Brownfield Redevelopment in Michigan Science Division Summer Research Janaya Crevier, with Alicia De Jong and Dr. Mark Bjelland July 27, 2016

## Background

This summer, our research followed up a project on brownfields done by Ian Noyes and Dr. Mark Bjelland during the summer of 2014, which found significant disparities in the amount of state and local funding made available to municipalities for brownfield redevelopment. (A brownfield is a site, usually post-insutrial in nature, whose redevelopment is complicated by environmental contamination.) Cities bearing heavy burdens of Michigan's industrial legacy, such as Detroit and Flint, dedicate a disproportionately small amount of funding to brownfields relative to their high amounts of derelict industrial land. In contrast, some cities with much less of an industrial legacy had disproportionately large amounts of money for brownfield redevelopment; this was especially the case for coastal cities along the Great Lakes, as well as some northern retirement communities.

## **2016 Research Summary**

Following up on these initial findings, Alicia De Jong and I zoomed in on four Michigan cities and their brownfields programs, taking a case studies approach to examine why the disparities exist in brownfield spending. During the month of June, we focused on Grand Rapids, whose brownfield redevelopment spending is about the level one would expect given its share of Michigan's industrial legacy. We examined dozens of brownfield sites in person, spoke with city officials, and attended public meetings about brownfield redevelopment. Maps we created based on data from the GR Brownfield Redevelopment Authority (BRA) and old zoning maps show that Grand Rapids has heavily invested in the downtown area and increasingly toward the southeast, but brownfield redevelopment in areas that were more heavily affected by industry have not been invested in as much as one would expect. The Story Map Journal we created that includes brownfield maps, historic photos, and more, can be found at: <a href="http://www.arcgis.com/apps/MapJournal/index.html?appid=0b52856bb9474aa5bcfca7d8c89b6c34">http://www.arcgis.com/apps/MapJournal/index.html?appid=0b52856bb9474aa5bcfca7d8c89b6c34</a>.

Throughout July, we branched out to other cities in Michigan, taking day trips to Flint, Traverse City, and Benton Harbor/St. Joseph. My research focused on the creation of a Cascade Story Map (not yet public) examining the legacy of the General Motors Corporation in Flint, specifically on three of the largest sites of former GM production, most of which remain severely contaminated empty spaces with limited potential for redevelopment. Because of the market-based nature of brownfield redevelopment in Michigan, Flint's brownfield program was pretty much defunct: since the real estate market there is suffering so heavily, even strong tax incentives for developers have failed to attract private investment to Flint's extensive brownfields.

Throughout the course of the summer, I was deeply impacted by witnessing and researching the contrast between a massively successful brownfield program such as Traverse City's (<a href="http://www.arcgis.com/apps/MapJournal/index.html?appid=078ef3c9369c4a35823b293f284d004f">http://www.arcgis.com/apps/MapJournal/index.html?appid=078ef3c9369c4a35823b293f284d004f</a>) and a suffering one such as Flint's. Relatively small capital investments on the part of big corporations like GM can wreak massive environmental and social damage on the city for decades after the corporations have left. In contrast, when local government has the funds and the political momentum to work on post-industrial clean-up, meaningful steps can be taken toward building a cleaner, more sustainable, and better connected city.