Data Driven Detroit
Technical Documentation

File name:	MCM_VacancyIndexAggregation_11182014.mdb
Theme:	Land; Housing
Data source:	Motor City Mapping, 2014; Proprietary Data Sources.
Year of data source:	2014
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Purpose

This document accompanies the file named above, which contains an aggregation of Data Driven Detroit's (D3's) vacancy index data. The work to produce this dataset fell under the Motor City Mapping project. The vacancy index assesses structural vacancy with greater nuance than the "occupied/unoccupied/maybe" categories used in the Motor City Mapping windshield survey. This dataset incorporates several sources, including Motor City Mapping, utility data, and other data sources to create a score evaluating the occupancy status of the parcel. The results have been aggregated to 2010 Census tracts. The purpose of this file is to provide a version of the vacancy index data to the public, enabling policymakers to track Detroit's vacancy as up-to-date as possible.

Creating the Vacancy Index

The analyst assembled the vacancy index from several sources, including Motor City Mapping data, utility shutoff information, and several other sources. The analyst then joined these datasets to survey parcel objects created for use in the Motor City Mapping survey. He assigned a weighted value to each dataset, based on its perceived accuracy and the likelihood of vacancy on a property with that particular coding. The final values for the index ranged from 0 to 4, with a value of 4 indicating a property that had the greatest number of factors identifying it as vacant.

This version of the vacancy index is based on data that were updated as recently as October 2014.

Creating the File for Public Display

Because the vacancy index incorporates proprietary data sources, D3 is unable to release the raw values of the index to the public. To allow the public to obtain some of the benefit from this highly effective tool, however, the analyst created several text categories that would help mask the values, while also allowing the public to more easily interpret the index scores. Based on the values in the vacancy index, the analyst created the following categories, defined below:

- **Likely Occupied:** Structure has a vacancy index score of 0 or 0.5. Most, if not all, sources in the vacancy index point toward this building being currently occupied.

- **Potentially Vacant:** Structure has a vacancy index score of 1. There are some signs of vacancy with this structure. It has the potential to be vacant, but may not have had its utilities shut off.

- **Likely Vacant:** The structure is likely to be vacant. Two indicators incorporated into the vacancy index point toward it being currently unoccupied.

- **Very Likely Vacant:** The structure is almost certainly vacant and has a strong potential of being either abandoned or in poor condition. At least one, and potentially multiple, utilities have been shut off. These buildings should be prioritized for intervention.

The analyst then tagged these results with 2010 Census Tract IDs and summarized the data, creating a total of eight new fields. Four of these contain the total number of structures that fell into each category. The other four columns contain the percent of structures that each field represents.