

Data Driven Detroit

Technical Documentation

File name: Brownfields_Geocoded_111314.mdb
Theme: Environmental
Data source: Michigan Department of Environmental Quality
Year of data source: 2014
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Purpose

The following document accompanies the file named above, which displays data on current Brownfield Facilities and their locations as recognized by the Michigan Department of Environmental Quality. The work to produce this dataset fell under the Motor City Mapping project. This dataset visualizes the locations and dispersion of perceived environmentally contaminated parcels. The purpose of this dataset is two-fold: to provide access to more public information on properties that may require special remediation efforts, and to help inform intervention strategies for all levels of stakeholders interested in making data-driven decisions.

Methodology for Creating the Dataset

Background: Inventory of Facilities and the Michigan Department of Environmental Quality (MDEQ):

The analyst downloaded the raw data used to develop this dataset from the MDEQ. Pursuant to statutory guidelines under the Natural Resources and Environmental Protection Act (NREPA), the DEQ is required to “post on its website an inventory of residential closures and a separate inventory of other known facilities.” For the purposes of this dataset, “residential closures” have not been included; these were submitted to the DEQ in a No Further Action Report and satisfy remediation standards for Residential Facilities. All “other known facilities” available are included in the Inventory of Facilities dataset that serves as the foundation for this layer.

The Inventory of Facilities includes all locations where there have been a release of hazardous substances as defined under multiple subsets of NREPA. Although this list is commonly referred to as Brownfields, it can contain other types of designations including but not limited to: Leaking Underground Storage Tanks (LUST), Baseline Environmental Site Assessments (BEAs) and Environmental Site Assessments. Each of these designations requires further action and are pursuing cleanup in conjunction with the DEQ.

It is also important to mention that this inventory does not necessarily include every facility that is subject to NREPA's guidelines, since owners are not required to inform the DEQ about the facilities and can pursue cleanup independently. Facilities that are not known to the DEQ are not on the inventory, nor are locations with releases that resulted in low environmental impact.

Processing the Final File

The analyst downloaded the full Inventory of Facilities spreadsheet from the DEQ's website (<https://secure1.state.mi.us/FacilitiesInventoryQueries/>) on 11/13/14. To geocode the Facilities locations, the analyst conducted the following process.

1. Utilized the existing County, Township and City attributes provided by the DEQ to determine which Facilities were in the City of Detroit and would be geocoded to parcel. The analyst extracted these records into a separate table.
2. The analyst uploaded the resulting table, into a personal geodatabase.
3. The analyst imported this data into an ArcGIS environment and geocoded using D3's internal address locator designed to match addresses to parcels in Detroit. Resulting in a new feature class.
4. The Analyst manually determined the location of any unmatched records by utilizing the DEQ's MI Mapper online interface, Google Earth and the City of Detroit Assessor's Office parcel file.
5. Parcels that remained unmatched following the automatic geocoding process and were not viable for manual geocoding (i.e. bad address or not enough information) were left intentionally blank and are not visualized. These accounted for approximately 6% of the total Facilities.

Geocoding Results

	Matched	Tied	Unmatched
Initial	644 (80%)	0 (0%)	160 (19%)
Final	756 (94%)	0 (0%)	48 (6%)