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# RESIDENT PERCEPTIONS OF NEIGHBORHOOD IN MAKING CONNECTIONS SITES: DENVER, SAN ANTONIO, HARTFORD, WHITE CENTER--SEATTLE, OAKLAND

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## SUMMARY AND KEY FINDINGS

Making Connections is investing in selected neighborhoods in order to strengthen communities and the families and children that live there. As such, the neighborhood is an important element of the Making Connections strategies and work. However, neighborhoods are not easy to define or demarcate and perceptions of the neighborhood may vary among residents and other stakeholders in Making Connections. To further inform the neighborhood work, this analysis examines how residents of Making Connections sites distinguish their neighborhoods in terms of geography and name identity.

**Data and methods**

The Making Connections survey asked each respondent to draw a map of their neighborhood and to provide their neighborhood name. That specific section of the survey was worded as follows:

> "By neighborhood, I mean the area around where you live and around your house. It may include places you shop, religious or public institutions, or a local business district. It is the general area around your house where you might perform routine tasks, such as shopping, going to the park, or visiting with neighbors. Please take a look at this map of the area. Study it for a moment and use this pencil to draw the boundaries of what you consider your neighborhood."

Respondents were then given maps that covered an area somewhat larger than the Making Connections project area in which they lived. Next, they were asked, "What is the name of your neighborhood?" The interviewer recorded the name verbatim, or noted if the respondent did not know the name or refused to answer.

The maps were digitized and imported into a GIS program so that they could be analyzed. For each respondents map, we calculated its area and perimeter. Then we overlaid all of the maps drawn by residents of the same project area to evaluate the degree to which they shared common definitions of neighborhood geography. Blocks endorsed by at least 50 percent of the residents were labeled *consensus* areas. Blocks endorsed by at least 1/3 of the residents were labeled *secondary* areas. Blocks with at least 10% of the residents endorsing them were labeled *tertiary* areas. We also overlaid the blocks in the *official project areas* onto each respondent map to determine the degree to which they agreed with the official boundaries.

The verbatim names were cleaned to eliminate misspellings and minor variations. The percent of residents who provided the *official project area* name was computed. Also, we mapped the locations in which alternative names were reported by 10 or more residents.

**Selected Findings**

In 2004, the team at Case conducted a geo-spatial analysis of the neighborhood maps and names data from the Denver survey respondents. The findings were presented to a small group of Local Learning Partners (LLP's) who suggested that this type of information could be useful in their neighborhood work. Moreover, there was the sense that research on how residents' perceive neighborhoods might be of general interest to the field. The approach to analysis used in Denver has now been extended to San Antonio, Hartford, White Center--Seattle and Oakland and the results are summarized here.

<u>Map characteristics</u>

Table 1 displays selected map characteristics for the 5 sites. It can be seen that the size of resident drawn maps varies across the sites, with Hartford residents drawing the smallest maps and San Antonio residents drawing the largest. Also, there is variation in the degree to which the residents' maps incorporate the *official project areas* of Making Connections. The highest overlap between official boundaries and resident perceptions is in Denver.

<u>Level of consensus</u>

Next we examine the geographic similarity among the resident maps. The first step is to overlay the maps of the residents who live in the same *official project area.* This is illustrated in Figure 1 for the Baker neighborhood of Denver. On the left of the figure, all of the map outlines are shown laid on top of each other. On the right, this is translated into the blocks that are endorsed by varying proportions of residents. Using this method, we see a relatively high level of agreement among residents of Baker on a core geography that constitutes their neighborhood. This picture of consensus can be compared with Figure 2 which shows the Oakland project area, Lower San Antonio. In Lower San Antonio, there are no blocks that are included in 50 % of the resident maps and very few that 1/3 of the residents endorse. The patterns in Hartford, San Antonio and White Center--Seattle were very similar to Oakland, with no consensus areas being identified as a result of overlaying the maps within official project areas. This is in marked contrast to the 4 official project areas in Denver about which there was clear consensus among residents about a core area.

Thus, we conclude that the methodology of uncovering *consensus areas* that emerged in the Denver analysis cannot be replicated in the other cities. While in some instances this may be an artifact of the density of sampling, such as in San Antonio where density is lower than the other sites, lack of consensus can also be due to how large an area residents include in their maps. It is the very small size of the average map in Hartford, for example, that seems to eliminate the possibility of finding common space endorsed by the majority of residents. Additionally, the degree to which residents of Denver seem to consistently include the *official project area* in their maps sets them apart from the other cities. This begs the question of what factors influence where respondents draw their neighborhood boundaries and whether these can be affected by neighborhood demographics, community organizing or aspects of the built environment. Nevertheless, the diversity of respondent maps in the other four cities suggest that the concept of the neighborhood is rather fluid and that strategies that build on neighborhood identity may need to first address the wide variation in how residents relate to the concept and their local geography.

<u>Neighborhood names</u>

A common conception of space is not the only aspect of neighborhood that can bring people together. Residents may see themselves as part of a neighborhood with fluid boundaries, but there may be other identifiers that align residents with one another. Neighborhood name is an example of such a symbol. In this analysis, we examine the degree to which residents share neighborhood names and the locations that are associated with neighborhood names in the minds of residents.

Table 2 summarizes the neighborhood names analysis. The percent of respondents who reported a neighborhood name that agrees with their *official project area* name varies across the sites, but is generally highest in Denver. In places where the *official project area* name is not used by residents, there are typically multiple alternative names that are offered.

The neighborhood names used by residents can be plotted on maps to provide a sense of how they are distributed geographically. Figure 3 illustrates this for the Baker neighborhood of Denver. The map on the left shows the blocks where residents endorsed the Baker name. The map on the right shows the areas in which alternative names are used by residents. Only modest spatial overlap among neighborhood names is seen in Denver. This can be contrasted with Lower San Antonio (Figure 4), in which many overlapping names are used by residents. In fact, this pattern of numerous overlapping neighborhood names occurred in all the sites except Denver.

In future iterations it would be possible to identify on these maps the characteristics of the individuals who endorse particular names. Such maps may be useful to neighborhood groups considering issues of neighborhood branding and identity. The degree to which individuals identify with an official neighborhood name or common space may be related to their position in the social structure and this will also be investigated in future work.

Alternative approaches to analysis

Given that the Denver methodology failed to uncover *consensus areas* in the other sites, we explored alternative methods of grouping together residents who would be expected to share a common conception of neighborhood. An example of one clustering approach appears in Figure 5. On the left, we plot the centroids of all the Oakland maps and identify clusters.[1] On the right, we show the results of overlaying the maps that were in one of the clusters. It can be seen that this method identifies a *consensus area* on the edge of Lower San Antonio. Similarly, in Figure 6, we group maps of residents who shared the same name for their neighborhood. When this set of maps is overlaid, a *consensus area* is found also. These two methods also yielded pockets of consensus in the other sites.

**Summary and future directions**

The Making Connections project areas in Denver seem to differ from those in the other four sites studied here in the degree to which the residents report the official name for their neighborhood and have mental maps that have a high degree of overlap. In Denver, it was possible to identify *consensus areas and named neighborhoods* using a relatively expedient method in which the data were first organized by *official project areas* and then areas of agreement identified. The same approach, when applied in the other sites, seems to have missed areas of consensus and common names that exist but do not comport well with the *official project areas*. We demonstrated the feasibility of several alternative methods of using the respondent maps and names to identify consensus areas in these sites. However, they tended to yield numerous clusters and names that could prove unwieldy in practice. Some additional simplifying assumptions are needed and should be applied in future iterations. Moreover, local input is needed to determine which solutions seem to have face validity.

Nevertheless, this exploratory work raises some intriguing questions about neighborhood perceptions and how they might affect a neighborhood change initiative such as Making Connections. Some of these are listed below.

> Correlates of neighborhood perceptions: What accounts for differences in residents' neighborhood perceptions and identity? And how do these perceptions affect community participation and various outcomes of concern to Making Connections?
>
> Application in neighborhood work: How can Making Connections teams use the maps and name information provided in the survey to guide focused work in

[1] We use nearest neighbor hierarchical (NNH) clustering, a spatial analysis tool used to identify groups of incidents that form distinct spatial clusters based on Nearest Neighbor Hierarchical Clustering Information and K-Function and Nearest Neighbor K-Function Information: Ned Levine (2004). *CrimeStat*: A Spatial Statistics Program for the Analysis of Crime Incident Locations (v 3.0) Chapters 5 and 6. Ned Levine & Associates, Houston, TX, and the National Institute of Justice, Washington, DC. May.

particular locations? Should the approach to specific groups of blocks be guided by which residents include them in their maps and what names they have for their neighborhoods? How should blocks in which several names overlap be approached? What should be the approach in sections of the site that are seldom included in residents' mental maps? Is it important to understand how demographic and economic factors shape residents' neighborhood identity?

Cross site comparison: What can we learn about the Making Connections initiative as a whole from the notable differences in the mental maps and naming patterns in the sites? Do the differences in map size, overlap and consensus between Denver, San Antonio and Hartford, for example, suggest that they need different strategies or expectations? What else can we learn from the mapping and naming analysis that would aid in the cross site comparisons? Should respondent views of their neighborhood be taken into account in the evaluation?

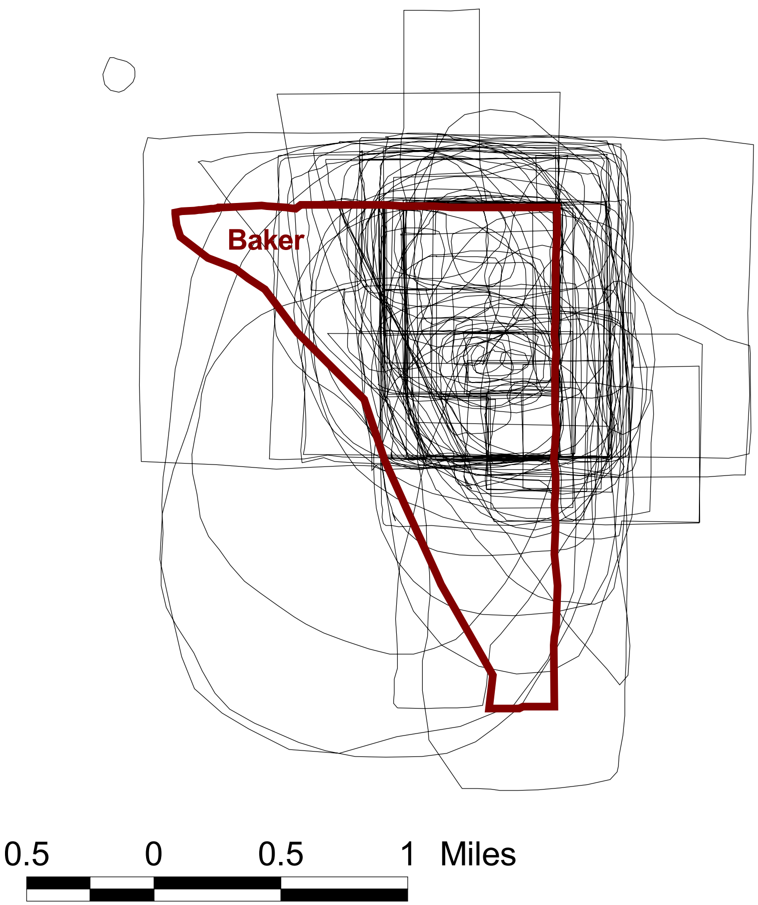
Knowledge of community change: Can the Making Connections survey data with its rich collection of mental maps and names be used to add to the knowledge base about community change? What are the important questions that we should tackle? Would it be useful to explore how neighborhood effects on child outcomes differ depending on how neighborhood is conceptualized and measured according to these mapping options?

| Table 1 | Characteristics of Resident Drawn Maps | | | | |
|---|---|---|---|---|---|
| | # of RD maps | Area of Official Neighborhood (sq. mi.) | Area of RD maps (median, sq. mi.) | Perimeter of RD maps (median, mi.) | Median % of Official Neighborhood in RD map |
| **Denver** | | | | | |
| Baker | 104 | 1.47 | 0.56 | 3.10 | 32.65 |
| Cole | 131 | 0.51 | 0.23 | 1.96 | 37.19 |
| Lincoln Park | 139 | 1.93 | 0.49 | 2.91 | 19.63 |
| Sun Valley | 166 | 0.64 | 0.22 | 1.86 | 27.76 |
| | | | | | |
| **San Antonio** | | | | | |
| West Side - Quad 1 | 179 | 9.37 | 1.32 | 4.45 | 10.15 |
| West Side - Quad 2 | 197 | 5.39 | 0.85 | 3.63 | 9.80 |
| West Side - Quad 3 | 154 | 3.96 | 1.43 | 4.89 | 23.20 |
| West Side - Quad 4 | 174 | 5.65 | 1.34 | 4.62 | 14.71 |
| | | | | | |
| **Hartford** | | | | | |
| Asylum Hill | 91 | 0.86 | 0.03 | 0.70 | 3.35 |
| Clay Arsenal | 65 | 0.51 | 0.08 | 1.03 | 10.43 |
| Frog Hollow | 107 | 0.64 | 0.09 | 1.15 | 10.96 |
| Northeast | 147 | 2.13 | 0.14 | 1.52 | 5.65 |
| Sheldon-Charter Oak | 29 | 0.47 | 0.04 | 0.76 | 6.08 |
| South Green | 31 | 0.23 | 0.04 | 0.78 | 16.50 |
| Upper Albany | 101 | 0.44 | 0.12 | 1.32 | 22.93 |
| | | | | | |
| **White Center--Seattle** | | | | | |
| Boulevard Park | 237 | 2.77 | 0.64 | 3.17 | 17.28 |
| White Center | 418 | 3.39 | 0.66 | 3.20 | 16.22 |
| | | | | | |
| **Oakland** | | | | | |
| Lower San Antonio | 571 | 1.95 | 0.23 | 1.87 | 9.41 |

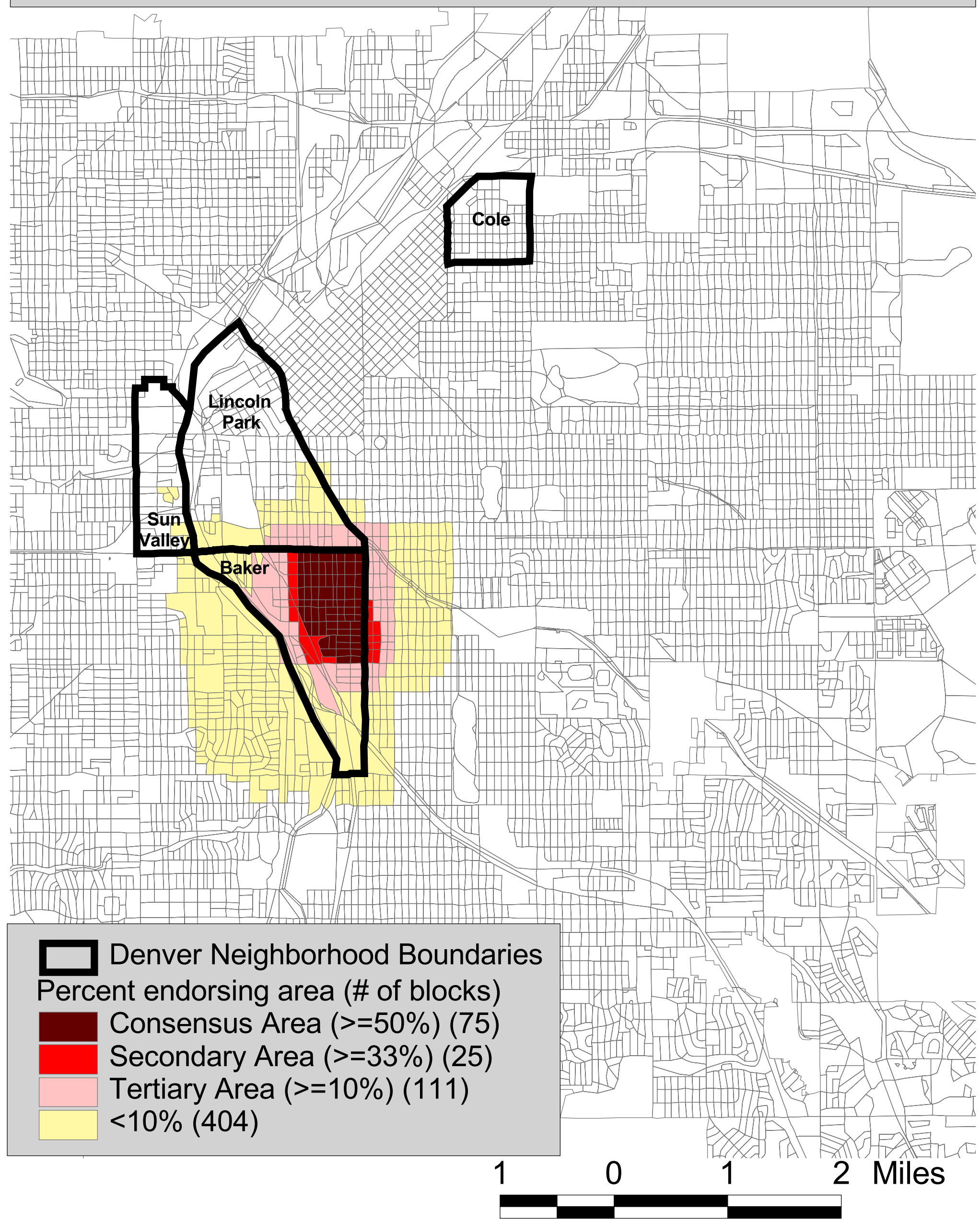
| Table 2 | Resident Provided Neighborhood Names | | | | |
|---|---|---|---|---|---|
| | | | | | |
| | # of Respondents | % Gave Official Name | % Gave No Name | # of Names (n>=2) | Total Number of Names |
| **Denver** | | | | | |
| Baker | 179 | 80.45 | 11.17 | 2 | 11 |
| Cole | 190 | 46.84 | 30.00 | 4 | 18 |
| Lincoln Park | 188 | 16.49 | 38.83 | 12 | 26 |
| Sun Valley | 222 | 82.88 | 12.61 | 2 | 5 |
| | | | | | |
| **San Antonio** | | | | | |
| West Side - Quad 1 | 207 | 11.11 | 51.21 | 14 | 32 |
| West Side - Quad 2 | 224 | 14.73 | 47.32 | 10 | 30 |
| West Side - Quad 3 | 187 | 17.11 | 60.43 | 6 | 28 |
| West Side - Quad 4 | 203 | 5.91 | 46.31 | 17 | 33 |
| | | | | | |
| **Hartford** | | | | | |
| Asylum Hill | 115 | 41.74 | 38.26 | 4 | 12 |
| Clay Arsenal | 76 | 5.26 | 30.26 | 7 | 22 |
| Frog Hollow | 138 | 44.20 | 38.41 | 4 | 14 |
| Northeast | 174 | 1.72 | 37.93 | 9 | 26 |
| Sheldon-Charter Oak | 39 | 15.38 | 43.59 | 3 | 13 |
| South Green | 34 | 14.71 | 58.82 | 1 | 7 |
| Upper Albany | 125 | 46.40 | 13.60 | 9 | 23 |
| | | | | | |
| **White Center--Seattle** | | | | | |
| Boulevard Park | 285 | 72.28 | 7.37 | 9 | 22 |
| White Center | 507 | 33.14 | 13.02 | 23 | 40 |
| | | | | | |
| **Oakland** | | | | | |
| Lower San Antonio | 697 | 13.34 | 42.32 | 35 | 82 |
| | | | | | |

# Figure 1. From Many Resident Maps to Areas of Overlap - Baker, Denver

Resident Drawn Maps
Baker, Denver




Percent of Resident Drawn Maps Endorsing Area
Baker, Denver

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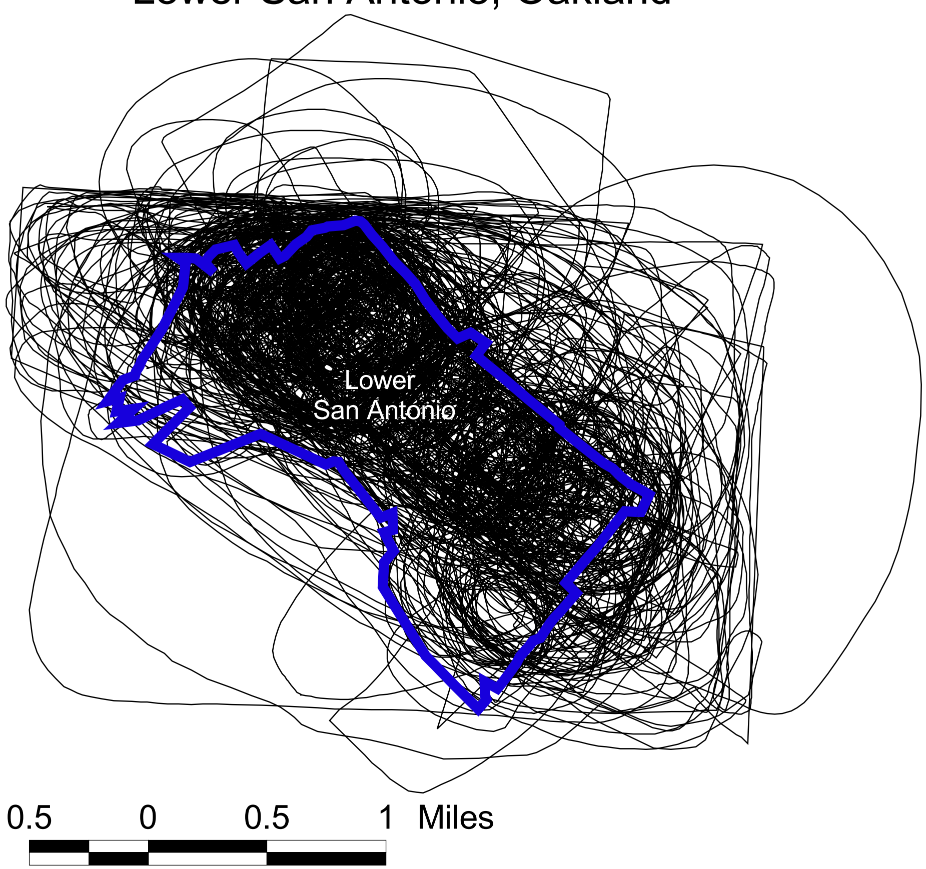
# Figure 2. From Many Resident Maps to Areas of Overlap - Lower San Antonio, Oakland

## Resident Drawn Maps
## Lower San Antonio, Oakland




## Percent of Resident Drawn Maps Endorsing Area, Lower San Antonio, Oakland

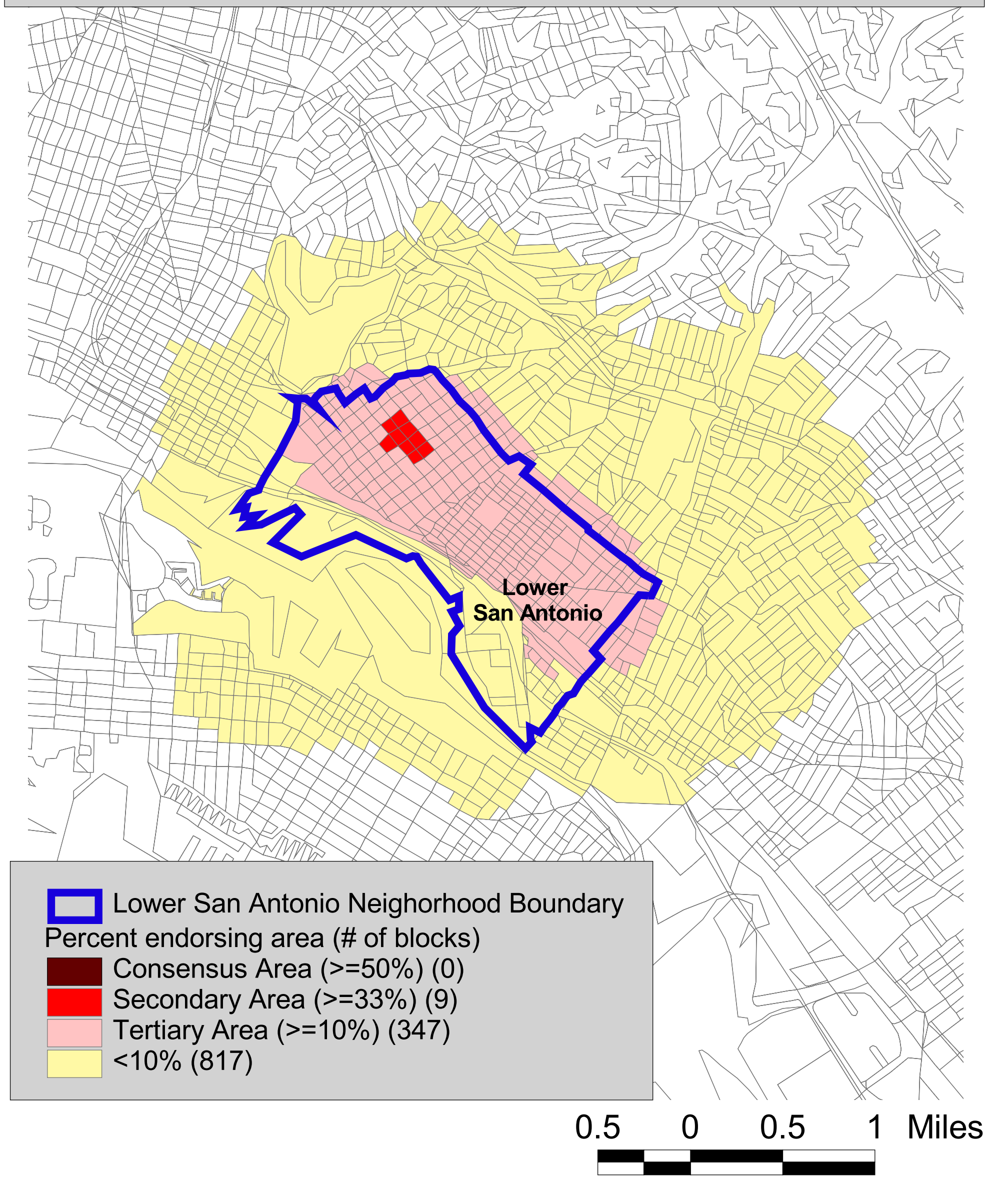



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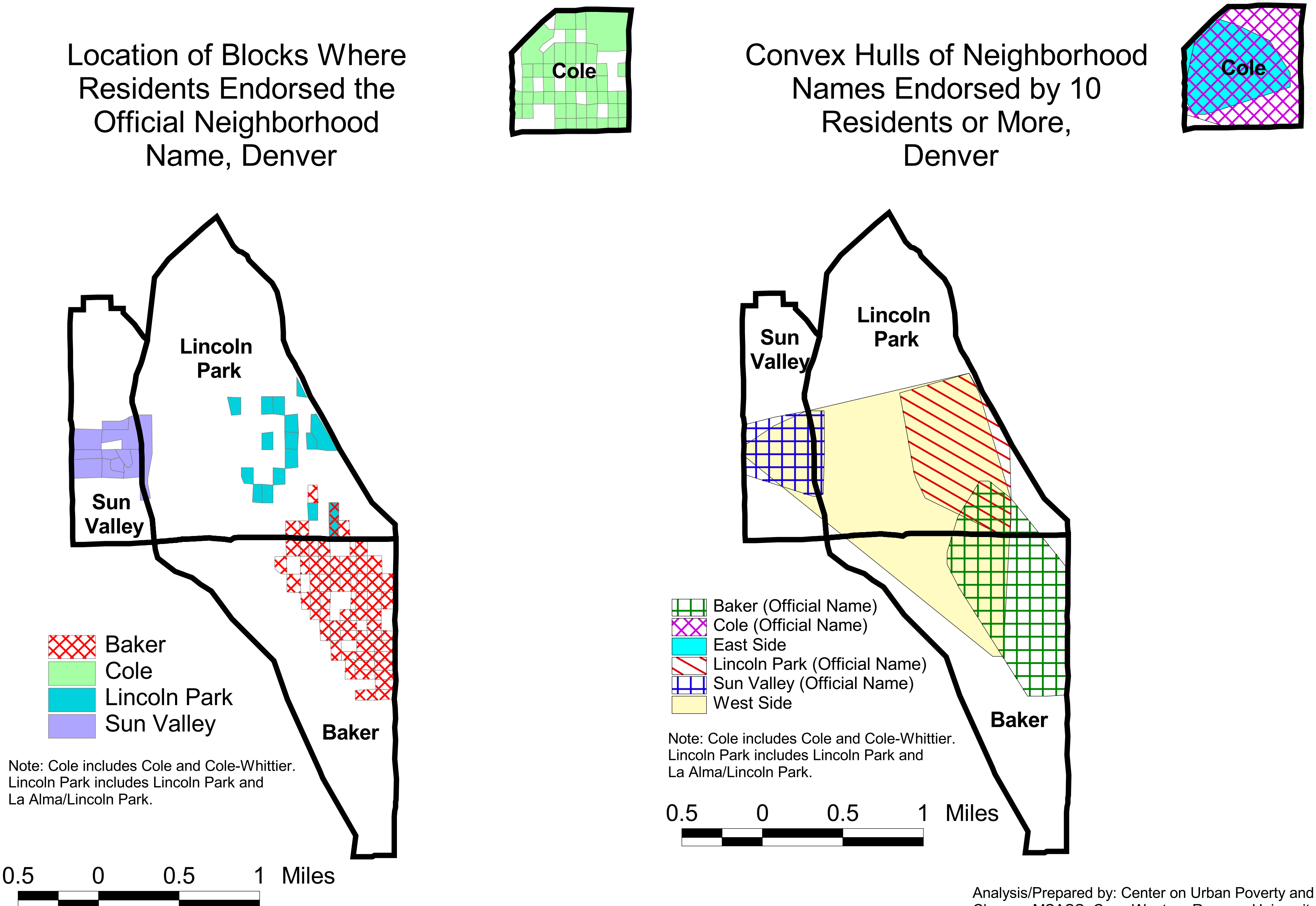
Figure 3. Analyzing Neighborhood Names, Denver

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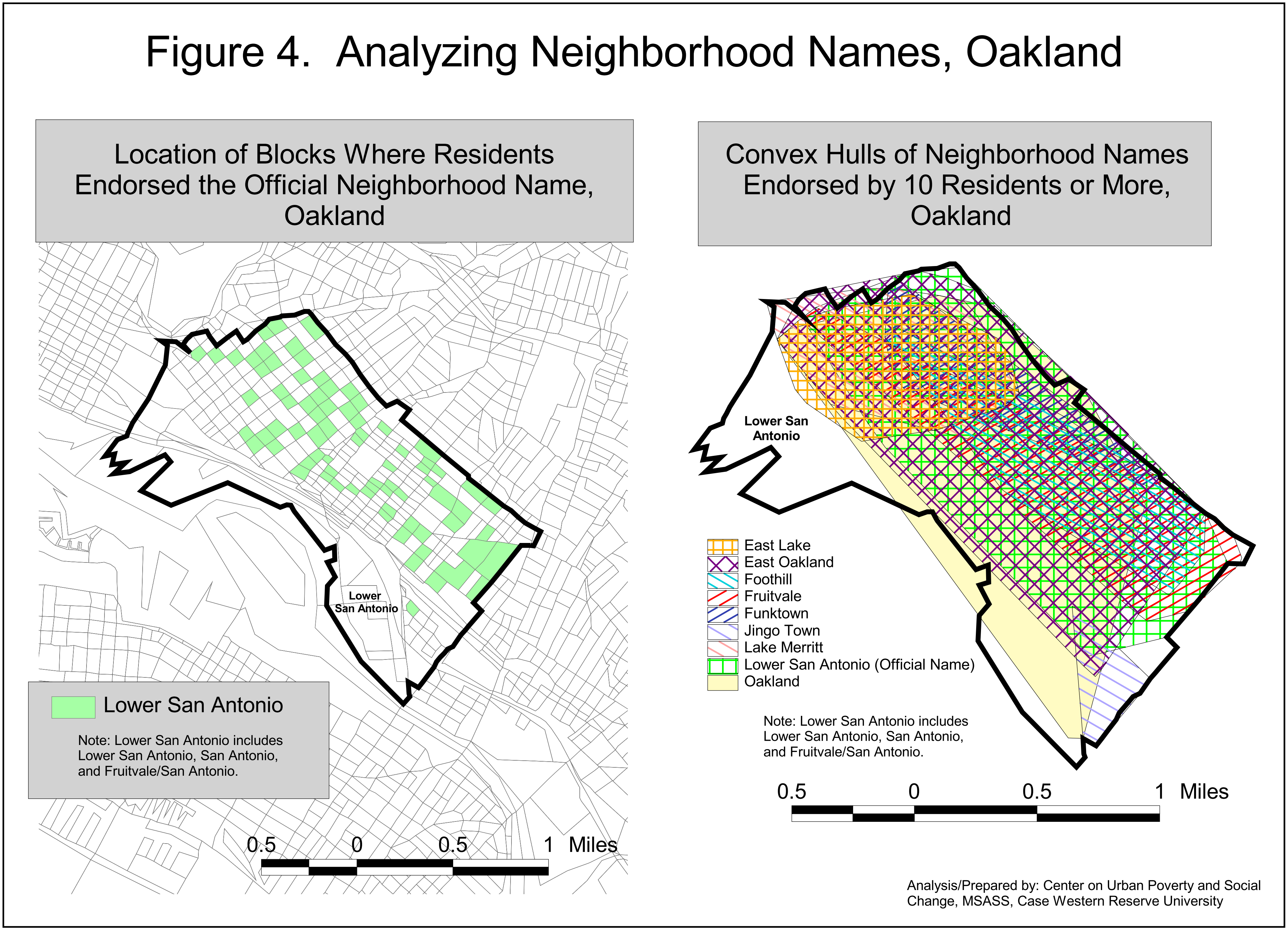
Figure 4. Analyzing Neighborhood Names, Oakland
Location of Blocks Where Residents Endorsed the Official Neighborhood Name, Oakland
Lower San Antonio
Lower San Antonio
Note: Lower San Antonio includes Lower San Antonio, San Antonio, and Fruitvale/San Antonio.
0.5 0 0.5 1 Miles
Convex Hulls of Neighborhood Names Endorsed by 10 Residents or More, Oakland
Lower San Antonio
East Lake
East Oakland
Foothill
Fruitvale
Funktown
Jingo Town
Lake Merritt
Lower San Antonio (Official Name)
Oakland
Note: Lower San Antonio includes Lower San Antonio, San Antonio, and Fruitvale/San Antonio.
0.5 0 0.5 1 Miles
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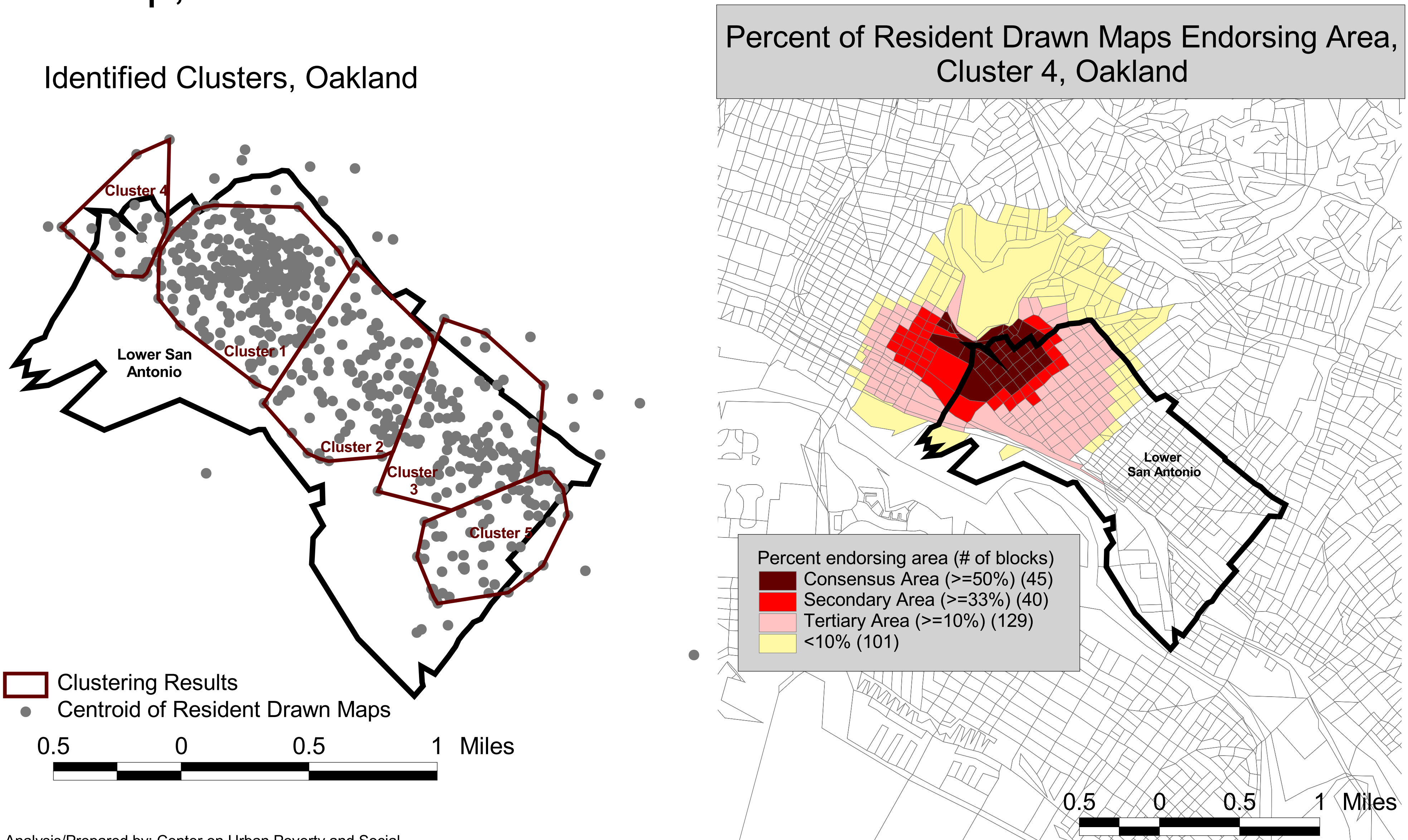
# Figure 5. Using Resident Drawn Maps to Identify Areas of Overlap, Oakland

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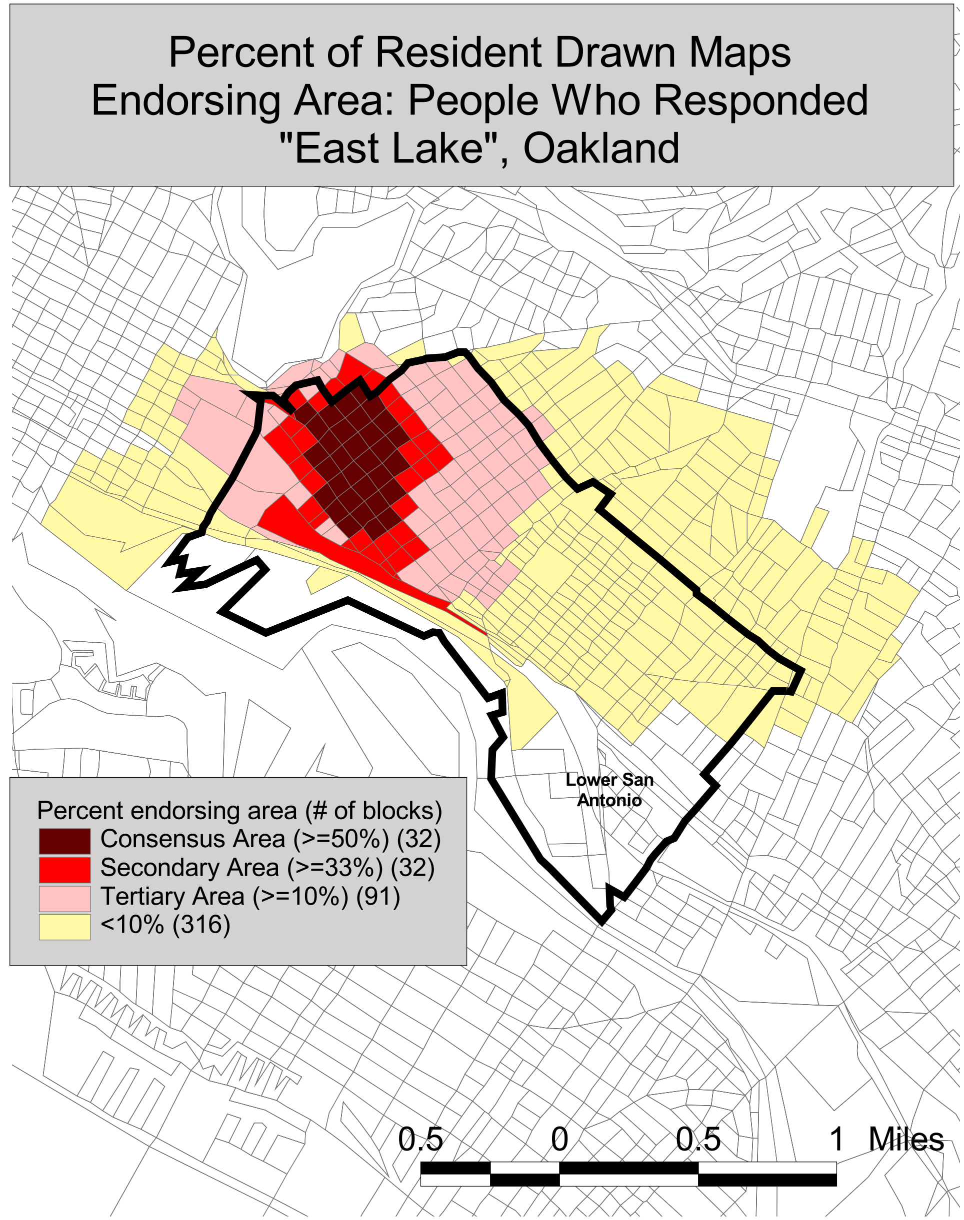
# Figure 6. Analyzing Neighborhood Names to Identify Areas of Overlap, Oakland

Neighborhood Names Endorsed by 10 or More Residents (with maps), Oakland

| *Neighborhood Name* | *Number of Residents (with Maps)* |
|---|---|
| East Lake | 22 |
| East Oakland | 53 |
| Foothill | 12 |
| Fruitvale | 13 |
| Funktown | 10 |
| Jingo Town | 12 |
| Lake Merritt | 28 |
| Lower San Antonio | 72 |
| Oakland | 16 |

Note: Lower San Antonio includes Lower San Antonio, San Antonio, and Fruitvale/San Antonio.

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