

Master of Industrial Design Project
"Community By Design"

ADVISING FACULTY

Dr. Claudia Rebola / Primary Advisor / School of Industrial Design
Kevin Shankwiler / School of Industrial Design
Dr. Carl DiSalvo / School of Literature / Media / Communication
Dr. Christopher Le Dantec / School of Literature / Media / Communication

School of Industrial Design College of Architecture
Georgia Institute of Technology



“COMMUNITY BY DESIGN”

BY | Michael Carpenter



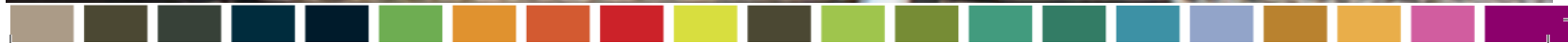
ACKNOWLEDGEMENTS |

I want to thank Claudia Rebola for her encouragement and unwavering support for an exploratory approach to community design. Her passion for design was and is, both inspiring and uplifting . Kevin Shankwiler for providing guidance and his contagious passion for industrial design. Carl DiSalvo and Chris Le Dantec for their inspirational and insightful knowledge of community research. To the entire community I worked with for their welcoming embrace and continued support. Lastly Mona Patel, who has helped me through one of the roughest times of my life. Without her support I wouldn't have completed this project or program.



ABSTRACT

n



ABSTRACT |

Principles of community based participatory research (CBPR) were applied in the field of design to create an avenue to encourage and allow more community input in the design process. Communities are diverse, each with their own unique characteristics; therefore, it is important to work with members and local organizations to understand the background, history, and dynamics that define the community. Current CBPR methods allow member's input in the design process but aren't geared towards creating design solutions. This project focuses on creating an approach that merges CBPR and user centered design principles. The outcome is the creation of K.I.N.D. (Knowledge, Immersion, Need, Design), a self designed toolkit used to connect and unify diverse groups of community members to learn about current needs and identify a design-oriented solution. To test this toolkit, the K.I.N.D methodology was applied to local community. Through the application of K.I.N.D, members of the local community became actively engaged in developing a tangible solution. The results showcase a branding strategy to strengthen the identity of the community as well as a plan for identifying assets within the community and stimulating economic growth.







TABLE OF CONTENTS |

INTRODUCTION | 8

- introduction
- methodology

KNOWLEDGE | 20

- community
- time-line
- stakeholder map

IMMERSION | 28

- engagements

NEED | 36

- digital Post-it representation
- workbook data collection

DESIGN | 42

- design criteria
- brand | place
- participatory workbook
- results
- branding precedents
- design criteria
- logo concepts
- participant feedback
- revised logos
- final concept
- assembly
- next steps

CONCLUSION | DISCUSSION | 80

- takeaways | limitations
- discussion

REFERENCES | 84

INTRODUCTION |

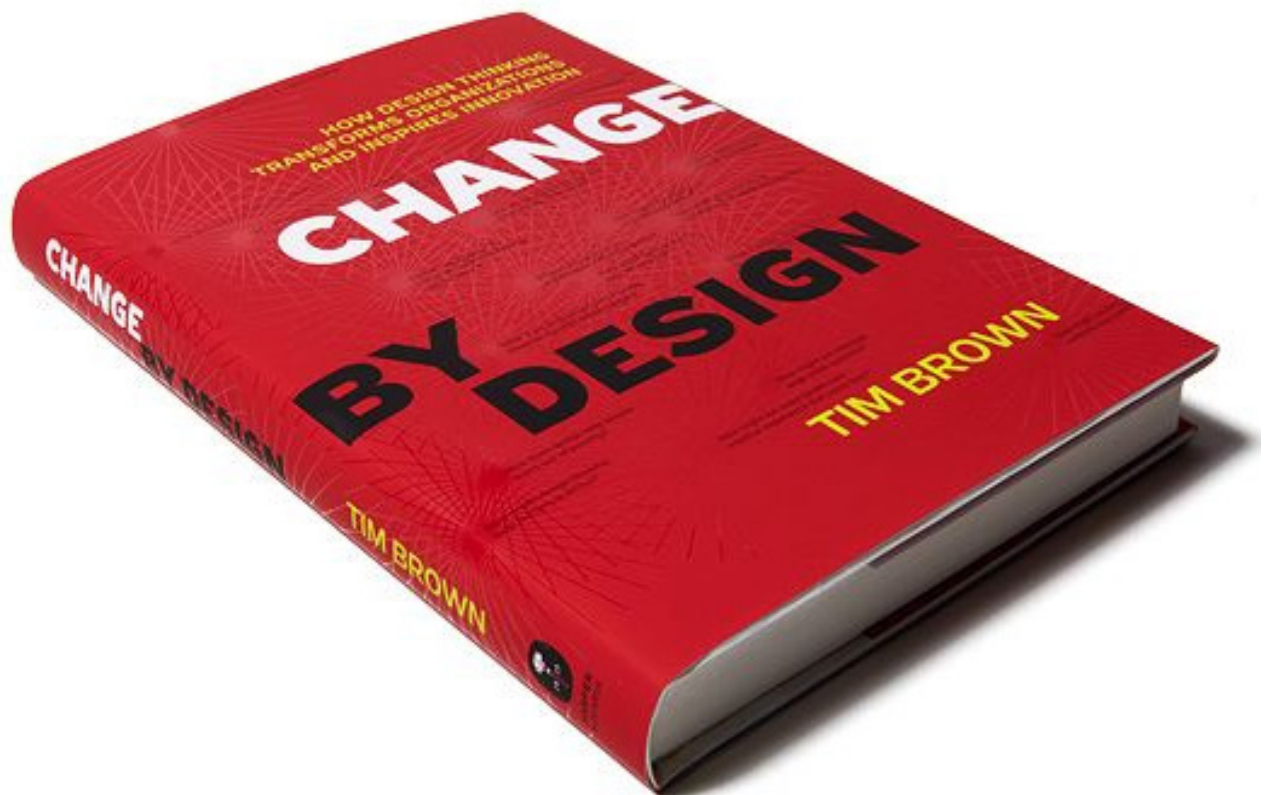
User-centered design is a philosophy used in the field of industrial design to better understand the needs of the user. Typically, the end-user's needs, wants, and limitations are a focus within the design process to aid in creating a more optimal product or system. Although this approach includes input from the user, the user is usually not engaged from the beginning stages of research. Rather than collaborating with the user to identify a need, an idea is already conceived and a potential solution is presented to the user for validation. If users are involved in the entire process from the inception of the proposed research to the final design oriented solution, the solution is more likely to truly meet the needs and empower users in the process. Rather than a top-down approach, in which users may feel disenfranchised, they will feel engaged since they were a part of the process in identifying a problem and coming up with a solution, making the end product more viable and sustainable. Tim Brown from IDEO discusses the importance of empathy and connecting with people that designers are observing. In his book, *Change by Design*, he dispels the idea of 'us versus them' or even 'us on behalf of them,' and suggests that the designer frame the concept as 'us with them'. He proposes the "need to invent a new and radical form of collaboration that blurs the boundaries between creators and consumers". To meet this need, the aim of the project was to utilize principles of community based participatory research (CBPR), an approach used by researchers to work with community members and groups to set goals and collectively work to achieve them, with the principles of user-centered design to create a toolkit that is more collaborative.

This community-based design approach, which merges CBPR with design principles, is more comprehensive in its involvement with community and therefore fulfills a need that current toolkits for design do not possess. Current examples of design toolkits include, the Human-Centered Design (HCD) toolkit by IDEO, and the Frog Collective Action toolkit. The Frog toolkit is an excellent tool for designers interested in creating a collaborative workshop-type environment to engage users and provides tips for leading and facilitating activities, but doesn't emphasize immersion and the importance of becoming a part of the community. On the other hand, the IDEO HCD toolkit is a more global focused set of tools specifically designed for regions of Africa, Asia and Latin America. The toolkit was designed for non-government organizations (NGOs) and social enterprises, who have often identified an area of need before working with a community. Community-based participatory research at its core works with community to discover need.



The toolkit is divided into four phases, with each phase designed to build on information gathered from the preceding phase. Dubbed “K.I.N.D”, the following section provides an overview of the toolkit.

The first stage “Knowledge” focuses on attaining local and contextual knowledge of a community. The knowledge should provide the researcher (designer) with a better understanding of the dynamics, culture, and history of a community. The next step is to fully immerse (“Immersion”) and become a part of the community by participating in local events, committees, forums, etc. Information collection will begin in partnership with the community. All forms of knowledge/information gathering is encouraged, from face-to-face, observation, and/or written form. Community members have the best information about what's actually happening, where concerns exist, and can identify assets and strengths more immediately. This stage also creates trust and buy-in for whatever ultimate plan or design oriented solution is adapted. Collectively, a need (“Need”) will be identified, creating a sense of ownership in the process and the incentive to work and make the implementation successful. The last stage focuses on developing a solution (“Design”) to meet the identified need. At this stage, the community has been involved and should feel vested in coming up with a solution. Because the research was conducted by the members themselves, it is more likely to meet community needs and become sustainable. Ultimately, the inclusion and participatory methods of the K.I.N.D toolkit methodology will help change a community's perception of themselves and what they can do, and move one step forward towards creating social change.



BACKGROUND |

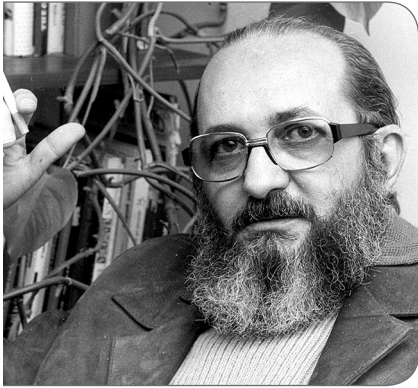


Fig.1 Paulo Friere

CBPR approach is grounded in developing and sustaining relationships with members. Its roots stem back to the 1930s when Paulo Friere and Kurt Lewin began to research and cultivate the iterative process of action research as a reflective process of continual learning and experiential learning (learning through empathy) (Faridi, Grunbaum et al. 2007). With CBPR, researchers make connections with the community under a set of common goals and shared values in order to make change; this is referred to as engagement. Engagement allows researchers to understand the process of community decision-making and inform them of current channels of knowledge that can be used as resources. Engagement goes beyond participation as it is the investment in a process which has decisions and resulting actions (Aslin and Brown 2004).

CBPR may be used in the field of design by encouraging community members to participate and inform all phases of the design process, from generating the needs within the community to developing a product that addresses those needs. Precedence should be given towards establishing relationships with members of the community (McMillan and Chavis 1986, Israel, Schulz et al. 1998, Shea 2012) and ensuring there is equal representation of people that make up the community (McMillan 1986). Developing relationships is important because it builds trust between the designer and the community members, helps people recognize common visions and interests in order to collectively achieve them, and empowers participants to create positive social change (McGee 2009).

The ultimate goal is to have mutual learning occur between both “designers” and “users” to exchange knowledge and create shared experiences (DiSalvo, Clement, & Pipek, 2012; Israel, Schulz, Parker, & Becker, 1998; McMillan, 1986). Ultimately, the members of the community become researchers themselves by deciding what questions should be asked, what methods should be used and how the information should be distributed among the community (Israel et al., 1998).



There are rewarding aspects of CBPR when approached correctly, but under poor execution can have a negative impact. For example, failure of designers to whole heartedly involve members of the community leads to unsustainable projects and dismal results because a bond between the community is not established when the people feel excluded, have a sentiment of mistrust, and lack a sense of membership. In addition to building trust and membership, inclusion also gives the designer a more representative insight of the community, valuable perspective, and the opportunity to empathize with the community's needs. To truly empathize, Brown states that the designer must listen and absorb what the community is saying to understand the perspective of community members, which can help alleviate any preexisting biases a designer may have when starting a project. Another approach is to tap into existing resources. Building upon strengths and resources of existing organizations and promoting a co-learning environment will also strengthen community research and inevitably result in a stronger design outcome because the result was the focus of the community's voice (Shelton 2008). Strong outcomes within community design and research establish trust with members.

Common experiences need to be cultivated in order to create trust, which may lead to respect among stakeholders and is imperative when brainstorming and sharing ideas to create sustainable design strategies and practices. In addition to shared experience, transparency of information and dissemination of all knowledge should be practiced among all partners within a project. Other common approaches within community based design include: assisting community members to establish a common vision in which they can collaborate; translating complex data into graphics that



Fig.2 Tim Brown



photo credit | Michael Carpenter

are easily understood and accessible to the entire community; helping to improve the levels of interaction and ways that organizations include the community in decision making; raising awareness around health, safety, and environmental issues in such a way that empowers them to want to be responsible; increasing efficiency in the process; and helping to improve relationships, networks, and support (Shea 2012). These approaches may be grouped into the following categories: membership, influence, shared experience, and reinforcement (McMillan and Chavis 1986).

These approaches all contribute to participatory design and inevitably create change for the betterment of community. According to Landry (2000), designers must ask two questions: can design change the way people and organizations think? And if so how? Integrating methods of CBPR into the design field can help designers be more empathetic with the community members and better understand issues that may not be immediately apparent, as related to cultural norms, values, environment, civil rights, racism, and sexism. In the end, it is the designer's job to see every project as an opportunity to make the world a little better (Scalin 2012).

METHODOLOGY

m



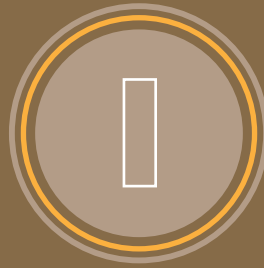


K | knowledge

GAIN KNOWLEDGE | LEARN

The first step is to learn as much as possible about the community. The goal is to find out as much information as possible through books, public forums, public documents, etc. Make a comprehensive list of communities, organizations, and individuals to develop a stakeholder map that visually communicates the relationships and power dynamics of the community. Keep in mind some of this information may not be realized until you immerse yourself into the community.

1. Who makes up the community?
2. Is there a current system for fostering community?
3. What is your relationship with the community?
4. What is the history of the community?
5. What is the political climate?
6. What are the socio-demographics of the population?
7. Who are the key stakeholders?
8. What effect do those stakeholders have on the community?
9. What are the assets?
10. What are the deficits?



I | immersion

GETTING INVOLVED | PARTICIPATE & ENGAGE

This is the opportunity to actively participate and engage with the community and to allow community members to engage with you. Evaluate your skills to figure out the best ways for you to contribute to the community and add value. Through this stage, the focus should be on having a shared conversation to learn more about each other. Ideally, you should gain more insight about community members, community structure, and build on your "knowledge" base. These shared experiences will help create trust and create a sense of membership within the community. Aim to work with diverse groups that as an aggregate can be representative of the community. Take mental notes and document conversations that discuss concerns or needs.

Potential ways to immerse yourself in a community include:

1. Volunteer
2. Attend public forums
3. Participate in community events and activities
4. Start conversations with local community members
5. Cultivate relationships



N | needs

CREATING TO MEET NEED

This step focuses on reflecting what you've learned from the community to determine the unique needs and assets of the community.

- 1.**Aggregate your notes to assess the unique needs and assets, as well the cultural and social structure of the community
- 2.**Consider how best to use the community's assets and resources in order to meet a need. By using existing resources, it increases the community's capacity for fulfilling it's own need and creates a more sustainable solution
- 3.**Make sure all of the stakeholders are at the table and included in the discussion
- 4.**Identify if the community has their own priority--if so, be sure to address it in order to establish trust and show respect. Even, if you don't see an immediate need, there may be underlying factors that you may not be aware of
- 5.**If no obvious priorities exist, engage with community members to categorize needs to find a priority or focus
- 6.**Identify options that are feasible and have buy-in from those who can implement the final design



D | design CREATE

This final step allows the designer and community to work together to create a design-oriented solution for the identified need

Brainstorm potential ways design can be used to meet the need. Keep in mind, form should follow function. Function should be a response to the needs of the community. Community members should be engaged to provide input on the design process, from brainstorming, sketching, to prototyping. Encourage community members to contribute to the design in ways that they feel comfortable, whether it be drawing, writing, or using pictures as reference. Once input has been collected from community members, share the final design-oriented solution to get feedback.

1. Aim to have a few concepts (at least 3) to allow the participants to compare and contrast the concepts to create a dialogue
2. Taking into account feedback, create and share the final design with the community members
3. Share the design within the community to members who have power and capacity to implement the design

PUTTING





TOWORK



1. Who makes up the community ?

2. Is there a current system for fostering community?

3. What is your relationship with the community?

4. What is the history of the community?

5. What is the political climate?

6. What are the socio-demographics of the population?

7. Who are the key stakeholders?

8. What effect do those stakeholders have on the community?

9. What are the assets?

10. What are the deficits?



KNOWLEDGE

GAIN KNOWLEDGE | LEARN

Knowledge about the community was obtained by conducting internet searches, reading internet forums, books about the community and its members, the city newsletter; and conducting ethnographic research and expert interviews. The researcher (designer) is a resident of the city but had no prior connections with organizations or government.

OUTCOMES | GAINED KNOWLEDGE

- The community is diverse and represents over 60 languages from 150 different countries (see info-graphic 1 and 1.2)
- Many organizations focus on refugee well-being and community development
- 2011 data shows that 31.7% of residents are below the poverty level
- There are three organizations at the forefront helping build community; CC (Community Center), CF (Community Foundation), FOF (Refugee Services Organization)
- Created a stakeholder map to have a visual representation of key players in the community
- Developed a time line to represent the historical data in a concise manner (info-graphic 2)
- Documented the government hierarchy; however, the connection of city, organizations and individuals was still unclear; The majority of registered voters are democratic

K question 1. | Who makes up the community?

DEMOGRAPHICS | POPULATION

60+ languages

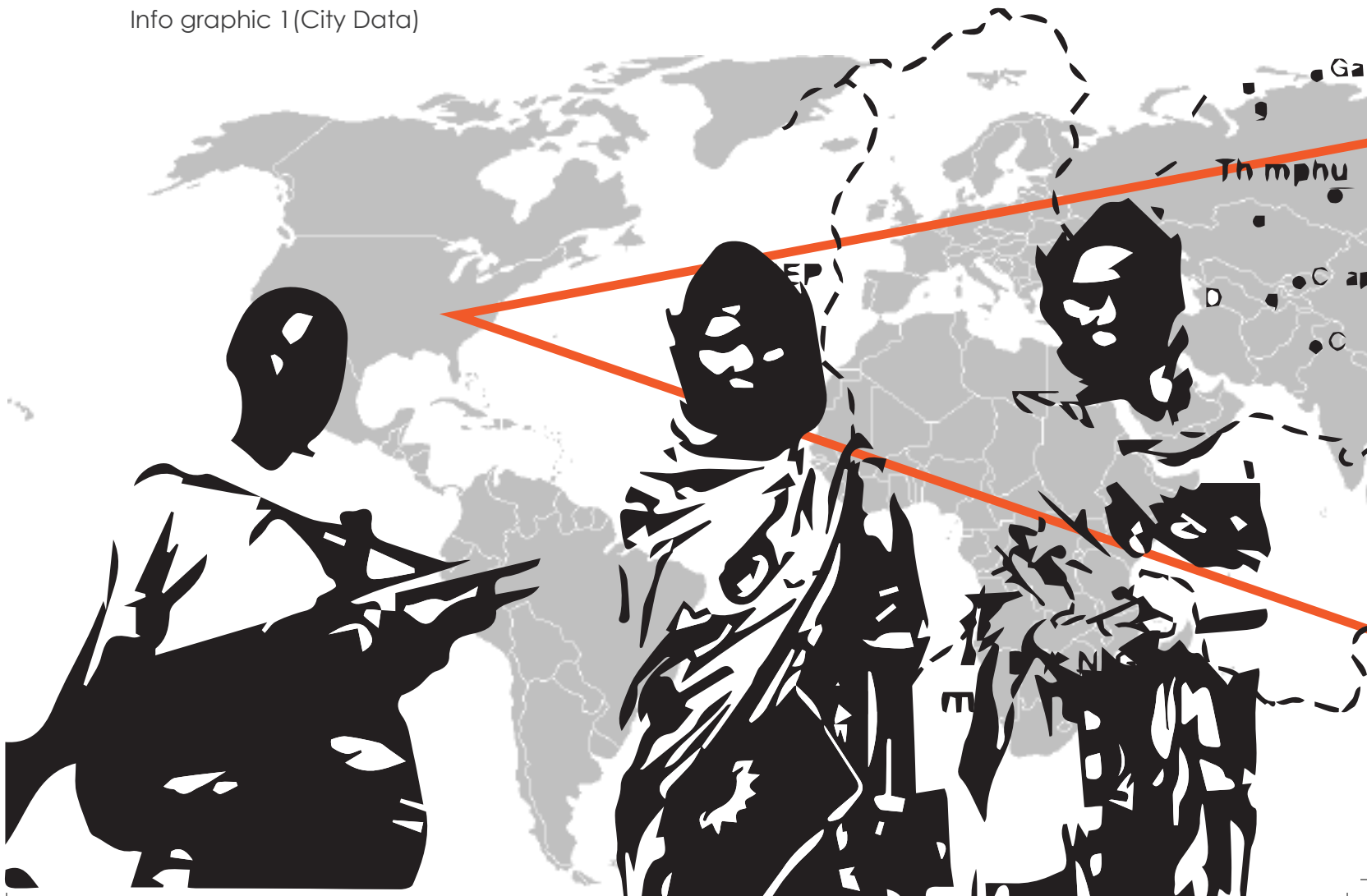
7700 population

50 / 50 gender split

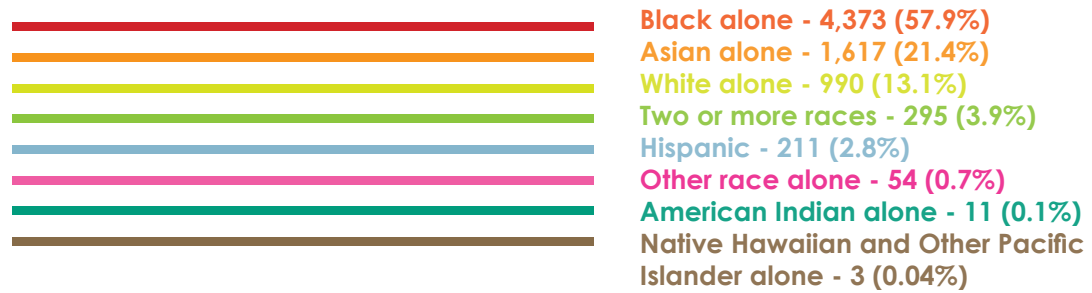
3,275 foreign born (25.0% Africa, 9.9% Asia)

150 different ethnic groups

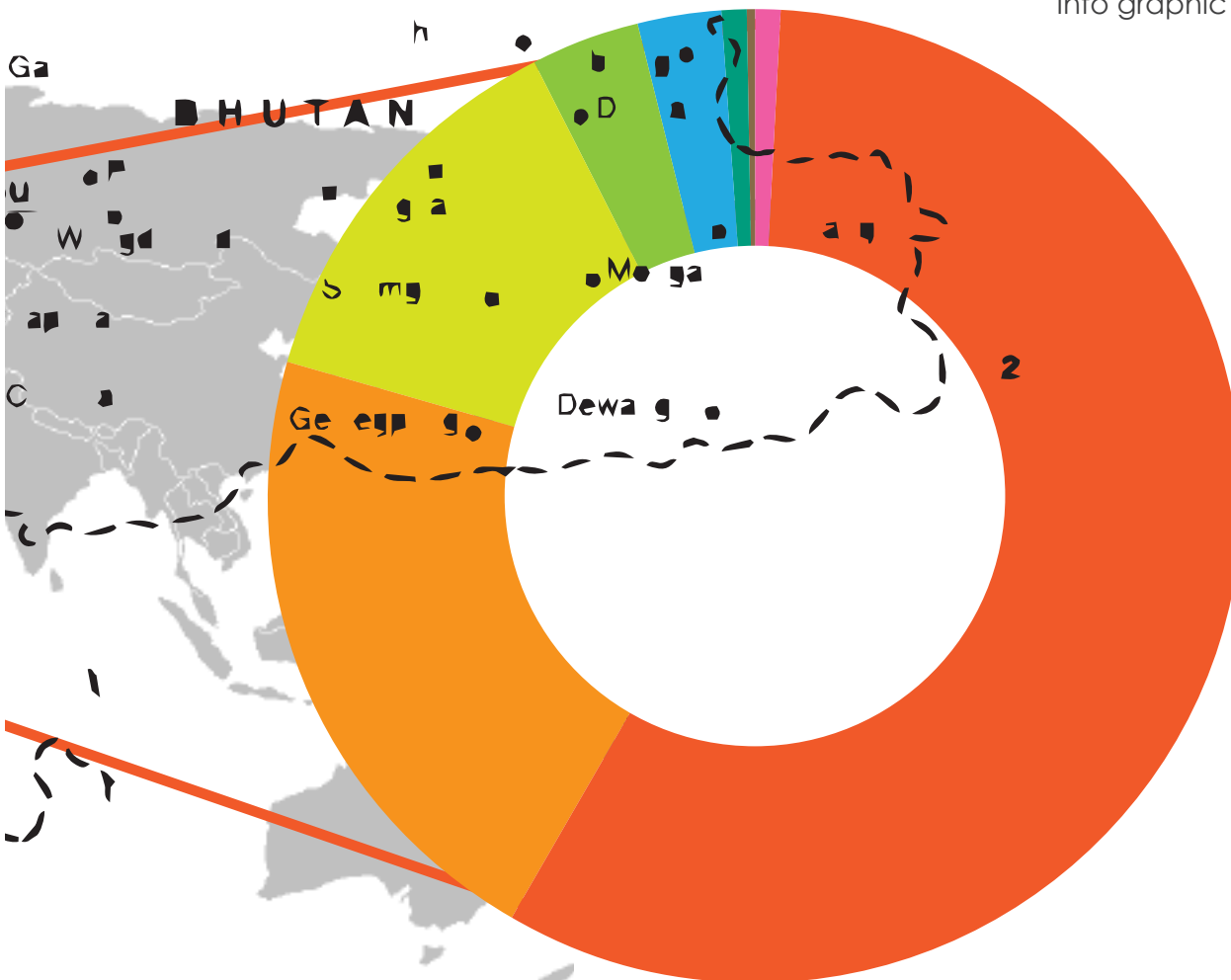
Info graphic 1 (City Data)



The **most ethnically diverse square mile** in the United States according to Time magazine.



Info graphic 1.2 (City Data)

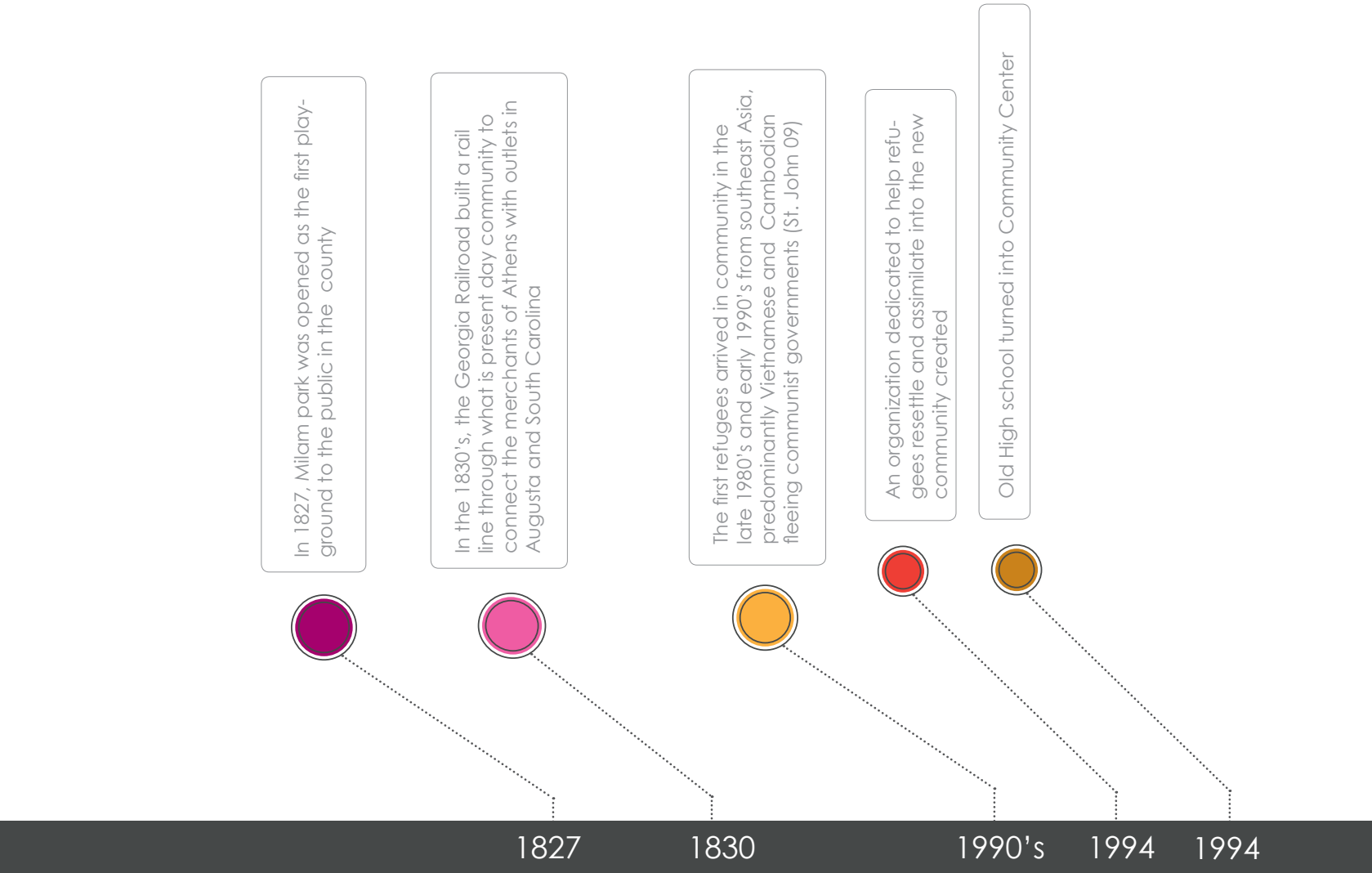


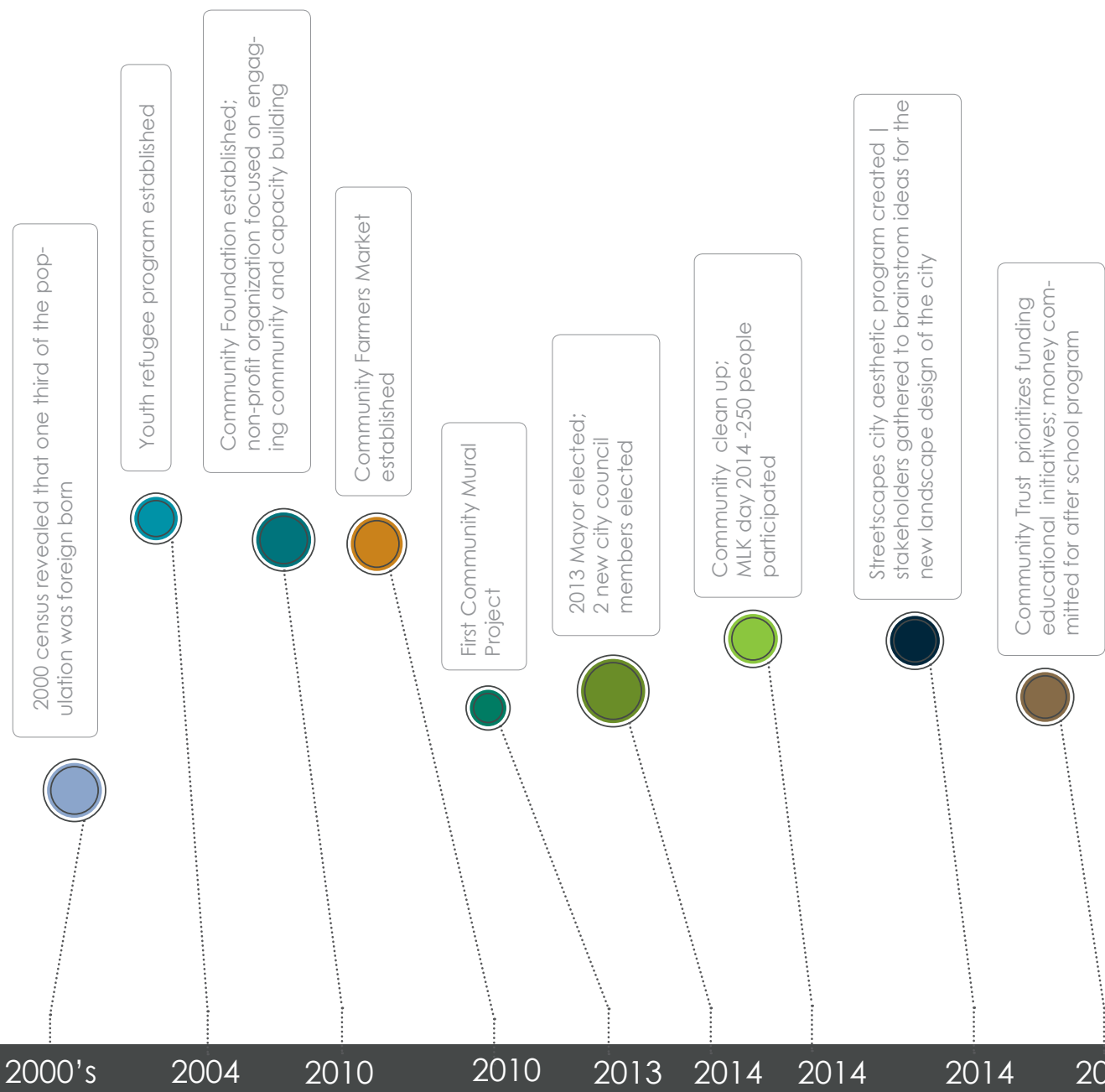
(info-graphic 2)

K question 4. | What's the history of the community?

CITY TIMELINE |

A BRIEF HISTORY

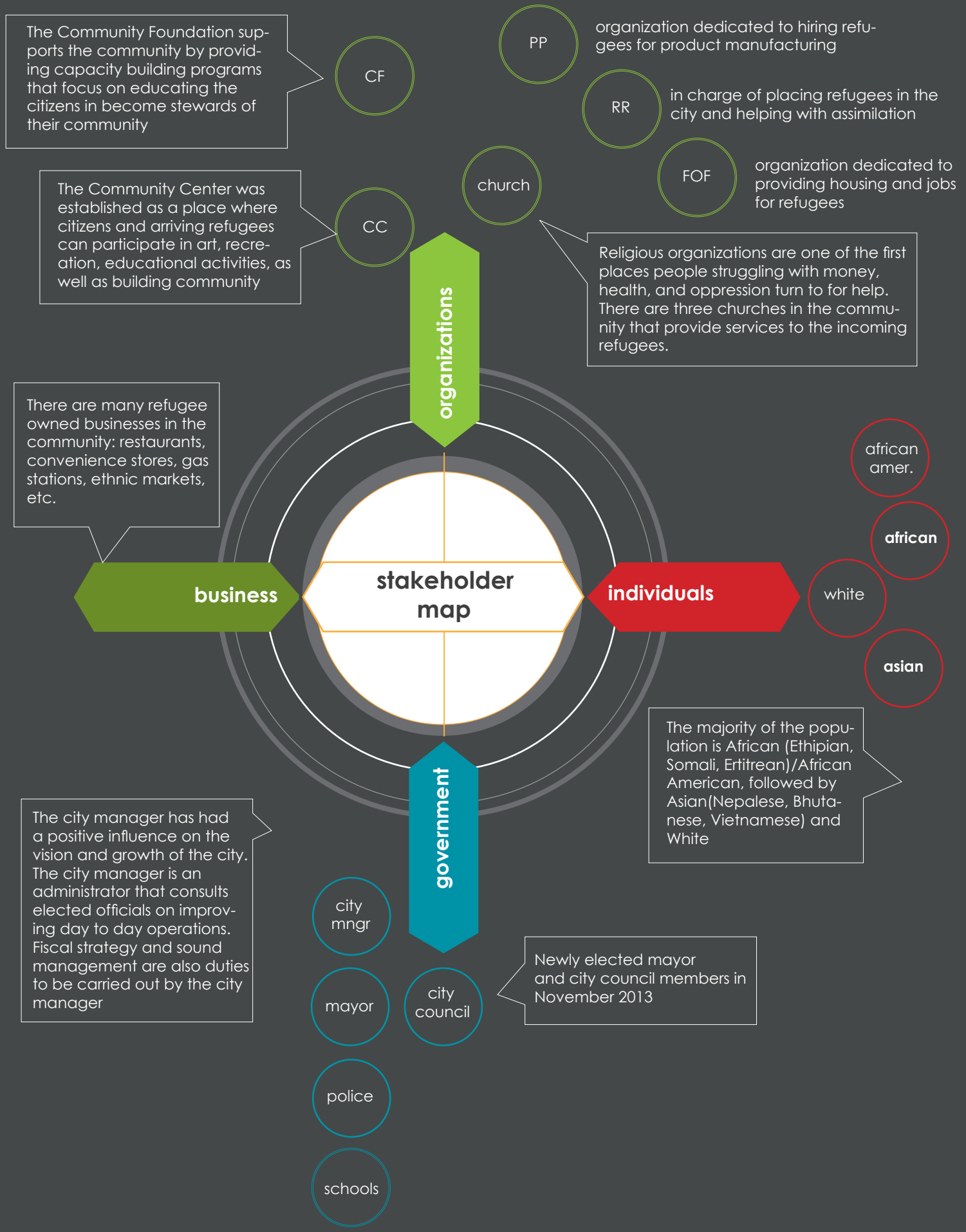




K question 7, 8. | Who are the key stakeholders?
What is there effect on community?

STAKEHOLDER MAP |

This map provides a visual representation of the populations, organizations, and government officials within the community. This also provides an overall scope of the stakeholders and pictorially depicts how the community is made up and organized.





1. Volunteering
2. Public forums
3. Participating in community events and activities
4. Starting conversations with local community members
5. Sharing your experiences of community or similar interests
6. Cultivating relationships

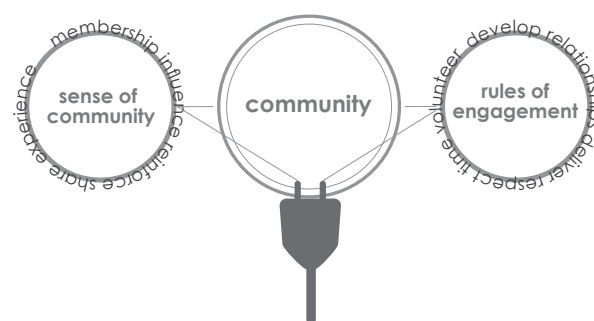
The experiences are documented in more detail in the following pages, explaining both the organizations and the type of engagement. Observations, ethnography, and unstructured conversations were documented during this phase to collect keywords and phrases that describe the assets and deficits of the community.

IMMERSION

LEARNING ABOUT COMMUNITY

OUTCOMES |

To understand the dynamics of the city, organizations that reflect various parts of the community were selected to engage with (arts, sustainability, community, local government, safety)



organization, group, event

- Community growth class |
- Team growth |
- Community Trust |
- CF (community foundation) |
- CC (community center)
- Community Academy
- Arts Committee
- Stakeholder Committee
- Photo voice
- Police Ride Along

involvement

- participant
- volunteer
- participant
- developing relationship
- developing relationship, volunteer
- participant
- member
- member
- participant
- participant

seek out leaders of the community for insight (refer to the stakeholder list for making connections)

Community Transformation |

overview |

The purpose of the community transformation training course was to teach the community about best ways to start engaging and partake in ethical conversations with each other, and how to become stewards of their community.

participants | approximately 10 participants (9 female, 1 male)

facilitators | 2

knowledge gained

- + Disparities and systemic problems exist related to poverty
- + Learned the organizational structure of community and who holds power
- + Parents are not learning at the rate of the children, causing a communication gap
- + Refugees work long hours leaving their children unattended and vulnerable to abuse
- + Apartments have safety issues that could be harmful to children (broken fencing, neglected facilities)
- + Learned fundamentals of grant writing and creating proposals to fund community projects
- + Youth are lacking resources and activities to engage with each other and the community

Community Trust |

overview |

A fund created to activate community decision making. Using a participatory process, the goal is to give residents the power to directly determine how funding should be allocated for projects and to select a group of trustees to guide and oversee the implementation of the project. The process took place over the course of approximately one year (August 2013-August 2014).

participants | 92 people were at the first meeting and collectively established education as a priority

demographics | Residents that spoke 10 different languages represented

knowledge gained |

- + Together the community identified many needs
 - Civic Engagement and Justice
 - Connectedness
 - Education*
 - Economic Development
 - Food Security and Sustainability
 - Health
 - Housing
 - Play and Fitness
 - Safety
 - Transportation

*Education was selected as a priority and the group decided to focus funding on after school programs)



Team Growth |

overview |

Team Growth is a volunteer group established to keep the city clean and bring people together through city beautification. The team helped procure funding for the first community art project and brought out more than 50 community members who all had a hand in completing the artwork.

knowledge gained |

- + Incorporating community in public art brings community together and fosters shared experiences
- + Public art beautifies the city and gives a sense of pride for those involved which creates a sense of membership
- + Planned activities in the community have good intentions but sometimes lack proper organization

CF (community foundation)

overview | CF is a non-profit organization focused on engaging the community by beginning conversations to help residents articulate their visions for the future and to help develop an action plan to achieve that vision

interaction | CF advised the researcher/designer on how ways to best engage the community, helped develop research tools, served as a feedback board during the needs and design phase, and help assessed the capacity and future potential of the project and how it may be used to foster economic growth and development

knowledgs gained |

- + Learned techniques to facilitate conversations
- + Gained insight on needs that currently exist within the community
- + Received value insight when developing concepts

Arts Committee

overview |

The Arts Committee was formed under the new mayor's oversight and was facilitated through a town hall meeting. The goal of the committee is to develop a platform to discuss community art projects and ways in which the city can engage community members to participate in the arts.

participants | 7

knowledge gained |

- + Despite having two members of city council in the committee, the group has decided to keep the committee removed from city influence
- + The city is in need of beautification
- + An aesthetically pleasing city is often associated with less crime and creates pride among community members
- + Art can be used a tool to teach skills (team work, fabrication process, ideation)

Community Academy

overview |

Community academy was a week long course that focused on sustaining the future of community development. Each course over the five day period targeted a different aspect of community sustainability. Such aspects were role of community government in local economy, effective organizing, and citizen participation, power, influence and authority.

participants | 15 people

knowledge gained |

- + Principles for a sustainable community requires consideration of ecology, economy, and equity
- + The county does not have a strong identity
- + One-on-one conversations start community development
- + There is a major disconnect between individual needs and city council priorities
- + Many refugees feel like they don't have a strong voice in the community
- + The community is considered unpleasant by those passing through and does not have an immediate appeal
- + There is no central location for community to congregate
- + People want to contribute but feel like current ways of becoming active are a waste of time (too many meetings in which action doesn't take place)

Stakeholder Committee

overview |

A stakeholder committee was established to represent the community's views regarding the designs for a new streetscapes project that will take place over the next four years. The project's aim is to beautify the city through landscaping and lighting, to improve accessibility by creating more sidewalks and crosswalks, and to discuss development of a central community square.

knowledge gained |

- + The plan is to represent diversity through sculptures and architectural landscaping
- + Stakeholders were asked to attend two full day concept meetings to provide input in the design and strategy
- + Participatory approach advocated by committee leaders however very little input was encouraged

Community Center

overview |

The Community Center was established in 1994 to provide the cultivation and celebration of art, recreation, education, agriculture and community development. The Community Center hosts events for community building and serves as a space for community members to hold meetings and gather. The researcher (designer); "provided woodworking"; "built bookshelves"; "children's fundraiser"

knowledge gained |

- + The center is a resource hub for immigrants and refugees in the community
- + The center has a community garden, edible forest, food co-op, as well as a food security program.
- + Community members and those living in poverty have access to recreational programs



PHOTOJOURNAL |

overview-
The goal of Photovoice is to build skills within communities using participatory photography and digital storytelling methods. This was a PHD project at a local university aimed at assessing the validity of using photography and shared story telling as a tool for engaging community.

participants | 7 participants

- + Community shared passionate stories and personal experiences of the community through photography
- + Learned :
 - There is a serious disconnect with city council and citizens
 - Apartment management of various complexes may be mistreating refugees
 - Community has affordable housing options
 - Many members leave the community for grocery/retail shopping, dining and for recreational activities
 - Mistrust of police in the community
 - Many dilapidated and neglected buildings; Need to beautify and clean-up the city to create pride

The photographs below taken by researcher as a participant of Photovoice



The birds' chaotic chirping reminded me of how community should be. Although the birds were all "talking" over one another , when it came to "action", they became silent and flew off as a synchronous group.



The bike lanes remind me that cycling is part of the city and should be embraced.



In apartment complexes and business parking lots, trash dumpsters are often left neglected and overflowing.



This apartment complex has left signs, doors, and fences without repair.



This tiny bird on a relatively huge machine reminded me of how individuals may feel when going up against the "huge machine" of politics in the city.



The community village is a place where all cultures from around town go to dine, converse, and shop for groceries. By some, this village plaza is said to be the cornerstone of the refugee and immigrant community. The owner of the grocery store has been supportive of the disparate cultures. Despite the obvious connection to the community, there are certain individuals who are disapproving of the maintenance and uncleanness of the buildings and would like to see more money come in through "non-refugee" businesses and want to change the shopping plaza.



1. Aggregate your notes to assess needs and assets, as well the cultural and social structure of the community

2. Consider how best to use the community's assets and resources to meet a need; By using existing resources, it increases the community's capacity for fulfilling it's own need and creates a more sustainable solution

3. Make sure all of the stakeholders are at the table and included in the discussion

4. Identify if the community has their own priority--if so, be sure to address it in order to establish trust and show respect; Even, if you don't see an immediate need, there may be underlying factors that you may not be aware of

5. If no obvious priorities exist, engage with members to categorize needs to find a priority or focus

6. Identify options that are feasible and have buy-in from those who can implement the final design



NEED

CREATING TO MEET NEED

To assess need, information was aggregated from meetings, conversations, observations, and interviews from the immersion phase. Keywords, insights, and comments were extracted from the notes and documentations and written on post-it notes. Post-it notes with similar themes were placed together to form categories of needs. Six categories emerged out of the needs assessment. Community members were presented with the list and asked to consider the needs in the context of the assets, deficits, and capacity

of the community. The next page provides a digital representation of the post-it exercise. The representation shows the outcome of the exercise. The post-it notes were counted and the topics were ranked based on prevalence. The need for "a sense of place" was ranked highest. This topic was then presented to a respected community organization to assess the viability and feasibility of strengthening the "sense of place".

Digital Post-it note representation |

The data collected from the immersion phase was categorized into topics of need; ACTION, VOICE, PLACE, VALUES, EDUCATION, COMMUNICATION (p# = participant)

21.4% PLACE

ACTION

p14.
need to utilize
resources in
community

p15.
use
skillsets of
citizens

p1.
take control
of your own
assets/ power

p11.
need
practical
tools
for change

VOICE

p3.
need an
open wall for
public com-
ments

p16.
engage,
educate,
empower

p13.
people want
to rush to
action

p13.
trust the pro-
cess of local
government

VALUES

p6.
think green
push
alternate tech

p10.
people are
unreliable

p18.
kids need role
models

p16.
balance
aspirations with
competency

EDUCATION

p17.
people need
direction /
where to go for
help?

p7.
need to ed-
ucate based
on capacity of
community

p12.
need continued
learning/adult
education

p10.
teach through
agriculture

PLACE

p1.
need physi-
cal space for
meeting

p2.
many
refugees
don't feel
welcome

p6.
need more
public art

p2.
need sense of
place

COMMUNICATION

p1.
online forums
should inte-
grate with in
person forums

p5.
need a com-
mon vision

p14.
common
interests can be
used to create
shared experi-
ences

p14.
need moreface
to face conver-
sations

19.0% ACTION 16.6% COMMUNICATION 16.6% EDUCATION 14.2% VALUES 8.4% VOICE



NEED | WHERE IS THE PROBLEM

The data from the immersion phase was aggregated to determine potential needs. Topics that surfaced as themes from discussions and meetings with community members included a sense of place, voice, communication, action, vision, education, and values. Slightly higher than the other topics (21.4%), "a sense of place" was the most frequent topic that came up in conversations throughout the immersion phase. In hindsight, we also discovered it was unfair to dichotomize topics, such as "place" from "communication" and "vision" as they are interlinked and not mutually exclusive. Many comments also focused on the lack of connection and division between cultures in the city and the need to have a common thread that people can relate to and share. After discussion, "a sense of place" was chosen as the focus.

While considering different avenues to create "a sense of place," a flyer was distributed in the community that expressed frustration in the city's process of creating a logo for the city. Leaving community members out of the process, a new city logo was chosen behind closed doors with minimal input from residents. The end-result was a logo that was trite. One community member said a google search identified multiple groups already had a similar "human tree logo" in place. The flyer stated "The number of corporate and business logos that popped up was both shocking and embarrassing. Yoga studios, vitamins, sandwich shops, organizations dealing with environment, charity, technology and investments have all adopted the human-as-tree concept as their identifiers. The search also called up scores of generic human-tree images for sale or download, inviting the attachment of "Your Company here" or "Insert Message Here". One

can only conclude the professionals we hired opened their "Big Book of Clip Art" and decided the most common concept for logos was good enough for our city." A google search conducted by the researcher (designer) for "human tree logo" is shown on the right in figure 3. The google search is compared to the logo selected without community input by the city (on the bottom right).

Through the knowledge and immersion phase, it was apparent the community was seeking a common thread and something that ties them together and creates a sense of place or belonging and inclusion.

After learning of this need, the researcher (designer) researched the topics of place, inclusion, and identity. Through research, McMillan's work resonated among community members. McMillan expressed that a common symbol is necessary to bring together a diverse community and to create a sense of place: "In order to obtain smooth functioning and integration in the social life of a modern community, especially when there is heterogeneity, a community must provide a common symbol" (McMillan 86).

Collectively, a new logo was determined to be a way to communicate a "sense of place" and strengthen the community's identity. The goal of the logo was to visually represent the "brand" of the community.

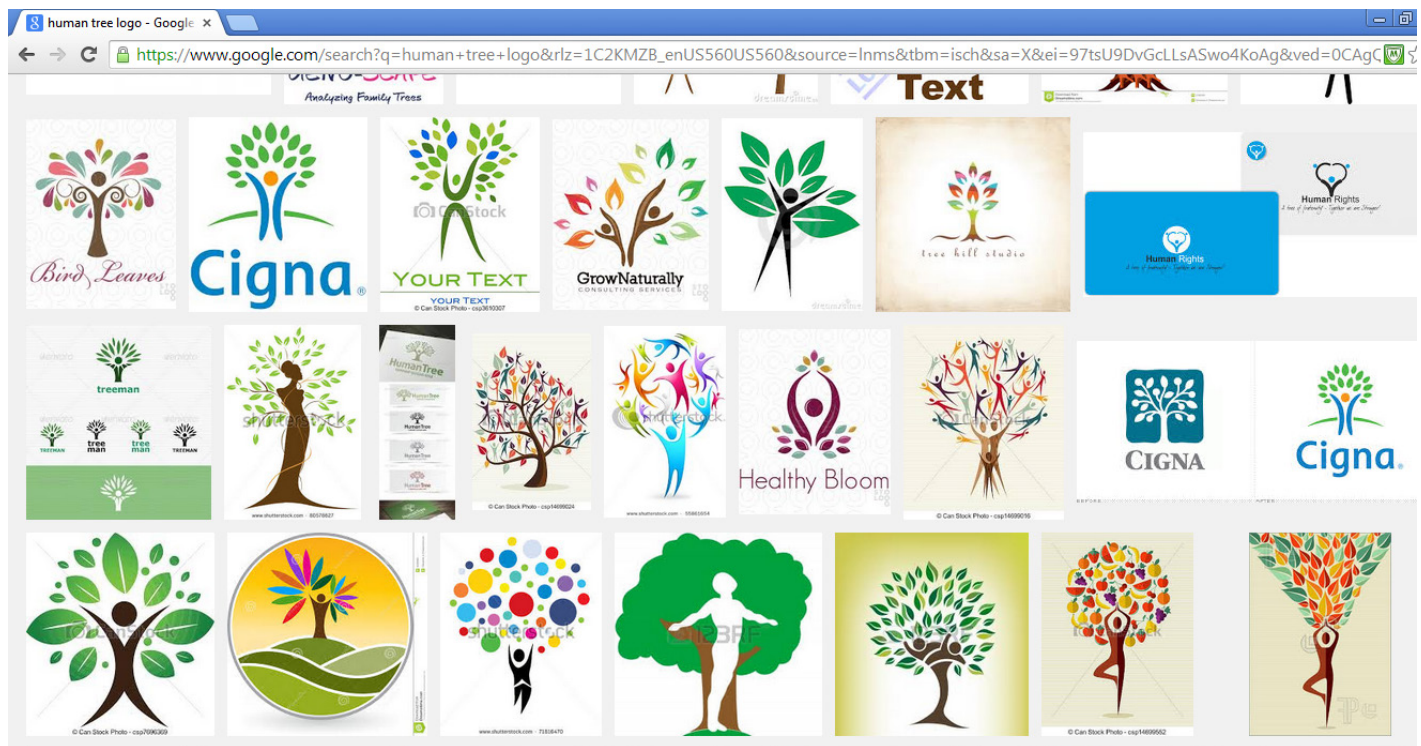


Figure 3. Google search for "human tree logo"



current community logo



1. Aim to have a few concepts (at least 3) to allow the participants to compare and contrast the concepts to create a dialogue.

2. Taking into account feedback, create and share the final design with the community members.

3. Share the design within the community to members who have power and capacity to implement the design.



What makes a successful brand?

How do cities approach the complicated task of compiling all the disparate attitudes, likes, interests, and characteristics of the architecture, history and citizens into a graphic marketing strategy that adds value to the location and empowers its members? The key to a great brand is to

formulate a vision. The graphics and styling involved in branding need to tell a story. A story that embodies the journey of the city and it's past present and desires for the future.

DESIGN

MAKING WITH COMMUNITY

The goal of the design phase was to include the community in defining a vision and creating "a sense of place" by creating a logo that represents the "brand" of the community. The goal was to invite community members into the design process by collectively brainstorming ideas and concepts that represent their community. To achieve this goal a workbook was created for participants to document their ideas over a two week period.

The researcher invited participants to help design the brand of the community. Adapting techniques used in corporate branding, a workbook was created to allow creative input. The workbook encouraged all forms of expression, including (but not limited to) drawing, writing, imagery, tracing, to express their idea of community.

“ researcher (designer)
It's good to give people options.
Everyone communicates ideas in
their own way.”

DESIGN

CONSTRUCTING A PARTICIPATORY WORKBOOK |

The workbook consisted of three main sections; **current community, envisioning the future of community and product concepts that express the vision.** The goal was for community members to come up with a brand, followed by a product concept that would represent that brand. The participants were guided through the workbook and each section was explained in detail. The participants could write draw or cut out pictures to express their ideas. The workbooks were left with the participants for approximately 2 weeks and then contacted for a follow up session to review the results.

Working with community to brainstorm branding and product ideas for
CLARKSTON

What is branding? what is an example of a good brand?

What is a product? name one product that represents it's brand?

How do they differ?

What does Clarkston represent?

Describe your ideas **visually** in the squares below: feel free to draw or cut out images that convey your ideas!

1	2	3
4	5	6

The participants were asked to define both brand and product.

They were then to give an example of what they thought was a good brand.

This was to establish the idea of the workbook

Recruiting Participants |

As directed by the CF, participants were obtained by contacting and reaching out to members of the community that were a part of the *immersion* phase of the design. Community members were also recruited through postings on community forum websites and e-mail list servs. Community leaders were also contacted to participate but were either non-responsive or unwilling to participate. Below are the participants recruited for the project

9 PARTICIPANTS

3 white male
3 white female
1 Eritrean female
1 Ethiopian female
1 Somali male
44.4% male 55.6% female

One-on-one meetings (approximately 20 minutes) were scheduled to discuss the goals and to provide directions to complete the workbook. Each member was also guided through the first part of the workbook to make sure they understood the relationship between products and branding. All participants were asked if the workbook was within their means to complete and were allowed two weeks to complete the workbook. After two weeks the participants were contacted and another meeting was scheduled to discuss the outcome.

After receiving only two completed workbooks after two weeks, it was decided that a workshop should be scheduled to help anyone who needed assistance with completion. The workshop took place at a local college and students of the college were also invited to participate. One participant showed up to the workshop and was aided in completing the workbook. Meetings were set up for the remaining participants at their convenience and at a location of their choosing.

NOTES / SKETCHES / DOODLES	
<div><div>E</div><div>ENVISION CLARKSTON (10 min)</div><div>How is Clarkston changing? Write 3 key words that represent changes you would like to see in Clarkston now or in the future. Write 3 keywords that represent why you want to see these changes in Clarkston.</div></div>	
How is Clarkston changing? KEYWORDS	
1	_____
2	_____
3	_____
4	_____
5	_____

IDENTITY / BRANDING
TOPIC/ _____
WHY/ _____
CONCEPT DRAWING/
EXPLANATION/

Does Clarkston represent?:

③ heart - love
as a unifying
force

② multi-focused
diversity

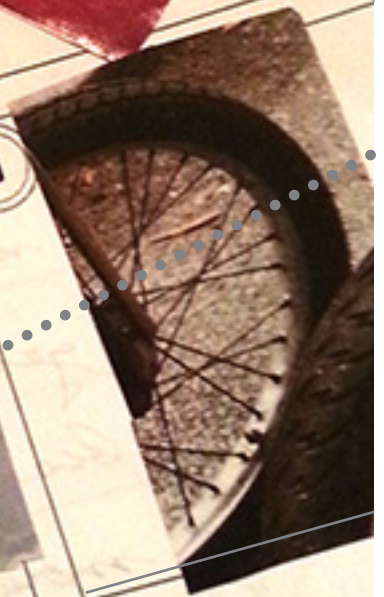
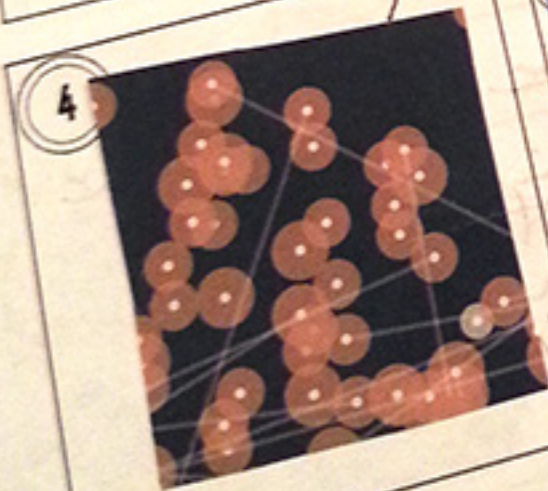
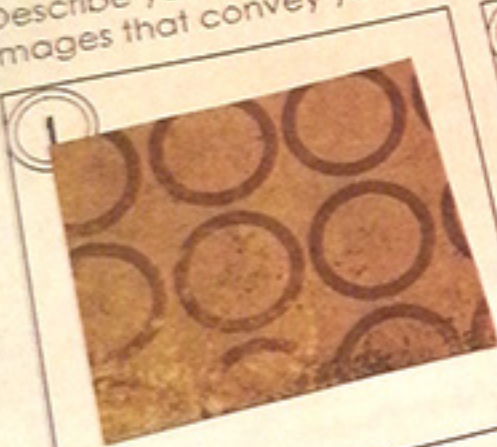
① African

④ ~~all~~ connecting the dots

⑤ free fall - leap of faith

⑥ spokes in a wheel

Describe your ideas visually in the squares below: feel free to draw or cut out
images that convey your ideas!





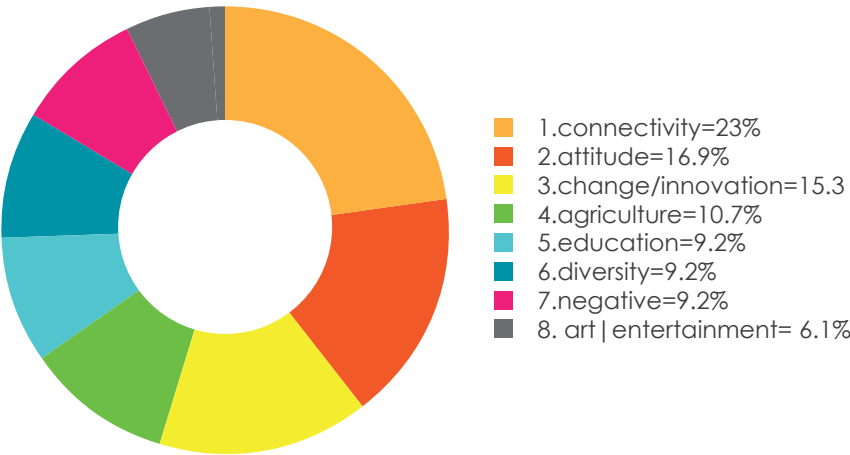
Free fall |

"you have to free fall, take a leap of faith and trust in the community. Let your guard down" (participant 1)

This is a page from the envisioning section of the workbook. The workbook was blank at the beginning of the session and full of rich information after approximately 45mins. Upon entering, the participant stated they were not looking forward to the workshop. At the end of session, the participant thanked the researcher (desinger) for the experience and claimed they really enjoyed the creative collaboration.

DESIGN | WORKBOOK RESULTS

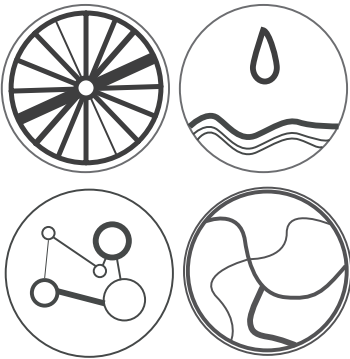
In order to aggregate the responses of the workbook, Post-it notes were used and arranged into similar themes that were placed together to form categories. The answers that were aggregated focused on reflections of current community and what the community would like for the future. The post-it notes were tallied and the results centered around themes of:



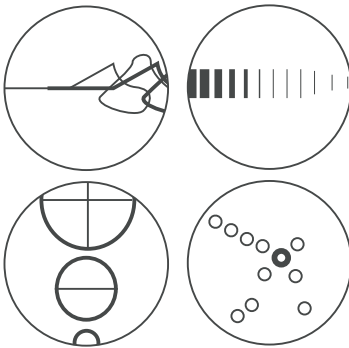
Drawings and cut outs from the workbook were translated into a graphics library that aimed to represent the ideas of the participants. The library was then used to start designing concepts. Participants were asked to provide ideas about their vision of community as well as how color and material can mirror that vision.

graphics library

CONNECTIVITY



INNOVATION | CHANGE




AGRICULTURE





COLORS |

Participants were asked to choose one color that represents the community but could list up to 3. Participants were also asked to give a phrase or keyword as to why that color was relevant to the community. Each of the colors below were identified as being colors that reflect the unique qualities of the population. The keywords they chose to describe the colors are listed to the right.



yellow | clothing, food (mac&cheese), sun, Eritrea, warmth

blue | sky, never ending, sadness, united nations, planet

green | grass, sustainability, balance, prosperity, farming

red | alarm, brick, stability, passion, love people share



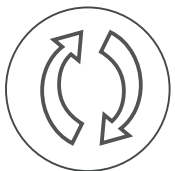
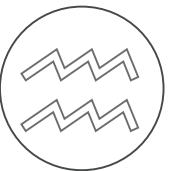
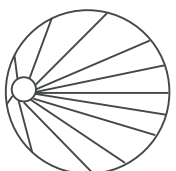
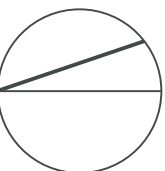
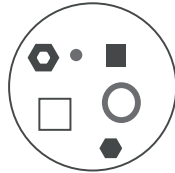



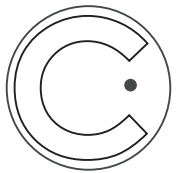
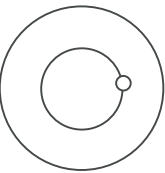
Participants chose both positive and negative keywords and phrases to represent color. For participant two, blue represented gentrification and sadness. They stated that an increase in taxes, home prices, and new business would eventually push out residents like the rest of the cities in the area that have gone through similar changes and transitions.

MATERIALS |

Participants chose wood as being the material that most reflects the community for a number of desirable reasons.

- + flexibility in application
- + diverse grain patterns
- + strength



DIVERSITY	EDUCATION	ATTITUDE
 	 	 
 	 	 



DESIGN | CRITERIA

Brief | Place Branding

The community has a diverse population but is quite small geographically and has distinct differences culturally, historically, and socially. For this brand, the message, imagery and positioning are key in embracing the multi-cultural aspects of this unique location. The brand must be authentic, experiential, and consistently delivered.

Critical Elements |

- + Scalable | The design should be customizable for special applications

- + The design must be made with the intent that the community will adopt the manufacturing process and has the capacity to meet the potential needs of demand

Materials |

- + Material should be common and easily obtainable

- + Weatherability should be taken into consideration

- + Fabrication should be minimal and take into consideration varying levels of capability



HOW IS THE BRAND DELIVERED?

Like most brands, exposure and authenticity is essential. The brand should be visually represented throughout the community and take many shapes on various products. Below are some ideas that came up in conversations with community members and participants in the project workbook.

- + a sign sign that can be displayed in windows or on homes**
- + a porch planter**
- + t-shirts**
- + banners**
- + free art**
- + stickers**

DESIGN | PRECEDENTS

The city of Melbourne Australia recently went through a branding overhaul and came up with a clean logo design that takes on many patterns, forms, colors, and styles all within the graphic parameters of the letter M. See figures 4A and 4B.

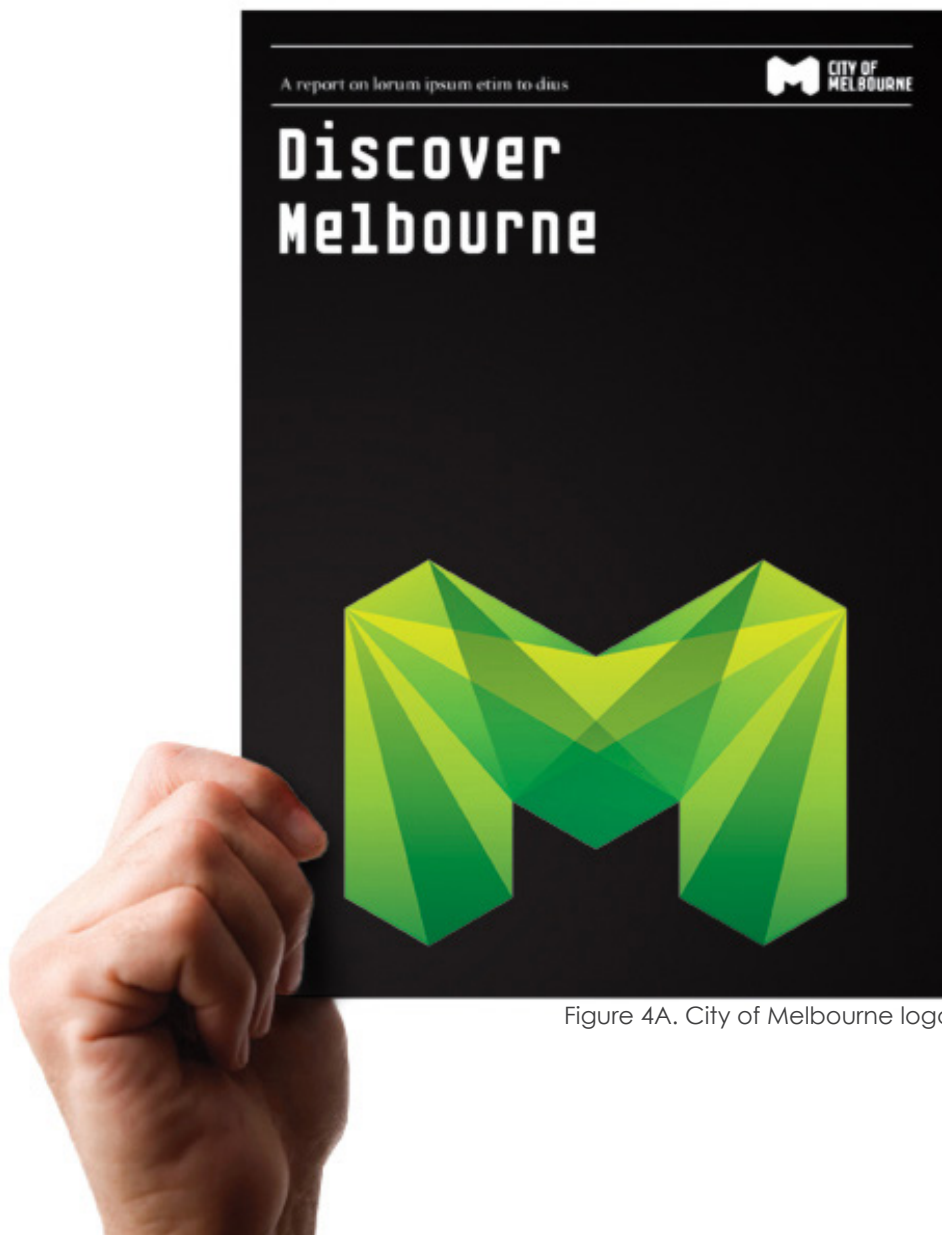


Figure 4A. City of Melbourne logo



CITY OF MELBOURNE

Figure 4B.City of Melbourne logo



Figure 5. Stefan Sagmeister

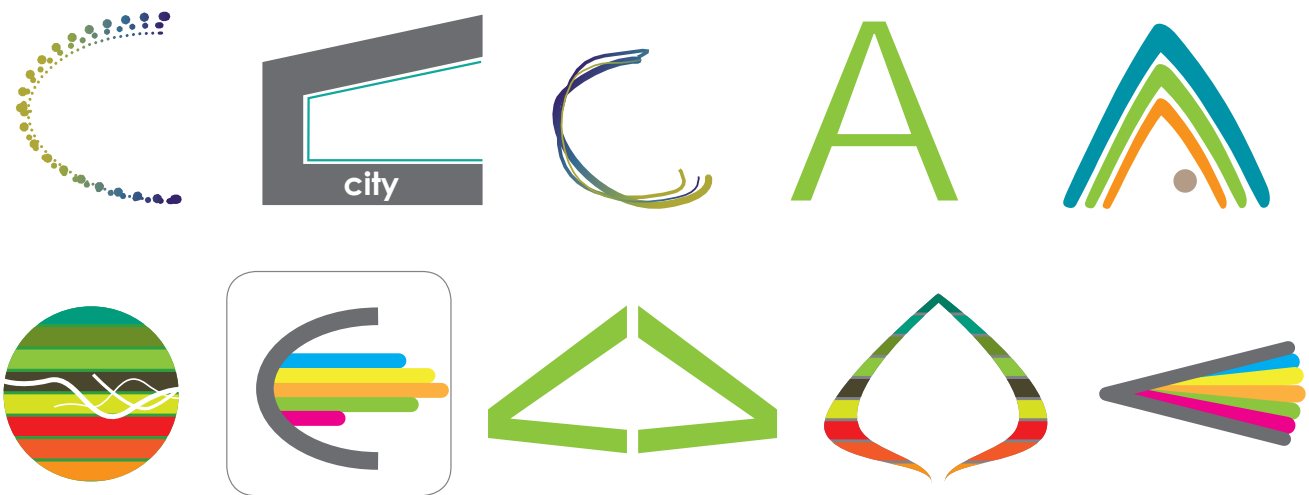
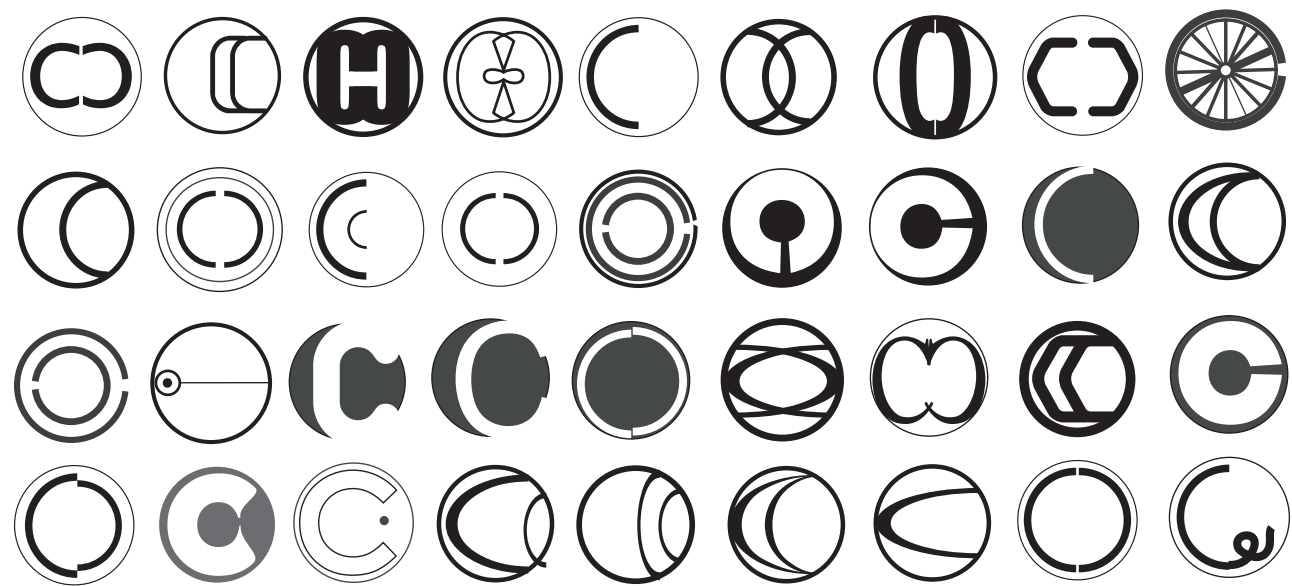
Stefan Sagmeister

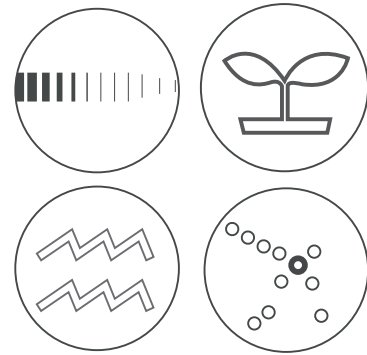
In the designs for the casa de musica Stefan draws color from paintings to use as a graphic template. The colors draw from multiple aspects of an image that represents the artist. For example the image to the right of Beethoven is used as the foundation for the color palette.



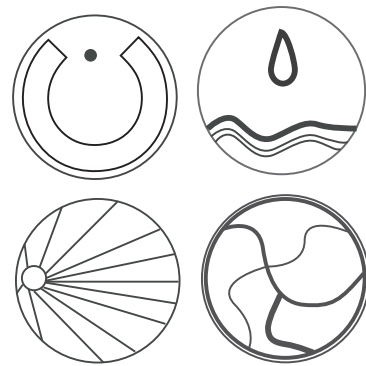
DESIGN | IDEATION

Focusing on the community's voice and translating their words and imagery for the future direction of the community was the primary goal when starting the iteration process. Designs were developed using the graphics library as previously shown on page 48-49. On the page to the right, graphics from the library are used to explain the origin of the designs.

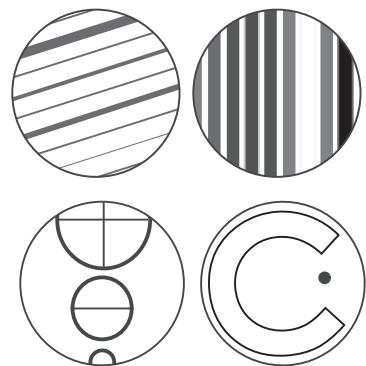




symbols represent |
nature, growth, change, innovation



symbols represent |
nature, growth, diversity, acceptance



symbols represent |
growth, diversity, acceptance

The following logos were presented to the participant group with an accommodating image that illustrated the message of the concept. The logos are on the page to the right and the images can be seen on pages 60-65.

- ① **GROWTH**
- ② **POSSIBILITIES OF THE FUTURE**
- ③ **SMALL TOWN OF
THE FUTURE**



①



②



③



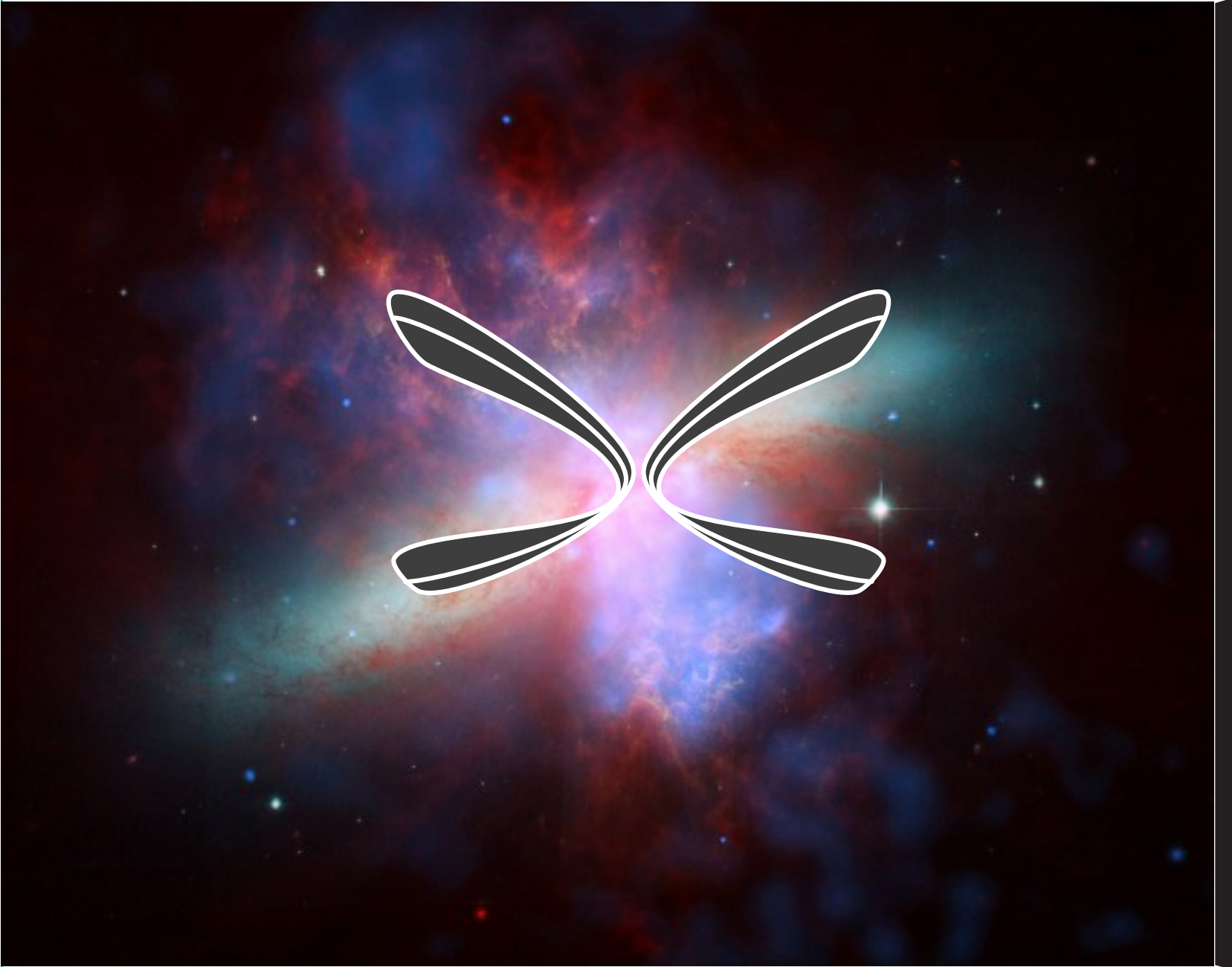
① GROWTH





“where possibilities **grow**”

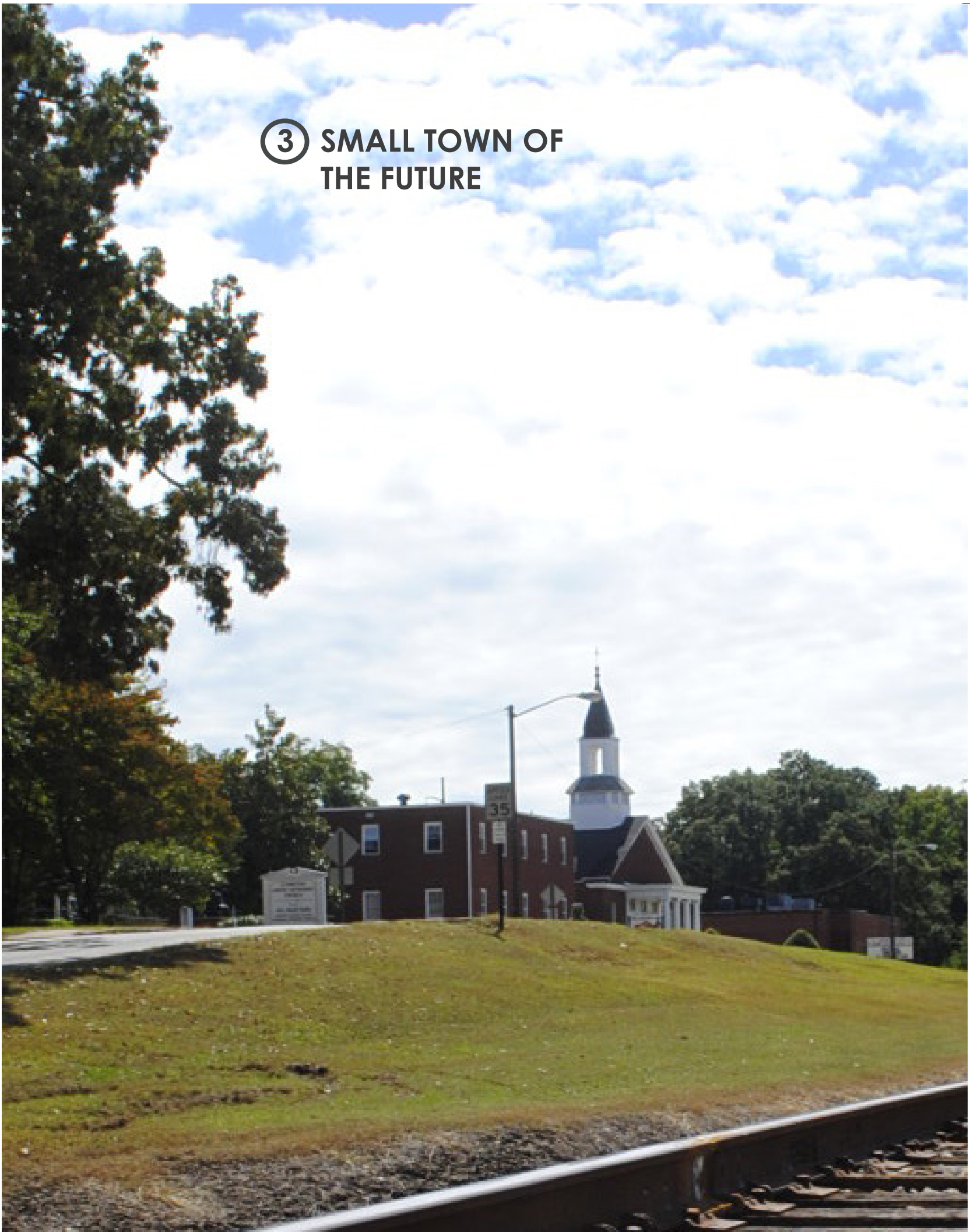
② POSSIBILITIES OF THE FUTURE



" s m a l l t o w n o f t h e f u t u r e "

E N D L E S S P O S S I B I L I T I E S

③ SMALL TOWN OF THE FUTURE



SMALL TOWN OF THE FUTURE





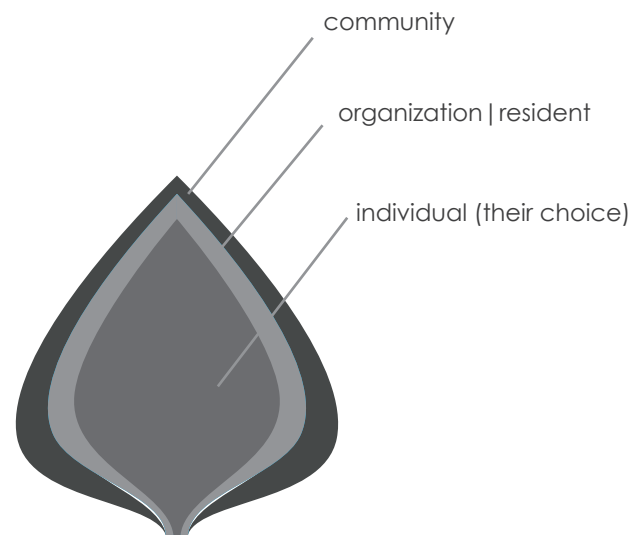
7 out of 9 participants responded to the three designs sent out for review. Of the 7 total responses 4 chose the above design and three chose the design below as being the most representative of their vision of the community. The two concepts were combined to validate all of the participant's voice.



REVISED CONCEPT |

The final concept is a three part logo in which each part is determined based on affiliation with the community. The user chooses how to design the inner leaf and the two outer shells represent the community and the organization or entity the user is representing within the community.

The concept idea was vetted by the CF, CC, the participatory workbook cohort and the mayor. They supported the idea and were enthusiastic about introducing the idea into the community. Shown below are the three pieces and a few versions of how the logo could be adaptable to organizations, individuals, and government.





















The Meaning Behind The Design |

The logo may be broken up into 3 pieces. The goal was to create a logo that is representative and is visually recognizable, but allows for flexibility and individuality. The outer shell will represent the entire community. The second shell will be customizable to a sub-group, which may be governmental groups, organizations/residents (restaurants, artisans, non-profits), and the inner piece (the heart) will be up to the individual(s) who make(s) up the sub-group.

The examples below are in basic colors, but the goal is for the larger community to determine the design of the outer shell democratically and the sub-groups (entity within the community) to come together to decide on their own color, pattern, or texture that best represents their identity, mission, or values. The design of the inner piece will be left up to the individual(s) that make up the sub-group.

Below is a hypothetical representation of the how the logo may be implemented.

ENTIRE COMMUNITY		ENTITY WITHIN THE COMMUNITY		INDIVIDUALS OR ORGANIZATIONS WITHIN THE ENTITY		
GOVERNMENT		SCHOOLS		middle school		
				high school		
ORGANIZATION		RESTAURANTS		Somali		
				Nepali		
INDIVIDUAL		CITIZEN		Jane Doe		
				John Doe		

DESIGN | CONCEPT DIRECTION

The current concept holds the potential to bring disparate members of the community together by including them in the creativity of design. The three sections of the logo become a language for the stakeholders within the community to connect through a common symbol. The connectivity and level of membership into the logo has two components.

financial investment | common shared symbol

economic investment |

Purchase of the branded product affords a deeper level of engagement. Contributing money adds value to the relationship between member and community. By investing financially a member contributes to the community's well being.

- +A portion of the proceeds would go to the maker
- +A portion of the proceeds would go to a community trust
- +The trust would focus on a need of the community's choosing

shared symbol |

Under one symbol, the community could be unified and represented individually through an infinite number of designs.

A designated portion of funds would go to a community trust that would fund a project of the community's choosing



There would need to be a branding and marketing strategy for the new design. A branding and marketing strategy, which involves a multi-faceted approach should be used to create and generate awareness of the new banding logo. Ideally, the logo should appear in different scales and various forms. Four avenues of dispersion have been discussed with community members to launch the logo:

- 1. Community art projects**
- 2. Banners**
- 3. Planter**
- 4. Mailer**

1.

Branding community art would visually display the logo on a large scale as well as convey the message through the context of the art piece (pg. 69).

2.

Banners would also connect the community by giving people a product they can display on their home or apartment (pg.70-71). Banners would be for purchase and designed with the community maker.

3.

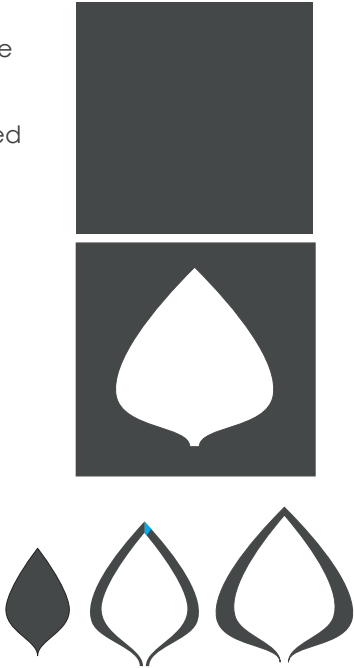
A planter would be available for purchase unassembled and would come with instructions for assembly. The manufacturing and distribution of the planter would involve community makers. (see pg.72-73).



4.

After involving residents and other organizations in determining the the design (color, pattern, texture) of the second shell which represents their “sub-group”, the 3-piece set will be mailed out with a blank inner piece. The design of the inner piece will be determined by the resident and individual(s) that make up the organization.

A brief explanation of the branding strategy, as well as the goals and aspirations of the logo will be provided.

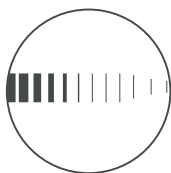




Community murals
would both beautify and spread the
message of connectivity

Providing Customizable Banners |

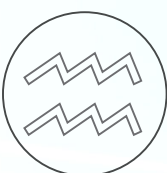
for homes would visually bond citizens together under a common symbol. Banners could be custom designed to match the color of a house or represent a point of view by selecting a color from the color library. For example the symbols below could be placed in the center of the design, supporting that idea.



progression



agriculture



movement



sustainable movement
green = sustainable
zigzag graphic = movement

■ = sustainability

Examples above are from the graphic library.





MATERIALS |

As stated in the design criteria, the materials must be easily sourced, be affordable, and easy to work with. To increase production, a laser cutter may be purchased. Local community members would be hired to help with cutting pieces, assembling, packaging, and distributing.

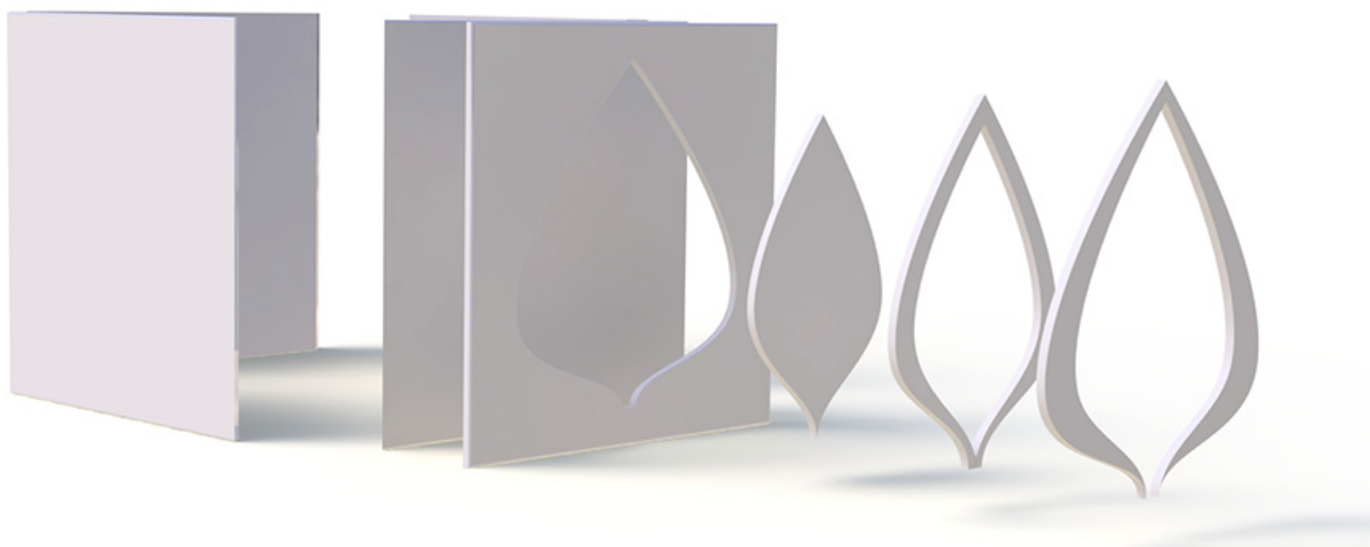
MATERIALS LIST |

1. 1/4 inch plywood - common material
2. 1/8 inch plywood - common material
3. yellow wood glue
4. primer
5. paint
6. laser cutter
7. table saw
8. sand paper

ASSEMBLY |

1. leaf piece 1
2. leaf piece 2
3. leaf piece 3
4. leaf frame
5. leaf bottom
6. planter box panel x 46

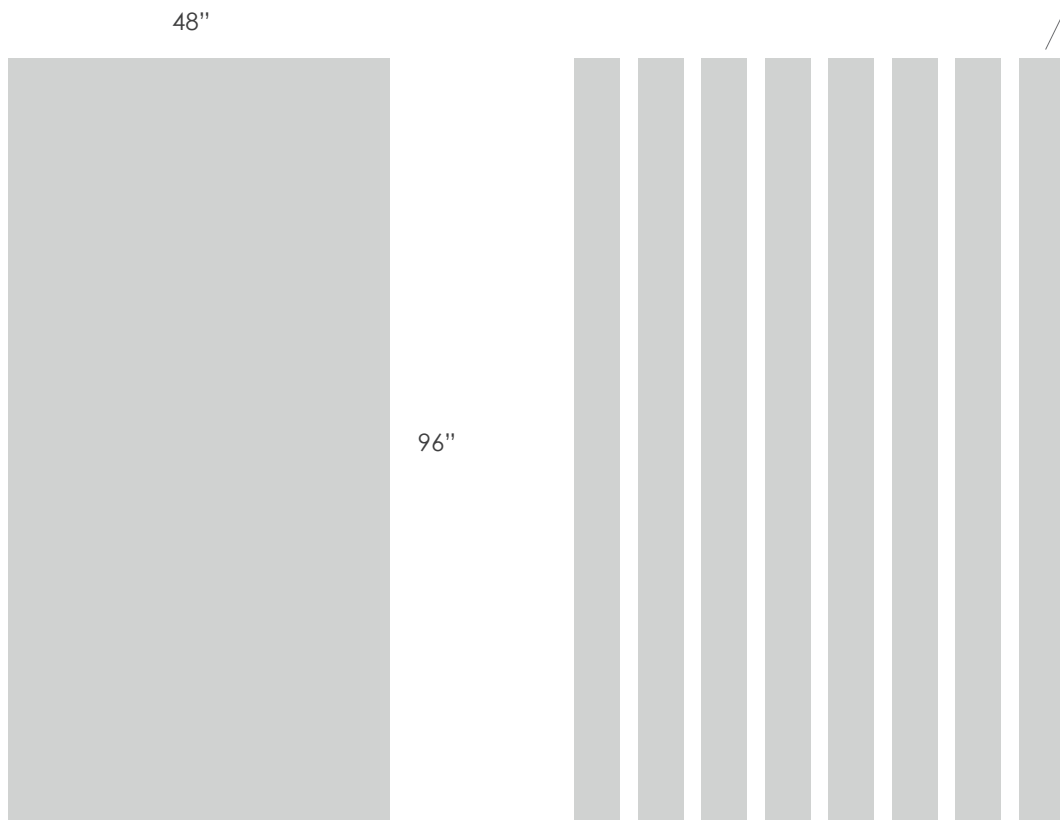




CONSTRUCTION STEPS |

1. Source materials from local renovation store
2. Site location to work (potentially current space occupied by non-profit)
3. Train volunteers the process of making the design and laser cutting
4. Start by priming a 4'x8' 1/8 inch plywood sheet. One side only
(this is for colored pieces) wood pieces will skip this step
5. Cut the plywood into (8) 6" sections lengthwise

you will lose 3/8" worth of material when cutting.
This last piece will be approx. 5 1/8"

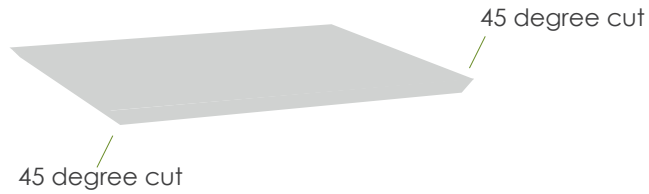


6. Take one 6" x 96" piece and use a chop saw to cut into (16) 6" x 6" sections



- 6.5. Take the short 5 1/4" piece and rip down into a 5" x 5" pieces. These will be the base of your boxes. The edges will be 90 degrees so no need to cut the 45 degree edge on these

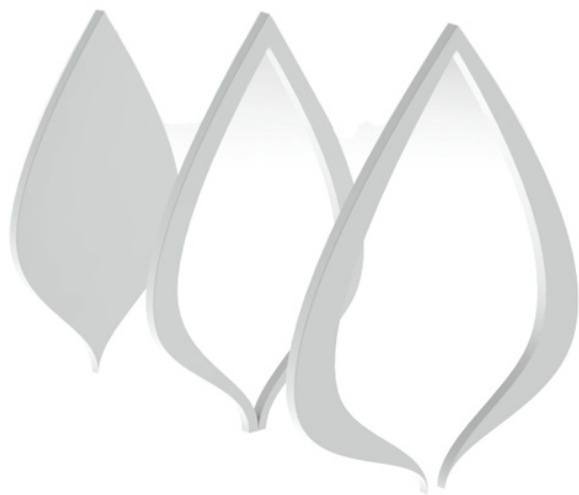
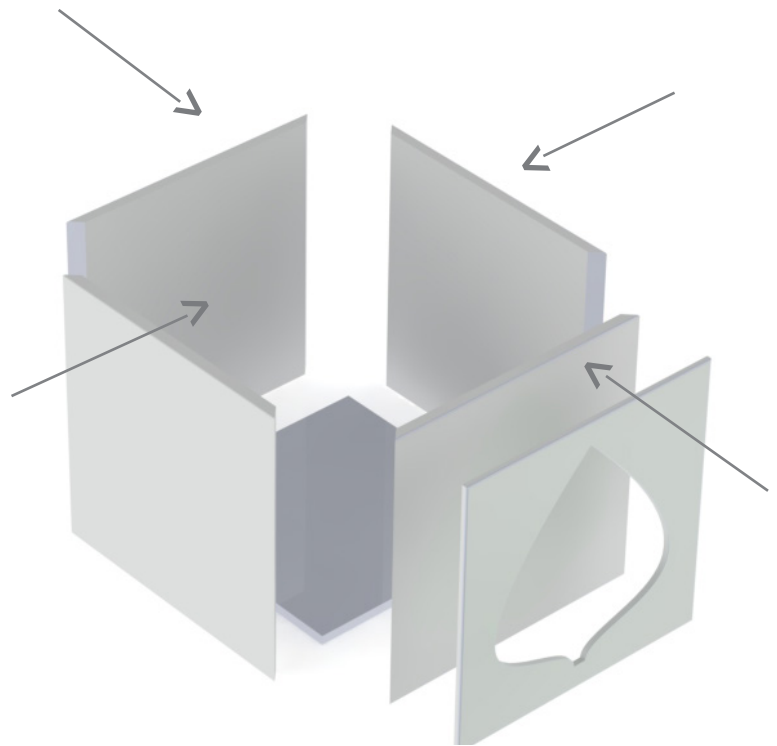
- 7.**
cut a 45 degree angle on
two of the edges of the
6" x6" piece and repeat



- 8.**Take the (4) 6" x 6" inch
pieces and place them around the
perimeter of the base block.
apply glue along all of the 45 degree
edges and all 4 edges of the base
block. Press the pieces together around
the base block so all of the edges are
tight

- 9.**Place two large rubber bands around
the outside of the box in order to hold it
together. wait 1 hour

- 10.** Apply the face plate to the front
using wood glue. Wrap rubber band
around the outside once more. Use as
many rubber bands as you would like
to keep the face plate tight against the
box

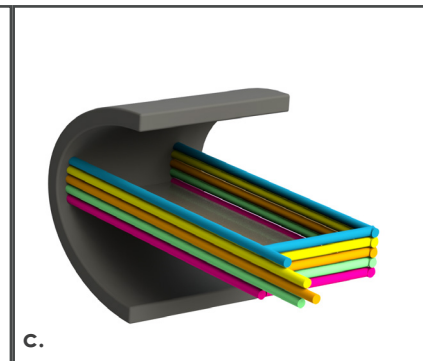
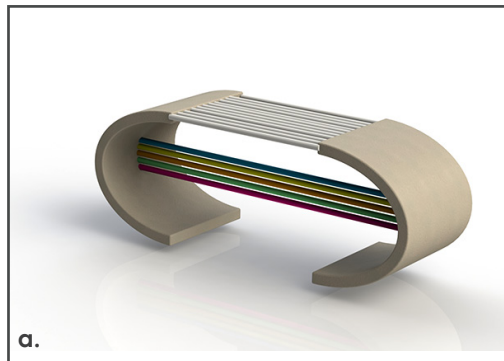


DESIGN | NEXT STEPS

Designs were developed as suggestions for the future streetscapes project aiming to extend the branding project's reach and connect the city on a grander level. Project discussions will be ongoing. The concepts below are sculptural ideas that are interpretations of the suggestions made from the participatory workshops. These include benches, organic sculptural pieces, planters, and landscape designs.

Participants and community members also suggested developing a website that people would visit to purchase products and also be able to customize their logo (pg.77)

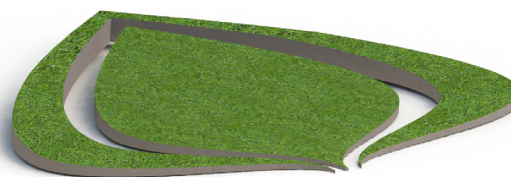
- a. concrete bench designed for the streetscapes project. The design mirrors the third logo design.
- b. a slender porch planter with a long stem that mimics the growth logo
- c. planter box that represents the Small Town of The Future logo



d. large sculptural planter that doubles as a seating area and musical environment. The long stems would sway in the wind creating a wind chime.

e. seating sculpture that represents growth in the community.

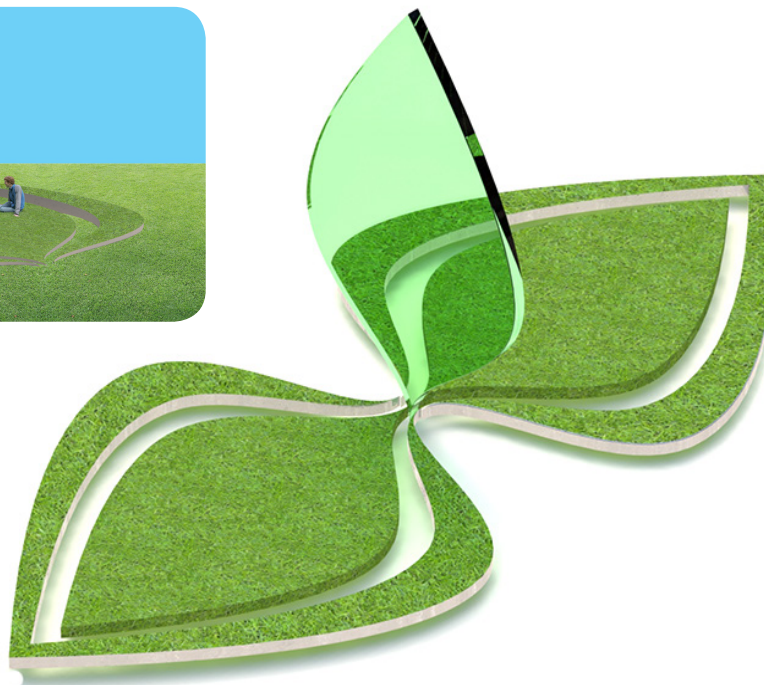
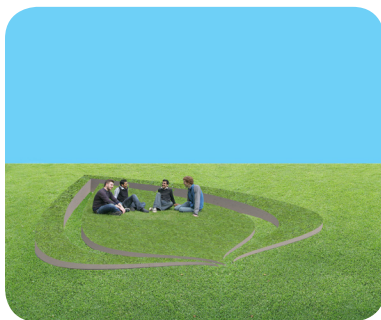
f. extruded ground seating and lounge sculpture that mimics the growth logo



f.

g. community members suggested an online presence where people could log on to order a shirt and also view the library of colors and their meaning. The site would be controlled by a community organization and a run by makers within the community

h. the sculpture below is another concept for the streetscapes project that would be a part of a community square, a proposed central area of the new landscaping



TAKEAWAYS | LIMITATIONS

K | kind

- Gathering surface level data about city officials and organizations was an easy task; understanding power dynamics was more difficult at this stage
- The amount of data available was immense and at times overwhelming. At times, it was difficult to assess if I had "enough" knowledge to move to the next stage
- It is important to keep in mind that the stages of the process are fluid and not unidirectional. Knowledge is gained throughout the entire process
- The IRB (institutional review board) process created delays, however the IRB process is important and necessary for a research setting. If implementing the toolkit in a research setting, keep in mind that more knowledge may need to be gained through text and public meetings

I | immersion

- Power roles were easier to identify because they were witnessed (compared to knowledge stage); also easier to see the "bigger picture" of the power dynamics because of the smaller size of the community
- Immersion requires a leap of faith; some experiences may be more useful and applicable than others. It's important to truly commit once you become involved, otherwise trust will be harder to form
- Sharing skills helped gain the trust of community
- Gaps were filled and more information added to the stakeholder map
- Community capacity was revealed at this stage of the process
- Often, depended on the representation of community members through advocacy organizations, which posed a question of true representativeness of the entire community; however, the advocacy organizations are respected and see their mission as providing "voice" of community members



N | need

- Informing community (members, organizations, local government) of the progress created transparency and trust; This also enabled input and validation throughout the entire process and encouraged an on-going conversation; also provided clarification and prevented "misinterpretation" of issues

D | design

- Would have preferred more community members to complete the workbook to have a larger and more representative sample; however, leaders in community organizations and advocacy groups were included to provide input that reflected the needs, wants, and vision of their constituents
- Ensured capacity was available and interest existed among individuals who have power and authority in the community to approve branding strategies
- Made sure stakeholders from each body of community were vetted and approved the design outcome



DISCUSSION |

Traditionally in the field of design, the designer is often regarded as the expert who comes into a situation to assess a problem or limitation and provide a solution. The user or participant is often only involved in the initial part of the process when data or information is being collected through surveys, interviews, or through direct observation. The K.I.N.D toolkit was developed to help shift the paradigm from this traditional approach, in which the user is passive, to an approach that is participatory and makes the user an active participant.

The application of the K.I.N.D toolkit in this diverse community proved to be very insightful, meaningful and created a rewarding process for both the participants and the designer. The toolkit allowed the roles of the designer and the participants to be interwoven. Knowledge and insight was gained by simply being present in the community and by listening. Polyani argues that by discovering what people think allows us to view their perceptions, but understanding how people feel gives us the ability to empathize with them. This tacit knowledge, which can't be readily expressed in words is more difficult to obtain through surveys and other quantitative methods of data collection. This toolkit attempts to merge more qualitative methods into the process to help the designer co learn and gain more insight about information that is less tangible. Although this participatory approach is more time intensive, the phases encourage reflection and self observation in the process, and in turn created a more meaningful dialogue. In the end, knowledge, information, and potential solutions emerged by listening, connecting and engaging with community members and keeping an open door for collaborative ideas and suggestions, with no preconceived notions. This toolkit provided a framework to guide the process and to help everyone critically think through the process, but in the end, the community (not to the toolkit) came up with novel approaches to meet self identified needs. Product branding was the design approach that was collectively chosen to address the need of creating place and identity.



This toolkit is for designers who have aspirations of working with community, and those who recognize the importance of inclusive behavior and want to go beyond considerations of form, function and usability, and integrate emotion, value, needs, dreams, and wants into the design process. It is important to remember each phase of the toolkit is equally important and is designed to build on the previous phase. By incorporating principles of CBPR with design principles, this toolkit helped create a process that allowed the designer to work collectively with the community and implement a plan for a branding strategy that has the promise of connecting community members together, creating a sense of place and identity, and improving the local economy by using existing assets and resources.



REFERENCES |

Abner, C. (2005). "Finding Refuge." *State News (Council of State Governments)* 48(6): 16-34.

Allen, T. and B. Chornyak (2012). "Necessity is the Mother of Innovation: Constraints and Community Engagement."

Aslin, H. and V. Brown (2004). "Towards Whole of Community Engagement: a practical toolkit."

Bates, D., et al. (2012). "Healthy Transitions: A Community-Based Participatory Research Approach with Burundians with Refugee Status." *Journal of Higher Education Outreach and Engagement* 16(3): 153-174.

Braun, K. L., et al. (2012). "Operationalization of community-based participatory research principles: assessment of the National Cancer Institute's Community Network Programs." *Journal Information* 102(6).

Brown, T. (2009). *Change By Design : How Design Thinking Transforms Organizations and Inspires Innovation*, Harper Collins.

Correa-Velez, I., et al. (2010). "Longing to belong: Social inclusion and wellbeing among youth with refugee backgrounds in the first three years in Melbourne, Australia." *Social science & medicine* 71(8): 1399-1408.

City data, Dekalb County. Retrieved March 13, 2014 from <http://www.city-data.com/city/Clarkston-Georgia.html>

Elliot. (2009). "Paulo Friere Predicts The Champions League Final". retrieved from <http://www.futfanatico.com/2011/05/26/essential-infallible-champions-league-predictions/>

Faridi, Z., et al. (2007). "Community-based participatory research: necessary next steps." *Preventing chronic disease* 4(3).

Freire, P. (2000). *Pedagogy of the oppressed*, Continuum International Publishing Group.

Gahungu, A., et al. (2011). "Educating Culturally Displaced Students with Truncated Formal Education (CDS-TFE): The Case of Refugee Students and Challenges for Administrators, Teachers, and Counselors." Online Submission.

Grönqvist, H., et al. (2012). "Income inequality and health: Lessons from a refugee residential assignment program." *Journal of Health Economics* 31(4): 617-629.

Heller, Steve. (2013) Stefan Sagmeister. retrieved from <http://www.aiga.org/medalist-stefan-sagmeister/>

Israel, B. A., et al. (1998). "Review of community-based research: assessing partnership approaches to improve public health." *Annual review of public health* 19(1): 173-202.



Landry, C. (2000). *The Creative City: A Toolkit For Urban Innovators*, Earthscan Publications.

Little, Jason. (2009) "City of Melbourne". retrieved from [behance.com](https://www.behance.net/gallery/City-of-Melbourne/276451)
<https://www.behance.net/gallery/City-of-Melbourne/276451>

Margolin, V. and S. Margolin (2002). "A "Social Model" of Design: Issues of Practice and Research." *Design Issues* 18(4): 24-30.

McGee, S. (2009). "Understanding Best Practices for Community Engagement in Municipal Contexts."

McMillan, D. W. and D. M. Chavis (1986). "Sense of community: A definition and theory." *Journal of community psychology* 14(1): 6-23.

Minkler, M. (2006). *Community Organizing and Community Building for Health*.

Minkler, M., et al. (2003). "Community-based participatory research: implications for public health funding." *American Journal of Public Health* 93(8): 1210-1213.

Polanyi, M. (1983) "The Tacit Dimension". First published Doubleday & Co, "Tacit Knowing".

Rellon, L. (2009). "Rules of engagement: reaching out to communities." *Nursing Management - UK* 16(3): 18-21.

Scalin, N. (2012). *The Design Activist Handbook*, How books.

Shea, A. (2012). *Designing For Social Change*, Princeton Architectural Press.

Shelton, D. (2008). "Establishing the public's trust through community-based participatory research: A case example to improve health care for a rural Hispanic community." *Annual review of nursing research* 26(1): 237-259.

St. John, W. (2009). *Oucasts United*. New York, Spiegel and Grau.

"Tim Brown": (2013). retrieved from <http://www.21stcenturychallenges.org/focus/tim-brown/>

Toolkit, H. C. D. (2008). "IDEO." Retrieved on 24th November.

Wang, C. C. (2006). "Youth participation in photovoice as a strategy for community change." *Journal of Community Practice* 14(1-2): 147-161.