

Who Owns West Woodlawn?

Sponsored by Blacks in Green

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Project Summary

In 2015, President Obama's announced his new presidential library and community center was to be built in Chicago's Jackson Park. Many community members and residents from neighboring areas are skeptical of how the 2250,000 square foot, \$500 million complex will affect local neighborhoods. The West Woodlawn based non-profit Blacks in Green is specifically concerned about displacement of current West Woodlawn residents. Blacks in Green founder Naomi Davis reached out to DePaul's Geography Department to help Blacks in Green track land ownership changes with hopes of beginning a 25 year study of housing in West Woodlawn.

Blacks in Green had a spreadsheet of West Woodlawn land parcel owners from a previous ownership study in 2013, and wished to compare it to an updated 2016 list of West Woodlawn land parcel owners. The group of DePaul students in charge of the project needed to make both sets of data compatible for comparison, track how land ownership changed from 2013 to 2016, and determine whether current land owners reside in West Woodlawn or not. A priority goal for the group was to make 2016 a baseline year for Blacks in Green's 25 year housing study.

Naomi Davis first provided the 2013 dataset to the group, and later provided the necessary 2016 data, which was acquired from the Cook County Clerk's Office. The 2013 and 2016 datasets were not completely identical in format or information provided. The 2013 data contained land parcel information, parcel owner information, and a variety of details on land occupancy, mortgage amounts, and land value. The 2016 data contained land parcel information, the taxpayer information for each parcel, and the address from which each taxpayer pays taxes. The 2013 data did not have information from the entirety of West Woodlawn, but only the Northern Section, while the 2016 data held land data for the entire community. The DePaul Geography group decided to compare land owners from 2013 to 2016 from the parcels of land both datasets shared, and the group also decided to determine where current taxpayers reside using 2016 taxpayer address information.

Comparing 2013 and 2016 land owners proved difficult due to differentiations between the 2013 and 2016 data. From the shared land parcels between the two datasets, owner names were often recorded differently. For example, the 2016 data would often put a middle initial for the landowner while the 2013 data almost never did. The 2016 data also did not display which parcels of land were owned by the City of Chicago because land owned by the city has no taxpayer. The group decided that if the parcel was recorded as owned by Chicago in 2013, and had no taxpayer in 2016, it would be considered owned by Chicago in 2016. Finally, some land parcels had several different owners, and tracking these ownership changes were not possible because the 2013 dataset did not record these land parcel owners accurately. The group ultimately had to go through the two sets of data by hand to combine them and record land ownership changes from the 1200 land parcels the datasets held in common. The group differentiated land parcels by four different categories: No ownership change, ownership change, land owned by the City of Chicago, and no data.

The group then differentiated 2016 taxpayers by each taxpayer's address. The group worked with Blacks in Green to define seven rings of taxpayers: West Woodlawn residents, South Lakefront residents (from the communities of Avalon Park, Calumet Heights, Chatham, Douglas, East Side, Grand Blvd., Grand Crossing, Hegewisch, Hyde Park, Kenwood, Oakland, Pullman, South Chicago South Deering, South Shore, Washington Park, and Woodlawn), Chicago residents, Cook County residents, Illinois residents, United States residents, and

international residents. Blacks in Green wished to track taxpayers by these rings to see how much of West Woodlawn's land was locally owned, and where its occupants truly resided. The Geography group geocoded the 2016 taxpayer addresses, and then spatially differentiated the addresses based on which zone each address fell in. To do this, the group acquired or created shapefiles for each of the seven taxpayer zones, and scoured the data to determine if any owners were actually international companies with a taxpayer address in America. The group then used this data to map West Woodlawn land parcels by where their owners payed taxes.

Ultimately the Geography group successfully accumulated and processed the 2013 and 2016 West Woodlawn ownership data sets, and created two main maps for Blacks in Green: A map of West Woodlawn land ownership change from 2013 to 2016, and map of West Woodlawn's land parcels color coded by which ownership ring the land parcel's taxpayer resides in.

The Geography group hopes the efforts to clean up and categorize both the 2013 and 2016 data helps Blacks in Green both understand current ownership changes within West Woodlawn and helps create a base for the organization's future housing studies.

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Introduction

President Obama announced his new presidential library and community center was to be built in Chicago's Jackson Park. Many residents from neighboring areas are skeptical of how the 2250,000-square foot, \$500 million complex will effect nearby communities. Deborah Taylor, member of Southside Together Organizing for Power community group describes s "when something major comes into a community, taxes go up, low-income residents are displaced, there is an influx of new residents who want to be in the area—it's sexy—prices go up," she said. "We want to be sure when it floats, we float with it."¹

Among other concerned parties is Blacks In Green, a non-profit organization founded on Chicago's south side in 2007. Since their inception, Blacks In Green has been focused on combating economic disparity in low-income, primarily African American neighborhoods. Through the creation of sustainable, local job driven development, Blacks In Green strives to protect at-risk communities histories, heritages, and residents. The organization is based in the Woodlawn community area, which neighbors Jackson Park. Woodlawn has a population of 23,739 people, of which 87.79% self-identify as African American. As a result of long term disinvestment from businesses and the city, an area that once had one of the busiest economic quarters in Chicago, now has a population where more than 30% of the residents live below the poverty line. With that said, land developers see business potential in Woodlawn's close proximity to the future Obama Presidential Library. In the six months following President Obama's announcement, property values in Woodlawn shot up 23%.

In conjunction with Blacks In Green's goal of conducting a 25 year analysis of housing and land price changes in the South Lakefront region, this project focuses on ownership changes in West Woodlawn from 2013 to 2016. We tracked whether each parcel in West Woodlawn experienced some sort of ownership change, and categorized each taxpayer into various "rings" according to their distance from West Woodlawn. With this research, we hope to provide the resources necessary to answer critical questions such as: Who are the owners of land in West Woodlawn? Do they live in the community, or somewhere else? Has there been an increase in changes from community resident-owners to outside influences?

¹ Bergen, Kathy. "Woodlawn pins big hopes on Obama library." *Chicago Tribune*, July 30, 2016. Accessed September 21, 2017. <http://www.chicagotribune.com/news/obamacenter/ct-obama-library-neighbors-met-20160729-story.html>.

Needs assessment

The scope of our project is specifically the West Woodlawn neighborhood. Due to the limited timeframe and access to data, we chose to narrow our focus to the western side of the community area. By doing so, we were able to compare taxpayer changes on a parcel by parcel basis. The original description of the project, given by Blacks In Green, highlighted the need to map populations vulnerable to large scale business development brought to the South Lakefront with the Obama Presidential Library. Ms. Davis describes the area that is likely to be effected by such development as the “Obama Library District”. With that being said, several sources have discussed the effectiveness of GIS in similar contexts.

Two Chicago case studies found that community organizations could successfully reclaim power in urban planning through the use of GIS. Their research argues that despite the fact that community organizations may not have a lot of economic and political power, they can use GIS to influence urban planning policy at a higher level by trying to “maximize opportunities to insert their spatial knowledge into key decision-making practices, sustain working relationships with powerful agents in urban spatial politics, and adapt to the rapidly shifting context of resources and priorities in which community organizations are embedded.”²

It has also been well established that GIS can be useful in tracking gentrification. An article published by Data-Smart City Solutions, part of Harvard Kennedy School, outlines a number of GIS methodologies employed by cities to track gentrification. The Log Angeles I-Team, for example, mapped gentrification with data on changes in income, education, race, rent, and household size.³ They also created a measure of “displacement pressure” in order to predict neighborhoods where displacement was likely. This combined a number of factors weighed by their predictive power, examining “transportation investment, percent of rent-burden households, and availability of affordable housing.” The article even establishes a precedent for building-by-building work – a Displacement Alert Project Map created in New York City measures displacement risk at the scale of individual buildings by analyzing public data on “loss of rent-regulated units, rate of tenant turnover, and price the building sold for.” Other projects in

² Elwood, Sarah. "Beyond Cooptation or Resistance: Urban Spatial Politics, Community Organizations, and GIS-Based Spatial Narratives." *Annals of the Association of American Geographers*, 96, no. 2 (2006): 323-41.

³ Bousquet, Chris. "Where is Gentrification Happening in Your City?" Data-Smart City Solutions. June 5, 2017. Accessed September 22, 2017. <http://datasmart.ash.harvard.edu/news/article/where-is-gentrification-happening-in-your-city-1055>.

Asheville, North Carolina; St. Petersburg, Florida; San Francisco, California; Seattle, Oregon; and Boston, Massachusetts make us confident that GIS will be a successful tool for this project.⁴⁵

Although we weren't able to meet face-to-face with Naomi Davis of Blacks In Green, we had several conference calls which helped further shape and refine our area of study. Originally, Blacks In Green had ideas of looking at land value, demographic, and ownership changes in community areas in the Obama Presidential District. With the limited time we had, we agreed to build off a previous research project sponsored by Blacks In Green, looking specifically at ownership data in West Woodlawn. An additional point of analysis that we will add to the 2013 study is the location of the taxpayers to see the proportion of people out of the city, or out of the state who own land within the community. Each taxpayer will be categorized into one of seven "ownership types" which are as follows: owner-occupancy in West Woodlawn, South Lakefront Region, Chicago, Cook County, Illinois, United States, or International. Although the scope of this project is fairly small in proportion to the entire area being put at risk by the new Presidential complex, the results will highlight important aspects of further investigation.

The key objectives of our research are:

- Defining the "Obama Presidential District" with specific spatial boundaries
- Collect data on ownership – should be provided by Blacks in Green.
- Map building-by-building ownership in West Woodlawn community.
- Compare ownership changes from 2013 to 2016 in each parcel.
- Categorize each owner into "type" according to ownership rings.

⁴ Fouch, Nakisha. "Planning for gentrification: a geographic analysis of gentrification susceptibility in the City of Asheville, N.C." Master's thesis, Clemson University, 2012. Accessed September 22, 2017. http://tigerprints.clemson.edu/cgi/viewcontent.cgi?article=2428&context=all_theses.

⁵ Nesbitt, Ashon J. "A model of gentrification: monitoring community change in selected neighborhoods of St. Petersburg, Florida using the analytic hierarchy process." Master's thesis, University of Florida, 2005. Accessed September 22, 2017. <http://ufdc.ufl.edu/UFE0010582/00001?search=model+=gentrification:+=modeling>.

System Requirements

This portion of the report is intended to lay out the data and processing requirements for our final product. Once the need assessment was complete, we were able to think about which data would be most beneficial. Since we are building off of a previous study, we will be making connections between the same data in different years.

Data Requirements

1. Who owns property in West Woodlawn? (2013 and 2016 separately)
2. Changes in ownership in West Woodlawn 2013-2017

Processing Requirements

1. Map property ownership in West Woodlawn
 - Data collection: Obtain 2016 equivalent data through Cook County Clerk's office, obtain shapefiles of West Woodlawn Ownership rings
 - Data Transfer: Using PIN attribute, join ownership data spreadsheet to Woodlawn plot shapefile
 - Geocoding: geocode addresses
 - Spatial Join: join addresses to ownership ring shapefiles
 - Table join: Ownership PIN join to plot shapefile
 - Thematic mapping: Make map of property ownership in West Woodlawn highlighting owners by taxpayer rings

2. Map ownership changes in West Woodlawn
 - Data collection: Use 2013, 2017 ownership data
 - Table join: Join 2013 and 2017 data
 - Analysis: Determine which land plots have changed ownership, and if they have changed in ownership "type"
 - Thematic map: create map showing which properties have changed ownership, and how properties have changed in value since 2013

Data Acquisition

This section of the report will outline our process for how our group obtained the data used in the final products. Our process of data collection was fairly straight forward. We only needed two data sets, which were both provided to us by Blacks In Green. Although our group did not need to find the data sets on our own, we had a long process of cleaning each data set to ensure that it was accurate and useful.

Blacks In Green supplied us with two data sets in the form of excel spreadsheets. One of which was from 2013, and one from 2016, but both we comprised of various taxpayer information of West Woodlawn properties. Each one contains similar attributes such as Parcel PIN, Taxpayer Name, Property Address, City, State, and Zip code. The data set from 2013 was compiled by a former Blacks In Green intern, while the 2016 data set was given to Blacks In Green by the Cook County Clerk's Office. In order to determine whether a change in ownership occurred, we focused on the Taxpayer Name and Address, and used the Parcel PIN to join to the shapefile. We had to manually go through both data sets and highlight whether a property had undergone an ownership change. Although plotting which properties have changed ownership was a goal of ours, we were not done yet. In order to further investigate whether the property in West Woodlawn is owned by community members or not, we had to we note which of the ownership categories the address of the new taxpayer fell under. To find any taxpayer that may be of "international" status, we searched each company or LLC that seemed to resemble an international name.

One limitation that our group encountered throughout the data acquisition process was that both data sets were not in the same format. For example, the main problem we ran into was that almost every address was listed to have an "ownership change" simply because the names of taxpayers in the 2016 data set were spelled slightly different. To correct this, we had to filter the data to find those that had at least five matching letters. Afterwards, we manually went through each data point and corrected the spelling of the taxpayer name. Also, although we obtained the most important data on parcel ownership in West Woodlawn, some of the land parcels had little to no obtainable information. With that said, our data was constrained to the land parcels in West Woodlawn that had accessible ownership data. As previously described, Blacks in Green had expressed the desire to plot ownership data on a larger scale, but both Naomi Davis and our group decided we did not have enough time to obtain accurate data for a larger area.

Data Dictionary:

A. 2013 West Woodlawn Parcel Ownership Data

- File Name: PIN Taxpayers 2013
- Description: Contains data on West Woodlawn's Parcel PINs, Taxpayers, addresses, city, state, and zipcode.
- Source: Alireza Karduni, Former BIG Research Intern, head of 2013 Who Owns West Woodlawn Project
- Processing Steps: None, data already contained Parcel PIN Numbers, addresses, and owner names.
- Spatial Object type: Polygon
- Attributes:
 1. PIN
 2. Taxpayer
 3. Address
 4. City
 5. State
 6. Zip code
- Data Format: Excel spreadsheet

B. 2016 West Woodlawn Parcel Ownership Data

- File Name: PIN Taxpayers 2016
- Description: Contains data on West Woodlawn's Parcel PINs, Taxpayers, addresses, city, state, and zip code.
- Source: Naomi Davis from Blacks in Green received the data from Cook County Clerk Tanya Anthofer
- Processing Steps: None, data already contained Parcel PIN Numbers, addresses, and owner names.
- Spatial Object type: Polygon
- Attributes:

- a. PIN
 - b. Taxpayer
 - c. Address
 - d. City
 - e. State
 - f. Zip code
- Data Format: Excel spreadsheet

C. West Woodlawn Shapefile

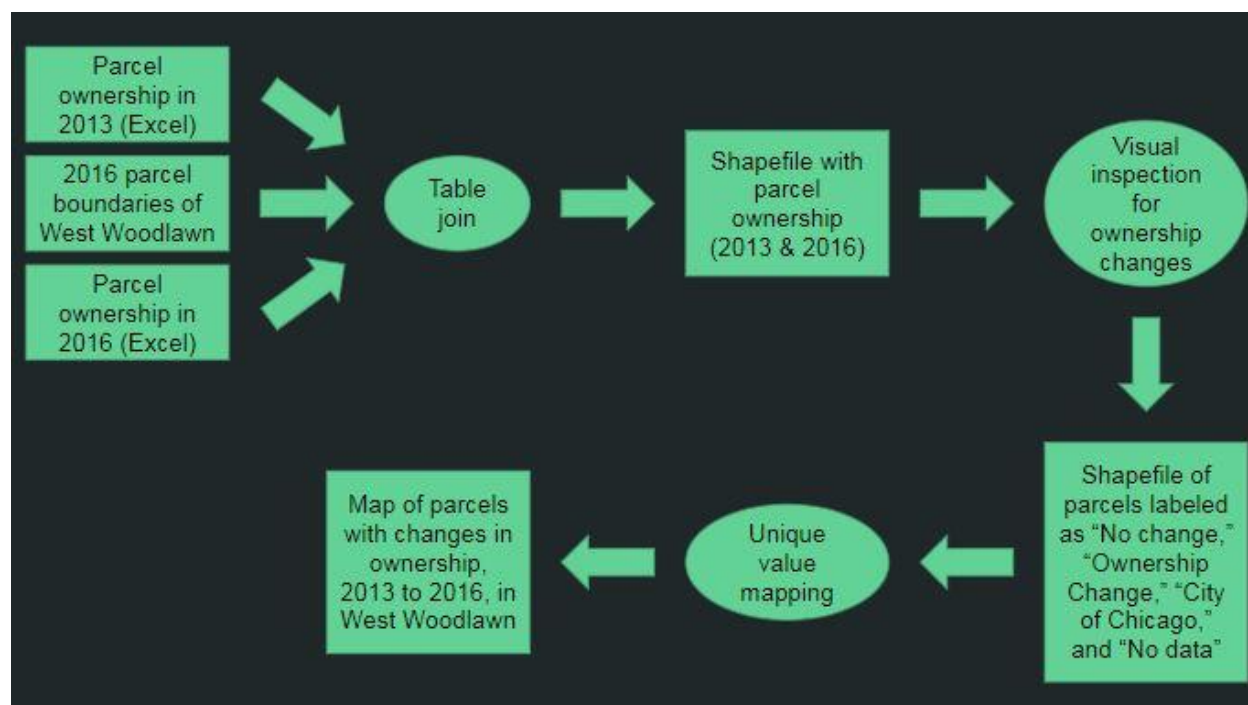
- File Name: Parcel Shapes 2016
- Description: Contains parcel shapes in the West Woodlawn Community Area
- Source: Naomi Davis from Blacks in Green received the data from Cook County Clerk Tanya Anthofer
- Processing Steps: None
- Spatial Object Type: Polygon
- Attributes:
 - a. Shape
 - b. Object ID
 - c. PIN
- Data Format: Shapefile

Data Analysis and Visualization

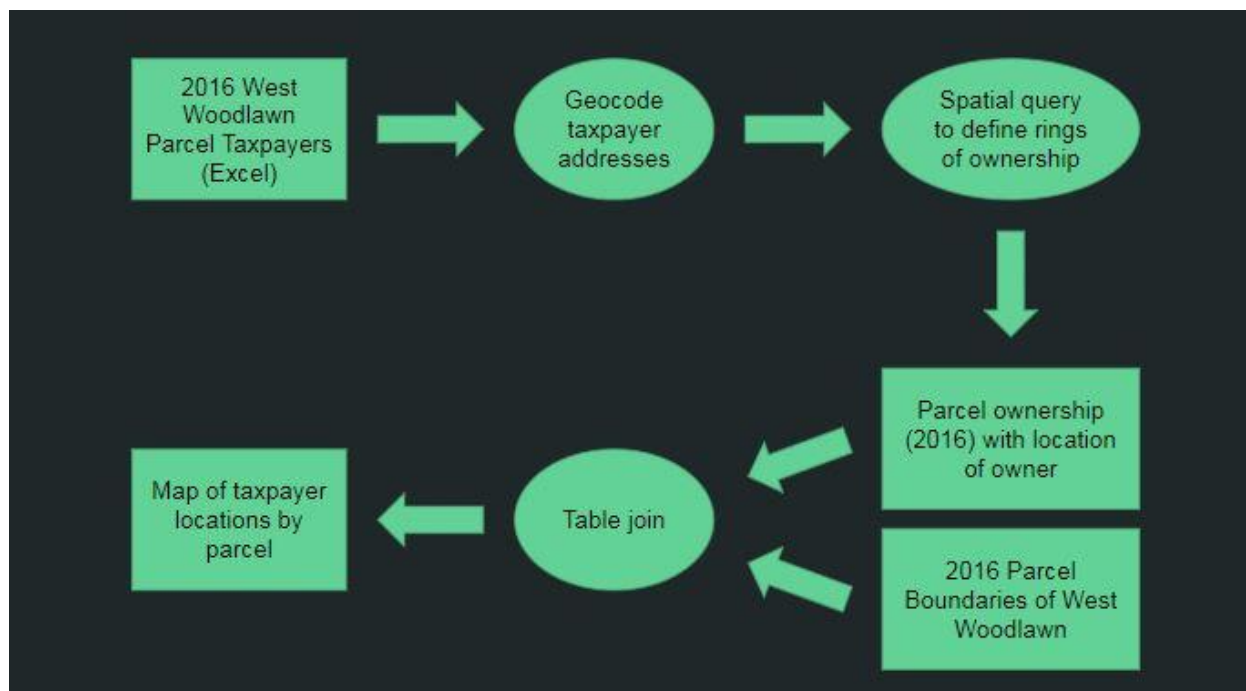
This section will be used to describe the processes and techniques we used while creating the maps and other visual aids using West Woodlawn ownership data. Our research produced two maps and one pie chart. One map simply displays which properties in West Woodlawn experienced a change in ownership from 2013 to 2016. While the other differentiates where the taxpayer for each property is located according to the seven categories. The pie chart is an alternative way to express the same values, showing the percentage of each of the seven owner types in the community.

As for the map showing whether ownership change occurred at each parcel, the process started by joining the 2013 and 2016 ownership data tables. This table join could be done by linking the two data sets together by a common attribute, the Parcel PIN number. This new table could then be joined to the shapefile of 2016 West Woodlawn parcel boundaries. We then had to visually inspect the table for any ownership changes, parcels owned by Chicago, or parcels with no data.

Below is a visual representation of the same process:



The second map focused solely on the 2016 West Woodlawn Taxpayers data set. After manually updating taxpayer names, categorizing the owners according to address, and getting rid of any unnecessary fields, the table was used to geocode the taxpayer's addresses. Then, a spatial query was used to define the "rings of ownership". Finally, after using table join, the parcels with the actual owner location and the 2016 West Woodlawn parcels shapefile created a map showing the owner type for each property.

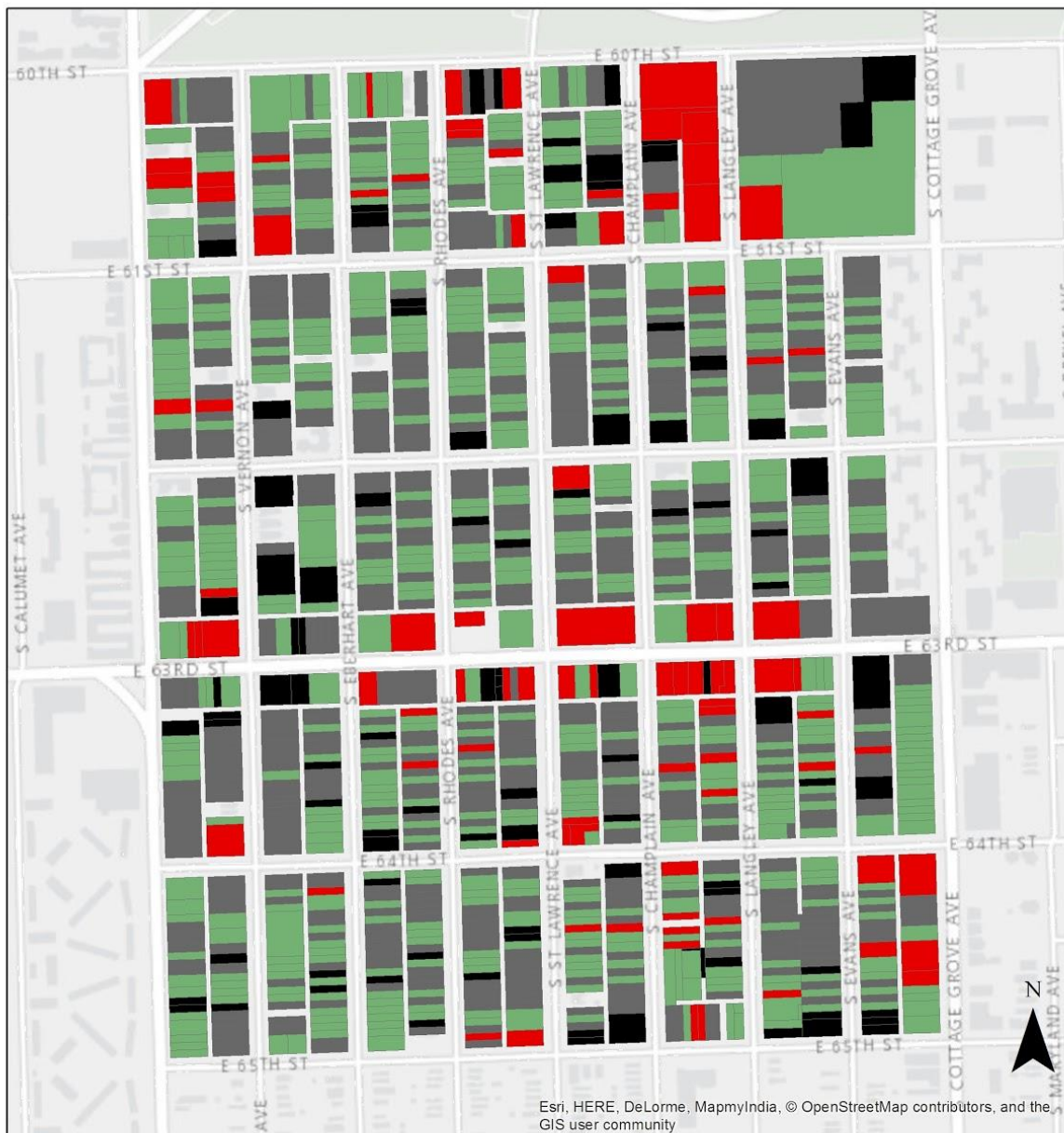


Results

The area under investigation for our project was bound by 60th street on the North, S. Cottage Grove on the East, S. Martin Luther King Dr. to the West, and S. Chicago ave to the South. Each of these visual information products were designed to illustrate how changes made on the smallest, individual level can completely change the structure of communities. The results of our project show that a large portion of land within West Woodlawn has undergone some sort of ownership change in the past three years. Among that change includes a slight increase in international developers. The most intriguing point brought out by this analysis is that roughly half (50.4%) of the total properties in West Woodlawn are owned externally. This could reality could put the existing residents and businesses at risk of outside influence in the future. Only 36.5% of West Woodlawn property owners are owner-occupants. This term was introduced to us by Naomi Davis, which describes residents who own the property they live at.

Our first map visualizes ownership changes in West Woodlawn from 2013 to 2016. Owner changes were scattered throughout the area, but some blocks experienced fewer ownership changes than others. Much of the most prominent land owned by the City of Chicago did not change hands, such as the parcels of land along 63rd street. Secondly, we created the map of 2016 West Woodlawn ownership and the taxpayer address. The parcels are color coded according to where the owner pays taxes. We differentiated the owners by seven rings: West Woodlawn, South Lakefront, Chicago, Cook County, Illinois, United States, and International. The label “No taxpayer” was used if the data showed no taxpayer information. Lastly, we created a pie chart as an alternative resource to illustrate the same findings. The chart shows the breakdown of West Woodlawn property owners by their type.

Changes in West Woodlawn Property Ownership, 2013-2016

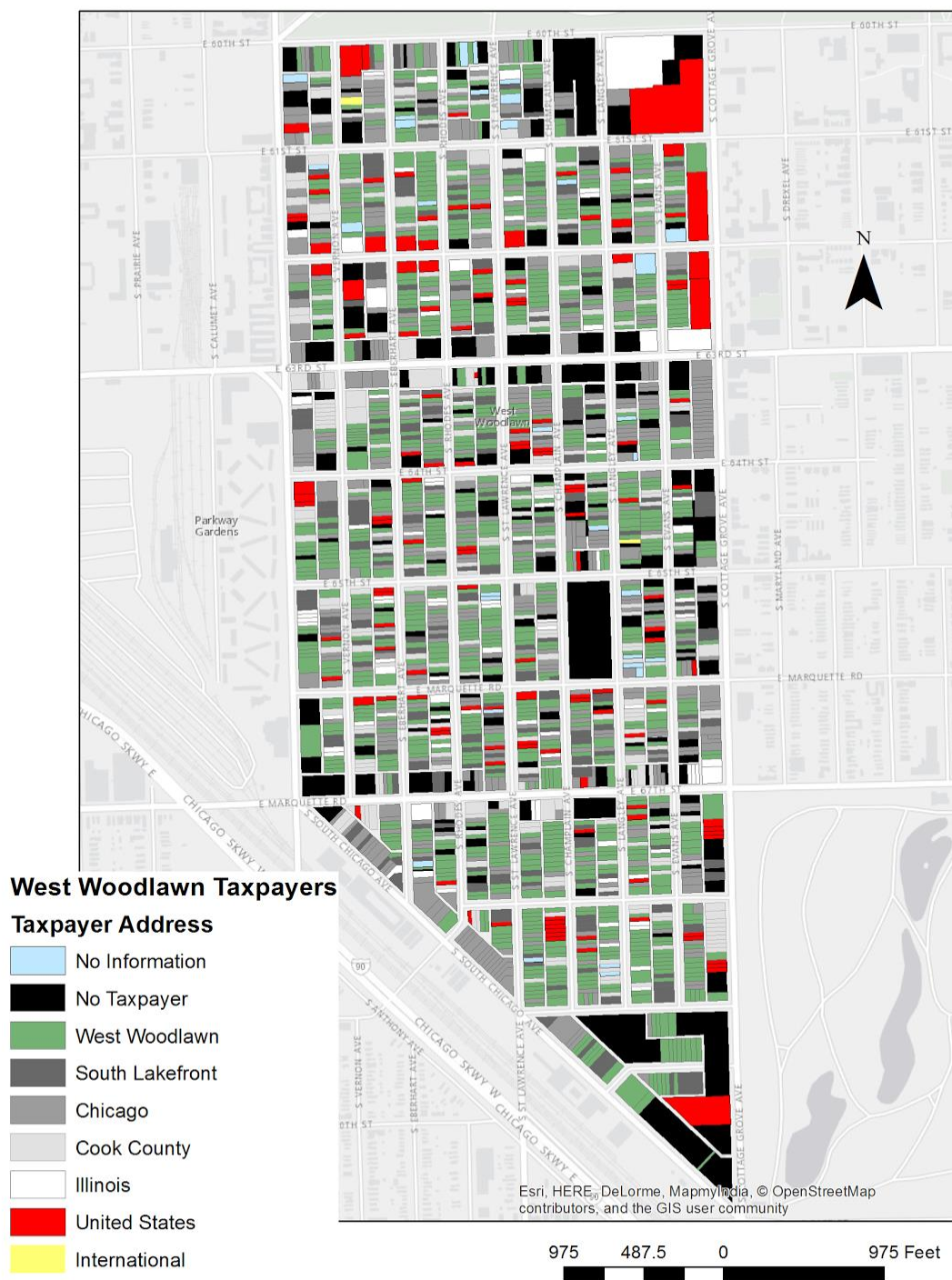


Property Ownership

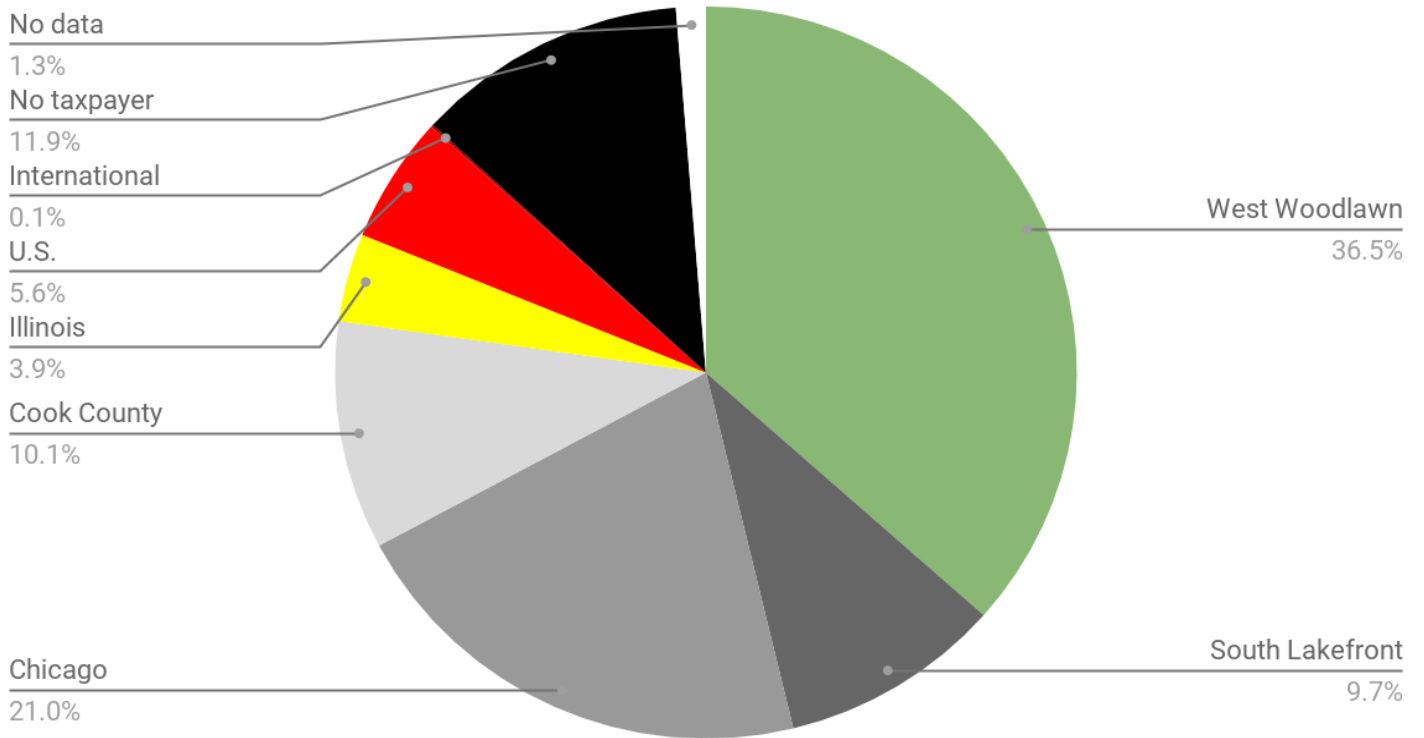
- No Ownership Change
- Ownership Change
- City of Chicago
- No Data



West Woodlawn Taxpayer Addresses 2016



West Woodlawn Property Owner Residencies (2016)



Summary, Conclusion, and Recommendations

This project, under the supervision and help of Blacks in Green, was focused on mapping ownership changes and ownership types in the neighborhood of West Woodlawn. The first map illustrates whether properties in the Northern part of West Woodlawn changed ownership from 2013 to 2016 on a parcel-to-parcel basis. Our second map showed where the owner of each individual parcel lives (or is located) based on the given taxpaying address, and categorizes them into various “rings” depending on their address.

We believe that this project was successful in terms of meeting Blacks in Green’s goal of illustrating how the West Woodlawn community has changed over recent years. By building off their 2013 research, we were able to compare previous community structure and ownership to more recent data. This project also succeeded in using the parameters defined by Blacks in Green to visualize owner type by taxpayer addresses.

Our findings show that much of West Woodlawn’s land owners have changed in the past few years, and that many of the land owners live and/or pay taxes outside the community. Our approach was effective in that we were able to produce a set of maps and readable data given the limitations of the particular datasets we received and worked with. After the completion of our research, we have reflected on several aspects that we would have done differently given the chance. One error we made that affected how we effectively used our time was not getting all necessary data as fast as possible in order to have more time to clean and process it. Although we were waiting for our community group partner to supply the data, it would have been beneficial to have that sorted out beforehand. Additionally, we would recommend possibly finding a way to streamline owner name matching and PIN matching into an automated process to save man hours and avoid human error, since most of our parcel-by-parcel data organization was done manually.

With that being said, some important questions still remain if this project were to continue. Further research remains about the actual value of the land parcels within West Woodlawn, and how the percentage of rental properties affect local ownership. Also, it would be interesting to conduct the same research after the Obama Presidential Library begins its construction. Since Blacks in Green’s overall goal is to conduct a 25 year study about land value and ownership in the South Lakefront region, these remaining questions can be used to guide future projects.