

Asset Mapping and Barriers to Access in the Hill District

Melana Dayanim
University of Pittsburgh

Introduction

The Hill District is a neighborhood in Pittsburgh, Pennsylvania between Oakland (the university hub) and Downtown (the business and industrial hub). The neighborhood began as a cross-cultural settlement where immigrants from many origins mingled and prospered. Between the 1930s and 1950s, the neighborhood was at the center of the Pittsburgh jazz scene and African American cultural life (Fox 2012). However, the construction of the Civic Arena hockey stadium that began in 1958 led many residents to lose their homes, breaking up the community geographically and beginning the economic downfall of the neighborhood. Currently, the neighborhood benefits greatly from its strong communal ties and community organizing assets such as Hill House Association. Hill House is a community organization that employs a holistic approach to deliver a vast array of social services to Hill District residents. In the effort to continue to understand the Hill District's built environment and improve the neighborhood's social and economic life, Hill House began an asset mapping project in conjunction with UCSUR.

I had been involved in the Hill District for about a year through the Global Brigades Alternative Spring Break (ASB) in the Hill and other various volunteer opportunities at the time I first heard of the project. The first time I went to the Hill District I only knew what to expect from rumors, news reports, and light pre-reading required before our service-learning experience began. I am not sure I had quite internalized the negative warnings of violence and danger in the community, but I was not prepared for what I would encounter. We met with numerous community organizations that work towards the advancement and empowerment of the neighborhood and its community. We met passionate civil servants who showed us the true soul of the community, even if we could not yet appreciate it ourselves. I was inspired enough to help plan the ASB in 2017 and will spearhead the ASB in 2018. When the opportunity arose to work more closely with Hill House and its inspiring faculty on a long-term project, I immediately jumped at the opportunity. While I had this experience and connection with the community, my experience with mapping began when I joined UCSUR and Hill House in creating this map.

I study politics and public health at the University of Pittsburgh. Before I began mapping, I had never realized the deep history as well as the wide breadth of uses that physical representations of data have for health and political issues. Asset mapping originated as an "asset-based community development strategy for community building and capacity development" in 1993 (Lightfoot 2014). It has grown into one of the most prominent tools in epidemiological studies, community-based participatory action research, and in needs assessment. The World Health Organization "has recognized that asset-based approaches to health promotion are critical for supporting overall population health and reducing health disparities" (Lightfoot 2014). The literature continuously acknowledges the "importance of neighborhood environments as structural conditions that shape individual lives and opportunities" (Diez-Roux 2001). Asset mapping is a logical extension of this principle; the built environment has the ability to affect the well-being of a community and as such must be understood in order to empower and engage the community.

The Community Based Research (CBR) Fellowship at the University of Pittsburgh Honors College enabled a cohort of student researchers—including me—to develop and execute research projects with full collaboration of a community partner and faculty advisor. Hill House, the community partner, and UCSUR hope the construction of this asset map helps to not only reduce barriers to access of already existing assets, but also prevents redundancy and increases desirability of new assets entering the neighborhood.

Methods

Preliminary Research

I first conducted background research on how best to find and identify community resources. This research was sourced from knowledgeable professionals at UCSUR as well as Dr. Dara Mendez, who guided the process towards the correct resources and how best to verify them online in addition to the best practices for verifying resources in person. Additional sources came from a short review of relevant literature concerning creation of databases to be used for various purposes, but most poignantly mapping. This guidance and the review helped me to find that a combination of Internet sourcing and on-site sources is the best practice for creating databases of assets in a community.

Internet Sourcing

The Internet sourcing process had been started long before this CBR project began. As such, there were a plethora of sources already plugged into a database including from the Hill House website, the Hill District Community Development Corporation website, and the United Way community asset list. I extracted additional resources from simple searches, documents throughout the websites of both Hill House and Hill CDC, and the Pittsburgh city website.

Virtual Ground Truthing

In GIS mapping, “ground truth” refers to reality on the ground of data sourced remotely. In this case, I used ground truthing to validate the data collected in the Internet sourcing phase of the research. I initially sought out the ground truth using Google Maps as a way of virtually looking at the neighborhood to see what resources could be verified by looking at a street view in addition to what new resources could be found. In this way, I could scour large sections of the Hill District and discern the credibility of the online information. At times a resource found online had actually been shut down, or its location was incorrectly reported. Additionally, many resources were identified that had either no website or were overlooked in Internet sourcing. Like all the methods used in creating this map, once a new resource was identified through virtual ground truthing, I could research it online to learn more.

On-Site Ground Truthing

This on-site ground truthing is similar to the process above with the exception of my physical presence in the neighborhood as a way of verifying resources. The advantages of this method over a virtual method are synonymous with the limitations of Google Maps street view.

The street view might be dated, all points of interest cannot be reached, and the technology has a way of warping perception so that it is difficult to truly understand the geography and to tell if a resource is in fact operational. The on-the-ground approach eliminates these problems at the expense of dealing with weather, the vastness of space, and exhaustion. I found this approach was very effective in identifying the true nature of many collected resources from the web.

Database Generation

The database is itself a Google Sheet with many columns for different aspects of a resource. The name, address, description, website, phone number, type, and other pertinent information is found and documented for each resource in the database. These addresses will be used to create a map and the descriptions are used to identify the type of the resource. This database is the core of the research and is a method as well as the result of this study.

Type-Generation Exercise

Each asset must be categorized into a type in order to sort and divide the long list of assets. Examples of types include *health, transportation, government, and business*. Types may have multiple subtypes within them to further specify the function of the asset. Examples of subtypes within the type of *health* are *dentistry, emergency medicine, and mental health services*. The type and subtype generation was done in a meeting with the community partner in which many stakeholders present identified different categories of resources in the Hill district in addition to type categories I created as different sorts of resources were continuously encountered.

Typing

Each asset was categorized by the types of resources it provides for the community according to the list of types generated previously. If the asset fell under a type, a 1 was marked in the corresponding column. If an asset did not fall under another type, a 0 was marked in that column. Assets could have more than one type since a single asset can provide many different sorts of resources and serve in different roles. This process felt subjective at times, as though I was inserting my own personal view of a given community asset’s functions. **Figure 1** shows an excerpt of resources by type to illustrate the multi-faceted nature of many of the Hill District’s community assets.

1	Agency Name	Arts & Culture	Business	Community Orgs	Development	Ecological	Education	Gov	Health	Housing	Religion	Retail	Senior Support
5	A For The People's Insurance Agency	0	1	0	0	0	0	0	0	0	0	0	0
6	A+Schoools	0	0	1	0	0	1	0	0	0	0	0	0
7	Abe's Market	0	1	0	0	0	0	0	0	0	0	1	0
8	Acculturation For Justice, Access and Peace Outreach (AJAPO)	0	0	1	1	0	1	0	0	0	0	0	0
9	Addison	0	0	0	0	0	0	0	0	1	0	0	0
10	Al-Masjid Al-Awwal	0	0	0	0	0	0	0	0	0	1	0	0
11	Albert "Turk" Graham Park	0	0	0	0	1	0	0	0	0	0	0	0

Figure 1: Typing Excerpt

Mapping

Creating the final map was the last and most challenging of all my research methodologies. My inner political science major instincts periodically wanted to forsake this map and retreat to more comfortable territory like a literature review. This is where my faculty

mentor and UCSUR were the most help in my research. Dr. Mendez gave expert guidance from the beginning about how best to approach the entire project of making a map with both theoretical and experiential background. She was the first to suggest not only making a digital map, but also the program eventually used to create the map, Google MyMaps. Elizabeth Monk was my main contact at UCSUR who continuously supported me as I tracked down as many assets as I could possibly uncover. UCSUR graciously supplied its own neighborhood outline information for the map

Through this struggle, I did manage to eventually conquer the digital map. The map was constructed using a layer for each type of asset. Users can therefore look at all of the health resources on the map by themselves and layer on other types as they wish, allowing for maximum convenience in searching for a community resource that matches their desires. I am proud and only slightly embarrassed to report that when I finished the first few layers of my map I had a moment of such complete joy that I began to tear up. Seeing my work in a concrete way was one of the most satisfying academic moments I have ever experienced. The digital asset map is the first step in what will hopefully be a useful resource for Hill District residents as it transitions into a more easily accessible format.

Results and Discussion

The research yielded two final products: a database of resources and a preliminary community asset map. I like to differentiate them in the following way: the final database reveals how many of each asset exist within the community according to this study, and the final map product reveals the dispersion of assets throughout the community. To make this point clearly, I generated a pie chart (**Figure 2**) using the typing results. Note, assets have been double-listed if they were sorted under more than one type.

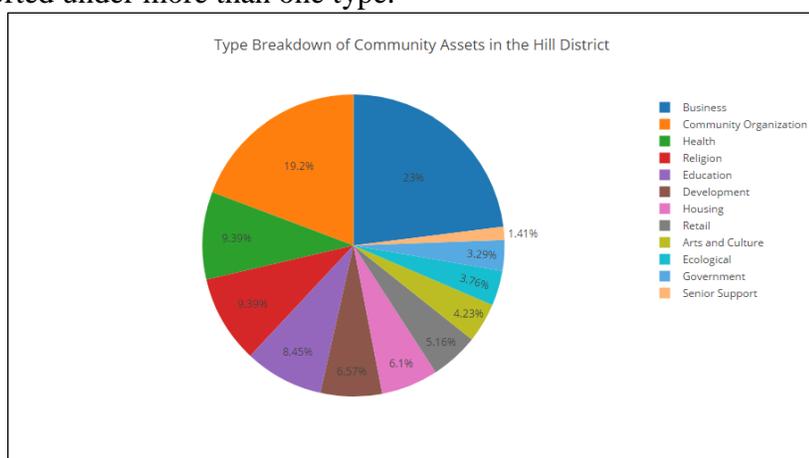


Figure 2: Type Breakdown of Community Assets in the Hill District

The most prominent types of assets are businesses and community organizations followed by health and religious assets. Categories like senior support, government, and ecological seem poorly represented in the community according to these statistics. However, it is important to recognize that this chart is a stand-alone entity without context or comparison. There is no indication from this chart that when compared to the highest performing and most resilient communities certain categories should be larger or smaller to promote community success. Without a proper comparison with the same metrics in other communities, these data

lack context and are only marginally useful. Furthermore, this presentation of data leaves out how the resources are physically concentrated within a community.

The map results, however, are revealing as to the distribution of the assets throughout the neighborhood. The following are geographical depictions of where resources are by type.

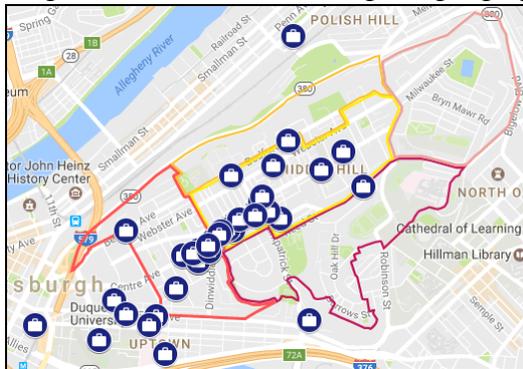


Figure 3: Business

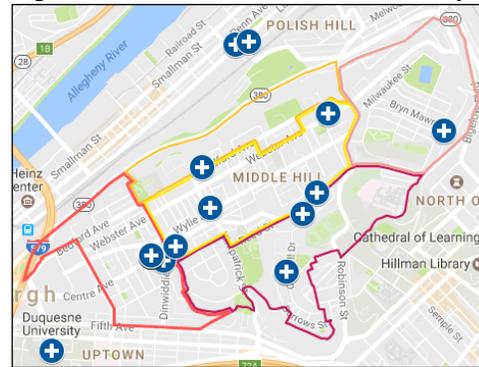


Figure 4: Health



Figure 5: Religion

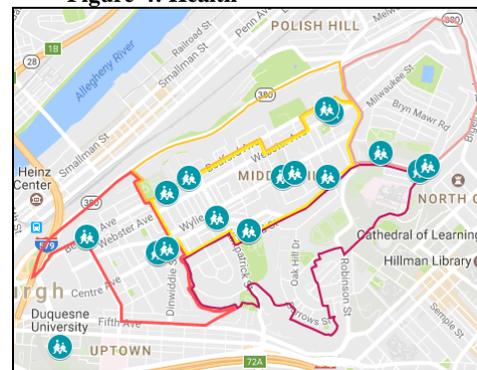


Figure 6: Education



Figure 7: Arts and Culture

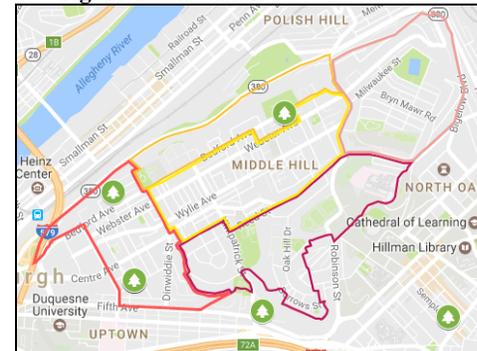


Figure 8: Ecological

It can be seen from looking at visuals of where each resource lies on the map that the pie chart does not reflect the whole story. For example, businesses of the Hill District lie mainly in the Middle Hill and Uptown portions of the neighborhood. Upper Hill is almost completely void of business establishments. Additionally, while health resources are relatively common, they are spread out more evenly. Religious institutions, however, are almost equally as abundant as health resources, but are physically closer together and more centrally located within the neighborhood. Adding the additional information provided by the map reveals patterns in physical space with respect to how accessible types of resources are to the community.

The final, composite map product will be used as a tool by both Hill House Association and the community of the Hill District to understand what resources are available to them within their own neighborhood and where these resources are located.

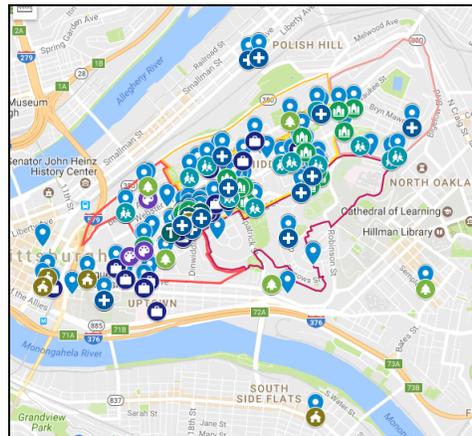


Figure 9: Final Asset Map

Personal Reflection

Unlike the average CBR Fellow, I did not design most of this project on my own. The CBR Fellowship had always been on my radar as it is an amazing opportunity to help make ethical change in a community. As with many of the opportunities I have seized in my time at Pitt, I was given a chance to apply for the CBR Fellowship with Hill House and UCSUR and could not find it inside me to say no. However, this wasn't the usual forced "yes" I have been known to hand out. The prospect of furthering a project dreamed up by a community, especially one I feel so invested in, was too interesting to even consider walking away from.

The most important piece, above all others, is that this project originated within the community it would later serve. Outsiders pushing their ideas and biases onto a community have led to failed urban renewal projects and increasing intercommunity distrust among other negative externalities noticeable throughout Pittsburgh. As a middle-class white student entering a primarily low-income black space, I could not immediately understand and identify with the Hill District community as it was so unlike the one I was familiar with. However, the resources available to me through the CBR program and the University of Pittsburgh gave me, an outsider, the ability to enable Hill House, an inside organization, to achieve one of its goals that emanated from community-identified issues. I could empower without imposing.

Through this process I observed the many different paths projects take during their work period, how vital communication is to success, and how obstacles can be overcome with consistent collaboration. These lessons became increasingly apparent as my product strayed continuously further away from what I had envisioned at the outset of the project. I faced challenges that were both posed by the community and myself. The greatest obstacles I faced from the very beginning were my lack of experience mapping, and my lack of knowledge as to what exactly community-based research entails. The latter was tackled with continued education as I was introduced to a great body of literature on service-learning and ethical community engagement during the weekly seminars organized by the CBR fellowship. These readings gave my work the context of a greater struggle to define how students can become ethically involved in communities. The lessons I learned from an exploration of these ideas continue to help me through the ethical dilemmas I face in international service-learning and volunteer opportunities

throughout Pittsburgh. I have been so taken with this literature that I have founded a Service Learning Journal Club through the University Honors College that brings students together to discuss and deliberate these issues.

Another obstacle crept up on me as I was working on this project. I could not help but question how big or how important the asset mapping project was in the greater context of the struggle in the Hill District. The neighborhood is one in need of more affordable housing, greater economic and social opportunity, educational efforts, and public health attention. As I continued to wonder how a map could truly help make resources more available, I began to realize the extent to which a map can facilitate understanding. Seeing what is around you enables connections between the community and resources that might have been less visible before being laid out concretely. Awareness of one's community resources provides a sense of empowerment and a reassurance that one's community matters and has all that a community needs to feel viable. Asset maps can show communities, and the surrounding region, a greater truth about the neighborhood beyond rumors and news reports.

This project is important to both the Hill District community and my personal growth as a scholar and citizen. While the process was not always straightforward, and the communication was not always perfect, in the end I have a tangible product of which I am proud. This pride does not render the map complete; rather, I hope the map is changed and reshaped and reimaged. Now is the time for the people and community organizers of the Hill District to take the map and do with it whatever they wish. I am overjoyed and honored to have been of service to this vibrant and storied community and fully intend to continue working with it into the future.

~

Elizabeth Monk and Robert Gradeck from UCSUR for all of the time and resources they have put into making this project succeed in all aspects.

Dr. Dara Mendez of the University of Pittsburgh Graduate School of Public Health for the knowledge and guidance she shared in regards to mapping, social epidemiology, professionalism, and methods.

Cheryl Hall-Russell, Terri Baltimore, and Carmen Ellington of Hill House Association for their contributions to the project and for making working with a busy and expansive non-profit so smooth.

Holly Hickling for helping me get involved in the CBR program, providing flexibility and understanding throughout the process, and for being an inspiration to continuously engage in the Pittsburgh community.

The Spring 2017 CBR cohort for their passion, sharing, and tireless work for a wide range of amazing causes.

References

- Diez-Roux, Ana V. 2001. "Investigating Neighborhood and Area Effects on Health." *American Journal of Public Health* 91 (11): 1783-1789.
- Fox, Randy. 2012. "Pittsburgh's Hill District: The Death of a Dream." *Huffington Post*, July 16. http://www.huffingtonpost.com/randy-fox/pittsburghs-hill-district-dream_b_1669867.html.
- Lightfoot, Elizabeth. 2014. "Asset Mapping as a Research Tool for Community-Based Participatory Research in Social Work." *Research on Social Work Practice* 38 (1): 59-64.