

A Demographics Analysis of the Interested Parties for the Westside Community Plan Areas Update

City of Los Angeles Department of City Planning (LADCP) conducts community outreach for its plans, policies, and programs to ensure the diverse opinions of Angelenos are represented in its processes. However, the process for community plan updates was recently condensed to three years, accelerating the timeline planners use to build partnerships in the plan area and conduct outreach to underrepresented populations. This project will investigate how City Planning can use data analysis in GIS to assess their outreach in the first phase of the update process. By mapping interested parties and overlaying their location with available data from City Planning, the Census Bureau, and Esri, recommendations will be made on where to focus their outreach in the next phase by targeting locations and demographic populations that are underrepresented.

The Westside Community Plan Update (CPU) consists of four distinct Community Plan Areas (CPAs): Venice, Palms-Mar Vista-Del Rey, Westchester-Playa del Rey, and West Los Angeles. Although separate, they are simultaneously being updated and regionally similar. The Westside CPU was a case study for this project because the updates are currently in process, and City Planning recently finished Kick-Off Events, the first phase.

Research Questions

The analysis will focus on a geographic and demographic assessment of the interested parties, specifically:

- Where are the interested parties located? Are the majority located within or outside the Community Plan Area? The Community Plan Area boundary will be overlaid with the geocoded contacts to determine this.
- Per the Esri Tapestry Segmentation what demographic populations are most represented?
- Are the interested parties homeowners or renters?
- What is the median income for the CPAs? Are the interested parties representing a good cross-section of income ranges?

Data Sources

Interested Parties List

This list, compiled in Excel, has contact data including street address and zip code, as well as if the party rents or owns, works, studies, or has another affiliation with the community. The data was collected from sign in sheets, the email list, and other submissions from the Westside CPAs Kick-Off Events. This data is the definitive list from the Westside Community Plan Update of

who has shown interest in the update process. Emily Gable of the Westside CPU Team manages the data, and she provided the latest version as of March 22, 2019.

Community Plan Areas

The shapefile for the Community Plan Area boundaries was downloaded from the City of Los Angeles GeoHub and produced by LADCP.

Census Tracts

The shapefile for census tracts was downloaded from the Census Bureau. Census tracts were selected over block groups or other segments because they present a small-scale segment of a homogenous population. The Los Angeles County dataset was downloaded.

American Community Survey

The American Community Survey (ACS) can provide insights on the socioeconomic demographics of the area. Specifically, the data for Median Household Income in each census tract was downloaded from the Census Bureau. This was used to visualize the breakdown of income in the Community Plan Area.

Esri Tapestry Segmentation

In addition to the ACS data, the Esri Tapestry Segmentation helps to understand the market demographics of the community. This will be useful for developing a new outreach strategy because it provides insights on the people who live in that segment. The Esri Tapestry Segmentation was accessed in ArcGIS Online through the license.

Methods

Three maps were generated to respond to the research questions. Following is a discussion of how each map was developed, what steps were done to clean and present the data, and what the reason is for each map.

Westside CPA Interested Parties by Owners and Renters

The first map, as shown in Appendix A, shows the distribution of homeowners and renters across the Community Plan Areas. This information is important to LADCP because both are important stakeholders in the community, yet the majority of input on the community plan update process has historically come from homeowners. LADCP is interested in knowing if they have reached a fair cross section of both.

To create the map, the interested parties list and community plan areas boundaries were used. First, the interested parties list was cleaned in Excel. In order to accurately geocode the data, an additional “State” column was added to the list to ensure that only addresses within the State of California were identified. ArcGIS Online was used to geocode the addresses. The data was

uploaded, and 1,070 points were generated. Initially, the data was visualized as a heatmap, but when accessing the layer in ArcMap, the visualization was lost and only the unique points remained.

Next, the points were categorized according to the attributes of “Rent” or “Own” on the interested parties list. Any field that was left blank or with a combination of rent and own was set as “Unknown.” For the symbology, a circle was selected to represent each point and a different color was chosen.

Then, the community plan area boundary for the Westside Community Plan Update was created. The shapefile was added, and the four community plan areas were selected in the attribute table. The rest of the community plan areas were removed, and the new layer was exported. The symbology was changed to a thick border with line fill to clearly showcase the area yet still show the basemap and reference layer. Lastly, the labels were added, and the font was edited to have a halo for easy reading. The map was completed with a title, legend, and scale bar.

2018 Esri Tapestry Segment for Westside CPA Interested Parties

The second map, as shown in Appendix B, provides socioeconomic insight into the residents within the community plan areas per the Esri’s Tapestry Segmentation. The Tapestry Segmentation is a proprietary data layer that classifies neighborhoods into 67 unique segments that highlight not only the dominant socioeconomic characteristics of the community, but also provides analysis of their spending habits (Esri, n.d.). This kind of insight is particularly useful to LADCP because it is concerned with planning a built environment that meets the needs and lifestyles of its residents.

To create this map, the geocoded interested parties list from the first map was enriched in ArcGIS Online with the Tapestry Segmentation. The dominant Tapestry Segment for the location of each interested party was added as an attribute to the layer. Next, the layer was added to ArcMap, and similarly to the first map for renters and owners, each Tapestry Segment attribute was categorized, and the symbology was changed. In this instance, there were a dozen Tapestry Segments across all of the interested parties. However, only three of the attributes had values in the hundreds. They were Urban Chic, Trendsetters, and Laptops and Lattes. Metro Renters had the fourth highest value at 52 points. All other attributes had values under 10. Thus, only the largest four were listed as categories. Lastly, the community plan area boundary layer from the first map was added. The map was completed with a title, legend, and scale bar.

2017 Median Household Income for Westside CPA Interested Parties

Finally, the third map, as shown in Appendix C, was created to understand one of the demographic indicators interested to LADCP: level of income. For this map, the data from the Census Bureau on median household income and census tracts was utilized. LADCP is interested income, because it can often indicate barriers to the planning process, such as poverty. However, the Westside is wealthier than other regions in the County. Looking at median household income by census tract may identify pockets of low-income residents within the CPAs, or wealthy enclaves, both of which are less likely to participate in the planning process.

To create this map, the census tract shapefile was joined with the 2017 American Community Survey five-year estimate data on median household income. To make the join, the attributes had to be aligned. The GeoId field on the census tract shapefile had an extra 0 before the number string, which was removed. After the join was successfully made, the layer was cleaned by removing the water polygons off of the coast. Each of the polygons was selected and deleted. Next, under symbology, the median household incomes were shown as quantities with graduated colors. The classes were presented by natural breaks, and the labels were rounded off to the nearest \$10,000. Lastly, the Westside community plans area boundary and interested parties layers from the previous maps were added. The map was completed with a title, legend, and scale bar.

Limitations

The interested parties list is a compilation from several sources, and as such, its data is inconsistent. For one, the list is limited because several contacts are missing a mailing address and zip code. They will not geocode without a mailing address. Also, ideally the list would include all the information requested on the sign in sheet. The sign in sheet asks about if the person lives, works, studies, or other in the community, and some respondents have left that information blank. With a mailing address and the complete data, the list could be geocoded and categorized in its entirety.

Also, not everyone who has participated in the planning process has signed in or completed a survey. It is possible that interested parties were not captured by those two means. Anecdotal evidence from the community plan team may provide insights on who actually came to events if their contact information is missing.

Lastly, demographic data is not included with the interested parties list, limiting the analysis on who is participating. Demographic data, including age, sex, and race/ethnicity, was collected via surveys during the initial phase of outreach. However, it is anonymous, and not saved with the contact information. While it would be helpful to know the demographics of the interested parties, it would pose privacy concerns to map that information. Instead, it is best to make assumptions on demographic information based off of census tract data and the geocoded addresses.

Conclusions

When starting this project, certain assumptions were made about the demographics expected for the Westside. The maps support those assumptions. These maps focus on income indicators, such as median household income and whether the party owns or rents. Considering the moderate to high median household income for the Westside, it was expected to see interest in the planning process because that aligns with previous demographic analysis done at the department. Overall, it was good to see that the interested parties are well spread out across the plan areas; there do not appear to be many concentrated hot spots. This indicates that interested parties are representing a wide variety of geographic areas. However, more data about the interested parties is needed to make conclusions about the demographic diversity of those who have shown interest in the community plan update process.

Regardless of the limitations of the interested parties data, some conclusions can be drawn from the maps. The first map shows that there is a variety of renters and owners spread across the plan areas. There is some notable clustering of renters in the Palms neighborhood as well as a clustering of homeowners in the West Los Angeles area. There are few renters represented in the Westchester-Playa del Rey CPA. These areas can be targeted by LADCP to reach those people who are not participating. For example, where there are more owners represented, LADCP may target its outreach to apartment complexes.

Next, the second map shows the prevalence of certain Esri Tapestry segments in the community plan areas. Each segment has a corresponding pamphlet with insights on that segment, including age by sex, race and ethnicity, and a market profile (Esri, n.d.). Even though the interested parties list is missing this data, some conclusions can be drawn using the segment insights. For example, the Trendsetters segment, one of the dominant identities in the Palms-Mar Vista-Del Rey CPA, is described as young, single, renters who prefer using public transportation (Esri, n.d.). As such, LADCP could plan more apartment buildings with easy access to transit and bike paths.

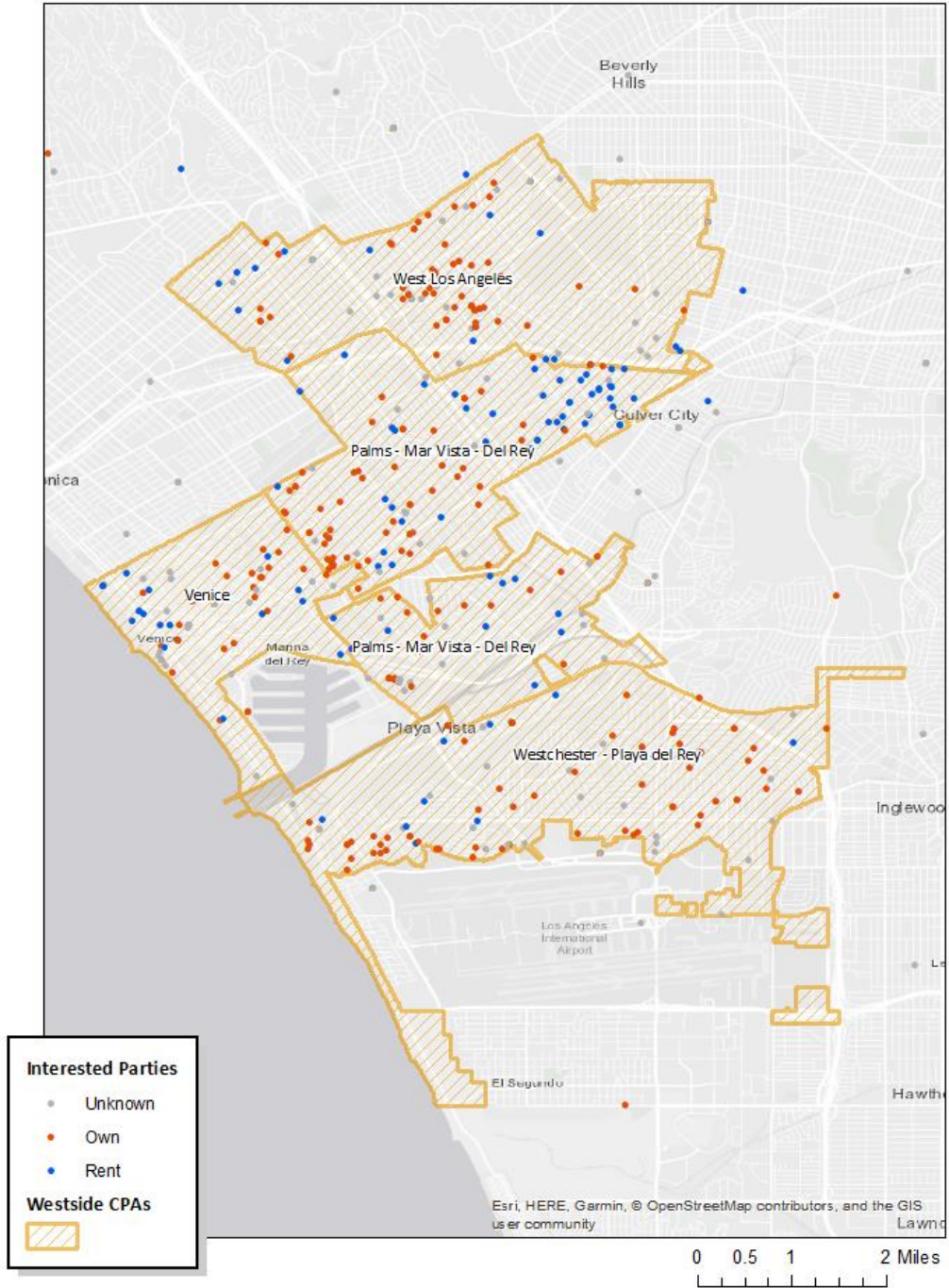
Lastly, the map that shows median household income with the location of interested parties presents some interesting information. For one, although parties are well spread across the plan areas, there are wealthy enclaves with higher median incomes and fewer participants. Often, underrepresented refers to residents who face barriers in the planning process because of poverty factors. However, on the Westside, LADCP faces barriers when trying to engage the wealthy residents in certain areas, and this map helps to pinpoint those areas.

Ultimately, incorporating data analysis into the planning process, especially when conducting outreach and engagement activities. Geographic analysis can provide substantial insights into the community that is being served, and conclusions can be drawn from demographic information. However, this data needs to be considered critically so as not to bias the perceptions of the community. Regardless, geographic analysis can inform LADCP on who is participating and where they reside.

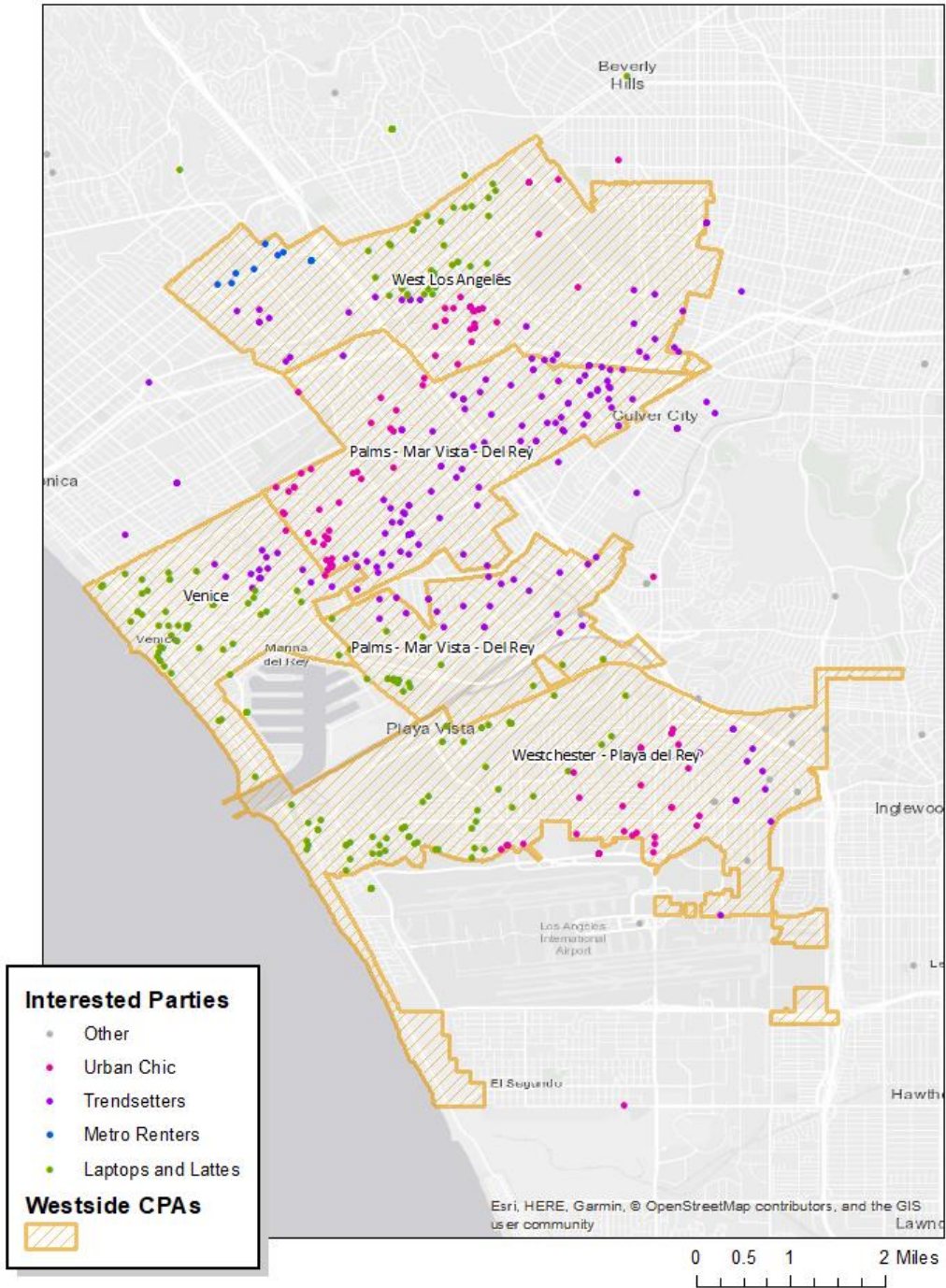
References

Esri. (n.d.). Tapestry Segmentation. Retrieved from <https://www.esri.com/en-us/arcgis/products/tapestry-segmentation/overview>

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