



# Designing Civic Stages for Democratic Participation



TO FACILITATE DIALOGUE AND DELIBERATION

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1. AIGA "GET OUT THE VOTE" NOV 2012



2. ANDREW BREITENBERG • SELAH • MAY 2012



3. EL PASO MUSEUM OF HISTORY • OCT 2012

## abstract

Civic participation is a set of actions and roles people assume to effect change. Traditionally, graphic designers encouraged civic behaviors such as informed voting through national poster campaigns.<sup>1</sup> Designers worked with state governments on initiatives to redesign the ballot and voter experience at the polls. Recently, a focus on technology and city-level, civic engagement tools has required the collaboration between designers and programmers. Current civic organizations such as Code for America offer research and development services to solve local government issues through technology. These examples suggest a range of civic contexts for design: from individually designed artifacts and tools to sophisticated services and participatory platforms.

Civic innovation can be intentionally disruptive. From the invasion of public art in Brazilian favelas to the hand-lettered street signs in South Africa, site-specific interventions can change one's perspective of a place.<sup>2</sup> Individuals and groups rethink political practices and their changing contexts by breaking complex issues into parts they can identify and solve. Public art may not ensure social cohesion or reduce crime. Yet, making a place where the community's hopes and dreams are visible to government could inspire conversation towards change.<sup>3</sup> From online petitioning to crowdsourced city budgeting, creative communication channels are supporting meaningful activity and public access to information. To produce democratic discourse, the tools and settings for virtual and in-person conversation must be familiar, flexible and friendly.

## keywords

civic stage  
agency  
accessibility  
relationships  
deliberation  
placemaking  
social networks  
community  
civic participation



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What are the qualities of a place that might invite someone to become civically engaged in a children's health or local food issue?

## preface

Information communication technologies (ICTs) transform the immediate moments of everyday life. With Wi-Fi and smart phones ready-at-hand, people have worldwide virtual access to people and places. But when people can be somewhere else with the tap of a screen, what happens to their sense of place? Their perception of where they are plays a profound role in how they directly engage with others in the physical place where they live.<sup>1</sup>

1. DRUCKER & GUMPERT,  
2011, PG.48

Local governments communicate with nonprofit organizations, community leaders and everyday people to develop comprehensive changes in the physical environment of a city. One measure in the process, the evaluation of citizen's needs, requires constant attention to the collective experience of place. City planners and architects converse with residents through diverse channels to discover the various ecologies of site-specific living communities.

The complex scope of national issues can leave people feeling too overwhelmed to take action. Yet, local issues and close-at-hand access to city governments promotes face-to-face gatherings and grassroots activism. "Do-it-yourself" attitudes are being replaced by collaboration and collective action. Neighborhood gardens and tech hackathons suggest the value of ad-hoc communities, where people sustain networks and citizens become activists. A series of social sharing scenarios I am calling CIVIC STAGES are meant to provide for a range of explored digital and virtual settings for conversation and participation around a local issue. My aim is not to prescribe a set path, but to recommend further research at the intersection of public policy, civic innovation and social design platforms for political participation.



## researchable questions

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**MY PROJECT AIMS TO RESPOND TO THE FOLLOWING:**

How can the design of civic stages for democratic engagement facilitate actionable communication among stakeholders when responding to local issues?

**THE FOLLOWING SUB-QUESTIONS ADDRESS SPECIFIC DETAILS OF THE MAIN QUESTION:**

How can participatory design methods engage citizens in the deliberation and design of civic stages?

How can physical and digital artifacts facilitate the organization of citizens into civic social networks?

How can blending information communication technologies (ICTs) and places foster universally-accessible civic participation?



## justification

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In the past five years, ICTs and social media platforms have, for better or worse, irrevocably altered political behavior. Three quarters of adults in American households use the internet for daily browsing, and four of every five people worldwide have a mobile phone. <sup>1</sup> In the 2008 presidential race, Barack Obama’s election staff proved the power of social media campaigning, motivating a reportedly apathetic generation of first-time voters to the polls. The election beget a politically polarized nation, where the Occupy and Tea Party movements rapidly mobilized online networks for offline protest, what Sanford calls “just-in-time” social capital on steroids. <sup>2</sup>

With the exponential growth of technology access and literacy, civic researchers speculate the inevitable demise of traditional institutions—the churches, city halls and neighborhood associations—as the central loci for civic engagement. Sanford challenges this assertion by asking, “Can such ephemeral interactions among so many, in such short duration, and increasingly among those who share a common, narrow ideology be durable enough to replace old civic institutions that provided a time, place and opportunity to address big and complicated issues?” Rainie and Wellman might argue for what they call the new era of networked individualism, where people want personal freedom to choose the occasion and ways they politically engage. <sup>4</sup> As government leadership is passed down to the next generation, Sanford simply wonders, “What’s next?”

It is my assertion that it may be too soon to assume technology will replace the *place* for civic engagement. Lippman claims, “we don’t know how to behave when personal contact and eternal authority have disappeared [because] there are no precedents to guide us. We have changed our environment more quickly than we have changed ourselves.” <sup>5</sup> Designing for civic participation demands that designers not only question the means and rules of engagement but also the definition of citizenship itself.

1. SANFORD, 2012, PG. 15
2. SANFORD, 2012, PG. 15
3. SANFORD, 2012, PG. 16
4. RAINIE & WELLMAN, 2012, PG. 6
5. LIPMANN, 1914, IN PUTNAM, 2000, IN SANFORD, 2012, PG. 23



## justification

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Imagining how one might design a civic stage for participation is both a speculative investigation into Sanford's "What's next?" and an attempt to critically analyze how a broad term like citizenship might be applied across a range of contexts for engagement. I chose to investigate and design for the local proximity and scale of an individual or community issue. I argue that the value of the physical place for gathering rests in its familiar, accessible and adaptable mobilizing structures. Therefore, one design opportunity is to explore and exercise the stage's politically participatory capacities. Blending technological affordances such as crowdsourcing and GIS mapping onto the built environment is important to creating scenes (like a digital flash mob or an virtual explosion of fireworks) for civic disruption and social engagement. A derivative of Putnam's position, the gathering of loosely connected social ties around conversational spaces like a kitchen or coffee shop breeds discussion and the formation of communities of opinion.<sup>4</sup>

4. SANFORD, 2012, PG. 28

If the next generation of civic participants dies off more rapidly than the already expected decline, what might be the cost? Without innovation in the democratic design of civic platforms to engage high-tech generations, the loss of social capital in communities might create greater cultural divides. At the same time, universal accessibility must be a critical consideration for engagement, as today some people still feel more comfortable and open to in-person participation than doing work behind a screen. If citizens and government fail to build reliable relationships and communication channels for collaboration, feelings of skepticism and distrust of elected leaders will perpetuate apathy and hinder the likelihood of solving the next generation's most pressing issues.



## assumptions and limitations

The following research and investigations assume certain design principles for civic engagement be valued over others. Specifically, principles I designed for included accessibility, flexibility, and familiarity. In *Networked*, Rainie and Wellman describe the social trend where an individual's involvement in multiple networks often limits their investment and commitment to any one network.<sup>1</sup> Accepting this challenge in the creation of civic stages requires embracing the value of *ad-hoc* communities, *informal* ways of bringing civic participants together and *loosely-knit* personal connections that inspire spontaneous collective action.

The ever-shifting roles and responsibilities people assume—from student to sibling to staff member, for example—demand flexibility in the settings where they collaborate. Citizens with access to many networks, boundless in space and time, are acutely aware of their local context; they create wayfinding systems to traverse the public domain and use mobile applications to self-identify by location. Civic stages are intended to occupy existing digital and physical environments, rendering political spaces for discourse. These situated interventions, while ephemeral, could reveal up to the minute, socio-political sentiments by locating sites where local issues are articulated and shaped.

One limitation to my investigations is the scope of the studies, which looked specifically at the affordances of digital and virtual *places* for civic engagement. The research highlights a need for further study of the multi-faceted *communication channels*—email, social media, word of mouth, etc.—for civic participation.

One trade-off of embracing concepts such as crowdsourcing and openness is limited liability. Rainie and Wellman explain, when people belong to many social networks, the demand for participation becomes competitive.<sup>2</sup> This means people are more likely to devote less time to collective efforts and temporary organizations and are less likely to make long term investments in individuals.

Because most of the design outcomes are renderings of ideas for the civic stage, another limitation is that the work is preliminary, operating in what Sanders describes as the “fuzzy front-end.”<sup>3</sup> This stage of design process includes many unknowns and is aimed at enumerating meaningfully distinct provocations that suggest possible scopes for a project.

1. RAINIE & WELLMAN, 2012, PG. 127

2. RAINIE & WELLMAN, 2012, PG. 124

3. SANDERS, 2008, PG. 3

## definitions

### PARTICIPATORY DESIGN

#### POSTDESIGN

Postdesign is a mindset that foregrounds user experience (as opposed to artifacts, interfaces, systems or spaces) as the focus for design inspiration and ideation. <sup>1</sup>

#### PARTICIPATORY DESIGN

Participatory design is a shift in attitude, from designing for users to designing with users. It is the belief that all people have something to offer in the design process and that they can be both articulate and creative when given appropriate tools to express themselves. <sup>2</sup>

#### PARTICIPATORY PROCESS

The participatory process is the motivation and the capacity to take part in political life, as affected by resources and networks of recruitment. <sup>3</sup>

### PLACES AND SPACES

#### SCENE

A scene is a site unified around the spirit and hospitality of a central moment, blurring either the space of the spot of the functional activity of the circles. <sup>1</sup>

#### HYBRID EVENT

Hybrid events combine politically neutral gatherings, such as a pancake breakfast, with protest forms of civic action, like a worker's strike. A protest claim or grievance is not aired through traditional formats such as a rally or demonstration, but is instead replaced with civic activities such as a church bowling night. One example might be a neighborhood art festival that also serves as a protest regarding same-sex marriage policies. <sup>2</sup>

#### BLENDED SOCIAL ACTION

Blended social action is a phenomenon where protest is combined with a traditional civic behavior, such as voting. <sup>3</sup>

#### DIRECT CITIZEN PARTICIPATION

Direct citizen participation is the process in which members of society (not those holding office or administrative positions in government) share power with public officials in making substantive decisions and in taking actions related to the community. <sup>4</sup>

#### CO-DESIGN

Co-design is the creativity of designers and people not trained in design working together in the design development process. <sup>5</sup>

#### CO-CREATION

Co-creation refers to any act of collective creativity shared by two or more people. <sup>6</sup>

1. SANDERS AND STAPPERS, 1999, PG.1

2. SANDERS AND STAPPERS, 1999, PG.1

3. BRADY, SCHLOZMAN AND VERBA 1995, PG.3

4. MANANDARO, 2010, PG.124

5. SANDERS AND STAPPERS, 2008, PG. 2

6. SANDERS AND STAPPERS, 2008, PG. 2

#### SPOT

A spot is a location with the security of a site, where people see each other at regular intervals and often acknowledge one another through the recognition of habits. <sup>4</sup>

#### SPACE

Space is a specific universe with a specific set of properties, dynamics, flows, elements or parts. <sup>5</sup>

#### PLACE MAKING

Place making is a multi-faceted approach to the planning, design and management of public spaces. It involves looking at, listening to and asking questions of the people who live, work and play in a particular space, to discover their needs and aspirations. <sup>6</sup>

1. BLUM, 2003, PG.187

2. SAMPSON, MCCADAM, MACINDOE AND WILZONDO 2005, PG.684

3.. SAMPSON, MCCADAM, MACINDOE AND WILZONDO 2005, PG.680

4. BLUM, 2003, PG.187

5. PPS.ORG/PLACEMAKING, 2009

## definitions

### SOCIAL NETWORKING

#### SOCIAL CIRCLE

A social circle is a collective that intermittently mobilizes around an activity, task or person such as in cooking or swing dancing. Social circles often invest time searching for sites at which to meet. <sup>1</sup>

#### COMMUNITY NETWORKS

Community networks refers to a digital tool that serves as a local medium for a “proximate” or geographical community, responding to the needs of the community and its residents. <sup>2</sup>

#### CONNECTIVITY HYPOTHESIS

The connectivity hypothesis states that when people read the newspaper, talk with their neighbors, watch television or use the Internet, they tend to do more than merely acquire local information for personal use. They connect to a community that is larger than the sum of its parts. <sup>3</sup>

### CONVERSATION

#### DISCURSIVE SPACE

Discursive spaces are the spaces of dialogue that are located and focused by the city; they are the place where meaning settles as the central concern. <sup>1</sup>

#### TERRITORIAL SPACE

Territorial space is defined by boundaries, occupancy and ownership; inside the boundaries exists a set of rules, regulation and governance. <sup>2</sup>

#### DELIBERATION

Deliberations is a social exchange that encourages critical thinking and reasoned arguments as a way for citizens to make decisions about public policy. <sup>3</sup>

#### CROWDSOURCING

Crowdsourcing is way of distributed problem solving. By distributing tasks to a large group of people, you are able to mine collective intelligences, assessing quality and process work simultaneously. <sup>4</sup>

#### SOCIAL CAPITAL

Social capital is the individual or collective, consciously or unconsciously aimed at establishing or reproducing social relationships that are directly usable in the short or long term. <sup>5</sup>

#### DIGITAL SOCIAL CAPITAL

Digital social capital is the process of building digital communities through planning participation processes that embrace Internet tools. <sup>6</sup>

1. MEADOWS, 2009, PG.159

2. CARROLL AND ROSSON, 2003 IN MESCH AND TALMUD, 2010, PG.1096

3. MATEI AND BALL, 2003 IN MESCH AND TALMUD, 2010, PG.1096

4. SHEPHARD, 2012, PG.10

5. BORDIEU, 1986 IN MONDARANO, ET. AL., 2010, PG.124

6. MONDARANO, ET. AL., 2010, PG. 123

1. BLUM, 2003, PG.27

2. BLUM, 2003, PG.27

3. GASTIL AND LEVINE, 2005, PG.200

4. GASTIL AND LEVINE, 2005, PG.200

*“Design is initiated by using a very broad brush in sketching the first version. Then, details are gradually added. The process continues until a sufficiently detailed design is obtained that enables us to carry it out.”*

—RUSSEL ACKOFF IN BELA BANATHY, 1981, PG.13



precedents

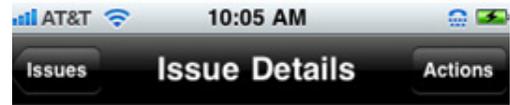
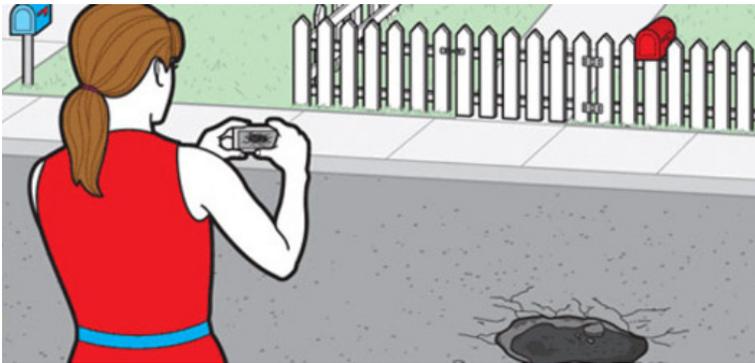
## precedents



## Textizen CODE FOR AMERICA

Code for America's SMS (short message service) platform allows users to create surveys and send them to communities through a mobile application. Cities use Textizen, along with online and in-person advertising, to promote campaigns and invite people to contribute opinions on issues like safety and transit. Textizen harnesses the just-in-time, responsive power of reaching communities where they are. With a majority of the U.S. population carrying SMS-capable phones, text surveys offer broad access to participation in a "single-tap" format.

## precedents



**broken sidewalk is Open**

3 people want this fixed

sidewalk is a tripping hazard and hard for wheel chairs  
760 Chapel St, New Haven, Connecticut

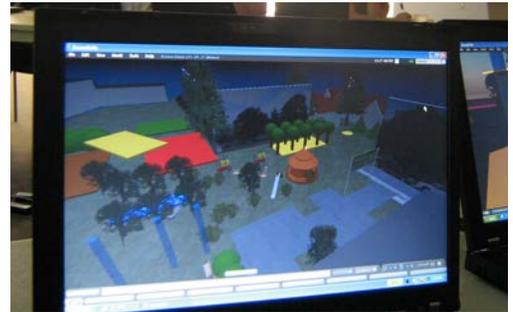
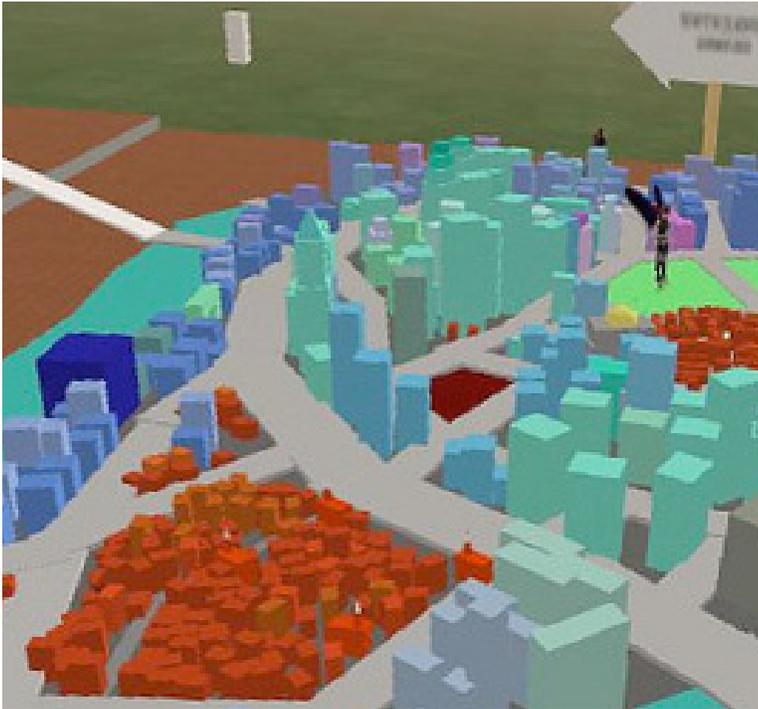
submitted by ben about 1 month ago  
new haven



## See, Click, Fix [CODE FOR AMERICA](#)

See, Click, Fix gives smart phone users the ability to report an issue to the city through a real-time mobile application. Once problems such as cracked sidewalks or graffiti are reported, people can elect to make the concern more important by up-voting the issue. The problems are geographically mapped and local government departments fix the broken or damaged infrastructure. Citizens receive status updates on their submissions directly from government employees. This feedback loop is powerful because it builds trust in the government and creates a communication channel between people and city officials.

## precedents



### Hub2 EMERSON COLLEGE > ENGAGEMENT LAB

Hub2, created with the platform Second Life, allows users to build a virtual sandbox in their neighborhood as a site for civic collaboration. Through online charettes, or intensive planning sessions, citizens “re-imagine public spaces” and “overcome identified problems” by assessing the factors that make public spaces special or unsafe to them.<sup>1</sup> Hub2 is an augmented reality for role-playing scenarios. As a flexible collaboration space, the software might be repurposed for diverse prompts from the city. Hub2 could also be a critical resource for communities with high social inequality and low access to supportive institutions and planning meetings. “Communities that lack financial, political, and cultural capital are often excluded from decision making, planning, and design of their own social spaces, leaving them the object of external interventions.”<sup>2</sup>

1. GORDON AND KOO, 2008, PG. 205
2. GORDON AND KOO, 2008, PG. 205

## precedents



### City as Play [JAMES ROJAS > MIT MEDIA LAB](#)

James Rojas's design-based approach to urban civic engagement makes learning about city planning pleasurable for citizens. Participants create collages with found objects that respond to a focus question posed by a facilitator. Key assets of the objects are their friendliness and familiarity. Tangible objects help educate community members about abstract planning concepts such as "neighborhood connectivity" and "open space." The workshop tools also provide a three dimensional environment for participants to model everyday contexts and scenarios. Still, in-person events require exhaustive time and resources. In the worst case, a lack of participation leads to unrepresentative voices speaking for a community.

## precedents



### **Detroit Soup** KATE DAUGHDRILL AND JESSICA HERNANDEZ

Detroit Soup is an event hosted in the Mexicantown neighborhood of Detroit. It is described in many ways: as a five-dollar public dinner, a platform for connection, a theatrical environment and a forum for critical but accessible discussion, to name a few. Detroit Soup brings together hundreds of neighbors to pitch ideas for creative projects that aim to improve the community. Neighbors vote for their favorite pitches, and the top picks receive microgrants to implement their ideas. The concept embraces diversity by making the event public and widely accessible. After the awards are granted, however, it is crucial to sustain the neighborhood's "belief in the commons" by making sure the funding is used towards implementing ideas.

## precedents



### Real Food Farm [CITY OF BALTIMORE > CIVIC WORKS](#)

Real Food Farm, an urban farm in Baltimore, harvests crops to sell to vendors, farmers markets and communities. The farm's offerings include a mobile market service. In neighborhoods on the Baltimore City Food Desert map, a truck drives to low access points where residents can purchase affordable produce. Baltimarket, another innovative approach addressing the food desert issue, is an online platform for residents to request a delivery of groceries. Pick-up locations range from public libraries to senior citizen housing. Staff converse with residents to better understand their food needs and ensure the produce accommodate local cooking styles.



**Pie Lab** JOHN BIELENBERG > PROJECT M

In 2007, the “Project M” design team adopted its first client for social change: the city of Greensboro, Alabama. They created Pie Lab, a public civic site where citizens are encouraged to exchange ideas and co-initiate collective action projects. Designating a territory for participatory design moves the community research from door-to-door knocking to conversations over coffee and pie. Placemaking as a process for urban social innovation is crucial. Active spaces helps designers and communities co-create open-ended forms and formats that allow for a range of civic activities to flourish.

## What's next?

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BOSTON'S "CITY ON WHEELS"

How could service designs like Real Food Farm and Detroit Soup be purposefully expanded? As local government initiatives and non-profit organizations, these models help residents build trust in the city and local government by speaking first hand with civic employees. In Boston, a food truck outfitted for city services suggests a new door to conversation with communities. Creating a mobile, temporary site for directed deliberation of topics with residents could help the city obtain local knowledge about broader issues of nutrition, food deserts and obesity. Collecting need-based responses helps policy makers define new directions for investment, prioritizing and responding directly to areas of greatest opportunity for impact.



Technologies like mobile phones, computers and tablets with access to the internet facilitate community-building activities as opposed to hindering them the way television has in the past.<sup>3</sup>

## precedents

### REFLECTION

New ICTs, service designs and participatory design methods depart from traditional civic experiences (e.g. watching a debate on television) and archetypal places (e.g. voting booths) for participation. Each precedent alters existing systems across what Meadows defines as *leverage points* in design.<sup>1</sup> Changes at these points occur in numbers, quantities, loops, flows and paradigms that affect interactions and experiences between a civic user and the platform for engagement.

1. MEADOWS, 2009, PG.48

2. BLUM, 2003, PG.27

3. SANFORD, 2007, PG.190

**Textizen** crowdsources opinions about city-level issues by collecting survey data from a large quantity of citizens. One experience of the platform relevant to my research is the use of invitational posters and ICTs in the same place. This blended approach to civic engagement adds participatory value to the citizen's interaction with seemingly mundane places like bus stops. A new affordances exist to collapse the offer to engage and the activity itself into an idle moment like waiting for the bus. For example, transit questions on posters in the shelter prompt commuters already killing time to answer a few questions about city light rail. Information flows and feedback loops between artifacts and citizens co-exist on-site and in the moment. This concept expands ordinary spots into discursive spaces for actionable communication between people and government.<sup>2</sup>

**See, Click, Fix** creates a different kind of feedback loop by using mobile technology to create a two-way communication channel. Citizens receive replies and status updates on issue reports they submit to the city. The feedback loop promotes a sense of agency so that citizens sustain long term feelings of empowerment to express their opinions. Residents trust that their contributions to city problems will result in desirable actions. Yet, recent comments from Raleigh residents indicate that the feedback loop sends their reports to the wrong contacts, leaving people frustrated by messages that their reports must be resubmitted. This error is an important consideration when designing a civic communication platform. For example, the system might instead give the user a list of city departments where they can choose to send their issue. This could improve the chances that an issue gets resolved and offer citizens the freedom to select the place where they want their issue to go. Ignoring the hiccup may cause users to lose faith in the communication system and provoke distrust in the local government's ability to effectively address their needs.



According to Sanford, reciprocity, a key factor in citizenship, occurs in the action between two people or a person and their community. This is important because people's political opinions are often formed over many interpersonal interactions.<sup>7</sup>

**Hub2** expands the current urban planning process through an online platform. Each citizen creates a virtual avatar, interacting with neighbors in a digital city. By changing the rules of the system, designers of Hub2 “upends” the physical space designated for traditional design charrettes.<sup>4</sup> The software allows anyone with internet access to offer their ideas and influence the issues that matter to them. Hub2 enhances the immersive experience of editing places through visualizing a virtual reality that mirrors the physical city. For my study, Hub2 suggests collaborative modeling and three-dimensional mapping interactions that could be useful when co-designing mobilizing structures for communities.<sup>5</sup>

**City as Play** redesigns the structure of civic participation in urban planning by redefining materials.<sup>6</sup> People interact with a wide range of familiar items, relating them to their lived environments to talk about urban issues and the character of their neighborhood through place making. City as Play applies the postdesign mindset that foregrounds the user experience by recontextualizing everyday objects as participatory artifacts.<sup>7</sup> These items aid citizens in the expression of their perceptions of place and community life. The repurposing of colorful toys and playful shapes also promotes open-ended and creative thinking, which might otherwise be lost when focused on the task of interpreting site maps and urban plans. As a public activity, City as Play showcases the act of making and the design process through a messy performance.

During an interview with architect and North Carolina State University professor Erin White, he said, “For me, healthy places and healthy communities are often messy, and technology has the attractiveness of being a quick fix. Messy relationships and messy cities are often times the most resilient.”<sup>8</sup> The friendly vernacular of the artifacts suggest a flexibility in their interpretation and implies that there is no wrong way to use them. Transparency builds trust between stakeholders, both important factors in collective efficacy, “the working trust with shared expectations for intervening on behalf of the common good.”<sup>9</sup> This project sets the stage for my investigations because it highlights an opportunity to ask citizens to co-create tangible artifacts and observe how making objects informs their inspiration, ideation and ability to solve local issues.

4. MEADOWS, 2009, PG.159

5. SAMPSON, MCCADAM, MACINDOE AND WILZONDO 2005, PG.678

6. MEADOWS, 2009, PG.155

7. SANDERS, 1999, PG.6

8. WHITE, PERSONAL INTERVIEW, MARCH 28, 2013

9. SAMPSON, 1997 IN SAMPSON, ET. AL., 2005 PG. 676



The bok choy contains tightly packed leaves at the core and larger, open leaves radiating from the center. The representational value of this image supports the social networking trend where people possess an abundance of weak social ties and fewer strong ties. <sup>5</sup>

**Detroit Soup** is a civic stage, or publicized place of both political and social sharing, is the only precedent that also has a physical stage. This hybrid event combines politically neutral activities like a potluck dinner with politically charged activities like voting and allocating money to citizens<sup>10</sup>. Hybrid events are more democratic forms of engagement because they make sure to include everyone and can be hosted nearly anywhere.<sup>11</sup> This free-for-all format takes precedent from protests and “sixties-style” demonstrations, intentionally blending public action with community oriented social events. The synthesis of activities blurs the experience of civic life with social life, which are strongly tied through features of “autonomy, citizenship interaction and the public domain.”<sup>12</sup> Detroit Soup suggests a deeper investigation into how a virtual civic platform could combine the ad-hoc, open and informal qualities of social networking events with activities which focus on political participation in civic life.<sup>13</sup>

**Real Food Farm**, an innovative approach to addressing the concern of food deserts, shifts the paradigm of how people receive resources from the city. The repurposing of a food truck radically alters the interactive capacity for government channels to communicate with low access, low income communities. A redesign at the systems level, Real Food Farm connects the demand for fresh foods with an abundant supply of produce from Baltimore’s urban farmers.<sup>14</sup> The city’s purchase of extra crops helps grow the agricultural economy. The delivery of goods to residents (Baltimarket) improves the health access of the community as a temporary, site-specific intervention to reduce disparities in the local food economy. The impromptu, pop-up style of places like flea markets and lemonade stands is familiar to neighborhoods. Activity emerges from the tables, tents and signs; at these types of events, representational value exists in artifacts—beyond information and wayfinding. The vernacular of a sign’s material and the rhetoric of its message, as well as where and how it is displayed in the public domain, can make a political statement about the local character of a community. This raises a design question regarding the type of branded or brandless experience a mobile civic site might display. The temporary scene depends on the relationship of the people, activities and artifacts in co-existence to create a sense of well being and trust in the common good.<sup>14</sup>

10. SAMPSON, ET. AL., 2005, PG.684

11. ROCH, 1987, PG.368

12. RAINIE & WELLMAN, 2012, PG.29

13. MEADOWS, 2009, PG.154

14. BLUM, 2003, PG.187



The individual florets of a dandelion create an extraordinary visualization that simultaneously conveys parts of the whole flower. This representation suggests a possible way to show individual and collective contributions to an issue.

## precedents

### REFLECTION

**Real Food Farm** challenges the perceived barrier of access to civic opportunities, suggesting transportation vehicle as an appropriate service, functioning both as a symbol of the city and an operating system for civic social movements. According to Rainie and Wellman, the general trend towards more independent lifestyles demands mobile modes of participation that bring people together in short-lived occasions.<sup>15</sup> Designing for civic engagement relies less on the need for a group membership like Boy Scouts and established civic activities tightly bound to a single place, such as town hall meetings. Designing a platform that occupies a place must balance multiple modes of civic being. For example, forming relationships, which foster dependency between people to meaningfully interact, and possessing agency, one's individual capacity to affect change on behalf of a community, are two qualities that could co-exist during deliberation.

15. RAINIE & WELLMAN, 2012,  
PG.123

*“Design generates, organizes and evaluates a large number of solutions, keeping an eye on the solution, rather than collecting and analyzing data about the problem.”*

—GERALD NADLER AND SHOZO HIBONO IN BELA BANATHY, 1990, PG.13





## the context for a “civic stage”

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A civic stage is a neologism I invented to describe an ever-changing participatory platform—independent of a fixed place or time—designed for socio-political activity.

1. MANNEHEIM, 1956, PG.151

2. MANNEHEIM, 1956, PG.152

*The following example of 17th century coffee houses highlights an opportunity for designers to create systematic conditions for civic engagement.*

During the French Revolution, coffee houses spread rapidly from London to Paris, evolving into “the first centers of opinion.”<sup>1</sup> When reading was an unfamiliar habit and newspapers were censored, coffee houses served as landmarks where political activity thrived. Activists delivered speeches and distributed pamphlets. News of the socially mobilizing capacity of coffee houses caused the French government to try banning them altogether.

Manneheim cites three democratic experiential qualities that define the success of the coffee house as a site of communicable action: *free association* among social circles, *universal accessibility* of a place for participation, and the *drawing together of communities* by opinion.<sup>2</sup>

## interviews



**William Allen**  
Hillsborough Citizen Advisory  
Council Chair

PERSONAL INTERVIEW  
NOVEMBER 1, 2012



**Reid Serozi**  
Communications Chair, Mordecai  
Citizen Advisory Council

PERSONAL INTERVIEW  
OCTOBER 16, 2012



**Thomas Crowder**  
Architect and City Councilor  
Southwest Raleigh

PERSONAL INTERVIEW  
NOVEMBER 1, 2012



**Sherée Vodicka**  
Director  
Advocates for Health in Action

PERSONAL INTERVIEW  
NOVEMBER 8, 2012



**Lisa Sluder**  
Urban Farmer  
Raleigh City Farm

PERSONAL INTERVIEW  
MARCH 28, 2012



**Chad McIntyre**  
Owner and Chef  
Market Restaurant

PERSONAL INTERVIEW  
MARCH 28, 2013



**Kathryn Rosenbaum**  
Community Outreach  
Coordinator, Voices into Action

PERSONAL INTERVIEW  
NOVEMBER 26, 2012



**Meredith Cheetham**  
7th Grade Teacher  
Exploris Middle School

PERSONAL INTERVIEW  
MARCH 28, 2013



**Annie Hardison-Moody**  
Project Manager  
Coordinator, Voices into Action

PERSONAL INTERVIEW  
NOVEMBER 26, 2012



**Erin White**  
Architect and Faculty  
NC State University

PERSONAL INTERVIEW  
MARCH 28, 2013

Through semi-structured interviews, I asked ten active civic stakeholders questions about their communication strategies for connecting and sustaining their civic networks. This research explored how access to types of technologies, places and resources support or impede civic participation.

Designing civic stages requires an understanding of the first-hand experiences, opinions and perceptions of citizens, public officials and community leaders. <sup>1</sup> Civic stages aim to facilitate the developing nature of local issues by aiding in deliberation and determining steps towards a solution. The interviews identified the means and locations where civic communication occurs, and changed my perception of how stakeholders communicate (see fig. 1.4 and 1.5 in appedices). In Raleigh, North Carolina, community leaders and health officials mentioned churches as primary places for civic engagement.

## interviews

One citizen advisory council meets in the basement of a Methodist church for deliberation over issues such as budgeting community funds for the neighborhood. Democratic activity may be better served in places free from religious association. Christian proverbs and religious iconography adorn large banners hanging in the church basement. An ideologically neutral space provides a blank canvas for open and comfortable conversation. Postman argues ideological bias, a predisposition, a public library, for example, is free from political positions that exert influence over the discursive space.

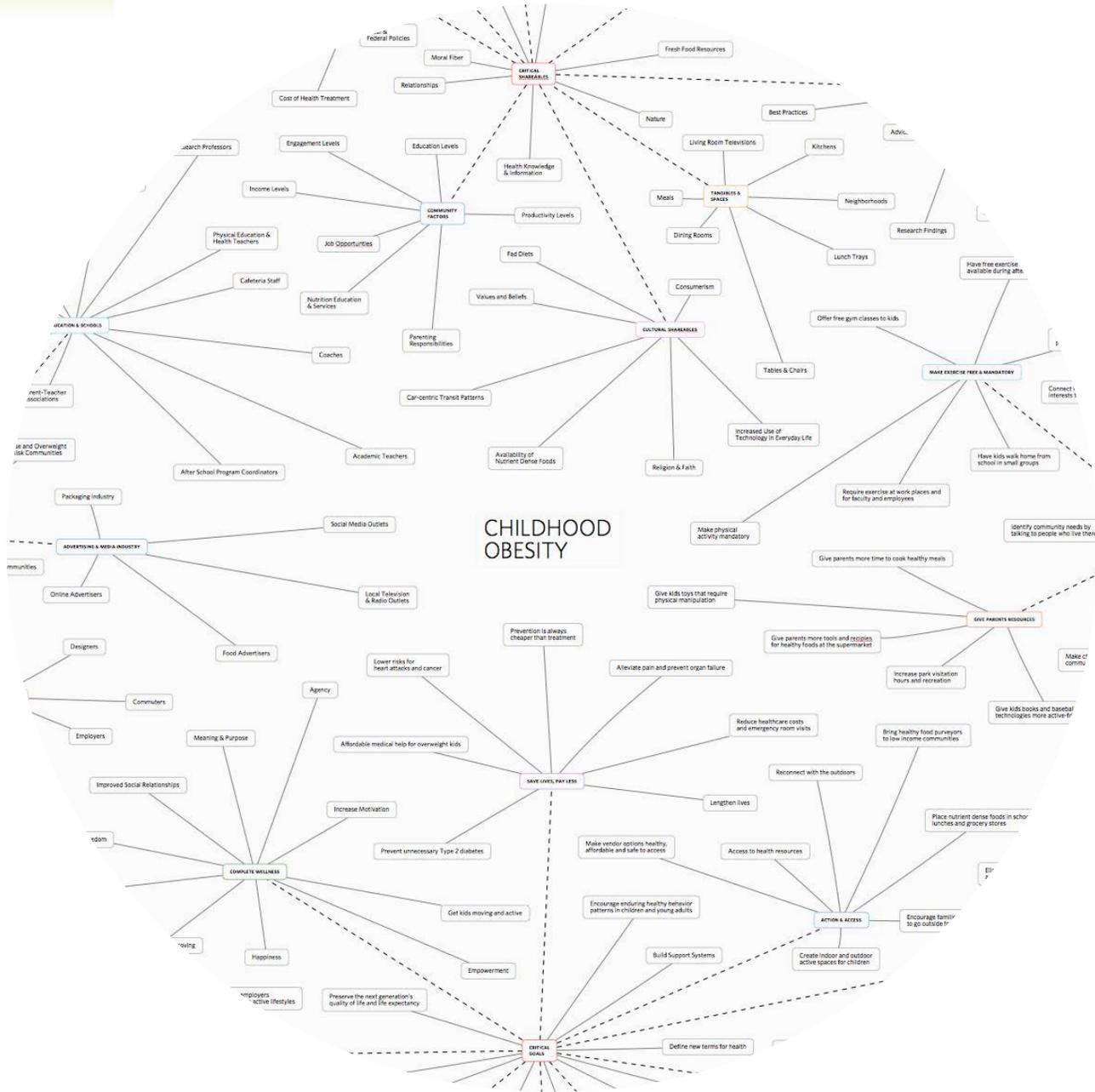
One topic for which further interviews would be crucial might address the qualities of places—beyond their location—to determine measures for how they either foster or impede civic engagement. This research would be important for understanding how the place by which and where conversation happens affects the response to action between stakeholders in local issues. When describing the social scenes of cities, Blum says, “we are not confident about the easy identification of the scene with conversation and its transparency that marks the discussion of democratic public space.”<sup>2</sup> Ethnographic descriptions of the socio-political organization—a social circle, clique, or coterie, for example—lack clear definitions of the scene or setting where civic activity occurs. One local architect sketched a possible scene for a civic site: “I could see architecture providing a physical stage and technology providing the activity, the programming of that stage. I’m a little reluctant to have everyone sitting at their own house on a completely virtual stage to actually feel the human contact. The physicality of being in a space with other people is an important part of our condition.”<sup>3</sup>

The synthesis of locative technology and architecture aligns with the argument that civic participation may not in fact be as low as research suggests. The “Internet and Civic Engagement” study conducted by Pew Research claims that among all adults, only 18-27% have ever participated in online or offline civic activities.<sup>4</sup> The measures for communication range from signing a petition and contacting a local official to making a financial political contribution. However, local ways and means of civic participation challenge these standard formats. Hybrid events, both virtual and physical, favor direct citizen participation, when community members share power with public officials through decision making and collective action.<sup>5</sup> For example, neighbors may use an online platform to allocate city funds for a seed library and use those seeds towards the activity of community gardening. While civic in nature, these types of engagement platforms may be under-represented in current participation research. The hyper-local networks, or key portals for drawing people in and connecting them through civic interests, need more attention in regards to representation as legitimate forms of civic action.<sup>6</sup>

1. HANNINGTON & MARTIN, 2012, PG.103
2. BLUM, 203, PG.164
3. WHITE, PERSONAL INTERVIEW, MARCH 28, 2013
4. SMITH, SCHLOZMAN, VERBA AND BRADY. 2009
5. NANANDARO, MEENAR AND STINES, 2010, PG.124
6. ABRAMSON, 2011, FOREWARD, VII

issues map

figure 1.0



An *issues map* visualizes many experiential lives aspects of the childhood obesity issue. As an organizational tool, the faceted map explores how the visual structure of an issue might be adaptive and responsive to the needs of government, communities and individuals through scaling the problem at many scopes.

## issues map

### DESCRIPTION

Figures 1.0 and 1.1 (pg. 39) aim to manage complex relationships through visualizing the potential “who,” “what,” “how” and “why?” of the obesity epidemic in the United States. Color-coded nodes and solid and dashed links are used to make direct and indirect pathways between information and ideas. This map ended up being extremely useful in the development of scenarios and personas when designing workshop materials around health and local food issues. This is because the terms in each frame could be connected to many other terms more than once to help construct different stories about the issue.

### DESIGN OPPORTUNITY

One key design opportunity involves mapping the civic networks surrounding an issue. Blending territory and stakeholder mapping methods, I created the *issues map* to represent the relationships among stakeholders, resources, anticipated design activities, and issue goals. A territory map shows the range of possibilities to help define the scope during the early phases of the design process.<sup>1</sup> Stakeholder maps visually consolidate and represent the key constituents in a project.<sup>2</sup>

I chose to use MindNode to map connected facets in the childhood obesity issue. One limitation is the lack of interactive qualities of the map, which could help people more selectively manage the overwhelming amount of information the diagram offers. Shifting scales between information hierarchies could aid in magnifying touch points across the map. Also, the color-coding system could be a responsive layer that changes over time, depending on real-time progress being made on the issue. Geographic maps may also hold greater capacity for richer data that could tell citizens which stakeholders or institutions are responding to the issue. The value of the diagram is its interesting spatial arrangements that use proximity to promote a sense of discovery. While the four branching cores: critical goals, shareables, stakeholders and actions create entry points for a search, other nodes selected at random can be used to illustrate problem scenarios in childhood obesity.

1. HANNINGTON & MARTIN, 2012, PG.176

2. HANNINGTON & MARTIN, 2012, PG.166



BEN FRY  
ORGANIC INFORMATION DESIGN

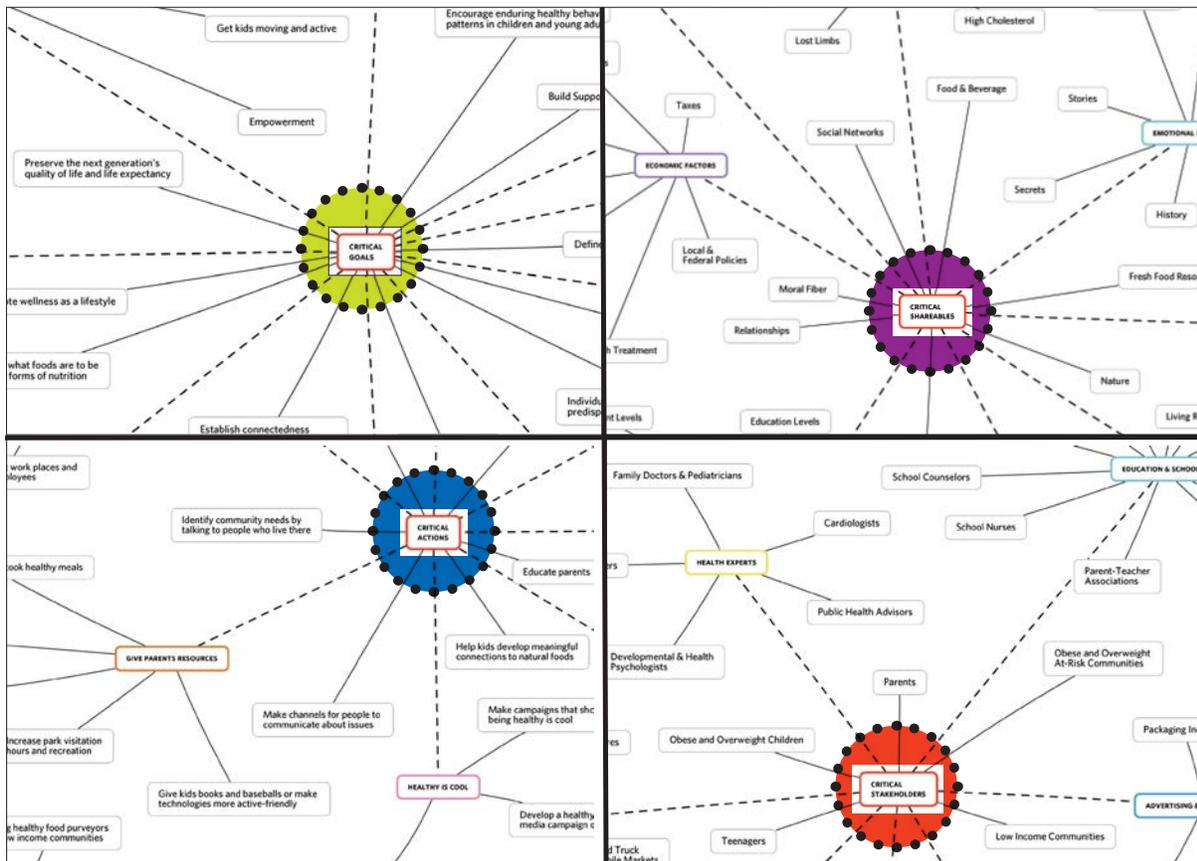


IAN HAGARTY  
SMOKEY ROAD PRESS



## issues map

figure 1.1



### ISSUE: CHILDHOOD OBESITY

The issue of childhood obesity arose from my initial interests in city planning and public health. Obesity is a complicated disease, effected by genetic, behavioral and environmental factors in a person's life. Obesity serves as a precursor to several chronic ailments such as diabetes and heart disease, "and now rivals smoking as the largest cause of preventable death and disease" in the United States.<sup>1</sup> Rittel describes the difference between tame and wicked problems, where wicked problems require several stakeholders to work within ever-changing scopes of investigation and constantly shifting scales.<sup>2</sup> The complex socio-economic problems in policy and community-level issues surrounding obesity make it impossible to solve in isolation. A third part of my research involved immersing myself into a local area to spend time with the community. Shea describes a process where designers immerse themselves in many activities: "taking tours through a neighborhood, regularly visiting community leaders, conducting focus groups and canvassing the community."<sup>3</sup> Each of these activities helped me organize a group of people as partners in the design process. Additional interviews and a workshop provided community input into the design for civic artifacts and platforms.

1. JACKSON, 2012, PG.22
2. RITTEL, 1973, PG.162
3. SHEA, 2012, PG.12

## person street study

The Person Street study examined the types of places and spaces where civic participation might take place in the future. Observing the streetscape and organizing images of the site provided insight into the issues that matter most to the community.

Person Street became an ideal location in Raleigh because it cuts across downtown, covering a diverse geography of residential, commercial/retail and academic institutions. The differences between people and places on the street led me to consider how I might facilitate an activity to bring diverse community members together to deliberate their perspectives on a health issue. To establish trust with the community, I presented my proposal to community members at a citizen's advisory council meeting and asked them for feedback. Shea addresses the importance in gaining the community's trust, mentioning ideas like making a meal or quickly addressing a basic design need in order build personal relationships and create authentic investment. <sup>1</sup> These ideas led me to situate the event I hosted at a locally-owned restaurant, where homemade pie was the civic currency for participation.

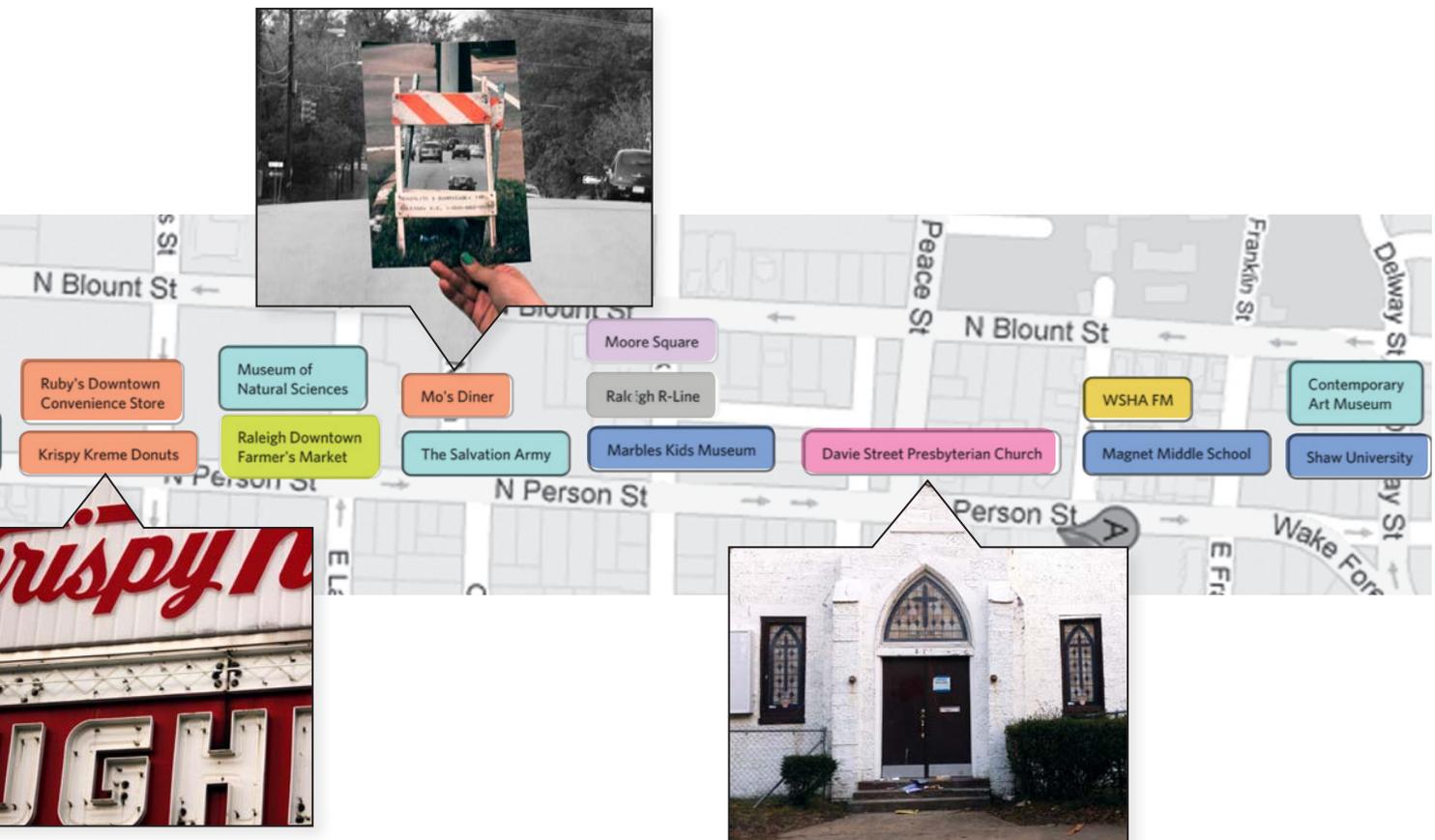


figure 1.3

## person street study

From my walking tours, I created image boards (fig. 1.3) to help determine the format, site and purpose of the workshop I staged. I arranged the photos on the board in the approximate location where they were taken. The Person Street “business district” lacked access to a grocery store, and the main landmarks on the street include a Krispy Kreme doughnut shop, a convenience store and a diner. The USDA categorized the neighborhood as being at high-risk of becoming a food desert, an area with unmet standards for basic food health. According to a neighborhood citizen advisory chair, many people that live there drive more than ten miles to get groceries.<sup>2</sup> I imagined many people may not be aware that they live in a high-risk area for the issue. In contrast, other landmarks in the neighborhood were potential catalysts to preventing the escalation of risk factors. Raleigh City Farm, Pie Bird and Market Restaurant showcase collective efforts in urban farming and local food service that bring nutritious, affordable foods closer to residents. The image boards helped to identify the food desert as an issue to be framed with participants. Eventually, the focus of the workshop shifted in order to address the broader construction of scenes for civic stages.

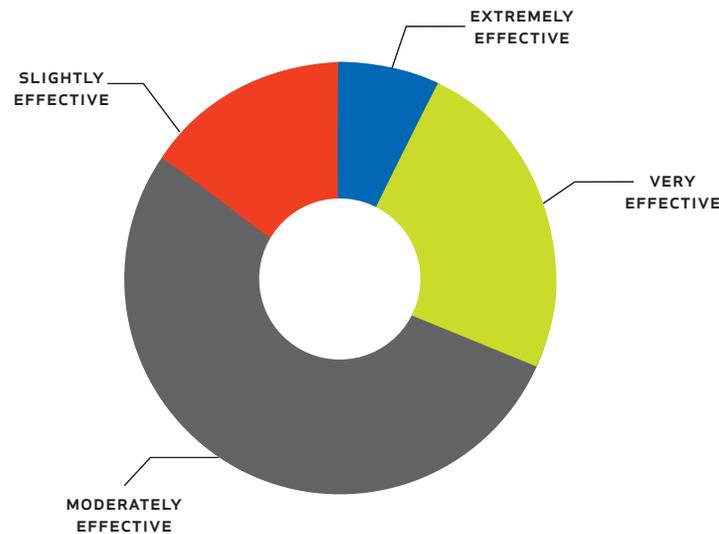
1. SHEA, 2012, PG.26
2. SEROZI, PERSONAL INTERVIEW, OCTOBER 16, 2012



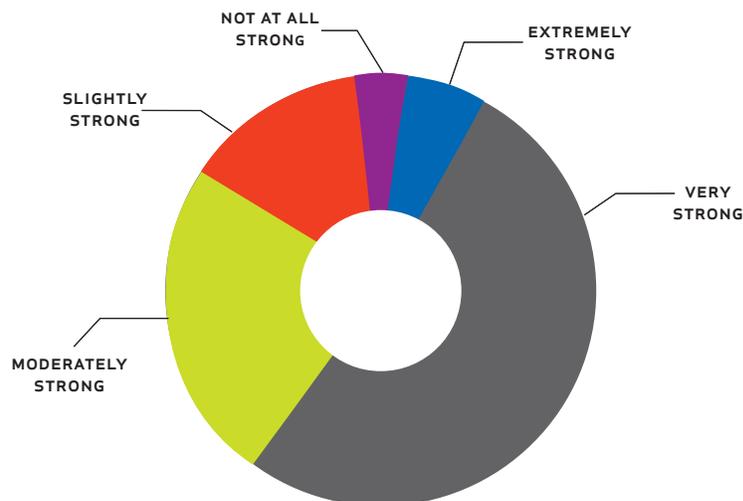
## civic participation survey

### semantic differentials, figure 1.6

A civic participation survey asked citizens in the Mordecai neighborhood to complete an online questionnaire about their levels of civic interaction with neighbors and the local government. This investigation explored people's expectations of community behavior and their perceived barriers to civic participation.

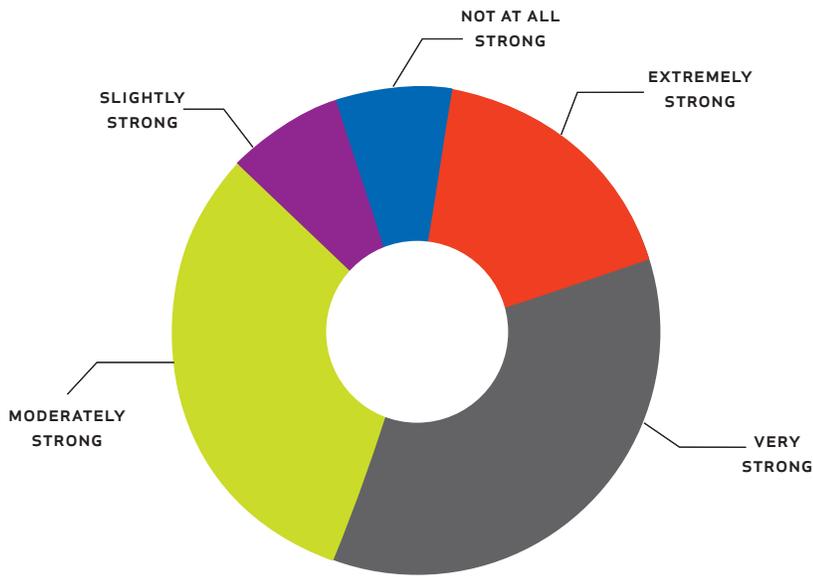


How effective is the local government at helping to solve problems in your neighborhood?



How strongly do you feel in your ability to improve something in your neighborhood?

**civic participation survey**



How strong is the sense of community in your neighborhood?

SAMPLE QUESTIONS	SAMPLE RESPONSES →	
Describe the qualities you would want for a strong community in your neighborhood.	“Neighbors, young, old and in the middle should converse with one another and provide mutual support.”	“Good communication system between neighbors and with the City, strong crime watch, neighbors organizing to correct problems and taking more ownership of the community as a whole.”
If you participate in activities in your neighborhood, why? If not, what would make it easier for you to be more civically engaged?	“Mainly, I get to events with entertainment like the music on the porch centered around Mordecai, or occasional block party by someone— less demanding job (my problem) would make it easier for me to be engaged, reflection of the economy.”	“No. I’m fairly introverted, not much of a groupie. Also, I’m nearly 70 and the median age in the neighborhood is about half that. If I were to be civically engaged it would be because someone asked me. That doesn’t mean ‘E-mail or ‘Facebook.””
What would make you feel compelled to do something about one of the issues you listed as important to you?	“I would be happy to contribute to making the changes a reality; I am just currently unaware of what specific steps I can take as an individual.”	“I’m not personally much of a leader but there are folks in the neighborhood that are, so when they set something up (like donate to so-and-so for this major or minor reason), that gives me a chance to use my credit card.”
	“That the City would have the staff who are receptive to my ideas”	“It would be necessary for me to get off my ass and make the choice to do it. I have no desire to be a chronic activist.”
	“If I feel that I could actually make a difference.”	“A significant event that gave my neighborhood a bad reputation.”



## civic participation survey

### METHOD

The survey method aimed to capture the sentiments of a large sample demographic. This method cost nothing to collect information. An invitation to participate could easily be shared over social media or email and required only 5-10 minutes from a responder. The survey format, an online questionnaire, allowed people to skip questions they felt unable to answer, and remained anonymous with the exception of the respondent's zip code. Because surveys run the risk of yielding inaccurate reflections of people's thoughts and feelings, it was used in combination with other methods such as participatory design workshops and semi-structured interviews.<sup>1</sup>

1. HANNINGTON & MARTIN, 2012, PG.172
2. BRADY, SCHLOZMAN AND VERBA, 1995, PG.3
3. JAHN, 2012, PG.11

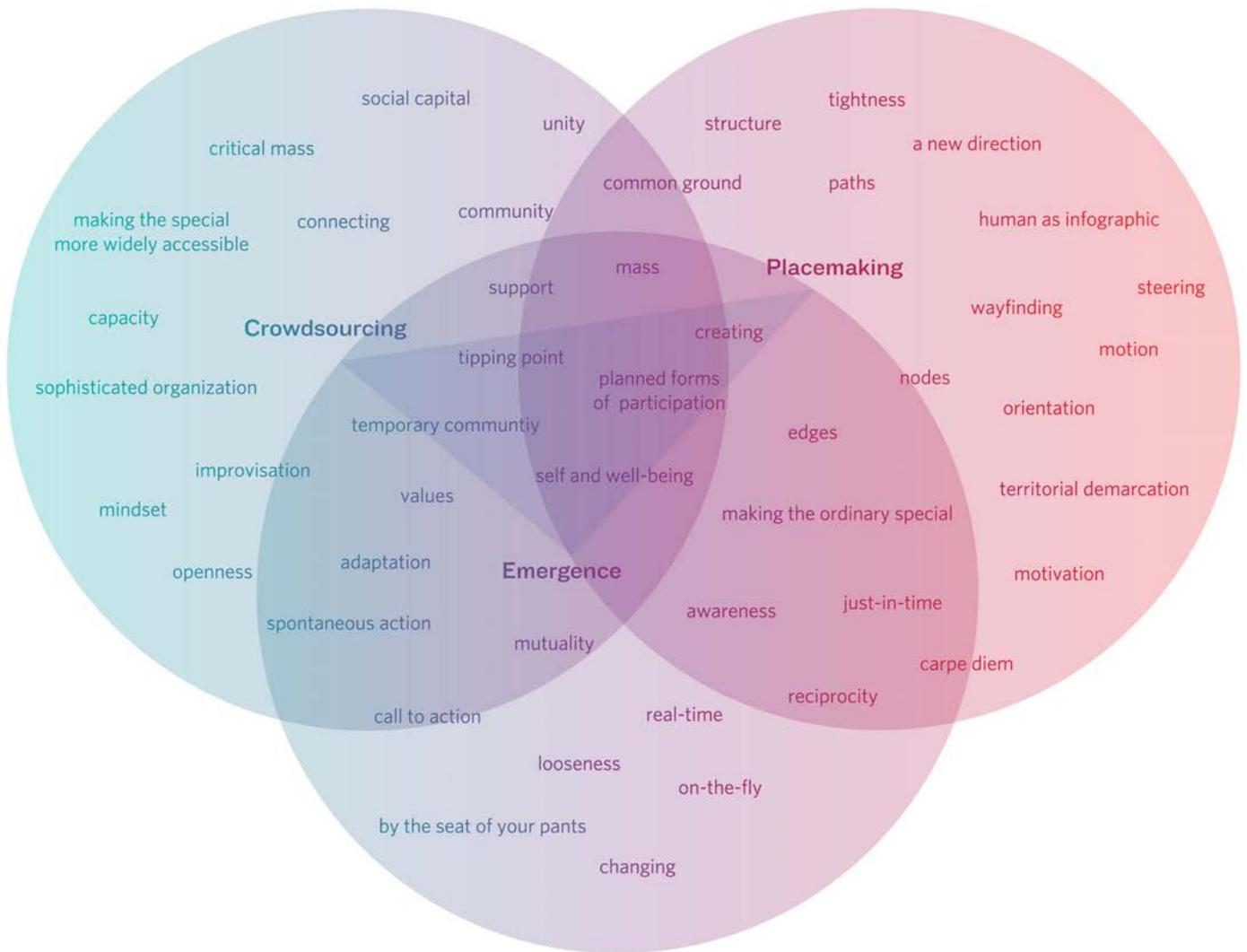
### ANALYSIS

Thirty-five residents in the Mordecai neighborhood of downtown Raleigh responded to the online survey. This method included neutral, hypothetical and judgemental types of survey questions that asked for people to describe their behaviors and give opinions about the local government's effectiveness in improving conditions and expressed their own agency and interest in political engagement. Resident's overwhelmingly referred to *communication and getting things done* as the way they measure a strong community and as their motivation for attending local events. In *Voice and Equality*, Schlozman, Brady and Verba state "civic life is strongly connected to social life."<sup>2</sup> Jahn's definition of agonism, the mutually constructive struggle over differences, also mirrors the respondents desire for an *appreciation of differences* as an important quality of community.<sup>3</sup>

A sense of commitment to others, neighborhood pride and friendliness appeared multiple times in open-ended replies describing the ideal community. The tone suggests the importance of relationships. One design opportunity might include a platform that fosters loose associations of people that pool resources, or social capital, in the spirit of a collective good. Generally, I used the responses from the survey in my design process as a checks and balances in designing principles and interactive modes for new civic experiences.

When asked about their civic participation, one resident declared, "I'm fairly introverted, not much of a groupie. Also, I'm nearly 70 and the median age in the neighborhood is about half that. If I were to be civically engaged it would be because someone asked me. That doesn't mean 'E-mail or Facebook.'" By describing civic stakeholders as "groupies," this participant's perspective suggests a lack of interest in club and associations that require membership. Comments became benchmarks for design principles, taking into account the expressed needs of neighbors looking for a strong community presence and multiple modes of engagement (including in-person interactions).

social networking and community conditions concept map



## analysis & findings

---

The primary research: interviews, issue mapping, image boards and a participation survey, helped clarify the value of designing civic stages. At a variety of scales, civic stages claim existing objects or spaces for public use. The stage imbues ordinary places with political spirit through activities that alter the social operation of the site. Through my research and literature review, *accessibility places*, *actionable communication* and *the formation of ad-hoc communities of opinion* emerged to define necessary experiences of the civic stage.

1. RAINIE & WELLMAN,  
2012, PG.43

2. RAINIE & WELLMAN,  
2012, PG.5

The literature also offered second-priority principles that combine concepts from social networking with conditions for community (left). In combination, these ideas work together to create scales for balancing the physical and virtual qualities of democratic places for communication.

Pairing agency and crowdsourcing principles establishes the need for simultaneous individual and community control over decision-making (through individual actions and networked activity). This condition mirrors the concept of “networked individualism” Ranie and Wellman use to describe the “negotiation of opportunities and constraints” when individual actors link together by passion, interest and geography.<sup>1</sup>

Coupling placemaking conditions with civic relationships asks designers to think of people as political bodies and of social institutions as discursive places for deliberation and decision making. Relationships and placemaking define the stakeholders and stages through which people share common values and compare perspectives. Lastly, communities of opinion and social networking principles illustrate a range of physical and digital “social operating systems” for hybrid socio-political communication.<sup>2</sup>

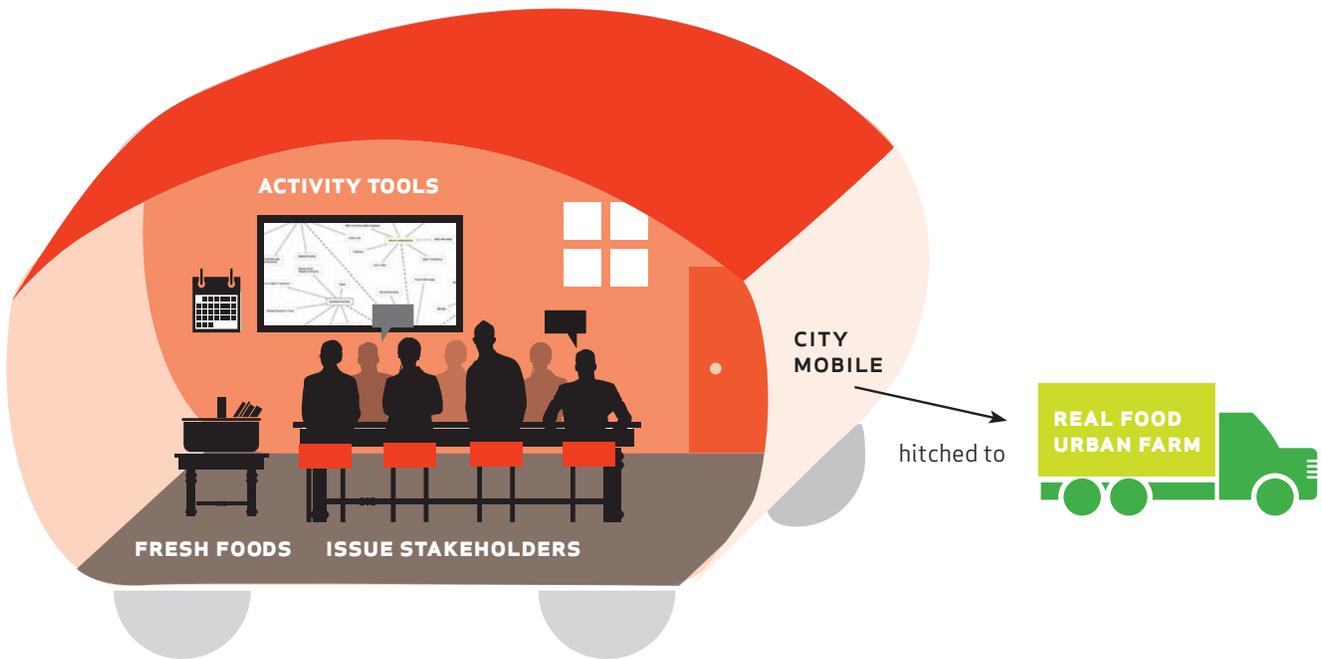
*“Churchman sees design as communication among people,  
enabling collective action and the transfer  
of the selected solution alternative into action.”*

—BELA BANATHY, REFERRING TO CHARLES CHURCHMAN, 1971, PG.13



## city mobile

City Mobile asks citizens in low-access neighborhoods to deliberate civic issues with city staff to address immediate community needs. This investigation explores how a transportable service and physical site might foster universally-accessible participation in local issues.



## sketch of trailer, interior

**STAGE:** READY TO KNOW AND HOLD AN OPINION

**SERVICE:** PARTICIPATORY VEHICLE FOR ACTIVITY

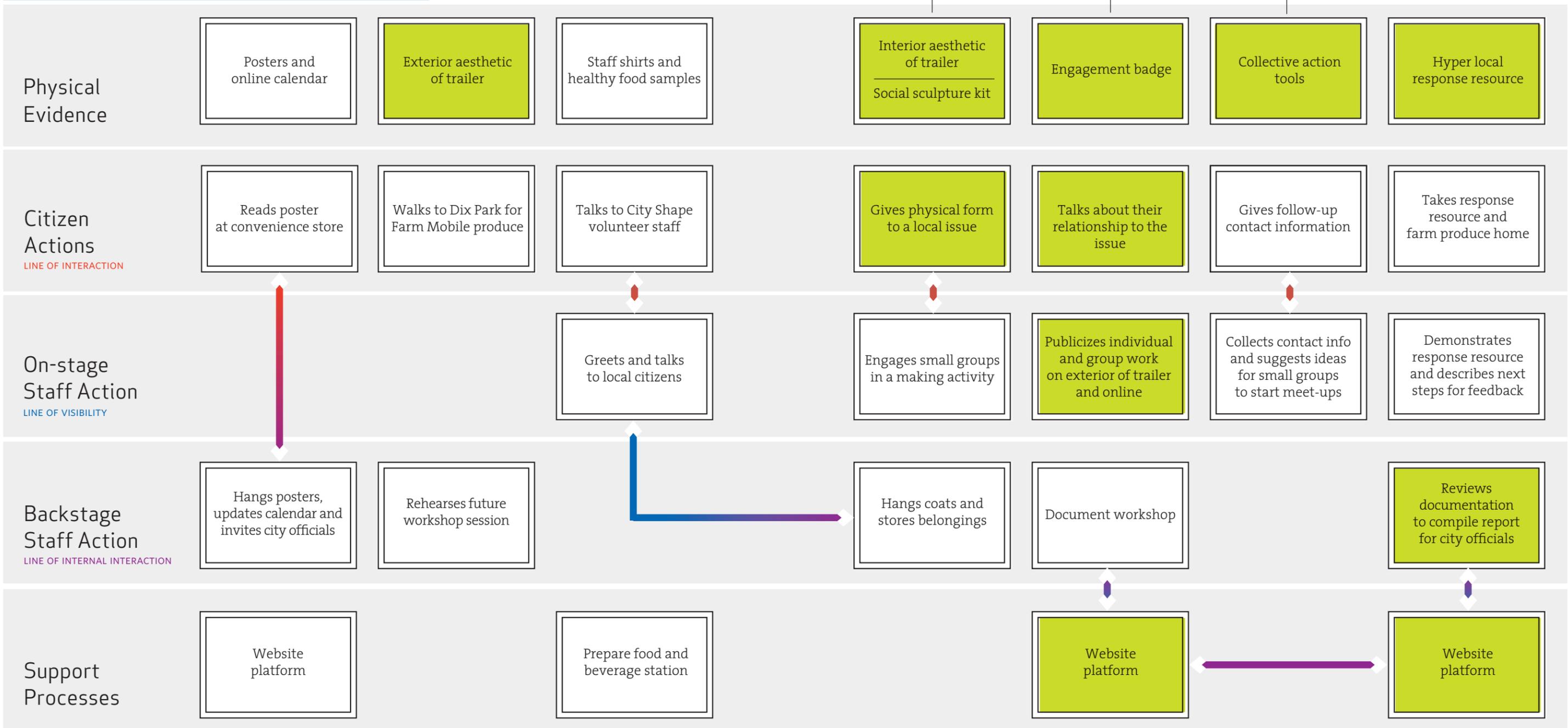
**ACTION:** WORKSHOP FACILITATION, DELIBERATION, CO-DESIGN, ETC.

**OPPORTUNITY:** UNIVERSAL ACCESSIBILITY



## montage of trailer and food farm truck

# the Service Blueprint for City Mobile





City Mobile proposes a multi-vehicle for exchange between citizens and city officials. The service blueprint describes a series of interactions among city staff or volunteers and citizens. The platform aims to address the issue of universal access to participation, striving for principles of equitable, flexible and intuitive use. The design of the interior space must be familiar and friendly, inviting people to socialize and make meaningful connections with staff and other residents.

1. MEADOWS, 2008, PG.159

The critical value of the mobile station is its capacity to travel from community to community. Also, the opportunity to integrate a digital platform for stakeholders to collaborate and capturing sentiment is essential in establishing a real-time feedback loop between people and government. According to Meadows, (2008), a balanced feedback loop is critical for devising a self-correcting system, where pluralistic perspectives on issues are clarified in the moment and perceived gaps in communication are replaced by fluid conversations.

## chat & chomp workshop

Chat & Chomp asks citizens to deliberate community issues, using participatory design methods for co-designing the civic stage. This prototyped investigation examines how citizens might invent *scenes* where individuals form networks in their community to solve a children's health or local food problem.



## workshop toolkit

**STAGE:** READY TO KNOW AND HOLD AN OPINION

**SERVICE:** MOBILE WORKSHOP

**ACTION:** CONVERSATION, COLLAGE AND MAPPING

**OPPORTUNITY:** GATHERING COMMUNITIES BY OPINION, UNIVERSAL ACCESSIBILITY

## sample quotes from persona postcards

*"I have two boys. Every time they watch TV, the cartoon characters selling cereal make them beg me to buy foods I know are not going to make them healthy and strong. I want them to be able to make healthy eating decisions on their own at home and at school."*

*"I always hang out with my older brother because he's more popular at school, so I look cool because he is. I smoke with him, steal foods from the gas station for him—once even booze."*

## chat & chomp workshop

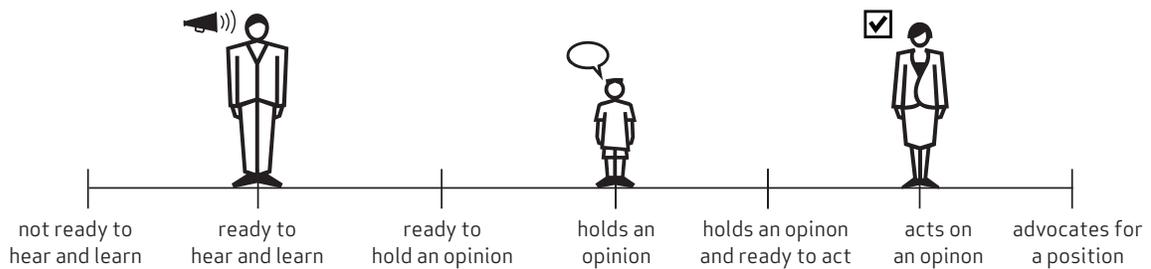


**ACTIVITY:** JUST ASKING, THE INVITATION TO ENGAGE  
**DESIGN METHODS:** POSTCARD PERSONA AND ISSUE MATRIX  
**TIME:** THIRTY-FIVE MINUTES

In the first activity, “Just Asking,” participants select a postcard from a stack of 25-30 on a table. As opposed to just handing out cards, giving participants a choice provides a chance for them to self-select a persona whom they feel they can most relate to. On the front of each postcard, portraits of individual people and their daily lives depicted various emotions, ethnicities, and education and income levels. The variety of personas allows for participants to consider a range of citizens with different backgrounds but similar concerns. Printed on the back of each postcard, a quote and the hypothetical home address framed a pertinent health issue and provided for a location of personas. Selecting local Raleigh home address intentionally aimed to give participants a sense that their work could impact someone living in their neighborhood.



After selecting a card, participants read their persona’s quote aloud to everyone at the table. With inflections in their tone of voice, the participants seemed to get into character, ready to assume the roles and responsibilities of the persona’s life. Participants then filled out an issue matrix—making lists of the “who?, what?, where? and how?” their persona might become more receptive to doing something about their issue. Participants identified their persona’s engagement level using David Rose’s receptivity gradient. His scale shows a range of experiences, from becoming “ready to know and learn” to being “ready to advocate” for an issue. Participants worked individually from their issue matrix to develop a key opportunity to help their persona become more receptive. The opportunity selection defined a critical component of the workshop. Participants connected resources, stakeholders, institutions and actions to weigh their value and choose the most meaningful and effective idea through deliberation.



**RECEPTIVITY GRADIENT | DAVID ROSE**  
 DAVIS, PERSONAL CONVERSATION, FALL 2012

chat & chomp workshop



event invitation



location: PieBird



chat workshop bags

## chat & chomp workshop

**ACTIVITY:** SCENES FOR STAYING CONNECTED

**DESIGN METHODS:** CONNECTIVITY CUBE, MAKETOOLS, SOCIAL SCULPTURE

**TIME:** FORTY-FIVE MINUTES

The second activity took precedent from Sanders and Stappers MakeTools method and references the concept of a “social sculpture,” a term coined by artist Joseph Beuys that suggests that everyone possesses the ability to create.<sup>1</sup> Participants visualized ideas for their personas through making three dimensional collages from a pre-selected set of images and textures. Before collaging, I asked participants to make connections between the people on the postcards and think of them as neighbors in a community. This consideration aimed to promote a sharing environment, where people could exchange materials and ideas simultaneously. Participants identified patterns in their ideas and hybridized their plans to coalesce around collective solutions. As a result, the individual opportunities became transferrable to the issues of many personas.

1. SANDERS AND STAPPERS,  
2008, PG.2



## chat & chomp workshop

### public social sculptures



The images above were not actualized at the workshop. This idea shows people taking the social sculptures and physically placing them at a site of concern or institution of support. This activity proposes an opportunity for monuments of modern political sentiment to be erected in the public domain in order to temporarily exhibit new forms of protest or support for local issues.

## chat & chomp workshop



**ACTIVITY:** SPEAK UP, SITUATING A SITE FOR ACTIVITY  
**DESIGN METHODS:** ISSUES AND STAKEHOLDER MAPPING  
**TIME:** TWENTY MINUTES

In the final activity, participants folded their collages into three-dimensional cubes. On a large map of Person Street (the location of the workshop) rolled out on the floor, participants looked at the greater implications of their ideas. They took their collaged cubes and physically embedded them in the local communities where they believed their ideas could have the most valuable impact.

Participants shared their reasons for why they placed their collages in the chosen locations. One important quality of the map dealt with its helpfulness in allowing a participant to identify strategic places in the community to aid in solving real world, every day issues faced by individuals. The significance of real world, personal concerns matters because it is often at this scale of problem-solving where people most frequently lose their sense of civic agency. If they fail to feel a perceived capacity to resolve their own issues, the cumulative effect of day-to-day problems leaves them without resources for civic engagement and community-level voluntarism.



After completing the activities, I had the participants recorded as they individually reflected on the purpose and value of their collage. Afterwards, they completed a survey that asked specific questions about their workshop experience and their willingness to work together as a group in the future. The collages became a critical vehicle for reflection; participants moved them around in their hands, showing each facet as a useful storytelling tool. Their work encompassed all the elements of the civic scene: the places and experiences where the persona's problem statement leads them to action and resolution. The cubes added a second layer, beyond words, for locating ideas as moments of activity in place—serving as checks and balances for what participants said and what they meant when deliberating a local issue.

## chat & chomp workshop



## WORKSHOP REFLECTION

The activities in Chat and Chomp intended to facilitate and capture participants' building shared scenes and solutions for local issue by sharing different perspectives through conversation. As opposed to the artifact, the discussion and reflection became the medium for people to deliberate issues.

The video reflection aimed to show how design research offers many ways to facilitate a political discourse and help people build empathy for others through civic engagement. The methods for engagement included interviews, personas, an issue matrix and place/stakeholder mapping.

In the places such as the work office or school where people are often told to avoid talking about politics or religion, consensus and similarities are promoted over conflict or differences between people. Often, advocacy for a cause is merely seen as waving a flag or banner, but not used as a tool for education and outreach in communities. Hosting the event at a restaurant was important because the location represented a non-traditional site of political discourse and civic production. The activities relied on the negotiation of people's different lived experiences and local knowledge to construct the meaning of how they perceive health and local food issues.



The Chat & Chomp workshop prototyped a series of design methods, scaffolded to facilitate the co-creation of social sculpture for the design of civic stages. As opposed to asking people to draw a physical place, tangible artifacts were collaged using images and textures to represent a scene. The scene depicts a civic stage, the place where a persona experiences a problem, develops a solution and takes actions to solve the issue with with community members.

1. RABAN, 1988, PG.27

2. BLUM, 2003, PG.165

3. SANDERS & STAPPERS, 2008, PG.2

4. BLUM, 2003, PG.165

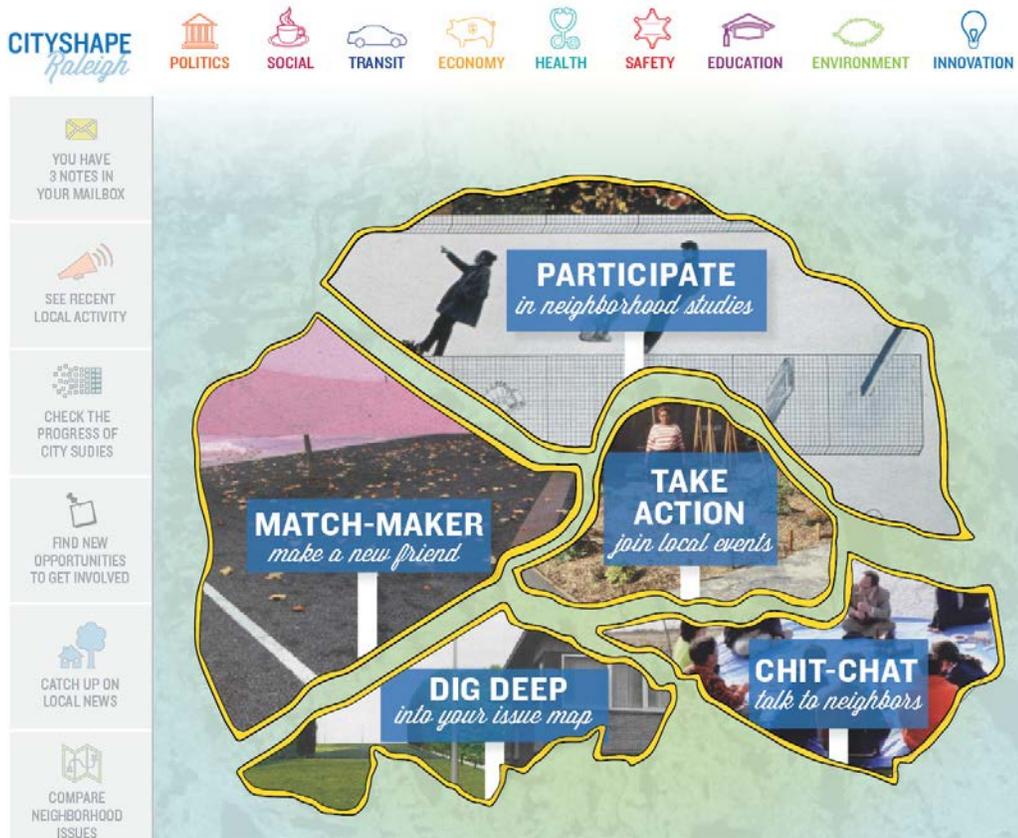
5. BUXTON, 2007, PG.167

Having people visualize ideas around issues was more important for the eventual design of the civic stage because participants illustrated scenarios where action could take place. Quoting Raban, “It is surely in recognition of this intrinsic theatricality of city life that public places in the city so often resemble lit stages awaiting a scenario.”<sup>1</sup> Because the invention of a civic stage is a changing public platform—independent of a fixed place or time—illustrating the scene foreground an excitable moment or center of activity where creative solutions emerge.<sup>2</sup>

One limitation of the MakeTools collage method is the pre-selected set of images.<sup>3</sup> While I collected images from a variety of sources, my bias may have affected the aesthetic of the “scenes.”<sup>4</sup> The Make Tools method Sanders and Stappers created asks people to talk about their own hopes, fears and dreams as opposed to a persona. It surprised me how meaningful the method became for participants as they worked towards solving the problems of a fictitious community member. The participants translated their conversations into images they used to interpret and express their ideas. This aspect helped me think about how imaginary communities are similar to virtual communities, in that the sharing currency of social media and online exchange is largely text, image and video-based.

The complete experience of the workshop: unforeseeable interruptions from the service staff, eating pie at the restaurant and activities, were “messy.” According to Buxton, “[Design] is a messy business. It has to be hands-on—and that is a messy process, in the most wonderful way.”<sup>5</sup>

## cityshape raleigh website



CityShape Raleigh asks citizens to deliberate, co-create and socialize with invested stakeholders through online and offline activities. This investigation explores how *blended social action* fosters universally accessible forms of civic participation.

**STAGE:** READY TO ACT

**SERVICE:** PARTICIPATORY PLATFORM FOR COMMUNITY STUDIES

**ACTION:** EXCHANGING LOCAL KNOWLEDGE AS RESEARCH THROUGH AN INTERDISCIPLINARY NETWORK

### REFLECTION

When people care deeply about an issue, clear paths to action must be designed for citizens to assume a role and affect the outcome of an issue. Civic studies, such as the Blue Ridge Corridor Study in Raleigh as well as research studies funded at NC State University offer opportunities for people to participate in local issues. In interviews with two Raleigh non-profit organizations, Advocates for Health in Action and Voices into Action, project coordinators described the great lengths they often go to recruit participants for a study. In addition to financial incentivization, project coordinators also post signs on the roads, speak to leaders in the community and use online social media platforms to attract target demographics. Designing a flexible online platform for civic research aiming to serve cities, universities and neighborhood associations may offer easier and more efficient activities for participants, potentially saving time, money and resources.

## cityshape raleigh website

The screenshot displays the CityShape Raleigh website interface. At the top, the logo "CITYSHAPE Raleigh" is on the left, followed by a navigation bar with icons for POLITICS, SOCIAL, TRANSIT, ECONOMY, HEALTH (highlighted), SAFETY, EDUCATION, ENVIRONMENT, and INNOVATION. A sidebar on the left lists six weekly activities: WEEK 1 Video Diary, WEEK 2 Food Journal, WEEK 3 Place Map, WEEK 4 Photo Shoot, WEEK 5 Activity Scale, and WEEK 6 Shape Vision. The main content area features a video diary entry titled "How do multiple jobs and long commutes affect my ability to buy food and cook at home?". The video shows a man holding a photo of a long drive home with the text "Monday, March 13th" and "A LONG DRIVE HOME FOR DINNER". Below the video are 5 comments, a "REPLY TO COMMENT" button, and options for "PUBLIC", "PRIVATE", and "SHAPE". A "More questions >" link is in the top right, and a "REVISIT THE Raleigh City Shape" button is in the bottom right.

## website interface

### SCENARIO, PART 1: INVITATION

Sean lives in downtown Raleigh and shares the responsibilities of taking care of his younger brother and sister with his Mom. Part of Sean's duties include purchasing groceries for his family, who depend regularly on food stamps and a strict budget to make ends meet. Sean wants to buy nutritious foods for his siblings, but low access to healthy options in Sean's neighborhood makes eating well a serious challenge.

At the grocery store, about a forty minute bus ride from Sean's home, he speaks with a woman handing out free food samples about an online food desert study taking place where he lives. He explains that his family shares one computer at home, and that it might be hard for him to contribute since he divides his time between two jobs and school. She writes down the link to the study on his napkin, and mentions a financial incentive that comes with participation. Sean discovers that the computers at the public library across the street from his job offer him an easy way to access the study after work. Since CityShape notifies him that he qualifies for two studies, he signs up for both and completes a series of activity assignments over a six week period.

## chit-chat social software

### REFLECTION

Chit-Chat is collaborative software for local socialization, an extension to the City Shape platform. Chit-Chat brings civically-active participants from studies into focus groups for conversations with city government officials. Chit-Chat includes a range of interactive modes: participants host their own conversations around local issues they care deeply about solving on their own. A second mode randomly assigns involved stakeholders in deliberative sessions towards the resolution of an issue. A group identified as a task force is invited to contribute to an information-rich, participatory conversation environment to share ideas, mine their networks for research and develop salient arguments for city officials to use in closed-door meetings with other decision makers.

**ACTION:** One asset of tracking the conversation, roll-overs allow for people to review deliberation among others by each new topic that is posed. New topics are pitched by conversation moderators after each person takes a turn contributing a single talking point.

*Chit-Chat streams the most recent chat contributions in a scrolling side bar, where bits of new conversation help participants refer to previous statements when preparing responses for the next topic for deliberation.*

**STAGE:** READY TO ADVOCATE

**SERVICE:** COLLABORATIVE CHAT SOFTWARE

## chit-chat social software



  
POLITICS

  
SOCIAL

  
TRANSIT

  
ECONOMY

  
HEALTH

  
SAFETY

  
EDUCATION

  
ENVIRONMENT

  
INNOVATION

### How can we make a case to the city council for a vote that HOA's cannot restrict residents from growing front lawn gardens?

**MOST DISCUSSED**

**TOPIC 1: Ben**  
Can we talk about potential case studies we could use to show how front lawn gardens have social and economic benefits in cities?

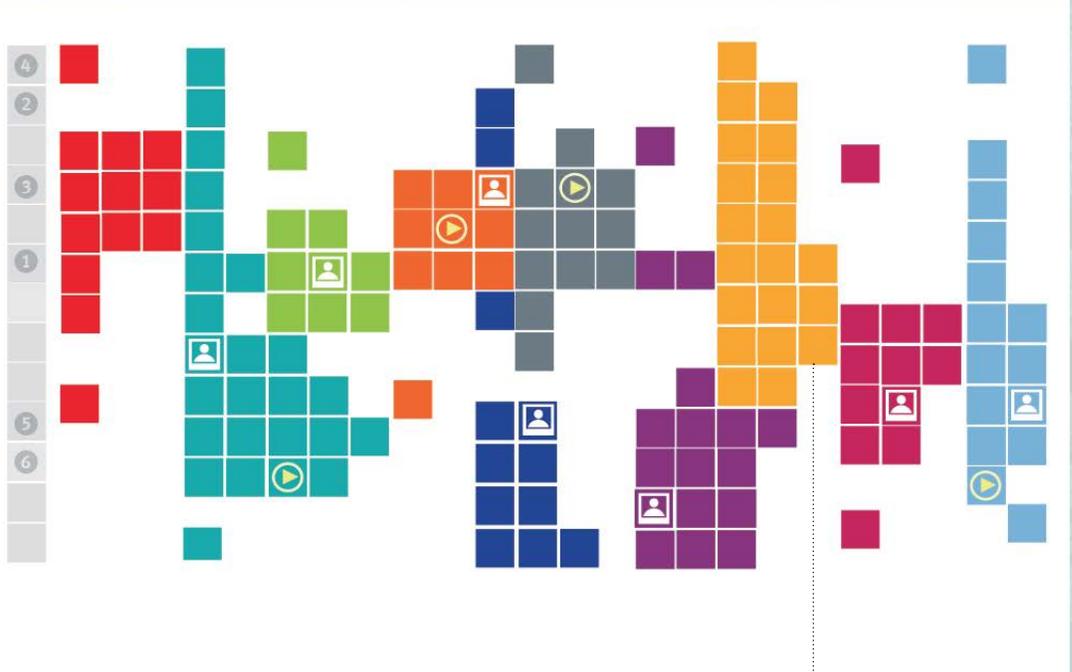
**TOPIC 2: Jacqueline**  
Can we look at the start of the local food movement in '07 and trace the factors for its continued success?

**TOPIC 3: Sean**  
What does everyone think about linking the value of community gardens to health in schools and neighborhoods?

**TOPIC 4: Maria**  
So, if we look at peer reviewed studies at this link, lets talk about how more greenspace improves mental, physical health and improves local economies from farm sales and CSAs.

**TOPIC 5: Ben**  
I think we should also discuss how these gardens will beautify the streetscape and build the character of the neighborhood by getting neighbors outside talking.

**TOPIC 6: Melanie**  
Let's put review our most important ideas and when we get to the white board session, we can see where if there's a pattern in our case.



  
Jacqueline

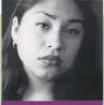
  
★ Sean

  
Ben

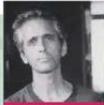
  
Lisa

  
David

  
Aaron

  
Maria

  
★ Melanie

  
Russ

  
Joleen

## FEATURES

CityShape is an information communication technology (ICT) containing a host of tools, like Catch-Up and Match-Maker (see appendix b and d), that suggest virtual opportunities for remote participants to contribute to research studies. Like online surveys and petitions, citizens search issues and subscribe to studies based on their personal interests and demographic compatibility. From the researchers side of the platform, a project coordinator generates scales, questions, content and media into templated style sheets. A participant see weekly activities assigned in the interface task bar. Pre-programmed algorithms allow for the distribution of responses to be viewed by the researcher in a variety of coded formats. If hosted by the city, data would be available to politicians as they work to assess a range of factors and citizen sentiments on a decision.

*Conversation is tracked by a color-coded grid of "talking points," where text and media are archived for a post-deliberation, collaborative editing session.*

65



Chit-Chat is social sharing software aimed to address the research that suggests, “the neighborhood is not where people’s community life is focused.”<sup>1</sup> Towards universal accessibility, the interaction of taking turns, as well as the roll-over chat feature, aim to create an equitable and easy-to-use environment for citizens to access and review information. Chit-Chat looks at how collaborative, multi-stakeholder chats can generate archived, edited and voted on “talking points.” “The Internet and Civic Engagement,” a study conducted by Pew Research, shows that those who are more politically active online have bigger networks and tend to engage more regularly in in-person civic activities.<sup>2</sup> Chatting frequently online is one way people describe being close to others in their networks.<sup>3</sup>

Because of the small size of the conversation grid and the amount of potential communicators, one design challenge is managing the complex interactions of following and contributing to the conversation. The left-hand side bar helps to address this issue by streaming the five most recent talking points as the conversation happens. The color-coded avatar system, meant to mirror the organization of being around a table, might seem too literal and somewhat difficult to follow. Alternatively, an opportunity exists to make the quotes in the roll-overs more prominent than the images of the people as central to the conversation.

Because multi-stakeholder deliberation is convoluted, traditional usability methods that recommend designing for speed and simplicity seem inappropriate. Civic software should strive for accessibility and usefulness and “the ability to do better work, not just use an application more easily.”<sup>4</sup> Making sense of information and applying new knowledge towards decision-making in the deliberation process means that experts need to be engaged with citizens in the place where consensus starts to take shape.

1. RAINIE AND WELLMAN, 2012, PG.130
2. SMITH, SHLOZMAN, VERBA AND BRADY, 2009
3. RAINIE AND WELLMAN, 2012, PG.136
4. SIMMONS & ZOETEWY, 2012, PG.142

WEEK 1  
*Food Journal*

WEEK 2  
*Video Diary*

WEEK 3  
*Place Map*

WEEK 4  
*Photo Shoot*

WEEK 5  
*Activity Scale*

WEEK 6  
*Shape Vision*

## How can you help increase food abundance where you live?


TO MY OAKWOOD NEIGHBORS : THE VALUE OF COMMUNITY GARDENING

PUBLIC  PRIVATE  SHAPE



I WANT GARDENS FOR EVERY FRONT YARD! HOW DO I MAKE THIS A REALITY?

**SUPPORT** **SPEAK UP!**

SHARE IDEAS + COLLABORATE ↑

**Russ:**  
Did you know that this study just showed that the presence of local food systems like community gardens increases social activity in neighborhoods?

**Sean:**  
Wow! That will really help my case. I'm trying to get garden regulations changed in my front lawn, but the HOA doesn't see the value to the community.

Russ and Sean collaborated on March 26, 2013, 2:02 PM

**Sean:**  
I'm really not sure where to start. Thanks for your contribution to my vision, Lisa!

**Lisa:**  
Hosting an event at your house where you invite your neighbors to talk about changing the HOA covenant to allow front yard gardening should help!

Lisa and Sean collaborated on March 29 2013, 3:42 PM

MY PHOTOS









Empower Point asks citizens to co-create images with others and share the images with the city government. City officials use Empower Point to review, comment and organize the images as slides for an in-person meeting with decision makers.

### SCENARIO, PART 2: PARTICIPATION

Participating in online studies with other people helps Sean find neighbors facing similar challenges who can offer him support and advice. Each week, he receives personalized messages from a local government employee, sending him encouraging tips and resources, such as a comprehensive health food map that shows available fresh food services and locations within a mile of his home. CityShape gives him the agency to act on an issue by offering an index of institutional studies to participate in. Sean receives access to experts and exchanges knowledge and resources with other local participants through social sharing opportunities. This type of social sharing includes the co-creation of images to represent an issue, comments on someone's shared activity work, support for a cause or concern, and responds to real-time questions from those in the study community.

## empower point



**Maria Morales**  
MOTHERS NEED A PLACE TO GROW THEIR CHILD'S MIND

**Jacqueline Moss**  
FRONT YARD GARDENS MAKE NEIGHBORS OUT OF STRANGERS

**Melanie White**  
NEIGHBORHOOD SURVEY ON GARDEN AS A FOOD SOURCE

**Aaron Mensler**  
SOMETHING TO DO AT THE END OF MY WALK

**Ben Velcrost**  
HEALTHY FOOD, HEALTHY LIFE, AC CASE STUDY

### Council Meeting, April 2, 2013: Front Yard Gardening in Food Deserts

< Slide 8 of 15 >

**STAGE:** READY TO ADVOCATE

**SERVICE:** CONTENT-CREATION SOFTWARE TO PROPOSE OR LOBBY FOR A POSITION

**ACTION:** COLLABORATIVE CONTENT CREATION PLATFORM (CITIZENS DESIGN WITH CITY REPRESENTATIVES)

## REFLECTION

Empower Point aims to bring civic leaders and citizens into the same co-creation space through designing content for a meeting slideshow. The value of collaboration software for leaders and citizens is that it allows for direct citizen participation. Direct citizen participation is the process in which members of society (not those holding office or administrative positions in government) share power with public officials in making substantive decisions and in taking actions related to the community.<sup>1</sup> When discussing new civic platforms like See, Click, Fix with Urban Design Center's Trisha Hasch, she said "I think that they [the platforms] are super helpful, and there are also so many things about the built environment that people can change without government. I think we [urban designers] forget that sometimes. I think it's evolving, you know, this whole idea of DIY urbanism and pop-up and temporary urbanism. It's fascinating and gaining a lot of traction, but it might just be a newfangled way of saying, 'We took it in our own hands.'"<sup>1</sup>

1. MANANDARO, 2010, PG.124

2. HASCH, PERSONAL INTERVIEW, DECEMBER 4, 2012



## empower point | co-creation presentations

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Empower Point is a part of the CityShape interface that allows city officials to take the collaborative editing of “talking points” from a focus group of issue stakeholders and turn it into a presentation. Co-created text and images organized by a city councilor but available for public feedback, for example, fosters transparent communication loops between people and government. Based on the group work in Chit-Chat (pg.64) towards generating key arguments for an issue position, politicians could work with stakeholders to put together compelling case studies, sentiments and statistics when lobbying in meetings or sharing information with other officials. In addition, the slides could be used for news, campaigns and media outlets to let others know the progress of an issue and what steps the local government is taking to champion a desired outcome for constituents. Empower Point suggests that offering people outside of the design community design tools democratizes the design process and makes it more accessible to those who need to apply design to everyday contexts.

## fireworks application



## ACTIVITIES

1. A citizen can start their own firework with a fuse that lights the issue. This fuse at the core, where citizens can use symbols or images to represent the issue. Once they start a fuse in a physical location people around them will be notified, causing conversation to spark.
2. When conversation sparks, ideas and opinions are shared as individual sparkles. A swipe can "cheer" a sparkle on the firework to grow longer, while a "whisper" keeps the sentiment quiet.

Fireworks asks citizens to embrace emergent issues through an application that visualizes real-time, socio-political sharing at a physical place. This investigation examines how ICTs might foster meaningful, in-the-moment political conversation by giving citizens a choice in how the issue is represented.

## fireworks application



### ACTIVITIES

3. GIS mapping allows for a low popping noise and vibration to locate a new issue for the citizen on-site when there are conversations relevant to their interests. When the person opens the application and holds it in front of them, the firework explodes on the image of the city and thoughts and feelings are shared.

**STAGE:** READY TO HOLD AN OPINION

**SERVICE:** REAL-TIME FEEDBACK LOOP FOR CIVIC NETWORKS TO SHARE IDEAS

**ACTION:** CROWDSOURCING CITIZEN OPINIONS, CLARIFYING VALUES THROUGH RAPID DECISION-MAKING ACTIVITIES



Fireworks is a real-time, dynamic information visualization application that uses locative technology to send citizens the social sentiments and current “buzz” around a local issue. Rainie and Wellman describe information communication technologies as platforms that, “support rapid-fire exchanges among individuals and that would only be partially feasible in village pubs.”<sup>1</sup> Representations of fireworks explode when ideas and opinions are shared, and single-swipe whispers and cheers stunt or spur the growth of a sentiment’s value. This prompt is meant to create a supportive feedback loop among citizens that emphasizes the “continuous presence and pervasive awareness” of being with others in social networks.<sup>2</sup>

The scene of this civic stage is overlaid onto everyday settings. This display evokes the emergent qualities of social festivals and protests that self-organize to flood the city with political energy. The visualization attempts to overlay an imagined community onto the city, defined as a “deep, horizontal comradeship, regardless of the fact that the members may never know most of their fellow-members.” Individuals can hold an image of their communion in their pockets. The community itself democratizes the physical place—whether the state capital or the local elementary school. The *place* then becomes a site for public deliberation and political discourse.<sup>3</sup>

1. RAINIE AND WELLMAN, 2012, PG.245

2. RAINIE AND WELLMAN, 2012, PG.12

3. ANDERSON, 1983, PG.49

## open mic signage



Open Mic asks citizens to write a civic issue they would like to publicly discuss on wayfinding signage at a restaurant. The investigation explores how physical artifacts might facilitate an organization of citizens into civic networks.

**STAGE:** READY TO HOLD AN OPINION

**SERVICE:** DESIGN PROPS AS CIVIC WAYFINDING

**ACTION:** ORGANIZED MOMENTS FOR DISCUSSION AND DELIBERATION

**OPPORTUNITY:** CONVERSATION, SEEKING KNOWLEDGE TO FORM AN OPINION

## REFLECTION

Open Mic might expand into a kit of parts or props that local diners looking for social opportunities that incentivize others to civically engage. Like trivia nights at brew pubs, tables could compete for civic pride in a challenge asking them to pose solutions or ideas for issues. This idea might include people's perceptions of the public bus system to a participatory budgeting brunch where people prioritize and purchase city projects through voting over pancakes.

## open mic signage

### SCENARIO: INVITATION

Selena is a retired service worker who spends her weekends tending to a community garden near her house. After gardening, she stops by City Market, a local restaurant, to read the newspaper over coffee at the bar counter. On Sunday, Selena performs her regular routine, putting in an order for her Columbian organic roast and an a la carte mesculin salad. Next to the self-serve coffee station, Selena spots a row of blank signs prominently in front of a small chalk board. Written on the chalkboard is a quote from President Woodrow Wilson: "I not only use all the brains that I have, but all that I can borrow" (Wilson, 1914, pg. 363). A small business card on the sign reads: "Sometimes solving national, local and everyday problems requires more than one person. Write your issue on the sign, put it on your table and strike up a conversation that changes the world."

1. WILSON, 1914, PG.363

Selena, surprised by this unforeseen provocation, looks around the dining room, eyeing other tables for a sign. She feels slightly nervous about making the first sign, but is very curious to know what other people might be talking about. Nothing looks out of the ordinary until she spots a round table of familiar faces in a back-corner booth. She sees that a regular diner positioned one of these signs front and center. Scrawled out in chalk, it exclaimed, "I'm starting a nutrition company on Person Street, but there are so many business models to choose from. Help me weigh the pros and cons of being a non-profit in Raleigh."

Selena realizes that, for all the weekends pulling weeds on the farm, she knows quite a bit about starting a non-profit organization. She talks with the farm's owner and saw a presentation about business models at a Raleigh start-up conference. She overhears the banter between two men debating the differences between opening a 401(c)3 foundation and a for-profit business in the Person Street "business district." Excited to help and share her perspective, she quickly mixes the soy cream into her coffee and strolls over to the the table.



Open Mic is a contextualized design artifact, repurposed to promote difference by inspiring intentionally chance conversations. Employing the familiar, a sign people traditionally take to their tables at restaurants as a wayfinding tool for service staff becomes a new political marker.

1. JAHN, 2012, PG.14

The object's function expands to help people delineate a territorial space for civic conversation. According to David Rose's receptivity gradient, people who hold an opinion about a particular issue are prepared for deliberation. Deliberation produces an "agonistic" environment, where conflict arises from a contested conversation of differences.<sup>1</sup> However, this conflict is constructive; it serves as a way for civic participants to negotiate meaning when defining the most salient arguments of an issue.

*“The entire activity from the stage of realization of a need to change to translating the image of the future system into reality is termed design.”*

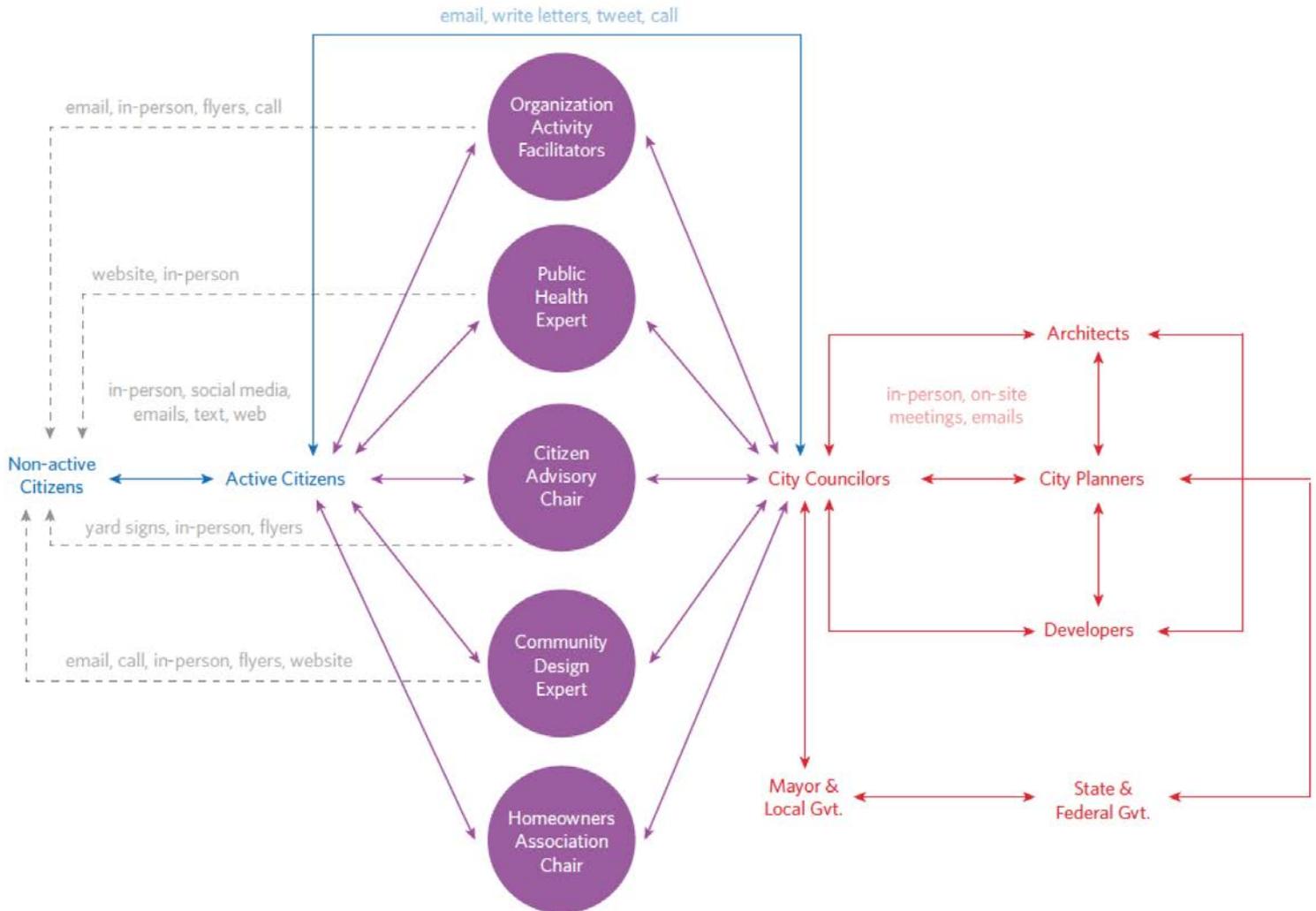
—SOMESH K. MATHUR IN BELA BANATHY, 1978, PG.12



# appendices

appendix a

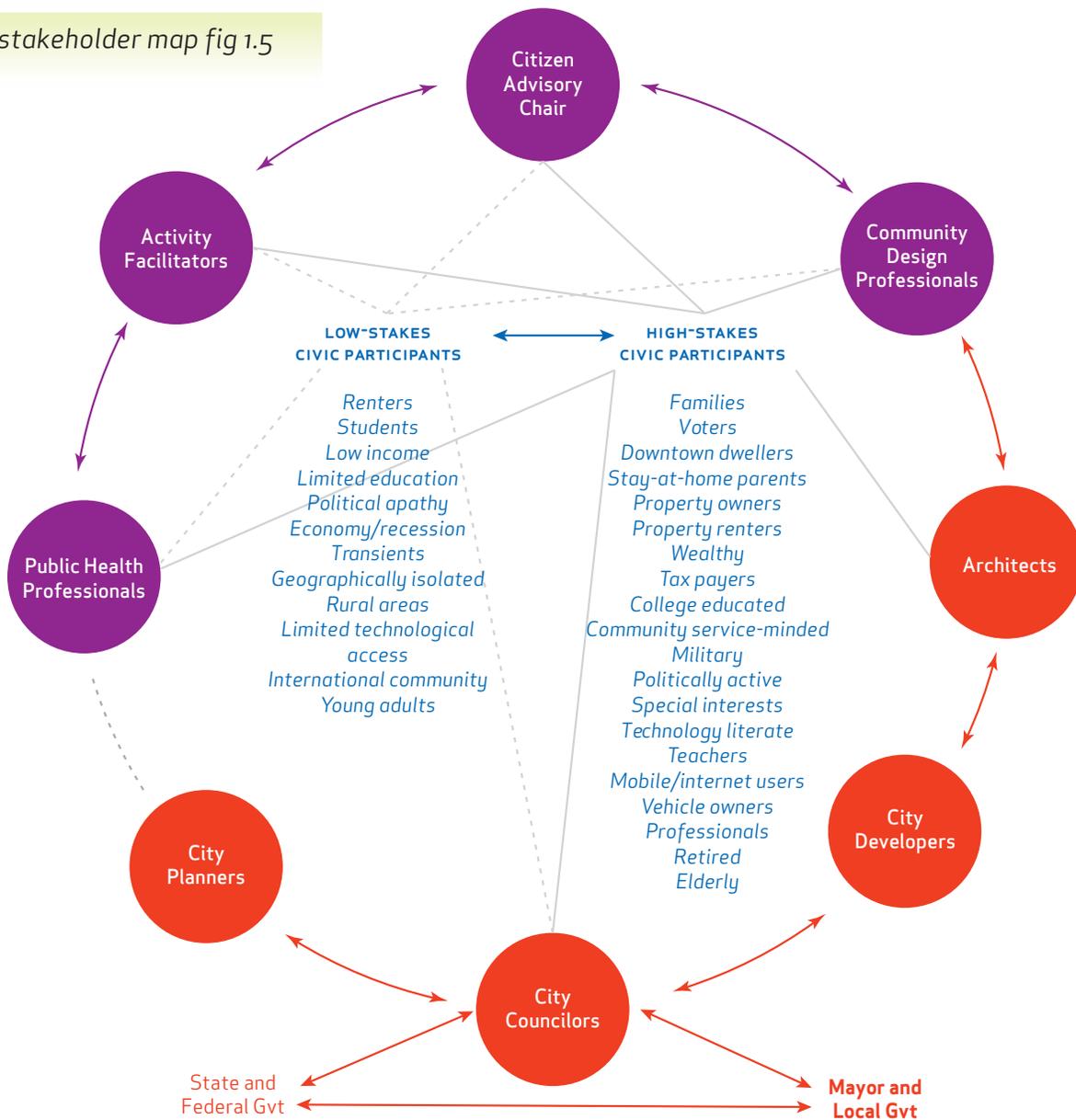
stakeholder map fig 1.4



First impressions and insights COMMUNICATION STAKEHOLDER MAP V.1

Locally active citizens often find out about opportunities for civic participation through non-profit and educational institutions, homeowners associations and citizen advisory councils. Currently, organization representatives and experts communicate with citizens through several disconnected mediums. The lack of networked physical and digital technologies creates inconsistent messages and technical difficulties when citizens have questions or ideas to share. Additionally, complications from loosely-related modes of communication become exacerbated when intermediaries attempt to talk to neighbors remotely or for the first time. Finding a way to sustain a dialogue with citizens is a crucial challenge faced by representatives who speak on behalf of citizens and collect important civic data.

stakeholder map fig 1.5



**Revised considerations** COMMUNICATION STAKEHOLDER MAP V.2

After an interview with Erin White, an architect and faculty at NC State University, it became clear that messy communication channels for civic engagement create a multitude of opportunities for civic participation.<sup>1</sup> The interchanging web of citizens, intermediaries and city officials creates a stronger and resilient network. When low-stakes citizens, those who are less impacted by decisions and outcomes, hear and know more about local issues, it is often because they have heard about them through a cacophony of redundant communication channels. In addition, high-stakes citizens, those who are directly affected by the issues, are more likely to act on or advocate for an issue when their concerns are reaffirmed by communities across many social outlets.

1. WHITE, PERSONAL INTERVIEW, MARCH 28, 2013

ACTIVITIES



1. A citizen selects the Catch-Up mode from the home screen of the mobile application.



2. The citizen taps to highlight issues they care about, such health or the environment. Local issues from the city and other citizens load, and the citizen elects certain topics they want to become more involved in.



3. The citizen selects the Food desert audit and can quickly flip through accordian-fold panels that offer information and additional links about local food deserts. Someone new to civic participation may initially use the app as a Clif Notes to get a sense for current city issues.

## appendix b

Catch-Up is a mobile application that gives citizens who are interested in following the progress of local issues an “on-the-go” communication channel to discover opportunities to get involved with their community.

**STAGE:** READY TO KNOW AND LEARN

**SERVICE:** SUBSCRIPTION SERVICE, ACQUIRING KNOWLEDGE AND CRITICAL THINKING

**ACTION:** READING AND SEARCHING FOR INFORMATION

**OPPORTUNITY:** LEARNING NEW DEFINITIONS, BECOMING AWARE OF LOCAL ISSUES

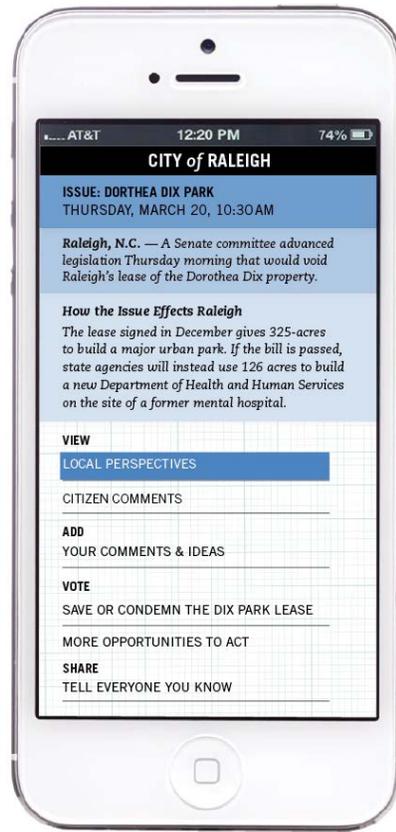
### DESCRIPTION

For people who have never participated in any civic activities outside of voting or watching the news, Catch-Up focuses on quick, “bullet-point” style updates to help people become familiar with new issues and unfamiliar terms, like food desert. Users can select the types of local issues they want to know more about. After highlighting their preferences, they select posts from a listing of city-level, community-level and neighbor-generated stories. As citizens become more engaged in Catch-Up, the platform also allows them to generate and post events news and occasions they want to share with their community.

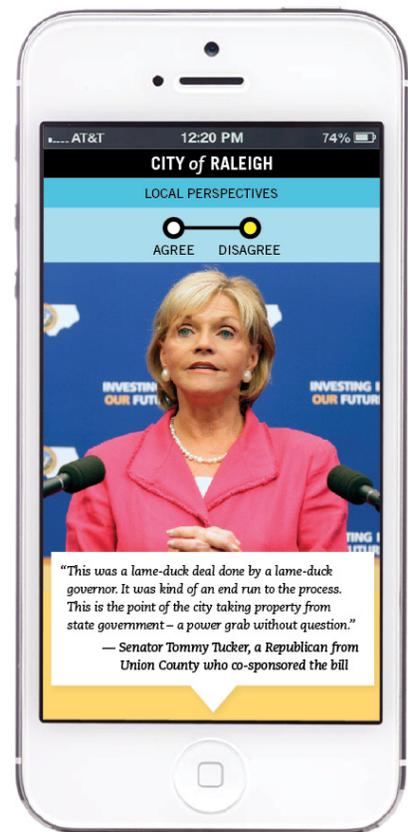
ACTIVITIES



1. A citizen receives a notification from their phone that a new issue has emerged.



2. The citizen taps to read about the issue and chooses to test his or her beliefs against the media to form a position about the issue.



3. The citizen scrolls through a 60-second series of quotes, opting to “agree” or “disagree” with the quote in order to compare and contrast perspectives on the issue.

When the citizen finishes the activity, he or she casts their vote or opinion on the matter for the city to see. The issue application completely dissolves until another issue emerges.

## appendix c

Cast is a mobile application that poses a single issue and asks citizens to make a split decision about sound bites generated from a variety of Raleigh media outlets. These interactions examine how networked individuals might momentarily engage in civic issues while killing time.

**STAGE:** READY TO HOLD AN OPINION

**SERVICE:** NEWS AND DECISION MAKING PLATFORM

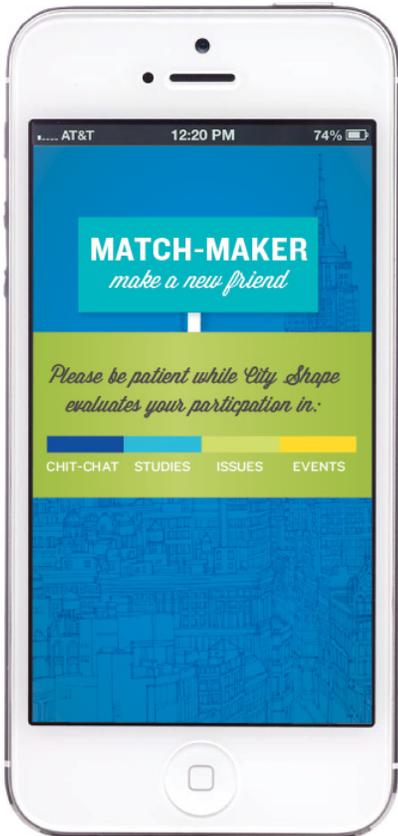
**ACTION:** ACQUIRING LANGUAGE, REASONING, VOTING

**OPPORTUNITY:** COST-BENEFIT RATIO, COMPARING PERSPECTIVES, CLARIFYING ISSUE POSITION

### DESCRIPTION

According to David Rose's receptivity gradient, people who hold an opinion about a particular issue are prepared for deliberation. After scrolling through a short series of quotes from a variety of issue stakeholders, citizens choose to agree or disagree with the statements. Their responses are visualized at the end of the issue, and they are asked to cast a vote that represents how they would act on the issue if they were the final decision maker.

ACTIVITIES



1. A citizen opens the Match-Maker application and it automatically syncs the citizen's civic participation profile: conversations, studies, issues and events the person has recently engaged in.
2. Once the sync finishes, the citizen can swipe open a public portal from which they can "dig" for new issues, familiarize themselves with local leaders and learn who is involved in what locally.
3. During the "dig," a citizen can select and analyze many "connectivity cubes" which appear on the map where other citizens previously placed them. Each cube is a single individual's events, networks, stories and voting histories, for example, they have chosen to make public to the community.

## appendix d

Match-Maker is a mobile application that asks active citizens to make connections between the people and the issues they follow in the community. This investigation explores how citizens might search to a digital database to discover civic friends and “dig deep” to see many sides of an issue.

**STAGE:** READY TO LEARN, FEEDBACK LOOP, CROWDSOURCING

**SERVICE:** SOCIAL SHARING SOFTWARE,

**ACTION:** CO-INITIATING COLLECTIVE ACTION, MAKING CONNECTIONS, SEARCHING FOR SENTIMENTS

**OPPORTUNITY:** DISCOVER NETWORKS, BRIDGING AND BONDING SOCIAL CAPITAL

### DESCRIPTION

A dynamic search engine offers them a range of profiles to view based on previous civic activity, and suggests important stakeholders to contact. The power of a civic social searching tool could offer citizens a way to reach people who deeply care about their issues and ideas. Aggregating people, value positions and issue histories in a dynamic information visualization creates transparency between local government officials and citizens looking to form collective action groups. This transparency allows citizens to easily access public open data about local government employees and everyday activists. They can read and learn more about who does what, connect with policymakers, and share issue information with other neighbors through social networking.

### SCENARIO: IN-CONTEXT USE

Miles is a computer programmer for a tech company outside the Beltline in Raleigh. He subscribes to the News and Observer and participates in design charettes organized by and the Urban Design Center. He’s an active citizen who wants to reach out to his neighbors and city officials about his interest in starting a front yard gardening program where he lives. At work, he scrolls through his “My Raleigh Subscriptions” and finds a tweet about the Match-Maker application. He downloads the app, which syncs with the City Shape platform and his social media accounts. The application software analyzes issues he cares about, events he attends, studies he participates in, and focus groups he contributes to frequently. A geometric visualization shows him a representative sampling of people that he might be interested in reaching out to, based on his previous civic participation. The visualizations are user profiles of other match-makers, who are looking to organize civic meetings as start up conversations. The scaling mode shows Miles results based on the strongest matches to his activity levels, interests and location nearest to home. After “diving deep” into the visualization, Miles decides to tap on City Councilor Thomas Crowder’s profile. A map appears, giving him contact information, the ability to send messages and a set of icons that track Councilor Crowder’s civic history. Miles selects the environmental issues, reviewing Thomas Crowder’s different voting positions by rolling across the facets of a cube for quick displays of information.



## appendix e

Conversation Catcher asks diners at a restaurant to record their civic discussions on the table. The investigation examines physical and digital archives of the same civic stage to show recognizable issues where patterns in ideas and discussion might be repeated or recycled over time.

**STAGE:** READY TO HOLD AN OPINION

**SERVICE:** DIGITAL TABLE CONVERSATION DOCUMENTATION, PEN AND NAPKIN TOOLKIT

**ACTION:** IDENTIFYING PATTERNS OF ISSUE CONCERN BETWEEN STRANGERS THROUGH ORAL HISTORY

**OPPORTUNITY:** WORD-OF-MOUTH, SOCIAL SHARING AMONG STRANGERS ACROSS TIME

### DESCRIPTION

Conversation catcher is an idea where the experiences of many people can be brought to the table for two. Whether a large sheet of butcher paper and colorful markers or a digital table top surface, Conversation Catcher examines accessibility across time. The platform is an archiving tool that remains in one place. The value of its station is the evolution of new people who sit there and contribute new ideas. The image (left) aims to create an opportunity to exchange many people's socio-political discussions simultaneously.

### ACTIVITIES

1. A couple of friends sit at a table and talk about current issues and events in the news. They are told by the cashier the table, when activated, receives and emits text by recognizing their voices.
2. Not only can their conversation be documented on the table while they occupy the seats, but they also can see fragments from other people's conversations that match the pattern of topics or content they discuss.
3. While the friends are intrigued, they want something with more creative control and privacy. Instead, they use a large sheet of butcher paper, fit to the edges of the table, to brainstorm. They jot down notes the next diners who sit at their table might see.

*“At the heart of the matter is the phenomenon of the human communicator, gliding and shifting between physical and media environments. It is this sense of contraction and expansion that permeates the relationship of person and place when a medium of communication is interposed.”*

—SUSAN DRUCKER AND GARY GUMPERT, 2011, PG.56



# literature review



## literature review

### INTRODUCTION AND JUSTIFICATION

In the Summer of 2102, Mitchell Silver, President of the American Planning Association, told a story to a group of designers and public health officials about a grandmother he met in Raleigh, North Carolina. She was an elderly woman in a wheelchair who used public transit to get to the senior citizen center in her neighborhood. Her concern dealt with the issue of accessibility. Because no crosswalk existed to connect her to the senior center just across the street from her home, she traveled twice as long by bus to get her where she wanted to go. Her lived experience exemplified an everyday, hyper-local issue about city infrastructure, health and the senior citizen community. Collaboration between stakeholders in an issue—from health experts to a grandmother making her way to a senior center—is crucial to progress that is socially equitable and improves the wellness of the collective society. Creating a civic stage is one way to unite the resources, tools and social networks in places for meaningful deliberation of issues.

The pluralistic perspective that communities collectively hold about where they live comes from the clarity and volume of their civic engagement. A community's opinion of how to preserve their history while considering new development changes among individual perspectives and the quantity of people engaged and the quality of what they say. To truly understand the meaning and significance of a place, local governments must consider residents as crucial players in the civic design process because they know the nuances of their community best—from the character of the community to the cracks in the sidewalks.

### RELEVANT LITERATURE

Through the search for literature, I discovered patterns in recurring terminology that helped me to refine my searches and make connections between texts. Examples include acronyms like ICT (information communication technologies) that offered specific language for web design inquiries. Reviewing abstracts quickly allowed me to view domains (i.e. public administration, political science, environmental studies, geography, and public environmental occupational health) where new stakeholders could be discovered. Additionally, I learned that civic literacy, epistemic inquiry and interest-based identification are critical behavioral considerations in developing criteria for designing a civic stage.

Tangential topics related to designing for civic engagement that I do not discuss in this review include resource management, urban crisis preparedness and participatory budgeting.

### KEYWORDS

Social networking  
Empowerment  
Feedback  
Civic participation  
Deliberation  
Dialogue  
Debate

The following searches yielded the most relevant literature:  
civic engagement AND local government AND decisions  
civic engagement AND web design AND urban planning  
health AND social networking AND civic participation

### LIMITATIONS + POTENTIAL BIASES

The scope of this literature review in that its emphasis is primarily on citizen behaviors and interactions. For example, it fails to focus on how the user experience design of a platform might be different for public experts or city officials. The review narrowly discusses design methods that might enhance participatory modes of engagement online and skims visualization strategies for making complex information accessible for an everyday audience.



## literature review

Sanford, S. (2007). *Civic Life in the Information Age, Political Technology and Generation X*. New York, NY: St. Martin's Press.

Sanford's research focuses on contemporary civic participation. She discusses technology's role in the seismic generational shift in civic behavior. She posits, like Putnam before her, the definitions and rules of engagement are always changing. Her analysis of the current state of citizenship contrasts the instantaneous interactions of social media platforms with the perhaps soon to be bygone era of the "civic institution." One question she poses looks at the replacement of places for people to connect in person with the spontaneous online mobilization. My assertion is that technology may not replace the sites for civic engagement, but instead be hybridized with social media interactivity to form new participation arenas. My interest is in making the online experiences of civic engagement richer and more meaningful by connecting them to "just-in-time," face-to-face activities and places.

Shea, A. (2012). *Designing for Social Change: Strategies for Community-Based Graphic Design*. New York, NY: Princeton Architectural Press.

Shea addresses the ideas of social innovation and human-centered design through community design case studies. His examples help explain the meaning of often-used, but harder to define concepts such as social change and social impact, as they relate to designers. He proposes strategies specific to graphic design, recognizing the initial knowledge and experience gaps designers face when working with communities as opposed to clients. Related to my work, Shea claims the projects designed *with* community members strengthen their networks and motivate collaborations with designers in the future (Shea, 2012, pg.9). Because the success of communities can build through networked activity, my studies exercise social networking principles, such as crowdsourcing and co-creation, as strategies for online and offline civic engagement.

Rainie, L., Wellman, B. (2012). *Networked: The New Social Operating System*. Cambridge, MA: MIT Press.

Rainie and Wellman's research of social networks and ICTs argues in favor of the "networked individual" (2012, pg. 7). Because technology expands access to friends, family and co-workers, unprecedented communication occurs among people in networks. The rapid, online social exchange rate calls into question the once required necessity for in-person interaction. A closer examination of wall posts, blogs and tweets, for example, illustrates the boundless entrances and exits for social participation. My study proposes political places must exist beyond the in and out, stop and go, back and forth ways and means of social media conversation. A civic stage is proposed as a space, unrestricted by character limits and threads, for more naturally paced political conversation. Because political engagement involves working as opposed to consuming or browsing, the speed of conversation must be harmonious to the rate at which people want to express ideas and listen to others. Platforms promoting civic engagement must support longer pauses in social traffic for contemplation, clarification and deliberation of issues.

Simmons W. M., Zoetewey, W. M. (2012). "Productive Usability: Fostering civic engagement and creating more useful online spaces for public deliberation. *Technical Communication Quarterly*," 21:3, 251-276.

Simmons and Zoetewey (2012) state "technical literacy, productive inquiry, place and multiple user identities" as benchmarks for examining how a citizen is being supported by the site. For civic sites, the focus moves from functionality to Mirel's (2004) concept of usefulness, "the ability to do better work, not just use an application more easily," (Simmons and Zoetewey, 2012). Citizens need a space to learn and use new information for creating new collective knowledge.



## literature review

the perceptions of place. Cities are a nexus between communication channels and diverse spaces and communities. By 2050, three-quarters of the world population is forecasted to live in the city (Drucker & Gumpert, 2011, p.49). The media of cities is a complex network of political, health, legal, organizational, rhetorical, visual, etc. communication that toggles between the physical and digital, local and global. In this social operating system, emerging communication research explores how people might traverse on the “net-local public space;” the physical space is mediated by digital technologies as an extension (as opposed to an interruption) of the purview of the local landscape (Drucker & Gumpert, 2011, p. 51). This means that there are affordances within the technology to augment one’s physical space and facilitate new behaviors in familiar settings.

One example is the ability to geocache physical things online. Geocaching allows people to hide tangible objects and mark their GPS coordinates on a digital map. The scavenger hunt-quality to this gaming interaction has involved groups going around cities to find geotagged items through the navigation of digital information (de Souza e Silva & Sutko, pg. 24). These informal collective action groups are engaged in playful quests. However, the value of a socially scaffolded event that collapses digital and physical environments together rests in the production of local knowledge through conversation and identification. Local knowledge is the shared understanding of spaces, customs or politics by a group of people with shared interests in a give space (Geertz, in Mandarano, 1983). A family going hiking in the mountains may discover an unmarked path on the trail and discuss with neighbors how to get to the an idyllic view of the city. The knowledge is socially constructed, specific to a place and creates strong ties in a shared world between local community members.

### **PRECEDENTS (FOR MORE EXAMPLES, REFER TO PRECEDENTS SECTION)**

Ibrattleboro.com is a community-hosted civic site where residents in Brattleboro, Vermont discuss current local planning issues and policies through forums, storytelling and comment boards. The design of the site uses familiar visual language like that of Craigslist and maintains a homegrown vernacular. The hierarchy could be better structured and the use of images and rich media could enhance the user experience. The main highlight of this civic site is that citizens have generated testimonials and resident crowd-sourced surveys as powerful lobbying tools to influence city developers to preserve the area’s woodlands and to critically examine whether city-budgeted funds should be used to renovate a small local park.

### **CRITICAL FEEDBACK AND FURTHER RESEARCH**

In existing precedents and research for designing an online space for civic engagement, none of the authors addressed the potential for how the a virtual place would also be a catalyst for activity in physical space. In the digital age of citizen participation, e-democracy not only fosters the exchange of power between government officials and citizens but also can result “in the formation of social capital, which is deemed a key variable in facilitating collective action” offline (Mandarano, 2011). According to French philosopher and sociologist Pierre Bordieau, social capital refers to “individual or collective, conscious or unconscious networks aimed at establishing or reproducing social relationships that are directly usable in the short term or long term,” which are fostered through subjective feelings such as “kinship, respect and gratitude,” (Mandarano, 2011). Moreover, social capital is key to the health of communities because it provides the cooperative foundation for an exchange of resources and the belief in the abilities of a group to get things done.



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