Ethnically Concentrated Area of Poverty
- **Understanding Dot Density:** Many data layers employ dot density to illustrate various population concentrations. Dot density does not show the actual locations of an individual or group of people. Rather, it employs density to depict concentrations of individuals within a specific boundary, often a census tract or block group. The locations of the dots are randomly generated within the respective unit of geography. The dot density scale varies across categories, but remains consistent for sub-layers within a category. As you will see on the map, for some groups when you zoom in, a census tract outline will appear to give you an idea of the

population concentration within a tract. Of note, some protected classes may not show up on map because their population numbers are not sufficient to meet the dot density scale for that category.

- **Switching Basemap Layers:** The upper right of the map features a tab labeled Basemap. If you click the down arrow, you will see three options: topo, aerial, and streets. The default setting is topo, which allows you to see building footprints if you zoom in. Aerial utilizes satellite imagery to provide a high level of photographic detail. Streets offers similar views as topo, but with street names.