Project Proposal

Description

Throughout the year, the Illinois Housing Development Authority (the Authority) receives applications for affordable home financing. The Market and Analytics team evaluates these project applications and reviews market areas and potential sites to ensure housing is going in areas where it is needed. As part of this process, members of the team select market areas based on groupings of census tracts around the proposed site and explore economic and demographic characteristics for the area. Typically this is down with a computer script that creates a spreadsheet with relevant information. However, it has been proposed that enhanced visualization could improve the evaluation process. It is suggested that an interactive map with corresponding data visualization could allow the analysts to better explore the market areas.

Persona

Lisa is the coordinator of the Market and Analytics team. She has been with the Authority for almost 40 years. She is deeply knowledgeable of the evaluation process and local housing market trends. However, she is not as technically savvy as some of the other Authority employees. Despite a general hesitation to new software and technology, she is well-versed at the computer programs she uses in her work. Her main Achilles heel, technologically speaking, is learning new software.

Scenario

After receiving a batch of project applications, Lisa and her team must go through the proposals, find project locations, and determine market areas surrounding potential projects. As part of the analysis, Lisa would like to see general economic and demographic characteristics for the selected areas. Selecting market areas should be done at the tract level, so that a grouping of contiguous tracts will make up the general area of analysis for projects. This process should allow for easy exploration of different market area configurations. It will need to be repeated multiple times for different applications.

Because the typical user is hesitant of new technologies, the interface should be simple, provide enough information needed but not more, and easy to navigate. In order to find First, because users will be searching for particular areas, search functionality should be included in the web-map. Next, economic and demographic data should be included at the tract level. Users should be able to select and deselect these areas while determining appropriate tact configurations for market areas. Data should be aggregated based on tracts selected by the user. Additionally, the user should be able to

Requirements Document

Representation	Format	Source	Notes
economic data	tabular	US Census Bureau	
demographic data	tabular	US Census Bureau	
census tracts for IL	topojson	Census Bureau	stylized with neutral color
basemap	web api	leaflet	nothing fancy

Interaction	Notes
interactive map	user should be able to pan and zoom; select features
bar chart	include multiple variables that adjusts with user input
search functionality	map should allow user to search for location, zoom to location, and mark on map

Wireframe