

RESHAPING THE POLITICAL CONVERSATION IN AUSTIN, TEXAS:  
DESIGNING A COLLABORATIVE SYSTEM OF COMMUNICATION  
BETWEEN CITIZEN AND GOVERNMENT

by

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## DEDICATION

To write a proper dedication, fully expressing my immense gratitude to the countless number of family, friends, and colleagues who have encouraged and inspired me in this journey, could fill volumes, and even then would not be enough. There simply aren't words to express how truly grateful I am for every second they have allowed me to share with them, their unwavering support through some devastating personal losses, and the absolute thrill of the most amazing shared experiences I will carry with me for the rest of my life. I will fall incredibly short of acknowledging all of those to whom I owe appreciation in this dedication, but do so with the full intent of expressing my sincerest gratitude in-person.

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## LIST OF ABBREVIATIONS

10-1 – Citizens Districting plan for geographic representation

2013CoACS – 2013 City of Austin Communication Survey

ANC – Austin Neighborhood Council

BtN – By the Numbers

C/r – Contacts/resources

CD – Communication Design

CoA – City of Austin

CoA Strategy Report – City of Austin Website Redesign and Social Media Strategy Report

CoAIS – City of Austin Interaction survey

CSoC – Collaborative System of Communication

ICT – Information and Communication Technology

PIAL–Pew Internet and American Life Project

PSEC – Public Service Education Campaign

PSEC-I – Public Service Education Campaign Installation

RSS – Really Simple Syndication

SCCA – Smarter Cities Challenge of Austin

SF – Social Feed

SoH – Show of Hands

SM – Social Media

SMA – Social Media Archive

TED – Technology, Education, and Design

VA – Virtual Assembly

# CHAPTER I

## Introduction

In November 2014, the City of Austin (CoA), Texas, will begin to implement a new city council election system known as 10-1. Under this system, ten City Council members will be elected to serve for ten districts of Austin, each geographically representative of ~10% of the total population, with the mayor elected by Austin citizens at-large. A similar example for this type of administration is in place in San Antonio, Texas, the 7<sup>th</sup> largest city in the United States, four places above Austin's position in 11<sup>th</sup>, and Austin's neighbor to the south (U.S. Census Bureau, 2013). Also known as a council-manager form of government, this geographically based system is described as "the most popular structure of government organization in the United States" (City of San Antonio, 2013, para. 1). Geographic representation will drastically reshape the political conversation in Austin for both the citizens and representatives by distributing representation equitably among all areas of Austin. Each of the newly elected City Council members will encounter responsibilities, organizational structure, and community relationships quite different from those of any Austin City Council in recent history (Raggi, 2000).

The scope and structure of communication between citizen and representative will change with 10-1, as each member will be responsible for direct representation of one particular district of Austin. The current system asks the group of seven Council members to communicate with the citizens of Austin as a whole. Based on the most current U.S. Census Bureau estimates (2013), the 10-1 system would give each of the ten City Council members a separate constituency of approximately 84,259 people, as opposed to the current system,

under which the seven-member Council jointly serves a constituency of 842,592 people. Addressing the needs of citizens at the district-level will require the evaluation and formulation of new communication solutions, as each of the ten districts will require unique attention.

This paper puts forth the findings of the City of Austin Interaction survey (CoAIS), conducted to evaluate citizens' communication needs with Austin, and proposes a Collaborative System of Communication (CSoC) design concept based on the findings of the CoAIS, congruent with the 10-1 system. The CSoC concept is intended to assist citizens in all of Austin's future districts with communication and gaining said unique attention effectively, as well as to engage citizens in a larger scope of interaction with the entirety of Austin. Details of the design deliverables for the proposed CSoC include the logo and online dashboard interface. Further detail is shown in this proposal of a physical installation for public exhibition, as part of a proposed public service education campaign (PSEC), as well as the Show of Hands (SoH) component of the CSoC, intended for ongoing sourcing of public opinion.

### **Statement of problem**

Many current residents of the CoA are unaware of or unfamiliar with the 10-1 system and its implications because Austin has maintained a completely at-large city council election process since 1909 (Raggi, 2000). As Selby (2012) explains, Austin is currently the largest U.S. city without geographic representation on its city council. Once 10-1 is implemented, Austin will face challenges in maximizing the efficiency of the transition on such a large scale and enhancing the public benefit of the new system. These challenges are compounded by statistics indicating a sustained population growth in Austin, garnering it the top place on the

Forbes list of America's fastest growing cities for the past three years (Brennan, 2013, para. 3). The CoA will need to rely heavily on its communication processes with citizens in the ten districts, in some instances restructuring and adapting to the unique needs of each, in order to educate the public on the affects and benefits of 10-1.

New and long-term residents of Austin alike will experience a major change in the local political atmosphere, as 10-1 will replace a nearly 104-year old system (Raggi, 2000, pp. 3-4). The change in structure, organization, and processes will have a direct impact on the subsequent election outcomes. Any citizen casting a vote for City Council during the first elections of 10-1 will have the unique opportunity to participate in shaping Austin's local government from the ground up. As the findings of the IBM Corporation's (2010a) Smarter Cities Challenge of Austin (SCCA) summary reveals, this is an advantageous opportunity for the CoA to revitalize the civic participation of residents, particularly on the East side of Austin, who "do not participate in government at the same rate [as those of the West side] and frequently feel disengaged from the greater Austin community" (p. 1). The full report of the IBM Corporation's (2010b) SCCA shows "members of both the Hispanic and African American communities [express] dissatisfaction with the current form of electoral representation on the city council, by which members are elected at large" (p. 12). For Austin voters, 10-1 will equalize the opportunity for citizen engagement across each of the ten districts. Lack of a communication initiative to familiarize citizens on geographic representation and the new system's implications leaves portions of constituencies vulnerable to being uninformed, underutilizing the function of 10-1, and consequently, being inaccurately represented in City Hall. An aspect of the CSoC proposal is the initiation of a comprehensive PSEC that would employ the most effective of the CoA communicative

channels to promote constituents' understanding of the forthcoming system, as well as promote the CSoC itself. Where the PSEC would be the initial flood of multimedia information across all channels and technologies, attempting to bring citizens up to the same level of understanding, the CSoC would serve to continue the flow of information into the future.

Contemporary technologies have been explored and implemented in Austin to enhance communication avenues between government and citizen, but in relation to the connection between residents and City Council, function for the entire population to the Council body as one collective terminal. 10-1 will institute ten distinct points of access to the City Council for Austinites, each dedicated to a different district of the population, thereby increasing the capability of Council Members and residents in each district to connect more closely. These district divisions will parse the volume of communication traffic competing for governmental attention by ~90%, both in total number of residents involved as well as topics being addressed, as the focus for each becomes ~1/10<sup>th</sup> of the size and more localized. These points suggest a more manageable municipal communication atmosphere between Austin citizens and their City Council representatives, as well as among the residents within each district, but the extent to which 10-1 will show a discernable, statistical impact is limited to the results of local elections. The CSoC concept attempts to provide citizens an opportunity within the 10-1 system to collectively voice their opinions with their elected officials in a manner more frequent than that of council member elections. An assessment of citizens' use of contemporary technologies and interaction with the CoA is necessary in identifying opportunities for a possible CSoC with the City Council so that it can adapt to the unique needs of each of the future districts.

Under the current at-large system, citizens' options for communicating directly with City Council members include postal mail, in-person meetings, office telephone calls, the seven Members' active Twitter and/or Facebook accounts, and emails to the Members as a group or individually, via the CoA official website (City of Austin, n.d.). The CoA official website encompasses an extensive amount of city-related content, including the city's social media archive (SMA), but primarily functions as a central hub of one-way, static information sharing. In order to interact with others through official city channels, users have to follow links on the city website's main page under "Connect with the City" to separate external sources like Austin's 3<sup>rd</sup> party social media (SM) properties, the SpeakUp Austin online community engagement portal, and Austin's 3-1-1 information center (City of Austin, n.d.), which are each effectively disconnected from one another. The CSoC design concept is the result of assessing how each of these and other channels can be interconnected in one place for information and public interaction.

Austin's 3<sup>rd</sup> party SM properties of Facebook, Twitter, YouTube, Pinterest, Flickr, and LinkedIn are each uniquely relevant vehicles in their delivery of information, and do so interactively, but primarily only with other users subscribed to their respective networks. As part of the City of Austin Social Media Guidelines (2011), comments and media files posted on CoA SM sites are required to be archived and stored, making it possible for users to search the SMA by date range, keyword, or SM platform (City Manager's Office, & Communications and Public Information Office, 2011). Each of the CoA SM examples of communication technology serve valuable functions in their respective fashions, but are not fully integrated with each other in any one location to create a unified source of real-time city-related conversation. The CSoC design concept provides a solution to integrate each of

the CoA feeds of each of these platforms, thereby expanding the breadth of one large network of social communication across all CoA SM subscribers.

SpeakUp Austin is conducive to cultivating citizen input, as it allows users to participate in and propose projects, online discussions, surveys, and vote on ideas, in a forum with City moderated feedback. However, SpeakUp Austin is an externally hosted website and the activity it generates remains primarily detached from the larger city discourse, though there is the option to connect to the portal's updates via a user's Facebook account. Linking this collection of knowledge and citizen engagement to the suggested networked SM properties even further deepens the pool of resources.

The Austin 3-1-1 information center is available by telephone or email for City services or information, and all correspondence records are legally considered public information. Therefore, 3-1-1 conducts a myriad of problem solving scenarios for those who utilize the service, and the solutions or results are recorded and can be referenced. As a resource, the 3-1-1 databases constitute a valuable source of information, but remain a one-on-one outlet for Austin information.

The Chief Communications Director for the City of Austin (CoA), Douglas Matthews, recognized "SpeakUpAustin, [the city's] SM properties, in-person facilitations, and a number of pilot technologies including Textizen, CoverItLive, Poll Everywhere, and Telephone Town Hall" as current sources for inviting citizen opinion (D. Matthews, personal communication, February 26, 2013). The multiple outlets mentioned by Matthews exemplify the CoA's assimilation of modern technologies into its portfolio of communication avenues, but does not necessarily address the possible comingling of each into some form of a unified conversation for citizens. Additionally, if citizens in certain sectors of the population

have access to only particular streams of communication, and those particular streams do not collaborate with the others in use, then those citizens are innately limited from portions of the larger community dialogue. During a Technology, Education, and Design (TED) Talk presentation Eli Pariser (2011), the board president of MoveOn.org and author of *The Filter Bubble*, contends “you couldn’t have a functioning democracy if citizens didn’t get a good flow of information.” As Colin Low (1997) of Hewlett Packard Laboratories points out, “there is a paradox in the fact that too many methods of communication and too many disjoint communication services make communication more difficult.” (p. 1).

Integrating each of the various CoA communication technologies available into a singular hub of information streams, allowing for users to collaborate information from a dynamic range of input, and providing the storage of these communications in the CoA databases creates a synergetic level of accessibility to the City that the individual media components cannot accomplish alone. It is to this point that this paper proposes a CSoC for the City of Austin, with emphasis on the collaboration aspect, in connecting individuals to work through and communicate ideas. Because the use of various streams of communication are different per each citizen, this system will seek to assimilate as many outlets of communication as possible into a singular system, in the attempt to create a more inclusive arena for collaborating City discussions.

### **Purpose of study**

This study attempts to solicit and evaluate the opinions of Austin citizens on their communication needs and accessibility with their government, identify opportunities for satisfying those needs and enhancing accessibility via Communication Design (CD), and propose a system of communication to be introduced in conjunction with the City’s historic

change to the 10-1 election system and geographic representation. The results of the CoAIS and research of this study suggested the need for a communication initiative to familiarize citizens on the changes involved with 10-1, and informed the design decisions made for the CSoC, intended to serve as a community source for unifying city-related communication streams. In addition to the CSoC, this paper proposes the use of a comprehensive public service education campaign (PSEC), utilizing the methods of communication the CoA has at its disposal, to prepare Austinites for the changes involved with 10-1 and cultivate stronger citizen-government and citizen-citizen connections into the future

The *2010 City of Austin Website Redesign and Social Media Strategy Report* (CoA Strategy Report) “provide[d] the City of Austin a plan for social media with strategies that focus[ed] on the usage of third-party (off platform) social media tools for communication with CoA citizens and internal audiences” (SteelSMBology, 2010, p. 3). After conducting a peer review of other governments’ social media integrations, the same report identified that none in the “peer set is making use of a central ‘lifestream,’ or fully aggregated feed of all social media activities into a centralized location” (Ibid., p. 12). The concept of an aggregated feed is highlighted by the CoA Strategy Report as an opportunity for the CoA’s communication efficiency, in such ways as making a singular broadcast across multiple platforms possible, ensuring the consistency of broadcasted information, and increasing the accessibility of information to the citizen-user in numerous formats (SteelSMBology, 2010, pp. 16-22).

Although the CoA Strategy Report was produced over two and a half years prior to Austin citizens approving 10-1, the suggestions it makes for an aggregated feed of social media outlets and communication efficiency merit exploration with Austin’s pending change

to geographic representation. Where the CoA Strategy Report approaches a communication vision from the perspective of a governing body to its internal audiences and external citizens, the CSoC proposes a solution from the perspective of each district as a civic body, communicating internally with neighbors, externally with other districts and the CoA government. The 10-1 system will provide the opportunity for magnifying the communications of smaller segments of the Austin population with elected City Council representatives, aggregating each into the larger political conversation at City Hall. The CSoC proposed by this study attempts to compliment the future communication opportunity in such a way that it can adapt to the specific communication needs of each of the ten districts, help to strengthen district consensus, and incorporate each into a city-wide dialogue.

### **Research questions**

To determine the current communication climate in Austin and identify potential opportunities for the application of Communication Design solutions, this study addresses the following research questions:

RQ1: What effects will 10-1 and geographic representation have on the communication dynamic between Austin residents and their government?

RQ2: What are the views of Austin citizens on the current conditions of communication and interaction with their City Council?

RQ3: How can the Internet and other contemporary communication technologies best serve the communication needs of Austin residents?

RQ4: What kind of design system can help those underserved in the Austin political process?

## Methods

To answer the research questions, this exploratory research project uses a combination of survey and interpretive research designs, with documentation, interviews, and a mixed-methods approach to collecting data. The Journal of Mixed Methods Research has defined mixed-methods research as “research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry” (Tashakkori & Creswell, 2007, p. 4). The quantitative findings of this study serve to add more precision and clarity to the hermeneutic analysis of the qualitative data, “where the researcher tries to ‘interpret’ the subjective meaning of a given text within its socio-historic context” (Bhattacharjee, 2012, p. 116).

Specific methods for collecting data included:

- Face-to-face interviews were conducted with Douglas Matthews, the Chief Communications Director for the CoA, and Larry Schooler, the CoA Community Engagement Manager, to determine how the city currently engages its citizenry, and what plans may be in place for the move to 10-1.
- The Internet-based City of Austin Interaction survey (CoAIS) will be conducted of a population of current Austin residents, of 18 years or older, to gauge their views on their interaction with the CoA and its accessibility, with the respondents remaining anonymous.
- The CoAIS was created as a Google Doc and hosted on Google Drive, accessible by a hyperlink. The author of this study will administer the hyperlink in two phases via personal email, using a snowball sampling method. This involves an initial pool of

- respondents identified by the author, with those respondents sharing the survey with others who match the survey criteria.
- The first phase of the CoAIS was administered to a pool of respondents from the author’s acquaintances. The second phase of the CoAIS was administered to individuals belonging to groups and organizations identified to be socially active in Austin, Texas.
  - Analysis of the officially commissioned 2013 City of Austin Communications Survey (2013CoACS) was made to determine citizens’ perspectives on communication with their government, as well as determine if the administration of the survey by telephone reveals any noticeable differences in the participant outcomes.

### **Significance of the study**

This study is significant because it generates data to support the need for the execution of a comprehensive public service education campaign (PSEC), prior to Austin transitioning into a new election system, and reveals the unique opportunity for a collaborative system of communication (CSoC) to serve as a benefit for the districts and their elected representatives concurrently. Austin will lose the title of the largest U.S. city without any geographic representation following November 2014, however, in expediting the adaptation of the 10-1 election system and amplifying its success, will stand to lead in a different category. As KXAN news reporter Calily Bien (2012) states, 10-1 can potentially set a unique example for other Lone Star State communities, as Austin is the first city in Texas to have its district lines drawn by an independent citizens redistricting commission. The possibility of setting a positive example is dependent on the success of the system in Austin, which in turn relies on a properly informed community to embrace it.

Leading up to the elections for the first ten Council members under this new system, the proposed comprehensive PSEC will involve utilizing the breadth of the City of Austin's (CoA) communication portfolio in reaching citizens across all media, with a clear and consistent message about 10-1, and what it will mean for the City. The CSoC component of this proposal will be introduced to remain an established fixture of 10-1, functioning to cultivate ideas and understanding within each of the ten districts, across the citizen population as a whole, and between districts and their respective representatives—via a direct exchange of multiple communication avenues.

## CHAPTER II

### Literature Review

On August 2, 2012, the City Council of Austin, Texas passed and approved an ordinance that called for an election to be held for Proposition 3, which asked voters, “Shall the city charter be amended to provide for the election of council members from ten geographical single-member districts, with the mayor to be elected from the city at-large, and to provide for an independent citizens redistricting commission” (Austin § 2). Proposition 3, commonly referred to as “10-1,” garnered 60.15% of the vote on November 2, 2012 (Martin, 2012), thus solidifying the implementation of a geographically based election system, unseen in Austin since 1909 (Raggi, 2000).

This change will unquestionably reshape the scope and structure of communication avenues for both Austin citizens and government. By increasing the amount of City Council members from 6 + mayor to 10 + mayor, concurrent with disbursing citizen representation across ten districts, with each “[having] reasonably equal population with other districts,” ten unique conversations will be created between citizens of a district and their elected official, and each will be specific to the needs of their relative citizen base. (Austin § 3.1.A.1; Austin § 3.1.A.2; Austin § 3.3.E.1), This effectively reduces the constituency-to-representative proportion from 842,592 citizens per 1 joint City Council, to approximately 84,259 citizens per each 1 of the 10 representatives (Austin § 3.1.A.2; U.S. Census Bureau, 2013). This division will help to compartmentalize citizens’ needs and concerns specific to each of the ten districts by reducing the deluge of initial citizen-to-Council topics by 90% and alleviating the immediate population outreach necessary of representative-to-citizen communications by the

same percentage. The Austin Neighborhoods Council (ANC), a “city wide umbrella organization [created] to support neighborhood interests,” formed in 1973 and coincidentally, uses 10 “sectors” to characterize the larger overall contiguous areas of the City (Austin Neighborhood Council [ANC], n.d.a, p. 1; ANC, n.d.b, p. 2). On November 3<sup>rd</sup>, 2012, as acting ANC President, Steven Aleman submitted a letter to the 2012 Charter Revision Committee of the CoA, on behalf of the members of the ANC, formally endorsing “a 10-0-1 plan” on the grounds that it “reflects [the ANC] belief that [Austin] has grown in size and diversity to the point that the current system no longer can provide adequate and fair representation of all residents” (Aleman, p. 1). Aleman further explained the endorsement, adding, “a 10-0-1 plan combats voter apathy by providing citizens a better opportunity to engage with their elected officials” (Ibid., p. 1).

### **Technological engagement**

In reference to utilizing technology for enhancing the relationship between government and citizen, Lieutenant Governor of California Gavin Newsom states, “It’s not about elites taking charge, controlling the system, and telling us what’s good for us. Through technology, we will learn how to engage millions of people with talent and wisdom to solve our problems” (Newsom & Dickey, 2013, para. 26). At the 2010 International Conference on Management and Service Science, Guo Yanqing discussed the concept of e-government and how “information and communication technology [ICT] applications are promising to enhance the delivery of public goods and services to citizens not only by improving the process and management of government, but also by redefining the traditional concepts of citizenship and democracy” (part I, para. 1).

Yanqing (2010) defines e-government as:

a way for governments to use the most innovative information and communication technologies, particularly web-based Internet applications, to provide citizens and businesses with more convenient access to government information and services, to improve the quality of the services and to provide greater opportunities to participate in democratic institutions and processes. (part II, A, para. 1)

The opportunities for both the citizen-representative and citizen-citizen levels of communication to increase in frequency and accessibility with 10-1, as explained earlier, are technologically magnified in Austin, the city Jack Hambrick names as “the head of the class for digital media usage. This includes social media, smart phones, and the Internet” (Hambrick, p. 1). Contemporary technologies have been explored and implemented in the CoA to enhance communication avenues between government and citizen, but remain limited in effectiveness by both the access of an estimated citizen base of 842,592 to one City Council body and a low level of intercommunication between the different information streams (U.S. Census Bureau, 2013).

A review of the 2013 City of Austin Communication Survey (2013CoACS), commissioned by Austin “to gather input [by telephone] from residents to improve the quality of City communication with the public,” reveals specific communication outlets of the CoA; City newsletter, City website, direct mailing from the City, Group E-Mail from the CoA, Channel 6 (the City's government broadcast station) on television, Channel 6 on the web, City staff, public meetings, CoA website, radio broadcasts on KAZI 88.7 of Council Meetings, the City's Facebook page, the City's Twitter account, the e-mail List Serv "AustinNotes," the Really Simple Syndication (RSS) feeds, the City's YouTube channel, and CoA blogs (ETC Institute, 2013). Exploration of the CoA official website reveals the City's

Pinterest board and Flickr page as two additional social media outlets, as well as Austin 311, online and by telephone, for general City information (Communications and Public Information Office, n.d.; Austin 3-1-1, n.d.). The 2013CoACS, with a total of 405 Austin citizens surveyed by telephone, found 94% of respondents were either somewhat interested, interested, or very interested in “keeping informed about City events and City government” (ETC Institute, 2013, p. 24). Of the same respondent pool, only 23.5% “hear about City news and information first...from an official City of Austin news/communications outlet” (Ibid., p. 29). The disparity between these two figures leads to the conclusion that the majority of citizens surveyed must go through at least one intermediary source for City information. While this isn’t inherently problematic, it does create a situation in which said information is vulnerable to manipulation or biased influence in its delivery. An aspect of the Collaborative System of Communication (CSoC) concept proposed in this paper is to conjoin as many of the previously mentioned communication outlets of the CoA as possible, such that citizens would have a source to trust on for getting the most comprehensive amount of official CoA information.

In a national study, Welch, Hinnant, and Moon (2004) found that “better deployment and integration of applications that engage citizens have indirect positive payoffs for trust in government,” and that “individuals who are more satisfied with e-government and government Web sites also trust the government more” (p.387). The 2013CoACS results showed that only about half (52.9%) of Austinites are at least somewhat satisfied when asked about the City’s “efforts to keep [them] informed about City services, issues, events, and programs” (ETC Institute, 2013, p. 24). The findings of Welch et al. (2004) “support the contention that citizens recognize that government is doing a relatively good job with

transaction and transparency but has not sufficiently addressed interactivity expectations” (p. 387). Kim, Kavanaugh, and Hult (2011) draw the conclusion that “civically and politically interested individuals often use the Internet to facilitate and augment their civic and political participation. At the local level, such people also use the Internet to communicate and share information with fellow members of the local community groups to which they belong” (p.807). The Pew Internet & American Life Project (PIAL) found in 2010 that 74% of the U.S. adult population uses the Internet, and 93% aged 18-29 are Internet users (Lee, 2010). If national trends translate similarly in Austin, then an opportunity to increase the satisfaction and trust levels of government could be realized in the further development of interactive technologies.

Austin currently utilizes many contemporary technological communication avenues for citizen outreach. However, most of these avenues exist in their own respective formats, and only come together to create a singular network of information at the City’s official website. This results in an incredibly high volume of information, with which the City is then challenged to organize into a singular source of reference, and a citizen is challenged to decipher. While a resource of this nature is valuable, a large percentage of the information would become irrelevant to a citizen attempting only to access material or communicate about something in their more immediate local area. Research specialist Aaron Smith (2010) of the Pew Research Center summarized findings of the PIAL by stating that “citizen interactions with government are moving beyond the website. Nearly one third (31%) of online adults use online platforms such as blogs, social networking sites, email, online video, or text messaging to get government information” (p. 2). The consideration of social media technologies for enhancing civic engagement is further defended by Smith (2010) in that

“78% of Internet users agree that [social media] engagement makes government more accessible...while 82% of Internet users...agree that it helps people be more informed about what government is doing” (p. 37). Chief Communications Director for the CoA Douglas Matthews does “anticipate more demand for district-level community engagement and communication involving [the CoA Communications] office.” (D. Matthews, personal communication, October 7, 2013). Matthews, who previously worked in a single member district, thinks, “the direct outreach/engagement with specific populations in specific districts (often on specific issues) is where the greatest demand is likely to arise. Alignment of the neighborhood liaisons with the community engagement division has the greatest potential” (Ibid.). The 10 single member districts of 10-1 would provide an ideal scenario for the City of Austin to allocate communication technology services, in the form of 10 smaller, district-centric community forums, to localize and engage citizens more effectively.

## CHAPTER III

### Methods

#### Introduction

This exploratory research project uses a combination of survey and interpretive research designs, with documentation, interviews, and a mixed-methods approach to collecting data. The Journal of Mixed Methods Research has defined mixed-methods research as “research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry” (Tashakkori & Creswell, 2007, p. 4). The quantitative findings of this study serve to add more precision and clarity to the hermeneutic analysis of the qualitative data, “where the researcher tries to ‘interpret’ the subjective meaning of a given text within its socio-historic context” (Bhattacharjee, 2012, p. 116).

For this study, the City of Austin Interaction survey (CoAIS) was created to evaluate the perceptions of communication avenues in Austin between citizen and government, from the perspective of Austin citizens currently utilizing information and communication technologies (ICTs), and possibly reveal opportunities for improvement. Conducting the survey in this way limited respondents to those with Internet access. The survey was hosted online through Google Drive and administered in two phases, via a hyperlink in electronic messaging, to a sample of Austin residents.

#### Participants of the City of Austin Interaction survey

The sample of the Austin population used for this study included 130 respondents who volunteered to answer the survey questions, of any gender, ages 18 or older, with online

access, who are residents of Austin, Texas. The CoAIS was administered in two phases to attain the 130 participants in the sample, using a snowball sampling method, in which study subjects recruit future subjects from their respective acquaintances. Each phase of the CoAIS was created solely by the author of this paper and shared via Internet-based social networking and communication avenues.

The first phase of the CoAIS was administered individually to acquaintances of the author known to be Austin residents of legal voting age, via personal email, Facebook message, and Twitter. Messages to each of these contacts contained a general description of the survey, so as not to influence any of the respondents' answers, a hyperlink to the survey hosted in Google Drive, as well as the invitation to share the survey with others who fit the criteria of the study. Because no personal identifying information was collected by the CoAIS, the author is unaware of which of these contacts participated in the survey and each remains anonymous.

The second phase of the CoAIS followed the same procedure as described in the previous paragraph, with the only difference being the initial contacts for the survey. The initial contacts chosen for the second phase of the CoAIS were principals of local Austin community groups, including but not limited to Austinites for Geographic Representation, the Austin Neighborhood Council, the League of Women Voters of the Austin area, the Austin Community College Student Government Association, the University of Texas at Austin Student Government, the Zilker Neighborhood Association, Zilker Neighborhood Austin, Texas Yahoo Group, Trinity United Methodist Church, and St. Andrew's Presbyterian Church.

The questions asked in the survey included a mixture of multiple-choice answers,

check boxes, choosing from a list, selections from a Likert scale of 1-10, and open paragraph text answers. In this way the survey collected quantitative statistical data as well as qualitative responses, in which the respondent could voice their opinion in their own words. In some cases, a quantitative question, such as rating something on a scale of 1-10 would be followed by an open paragraph text answer, allowing the respondent to elaborate on their sliding scale choice.

Based on analysis of the first phase of the CoAIS feedback, ten questions were added to gain a more specific assessment of participants' relationships with Internet and social media outlets, and try to determine how that information could potentially have an effect on their interactivity with the CoA. It was at the point in between the two phases of the CoAIS that a hypothetical Communication Design (CD) solution began to form based on survey respondent answers, centering around the creation of ten individual but interconnected online hubs, for each of the soon-to-be geographic districts of Austin. This idea was compellingly substantiated once the results of the second phase of the CoAIS were compiled, fueling the Collaborative System of Communication (CSoC) design solution, along with substantial consensus that lead to the CSoC Show of Hands component for sourcing public opinion, and the need for a public service education campaign to inform the public on both 10-1 and the CSoC's introductions.

### **Other participants**

Face-to-face interviews were conducted with Douglas Matthews, the Chief Communications Director for the CoA, and Larry Schooler, the CoA Community Engagement Manager, to determine how the city currently engages its citizenry, and what plans may be in place for the move to 10-1.

## **Research design**

The survey for this project utilizes a mixed methods research approach, with the application of an interpretive research design method, after analyzing the respondent data. Survey respondents were asked a series of questions, via an online survey, to establish basic demographic information, to gauge respondents' levels of interaction and communication with the CoA, to try to understand their perceived communication needs with Austin, to try to gain an understanding of their personal feelings towards the city, and to determine respondents' awareness of technological communication avenues currently available.

## CHAPTER IV

### Findings

#### Introduction

The purpose of this study is to gain an understanding of citizens' perspectives on communication and interaction with the City of Austin. The results of the information collected from the 130-person sample for this study produced the following data (in order of appearance in the City of Austin Interaction survey (CoAIS):

The percentage of female respondents to the CoAIS (51%) was closely representative of the most current U.S. Census (2013) count of female residents in Austin (49.4%).

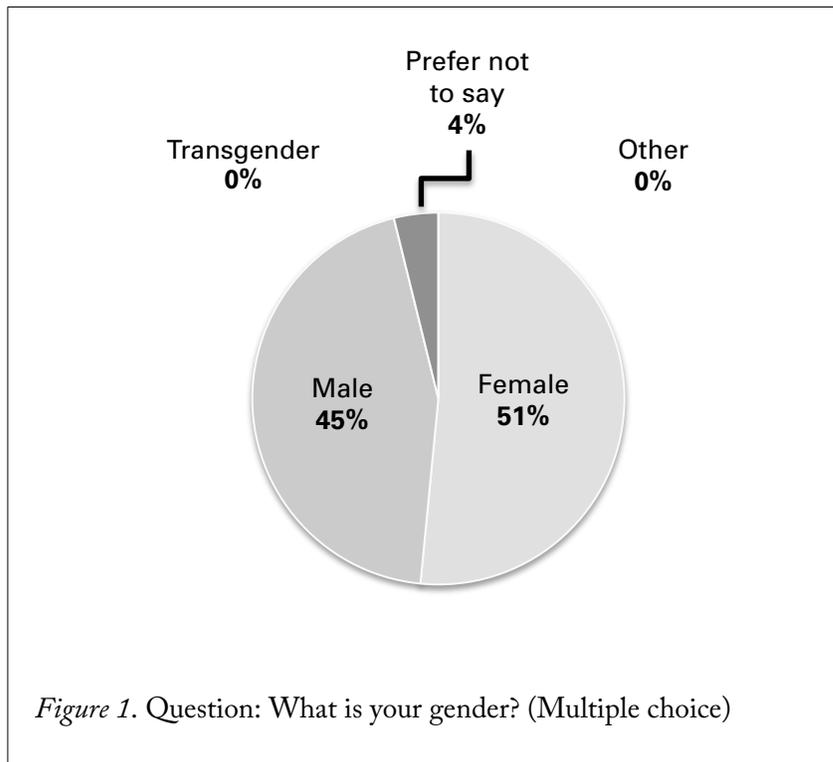


Table 1. Question: What is your gender? (Multiple choice)

Response	<i>n</i>	Percent
Female	67	51%
Male	58	45%
Transgender	0	0%
Prefer not to say	5	4%
Other	0	0%
Totals ( <i>N</i> =130)	130	

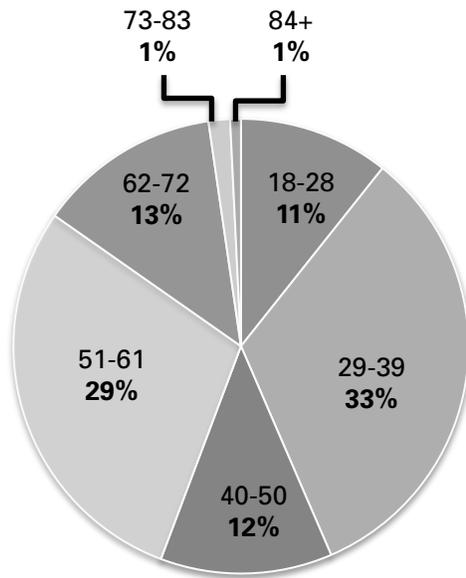


Figure 2. Question: What is your age? (Multiple choice)

Table 2. Question: What is your age? (Multiple choice)

Response	<i>n</i>	Percent
18-28	14	11%
29-39	42	33%
40-50	16	12%
51-61	38	29%
62-72	17	13%
73-83	2	1%
84+	1	1%
Totals ( <i>N</i> =130)	130	

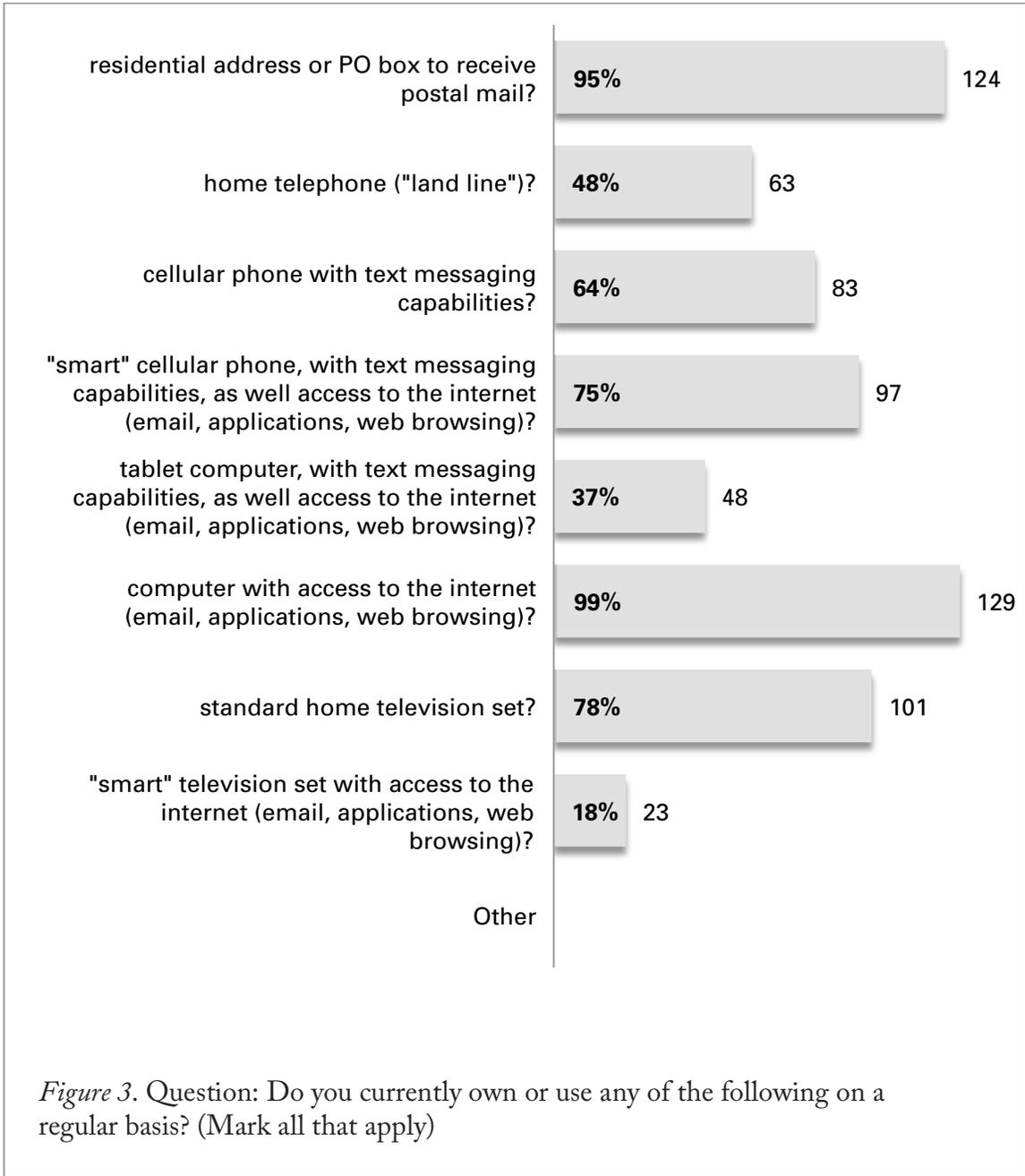


Table 3. Question: Do you currently own or use any of the following on a regular basis?  
(Mark all that apply)

Response	<i>count</i>	Percent
Residential address or PO box to receive postal mail?	124	95%
Home telephone ("land line")?	63	48%
Cellular phone with text messaging capabilities?	83	64%
"Smart" cellular phone, with text messaging capabilities, as well access to the Internet (email, applications, web browsing)?	97	75%
Tablet computer, with text messaging capabilities, as well access to the Internet (email, applications, web browsing)?	48	37%
Computer with access to the Internet (email, applications, web browsing)?	129	99%
Standard home television set?	101	78%
"Smart" television set with access to the Internet (email, applications, web browsing)?	23	18%
Other	0	0%

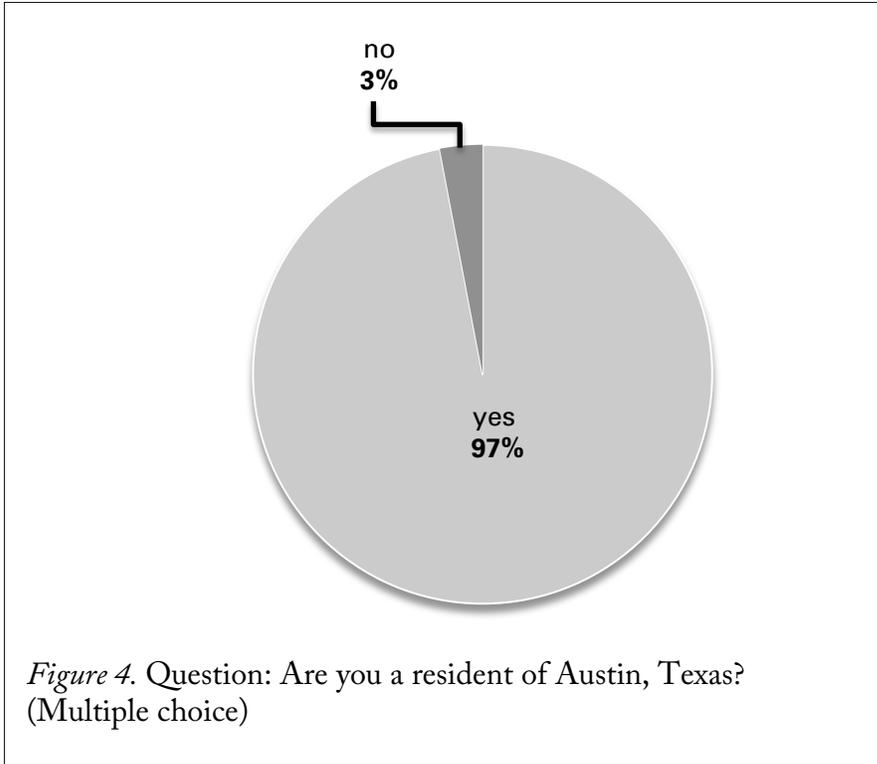


Table 4. Question: Are you a resident of Austin, Texas? (Multiple choice)

Response	<i>n</i> *	Percent
Yes	130	97%
No	4	3%
Totals ( <i>N</i> =134)	134	

*\*Note:* This question appeared in the beginning of the CoAIS, to determine the residency of a respondent, and if they answered “no,” they were not allowed to progress further in the survey.

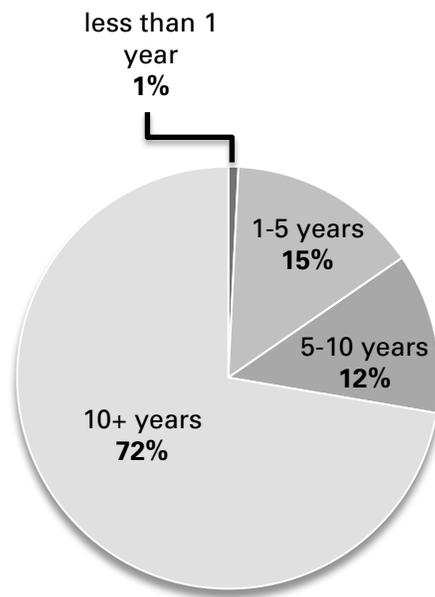


Figure 5. Question: How long have you been a resident of Austin, Texas? (Multiple choice)

Table 5. Question: How long have you been a resident of Austin, Texas? (Multiple choice)

Response	<i>n</i>	Percent
Less than 1 year	1	1%
1-5 years	19	15%
5-10 years	16	12%
10+ years	94	72%
Totals ( <i>N</i> =130)	130	

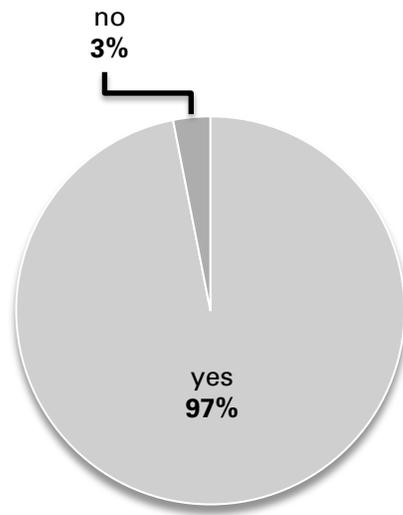


Figure 6. Question: Are you registered to vote in Austin, Texas? (Multiple choice)

Table 6. Question: Are you registered to vote in Austin, Texas? (Multiple choice)

Response	<i>n</i>	Percent
Yes	126	97%
No	4	3%
Totals ( <i>N</i> =130)	130	

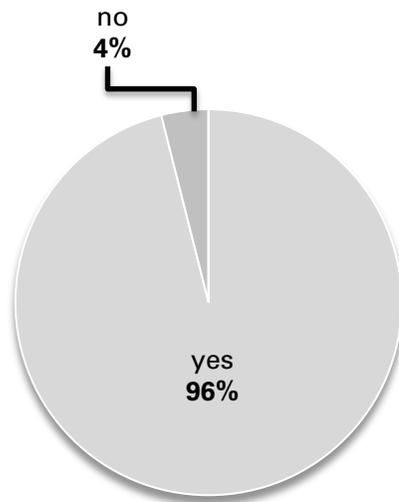


Figure 7. Question: Have you voted in any elections (local, state, or national) in Austin, Texas within the last 10 years? (Multiple choice)

Table 7. Question: Have you voted in any elections (local, state, and national) in Austin, Texas within the last 10 years? (Multiple choice)

Response	<i>n</i> *	Percent
Yes	122	96%
No	5	4%
Totals ( <i>N</i> =127)	127	

\*Note: This question was a follow up for the 126 respondents who responded with a “yes” to the question seen in Figure 6 and Table 6. Due to an unknown error with the CoAIS, 127 individuals were allowed to respond to this question. Therefore, the accurate representation is ±1 respondent for either of the options given.

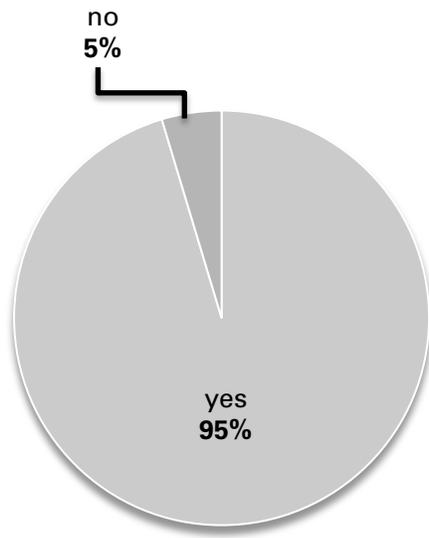
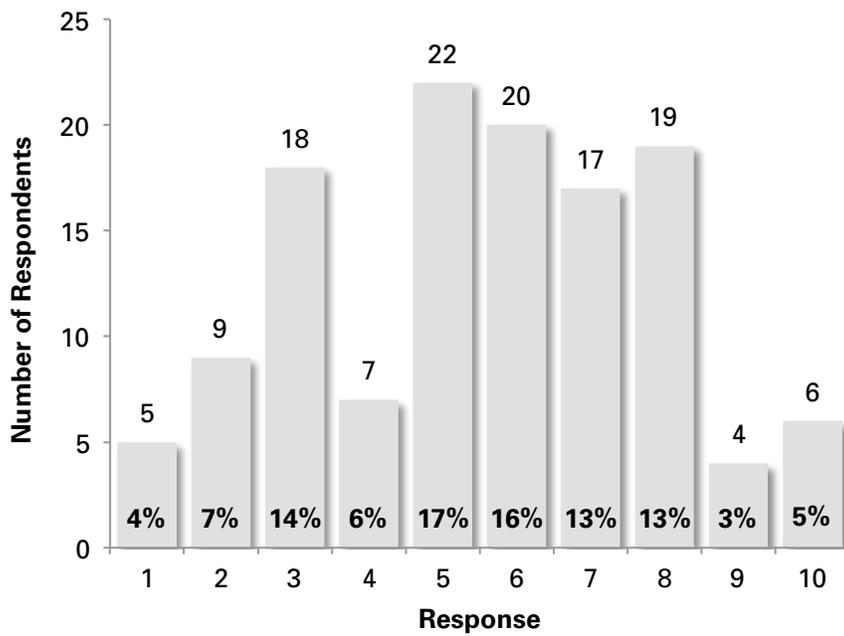


Figure 8. Question: Have you ever lived in any other city or cities than Austin, Texas? (Multiple choice)

Table 8. Question: Have you ever lived in any other city or cities than Austin, Texas? (Multiple choice)

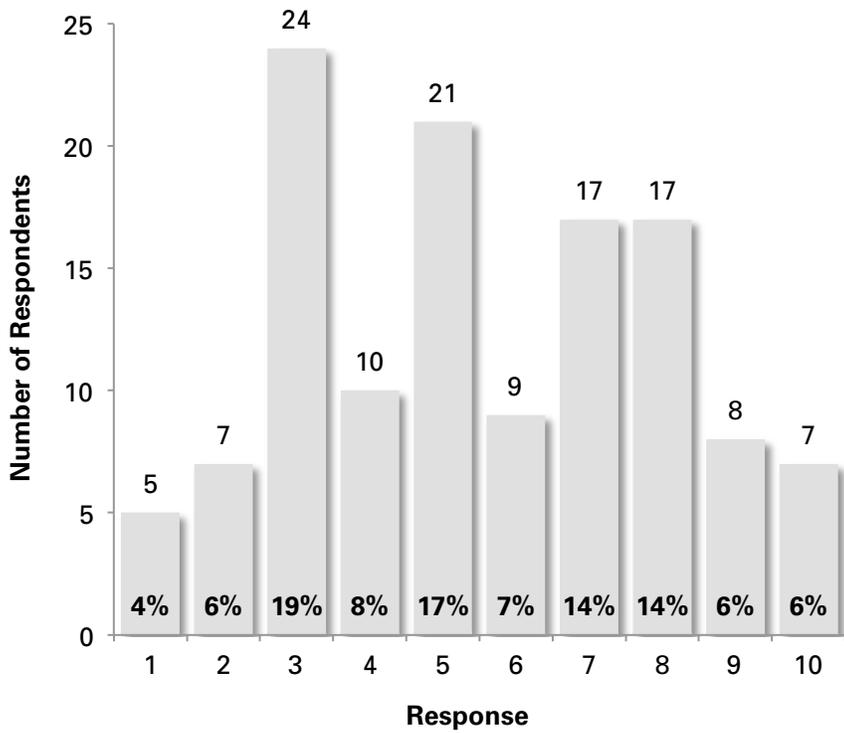
Response	<i>n</i>	Percent
Yes	123	95%
No	6	5%
Totals ( <i>N</i> =129)	129	



*Figure 9:* Question: On a scale of 1-10, how would you rate your ability to communicate directly with the City of Austin, Texas? (Scale of 1-10, with 1=Most difficult, and 10=Easiest)

Table 9. Question: On a scale of 1-10, how would you rate your ability to communicate directly with the City of Austin, Texas? (Scale of 1-10, with 1=Most difficult, and 10=Easiest)

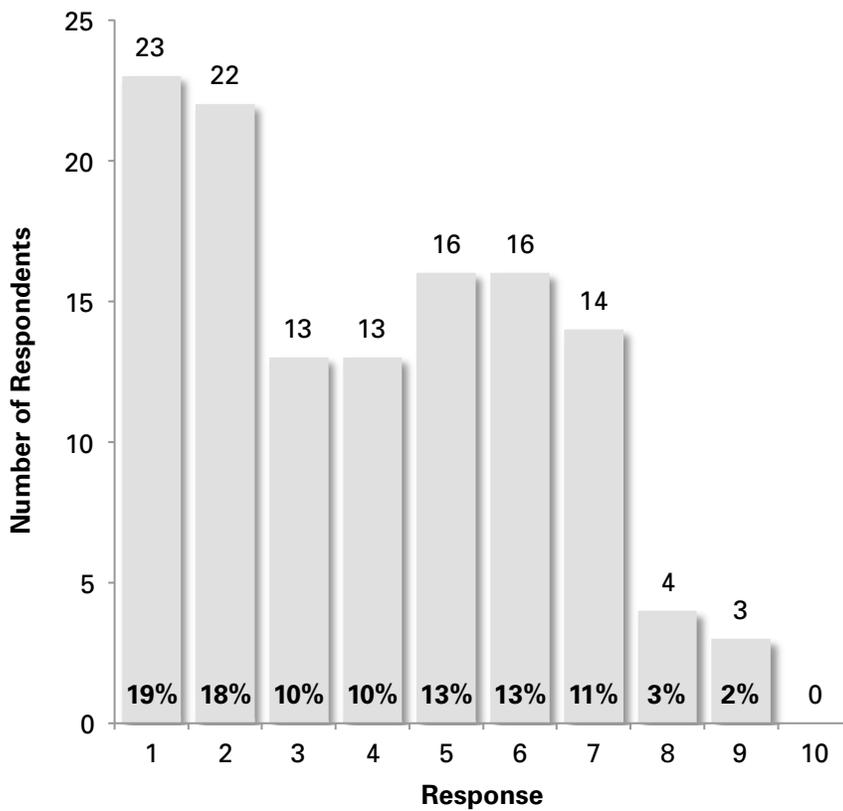
Response	<i>n</i>	Percent
1	5	4%
2	9	7%
3	18	14%
4	7	6%
5	22	17%
6	20	16%
7	17	13%
8	19	15%
9	4	3%
10	6	5%
Totals ( <i>N</i> =127)	127	



*Figure 10:* Question: On a scale of 1-10, how much interaction do you think you have with the City of Austin (voting, community, policies, law enforcement, employment, services, etc.)? (Scale of 1-10, with 1=None at all, and 10=Very frequently)

Table 10. Question: On a scale of 1-10, how much interaction do you think you have with the City of Austin (voting, community, policies, law enforcement, employment, services, etc.)? (Scale of 1-10, with 1=None at all, and 10=Very frequently)

Response	<i>n</i>	Percent
1	5	4%
2	7	6%
3	24	19%
4	10	8%
5	21	17%
6	9	7%
7	17	14%
8	17	14%
9	8	6%
10	7	6%
Totals ( <i>N</i> =125)	125	



*Figure 11.* Question: How important do you think the City of Austin values your opinion on any city-related issues? Help text: This is to gauge how effective you think your singular voice can be. (Scale of 1-10, with 1=In one ear and out the other, and 10=Your opinion is taken straight to the top authority)

Table 11. Question: How important do you think the City of Austin values your opinion on any city-related issues? Help text: This is to gauge how effective you think your singular voice can be. (Scale of 1-10, with 1=In one ear and out the other, and 10=Your opinion is taken straight to the top authority)

Response	<i>n</i>	Percent
1	23	19%
2	22	18%
3	13	10%
4	13	10%
5	16	13%
6	16	13%
7	14	11%
8	4	3%
9	3	2%
10	0	0%
Totals ( <i>N</i> =124)	124	

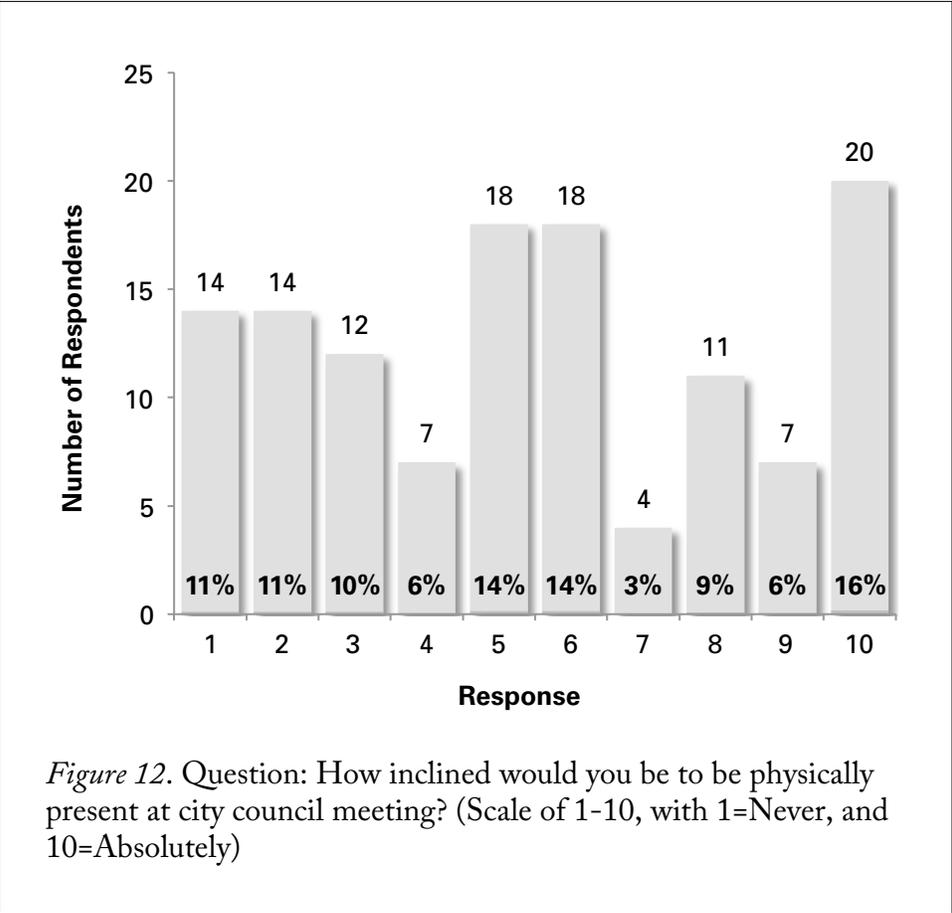


Table 12. Question: How inclined would you be to be physically present at city council meeting? (Scale of 1-10, with 1=Never, and 10=Absolutely)

Response	<i>n</i>	Percent
1	14	11%
2	14	11%
3	12	10%
4	7	6%
5	18	14%
6	18	14%
7	4	3%
8	11	9%
9	7	6%
10	20	16%
Totals ( <i>N</i> =125)	125	

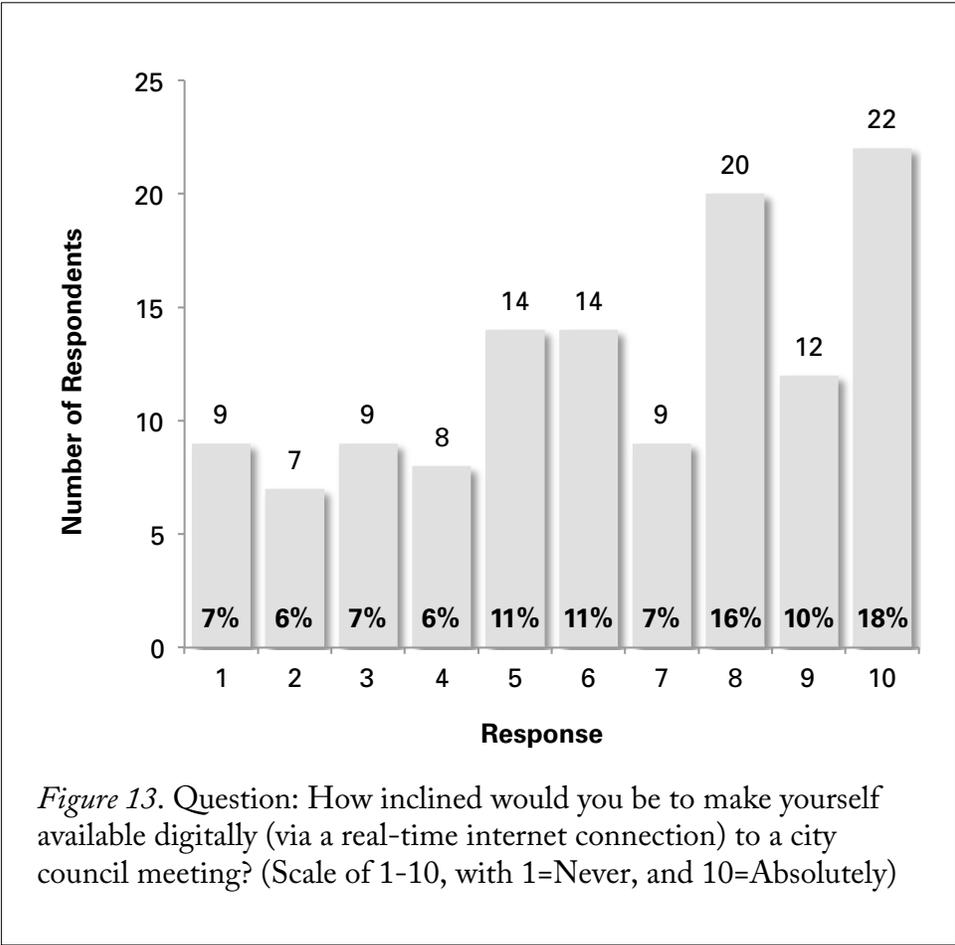
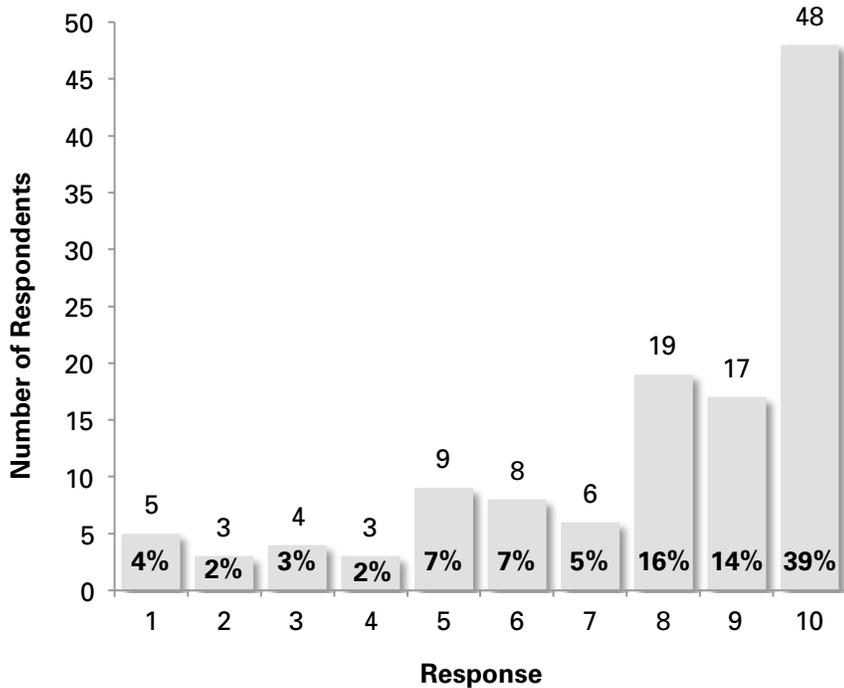


Table 13. Question: How inclined would you be to make yourself available digitally (via a real-time Internet connection) to a city council meeting? (Scale of 1-10, with 1=Never, and 10=Absolutely)

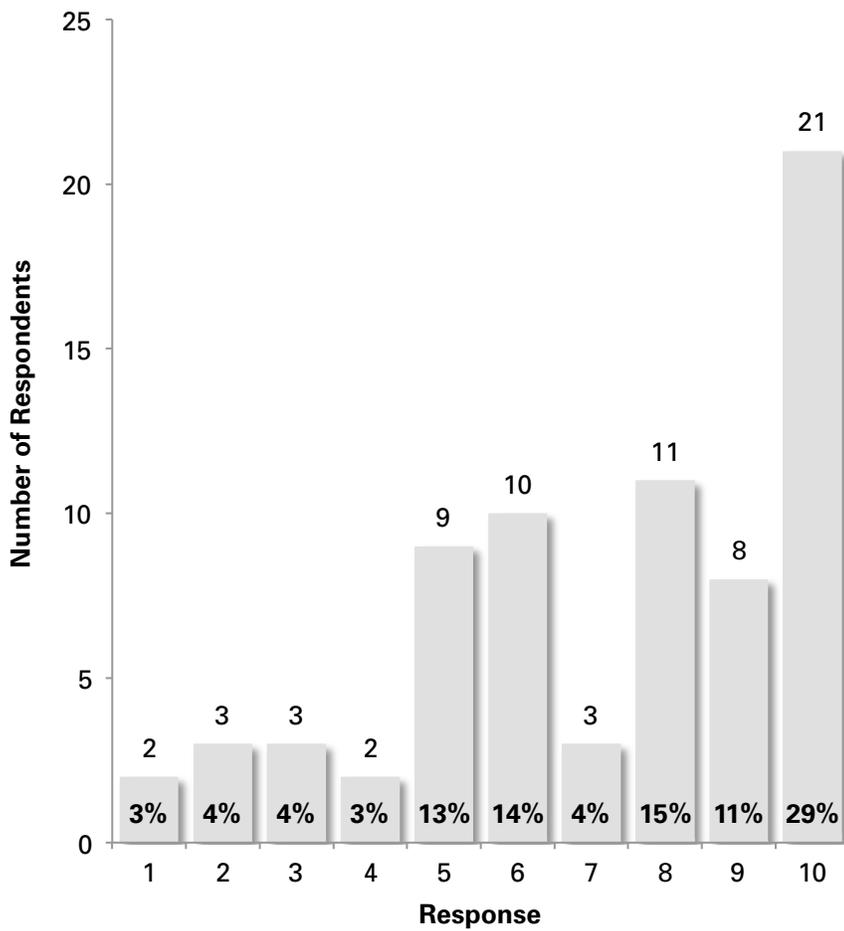
Response	<i>n</i>	Percent
1	9	7%
2	7	6%
3	9	7%
4	8	6%
5	14	11%
6	14	11%
7	9	7%
8	20	16%
9	12	10%
10	22	18%
Totals ( <i>N</i> =124)	124	



*Figure 14.* Question: How inclined would you be to communicate with the City of Austin about issues via an online forum, if your posting was guaranteed to be addressed by a city representative? (Scale of 1-10, with 1=Never, and 10=Absolutely)

Table 14. Question: How inclined would you be to communicate with the City of Austin about issues via an online forum, if your posting was guaranteed to be addressed by a city representative? (Scale of 1-10, with 1=Never, and 10=Absolutely)

Response	<i>n</i>	Percent
1	5	4%
2	3	2%
3	4	3%
4	3	2%
5	9	7%
6	8	7%
7	6	5%
8	19	16%
9	17	14%
10	48	39%
Totals ( <i>N</i> =122)	122	



*Figure 15.* [Phase 2] Question: How inclined would you be to communicate with the City of Austin about issues via an online forum, if there existed a sub-forum for an area closer to your residence? Help text: If an analogy helps, picture a forum for a university as a whole, and then sub-forums for each of the different schools within the university (engineering, history, agriculture, etc.) (Scale of 1-10, with 1=Never, and 10=Absolutely)

Table 15. [Phase 2] Question: How inclined would you be to communicate with the City of Austin about issues via an online forum, if there existed a sub-forum for an area closer to your residence? Help text: If an analogy helps, picture a forum for a university as a whole, and then sub-forums for each of the different schools within the university (engineering, history, agriculture, etc.) (Scale of 1-10, with 1=Never, and 10=Absolutely)

Response	<i>n</i> *	Percent
1	2	3%
2	3	4%
3	3	4%
4	2	3%
5	9	13%
6	10	14%
7	3	4%
8	11	15%
9	8	11%
10	21	29%
Totals ( <i>N</i> =72)	72	

\**Note:* All questions denoted as [Phase 2] were additions made to the CoAIS for its second circulation and therefore have a maximum respondent level of 72.

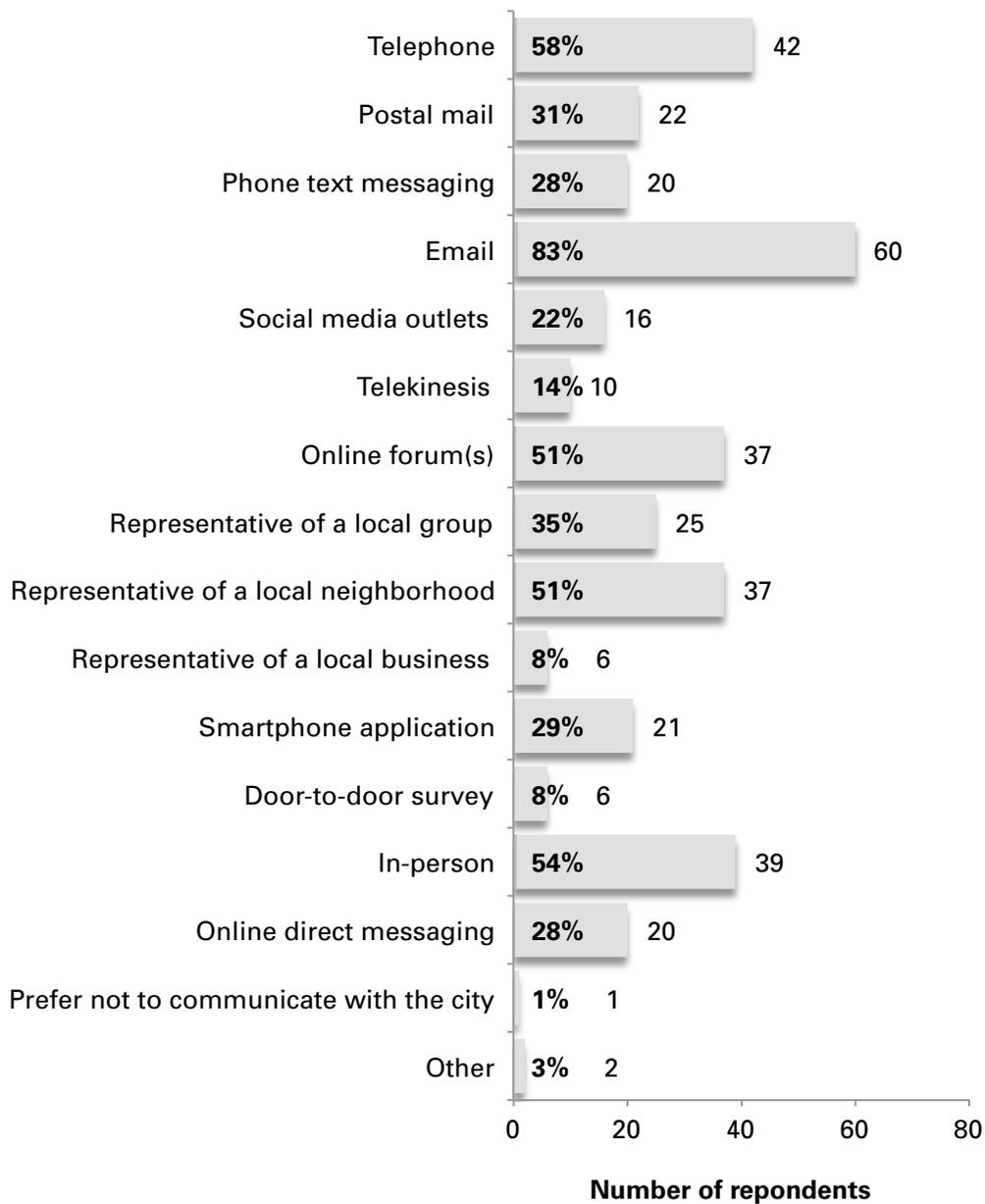


Figure 16. [Phase 2] Question: How would you like to have communication accessibility to the City of Austin? Help text: What different outlets would you like available to offer your input on city-related issues? (Mark all that apply)

Table 16. [Phase 2] Question: How would you like to have communication accessibility to the City of Austin? Help text: What different outlets would you like available to offer your input on city-related issues? (Mark all that apply)

Response	<i>count</i>	Percent
Telephone	42	58%
Postal mail	22	31%
Phone text messaging	20	28%
Email	60	83%
Social media outlets	16	22%
Telekinesis	10	14%
Online forum(s)	37	51%
Representative of a local group	25	35%
Representative of a local neighborhood	37	51%
Representative of a local business	6	8%
Smartphone application	21	29%
Door-to-door survey	6	8%
In-person	39	54%
Online direct messaging	20	28%
Prefer not to communicate with the city	1	1%
Other	0	3%

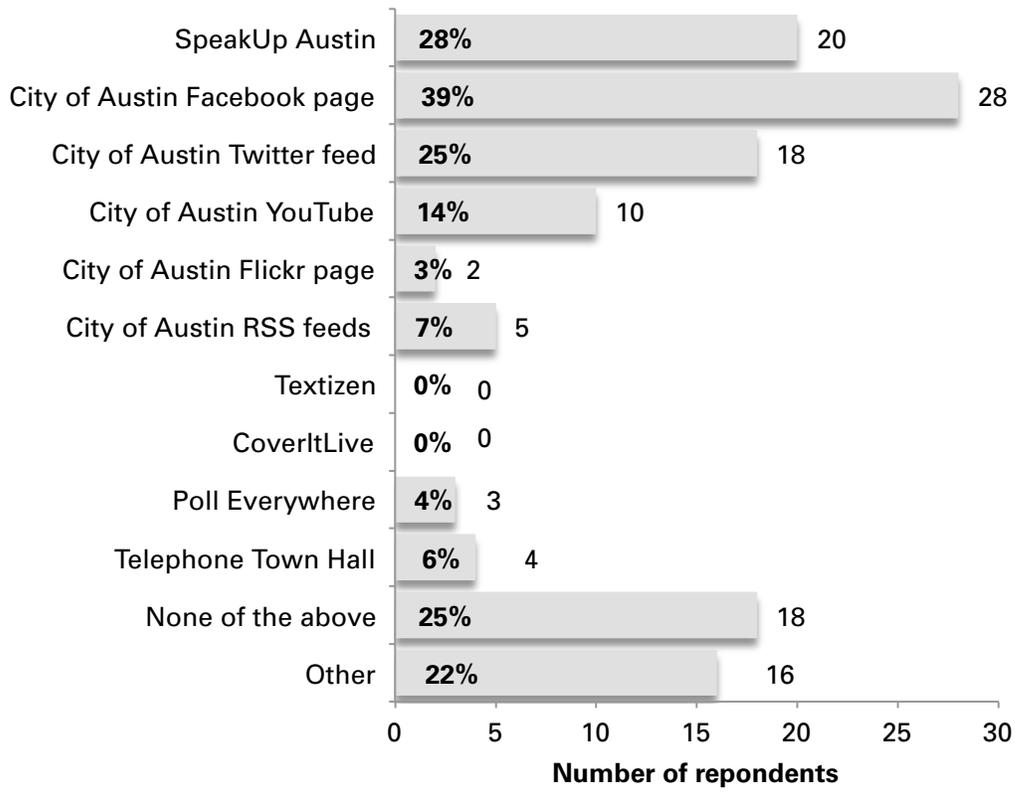


Figure 17. [Phase 2] Question: Which of these currently existing outlets for public opinion in Austin are you aware of? Help text: Prior to reading this question of course :- (Mark all that apply)

Table 17. [Phase 2] Question: Which of these currently existing outlets for public opinion in Austin are you aware of? Help text: Prior to reading this question of course :-) (Mark all that apply)

Response	<i>count</i>	Percent
SpeakUp Austin	20	28%
City of Austin Facebook page	28	39%
City of Austin Twitter feed	18	25%
City of Austin YouTube channel	10	14%
City of Austin Flickr page	2	3%
City of Austin RSS feeds	5	7%
Textizen	0	0%
CoverItLive	0	0%
Poll Everywhere	3	4%
Telephone Town Hall	4	6%
None of the above	18	25%
Other	16	22%

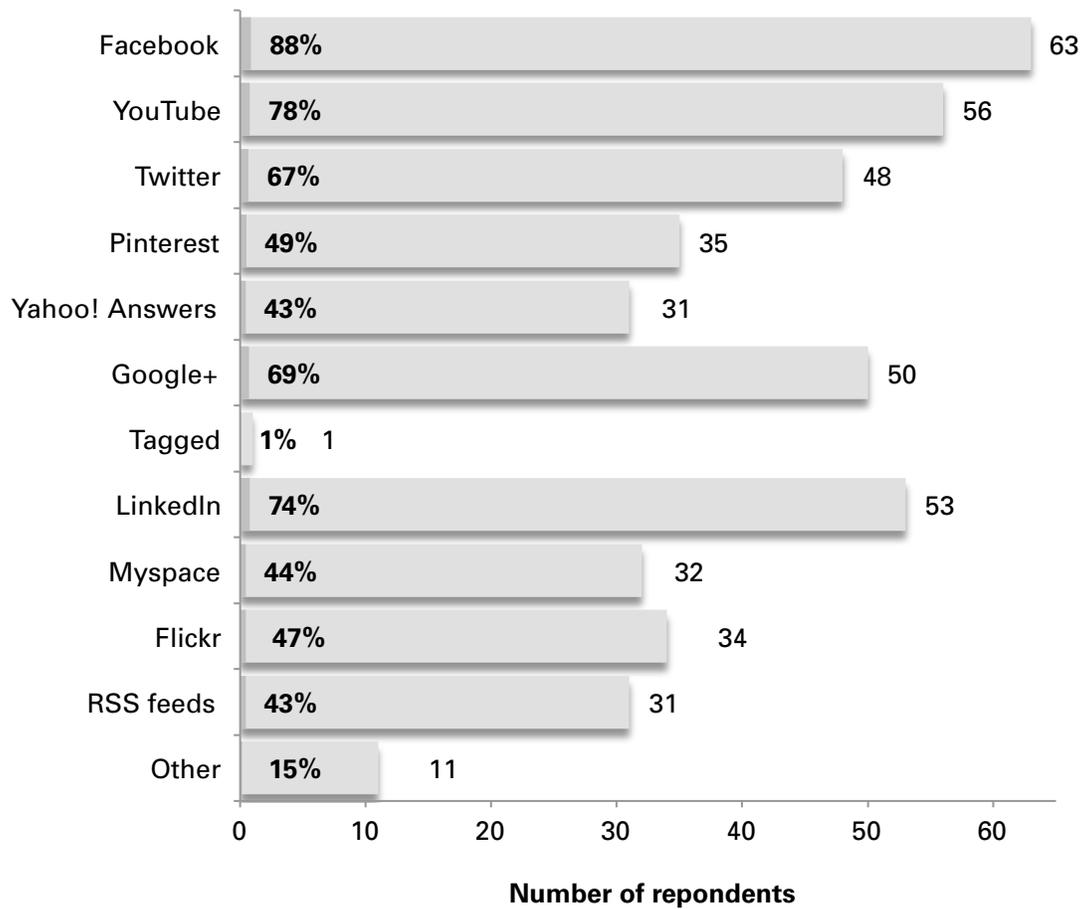
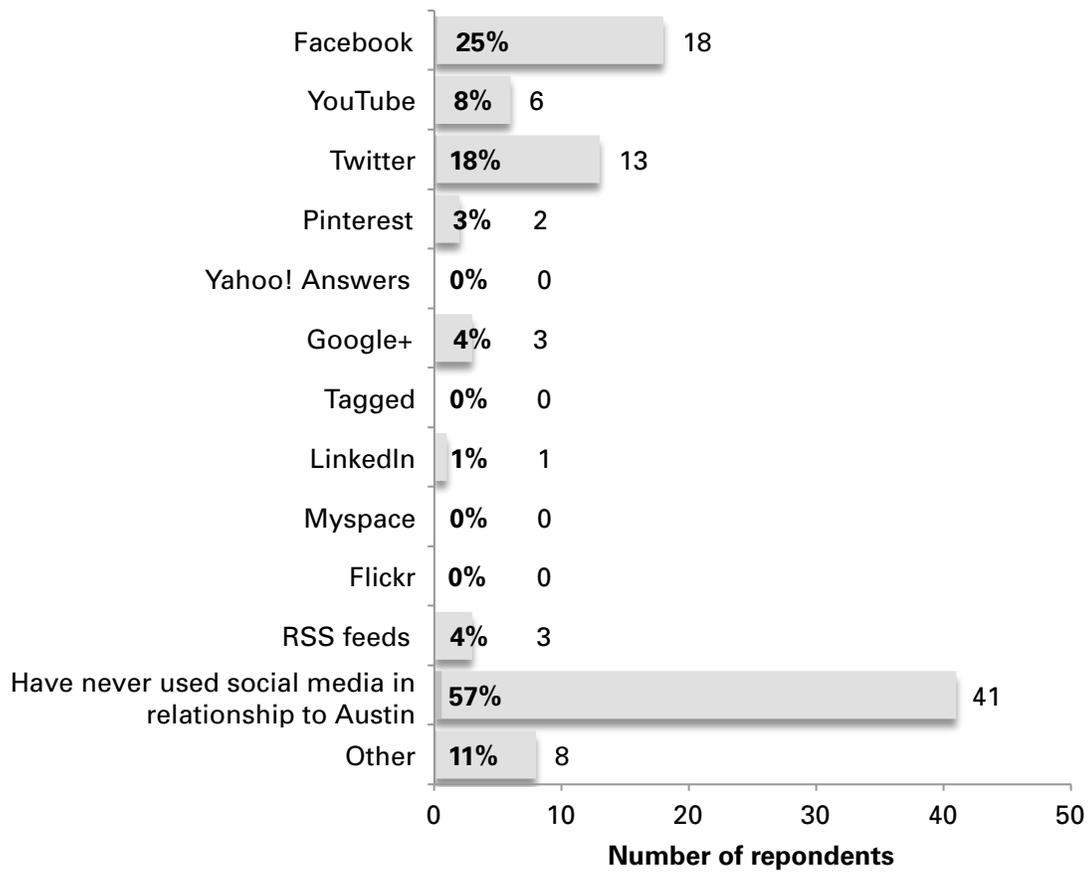


Figure 18. [Phase 2] Question: Which of these social media outlets are you aware of for getting information? Help text: This can be any type of information, for any type of reason (personal, business, pleasure, etc.) (Mark all that apply)

Table 18. [Phase 2] Question: Which of these social media outlets are you aware of for getting information? Help text: This can be any type of information, for any type of reason (personal, business, pleasure, etc.) (Mark all that apply)

Response	<i>count</i>	Percentage
Facebook	63	88%
YouTube	56	78%
Twitter	48	67%
Pinterest	35	49%
Yahoo! Answers	31	43%
Google+	50	69%
Tagged	1	1%
LinkeIn	53	74%
Myspace	32	44%
Flickr	34	47%
RSS feeds	31	43%
Other	11	15%



*Figure 19.* [Phase 2] Question: Which of these social media outlets **HAVE** you ever used in direct relation to the City of Austin? Help text: This can mean news, information, direct communication with the City of Austin, or even just with anyone about something relating to Austin, Texas. (Mark all that apply)

Table 19. [Phase 2] Question: Which of these social media outlets HAVE you ever used in direct relation to the City of Austin? Help text: This can mean news, information, direct communication with the City of Austin, or even just with anyone about something relating to Austin, Texas. (Mark all that apply)

Response	<i>count</i>	Percent
Facebook	18	25%
YouTube	6	8%
Twitter	13	18%
Pinterest	2	3%
Yahoo! Answers	0	0%
Google+	3	4%
Tagged	0	0%
LinkedIn	1	1%
Myspace	0	0%
Flickr	0	0%
RSS feeds	3	4%
Have never used social media in relationship to Austin	41	57%
Other	8	11%

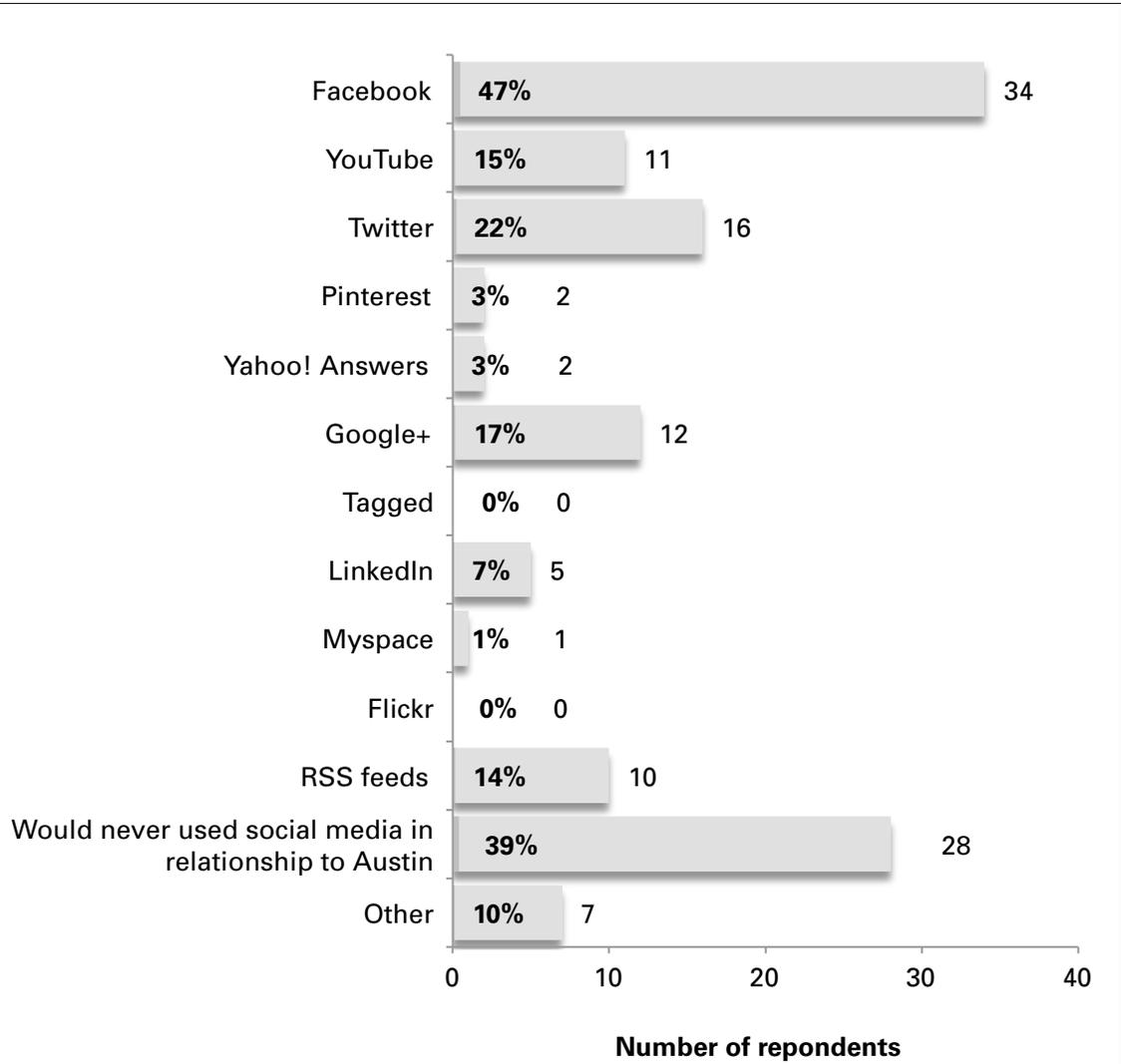


Figure 20. [Phase 2] Question: Which of these social media outlets WOULD you ever use in direct relation to the City of Austin? Help text: This can mean direct communication with the City of Austin, or even just with anyone ABOUT something relating to Austin, Texas. (Mark all that apply)

Table 20. [Phase 2] Question: Which of these social media outlets WOULD you ever use in direct relation to the City of Austin? Help text: This can mean direct communication with the City of Austin, or even just with anyone ABOUT something relating to Austin, Texas. (Mark all that apply)

Response	<i>count</i>	Percent
Facebook	34	47%
YouTube	11	15%
Twitter	16	22%
Pinterest	2	3%
Yahoo! Answers	2	3%
Google+	12	17%
Tagged	0	0%
LinkedIn	5	7%
Myspace	1	1%
Flickr	0	0%
RSS feeds	10	14%
Would never used social media in relationship to Austin	28	39%
Other	7	10%

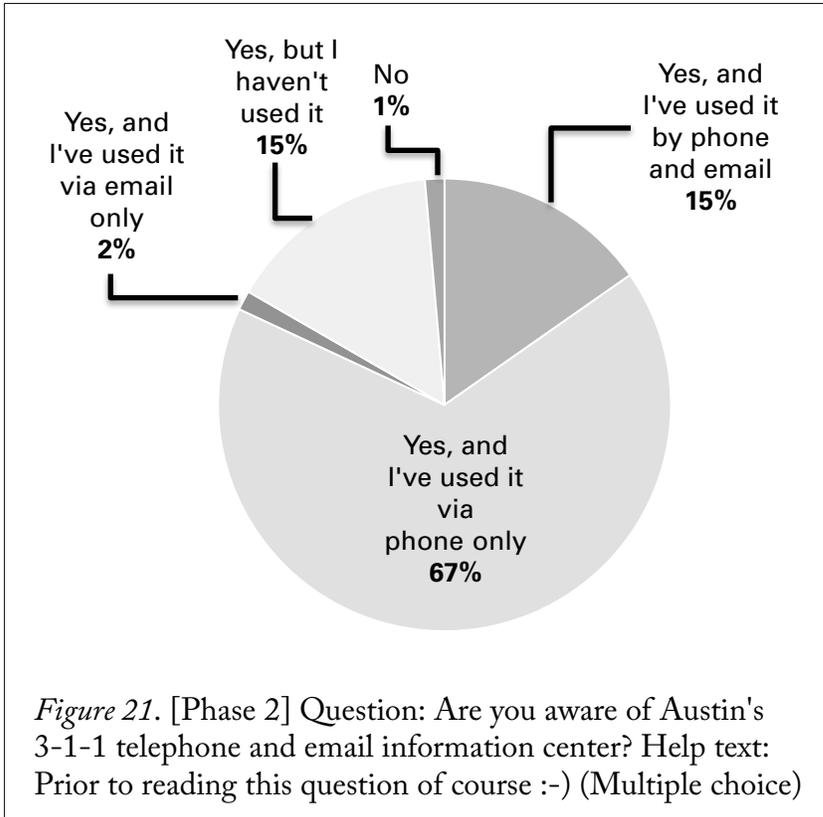


Table 21. [Phase 2] Question: Are you aware of Austin's 3-1-1 telephone and email information center? Help text: Prior to reading this question of course :- ) (Multiple choice)

Response	<i>n</i>	Percent
Yes, and I've used it by phone and email	11	15%
Yes, and I've used it via phone only	48	67%
Yes, and I've used it via email only	1	1%
Yes, but I haven't used it	11	15%
No	1	1%
Totals ( <i>N</i> =72)	72	

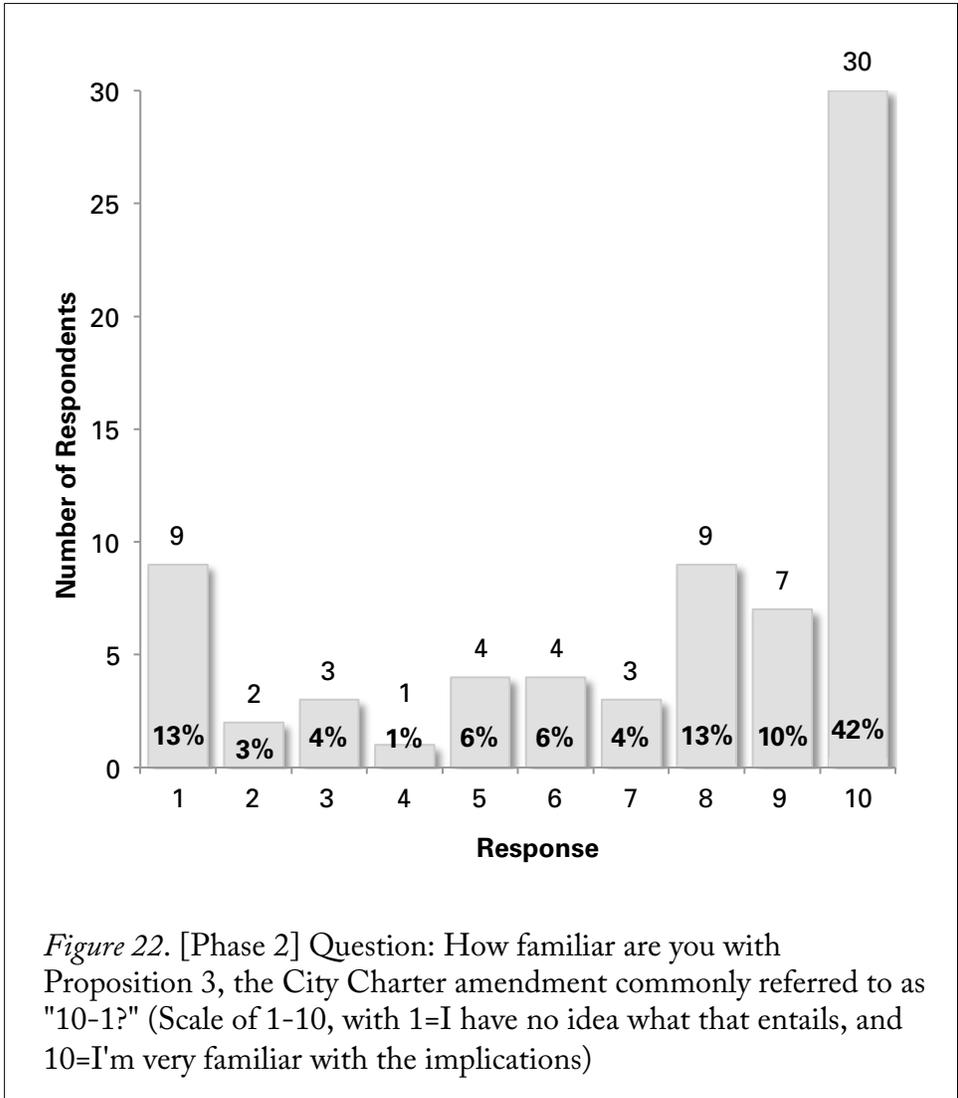
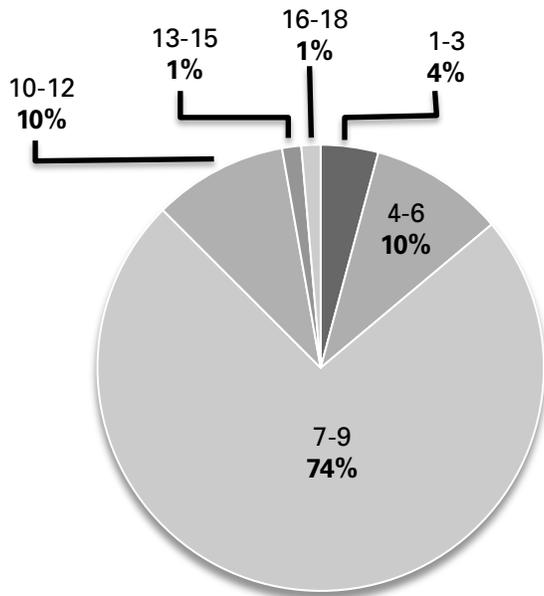


Table 22. [Phase 2] Question: How familiar are you with Proposition 3, the City Charter amendment commonly referred to as "10-1?" (Scale of 1-10, with 1=I have no idea what that entails, and 10=I'm very familiar with the implications)

Response	<i>n</i>	Percent
1	9	13%
2	2	3%
3	3	4%
4	1	1%
5	4	6%
6	4	6%
7	3	4%
8	9	13%
9	7	10%
10	30	42%
Totals ( <i>N</i> =72)	72	



*Figure 23.* [Phase 2] Question: As of September 1st, 2013, are you able to identify the current number of City Council members (including the mayor)? Help text: Please don't cheat and look this up if you don't know. Again, there are no wrong answers and your honesty is really valuable! This will just really help to see what the public is aware of. (Multiple choice)

Table 23. [Phase 2] Question: As of September 1st, 2013, are you able to identify the current number of City Council members (including the mayor)? Help text: Please don't cheat and look this up if you don't know. Again, there are no wrong answers and your honesty is really valuable! This will just really help to see what the public is aware of. (Multiple choice)

Response	<i>n</i>	Percent
1-3	3	4%
4-6	7	10%
7-9	53	74%
10-12	7	10%
13-15	1	1%
16-18	1	1%
Totals ( <i>N</i> =72)	72	

## **Revisions of City of Austin Interaction survey from Phase 1 to Phase 2:**

- The question, “What is your age?” was changed in phase 2 to require a respondent’s answer in order to proceed in the survey, where in phase 1 it had not been.
- The question, “Do you currently own or use any of the following on a regular basis?” was changed to require an answer in order to proceed in the survey, where previously it had not been.
- The question, “How inclined would you be to communicate with the City of Austin about issues via an online forum, if there existed a sub-forum for an area closer to your residence?” was added, with the follow up question, “Care to elaborate?”
- The question, “How would you like to have communication accessibility to the City of Austin?” was added.
- The question, “Which of these currently existing outlets for public opinion in Austin are you aware of?” was added.
- The question, “Which of these social media outlets are you aware of for getting information?” was added.
- The question, “Which of these social media outlets HAVE you ever used in direct relation to the City of Austin?” was added.
- The question, “Which of these social media outlets WOULD you ever use in direct relation to the City of Austin?” was added.

- The question, “Are you aware of Austin's 3-1-1 telephone and email information center?” was added.
- The question, “How familiar are you with Proposition 3, the City Charter amendment commonly referred to as ‘10-1’?” was added with the follow up question, “Care to elaborate?”
- The question, “As of September 1st, 2013, are you able to identify the current number of City Council members (including the mayor)?” was added.

## CHAPTER V

### Discussion

#### Introduction

The purpose of this study was to solicit and evaluate the opinions of Austin citizens about their communication and accessibility needs with their city government in the face of a historic change to geographic representation, and identify opportunities to facilitate said needs and accessibility via Communication Design (CD). The first focus was aimed at identifying which current forms of communication would have the greatest public versatility, and utilize said forms in the implementation of a comprehensive public service education campaign (PSEC) to familiarize citizens with the implications of 10-1. This focus was followed by determining a vehicle most suited for driving up citizens' communication levels and civic engagement moving into the future, which this paper proposes as the Collaborative System of Communication (CSoC).

Initially, the choice was made to use the Internet as the communication conduit for this study because of the amount of current modern communication technologies that it supports, many of which the City of Austin (CoA) has adapted into its own e-government communication portfolio, and the high proclivity of Austin residents in “digital lifestyle[s]” (Hambrick, 2013). Bolstering e-government in Austin via the use of the Internet offered a substantial opportunity for civic benefit. Mentioned previously, Guo Yanqing (2010) describes one of the benefits of e-government as a way to “provide greater opportunities to participate in democratic institutions and processes” (part II, sect. A, para. 1).

The apparatus chosen to obtain data for this study was the City of Austin Interaction

survey (CoAIS), created, hosted, and shared online via a hyperlink. This approach was meant to solicit and ascertain the specific perspectives of Austin citizens who are currently active online and determine what technological opportunities exist to further facilitate communications when the City government changes to geographic representation. The data collection offered insight into online citizens' expectations of their current and future communications atmosphere and confirmed a vested interest of the people's majority in matters concerning their city, but inadvertently revealed a disparity between the potential and actual function of contemporary technologies currently employed by the CoA on civic engagement.

### **Advantages of the City of Austin Interaction survey**

The first notable characteristics of this study are the reception of the CoAIS conducted for public opinion, the response evoked, and the nature of the delivery method. 130 qualifying respondents, of any gender, aged 18 or older, and current residents of Austin (see Figures 1, 2, and 4) volunteered their time to communicate their opinions about the CoA via 34-50 questions, and did so within a total timeframe of 68 days. The survey was released in two phases; the initial version received 58 responses in 26 days, and the revised version was released 6 months later, gaining 72 responses in 42 days. The growth of respondents can be contributed, not to the author's direct contact with 130 or more individuals, but rather to the functional nature of the Internet for expediting the dissemination of materials among interested individuals. Both phases of the CoAIS were accessible 24 hours a day, each reaching a maximum daily respondent level of 27. This participatory aspect could be attributed to the CoAIS being hosted online, allowing the respondents to complete the survey at their convenience. Traditional survey methods

requiring human administration, such as in-person or over the telephone, are inherently confined to a moment in time in which the survey administrator makes contact with the potential respondent, often further restricted by acceptable public situations or hours of the day deemed socially acceptable. Comparison of the CoAIS with the official 2013 City of Austin Communications survey (2013CoACS) emphasizes some of the key points mentioned in this paragraph.

The CoA commissioned the 2013CoACS by the ETC Institute (2013) to “[administer] a survey...to gather input from residents to improve the quality of City communication with the public.” Contrary to the CoAIS, the 2013CoACS conducted its survey of residents by telephone, the fundamental differentiation between these two surveys. This comparison is not to infer either survey method as being any more accurate than the other, but rather to illuminate the efficiency associated with the use of Internet-based communication, in a variety of forms that telephony is intrinsically unable to recreate. The CoAIS was made possible by a singular individual and a laptop computer with Internet access, whereas the 2013CoACS required the services of a separate company of individuals to manage data and resources, and administer via one-on-one telephone interactions. The CoAIS was able to elicit 130 Austin residents’ opinions over a total period of 68 days; the first phase lasting 26 days, and the second lasting 42 days. 55 of the 58 respondents in the first phase (95%) participated within a 7-day timeframe, and 64 of the 72 respondents of the second phase (89%) participated within a 15-day window of time. The ETC Institute (2013) did not clarify specific dates of the 2013CoACS, but collected input from 405 residents “during the summer of 2013” (p. i).

The nature of the Internet facilitated the author of this study in administering a web

hyperlink to the CoAIS via a snowball sampling method, in which study subjects recruit future subjects from their respective acquaintances. The 2013CoACS by telephone required a human to actively administer the survey to each one of its 405 respondents individually, one at a time. Additionally, the total number of 405 people only accounts for those residents included in the survey results, and does not reflect the amount of individuals unwilling to participate or unanswered phone calls. The manpower and time required for this approach is much higher and exacerbated by the legal regulation on acceptable hours for such telephone solicitation, which in turn is also quite costly. Doug Matthews (personal communication, Oct. 21<sup>st</sup>, 2013) stated that the 2013CoACS cost the City close to \$9,000. Although the CoAIS was conducted for the purposes of this academic research paper and not as a business service, it was initiated and administered solely by the author, at minimal cost.

### **Understanding the audience scope**

The primary catalyst for the CoAIS was the citizen-led initiative Proposition 3, also known as “10-1,” put forth to amend the Austin City Charter to allow for geographic representation on its City Council, and the formation of an independent citizens redistricting commission to draw the boundary lines of the City Council member districts (City Council of Austin, 2012). Because Austin is the largest city in the nation without any geographic representation on its City Council, this study sought to determine how CD could be utilized in facilitating the change at such a large scale (Selby, 2012). The first determination that needed to be made for this study was the scope of citizens that the shift in public policy would affect, in order to gauge the audience for communications regarding this change.

One of the first steps in approaching a problem to be solved by CD is to identify the audience to which a design will communicate. These identifications come in countless forms,

such as particular demographic information, attitudes or beliefs, tastes and styles, and endless more, but generally seek to attribute common characteristics to the audience as a whole. In the case of facilitating communication in Austin, concurrent with the implementation of the 10-1 election system, and the audience being the entire city population, the identifying characteristics had to become much more general for this study in order to ascertain the group with which a CD solution would be most effective. Therefore, the three prominent identifying characteristics considered in this study were the individuals who are Austin, Texas residents, at the eligible voting age of 18 years or older, and have access to the Internet. The latter of these three characteristics was chosen as an identifying aspect for the CoAIS because of the versatility of the medium, and because of the relevance it plays in the current emergence of e-government.

### **Opportunity to bridge a disconnection**

As long as any living Austin resident has known, a visit to the poll booth during City Council elections has meant being asked to cast a vote for multiple members' places on the governing body. The second phase of the CoAIS revealed that 19 of the 72 respondents (26%) were unable to identify the correct number of members currently sitting on Austin's City Council (see Figure 23). The current number of members sitting on the City Council has been 7 since it first went into effect in 1969 (AustinTexas.gov, n.d.). It is not as pertinent to note that over a quarter of residents surveyed were unable to identify their local governing body's size, especially in a city found by Brennan (2013) to be the fastest growing in the nation for the last three years, as it is to point out that 15 of the 19 who answered incorrectly have lived in Austin for ten or more years. 15 of those 15 long-term residents of Austin each responded "yes" on the CoAIS as having voted in Austin within the last ten

years, and being regular users of some form of access to the Internet. If the CoAIS were considered representative of Austin as a whole, it would indicate that close to 21%, or just over 128,000 registered and active voters of Austin, whom regularly use the Internet, and have lived in the City for more than ten years, are not completely aware of the members of the body that governs them. From a CD standpoint, this is a glaring opportunity for improving citizen-representative engagement, and one of the intents of the proposed CSoC.

As detailed in the Introduction and Literature Review chapters of this paper, as well as in the 2013CoACS and CoAIS, the CoA has been actively employing multiple avenues of contemporary communication technologies to supplement their communication reach with citizens. A profusion of communication outlets however, does not guarantee an abundance of citizen engagement. Statistical analysis reveals a disconnection between the commendable intentions of the City in diversifying their communicative capabilities and that of the reception the public has had in utilizing the various options. In a recent email, Chief Communications Director for the CoA Doug Matthews (2013) shared the 2011, 2012, and 2013 count of combined “subscribers across [Austin’s] major social channels (Facebook, Twitter, YouTube, Pinterest and SpeakUpAustin)” as being 14,762, 21,848, and 36,003 people, respectively. Although the total subscribers in 2013 is sizeable, they represent less than 5% of Austin’s total residents from two years prior in 2010, and the CoA population is estimated to have grown by 6.6% between April of 2010 and July of 2012 alone (U.S. Census, 2013). Although these numbers suggest that the CoA major social media channels are not connecting with their audience at a high percentage, the findings of the CoAIS reveal that the opportunity does exist, in that nearly half (47%) of respondents were willing to connect through Facebook alone (see Figure 20).

The CoAIS results in the Findings chapter of this paper produced similar compelling evidence of a citizen-perceived disconnection. Of the 130 Austin residents who replied to the CoAIS, the following outcomes were suggestive of the potential for a CD solution:

- When asked “On a scale of 1-10, how much interaction do you think you have with the City of Austin (voting, community, policies, law enforcement, employment, services, etc.),” with 1 being “none at all” and 10 being “very frequently,” 67 (54%) responded with a 5 or less (see Figure 10). Over a quarter of the total respondents, 36 (29%), responded with a 3 or less.
  
- When asked “how important do you think the City of Austin values your opinion on any city-related issues,” with 1 being “In one ear and out the other” and 10 being “your opinion is taken straight to the top authority,” 87 (70%) responded with a 5 or less (see Figure 11). Over a quarter of the total respondents, 45 (37%) responded with a 2 or 1.
  
- When asked “on a scale of 1-10, how would you rate your ability to communicate directly with the City of Austin, Texas,” with 1 being “most difficult” and 10 being “easiest,” 81 (64%) responded with a 6 or less (see Figure 9). Almost one third of the total respondents, 39 (31%) responded with a 4 or less.

Although the above findings demonstrate a less than optimistic view for current citizen engagement in the CoA, the upcoming change of the 10-1 system could provide the opportunities for a potential transformation of those perceptions. Welch, Hinnant, and Moon (2004) find that “trust in government is strongly associated with e-government

satisfaction and that e-government satisfaction is associated with citizens' perceptions about online service convenience (transactions), information reliability (transparency), and engaged electronic communication (interactivity)." In light of the City's historic change to a single-member district City Council format, in which the local governmental architecture will have to be reevaluated and reorganized, lies the quintessential opportunity for the CoA's communication structure to reorganize and incorporate more aspects of e-government. In doing so, the CoA could potentially reinvent the way citizens perceive their connection to the City, demonstrate the capabilities of modern day technologies, and effectively revitalize the trust and confidence of the public. The sheer volume of feedback with which participants of the CoAIS were willing to share on open-ended questions speaks to the levels of Austinites' enthusiasm about their City, both good and bad, as well as their receptiveness to online communications. It should be noted that when asked the open-ended question of "how would you describe your relationship with the city of Austin," the word "love" appeared in 53 (41%) of the participants' answers.

### **Interactive feedback supporting an interactive solution**

The following four questions intentionally appeared on the CoAIS sequentially as they are presented below, in order to gauge the respondents' inclination towards civic participation with varying scenarios utilizing Internet-based technologies. The fourth question below was the only one of the four added to the second phase of the CoAIS, and convincingly supported the notion that online district-level community forums have the potential to be well received;

- When asked "how inclined would you be to be physically present at City Council meeting," with 1 being "never" and 10 being "absolutely," just over half of the 125

- respondents who replied, 65 (52%), selected a 5 or less (see Figure 12). This scenario proved to be polarizing among the participants as 28 (22%) responded with a 1 or 2, and 27 (22%) responded with a 9 or 10.
- The participants were then asked “how inclined would you be to make yourself available digitally (via a real-time Internet connection) to a city council meeting,” with 1 being “never” and 10 being “absolutely,” and this is where the scales began to tip in favor of digital accessibility. 91 out of the 124 who responded to this question, or 73%, selected a 5 or higher, with 54 (44%) submitting an 8 or higher (see Figure 13).
  - When a scenario was presented supposing the use of online forums for communication with the CoA, the public reception of just such an avenue became most evident. Respondents were asked “how inclined would you be to communicate with the City of Austin about issues via an online forum, if your posting was guaranteed to be addressed by a city representative,” and 107 (88%) responded with a 5 or above, 84 (69 %) of the 122 who answered the question chose 8 or higher, and 48 (39%) selected a 10 (see Figure 14). If the CoAIS were considered representative of all Austin residents, then almost two out of every five persons would very highly favor this outlet.
  - After the strong response level to online forums in the first phase of the CoAIS, it was determined that a forum would be a viable project to consider as a design solution for Austin, but then the focus turned to how best to utilize the platform in facilitating communication. With the shift in political attention to specific geographic locations that 10-1 will effect, it was theorized that implementing ten community-centric

forums in each of the forthcoming districts could benefit both the citizens' and representatives' lines of communication. A fourth addition was made to the previous line of questioning, asking participants "how inclined would you be to communicate with the City of Austin about issues via an online forum, if there existed a sub-forum for an area closer to your residence," and the results were close to that of the initial public reception of the idea. 62 (86%) of the 72 respondents chose 5 or higher, with 40 (55%) responding 8 or higher, and 21 (29%) selecting 10 (see Figure 15).

### **Design direction**

The chosen platform for the delivery of this study's proposed CD solution became a ten part, Internet-based, community network, tentatively called the Collaborative System of Communication (CSoC), which would allow citizens the opportunity to collaborate and band together on issues for both the greater Austin area, as well as those issues more localized to their respective districts. Locally-minded citizen groups such as the Austin Neighborhood Council, which was established in 1973 and coincidentally designates 10 sectors of Austin, are nothing new, however, this CD concept proposes the active involvement and participation of each district's City Council representative and staff, thereby creating a scenario where local consensus would more directly inform said representative of the peoples' will. When participants of the CoAIS were asked "how would you like to have communication accessibility to the City of Austin," given a list of 16 varying methods of communication ranging anywhere from technological forms, to in-person facilitations, and even telekinesis, 37 (51%) out of 72 chose "online forum(s)" as an option, and the exact same amount of respondents also chose the idea of having a "representative of a local neighborhood" (see Figure 16). Both of these outcomes directly informed the CSoC concept

proposal of this paper, which would provide an online intermediary location for district populations to meet (virtually) with their respective district representatives, and allow the proactive members of neighborhood communities a venue for spearheading popular issues. Ideally, the public opinion in each district would then translate to representation in City Hall. A slight variation in the CSoC concept from the input gained from the CoAIS is the semantic substitution of the word “hub” in place of “forum” for each of the district’s online platforms. This choice was made to express the inclusion of other various information outlets, as compliments to the idea of forums, which CoAIS respondents reacted favorably towards. The same CoAIS question referenced above revealed that 58% of participants would like communication accessibility via telephone, 83% via Email, 54% via in-person facilitations, and various other methods to lesser extents (see Figure 16). These proposed hubs would function to allow a network of communication at both the local district level and greater Austin area simultaneously, between citizen-citizen as well as citizen-representative, and would integrate as many popular communication lines as possible into one source (see Figure 24).

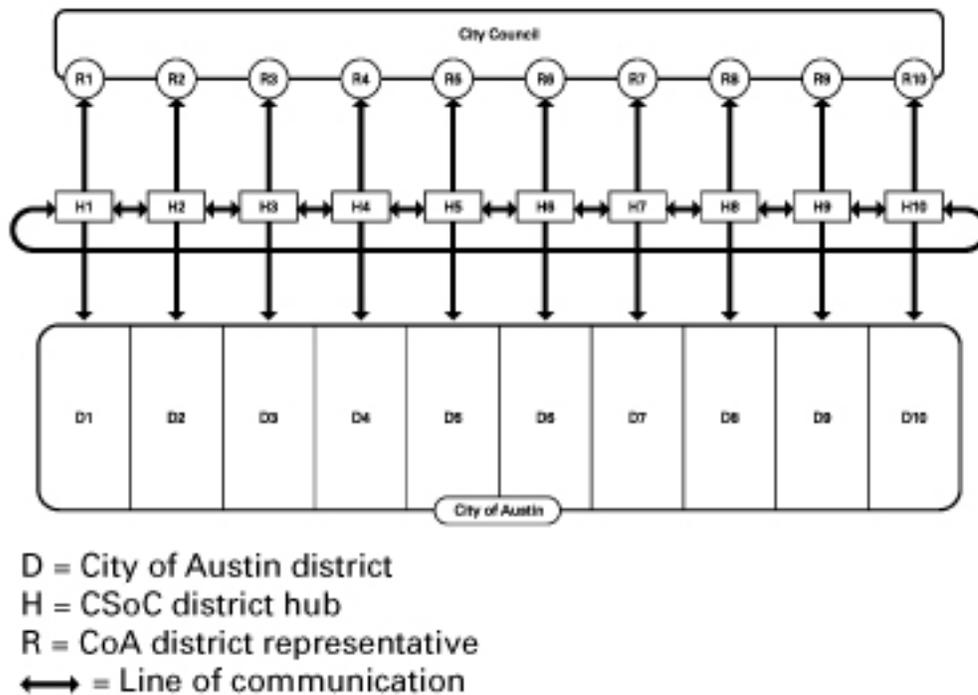


Figure 24. Infographic illustrating the communication flow of the CSoc

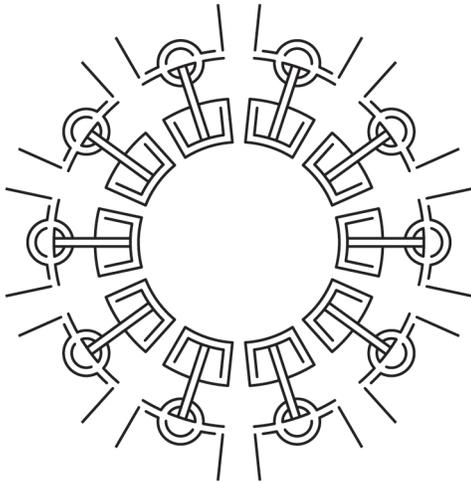
The execution of the designs for the CSoc concept began by establishing a logo as part of the identity for the system, followed by the creation of an exhibition component of the comprehensive PSEC, the development of the first version of the CSoc digital dashboard interface, and concluded with the concept design screens of the Show of Hands (SoH) component of the CSoc digital dashboard.

### Collaborative System of Communication logo

Because the CSoc would involve reaching as many Austin residents as possible, across a multitude of media, a recognizable identity system is needed to help introduce and familiarize Austin citizens with the system. A key component of said identity system is a distinguishable icon or logo that can quickly convey what is a relatively complex concept. The

logo solution for the CSoC (see Figure 25) was a simplified visualization of the concept of the system.

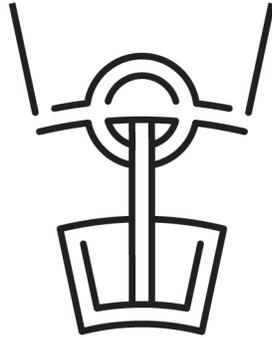
The arrangement of the CSoC logo is meant to convey ten separate but equal components, each in it's own unique orientation, that come together to create a larger whole. The larger whole in this case is the communicative network in Austin that the CSoC proposes to create. The innermost circle of the CSoC logo, created by the negative space of the components coming together, represents the center of decision making for Austin. The design utilizes the negative space to create duplicity of recognition, creating a visual metaphor meant to imply a constant input towards the center along with the resulting effects projecting outwards.



*Figure 25.* Collaborative System of Communication logo

Each of the components of the CSoC logo (see Figure 26) symbolizes one of the ten district connections to a respective district representative, via the CSoC. The small circular shape of each component portrays a CSoC district hub, where communication culminates

and forms a stronger direct line to a City Council access point, illustrated by the slightly curved rectangular shape at the bottom.

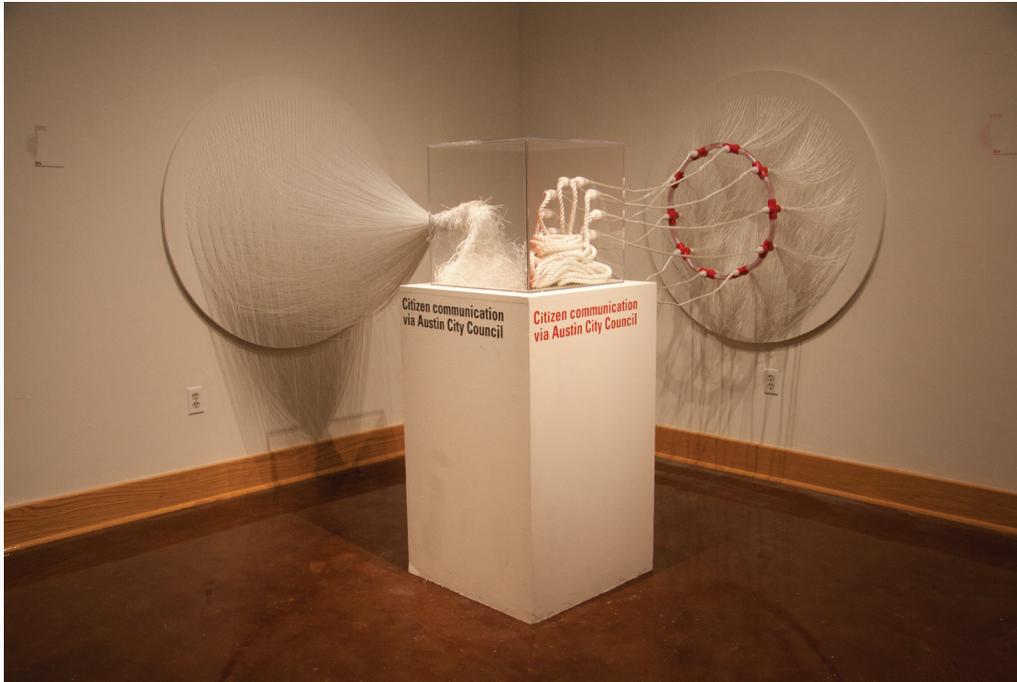


*Figure 26.* Collaborative System of Communication logo component

### **Public service education campaign installation**

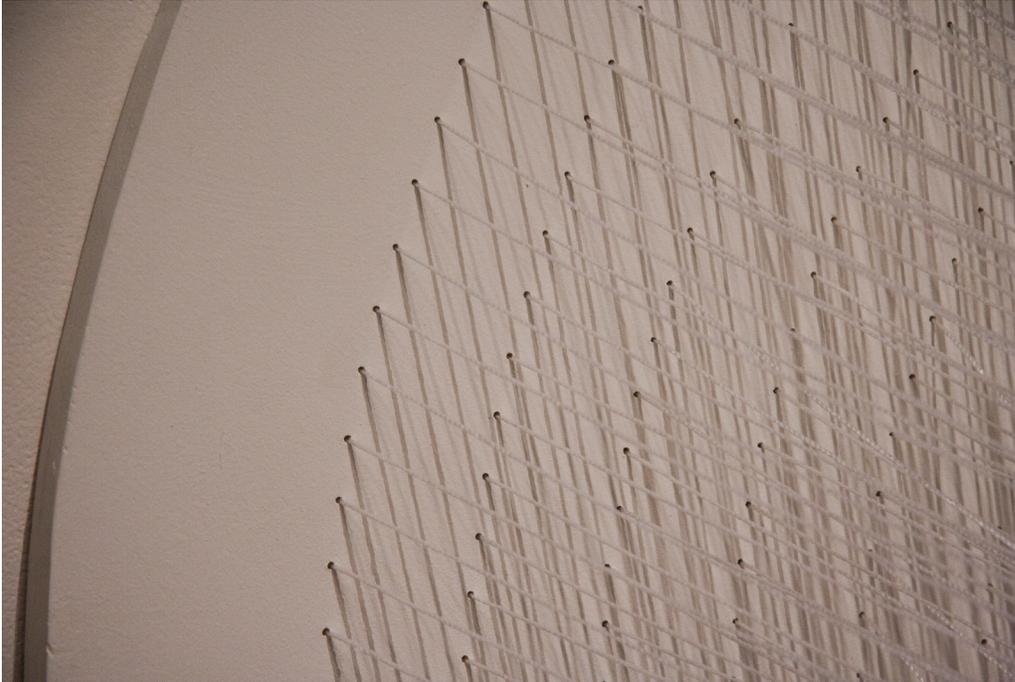
A fundamental necessity of the CSoC concept is to first have the participants with which collaboration can occur, and a comprehensive public service education campaign (PSEC) can help raise awareness and participation among Austin citizens.

As part of the PSEC, an installation piece was created in conjunction with this study (see Figure 27), visualizing the CSoC concept within the 10-1 system, to try and provoke interest and intrigue about the function it can serve. By making an intangible concept a tangible object, the installation piece was meant to offer a unique perspective to viewers.



*Figure 27.* Wide view of PSEC-I in Texas State University Gallery II

The PSEC installation (PSEC-I) is designed to illustrate the communication lines between Austin citizens and their government, before and after the 10-1 system goes into effect. It is necessary for it to be displayed at the corner of two walls, the left wall being the before, the right wall being the after, and extending out over approximately a five foot square area to a free standing component. On the left wall is hung a large circular board representing the City of Austin (CoA), with 842 holes evenly dispersed across its surface in a circular pattern. This number was derived from the most current U.S. Census Bureau estimates (2013), with each of the holes representing approximately 1,000 Austin residents, and a thread extending from each of the holes (see Figure 28) is meant to represent a line of communication to the CoA government, which symbolizes the current at-large election system.

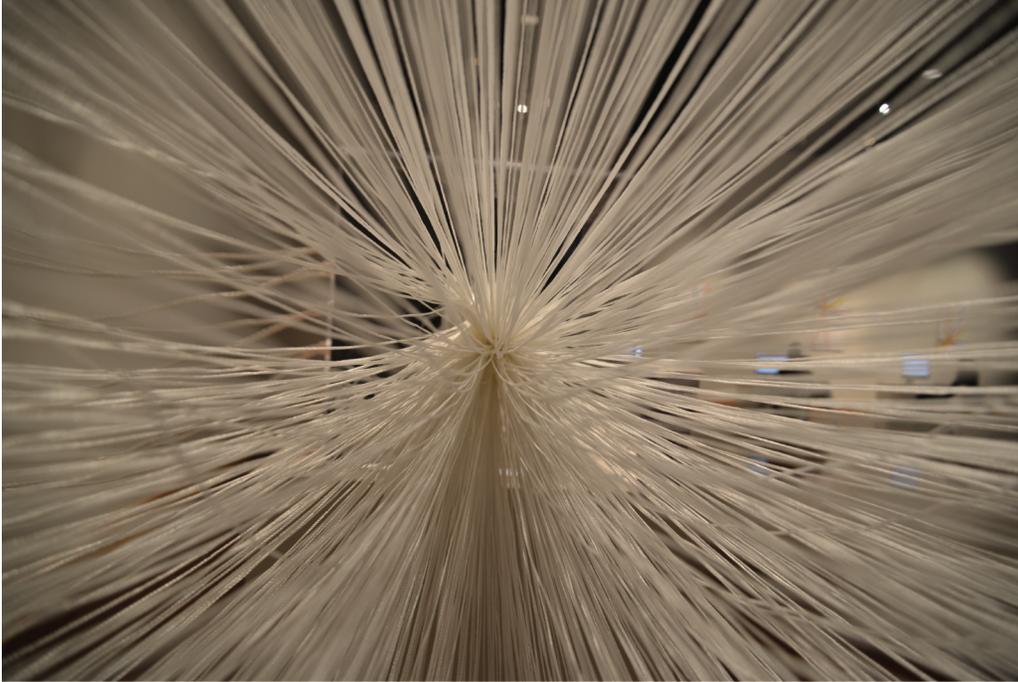


*Figure 28.* Detail of the pinholes in PSEC-I, representing ~1,000 citizens per each hole

The CoA government is represented in the PSEC-I by a plexiglass cube, with a partition dividing it diagonally in half, again with the left side being symbolic of before the 10-1 change, and the right side being after. The left face of the cube has one singular hole drilled into it (see Figure 29) at which each of the lines from the circular board on the left wall converges upon (see Figure 30). The singular hole signifies a smaller communication access for citizens to government when the City Council is responsible for addressing all issues as one single body.



*Figure 29.* Detail of the left side of PSEC-I plexiglass cube and threads



*Figure 30.* Detail of left PSEC-I threads extending at plexiglass cube

The circular board on the right side of the PSEC-I has the same 842 holes and threads as that of the one on the left, but the holes are arranged into ten equal sections, similar to the CSoC logo (see Figure 25), signifying the ten geographic districts. Hanging in between the circular board on the right and the plexiglass cube is a hoop comprised of ten pipe connectors and tubing (see Figure 31). The hoop is symbolic of the CSoC, with each of the sections of the holes and threads having a corresponding pipe connector to which it joins.



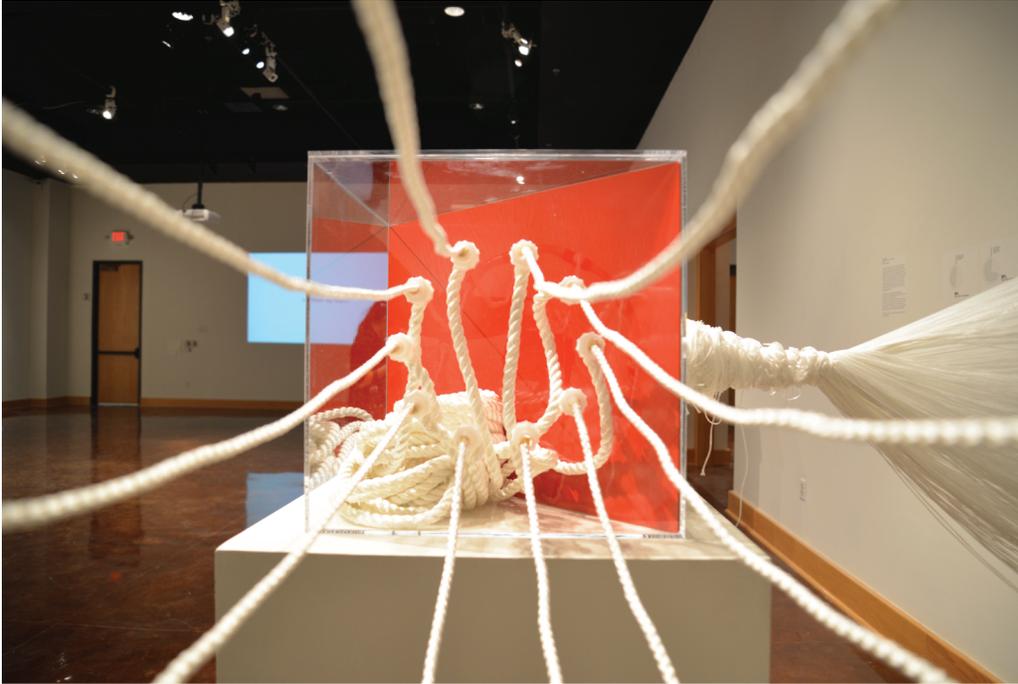
*Figure 31.* Detail of right side of PSEC-I threads, hoop, and rope extending to plexiglass cube

Each pipe connector is representative of a CSoC district hub, where the threads, or lines of communication converge, interact within the hoop or CSoC, and the result is a rope, or strengthened line of communication with the CoA government (see Figure 32).



*Figure 32.* Detail of right side of PSEC-I threads, pipe connector, and rope

The PSEC-I creates a visual metaphor suggesting that the CSoC will not only strengthen communication lines for citizens with the CoA government, but that it will clarify and organize the process (see Figure 33).



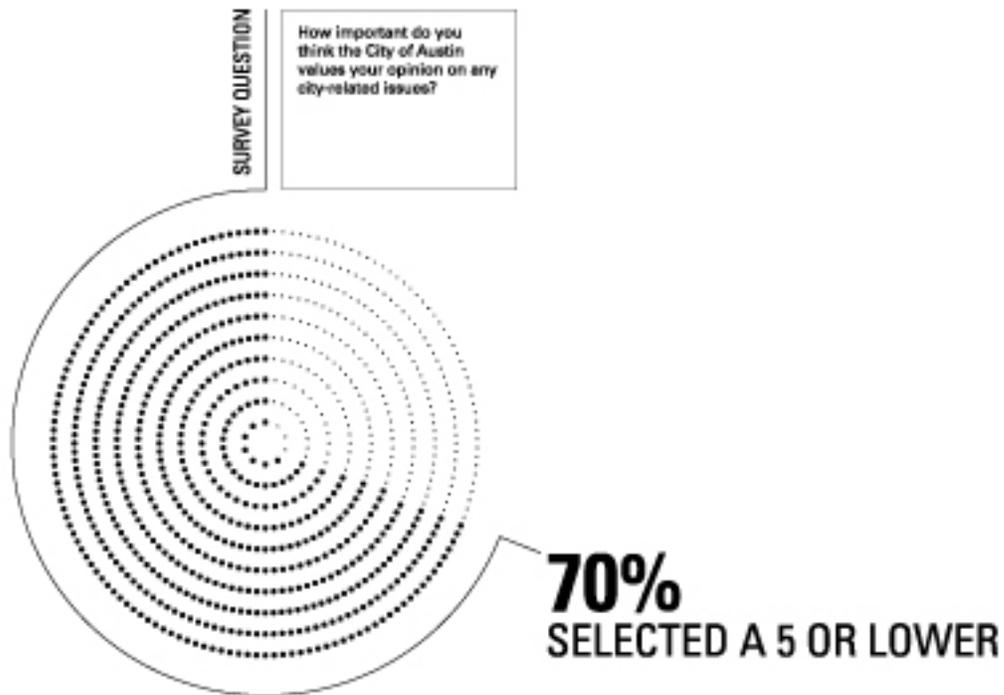
*Figure 33.* Detail of right side of PSEC-I rope extending to plexiglass cube

The right side of the plexiglass cube has ten distinct holes drilled in it to represent the ten distinct communication access points to government that 10-1 will provide (see Figure 34).



*Figure 34.* Detail of right side of PSEC-I rope connection with plexiglass cube

Black infographics are used on the left side of the PSEC-I, corresponding with the CoAIS answers from respondents about the current conditions of communication in Austin (see Figure 35). The design of the infographics is meant to closely mimic that of the boards with drilled holes, and the circular theme also seen in the CSoC logo. The spacing of the dots used in the black infographics is the same pattern as the circular board on the left side, evenly disbursed in a circular shape.



*Figure 35.* Detail of black infographic for PSEC-I

Red infographics are used on the right side of the PSEC-I, corresponding with the CoAIS answers from respondents about the possible future conditions of communication in Austin with the CSoC in place (see Figure 36). The design of the infographics is meant to closely mimic that of the boards with drilled holes, and the circular theme also seen in the CSoC logo. The spacing of the dots used in the red infographics is the same pattern as the circular board on the right side, divided into ten sections, representing the ten district divisions.



Figure 36. Detail of red infographic for PSEC-I

### **Collaborative System of Communication dashboard interface**

The concept for the CSoC dashboard interface (see Figure 37) is an amalgamation of different information and communication streams, compartmentalized into different expandable windows (see Figures 38-43) based on the nature of their respective feeds. A user of the CSoC dashboard is offered the function of conducting a search by keyword or hashtag across all of the streams, with the option of filtering the results even further by category, district, and date, or they can expand each of the windows individually for more detailed information. Each window also remains actively connected to their respective feeds and will continuously update with new data, if applicable.

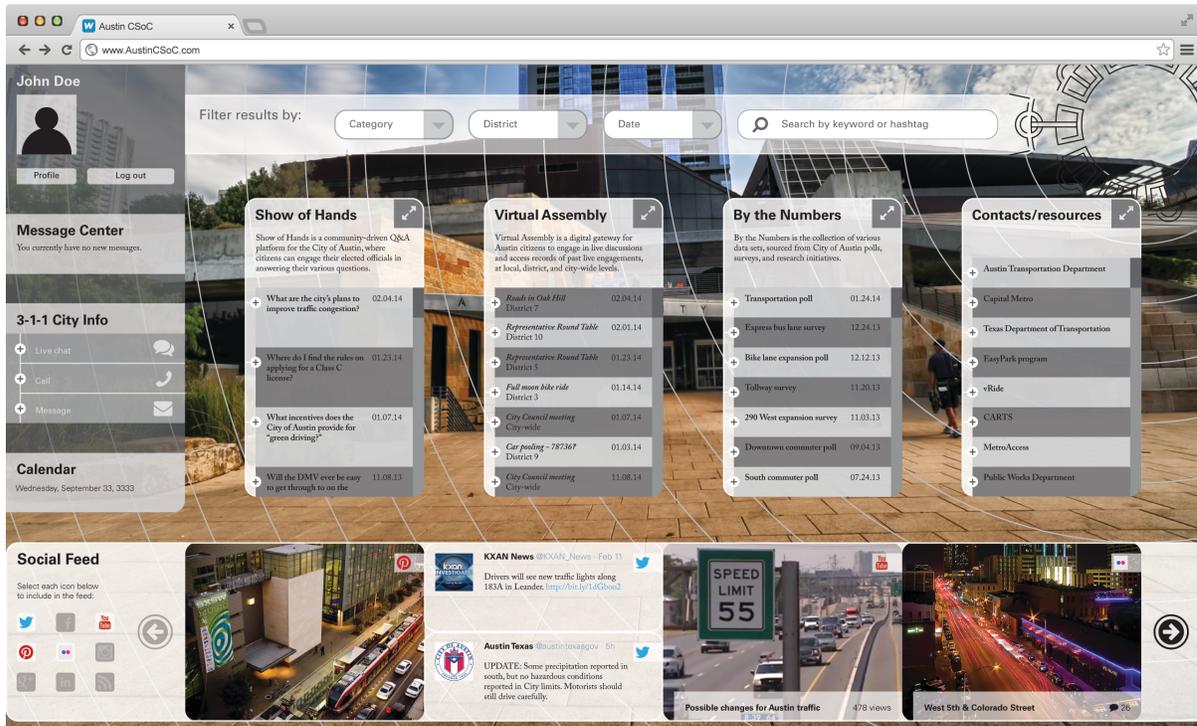


Figure 37. CSOC main dashboard interface

The CSOC dashboard user window (see Figure 38) will remain visible at all times and allow the user access to their personal information and communications within the system if they have created an account. In order to promote transparency and accountability within the CSOC system, users wishing to actively participate in components involving other users are required to create a profile to identify them. The Message Center option of the user window functions the same as standard email accounts. The 3-1-1 City Info option allows the user the choice of a live online chat, requesting a telephone call, or direct messaging a 3-1-1 representative. The Calendar option allows the user a place to schedule and keep track of City-related events and meetings.

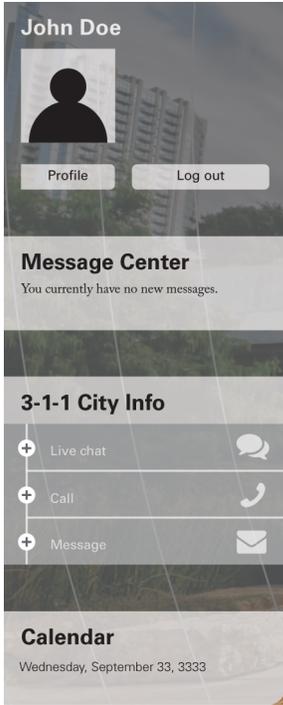


Figure 38. CSoC dashboard user window

The SoH window seen on the main dashboard interface presents the user with an abbreviated list of topics from the SoH community to scroll through for quick reference (see Figure 39). From this window, the user has the option expanding specific topics for more detail or opening the complete SoH interface in full screen (see Figures 44-49).

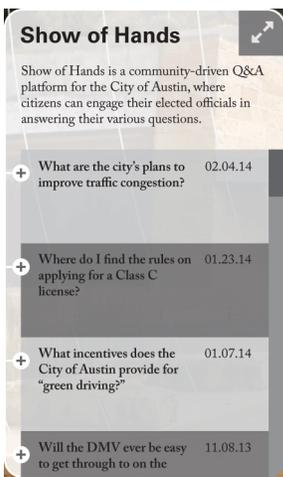


Figure 39. CSoC dashboard SoH window

The Virtual Assembly (VA) window seen on the main dashboard interface presents the user with an abbreviated list of topics from the VA collection to scroll through for quick reference (see Figure 40). From this window, the user has the option expanding specific topics for more detail or opening the complete VA interface in full screen. VA is a digital gateway for Austin citizens to engage in live discussions and access records of past live engagements, at local, district, and city-wide levels.



Figure 40. CSoC dashboard Virtual Assembly window

The By the Numbers (BtN) window seen on the main dashboard interface presents the user with an abbreviated list of topics from the BtN collection to scroll through for quick reference (see Figure 41). From this window, the user has the option expanding specific topics for more detail or opening the complete BtN interface in full screen. BtN is the collection of various data sets, sourced from City of Austin polls, surveys, and research initiatives.

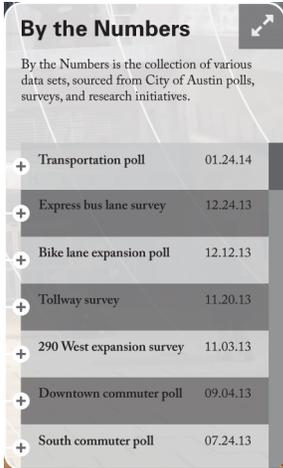


Figure 41. CSoC dashboard By the Numbers window

The Contacts/resources (C/r) window seen on the main dashboard interface presents the user with an abbreviated list of topics from the C/r collection to scroll through for quick reference (see Figure 42). From this window, the user has the option expanding specific topics for more detail or opening the complete C/r interface in full screen. C/r is the collection of contact information and listings of the various people and departments of the CoA government.

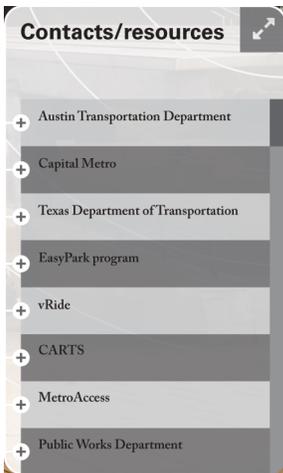


Figure 42. CSoC dashboard Contacts/resources window

The Social Feed (SF) window seen on the main dashboard interface presents the user with a continually updated stream of input from any of the CoA social media feeds (see

Figure 43). From this window, the user has the option expanding specific items for more detail or opening the complete SF interface in full screen. At the left of this window, a user has the ability to toggle on and off which social media feeds provide input.



Figure 43. CSOC dashboard Social Feed window

## Show of Hands

The SoH component of the CSOC dashboard was created around the notion of a person raising a hand to signal that they have or can answer a question, as well as the common act of surveying the response of a large audience by soliciting a “show of hands.” From a conceptual standpoint, the ability to bring this physical act into the virtual arena of the CSOC is fitting for online community engagement. The structure of SoH is modeled closely after the White House petition website (March 24, 2014) for the purpose of Austin users to pose questions, garner support from peers on their questions, and then require an official city response to the question once the support has passed a certain threshold. In order to maintain a high level of accountability in this process, and for it to be respected by all citizens and city representatives involved, all users would have to identify themselves via an online CSOC profile in order to participate. The information provided in creating a CSOC profile would also determine the district with which a user is associated, thereby identifying which City Council member their concerns would be directed at.

Borrowing on the limitation of character input used in Twitter tweets, SoH users would be required to concisely submit their concerns, but are also required to do so in the form of questions. This dynamic not only creates a format for deliberate concerns, but also encourages the concept of inviting conversation, as opposed to exclusively making statements or demands. In order for a user to publish a question publicly to their SoH community, they are guided through a four-step process, with each step having its own screen.

The first screen under the Ask a Question tab in SoH presents the user with a large text box, in the shape of a speech bubble seen in comic illustrations, in which they are to enter their question. The user question is limited to 120 characters, and a counter for this is displayed underneath the speech bubble to inform the user. Once a question has been entered in the first step of the process in SoH, options are given to the user to select up to three categories that their question may fall under, each being a department of the CoA. As well, a drop down menu to the right of category list allows the user to choose one particular district that their question applies to, or the CoA as a whole (see Figure 44).

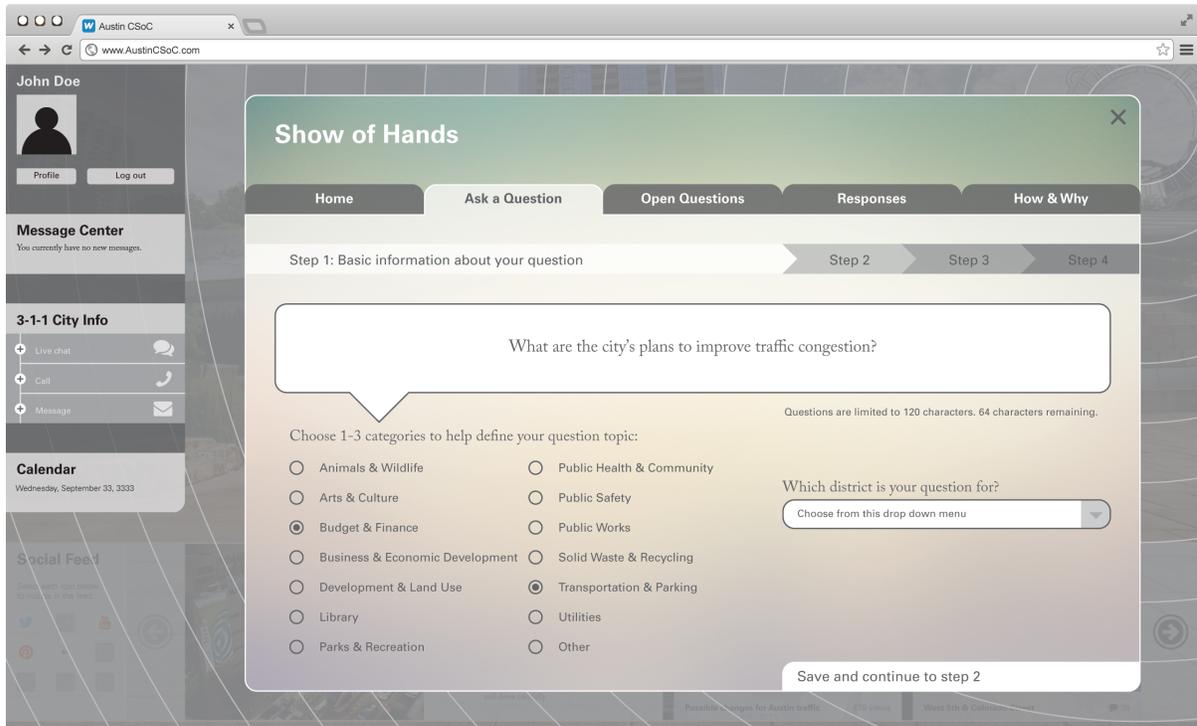


Figure 44. SoH screen; Ask a Question tab, Step 1: Basic information about your question

Step 2 of the SoH Ask a Question process tries to identify questions similar to what the user has entered in the Step 1, that may have already been published, suggesting the cooperation with other users questions before beginning a new one. The screen for this step displays a section on the left, with a list of related questions that the user can scroll through, each with a corresponding number that represents other citizens who have chosen to support it (see Figure 45). If an existing question is the same or similar to the one the user was attempting to publish, they can click on it to open it, choose to support it, and forego having to publish a new one. For review, a section to the right shows an itemized list of the question the user has entered in the previous screen, any of the categories they have chosen for it, the district they have associated with it, and if they do not find an existing question which will supplement for their own, it is here that they can choose to continue the process.

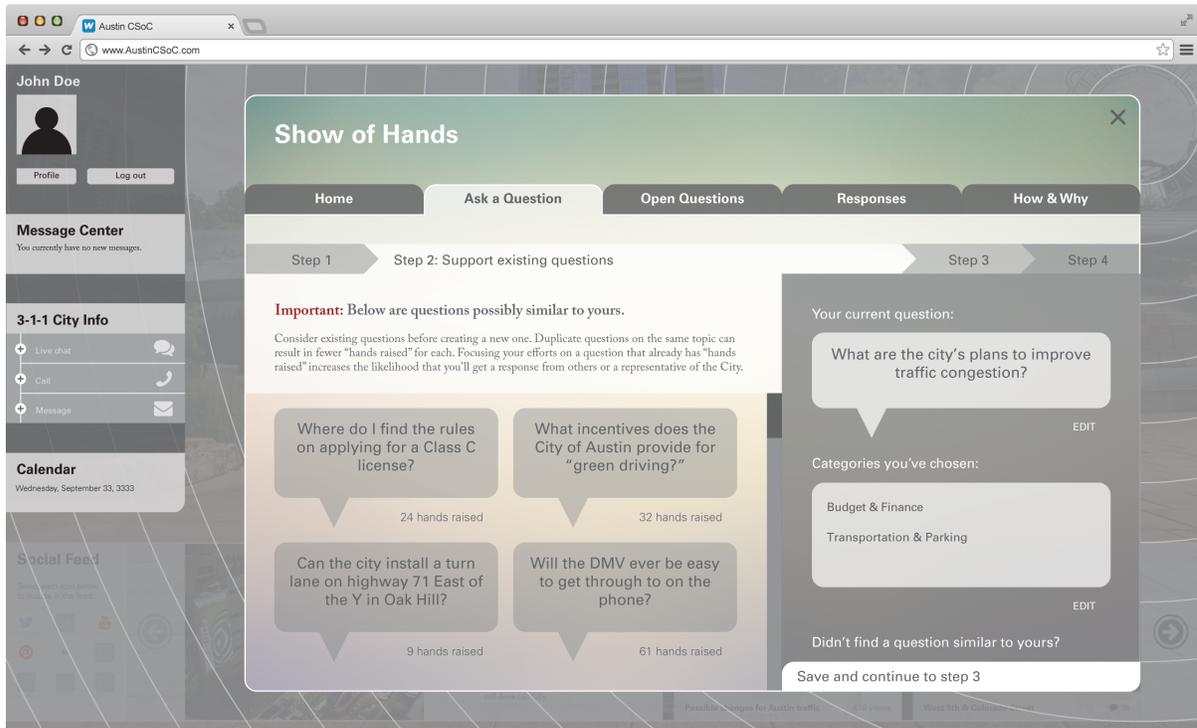


Figure 45. SoH screen; Ask a Question tab, Step 2: Support existing questions

Step 3 of the SoH Ask a Question process allows the user to give a brief explanation of their question, to serve as further detailed information for other users' understanding, as well as an option to associate certain keywords with it, so that others may more easily find it in a search. The screen for this step displays a section on the left with two different text entry boxes, one for the explanation and one for the keywords, each with a counter for their respective limits on characters (see Figure 46). A section for review, identical to that in step 2, is shown in a section on the right (see Figures 45 and 46).

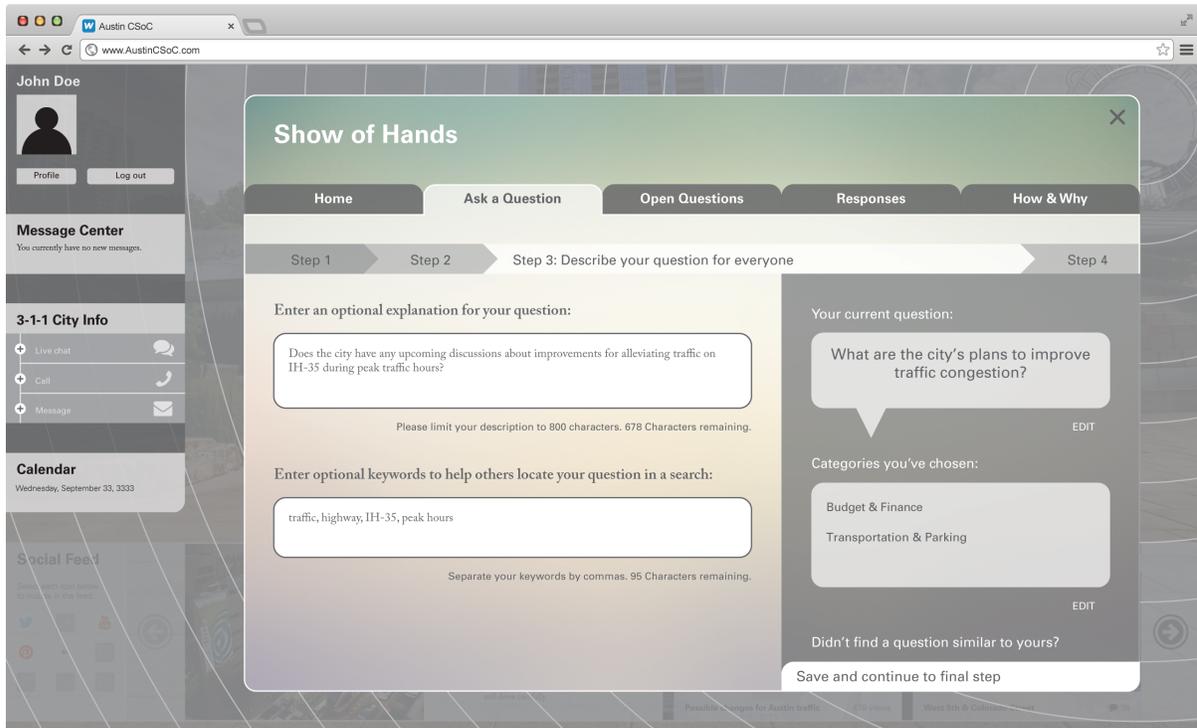


Figure 46. SoH screen; Ask a Question tab, Step 3: Describe your question for everyone

The fourth and final step of the SoH Ask a Question process allows the user to review all of the information they have provided with their question for accuracy, before choosing to publish it to the SoH community, saving it to publish at a later time, or deleting it entirely. The screen for this step confronts the user with a bold red bar across the top, containing text to alert the user that their question has not been published and to carefully review all of the information provided for accuracy (see Figure 47). This step in the SoH Ask a Question process is meant for precautionary reasons, as once a question is published, the user will be unable to edit or delete it. A section to the left of this screen contains an itemized listing of all of the information associated with the user's question; the current date, the question itself, the categories associated, the district chosen, the brief description, and the keywords. Each item of this listing also has a corresponding edit link, which the user can click on if they would like to change any information, and they will be taken back to the

associated screen for that item (see Figure 47). To the right of this screen is a section with three prominent buttons to initiate further action: one to publish the question to the SoH community, one to save the question for publishing at a later time, and one to delete the question permanently (see Figure 47).

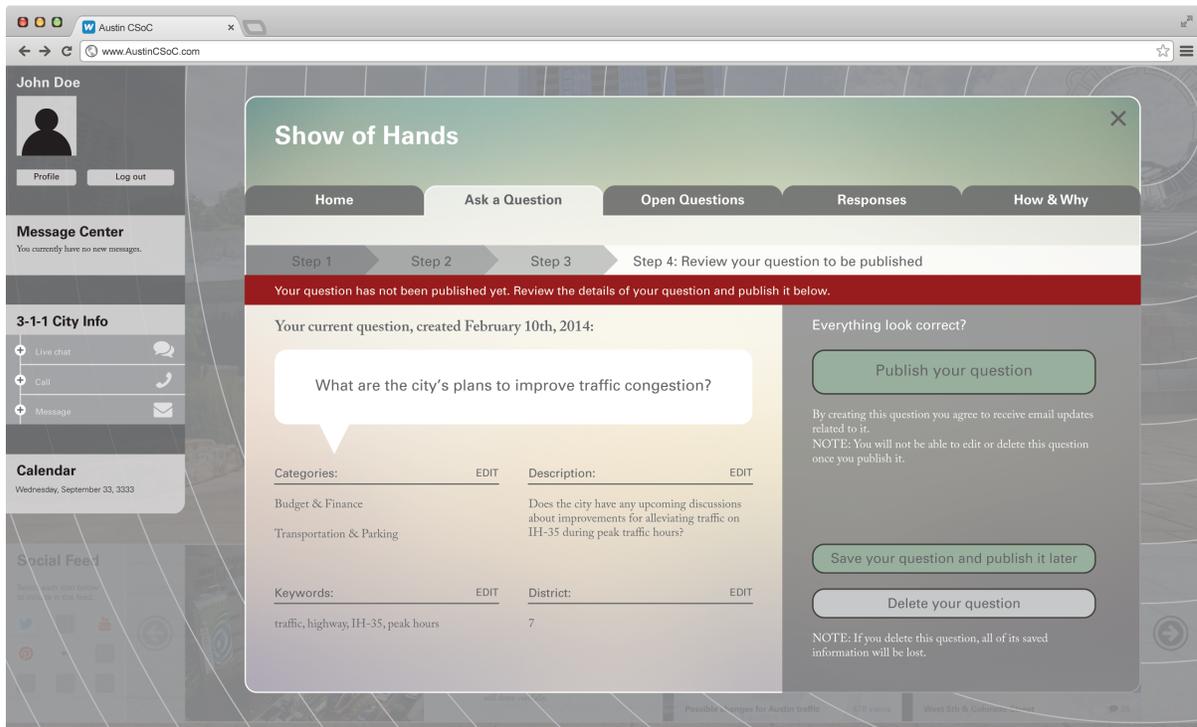


Figure 47. SoH screen; Ask a Question tab, Step 4: Review your question to be published

The SoH window provides users the option for perusing other user questions that have been published, under the Open Questions tab. Much like the search bar on the CSOC dashboard, the option is given to search for questions by keywords and filter those results by category, district, or popularity (see Figure 48). As a visual cue, the more popular questions are framed in larger text bubbles and are orientated towards the top of the screen, each has a corresponding number that represents other citizens who have chosen to support it, and a user can scroll down in the screen to explore all of the active questions (see Figure 48).

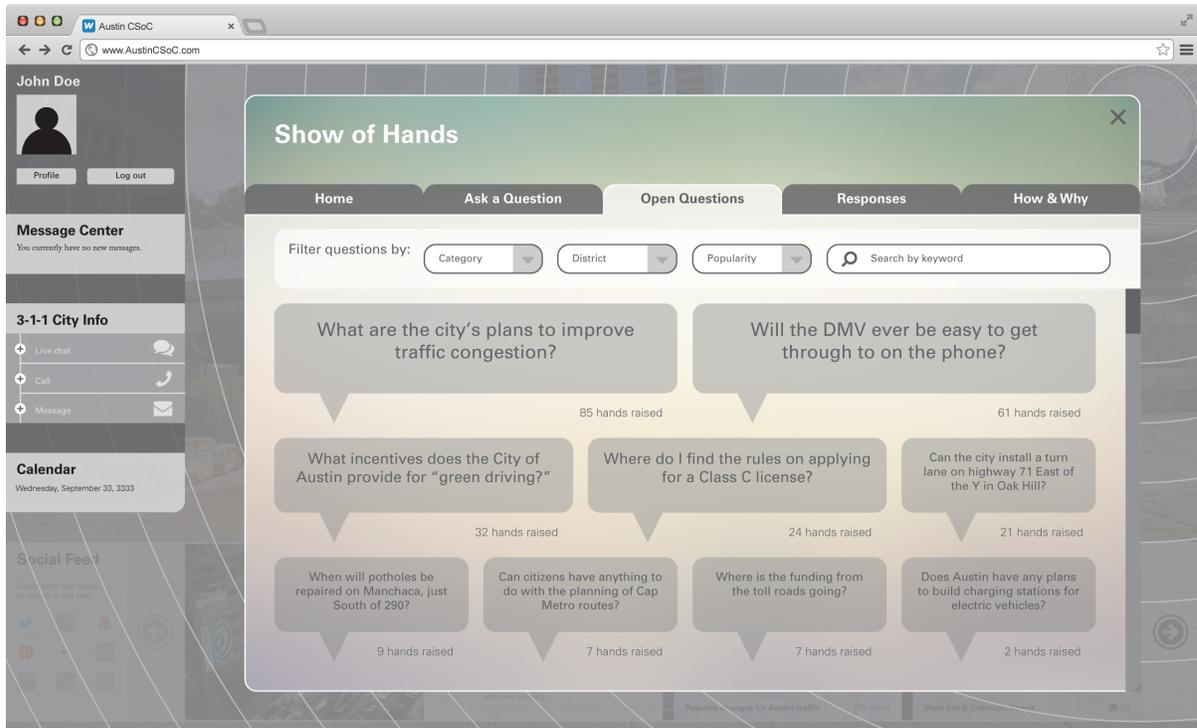


Figure 48. SoH screen; Open Questions tab

As well as participating in the process of creating and supporting questions, the SoH window allows for users to browse the history of questions that have been officially addressed, under the Responses tab. The screen under the Responses tab maintains the same search capabilities as that of the Open Questions tab: keyword, category, district, or popularity (see Figures 48 and 49). A user can scroll down the screen of each of the simplified response items, displayed with all the basic information about the question and answer associated: the original question, the number of citizens who supported the question, the date the question was answered, the name and profile picture of the representative who answered the question, the district the representative is associated with, and then a large button to view the response (see Figure 49). Clicking on the button to view the response would present any of the more detailed information about the question, as well as the representative's answer to the question.

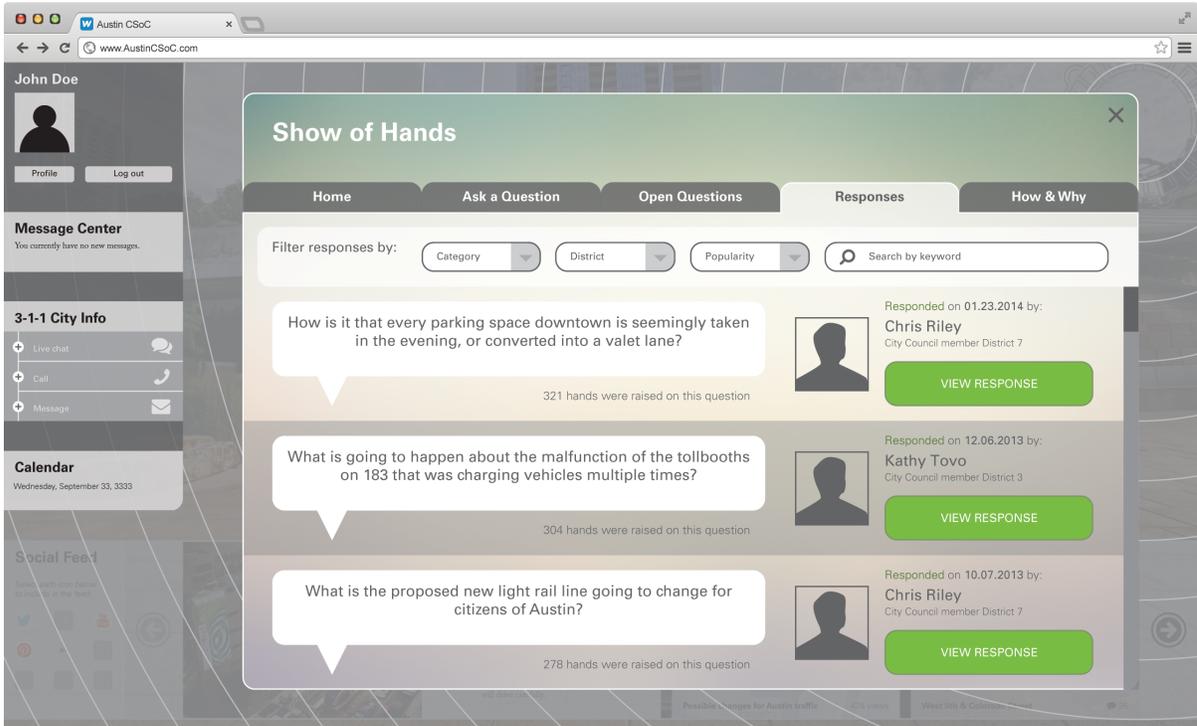


Figure 49. SoH screen; Responses tab

## CHAPTER VI

### Conclusion

In November of 2014, the City of Austin (CoA), Texas, will begin to implement a historic change to a geographically based City Council election system, commonly referred to as 10-1. Most citizens of Austin are unfamiliar or unaware of this type of system, as it has not existed in the city for over 100 years (Raggi, 2000). This paper sought to determine how Communication Design (CD) could be utilized in this situation to facilitate the transition on such a large scale, and promote the effectiveness of the 10-1 system into the future for both the citizens of the city as well as their governing body.

In order to approach this problem, this study set out to research the effects of 10-1 on the communication dynamic between Austin citizens and their government and the City of Austin Interaction survey (CoAIS) was conducted to try and understand citizens' perspectives on their current communication conditions with their city's governing body. Further research was conducted to determine how Internet and information and communication technologies (ICTs) could best serve the communication needs of the city and determine what type of CD system can best help the underserved in the CoA political process.

Research and input gained from the CoAIS revealed an active effort by the CoA to incorporate many forms of ICTs into their communication outreach to residents, but an apparent disconnect of said ICT's with their audience, from a citizen perspective. Further input provided by the CoAIS, combined with contemporary research supporting the high level of effectiveness of e-government, was applied to the opportunities 10-1 will create in its

restructuring of the CoA governmental process, to formulate a CD solution. The result was this study's proposal of a comprehensive public service education campaign (PSEC) in combination with a Collaborative System of Communication (CSoC).

The PSEC component of this proposal is aimed at informing citizens of the implications and opportunities the 10-1 system will provide them, as well as introducing and cultivating interest in the CSoC as a tool for improving their future communication ability with the CoA. A physical installation piece is introduced for public exhibition as part of the PSEC, with the goal of providing an alternative perspective to the Austin audience on the function of the CSoC, and encouraging public participation in its utilization. The CSoC is an Internet-based platform, incorporating a multitude of available information and communication sources into one comprehensive tool for community engagement and participation on matters pertaining to the CoA. Together, the PSEC and CSoC are designed to improve the current communication atmosphere for both the citizens and government of Austin in working towards an overall better quality of life for all.

### **Future research**

A primary function of the Collaborative System of Communication (CSoC) proposal is to facilitate the transition and effectiveness of the new City Council election system, also known as 10-1, by creating localized hubs of communication, information sharing, and community awareness. Including each district's Council member and staff in this theoretical scenario would not only allow for a more direct communication avenue from constituent to representative concerning local issues, but would function to allow each respective district a local platform to voice consensus on matters concerning the City as a whole. A system such as the CSoC could prove to be incredibly beneficial and long standing if executed properly,

but there would be a multitude of factors to consider and study further. Below are merely a few considered from the perspective of the author:

- Further develop and expand the CSoC visual identity system, representing each of the unique districts resulting from 10-1 while also maintaining a sense of equality. Special attention would need to be paid to any graphical treatments, such that they will also function as a whole based on the sum of its parts.
- Further explore and develop the deliverables to be utilized in the PSEC. This would include utilizing any media outlets available, from printed materials, to audio-visual components, and anything else available, in order to reach the maximum amount of citizens.
- Investigate the resources required to develop a beta version of the CSoC, test a trial group, and gauge the citizen engagement and effectiveness of such a system.
- Explore and research contemporary leaders in social media software and determine how best to incorporate multiple avenues of communication technologies into a singular information network for the CSoC.
- Employ User Experience methodologies to research and discover the particular communication needs of each of the ten districts, such that each of the CSoC hubs could be adapted to operate with the greatest benefit to its respective citizen base.
- Inquire into the feasibility of the CSoC being able to function as a portal for conducting basic city business matters like paying utility bills, parking tickets, or things of that nature.

- Test the usability of a SoH prototype and make revisions accordingly.
- Research the feasibility of City Council members interacting on a frequent basis with something like SoH.
- Research the feasibility of including mediation within each CSoC hub as a digital extension of 3-1-1's information center, as well as the practicality of the 3-1-1 department in supporting the live chat feature of the CSoC.
- Investigate the integration of survey results in the forums from Textizen, a pilot technology currently being explored by the CoA, in which a simple question is posed, on a poster for example, along with a telephone number for the audience to provide input via text message. Digits correlating to the available answers, such as 1 for yes, and 2 for no, provide a quick and accessible option for garnering citizen input. While this technology is limited in its ability to communicate at a conversational level, it could prove to be a valuable polling mechanism as an addition to the By the Numbers window in the CSoC dashboard.
- Create a condensed version of this paper's proposal, to serve as a marketing tool in the garnering of support for the implementation of the PSEC and CSoC.

## REFERENCES:

- Aleman, S. (2011). *Re: ANC's position on 2012 city charter revisions*. Retrieved November 1, 2013 from <http://citizensdistricting10-1.org/wp-content/uploads/2012/02/ANC-letter-03Nov2011.pdf>
- Austin 3-1-1. (n.d). *Austin 3-1-1*. Retrieved November 2, 2013 from <http://austintexas.gov/department/311>
- Austin Neighborhoods Council. (n.d.a) *About ANC*. Retrieved November 2, 2013 from <http://www.ancweb.org/about.htm>
- Austin Neighborhoods Council. (n.d.b) *Neighborhood associations*. Retrieved November 2, 2013 from [http://www.ancweb.org/na\\_links.htm](http://www.ancweb.org/na_links.htm)
- Austin, Texas, Ordinance No. § 20120802-015. Retrieved from <http://austintexas.gov/edims/document.cfm?id=174695>.
- Badreddin, O. (2013). Thematic review and analysis of grounded theory application in software engineering. *Advances in Software Engineering, 2013* (468021). Retrieved October 13, 2013 from <http://www.hindawi.com/journals/ase/2013/468021/>
- Bhattacharjee, A. (2012). *Social science research: Principles, methods, and practices*. Retrieved August 23, 2013, from [http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1002&context=oa\\_textbooks](http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1002&context=oa_textbooks)
- Bien, C. (2012, December 2). *Making sure 10-1 is representative*. Retrieved from <http://www.kxan.com/news/local/austin/making-sure-10-1-is-representative>

Brennan, M. (2013, January 23). *America's fastest growing cities*. Retrieved August 5, 2013, from <http://www.forbes.com/sites/morganbrennan/2013/01/23/americas-fastest-growing-cities/>

City of Austin. (n.d.). *Welcome to AustinTexas.gov*. Retrieved November 3, 2013, from <http://www.austintexas.gov/>

City Manager's Office, & Communications and Public Information Office. (2011). City of Austin Social Media Guidelines. Austin, TX. Retrieved from <http://austintexas.gov/sites/default/files/files/Communications/social-media-policy.pdf>

City of San Antonio. (2011). *The city organization: How it works*. Retrieved October 15, 2013, from <http://www.sanantonio.gov/YourCity/organization.aspx>

Communications and Public Information Office. (n.d.) Connect with city social networks. Retrieved November 2, 2013 from <http://austintexas.gov/social>

ETC Institute. (2013). *2013 City of Austin communications survey: Final report* [PDF].

Guo, Y. (2010). E-Government: Definition, Goals, Benefits and Risks. In *2010 International Conference on Management and Service Science* (pp. 1–4). IEEE. doi:10.1109/ICMSS.2010.5576557

Hambrick, J. (2013). Austin ranks at the top for digital media and social media usage.

Retrieved November 2, 2013 from <http://digitaltexas.net/2013/austin-local-news/austin-ranks-top-internet-social-media-usage/article52280/#.UnXH-ZRARAd>

IBM Corporation. (2010a). Austin, Summary Report. *Smarter Cities Challenge*. Retrieved from

<http://smartercitieschallenge.org/wps/wcm/connect/20071b804127b1dfbb99ff5e2785>

d2db/SmarterCities-  
Austin.pdf?MOD=AJPERES&CACHEID=20071b804127b1dfbb99ff5e2785d2db

IBM Corporation. (2010b). Austin, November 2010. *Smarter Cities Challenge*. Retrieved from  
<http://smartercitieschallenge.org/wps/wcm/connect/6e35b6004fd0d9e925c9fd099aebe4e/IBM+Smarter+Cities+Challenge+-+Austin+Report.pdf?MOD=AJPERES&CACHEID=6e35b6004fd0d9e925c9fd099aebe4e>

Independent Citizens Redistricting Commission. (2013a). About the Charter. *Austin Redistricting*. Retrieved November 5, 2013 from  
<http://www.austinredistricting.org/about/about-the-charter/>

Independent Citizens Redistricting Commission. (2013b). Mission. *Austin Redistricting*. Retrieved November 5, 2013 from <http://www.austinredistricting.org/about/mission/>

Independent Citizens Redistricting Commission. (2013c). Ten things you may not know about Austin's 10-1 redistricting process. *Austin Redistricting*. Retrieved November 5, 2013 from <http://www.austinredistricting.org/2013/10/17/ten-things-you-may-not-know-about-austins-redistricting-process/>

Kim, B. J., Kavanaugh, A. L., & Hult, K. M. (2011). Civic engagement and Internet use in local governance: Hierarchical linear models for understanding the role of local community groups [Abstract]. *Administration & Society*, 43(7), 807–835.  
doi:10.1177/0095399711413873

- Low, C. (1997). Integrating communication services. *IEEE Communications Magazine*, 35(6), 164–169. Retrieved October 2, 2013 from <http://www.hpl.hp.com/techreports/96/HPL-96-135.pdf>
- Martin, K. (2012, November 7). *10-1 plan to rule council elections*. Retrieved October 10, 2013 from [http://www.theaustinbulldog.org/index.php?option=com\\_content&view=article&id=238:10-1-plan-to-rule-council-elections&catid=3:main-articles](http://www.theaustinbulldog.org/index.php?option=com_content&view=article&id=238:10-1-plan-to-rule-council-elections&catid=3:main-articles)
- Newman, C. (2013, June 13). World's oldest person dies—How can you live to 100? *National Geographic Daily News*. Retrieved October 17, 2013, from [http://news.nationalgeographic.com/news/2013/06/130613-oldest-person-dies-health-longevity-science/?rptregcta=reg\\_free\\_np&rptregcampaign=20131016\\_rw\\_membership\\_n1p\\_us\\_se\\_w#](http://news.nationalgeographic.com/news/2013/06/130613-oldest-person-dies-health-longevity-science/?rptregcta=reg_free_np&rptregcampaign=20131016_rw_membership_n1p_us_se_w#)
- Newsom, G., & Dickey, L. (2013) *Citizenville: How to Take the Town Square Digital and Reinvent Government* [Kindle version]. Retrieved from Amazon.com
- Office of the City Clerk. (n.d.). May 3<sup>rd</sup>, 1969. *Election history*. Retrieved October 1, 2013 from <http://www.austintexas.gov/election/byrecord.cfm?eid=29>
- Pariser, E. (2011, March) *Eli Pariser: Beware online “filter bubbles.”* [Video file] Retrieved August 26, 2013 from [http://www.ted.com/talks/eli\\_pariser\\_beware\\_online\\_filter\\_bubbles.html](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html)
- Raggi, N. (2000). *Alternatives for City Council Elections Alternatives for City Council Elections in Austin, Texas* (Master’s professional report). Retrieved September 5, 2013 from

- <http://www.iafflocal975.org/items/Raggi%20Austin%20City%20Council%20Study.pdf>
- Rainie, L. (2010, January 5). Internet, broadband, and cell phone statistics. *Pew Internet & American Life Project*. Retrieved October 18, 2013 from [http://www.pewinternet.org/~media/Files/Reports/2010/PIP\\_December09\\_update.pdf](http://www.pewinternet.org/~media/Files/Reports/2010/PIP_December09_update.pdf)
- Selby, W. G. (2012, August 17). *Austin group says Austin is the biggest U.S. city lacking City Council members elected from geographic districts*. Retrieved August 5, 2013, from <http://www.politifact.com/texas/statements/2012/aug/17/austinites-geographic-representation/austin-group-says-austin-biggest-us-city-lacking-c/>
- Smith, A. (2010, April 27). Government online information. *Pew Internet & American Life Project*. Retrieved October 18, 2013 from [http://www.pewinternet.org/~media/Files/Reports/2010/PIP\\_Government\\_Online\\_2010\\_with\\_topleveline.pdf](http://www.pewinternet.org/~media/Files/Reports/2010/PIP_Government_Online_2010_with_topleveline.pdf)
- Straubhaar, J., Chen, W., Spence, J., Correa, T., & Machado-Spence, N. (2011). Report to the City of Austin Office of Telecommunications & Regulatory Affairs. *The Austin Internet and Global Citizens Project*. Retrieved November 2, 2013 from [http://austintexas.gov/sites/default/files/files/Telecommunications/The\\_Austin\\_Internet\\_and\\_Global\\_Citizens\\_Project.pdf](http://austintexas.gov/sites/default/files/files/Telecommunications/The_Austin_Internet_and_Global_Citizens_Project.pdf)
- SteelSMBology. (2010, April 16). City of Austin website redesign and social media strategy report. Retrieved October 25, 2013 from [http://austintexas.gov/sites/default/files/files/AustinGO/Appendix\\_L\\_Social\\_Media\\_Analysis\\_Report.pdf](http://austintexas.gov/sites/default/files/files/AustinGO/Appendix_L_Social_Media_Analysis_Report.pdf)

- Tashakkori, A., & Creswell, J. W. (2007). Editorial: The New Era of Mixed Methods. *Journal of Mixed Methods Research*, 1(1), 3–7. doi:10.1177/2345678906293042
- U.S. Census Bureau. (2013). Austin (city), Texas. *State & county Quickfacts*. Retrieved August 26, 2013 from <http://quickfacts.census.gov/qfd/states/48/4805000.html>
- U.S. Const. amend. XXVI. (1971). Retrieved from <http://www.archives.gov/historical-docs/todays-doc/?dod-date=323>
- Weeks, O. D. (1988). Election Laws. *Handbook of Texas Online*, 1–5. Retrieved October 1, 2013 from <http://www.tshaonline.org/handbook/online/articles/wde01>
- Welch, E. W., Hinnant, C. C., & Moon, M. J. (2004). Linking Citizen Satisfaction with e-Government and Trust in Government. *Journal of Public Administration Research and Theory*, 15(3), 371–391. doi:10.1093/jopart/mui021
- White House, The (n.d.). We the People: Your Voice in Our Government. Retrieved March 24, 2014 from <https://petitions.whitehouse.gov/>
- Yanqing, G. (2010). E-Government: Definition, goals, benefits and risks. In *2010 International Conference on Management and Service Science* (pp. 1–4). IEEE. doi:10.1109/ICMSS.2010.5576557