

DETAILED CASE STUDY

MAPPING RED HOOK:
USING DESIGN TO UNDERSTAND
A NEIGHBORHOOD'S PATTERNS

CONTENTS

- 01. Project Details
- 02. About Red Hook
- 03. Design Challenge
- 03. Partnership
 - 01. AIGA DESIGN/RELIEF Red Hook
 - 01. Pratt GradComD Design Advocacy: Creative Placemaking
- 04. Research Methodologies
 - 04. Panoramic street photography
 - 04. Case study research of creative placemaking
 - 04. On-site sidewalk mapping
 - 04. Interactive route tracing
 - 05. Site characteristics and quality point
 - 05. Map comparisons from SAVI Data
 - 05. Resident and visitor interviews
- 06. Engagement Strategy
- 07. Findings
- 08. Deliverables
 - 08. Website
 - 08. Toolkit
 - 07. Compilation of key resources
 - 09-12. Custom GIS maps
- 13. Impact
- 14. Our Design Practice Has Expanded
- 15. Future Needs

DETAILED CASE STUDY:
Using Design to Understand a
Neighborhood's patterns

Date & Duration:	January 27 - March 10, 2014; 6 weeks.
Partner / Client:	Pratt GradComD & AIGA/NY DESIGN/RELIEF
Location:	New York, New York
Community Being Served:	Red Hook Neighborhood of Brooklyn, NY
Design Partners:	Jessie Braden, Director of Spatial Analysis and Visualization Initiative (SAVI) at the Pratt Center
Design Disciplines:	GIS, Creative Placemaking, Communications Design
Advisor:	Andrew Shea, Adjunct Professor at Pratt Institute
3rd Party Partners:	AIGA/NY

**DETAILED CASE STUDY:
Using Design to Understand a
Neighborhood's patterns**

ABOUT RED HOOK

Red Hook is a largely blue-collar neighborhood located on the south-western edge of Brooklyn with a large African-American and Latin population. LIFE named Red Hook as the “crack capital of America” and one of the country’s worst neighborhoods in 1990. Although crime has dropped and the highly trafficked Van Brunt Street has seen a recent influx of artists and business, the neighborhood remains one of the most challenged in Brooklyn. The average annual household income is under \$24,000; nearly a quarter of residents are unemployed; and between 80-85% of residents live in large low-income housing buildings. The region is geographically isolated and has limited public transportation. Red Hook was one the regions affected most by Hurricane Sandy in October 2012, which submerged the neighborhood in up to 10 feet of water; cut off electricity, heat and hot water for up to 17 days; and limited the access to food and aid. FEMA finally approved the installation of new boilers in all of the Red Hook Houses in March 2014. The storm and lack of immediate on-site federal aid only contributed to Red Hook residents feeling neglected and unsupported.

DETAILED CASE STUDY:
Using Design to Understand a
Neighborhood's patterns

DESIGN CHALLENGE

Our group aimed to investigate the existing assets of Red Hook with the goal of combating the area's lack of communication while also celebrating its strong sense of community. The initial scope was to measure space and understand the neighborhood on a street level. Once we incorporated the interview process, our work evolved into a human-centered research project. Overall, we wanted to understand the best location for a community-info Hub created by DESIGN/RELIEF.

THE PARTNERSHIP

We chose to collaborate with DESIGN/RELIEF because we wanted to:

- Work on local, meaningful issues
- Become more connected to our diverse city
- And find the appropriate framework to expand the definition of our design practice.

This partnership proved to be a unique match as both teams had strengths in problem solving, relationship building and creating visual impact.

DESIGN/RELIEF RED HOOK (AIGA/NY)

This participatory design initiative was focused on creating authentic markers, physical or time-based, temporary or permanent, that would change the perception of Red Hook post Superstorm Sandy. DESIGN/RELIEF aimed to demonstrate design's role in creative placemaking and to help these neighborhoods be more livable, walkable, vibrant and enjoyable.

PRATT GRADUATE COMMUNICATIONS DESIGN
DESIGN ADVOCACY: CREATIVE PLACEMAKING

While communication designers rarely design buildings or public spaces, there is growing evidence that the expertise they contribute to shaping built environments can have a measurable impact on communities. Students in this course applied strategic methodologies to engage and understand the needs of the Red Hook community, and then extend what they learned into solutions that might spur a positive outcome. Course curriculum was driven by guest lecturers and methodologies of spatial mapping, ethnographic research, prototyping, tracking/measuring user experience, and co-/participatory design.

DETAILED CASE STUDY:
Using Design to Understand a
Neighborhood's patterns

RESEARCH METHODOLOGIES

Our goal was to create a rich picture of the neighborhood using sidewalk mapping, water tables, automotive/pedestrian traffic data and interviews that could be open sourced for future projects.

PANORAMIC STREET PHOTOGRAPHY



DETAILED CASE STUDY:
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Neighborhood's patterns**

RESEARCH METHODOLOGIES CONTINUED

CASE STUDY RESEARCH OF CREATIVE PLACEMAKING

- *How to Study Public Life* by Jan Gehl and Birgitte Svarre
- *Cities for People* by Jan Gehl
- *Active Design: Shaping the Sidewalk Experience**, *Tools and Resources** by NYC Department of City Planning
- Geographic Information Systems (GIS) and maps provided by Jessie Braden, Spatial Analysis and Visualization Initiative (SAVI) at the Pratt Center*
- *Creative Placemaking**, a White Paper for The Mayors' Institute on City Design
- *Places in the Making** by MIT Department of Urban Studies and Planning

ON-SITE SIDEWALK MAPPING

45-minute survey from *Active Design: Shaping the Sidewalk Experience*** with the goal of understanding how urban planning shapes the pedestrian experience.

INTERACTIVE ROUTE TRACING

Participants were selected at random on site and asked to draw their normal route on a blank street map** of Red Hook. They were directed to mark their home, spots where they think a communications hub would be effective and spots where it would not. Tracing movements on a plan provided a clear picture of dominant lines of flow and areas that are less trafficked.

DETERMINED SITE CHARACTERISTICS AND QUALITY POINTS**,
ADAPTED FROM CITIES FOR PEOPLE**

MAP COMPARISONS FROM SAVI DATA*

- City assets, land use, population density, topography, flood plane, traffic patterns, vacant lots and waterfront environments

RESIDENT AND VISITOR INTERVIEWS

Driven by four specific questions provided by DESIGN/RELIEF, interviews were meant to be organic conversations. Questions included:

- (Multiple-choice) Where do you visit? Choose often or rarely:
Fort Defiance, Miccio Center, Rec Center, Library, Coffey Park, Other
- (Open ended) What's the most pressing need in Red Hook?
- (Open ended) What kind of information do you and/or Red Hook need?
- (Open ended) What information would be useful during an emergency like Sandy?

**Full text versions of these readings are available online in the "Additional Resources" download.*

***Documents available online in the "Toolkit" download.*

DETAILED CASE STUDY:
**Using Design to Understand a
Neighborhood's patterns**

ENGAGEMENT STRATEGY

The goal of personally engaging with people who experience the neighborhood was vital in objectively discovering key points of interaction. We conducted on-site interviews with both residents and visitors at various points of interests based on traffic patterns and community accessibility (e.g. the Miccio Center, library, Rec Center, Fort Defiance, Van Brunt Street, Coffey Park, IKEA, Fairway and Red Hook Houses). Additionally, we reached out to a variety of local groups, including NY Rising, SAVI at the Pratt Center, The Red Hook Initiative, shop and bar owners, service industry workers, government employees, public housing residents, etc. Site visits ranged from 1-3 hours on days with temperatures ranging from 25-50 degrees in January/February 2014 and were equally conducted on the street or inside public places either government or privately owned.

DETAILED CASE STUDY:
Using Design to Understand a
Neighborhood's patterns

FINDINGS

Our initial scope was to measure space and understand the neighborhood on a street level. Once we incorporated the interview process, our work evolved into a human-centered research project.

By visiting Red Hook in teams and having casual interviews with residents, we gathered a relatively small but informative sample population that provides diverse data about the neighborhood and the people. The short time frame of the project and inclement weather impeded our ability to get enough interviews to accurately capture the diversity of the community. Since we received the four interview questions from DESIGN/RELIEF after our first round of interviews, our qualitative data isn't as rich as our quantitative. However, the data we did retrieve was sourced from organic and reliable connections within Red Hook, and the process of refining our interviewing methods increased our own understanding of the neighborhood and of what kind of Hub would be most useful to the community. Once we received those four vital questions, we tried our hardest to evaluate the tracing and answers as equally as possible.

The Design Advocacy class was asked to submit their views on the process of gaining this ethnographic research and how it shaped our understanding of the prospective public assistance program. Overall, the class enjoyed their personal interactions with Red Hook residents, exploring the neighborhood, identifying what worked and what didn't work and using graphic design to formulate a prospective hub location. However, the lack of sufficient time and the below freezing weather proved to be deterrents throughout the process. The class could have also benefitted from regular discussions with officials from the DESIGN/RELIEF team; concrete details were never established regarding the content and management of the hub. A well-structured system of qualitative data collection in addition to specific focus groups would have allowed for flexible interactions between the residents and the class.

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DETAILED CASE STUDY:
**Using Design to Understand a
Neighborhood's patterns**

DELIVERABLES

WEBSITE: MAPPINGREDHOOK.PRATTGRADCOMD.COM

Documents the process and strategy of studying a neighborhood or public space.

TOOLKIT FOR FUTURE SURVEYING

Users can download an in depth tool kit to conduct their own surveys and engage their neighborhood.

COMPILATION OF KEY RESOURCES*

A crucial dimension of creative placemaking is urban design; however, communications design is key in creating social practices that engage communities and lead to social change. A cross-disciplinary reading list provided a thorough and nuanced understanding of creative placemaking.

DATA VISUALIZATION OF CUSTOM GIS MAPS

With the collected and annotated data, SAVI created custom GIS maps to support DESIGN/RELIEF's assumption that one single communications hub would not benefit the diverse neighborhood. Strategic locations were discovered that could potentially deliver vital disaster and community-building cultural information to the neighborhood's entire population.

AT THIS TIME, we cannot provide a concrete answer to the question, "where should a communications hub be located in Red Hook?" Our data reflects the following limitations: the population is not accurately represented by those surveyed and the type of content represented by the hub was never solidified by DESIGN/RELIEF during our research process. We feel we would have provided better data if we had overcome these two inconsistencies.

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***Documents available online in the "Toolkit" download.*

RESEARCH METHODOLOGY

We organized into teams of two and demarcated Red Hook into 5 zones. Each team first surveyed their region broadly to determine where residents spent their time, and mapped the sidewalk space on-site to build quantitative data about the urban planning in these regions. We determined five key areas that seemed to draw the highest population of Red Hook's diverse demographic—the Miccio Center, the library, the Recreation Center, Fort Defiance, and Coffey Park—and returned to Red Hook multiple times over the course of four weeks to interview residents in those regions. Interviewees noted on a map where they lived and where and how they traveled, and spoke with us about what kind of information or assistance they needed the most. We evaluated all of our findings as a group to determine where the best location for a central Hub might be, and how it might be of greatest service to residents.

1. MICCIO CENTER
2. THE LIBRARY
3. RECREATION CENTER
4. FORT DEFIANCE
5. COFFEY PARK

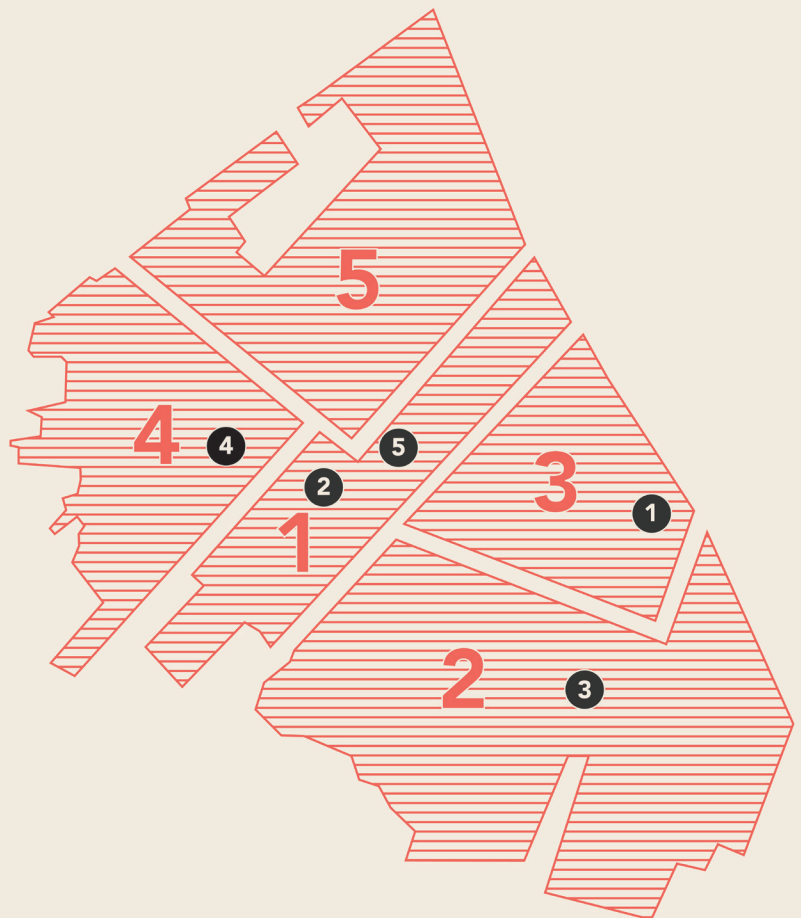
GROUP 1
John Olson
Kristen Myers

GROUP 2
Kiran Puri
Miriam Bowring

GROUP 3
Tania Lili
Alejandro Torres
Yojna Shetty

GROUP 4
Caroline Matthews
Annie Sexton

GROUP 5
Elizabeth Montgomery
Cynthia Douaiher



RESULTS

OUT OF THE 86 PEOPLE WE INTERVIEWED:

39

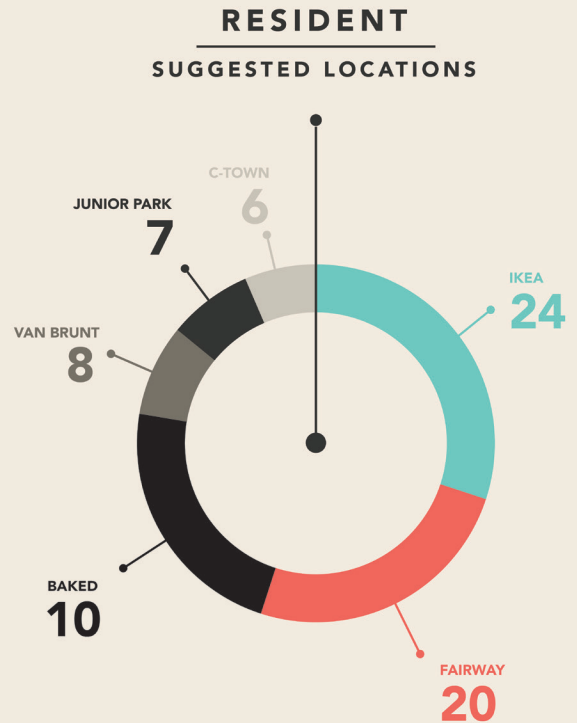
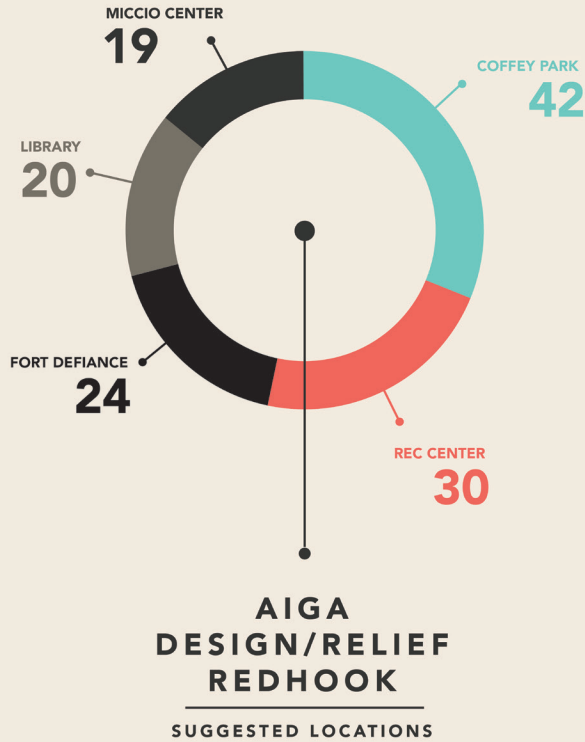
LIVED OUTSIDE RED HOOK

31

LIVED IN THE HOUSING PROJECTS

16

LIVED SOMEWHERE ELSE IN RH.



NUMBER OF PARTICIPANTS SAID THEY TRAVELED BY THE FOLLOWING MEANS:



40

COMBO



14

DRIVE



9

BUS



7

WALK



6

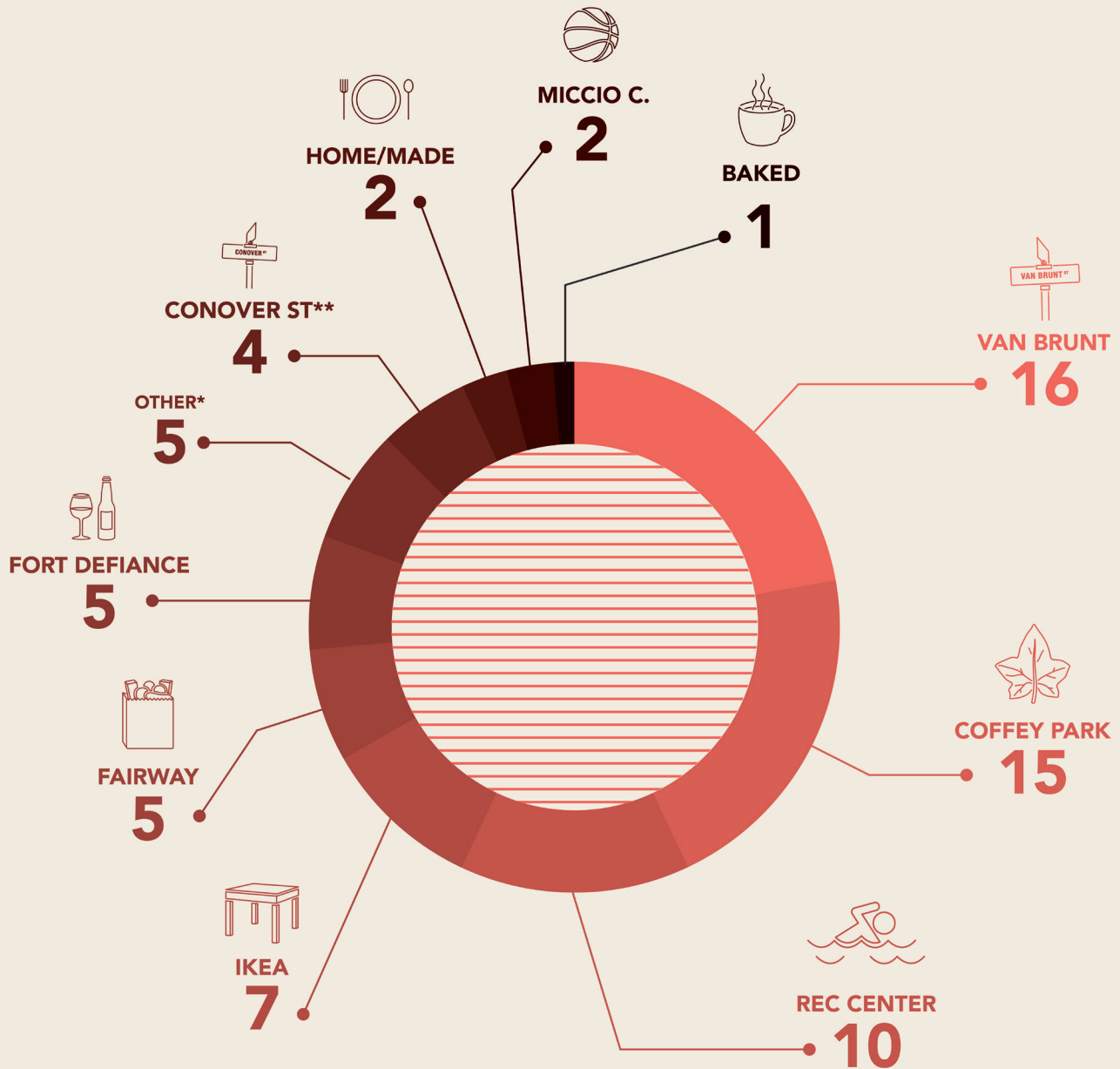
BIKE



5

TRAIN

POTENTIAL HUB LOCATIONS

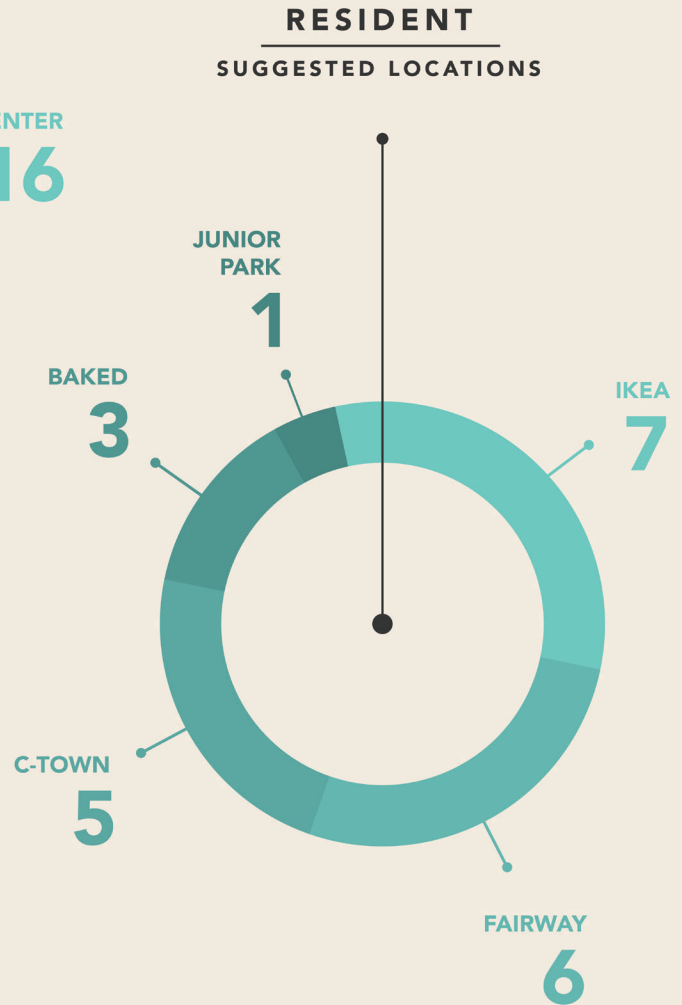
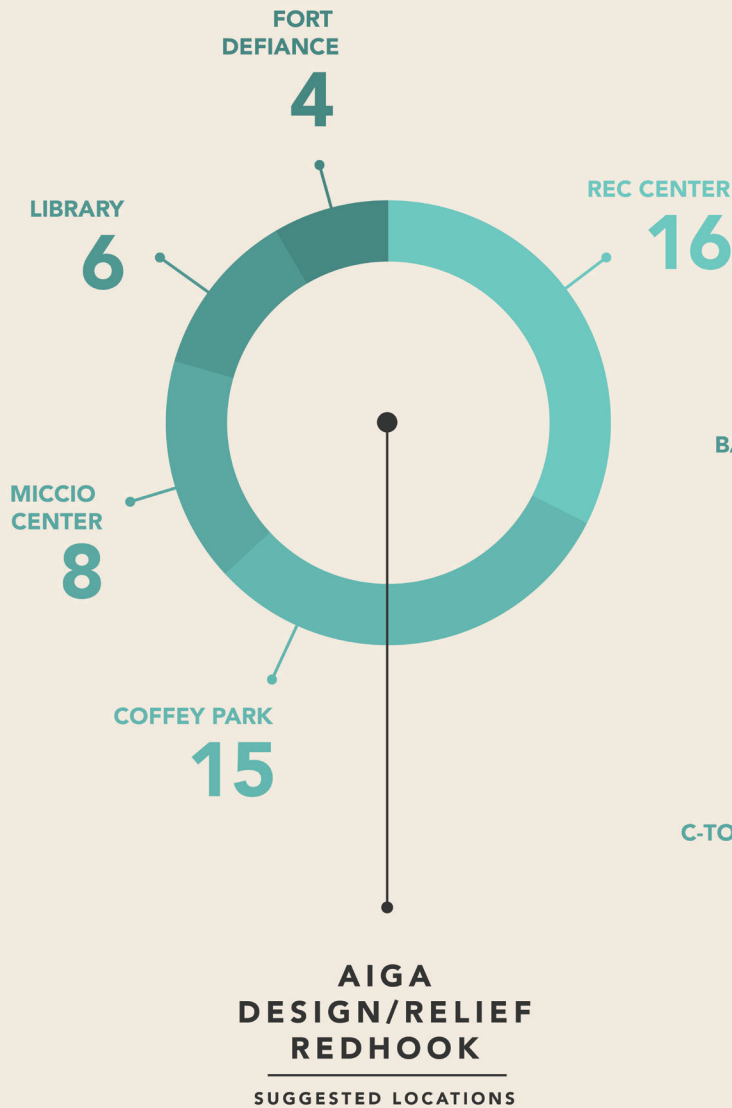


NOTES

* Other locations include: Red Hook Justice Center, Subway, Beauty Salon, Courthouse, Rebuilding Together, River Bay, Rocky Sullivans, SuperMart, Good Fork, Red Hook Winery, Camilas Cafe, Church (only one person mentioned these).

** Between Beard and Dikeman.

TARGET AUDIENCE



NUMBER OF PARTICIPANTS WHO LIVED IN THE HOUSING PROJECTS SAID THEY TRAVELED BY THE FOLLOWING MEANS:



19
COMBO



3
DRIVE



3
TRAIN



2
BUS



1
WALK



0
BIKE

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Using Design to Understand a
Neighborhood's patterns

IMPACT

Creative placemaking has great value; it creates opportunities for people of all income levels and backgrounds to thrive in one place. The points we have selected as possible locations for the hub are centered in highly populated parts of Red Hook, increasing the potential that they will be accessed regularly and integrated into residents' awareness and daily habits.

QUALITY OF LIFE

We gathered data for the location, functionality and content of the Hub from the residents who need support and information the most; as such, the Hub will support the contemporary, calculated needs of the Red Hook community rather than theoretical solutions. Its focus on community events, job support and lifestyle improvement will offer residents access to the tools they need to improve their quality of life, and will increase their impetus to contribute to its content, fueling its short and long term relevancy and applicability.

COMMUNITY OUTREACH

We are aiming to support a resiliency effort. Because of its location, Red Hook will experience damage from flooding again. Many residents commented on the strong sense of community within the neighborhood, something extremely unique within a large urban sprawl like New York City. Our goal was to convince people that a place can have a different and better future.

ECONOMIC OPPORTUNITIES

The Hub is intentionally inclusive and will foster connections among this diverse socioeconomic community. Perhaps this will spur more business in less populated areas. Making places that support economic diversity provides more interaction for people of all incomes. When a community becomes more economically integrated, more opportunity becomes evident for all. Our process of measuring public space was a way to more-definitively determine the best locations to benefit the community.

MEASURING LIVABILITY

The entire process was driven by the standards of monitoring human interaction within public space outlined by architect and urban designer Jan Gehl and The Department of City Planning's *Active Design: The Sidewalk Experience*. Gehl believes that the urban landscape must be considered through the five human senses and experienced at the speed of walking rather than at the speed of riding in a car, bus or train. The book is a plea for city planning on a human scale. *Active Design* encourages the urban designer, architect and landscape architect to be aware of the pedestrian's experience of the sidewalk and design it accordingly by visualizing it as a room with four planes. Quantitative and qualitative factors are used to suggest new policies and zoning codes that would support the optimal experience.

DETAILED CASE STUDY:
**Using Design to Understand a
Neighborhood's patterns**

**OUR DESIGN PRACTICE HAS EXPANDED BEYOND
TWO-DIMENSIONAL PRINT AND DIGITAL WORK.**

The project embodied human-centered design by working with a social impact client. Collecting primary research was a great opportunity to immerse ourselves within a community. This project reaffirmed the importance of visualizing things in ways that are more accessible. Most of us believe we have developed an expertise in GIS.

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Neighborhood's patterns**

FUTURE NEEDS

This study provided many useful takeaways but was also an excellent starting place. Our initial goals could be furthered by continuing to engage Red Hook residents in 1-on-1 or small group conversations; additionally our interviewing process could be further refined to create a more engaging survey with a greater likelihood of full and active participation. If you're working on a similar project in Red Hook (or in another neighborhood), here are some things to keep in mind:

- Increase the duration of the project to allow for more time in the field, we suggest 8 weeks, allocating a collective 10 hours per week.
- Meet partners on a regular basis to understand how their project is evolving.
- Determine data set requirements at the start of the interview process, i.e. target count and qualitative questions.
- Partner with an ethnographer studying the subject and work together to create a more efficient and effective interview process.
- Increase the budget so that interviewers can provide coffee or snacks for interview participants.
- Brand the mission, document the process in a sharable way and provide literature for interview participants so that they can follow the progress of the project and digest their influence on their own time.