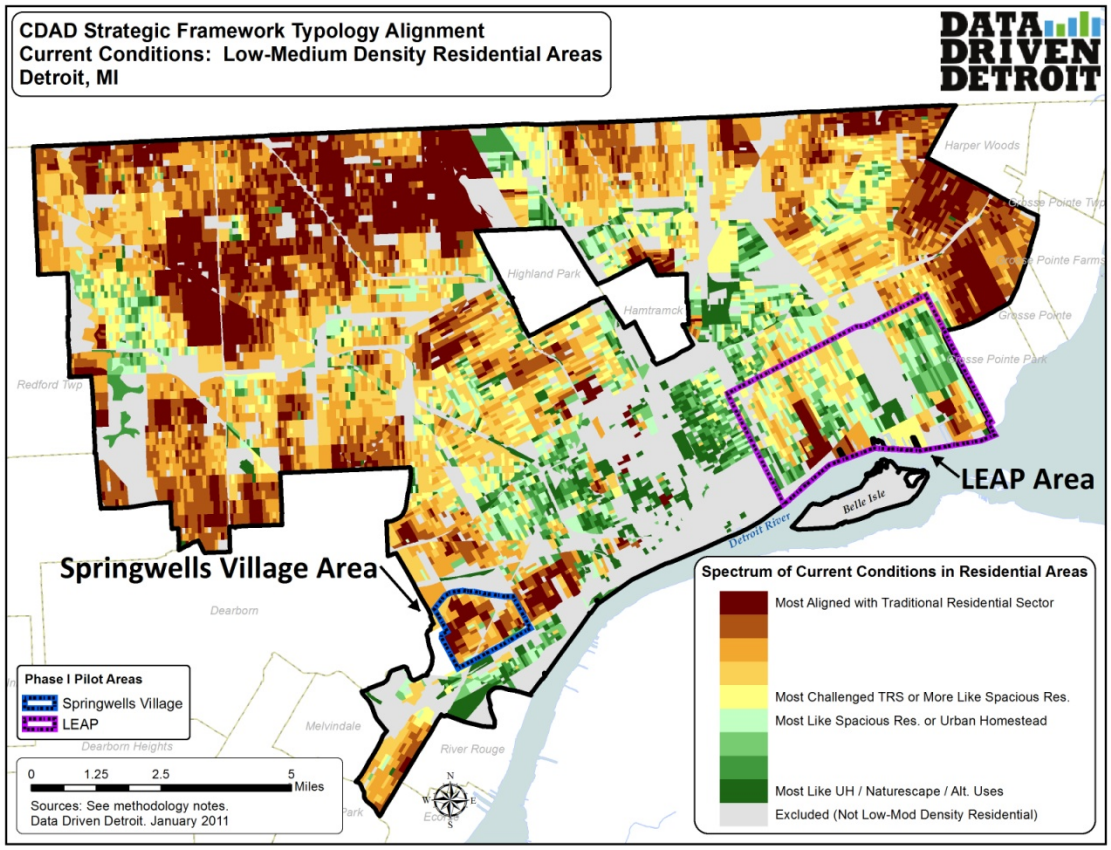
Data Driven Detroit (D3) was CDAD's technical partner during the development of the strategic framework process. D3 supported CDAD by operationalizing and visualizing the typologies of the strategic framework. D3 also provided technical assistance to the community stakeholders in the Springwells Village and LEAP areas. D3 presented the data as a tool to inform (not direct) community-based decisions. D3's goals in the pilot process were to utilize neighborhood indicators to illustrate existing conditions and create tools to assist neighborhoods to understand and access data relevant to their decision-making processes.

Residential Analysis:
Traditional Residential Sector, Spacious Residential Transition Zone, Urban Homestead
The most robust data available in Detroit relate to population, housing, and residential land use; D3's analysis and presentations centered on primarily on conditions within residential areas. Map 1 shows our analysis of current conditions for residential areas across the city. The map is color-coded based upon a combination of several key neighborhood indicators. Broadly speaking, the dark brown represents areas that are the most active residential areas. As the color spectrum moves toward dark green, the areas tend to have fewer housing structures or more abandonment. Note: the two pilot project areas are outlined as well.



Map 1. Current Condition: Low-Medium Density Residential

For the analysis in Map 1, there are two color spectrums. The Brown to Yellow represents the evaluation of attributes related to Traditional Residential Sector. The Light Green to Dark Green represents the evaluation of areas that are primarily residential, but with few to no housing structures.

The darkest brown areas have current characteristics that are most aligned with CDAD's Traditional Residential Sector (TRS) typology. Generally, the darker brown areas reflect residential areas that are more active, have higher population density, fewer vacant lots, fewer properties owned by banks, investors or the city, and less population decline.

Orange areas have characteristics aligned with TRS, but tend to have more challenges to the stability of the neighborhood such as higher rates of housing vacancy or bank ownership or population decline. These areas are stable neighborhoods, but require more intervention than brown areas to retain that stability.

As brown fades to yellow, the areas see greater challenges to neighborhood stability as TRS areas. Generally a yellow area has less housing structure density than a brown area (or more vacant lots). The yellow blocks would take more intensive effort to stabilize if the future direction decided by stakeholders was to be TRS.

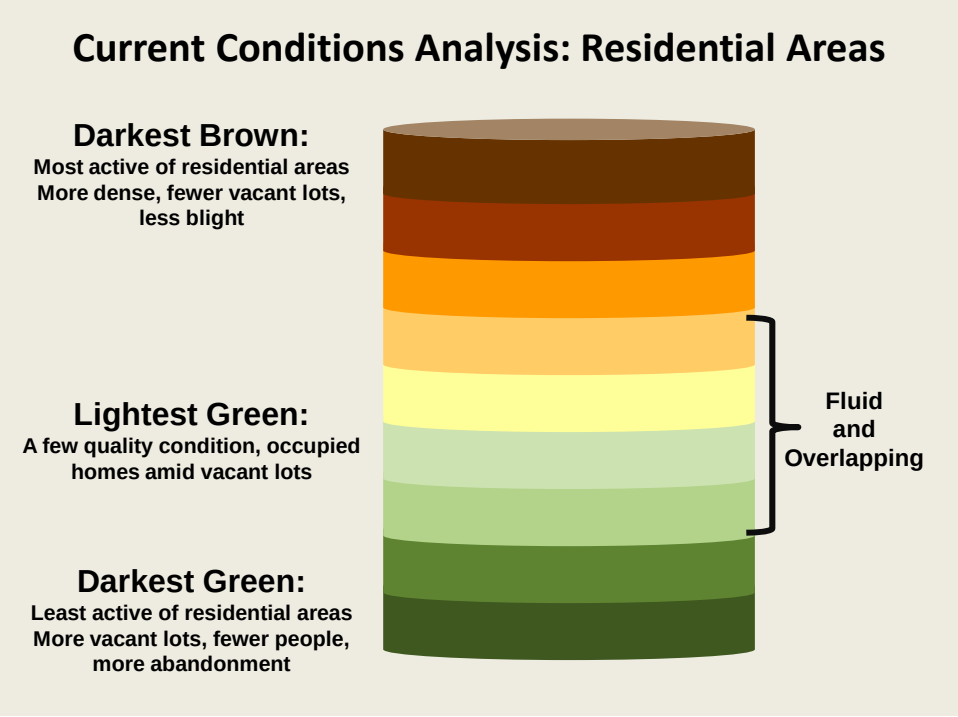


Figure 1. Low-Medium Density Residential Analysis Spectrum

We created a two-tiered analysis to better identify areas at the low end of the residential analysis that still have good quality homes and home occupancy rates, albeit in less dense areas. The light green areas have similar characteristics to the yellow areas. These are still primarily residential areas, but with higher percentages of vacant lots or low housing occupancy rates compared to brown areas. Compared to dark green areas, the light green areas have some good quality housing stock, but this stock is intermixed with vacant lots.

The darkest green areas are generally residential, but are the least active, with less density, more abandonment, and generally the highest concentrations of vacant lots.

One of the goals of this analysis is to demonstrate the relative activity of neighborhoods, regardless of different attributes found in Detroit's unique neighborhoods. For example, when examining CDAD's two pilot areas, Springwells Village may have lower housing values than Indian Village, but Springwells has higher population density and less population loss. On the citywide map, both of these areas are dark brown, despite their differences in character. In other words, both areas have attributes that make them active and aligned with TRS characteristics, but for different reasons.

D3 created a composite score from the following neighborhood indicators to illustrate how closely aligned residential areas are with the characteristics of Traditional Residential Sectors:

1. Population Density,
2. Rate of population loss or gain
3. Housing condition ratings,
4. Estimated housing values,
5. Density of housing structures (or the opposite of residential vacant lots)
6. Housing occupancy rates
7. Parcel ownership type. Specifically, D3 included whether or not residential parcels are owned by a non-investor individual as opposed to a bank, investor or public entity.

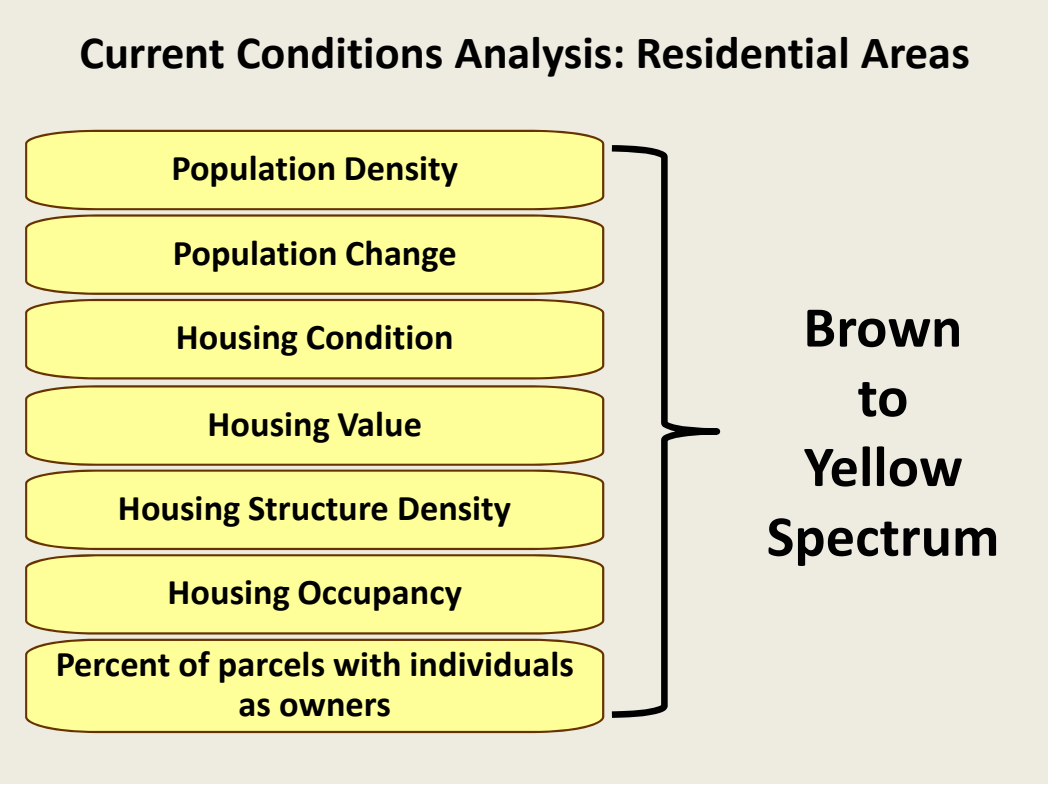


Figure 2. Neighborhood Indicators for Brown to Yellow Spectrum

D3 next created a light green to dark green spectrum to better understand which areas might be most like spacious residential areas, urban homesteads, or residential areas that may be considered for repurposing. This spectrum thus re-evaluates least dense "residential" areas to distinguish between areas with low density, but occupied, quality condition homes and areas with almost all vacant lots or abandonment. The green spectrum (Figure 3) evaluates the blocks with the lowest composite scores in the brown to yellow spectrum for the following characteristics:

1. The number of occupied homes (with a minimum number required)
2. The number of homes in good or fair condition
3. The percent of parcels with individual, non-investor owners
4. The density of housing structures (as opposed to concentration of vacant lots)

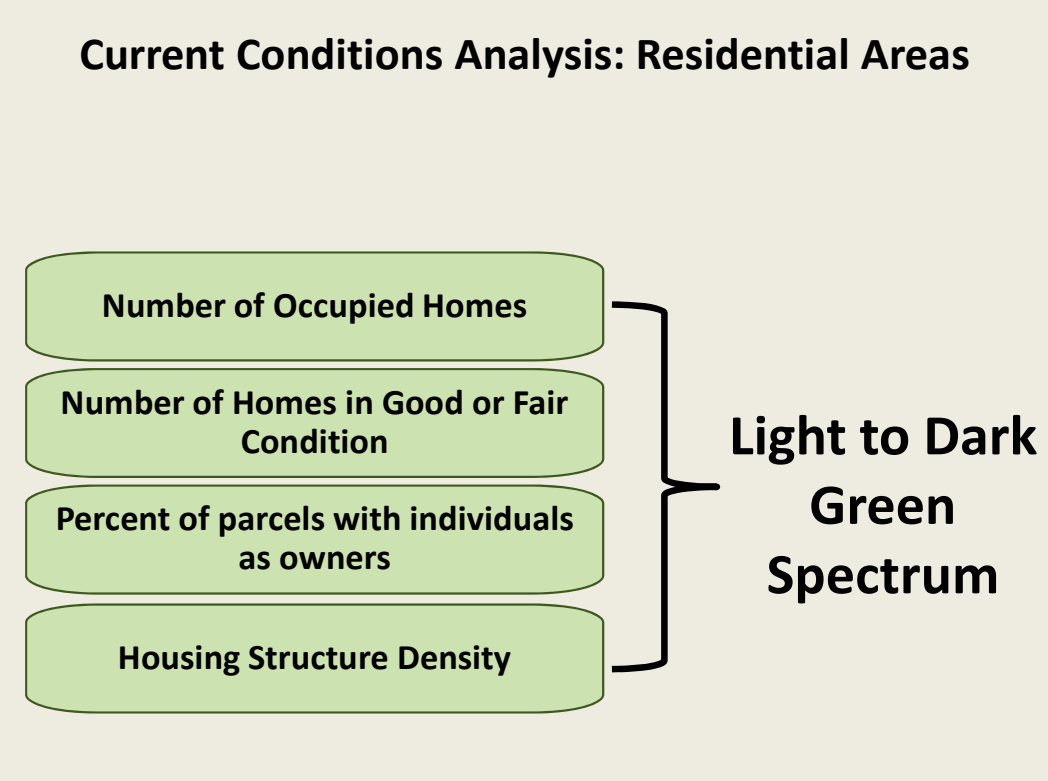


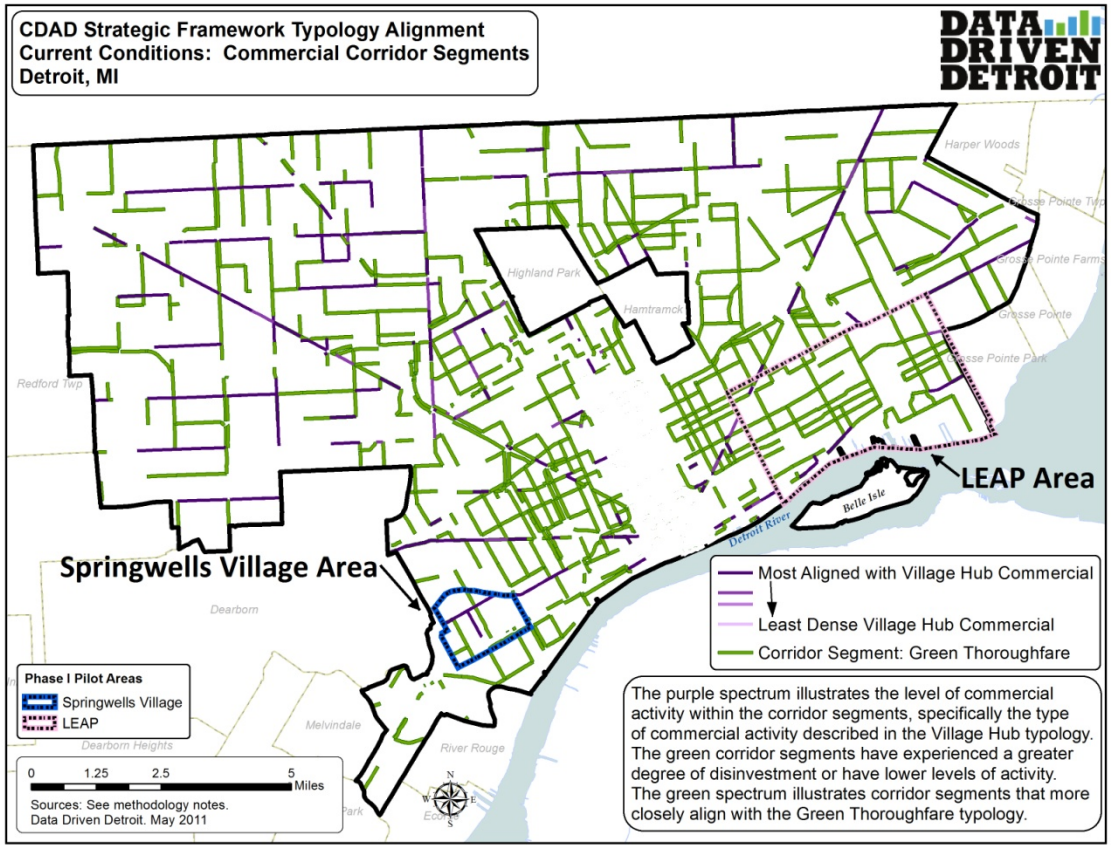
Figure 3. Neighborhood Indicators for Light to Dark Green Spectrum

Corridor Segment Analysis: Village Hub and Green Thoroughfare

The corridor segments in Map 2 represent a 160ft buffer around roads most likely to have commercial activity. This map contains two analyses of the characteristics of parcels and businesses within these segments: 1) the purple analysis and 2) the green analysis.

The purple spectrum illustrates the level of commercial activity within the corridor segments, specifically the type of commercial activity described in the Village Hub typology. The businesses within each corridor segment were filtered for specific types (limited to the categories provided in the data); these included grocery stores, restaurants, apparel, retail, hardware, and personal services.

The green corridor segments have experienced a greater degree of disinvestment or have lower levels of activity. The green spectrum illustrates corridor segments that more closely align with the Green Thoroughfare typology. This analysis is limited to two criteria: the concentration of vacant lots and/or the business vacancy rate.



Map 2. Current Condition: Commercial Corridor Segments

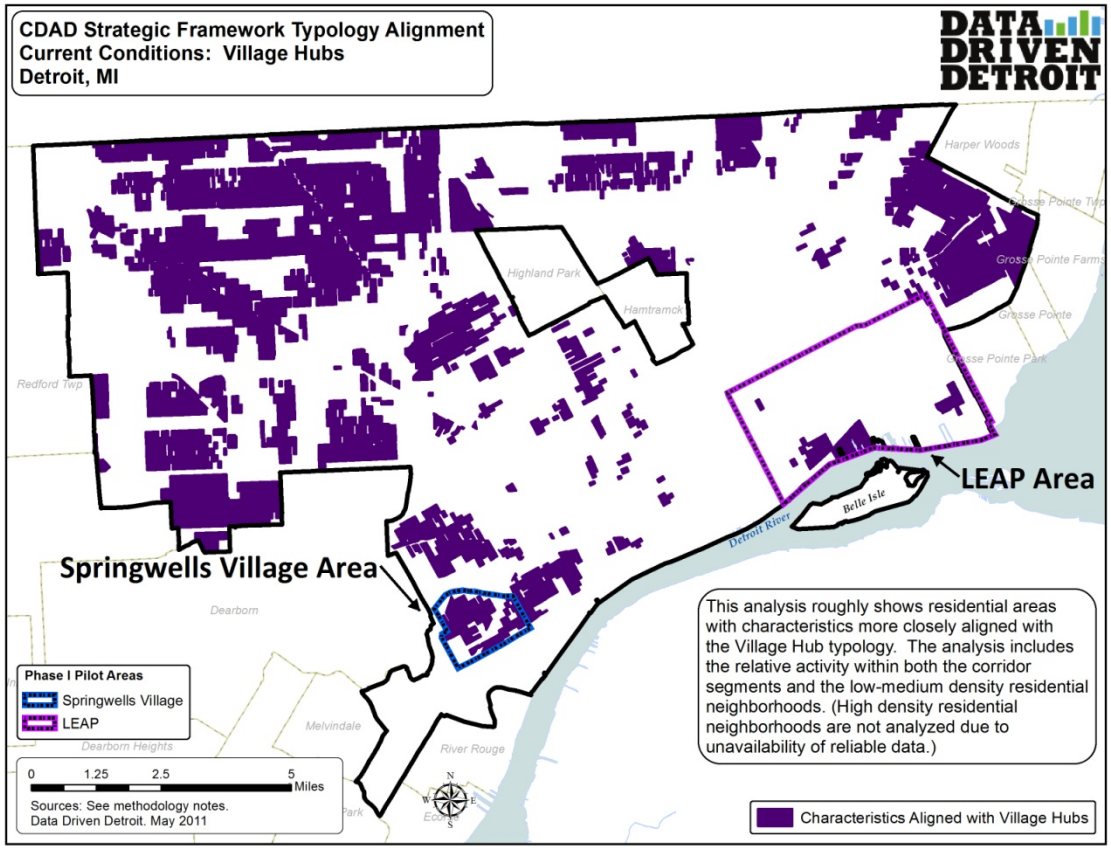
Data to analyze commercial areas are particularly difficult to incorporate into a study for Detroit. Accurate public data are not available to indicate these key variables: presence of buildings, the occupancy rate for commercial buildings (to a greater detail than at Census Tract level from USPS), and the type of businesses on a property. D3 utilized SEMCOG land use data and the National Establishment Time Series (NETS) data for the analysis. In this map, corridor segments are not shown in the City Hub area located in Greater Downtown (Downtown and Midtown). Corridors in this area require a separate analysis, unique to the density and characteristics of the City Hub typology.

Residential Analysis: Village Hubs

The analysis in Map 3 roughly shows residential areas with characteristics more closely aligned with the Village Hub typology. The analysis includes the relative activity within both the corridor segments and the low-medium density residential neighborhoods. (High density residential neighborhoods are not analyzed due to unavailability of reliable data.)

Census Blocks highlighted in purple have the following characteristics:

1) Ranked above the median when analyzed for residential characteristics;
2) Located within ¼ mile of a commercial corridor segment that had relatively higher density of certain types of open businesses (of types found in Village Hubs).

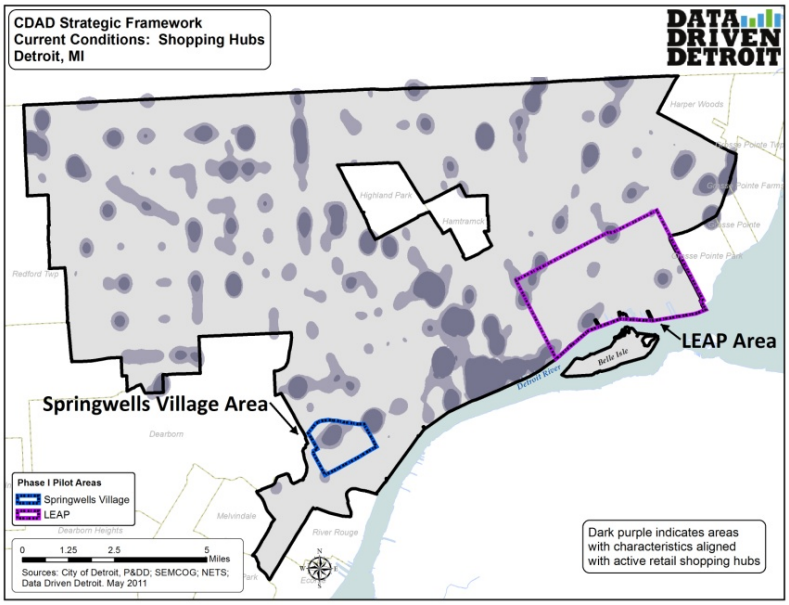


Map 3. Current Condition: Village Hubs

As noted, access to relevant and accurate commercial and industrial data have been far more limiting than residential. D3 combined SEMCOG, City of Detroit, and NETS data to map vacant lots, inactive buildings, and possibly active buildings. In addition to the corridor segment analysis, this parcel-level mapping is provided to community stakeholders as a tool. Validation of the data has been difficult and D3 will continue to develop tools that assist neighborhoods to understand the characteristics of commercial and industrial areas relative to areas across the city. In addition to parcel mapping, D3 included a hot spot analysis to illustrate Shopping Hubs.

Commercial Analysis: Shopping Hubs

The analysis in Map 4 roughly shows areas aligned with the Shopping Hub typology. The hot spots on the map show concentrations of revenue for commercial and retail establishments. Active Shopping Hubs will have specific types of businesses and higher revenue volume than scattered site retail.

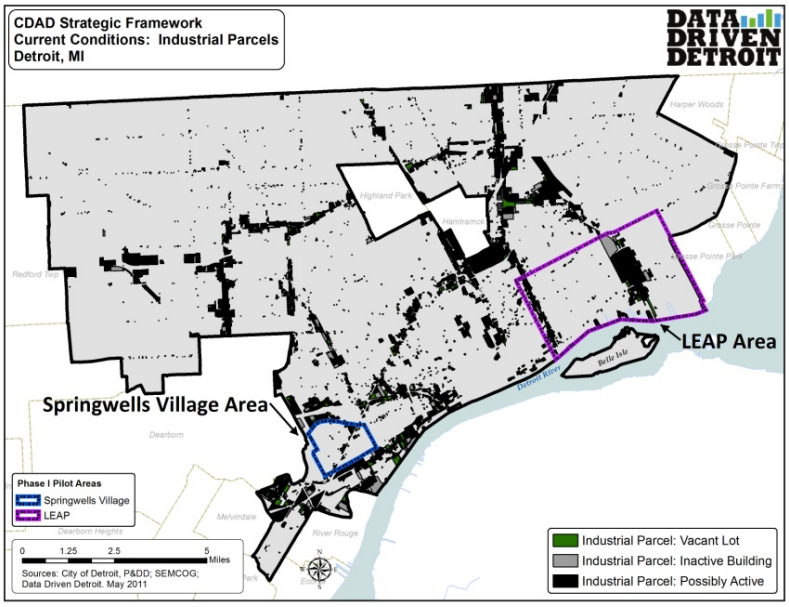


Map 4. Current Condition: Shopping Hubs

Industrial Analysis: Parcel Detail

The analysis in Map 5 roughly shows the characteristics of industrial parcels. Based upon a combination of SEMCOG, City of Detroit, and NETS data, the parcels are coded as industrial lots that are either:

1) Vacant Lots,
2) Inactive Buildings, or
3) Possibly Active Buildings



Map 5. Current Condition: Industrial Parcels