Florida Housing Finance Corporation -Areas of Opportunity Analysis Technical Documentation

The Shimberg Center created geospatial data and maps to help FHFC in analyzing its policy options to encourage affordable housing development in areas of opportunity. Following is technical information regarding the data and maps to assist in their use and comprehension.

Map PDFs

Following is an example list of the set of maps provided in PDF format. A separate set of maps was created for each of the seven counties as well as specifically requested sub-county areas. Each PDF includes 22 maps, with each map displayed at the county-level and the requested sub-county area(s).

Map PDF Name	Description
1_Final_properties_2005_2015	FHFC Funded Applications 2002 - 2015
2_Final_elder_properties	FHFC Applications – Elderly Properties – Funded/Not Funded
3_Final_family_properties	FHFC Applications – Family Properties – Funded/Not Funded
4_Final_AHI_by_primary_funder	Assisted Properties by Primary Funding Source
5_Final_below200poverty	% of Population below 200% of Poverty Level
6_Final_emprate	Employment Rate
7_Final_labforce	% of Population in Labor Force (16 – 64 years)
8_Final_somecollege	Educational Attainment Rates – Some College or Higher (25+yrs)
9_Final_medinc	Median Household Income
10_Final_medinc_HML	Median Household Income – Low/Moderate/High
11_Final_medinc_chng	Change in Median H'hold Income – 2000 & 2009-13
12_Final_ownership	Home Ownership Rates
13_Final_popchange	% Population Change 2000 & 2010
14_Final_sf_sales_price	Median Single-Family Sales Price - 2014
15_Final_sfsales_chng	Change in Single-Family Sales Price – 2010 & 2014
16_Final_sf_jvsf	Median Single-Family Just-Value per Square Foot
17_Final_sf_jvsf_chng	Change in Median Single-Family Just-Value per Square Foot – 2001 &
	2015
18_Final_mf_jvsf	Median Multi-Family (10+ Units) Just-Value per Square Foot
19_Final_mf_jvsf_chng	Change in Median Multi-Family (10+ Units) Just-Value per Square Foot –
	2001 & 2015
20_Final_travel_cost	Average Annual Household Transportation Cost
21_Final_land_use	Vacant Residential Acres as % of All Residential Acres
Merged	Above PDF's merged into county set

Map Templates

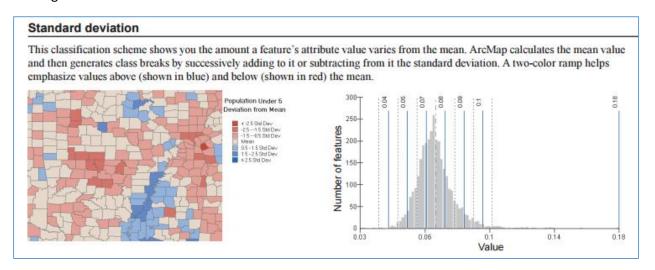
A map template was created for each of the 21 maps above, with a separate set for each of the seven counties. The template names are reflected by the PDF names in the table above.

Each template contains the spatial layers displayed in that map. The templates, when opened in ArcGIS, display the data in "Layout View", which shows how the map looks when exported to PDF. The order of the data shown in the template's "table-of-contents" is important as it sets how the data displays in the

final map. If the order is changed, the maps will display differently, according to the new order. It is important to understand this, as layers can become invisible in the map if they are moved underneath a layer that can block its display (e.g. property data being hidden underneath tract-level data).

The tract-level indicator layers in the various templates are generally shaded using the same range of colors (yellow-orange-red), with the exception of the maps representing change over time which required more color variation.

The ranges used for the shading each of the indicator layers was based on the distribution of the tract data values for each indicator. Using symbol tools in ArcGIS, a standard deviation method was applied to determine the value ranges for each change in shading. An explanation of how this method of shading works is shown below.



The ranges for shading each of the indicator layers was calculated in the same way. Firstly, the data was separated into subsets by county, so that the ranges on each map reflect the range of values for that indicator in that specific county. Secondly, within each county and for each indicator, any tract that had a value to be suppressed or had no data, was selected and shaded accordingly. The remaining tracts (i.e. those not suppress or had no data) were then categorized for each indicator using the standard deviation method described above.

There was one exception to the above - shading the population change maps. For all counties, where a tract had a population change of 200% or less, the tracts were selected and shaded using the standard deviation method above. Tracts with a change greater than 200% were grouped together and shaded as one color.

Data

Two main spatial datasets were created for the maps – a property-level dataset of FHFC applications, and a tract-level dataset of different Census and Property Appraiser variables.