

USING ARNSTEIN'S LADDER OF CITIZEN PARTICIPATION TO ASSESS SOCIAL
MEDIA'S EFFICACY AS A PUBLIC PARTICIPATION TOOL: A CASE STUDY OF
ACTION ALEXANDRIA

By

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To my most beloved grandmother. Your sacrifices now yield fruit.

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Abstract of Thesis Presented to the Graduate School
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Many local governments require some level of public participation as part of the planning process. Public engagement often takes the form of public meetings, workshops, and surveys. These methods have come under criticism by practitioners, researchers and theorists, who claim that they do not reliably increase meaningful participation of stakeholders and the general public in the planning process and fail to adequately represent the served population. In recent years, social media has been proposed as an alternative tool for public participation, however, current research does not adequately address how social media meets quality standards for public participation and how social media represents the served population.

ACTion Alexandria is a non-profit online initiative of Alexandria's community foundation: ACT for Alexandria. It was created as an online platform to facilitate community action and problem solving and has a reputation for successful use of social media as a public participation tool. However, no examination of ACTion Alexandria has occurred regarding the non-profit's application of social media as a public participation tool. Furthermore, there is debate among scholars and practitioners as to the legitimacy

of a public participation initiative based on social media. Current means of evaluation exist, however they are tailored to specific public participation contexts and cannot be used to analyze overall efficacy of public participation tools as a whole.

Therefore, in order to evaluate ACTion Alexandria's use of social media as a public participation tool within a framework that is accepted by practitioners, researchers and theorists as a legitimate standard for any public participation medium, this research uses Arnstein's Ladder of Participation as a standard of evaluation. First, this study looks into Arnstein's theoretical framework and extrapolates five main aspects from Arnstein's writing that are then compared to ACTion Alexandria. The highest quality of public participation based on Arnstein's theoretical framework incorporates all five aspects. Most of the current public participation tools used by practitioners have four of Arnstein's aspects and are considered legitimate forms of public participation. If ACTion Alexandria can meet at least four aspects of Arnstein's theoretical framework, it would be evidence that social media can be a legitimate form of public participation. Due to consistent concerns regarding social media as a public participation tool particularly its inability to represent stakeholders, this study focuses on the first of Arnstein's theoretical characteristics: representation of the served population. By looking at digital divide data and neighborhood organization partnerships, the study hopes to establish a qualitative narrative that can demonstrate a clear presence of community representation within ACTion Alexandria. The digital divide data demonstrates that all citizens in Alexandria have access to the ACTion Alexandria website portal with no discrimination. However, due to the logistics of neighborhood organizations' access to ACTion Alexandria, it is not possible to ascertain a clear and decisive narrative of unbiased

participation. These findings therefore invite further study. Still, the current results do present a narrative that indicates the promise and strength of ACTion Alexandria to harness this technology to enhance the participation process.

CHAPTER 1 INTRODUCTION

Public participation as defined by Sherry Arnstein is the implementation process by which the general public joins planners and decision makers in working towards social reform (1969). However, Beierle (1998) defines public participation as only occurring through a “limited number of mechanisms” one of which is “intentionally instituted by the government to involve the lay person or their representative in administrative decision making” (p. 15). This mechanism includes traditional public hearings and meetings as well as deliberation, consensus building and collaborative management efforts; and excludes conventional political influence like voting and extralegal methods like strikes (Beierle, 1998). McComas (2001b) defines public participation as “nonrestricted gatherings of three or more people for purposes that include providing information, discussing issues, obtaining information, reviewing projects, evaluating options, developing recommendations, and making decisions” (p.36-37). Most states require local governments to accommodate public participation (Williamson and Scicchitano, 2013; Brody, 2003). Planners and public officials fulfill this requirement through public meetings (McComas, 2001a; Williamson and Scicchitano, 2013), questionnaire surveys (Li, Liu, Li, 2011), citizen advisory boards, and focus groups (Williamson and Scicchitano, 2015) among other methods. In fact, public meetings continue to be the most popular method of public participation (McComas, 2001a; Williamson and Scicchitano, 2015). Proponents of public meetings as a tool for public participation claim that they are quick, inexpensive (McComas, 2001a), fulfill several legal requirements (Williamson and Scicchitano, 2015), and allow the public to express their point of view on proposed projects (Adams, 2004).

However practitioners, researchers and theorists have criticized these traditional methods and claim that they fail to achieve genuine participation from participants; that they do not provide sufficient information for public officials or the general public; that they fail to represent the comments and attitudes of the general public; that they do not improve decisions made by officials and practitioners (Innes and Booher, 2000; Apostol, Antoniadis, and Banerjee, 2012); that they discriminate in favor of special interests, groups, and areas (Lowndes, et al, 2001); and that they do not accurately represent a diverse demographic sample (Williamson and Scicchitano, 2015; Lowndes, et al, 2001; Innes and Booher, 2000). Further, planners, public officials, and academics have found inadequacies with public meetings, including their adversarial format, overly technical presentations, ineffectiveness as vehicles of rational persuasion, and lack of impact on ensuing decisions (McComas, 2001a; Adams, 2004). Critics have also highlighted the use of public meetings by officials to meet the minimum legal requirement in the review process while minimizing the public's input (McComas, 2001a; Brody, 2003).

Dissatisfaction with public meetings as a tool for public participation has led practitioners and scholars to propose alternative methods for involving the public in decision making (Adam, 2004; Crosby, Kelly, and Schaefer, 1986; Williamson and Scicchitano. 2013; Innes and Booher, 2000; Li et al., 2012; McComas, 2001a; Fiorino, 1990). These proposals include the modification of the public meeting format into a roundtable or small group format, forums, citizen panels (Adam, 2004), and the application of social media (Linders, 2012). Many scholars hail social media as an ideal format to disseminate and mass produce information and collaborate with citizens (Linders, 2012; Bonson, 2012). They also highlight the power of social media to either

break or make a public entity's reputation (Kietzmann, Hermkens, McCarthy, Silvestre, 2011). Nevertheless, social media as a tool for public participation has also been criticized by practitioners and scholars. Critics claim that public planners' lack of knowledge regarding how to use social media technology could hinder the consistency and overall delivery of information to the public, which could result in customer dissatisfaction (Picazo-Vela, et al., 2012). Also concerns about privacy and security issues exist such as hacking and virus attacks (Bertot, 2011), records management, accuracy of information, lack of constructive participation from the citizenry, and administrative requirements (Picazo-Vela, et al., 2012). Another key criticism is the lack of accessibility to social media due to limited access to hardware, software, and the internet (Bertot, 2011). Accessibility also includes the limitation of language or speech skills which is common among foreign born and citizens of lower social economic strata (Apostol, et al., 2012).

Despite the criticisms however, social media as a public participation tool is gaining overall acceptance from local officials (Linders, 2012; Bertot, 2011). In 2009, President-elect Obama used social media to communicate with citizens via his Change.gov campaign, a novel action that influenced agencies from all levels of government to implement these strategies. For example, broadband.gov gathered citizen comments on the national broadband plan while the City of San Francisco used SFideas.org to gather online suggestions on cost efficiency (Linders, 2012). Social media is also at the heart of federal agencies' open government plans which stemmed from President Obama's call to increase openness in government (Lee, 2012). Further, the United States is not the only country incorporating social media into its public

participation tool arsenal. Mexico (Picazo-Vela, et al, 2012), China (Li, 2011), Scotland, England, and Chile just to name a few (Linders, 2012) have all implemented to varying degrees social media as a public participation tool.

Due to social media's capacity to enhance the interactivity, transparency, and openness of the public sector (Bonson, 2012), and its quick implementation by government bodies as a primary tool for disseminating information, it is not a temporary fad and will most likely continue gaining acceptance as a flexible and interactive public participation tool (Reddick, 2012). In an article for the *Washington Examiner*, Kelly Cohen (2014) highlighted overwhelming statistical data denoting social media's powerful ability to influence people and its prolific use by the American public. These findings however do not necessarily apply to the context of public participation. Furthermore, an agreed upon standard for quality in the public participation sector does not exist (Syme and Sadler, 1994; Chess and Purcell, 1999; McComas, 2001b; Chase, Decker, and Lauber, 2004; Rowe and Frewer, 2004).

Although there have been a number of attempts at specifying criteria against which effectiveness may be assessed, these have certain limitations, and they have not yet been widely influential in a practical sense. There is a need for a more comprehensive set of criteria for determining whether a public participation mechanism is successful (Rowe and Frewer, 2000. p. 4).

Many standards exist, but these target different aspects of public participation, including public engagement such as integrating social media tools, and thus prove difficult to apply consistently in all cases (Rowe and Frewer, 2004; Chase et al., 2004).

In spite of the many different measures, Arnstein's Ladder of Public Participation greatly influences how practitioners approach public participation efforts and has been labeled as the "bench mark" metaphor for describing and evaluating participatory

activities” (Collins and Ison, 2006, “Introduction,” para. 4). Arnstein criticized the limited extent of local control in U.S. urban development programs by highlighting the inconsistency between the legislative mandate for “maximum feasible participation” and the lack of power among local communities (Bruns, 2003 p. 3). She then proposed what is known among scholars and practitioners as the “Ladder of Citizen Participation” (Arnstein, 1969; Bruns, 2003; Ghoguill, 1996; Lane, 2005). In this ladder, Arnstein creates a one dimensional scale composed of eight rungs designed to emphasize citizen empowerment (Bruns, 2003; Lane, 2005; Maier, 2001) arguing that real participation is only found where there is a full partnership or even full control between citizens and policy makers (Bickerstaff, Tolley, and Walker, 2002). Scholars and practitioners have described current public participation tools as belonging to the fourth rung in Arnstein’s ladder: consultation (Lane, 2005). The consultation rung belongs to the group Degrees of Tokenism which Arnstein defines as a “sham” stating that “it offers no assurance that citizen concerns and ideas will be taken into account” (Arnstein, 1969 p. 219). This coincides with current criticism by practitioners and researchers of public participation methods whereas current methods fail to achieve genuine participation, are not effective in considering and implementing input from the citizenry, fail to represent an accurate sample of the public, and tend to favor special interests and higher socioeconomic populations (Innes and Booher, 2000; Irvin and Stansbury, 2004). In spite of their acknowledged qualification within Arnstein’s Ladder of Participation as consultation methods (Lane, 2005), current public participation tools are accepted as legitimate forms of public participation and fulfill the public participation requirements of

local governments (Irvin and Stansbury, 2004; Laurian and Shaw, 2008; McComas, 2001a, 2001b; Rowe and Frewer, 2000).

The case study for this research looks at ACTion Alexandria, a social media online civic engagement initiative that serves the city of Alexandria under ACT for Alexandria (the city's community foundation). Alexandria is a small city in the state of Virginia with a population of 153,511 divided into 66.3% white, 22.6% black or African American, and 16.7% Hispanic or Latino (United States Census Bureau, 2016). Approximately 29% of Alexandrians 5 years old or older speak a language other than English at home with the most common language groups other than English being Spanish (around 16,156 speakers) (City of Alexandria, 2016). Alexandria ranks higher than the state average for education with 91.7% of citizens over the age of 25 possessing a high school degree or higher (compared to 86.9% in the state of Virginia) and 60.5% of Alexandrians over the age of 25 possessing a bachelor's degree or higher (compared to 34.7% in the state of Virginia) (Act for Alexandria, 2013b). The city also has a higher median household income when compared to Virginia with \$83,996 (Virginia's median household income: \$63,636) (Act for Alexandria, 2013b). The percentage of residents living in poverty is 9.6% (United States Census Bureau, 2013).

ACTion Alexandria tackles much of the criticism plaguing most of the public participation efforts by focusing on creating a platform that "empower citizens to take collective action" and encourages a more transparent, accessible, and engaged method of public participation (About Action Alexandria, 2016, "Goals," para. 2). The ACTion Alexandria social media platform was inspired by the "American barn raising tradition" (Koepfler, Hansen, Jaeger and Bertot, 2012, p. 2; Mernit, 2011) where citizens came

together to share resources and labor in order to build essential elements of a community such as large buildings (About Action Alexandria, 2016). With this in mind, Alexandria's community foundation: ACT for Alexandria, sought to create an online social media platform designed to connect local residents, service-oriented organizations, and local government in an effort to address pressing local needs in what has been labeled as an "action brokering platform" (About Action Alexandria, 2016; Koepfler et al., 2012, p. 2; Mernit, 2011). This platform has gained the reputation of successfully using social media to engage the citizens of Alexandria. Its success has been attributed to "a competent community manager, institutional support from an existing nonprofit brokering agency, a synergistic partnership process with nonprofits that helped grow each group's donor network, and emphasis on promoting immediate actions and soliciting ideas for community challenges among residents and nonprofit organizations" (Koepfler et al., 2012, p. 2).

This thesis analyzes ACTion Alexandria's use of social media by comparing it to the principles found in Arnstein's Ladder of Participation. ACTion Alexandria boasts that its platform gives local residents the ability to not only receive information but also give information by blogging, creating events in the public calendar, and posting ideas (Techimpact, 2015). The case study approach employed here is ideal for "understanding phenomenon within a larger system" (Koepfler et al., 2012, p. 7) and for describing phenomenon that lack empirical investigation (Koepfler et al. 2012). The lack of standards available for the assessment of public participation tools, the novelty of social media as a public participation tool, and the interest government officials and practitioners show in the application of social media as an alternative for public

participation have been the motivators for this research question: what's the effectiveness of social media as a public participation tool? The goal is to ascertain whether ACTion Alexandria's use of social media begins to engage with Arnstein's Ladder of Participation, which could lend evidence as to social media's legitimacy as a public participation tool.

The literature review discusses the failure of public participation to accommodate full and equal representation; the varying levels of quality in the public participation process and the resulting reason for adopting Arnstein's Ladder of Participation as the quality standard for this study; an examination of Arnstein's Ladder of Participation; and background information on social media and how it pertains to ACTion Alexandria. Chapter 3 provides information on ACTion Alexandria including its genesis, platform goals, community structural make up; tools of interactions such as actions, ideas, blogs; and the role of the community manager. Chapter 4 describes the methodology employed for this study. Chapter 5 records this study's findings. Lastly, Chapter 6 delves into discussion and recommendations for ACTion Alexandria and further study.

CHAPTER 2 BACKGROUND

Public participation has had a tumultuous history ranging from “constrained” commentary on the goals of planners to an active and constant pursuit of representing the interest of the public (Lane, 2005). Though this research is meant to analyze the current proposal of social media as a public participation tool via a case study of ACTion Alexandria, it’s beneficial to have some understanding of the struggle that the practice of public participation has had through history and how it has morphed into what we have today. Therefore, this chapter will begin with a general historical view of public participation from its infancy to the present. In looking at public participation’s history the fact that planners have struggled with finding a way to encapsulate a method of ascertaining the quality of public participation tools becomes apparent and problematic (Lane, 2005). “One of the problems that has bedeviled the literature on participation...is how to evaluate the success or effectiveness of public participation efforts....public participation can only be understood in terms of the decision-making context in which it is embedded” (Lane, 2005, p. 297). The problem of defining a standard of effectiveness for public participation tools has not been solved yet, therefore this study takes a more theoretical approach in instituting a standard of quality by which to measure ACTion Alexandria and uses Arnstein’s Ladder of Public Participation as the theoretical framework. This chapter will go into details as to what Arnstein’s framework entails and how it measures quality. Lastly, with all the confusing terminology surrounding the concept of social media, it’s important to define ACTion Alexandria’s use of social media. To do so, this chapter clarifies some of the current definitions and establishes a

working definition that will be used when proceeding to look at the case study of ACTION Alexandria.

The figure head of public participation and its failure to represent the people

At the federal level, public participation was first mandated in the 1954 Urban Renewal Program with the aim of dealing with urban blight (Brody, Godschalk, and Burby 2003; Johnstone, 1958). Public backlash over the disenfranchisement of the poor and minorities led to the expansion of public participation's role in planning through the Model Cities program and the War on Poverty during the 1960s (Brody et al., 2003; Kline and Gates, 1971). The intent, in part, of Model Cities and the War on Poverty was to grant disadvantaged citizens, greater access to participation in urban politics, which resulted in an enlargement of "formal requirements" for citizen participation (Howard, Lipsky, and Marshall, 1994).

Planning would eventually go through several evolutions, including incrementalism and a mixed scanning approach, each one providing more opportunities for public participation (Lane, 2005). By the late 1960s, the synoptic planning model's criticism of an idealistic attachment to "the notion of a unitary public interest" resulted in the exploration of new planning theories (Lane, 2005, p. 290). The introduction of critical theory into planning theory produced transactive, advocacy, and Marxist planning, as well as communicative approaches (Lane, 2005). With the exception of Marxist planning, all gave public participation a more significant role (Lane, 2005). In addition to efforts to greater integrate public participation through programs such as Model cities, Congress continued to incorporate participation requirements in the 1970s through

environmental legislation such as in the Coastal Zone Management Act and the Energy Reorganization Act (Brody, Godschalk, and Burby, 2003).

Yet simply allowing the public to participate in these debates was not enough. In 1969, Arnstein argued that public participation had become a mechanism that allowed powerholders to claim engagement (and thus fulfill legislative requirements), without providing participants legitimate power to influence decision making (Arnstein, 1969). Furthermore, Arnstein argued that power holders discriminated against “the have-not blacks, Mexican-Americans, Puerto Ricans, Indians, Eskimos, and whites” by politically opposing redistribution of power in public participation (Arnstein, 1969 p.216). For Arnstein, quality in public participation equated with citizen power that

enables the have-not citizens, presently excluded from the political and economic process, to be deliberately included in the future. It is the strategy by which the have-nots join in determining how information is shared, goals and policies are set, tax resources are allocated, programs are operated, and benefits like contracts and patronage are parceled out. (p. 216).

A definition of public participation and its effectiveness has changed over the years. From what began as a tool to provide “commentary on the goals of planning” (Lane, 2005, p. 290), evolved into what is now a legal form of communication between planners and citizens. Arnstein criticized this legal requirement by stating that quality for public participation equated with citizen power, something that it lacked during Arnstein’s time (Arnstein, 1969). Planning has continued to evolve since Arnstein. However some scholars, practitioners, and researchers still argue that public participation is lacking effectiveness and that its original intentions of public engagement translated into the fruition of the public interest is absent (Innes and Booher, 2000; Irvin and Stansbury, 2004). To find answers concerning the effectiveness of public

participation, it is necessary to have a working definition of success (Chess and Purcell, 1999). However, this has proven to be difficult.

Defining Quality

A clear definition of what characterizes “quality” in the public participation process is difficult (Bailey and Grossardt, 2006; Chess and Purcell, 1999). Few cases examine the merits of public participation (Rowe and Frewer, 2004; Rowe and Frewer, 2000; McComas, 2001a; Chess, 2000). Moreover, public participation evaluations rely on a wide range of criteria that address processes and outcomes, resulting in inconsistent standards among practitioners and evaluators (Rowe and Frewer, 2004; Laurian, 2008) and a lack of a “theoretical bench-mark against which performance may be assessed” (Rowe and Frewer, 2004, p. 517). Furthermore “quality” cannot easily be identified, described and measured (Rowe and Frewer, 2004). The lack of a universal standard of quality stems from the wide range of contexts within which public participation occur (Rowe and Frewer, 2004; Rowe and Frewer, 2000). Rowe and Frewer (2014) clarify:

...consider the activity of a group that is meeting to produce a solution to a particular problem...How would one judge the effectiveness of the group? Among the possible standards (hence definitions) are the speed at which the group came to its solution... Of course, ‘speed of decision making’ could be interpreted positively or negatively: it could reflect an efficient process, or it could indicate that the group engaged in insufficient deliberation to reach a solution or was not provided with sufficient resources to appreciate the complexity of the problem... (p. 517-518).

In this particular example, the “speed of decision making” by the group is used as an evaluation standard. However, a faster resolution may result in a negative or positive outcome that can only be understood within the context of the broader planning initiative. Due to the varied contexts, methods, and goals of the public participation

process, any set of criteria meant to evaluate public participation's effectiveness fails to address the goals of the process as outlined by Arnstein (Rowe and Frewer, 2004; Chess, 2000).

Aside from situational interpretations, quality standards also have to take into account "Sponsors of the exercise, the organizers that run it, the participants that take part, and the uninvolved-yet-potentially affected public" (Rowe and Frewer, 2004, p. 516). Aspects that might seem effective to participants, could potentially be interpreted as ineffective by sponsors and organizers (Rowe and Frewer, 2004). Rowe and Frewer (2004) give an example of this:

...participants might be satisfied with a deliberative conference process and judge it effective on that basis, while the sponsors might be dissatisfied with the resulting recommendations and, on that basis, judge it ineffective (p. 520).

A review of the literature reveals varied definitions regarding the quality of public participation. Rowe and Frewer (2004) argue that these can be grouped into three types: definitions developed on the basis of theory (see Esogbue and Ahipo, 1982; Fiorino, 1990; Laird, 1993; Poisner, 1993), definitions developed "through summarizing the opinions of authors or researchers and their findings" (p. 521, see also Arnstein, 1969; Rosener, 1975; Wiedermann and Ferners, 1993; Rowe and Frewer, 2000) and definitions developed on the basis of surveying participants regarding their perceptions of what constitutes an effective public participation exercise (see Moore, 1996; Shindler and Neburka, 1997; Carnes, Schweitzer, Peelle, Wolfe, and Munro, 1998; Lauber and Knuth, 1999; Tuler and Webler, 1999). Given this lack of standards to evaluate what constitutes a "quality" public participation process, Arnstein's Ladder of Participation

remains a theoretical standard used by planners as a means of characterizing effective public engagement (Bailey and Grossardt, 2006).

Arnstein's Ladder of Participation and Social Media

In 1969, Arnstein penned one of the most pivotal criticism of the limited extent of local control and power relation between government and citizen in U.S. urban development programs (Bruns, 2003; Bickerstaff, Tolley, and Walker, 2002; Collins and Ison, 2006; Bailey and Grossardt, 2006; Lane, 2005). She began:

The idea of citizen participation is a little like eating spinach: no one is against it in principle because it is good for you. Participation of the governed in their government is, in theory, the cornerstone of democracy—a revered idea that is vigorously applauded by virtually everyone. The applause is reduced to polite handclaps, however, when this principle is advocated by the have-not blacks, Mexican-Americans, Puerto Ricans, Indians, Eskimos, and whites. (Arnstein 1969, p. 216).

By using examples from three federal programs: urban renewal, anti-poverty, and Model Cities, Arnstein (1969) argued that real public participation in planning can only be achieved when there is at least a full partnership or full control by the participants involved (figure 2-1). Otherwise, participation can become manipulation, tokenism, and an overall “Mickey Mouse game” (Arnstein, 1969, p .218; Bickerstaff et al., 2002). To illustrate these issues, including what true public participation should entail, Arnstein (1969) proposed a “typology of eight levels of participation” (p. 217), or what is now known as a “ladder of citizen participation” (Arnstein, 1969 p. 216; Bruns, 2004; Rocha, 1997). Based on a direct democracy model (Gronlund, 2009), Arnstein's Ladder consists of a gradation of participation illustrating the degree of power or control afforded to participants seeking to influence the outcome of a planning proposal or

agenda (Lane, 2005). Composed of eight rungs, the ladder begins with two levels of non-participation

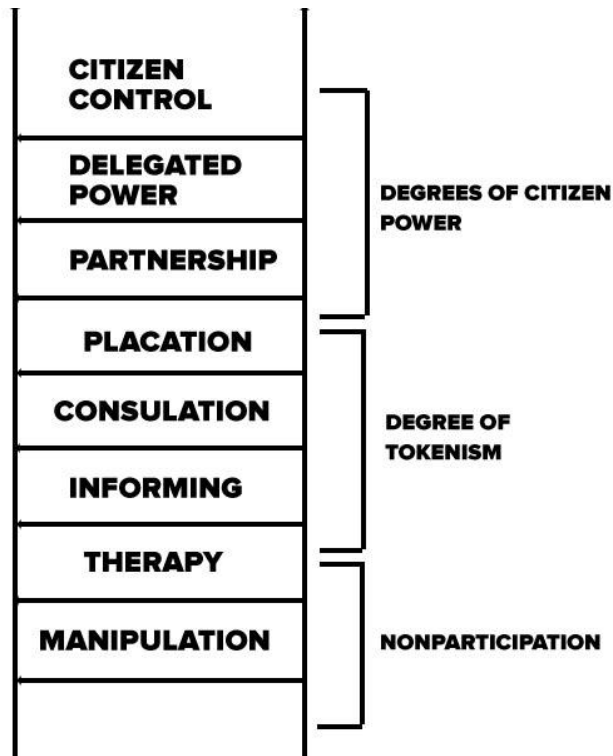


Figure 2-1. Arnstein’s Ladder of Participation, Arnstein (1969), p. 217.

(Manipulation and Therapy), then three levels of tokenism (Informing, Consultation, and Placation), and finally three levels of citizen power (Partnership, Delegated Power, and Citizen Control) (Arnstein, 1969; Connor, 1988).

Social media as a public participation tool “has the promise of changing how citizens interact with their government by increasing accessibility to information, enhancing efficiency, and facilitating greater access to government officials” (Koh, Ryan, and Prybutok, 2005, p.32). In fact, some have even gone as far as saying that social media as a public participation tool has “the greatest potential to revolutionize the performance of government and revitalize our democracy” (The Council for Excellence in Government, 2001, p.2). These are bold claims concerning the potential of social

media as a public participation tool. However, the question remains, how can these claims be substantiated? This question is especially relevant today given that some theorists state that “not all forms of participation are equally democratic, and thus not all are of equal importance in setting policy” (Laird, 1993, p. 342). If social media is going to be an effective tool for public participation, it stands to reason that it must be a form of participation that is “equally democratic” so as to have the importance to set policy. However, comparing social media to other forms of public participation is problematic given that, according to Lane (2005) “public participation can only be understood in terms of the decision-making context in which it is embedded” (p. 297). A method of analyzing a public participation tool’s effectiveness that is not constrained to a specific context is needed. Here is where Arnstein’s Ladder of Participation is directly applicable.

A partnership between the government and the citizenry is the focus of Arnstein’s Ladder of Participation. Moreover, Arnstein’s theoretical evaluation is dependent on the level of citizen power afforded by a form of participation rather than how a tool performs under a specific context. Therefore, it is one of the best theories for analyzing the decision-making context of social media as a public participation tool.

If comparisons are to be drawn between social media and other accepted forms of public participation such as public meetings, workshops, and surveying; it is important to note where these accepted public participation forms fall on Arnstein’s Ladder. Lane (2005) maintains that the opportunities afforded for public participation often amount to merely consultation where government agencies gather advice from the public but not much else. On the other hand, Koh et al. (2005) state that when it comes to the use of

social media for public participation, “nearly all government agencies are at the informing rung of the Citizen Participation ladder or lower” (p. 32). These characterizations reflect the level of tokenism on Arnstein’s Ladder. According to Arnstein (1969) “when participation is restricted to these levels, there is no followthrough, no ‘muscle,’ hence no assurance of changing the status quo” (p. 217). This assertion raises the question, can social media function as a public participation tool that rises above the level of tokenism? This thesis seeks to provide an answer to this question.

Despite Arnstein’s Ladder being heralded as the “‘bench-mark’ metaphor for describing and evaluating participatory activities” (Collins and Ison, 2006, n. p.), Arnstein acknowledged that her model was a simplification and had limitations (Arnstein, 1969). In *A New Ladder of Citizen Participation*, Connor (1988) summarizes these limitations: citizen power is not as concise as the divisions suggest; significant “road-blocks” are absent such as racism, resistance of power holders, ignorance and disorganization of low income communities; and eight rungs are not enough to illustrate the context of a real world. These limitations have become the focus of scrutiny with critics highlighting the failure Arnstein’s Ladder to fully apply to the nuances of all planning contexts (Collins and Ison, 2006). Tritter and McCallum (2006) critique Arnstein’s Ladder within the context of the healthcare system and take issue with its simplicity:

The lack of complexity in the conceptualisation [sic] of the protagonists in Arnstein’s model, its failure to consider the process as well as the outcome, or the importance of methods and feedback systems, means that a more nuanced model is required to guide current challenges to user involvement and public participation (p. 158).

Further, “understanding power requires an assessment of outcomes, rather than simply resting on an analysis of relative power prior to the occurrence of relevant interactions” (Painter as quoted by Lane, 2005 p. 286). More importantly, Arnstein’s assumption that decisions occur at a single point of the process is also flawed. “Such a mistake...ignores the fact that there is rarely an identifiable, or single, ‘point of decision’ in policy-making” (Lane, 2005, p. 286). Collins and Ison (2006) further criticize Arnstein’s Ladder by taking issue with the fact that “ladders do not exist in free space” and as such “Arnstein’s notion of participation is both devoid of context and, critically, has no means of making sense of the context in which the ladder is used” (“Arnstein’s Ladder – Conceptualising participation as power”, para. 13). Maier (2001) goes on to say “increasing participation should not be simplified to the one dimensional parallel of ‘climbing a ladder’” (p. 716). Researchers have even proposed alternate ladders such as Rocha’s (1997) ladder of empowerment, Choquill’s (1996) ladder of community participation, and Bruns’ (2004) extended ladder of participation.

Notwithstanding, Arnstein’s Ladder of Participation “remains, implicitly and explicitly, at the core of many approaches to participation” (Collins and Ison, 2006, Introduction para. 4) with these other models based upon her original theory (Gronlund, 2009). Models such as The International Association for Public Participation’s (IAP2), model of “participation spectrum” or Connor’s New Ladder of Citizen Participation add or subtract rungs in order to introduce new participation levels (Gronlund, 2009; Bruns, 2003; Connor, 1988), however, these models have not had the wide acceptance that Arnstein’s model has enjoyed. “Arnstein’s ladder continues to be cited by planners. This

indicates that it resonates with planners as an effective way of characterizing levels of public involvement” (Bailey and Grossardt, 2006, p. 338).

By establishing Arnstein’s Ladder as our theoretical framework for assessing quality of public participation we can now take a closer look at ACTion Alexandria. First however, it is important to have a working definition of social media.

Social Media and ACTion Alexandria

Several concepts have been wrongfully used interchangeably with social media in the literature such as Web 2.0, User Generated Content, and social networking (Kaplan and Haenlein, 2009). The use of these terms is problematic as it obscures the legitimate definition of social media making it difficult to study (Edosomwan, Prakasam, Kouame, Watson, and Seymor, 2011). Moreover, ACTion Alexandria has the appearance of a website but is heralded as a public participation social media tool. For the purposes of this study the ACTion Alexandria website is a social media tool for public participation. While ACTion Alexandria incorporates social network sites such as Facebook and Twitter, the website has a broader purpose that is to translate web communication, such as user generated blogs, comments on website posts, and ideas suggested by users, into offline community action (About Action Alexandria, 2016; Mernit, 2011). The translation of online communication into offline community action has the potential to muddy ACTion Alexandria’s status as a social media tool. This section will first clarify the definition of social media for the purpose of this study and then examine the website ACTion Alexandria.

Defining Social Media

According to Edsomwan et al. (2011) social media can be defined as a “strategy and outlet for broadcasting while social networking is an act of engagement” (“Social Media vs. Social Networks section,” para. 2). Social media focuses on sharing information with a broad audience and is not confined to interest or demographic parameters (Edsomwan et al., 2011). Social networking on the other hand engages people who share common interests, associate together, and build relationship through community (Edsomwan et al., 2011). Another difference between social media and social networks consists of the communication style. Social media is a communication channel devoid of physical location and physical interaction (Edsomwan et al., 2011). In contrast, social networks are composed of two-way communications where conversations are crucial to developing relationships (Edsomwan et al., 2011). Further, “Social Media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of User Generated Content” (Kaplan and Haenlein, 2009, p. 61)

Web 2.0

Web 2.0 is a term that was first used in 2004 to describe the World Wide Web based on the relationship between software developers and end-users (Kaplan and Haenlein, 2009). This term refers to a platform whereby content and applications are not created by individuals but rather are “continuously modified by all users in a participatory and collaborative fashion” (Kaplan and Haenlein, 2009, p. 61). Web 2.0 does not refer to “any specific technical update of the World Wide Web,” however it does require specific “functionalities” in order to operate successfully (Kaplan and

Haenlein, 2009, p. 61). These functionalities include Adobe Flash (a method for adding animation, interactivity, and video streams to web pages), Really Simple Syndication (RSS), and Asynchronous Java Script (AJAX) (Kaplan and Haenlein, 2009). Web 2.0 is considered to be the “platform for the evolution of Social Media” (Kaplan and Haenlein, 2009, p. 61), but it is not social media (Kaplan and Haenlein, 2009).

User Generated Content (UGC)

Similar to the term Web 2.0, user generated content (UGC) has erroneously been used to refer to social media (Kaplan and Haenlei, 2010). Kaplan and Haenlein (2010) define UGC as “the sum of all ways in which people make use of Social Media” (p. 61). Bertot et al. (2011) elaborate that UGC is “any content that has been created by end users or the general public as opposed to professionals” (p. 30). The term became popular in 2005 and is usually applied to the description of many forms of publicly available media created by end-users (Kaplan and Haenlein, 2010). Kaplan and Haenlein (2010) outline the Economic Co-operation and Development (OECD) requirement for UGC:

First, it needs to be published either on a publicly accessible website or on a social networking site accessible to a selected group of people; second, it needs to show a certain amount of creative effort; and finally, it needs to have been created outside of professional routines and practices (p. 61).

Under these conditions, content created in emails or instant messages (first condition), replications of already existing content (second condition), and all content created with the purpose of advertising/commercial content (third condition), are all excluded from being UGC (Kaplan and Haenlein, 2010).

By defining the social network, Web 2.0, and UGC concepts, the contrast from social media is now ascertainable (Kaplan and Haenlein, 2010). Kietzman, Hermkens,

McCarthy, and Silvestre (2011) expand this definition by adding a mobile (cell phone for example) component. Unlike traditional media such as radio, television, and newspaper; social media relies on UGC to create a dialogue between a large group of people or as Bertot et al. (2011) put it “many to many interaction” (p. 30). This many-to-many interaction allows large groups of users to solve problems, create valuable information resources, and gain unique perspectives and insights regardless of their geographical location (Bertot et al., 2011).

ACTion Alexandria’s Website as Social Media

By clarifying the definitions of social networks, Web 2.0, and UGC, it becomes evident that ACTion Alexandria is social media. ACTion Alexandria is a website that incorporates Web 2.0 and UGC technology in order to create a dialogue between large groups of people (Koepler et al., 2012). Furthermore, though it may incorporate some elements of networking and physical communication, the dissemination of information to a broad audience is not bound to a physical location (Koepler et al., 2012). The ACTion Alexandria platform’s website hosts content and applications that are not created by professionals but are “continuously modified by all users in a participatory and collaborative fashion” (Koepler et al., 2012; Kaplan and Haenlein, 2009 p.61). This meets Kaplan and Haenlein’s criteria for UGC, which is required as part of a definition for social media (2009).

Defining the ACTion Alexandria website as a legitimate form of social media, allows aspects that may not seem readily associable with a social media platform such as actions, ideas, and the community manager to be analyzed. In the following chapter,

we are going to take a look at ACTion Alexandria and the characteristics mentioned in this paragraph.

CHAPTER 3 CASE STUDY: ACTION ALEXANDRIA

Launched on February 7, 2011, ACTion Alexandria is a membership based “action brokering platform” online civic engagement tool designed to connect residents, non-profits, and local governments for the purpose of philanthropic activities (Koepfler et al., 2012 p.2; About Action Alexandria, 2016). “In the context of civic participation, action brokering is the intermediation between those performing and those organizing civic participation activities” (Koepfler et al., 2012, p. 3). ACTion Alexandria’s vision is to “empower citizens to take collective action on behalf of themselves and local organizations” and to “cultivate the next generation of philanthropists by reaching out to students and young adults in the community and strengthening their desire to become active and lifelong civic participants” (About Action Alexandria, 2016, para. 5). ACTion Alexandria’s vision is part of ACT for Alexandria’s mission “that seeks to raise the level and effectiveness of community engagement and giving for the benefit of all Alexandria” (ACTion Alexandria, 2016, “Mission,” para. 1). ACTion Alexandria provides a platform where people who want to volunteer their time and/or donate money can find opportunities to connect with organizations that are in need of such help (Techimpact, 2015; Koepfler et al., 2012). “A single individual or organization has the option to be both an ‘action seeker’ at a certain time or an ‘action provider’ at other times (Koepfler et al., 2012 p.4). As Tracy Viselli describes in an article for the *Washington Magazine*, “ACTion Alexandria [is] different from traditional community foundation outreach models because its approach is more grassroots/bottom-up driven, relying on citizen engagement rather than traditional dependency on organizations and donors” (Collins, 2011, para. 5). Information posted on ACTion Alexandria’s website (such as community

events, Ideas, and Blogs) can be accessed by anybody simply by going to the website's home page and following the designated tabs that read "Blogs" and "Events".

However, interacting with the content on the website, for example, submitting an Idea to a Challenge or creating a blog, can only be done by people who have registered with the ACTion Alexandria site (who shall be referred to as members from here on).

Anybody can register on the ACTion Alexandria site, however the site uses a member's zip code in order to tailor event and community information. Therefore, if a person is not a resident of Alexandria and creates a membership with ACTion Alexandria, they might not see all the information on the site. In order to register, a person simply clicks on the "Join" button located on the top right hand corner of ACTion Alexandria's website landing page (figure 3-1). Once the "Join" button is clicked, a page containing blank information fields for E-mail, a password, first name, last name and zip code is produced which needs to be filled out by the person interested in joining (figure 3-2). Once the information fields are filled, the person must click a small check box stating that they are at least 13 years old (residents under 13 are not allowed to join the site) and verify their submission by retyping the distorted letter image located underneath the age verification check box (this is to prevent "spam bots," which can atomically create false accounts).



Figure 3-1. Screenshot of ACTion Alexandria landing page showing join button (ACTion Alexandria, 2016).

Figure 3-2. Screenshot of ACTion Alexandria new account online submission form. (ACTion Alexandria, 2016).

Though ACTion Alexandria relies on the engagement of the community (which includes both member and non-member residents of Alexandria) to perform philanthropic work, non-profit organizations were instrumental in its creation. Funded by the City of Alexandria, the Knight Foundation, and the Bruhn-Morris Foundation, ACTion Alexandria is an initiative of ACT for Alexandria, which is Alexandria’s community foundation (Collins, 2011; Mernit, 2011) with an established history of local philanthropic activities (Koepler et al., 2012). “A community foundation is a tax exempt, non-profit, publicly supported philanthropic organization” with the responsibility of gathering funds for the benefit of the citizens in a specific geographic area (Community Foundation for

Brevard, 2016, n.p.). Community foundations enhance a community by creating permanent funds and using portions of these funds to support local nonprofit organizations (Community Foundation for Brevard, 2016). Similar to a community foundation, a national foundation is also a nonprofit philanthropic organization that is tax exempt (Knight Foundation, 2016). However, national foundations tend to be privately supported which means they derive their financial support from an individual, family, or corporation (Foundation Center, 2016). Further, they are not constrained to a specific community but have broader funding requirements (Knight Foundation, 2016). For example, the Knight Foundation is a privately owned national foundation that was created to “promote excellence in journalism and the success of the communities in which they (the founders of the Knight Foundation) worked” (Knight Foundation, 2016, n. p.). Foundations do not have to function on a national scale to be private. The Bruhn-Morris Family Foundation is a foundation local to Alexandria but is private (Bizapedia, 2016).

The Knight Foundation and the Bruhn-Morris Foundation were pivotal in ACTion Alexandria’s creation through grant support such as the 2009 Knight Foundation Community Information Challenge grant, which rewards communities and place-based foundations in order to help them meet their community’s information needs (About Action Alexandria, 2016; Knight Foundation, 2016). ACT for Alexandria was one of 24 winners of the Knight Community Information Challenge and received \$102,000 over a period of two years (Act for Alexandria, 2013a). ACTion Alexandria was conceived by the ACT Executive Director John Porter, Program Director Brandi Yee, and other local community members. (Mernit, 2011). ACT created a steering committee of city

constituents and commissioned a \$20,000 study in 2009 called “Connect Alexandria” to determine the feasibility of a social media network. The interest in a social media platform and consequently the Connect Alexandria study was in response to demands from residents of the Alexandria community for increased services in light of decreased support from local nonprofit organizations (Act for Alexandria, 2013a). The study found that “the city was ripe for a technological approach to better engage citizens in community problem solving and to increase philanthropy in the community” (Act for Alexandria, 2013a, para. 6). ACTion Alexandria was then developed as “an experimental and evolving online platform” where the community of Alexandria can interact on civic matters “especially in the human services arena” (Act for Alexandria, 2013a, para. 3). ACT’s Executive Director John Porter further explains “Directly engaging community members through the web intended to provide not only more input on various issues, but also to facilitate an active approach to citizen-led problem solving. Converting online interest into offline action...” (ACTion Alexandria, 2013, para. 3).

ACTion Alexandria is an ACT-administered initiative that is overseen by an ACT advisory board composed of citizens from Alexandria. A full-time Community Manager reports to the board and also provides technical and organizational leadership support to the ACTion Alexandria platform. Further, he/she is responsible for daily operations and outreach efforts (ACTion Alexandria, 2013; Hansen, Koepfler, Jaeger, Bertot, and Viselli, 2014). The community manager is joined by a part-time business manager who oversees the operations of the website and also helps the Community Manager in seeking partners in the Alexandria community for the purpose of developing “long term

financial sustainability” (ACTion Alexandria, 2013, n.p; City of Alexandria, 2015). “ACT steering committee members and the Community Manager sit on many community councils, participate in town hall meetings, and interface with the local government” (Hansen et al., 2014, p. 1317). This involvement from the ACT steering committee and the community manager has given ACT for Alexandria and by extension ACTion for Alexandria social clout that has enabled them to have a “panoramic view of the entire community-giving and volunteering network in Alexandria” (Hansen et al., 2014, p. 1318). This social clout and the efforts of the Community Manager have been critical in the success of ACTion Alexandria meeting their goals and visions (Hansen et al., 2014; Koepfler et al., 2012).

ACTion Alexandria has three goals. The first goal serves to “create a vibrant online platform that inspires offline action, where challenges are posted, solutions are debated, successes and failures are achieved, data is both disseminated and captured, stories are shared, and essential civic relationships developed” (About Action Alexandria, 2016, n. p.). The second goal deals with improving the quality of life for vulnerable residents “In a cost-efficient manner through a platform that provides everyone a voice and the opportunity to identify problems and offer solutions” (About Action Alexandria, 2016, n. p.). The last goal addresses citizen engagement specifically to “engage residents and business people in problem solving to strengthen community ties and increase each individual’s stake in creating positive outcomes for specific community problems” (About Action Alexandria, 2016, n. p.).

In order to meet these goals, ACTion Alexandria has outlined a roadmap of six visions or objectives to follow: to empower citizens to “take collective action on behalf of

themselves and local organizations; enable citizens to submit community challenges for consideration, debate, prioritization and response from organizations and citizens themselves; support local organizations in their calls for collective action by citizens; connect citizens and organizations online to supplement and increase offline collective action; cultivate the next generation of philanthropists by reaching out to students and young adults in the community and strengthening their desire to become active and lifelong civic participants; and develop a scalable model that other communities can easily and affordably adopt” (About Action Alexandria, 2016, n. p.). To accomplish their visions, ACTion Alexandria’s website employs the use of four elements: the Community Manager, Actions, Featured Actions, and Ideas and Community Challenges.

The Community Manager

As mentioned earlier, the Community Manager is vital to the operations of ACTion Alexandria and acts as a liaison between non-profit organizations, residents of Alexandria (via public meetings, local events, etc.), members of the ACTion for Alexandria social media platform, the local government, and ACT for Alexandria (Hansen et al., 2014). The community manager along with the steering committee from ACT for Alexandria use their insights and relationships within the community to connect non-profit organizations with local governments and residents of Alexandria (including members of ACTion for Alexandria) by sponsoring an annual event called “Spring to Action” (Koepfler et al., 2012). At this event, they bring together nonprofit and local government organizations to “network, share best practices, and teach new skills such as how to effectively use social media” (Koepfler et al., 2012, p.13).

Before the founding of ACTion Alexandria, ACT for Alexandria functioned as a network hub for the nonprofit community. The connections from ACT for Alexandria helped the Community Manager for ACTion Alexandria to “broker and aggregate actions among citizens and organizations” (Koepfler et al., 2012, p.13). Furthermore, the ACT for Alexandria Steering Committee and the Community Manager understand the composition of the philanthropic community in Alexandria. This includes the philanthropic community’s focus, connections, and current project and endeavors. This understanding of the community’s nonprofit organizations’ structure allows the Community Manager to see problems that are shared between nonprofits that enable him/her to create opportunities for collaborations. These collaborations are accomplished using Community Challenges as an attention magnet to larger social issues in the community (Koepfler et al., 2012). Therefore, the Community Manager must be able to frame Community Challenges “in a way that will resonate with residents and generate enthusiasm and ideas” (Koepfler et al., 2012, p.14). This critical role underscores the importance of having a competent Community Manager whom the nonprofit community trusts. “A large part of the success of the ACTion Alexandria project results from the foresight to hire an experienced, enthusiastic, full-time Community Manager” (Koepfler et al., 2012, p.14).

The Community Manager then provides a key interface between the organization and human services and civic organizations to find and help create opportunities for community actions, ideas, etc. He/she is also responsible for posting actions, ideas challenges, blog posts, tweets, Facebook posts, events, and other community information; identifies actions that meet urgent human service needs in the community;

and works with nonprofit partners to create weekly featured actions in order to meet specific goals such as acquiring 100 books, 640 diapers, and \$500 towards a cause. Other activities include highlighting community problems and creating a challenge to encourage solutions and feedback from the community; continually conducting community outreach using a variety of methods both online and offline; and lastly, managing all aspects of the site and program. This includes website administration, community organizing, email marketing, editing content, securing sponsorships and organization partners, public relations, and marketing (Koepfler et al., 2012).

A concern regarding these significant responsibilities, and frankly the success of the organization, residing in one position – the Community Manager – is that it introduces a “single point of failure” (Koepfler et al., 2012 p.14). There is nothing to suggest that any lack of leadership or organizing capacity currently exists, however, according to the iPAC Case Study on ACTion Alexandria, if a Community Manager did not possess the necessary skills for the position, the credibility of the organization could be undermined (Koepfler et al., 2012). Yet given that the Community Manager has considerable responsibility for the organization’s processes and actions, depending on a single Community Manager to deal with too many responsibilities may lead to burn out (Koepfler et al., 2012).

Actions

The Community Manager helps local government and nonprofit organizations create “actions” on the ACTion for Alexandria website. Actions are small gestures that are posted by local nonprofit organizations and the local government requesting citizen involvement in the form of small donations of items, funds, petition signatures, and

volunteer time. The “ACT Now” website page allows members of the ACTion Alexandria site to solicit actions that can be filtered “by category (Arts & Culture; Education; Environment; Food & Shelter; Health; Neighborhoods), by neighborhood (of which there are 8), or keyword” (Hansen et al., 2014, p. 1311). If an action is selected by a website user, a webpage associated with the action is presented with information describing the needs of the action and a “Take Action” button (figures 3-3 and 3-4). Once the button is clicked, the user initiates the next steps towards fulfilling the action such as a donation website, Amazon wish list, or volunteer location (Hansen et al., 2014). To meet an immediate community need, actions require small contributions from a large amount of action seekers over a short period of time, which is usually about one week (Koepller et al., 2012). ACTion Alexandria donors can purchase the needed item themselves and take these items to the location requesting the items or order the items through Amazon.com (Carey, 2011).



Figure 3-3. Screenshot of ACTion Alexandria homepage showing ACT Now participation access. (Koepller et al., 2012)



Figure 3-4. Screen shot of ACT Now page with search functionality. (Koepler et al., 2012)

Featured Actions

Actions can also be promoted by the community manager. These actions are referred to as “featured actions” (Koepler et al., 2012, p.10; Carey, 2011). Featured actions appear on the main website page, at the top of the ACT Now page, are distributed in the email list, and are posted on Facebook and Twitter (Hansen et al., 2014). Featured Actions normally run for a period of one week and seek to meet an urgent need that is identified by both a local nonprofit and the Community Manager. An

Information Policy & Access Center (iPAC) case study on ACTion Alexandria provides an example of one such action.¹

An example of one featured action campaign was a diaper drive for Community Lodgings...a local nonprofit dedicated to helping families exit homelessness through transitional and affordable housing and through youth and adult education programs. An adequate supply of disposable diapers can cost between \$100 and \$120 a month, and safety net programs (e.g., food stamps) do not cover their cost. For a family struggling with homelessness, the cost of diapers can seem insurmountable. Community lodging needed disposable diapers for children living in their transitional housing apartments. The featured action sought to raise 640 diapers (one-month's supply of diapers) in one week. By the end of the week, community members had donated 2,500 diapers to Community Lodgings, exceeding the goal by 390% (Koepfler et al., 2012, p.10).

This action, given the goal set by ACTion Alexandria, was particularly successful. According to the iPAC case study, "All but one of the featured actions promoted in the platform's first year met or exceeded their goal" (Koepfler et al., 2012, p. 10). Actions and featured actions are ACTion Alexandria's small scale engagement tool, therefore actions and featured actions do not influence major decisions of urban installment, policy changes, and or major financial distributions. Nevertheless, given the small scale success of actions and featured actions, local nonprofits organizations were encouraged to attempt ambitious outreach campaigns that they otherwise would not have attempted mainly due to lack of "technological sophistication" and experience to perform online initiatives (Koepfler et al., 2012, p.10). Aside from the opportunity to mount larger and more complex campaigns, smaller nonprofits benefited from exposure to the broader community and greater organizational capacity to bolster the campaign

¹ Information Policy & Access Center (iPac) is a research organization that focuses on the processes, policies, and social issues related to accessibility of information via digital technology.

(Koepfler et al., 2012). Moreover, most of the nonprofit organizations that partnered with ACTion Alexandria reported an increase in new donors.

Though beneficial, the danger with the featured action mechanism is focusing attention on a specific action that could overshadow other actions posted by other organizations resulting in diminished attention to these causes. Another danger involves the organizations promoted by the featured actions. Once assisted by the Community Manager in promoting their featured action, organizations “may be less willing to create their own non-featured actions on the site. Indeed, several organizations did not know that actions and featured actions were different and hardly any organizations have posted their own non-featured actions to the site” (Koepfler et al., 2012, p. 12). The reliance on the Community Manager may set up a false expectation that the community manager needs to be involved in the creation of *all* actions. This misperception presents a problem since the Community Manager has a limited amount of time, which then creates a “bottleneck that restricts the number of featured actions that can be promoted in a given month” (Koepfler et al., 2012, p. 12). Some organizations have already expressed these concerns when it comes to featured actions. They fear that it might unfairly favor some organizations above others. However, organizations also feel that the benefits “outweigh the risks” (Koepfler et al., 2012, p. 12). Moreover, there is no evidence to suggest that unfair favoritism is taking place when it comes to featured actions (Koepfler et al., 2012).

Actions and featured actions connect local government and nonprofit organizations with residents of the Alexandria community in order to accomplish relatively small needs and are not designed for major projects or events such as the

installation of a park or discussions concerning project funding. The discussion of bigger projects that impact the community of Alexandria, and as such require input from residents, starts happening on the third function of ACTion Alexandria: Ideas and Community Challenges.

Ideas and Community Challenges

The third function is known as *ideas*. In this function, residents and organizations help to “brainstorm and vote on *ideas* to community challenges identified by ACTion Alexandria, local government, and the greater Alexandria philanthropic community” (Koepfler et al., 2012, p.7). The Community Manager works with local nonprofits and government agencies to identify a problem or issue that needs community input (*ideas*). After a need is identified a *community challenge* is created and posted to the website. This is followed by an outreach effort (both online and offline) with members of ACTion Alexandria submitting their detailed *ideas* for solutions (figures 3-5, 3-6, and 3-7) (Koepfler et al., 2012). After members, which include residents and business owners but is limited to those who have signed up for a membership in ACTion Alexandria, submit their ideas, a “voting round” ensues where members vote for the favored or best solution proposed. After a voting period of a week, the Community Manager does a follow up resulting in actions towards the best (most popular) ideas that include steps towards implementation (Koepfler et al., 2012). A challenge can last anywhere between one to two months, culminating in a week-long voting period.

An example of such a challenge was a 2011 civic engagement initiative called “Project Play”. A city-wide campaign with the focus on improving play spaces in Alexandria and which took place between local nonprofits such as the Childhood


Obesity Action Network, Get Healthy Alexandria, Smart Beginnings Alexandria/Arlington, and government agencies focusing on the health of children in Alexandria (Koepfler et al., 2012). The Community Manager worked with local organizations and established a task force with the goal of creating an environment in Alexandria where “every child in Alexandria has a quality space to play” (Koepfler et al., 2012, p. 12). The challenge was then posted on the ACTion Alexandria website and members of the website were encouraged to nominate a playground that would receive a \$15,000 grant from Spruce Up. A total of 22 detailed ideas were submitted by residents with the leading ideas receiving over 1,000 votes.



Figure 3-5. Screenshot of the Green Ideas Challenge offered as an example of a community challenge. (ACTion Alexandria, 2016).

ADD YOUR IDEA


▶ **IDEAS** [Sort by Supports](#) [Sort by Date](#)

 **[Hands-on Wetland Experience and Action Day for Alexandria Students](#)**

Proposed By: Ana Humphrey 6/26/2016

The Watershed Warriors are a student-led organization currently operating out of T.C. Williams High School that works to improve our environment by providing hands-on science education to local elementary school students. Even though many ACPS students live within a mile of wetlands, many of...


86 Supports [1 Comment](#) [Add Your Comments](#)

 **[Kick the Habit: Jug and Water-Bottle Filling Stations for City Fields!](#)**

Proposed By: Kurt Moser 6/25/2016

Water is essential in life and in sports. Any athlete can attest to the importance of staying hydrated, especially on a sunny afternoon game field. Athletes need water close at hand, and in recent years, the custom of hauling along a case of bottled water—for the team, for the coaches, for the...

43 Supports [2 Comments](#) [Add Your Comments](#)

 **[Butterfly - Pollinator Garden for Jefferson-Houston Pre K - 8 School](#)**

Proposed By: Lori Quill 6/17/2016

Butterfly-Pollinator Garden for Jefferson-Houston Pre K – 8 School The Jefferson-Houston PTA is creating a Butterfly – Pollinator Garden. This spring, the 7th Grade Science classes began the design of the Butterfly-Pollinator Garden by identifying plants to be included in the design of the...

36 Supports [8 Comments](#) [Add Your Comments](#)

Figure 3-6. Screenshot of ideas submitted by members of the ACTion Alexandria community. (ACTion Alexandria, 2016).

HANDS-ON WETLAND EXPERIENCE AND ACTION DAY FOR ALEXANDRIA STUDENTS



Submitted by Ana Humphrey on Sun, 06/26/2016 - 7:41pm



The Watershed Warriors are a student-led organization currently operating out of T.C. Williams High School that works to improve our environment by providing hands-on science education to local elementary school students. Even though many ACPS students live within a mile of wetlands, many of them have never had a first-hand experience. For the past two years, thanks to funding from past Action Alexandria grants, we have brought native wetland plants to local 5th-grade classrooms for a hands-on two-day classroom event. The students get the chance to identify wetland plants and plant their own wetland garden at their school. During spring, the students take care of their garden and watch their plants grow. At the end of the school year, students get the opportunity to visit and help restore a local wetland using the plants they grew themselves.

With our group of eight, we have worked with over 100 ACPS students, many from low-income families. Our club membership recently expanded fourfold. We would like to grasp this opportunity to expand our outreach so that we may provide hands-on learning to even more students. To reach more students, we have created a program called the Wetland Crash Course. The Wetland Crash Course will take students to a wetland for a day for the students to learn about the function and importance of wetlands in our environment. The students will start the field trip with a talk from a wetland ecology expert, where they will learn about the basic functions of wetlands, the significance of wetlands to our community, and how human activity can endanger wetlands. The students will then break up into groups and attend three stations. At the first station, the students will have a chance to conduct extensive water quality testing for environmental factors such as pH, dissolved oxygen, and turbidity. Through water quality testing, the students will learn about the challenges facing our wetlands while simultaneously learning about the scientific method and the importance of conducting scientifically rigorous investigations. At the second station, the students will be able to test their observational skills by participating in a scavenger hunt. This hands-on activity will encourage students to explore the biotic and abiotic factors that make up wetlands. The third station will engage students in a macroinvertebrate monitoring activity. Macroinvertebrates can serve as indicators of water quality as they are the first organisms to be affected by changes in quality levels. Studying macroinvertebrates will create awareness of the important relationships within a wetland ecosystem. After each group of students completes all three activities, we will regroup and discuss what the students learned. The students will then have a chance to apply their knowledge and directly impact their environment by participating in a trash pickup activity.



Your supports: 0

▶ GET EMAIL UPDATES

SIGN UP!

Figure 3-7. Screenshot of idea submission by member of ACTion Alexandria. (ACTion Alexandria, 2016).

According to the iPAC case study, successful Community Challenges have these properties in common: they tend to have a clear winner “associated with the ideas that are generated through a process of community voting”; they are sponsored by a project that incorporates several organizations and focuses on social issues such as childhood obesity, teen pregnancy, or affordable housing; and the issue in question affects a large proportion of the people in the community (Koepller et al., 2012, p. 14).

Actions and ideas are promoted via the ACTion Alexandria website, mailing lists (email lists), Facebook, and Twitter. Members also have the opportunity to

communicate via blogging, commenting, posting on the Facebook wall, mentioning the Twitter account, and in person via local events (Koepfler et al., 2012). Most of these functions and activities are managed by the Community Manager on a daily basis who receives instructions from the ACTion Alexandria Steering Committee and other volunteers (Koepfler et al., 2012).

ACT for Alexandria has created an online platform that is proactive about engaging the local government, nonprofit organizations, and residents of Alexandria in order to meet needs identified by residents, local government and nonprofits. This identification occurs through a dialogue between residents, nonprofits, and local government via the ACTion Alexandria functions: The Community Manager, Actions, Featured Actions, and Ideas and Community Challenges. Engagement from citizens range in scale from smaller engagements such as meeting the needs of an Action on ACTion Alexandria (donating money, purchasing supplies for a local organization, volunteering) to larger and more involved engagements such as submitting ideas to a local government created Idea Challenge. The successful implementation of the ACTion for Alexandria functions have earned the website platform a favorable reputation among residents, business owners, nonprofit organizations and local government; signs that could indicate that indeed this application of social media is a legitimate form of public participation. To explore this possibility further, the study will now compare ACTion Alexandria with Arnstein's Ladder of Participation.

CHAPTER 4 METHODOLOGY

This is a qualitative case study that seeks to analyze whether the action brokering system ACTion Alexandria employs is a form of non-participation, tokenism, or citizen power, by comparing ACTion Alexandria to characteristics extrapolated from Arnstein's Ladder of Public Participation. A total of five characteristics were extrapolated by analyzing Arnstein's paper entitled "A Ladder of Citizen Participation" and highlighting themes found within Arnstein's use of examples, criticism, and explanations (1969): Representation, Information Flow, Intent Flow, Mechanism of Implementation, and Final Decision Source. Representation seeks to establish whether a public participation tool's participants reflect an accurate sample of the population the civic engagement tool (ACTion Alexandria for example) serves. Information flow is concerned with who provides information in a civic engagement event (stakeholders only, practitioners only, or two-way information sharing between stakeholders and practitioners). Similar to information flow, intent flow is concerned with the initiator of a proposal. However, in the case of intent flow, the intended goal of the person who initiates a proposal is taken into account to see if a means exists for stakeholders to disagree. For example, if public officials and decision makers have the intent to establish a new policy, is there a way for stakeholders to negate the intention if it was not in accordance to the public interest? Mechanism of implementation looks at the physical structure of public participation and the steps needed to implement an agreed upon decision. Final Decision Source looks at who makes the final decision (public officials, stake holders, or a combination of the two).

These characteristics were extrapolated qualitatively by reviewing the examples, definitions and implied problems illustrated by Arnstein in her paper entitled “A Ladder of Citizen Participation” (1969). Every rung was analyzed and from every rung a note was made of the characteristics described and or omitted by Arnstein (Appendix A). Originally, the intention was to highlight principles within each extrapolated characteristic and compare these principles to the case study of ACTion Alexandria. The goal to ascertain ACTion Alexandria’s placement within Arnstein’s Ladder was dependent on ACTion Alexandria incorporating all five principles extrapolated from Arnstein’s paper. However, upon further review it became clear that resources (such as time and finances for travel) were not adequate to accommodate a thorough investigation. This thesis assumes that the lack of one of these principles undermines ACTion Alexandria’s standing within Arnstein’s Ladder. Therefore, the decision was made to test one of the five principles extrapolated from Arnstein’s Ladder – Representation - with the assumption that if the case study fails to meet this characteristic, it will be an indicator that ACTion Alexandria does not exemplify Citizen Power. Representation was chosen because it is of key importance to the other four characteristics. Without Representation, there is no fully democratic execution of Information Flow, Intent Flow, Mechanisms of Change, and Final Decision Source.

The goal is to examine whether ACTion Alexandria adequately represents the population of Alexandria. Three variables were observed: Demographic Representation, Access, and Internet Infrastructure. Demographic representation is used as a variable due to the number of sources and studies that highlight its importance as a prerequisite for a democratic form of civic engagement (see Fiorino,

1990; Laird; 1993; Lane, 2005; McComas, 2001; Wiedemann and Femers, 1993).

Further, demographic representation was one of Arnstein's criticisms regarding public participation – the disenfranchisement of the “have-nots” (Arnstein, 1969, pg. 216). The variables access and internet infrastructure are examined due to the significance of access as a prerequisite for democratic civic participation (see Lane, 2005; Wiedemann and Femers, 1993). It is assumed that physical limitations such as lack of broadband infrastructure would be a significant barrier to access. Further, barriers that are present within the website (i.e. design) would also present a significant barrier for stakeholders. In order to observe demographic representation, the study sought to acquire demographic access data from ACTion for Alexandria's Facebook and Twitter accounts and from the website. However, the data was not available due to Facebook, Twitter, and the ACTion for Alexandria's website not keeping track of this information. Consequently, the study looked at partnerships created between ACTion Alexandria and local neighborhood organizations with the assumption that local neighborhood organizations were representative of the demographic within a given neighborhood. Neighborhood partnership information was obtained from ACTion Alexandria's website under the tab “Organizations” (figure 4-1). Each listed organization was then observed to identify what neighborhood they represented by visiting the neighborhood organization's websites and sifting through their organizations' descriptions (visions, goals, “About us”).

Neighborhood	Association	Listserve
Arlandria	The Arlandrian	http://Groups.Yahoo.com/group/ARLANDRIA
Beverley Hills/North Ridge	North Ridge Citizens Association	BeverleyHills-Subscribe@YahooGroups.com
Brookville-Seminary	Brookville Seminary Valley Civic Association	BSCVA-List-Subscribe@YahooGroups.com
Cameron Station	Cameron Station Civic Association	CSCivicAssn@Gmail.com
Del Ray	Del Ray Citizens Association	DelRayCitizens-Subscribe@YahooGroups.com
Holmes Run Park Committee	Holmes Run Park Committee Facebook Page	
Hume Springs	Hume Springs Citizens Association	Hume Springs Google Group
Lynhaven	Lynhaven Civic Association	Lynhaven Google Group
NorthEast	NorthEast Citizens Association	
North Old Town	North Old Town Independate Citizens Civics Association	
Old Town	Old Town Civic Association	
Rosemont	-	RosemontVa-Subscribe@YahooGroups.com
Seminary Hill	Seminary Hill Association	
Seminary Valley		SeminaryValley-Subscribe@YahooGroups.com
Taylor Run	Taylor Run Citizens Association	TRCANEighbors-Subscribe@YahooGroups.com
Upper King Street	Upper King Street Neighborhood Association	UpperKingStreet-Subscribe@YahooGroups.com
Wakefield-Tarleton	Wakefield-Tarleton Civic Association	wakefield-tarleton-wtca22304@gmail.com
West Old Town	West Old Town Citizens Association	

Figure 4-1. ACTion Alexandria webpage listing neighborhood organizations (ACTion Alexandria, 2016).

The second variable observed within the representation analysis was that of “Access” which looked at the ability for an individual to gain access to the ACTion

Alexandria website. Two characteristics were observed: Consideration of disabilities and Consideration of secondary languages. Guidelines from the Web Accessibility Initiative (WAI)² (<https://www.w3.org/WAI/eval/preliminary.html>) were used to evaluate the two characteristics within “Access”, which included Page Title, Image Text Alternatives, Headings, Contrast Ratio, Resize Text, and Keyboard Access. A table was formed where each guideline was compared against ACTion Alexandria. Adherence and/or omissions were then recorded and evaluated (appendix B).

In order to analyze page title a Chrome web browser was used to open five different pages from ACTion Alexandria. The tab titles were then observed in order to confirm whether titles briefly described the content of a page and the titles differed from each of the other pages (figure 4-2). Image text alternatives were analyzed by using the WAVE web accessibility tool (<http://wave.webaim.org/>), which allows a web address to be submitted. The tool then analyzes the web address submitted and highlights areas based on whether they are in compliance to the text alternative protocols or not (figure 4-3). Headings was analyzed by using the Markup Validation Service web tool (<http://validator.w3.org/>) with detailed instructions as to its implantation from the Web Accessibility Initiative (<https://www.w3.org/WAI/eval/preliminary.html#title>) (figure 4-4). Contrast ratio was analyzed by taking a screen shot of ACTion Alexandria web pages. Three different web pages were used for the analysis. The screen shots were then imported into Photoshop where the “eye drop tool” was used to obtain color numeric

² The Web Accessibility Initiative (WAI) is an initiative of the World Wide Web Consortium (W3C) which is an international community that works with organizations and the public in an effort to develop Web standards. The focus of WAI is to develop strategies, guidelines, and resources in order to make the Web more accessible for people with disabilities.

values from colors found on the website screen shots. These color numeric values were then submitted to a color contrast checker tool (<http://webaim.org/resources/contrastchecker/>) where a contrast ratio would be determined. Contrast ratios below 4.5:1 were not in compliance with the color ratio allowances for this analysis (figures 4-5 and 4-6). For the resize text analysis, ACTION Alexandria web pages were expanded in size by pressing the “Ctrl” key and using the computer mouse to scroll up for positive magnification and scroll down for negative magnification. The behavior of letters was observed and recorded. To analyze keyboard access, a Chrome web browser was used. The use of a computer mouse was avoided and instead the “Tab” key on the computer keyboard was employed. On the ACTION Alexandria website, the “Tab” key was repeatedly pressed and the behavior of the website observed.

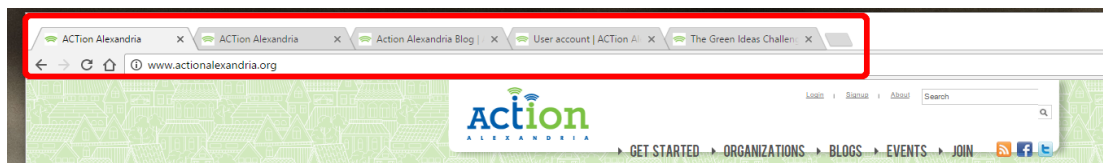


Figure 4-2. Page title analysis with five web tabs open and descriptive names. (ACTION Alexandria, 2016).

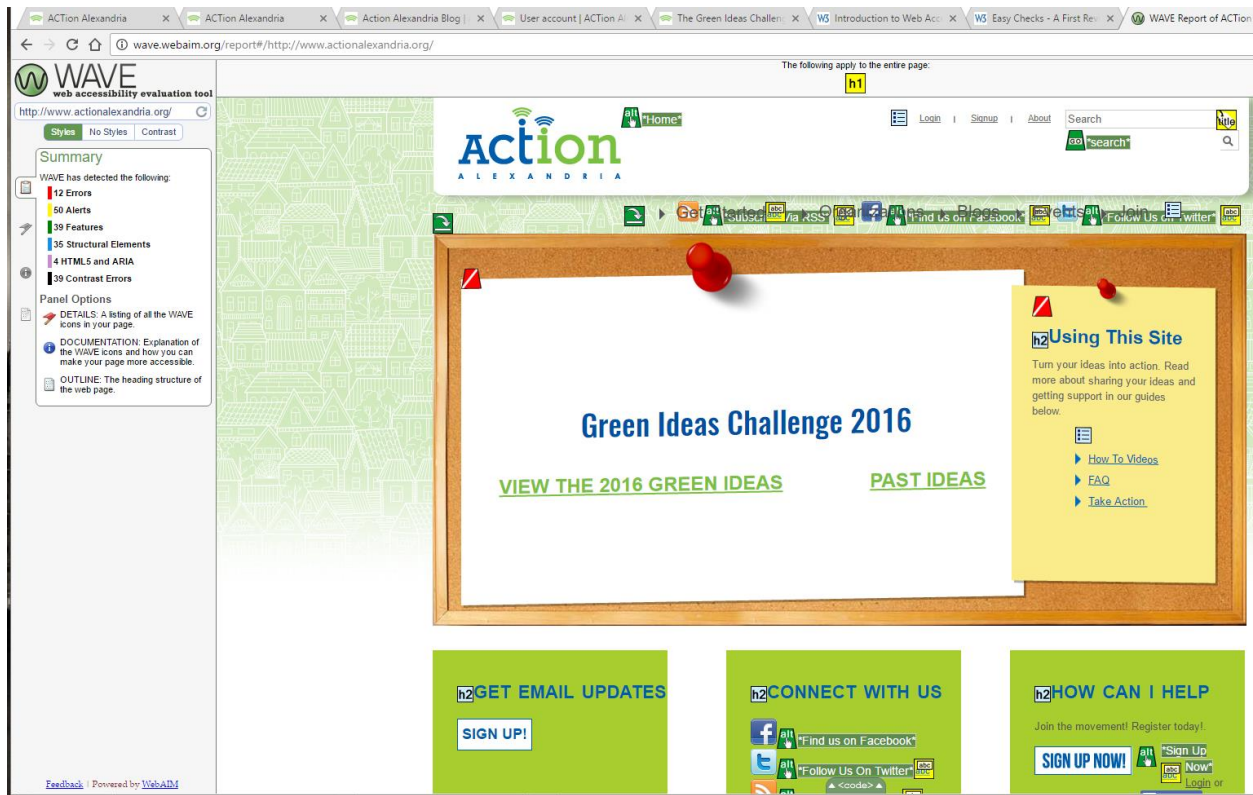


Figure 4-3. Image text alternative analysis WAVE tool output of the ACTION Alexandria website.

Document Outline

Below is an outline for this document, automatically generated from the heading tags (<h1> through <h6>.)

```

[h2] Using This Site
[h2] Get Email Updates
[h2] Connect With Us
[h2] How Can I Help
[h2] Featured Actions and Events
[h2] Join Give Back Alexandria!
[h2] Alexandria-Arlington CASA program
[h2] Run the Marine Corps Marathon with RunningBrooke!
[h2] Volunteer with Together We Bake!
[h2] Actions
    [h3] By Category (View All)
    [h3] By Neighborhood (View All)
[h2] Our Partners
[h2] Blog Posts
[h2] Support Your Favorite Green Idea for Alexandria!
[h2] The Green Ideas Challenge Returns!
[h2] Spring2ACTION Results & Recap!
[h2] Spring2ACTION 2016 Update
  
```

Figure 4-4. Headings analysis, output from the Markup Validation Service web tool.

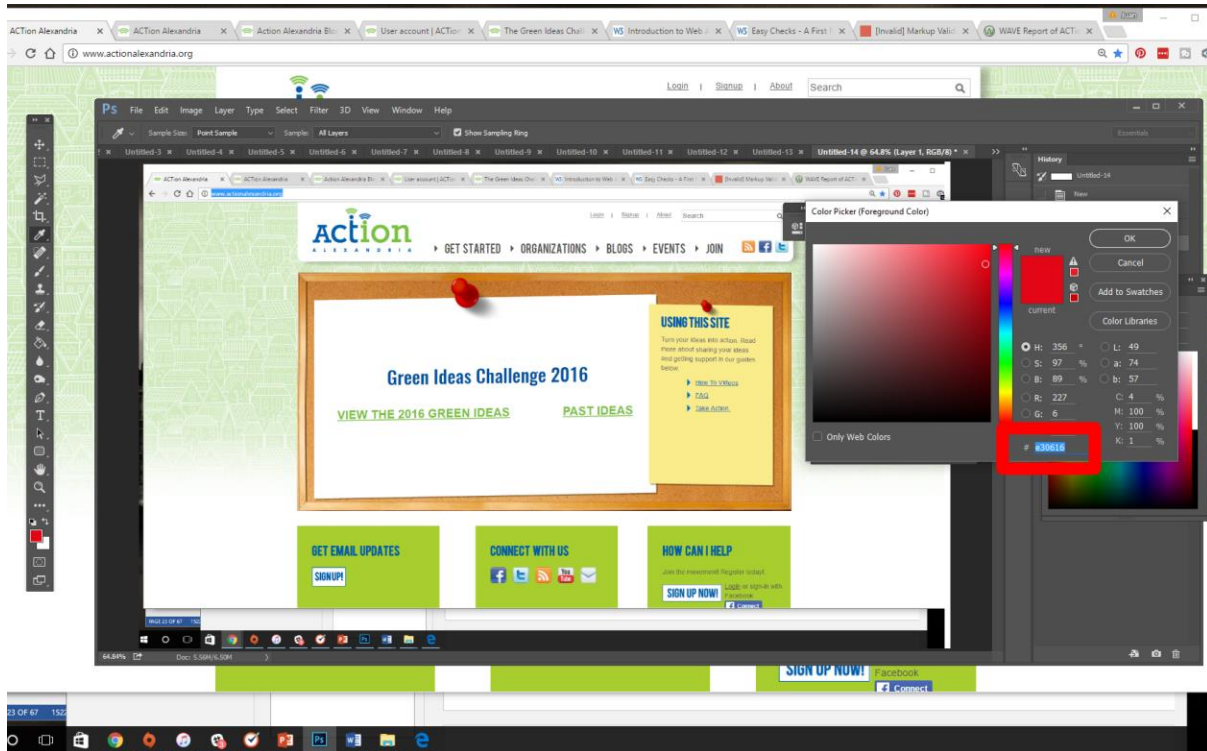


Figure 4-5. Contrast ratio analysis using Photoshop.

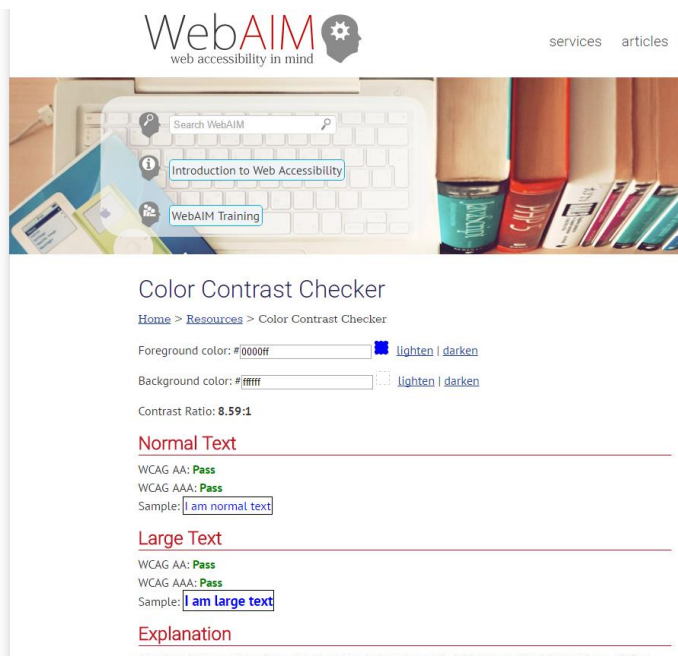


Figure 4-6. Screenshot of WebAIM Color ratio analyzer.

For the third variable - Internet Availability - two characteristics were analyzed: broadband availability in Alexandria and locations that offer free access to the internet.

To analyze the broadband availability in Alexandria, the study looked at the National Broadband Map via the website Broadbandmap.gov (<http://www.broadbandmap.gov/>) on a census block scale. The National Broadband Map website accommodates different forms of access to census block broadband data. Data can be obtained by inputting a specific address, a zip code (this however only returns data for the census block located in the center of the zip code area), and by using the interactive map and clicking on specific blocks, which highlights areas with broadband access (figure 4-7). The latter approach was used to obtain broadband access data.

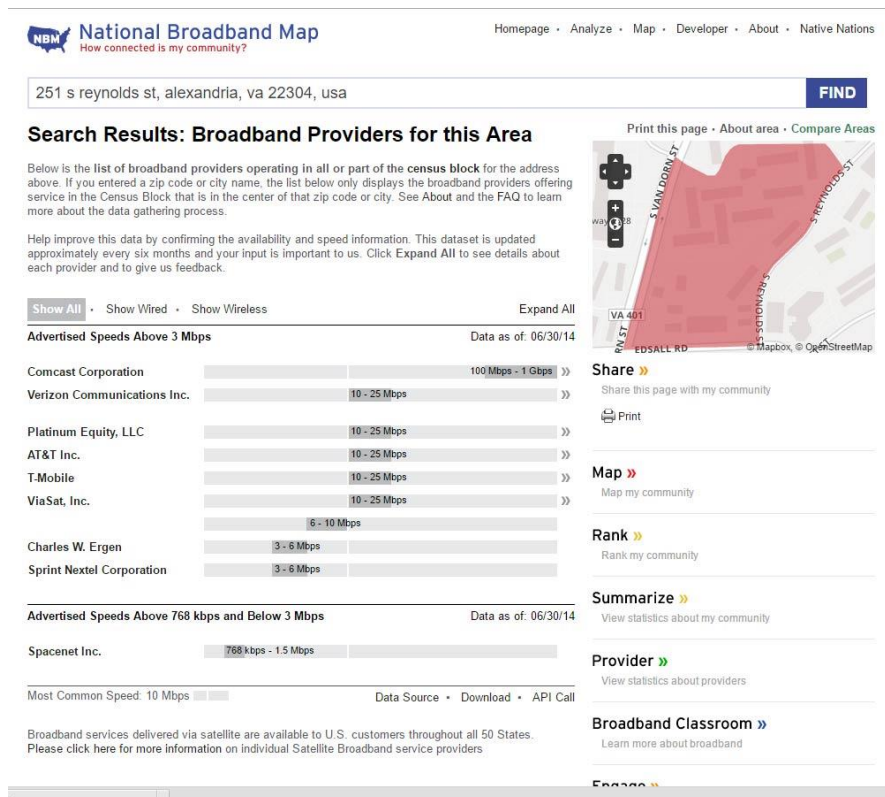


Figure 4-7. Example of National Broadband map output.

In order to analyze locations that offered free internet, a list was compiled of known providers of free internet public access, which include public institutions (i.e. public libraries) and businesses. The study then used the website Openwifispots.com to

locate instances of these locations within the city borders of Alexandria. The locations were then recorded on a table (appendix C).

By dividing the analysis of ACTion Alexandria into sub-categories: Demographic Representation, Access, and Internet Infrastructure, this thesis applied varied methodologies which include the use of the broadband mapping of the digital divide data and the WAI tool in order to examine whether ACTion Alexandria adequately represents the population of Alexandria. The following chapter outlines the findings.

CHAPTER 5 FINDINGS

In order to analyze the quality of ACTion Alexandria as a public participation tool, a standard of analysis was needed. However, a review of the literature reveals that no universal standard for public participation evaluation is available. Since the process and focus of public participation varies significantly, including public meetings, questionnaires, community workshops, the standards of evaluation vary. Yet, Arnstein's Ladder of Public Participation, with its long tenure as a widely accepted model of the public participation process, with a focus on the level of community engagement, offers an effective means to examine the work of ACTion Alexandria while also providing a standard evaluative approach that can be applied to other organizations that seek to use social media as part of their outreach initiatives.

Five Characteristics from Arnstein's Ladder

Through an analysis of Arnstein's Ladder, five characteristics were identified as necessary to achieve a degree of citizen power, which is the culmination of true public participation (Arnstein, 1969). The characteristics are: representation, information flow, intent flow, assurance of consideration, and decision and proposal implementation.

Some studies claim that social media as a public participation tool does not achieve a level higher than tokenism on Arnstein's Ladder (see Apostol et al., 2012; Koh et al., 2005). However, ACTion Alexandria has been heralded for its successful application of social media for public participation. The theory is that ACTion Alexandria achieves more than a degree of tokenism on Arnstein's Ladder. For this to be true, ACTion Alexandria must meet all five of the characteristics extrapolated from Arnstein's paper. This thesis begins the discussion of whether ACTion Alexandria meets the first

extrapolated characteristic: representation. In order to analyze whether ACTion Alexandria represents residents of Alexandria, the study looks at three variables: demographic representation, access, and internet availability.

Demographic Representation

Like other forms of social media, ACTion Alexandria does not record race or socioeconomic demographic data of its participants. In order to ascertain whether participants in ACTion Alexandria represents the population of Alexandria, this study looks at partnerships created between ACTion Alexandria and local civic neighborhood organizations. The study found that ACTion Alexandria does not have a binding partnership with the 18 neighborhood associations targeting all of Alexandria's neighborhoods. Though the neighborhood organizations are listed on the ACTion Alexandria website, these listings are a service that ACTion Alexandria extends to neighborhood organizations and does not represent a partnership. What the study was hoping to find was an established agreement between neighborhood organizations and ACTion Alexandria that outlined required services from ACTion Alexandria. This type of agreement between ACTion Alexandria and neighborhood organizations is not present. Moreover, a review of ACTion Alexandria's Five Year Initiative Report (appendix D), no evidence exists to suggest that ACTion Alexandria has worked with neighborhood organizations to complete initiatives, including any of those proposed by the neighborhood organizations.

Access

The analysis of access to ACTion Alexandria consisted of determining whether barriers impeded people from accessing the website. The barriers analyzed were: consideration for disability and consideration of foreign languages. For disability, ACTion Alexandria's website had positive site design elements for three of the six characteristics defined by the Web Accessibility Initiative: page title, image text alternatives, and headings. However, three web design characteristics did not meet the standards of the Web Accessibility Initiative: contrast ratio, resize text, and keyboard access.

Unlike the characteristics from the analysis that ACTion Alexandria met (page title, image text alternatives, and headings), contrast ratio, resize text, and keyboard access are particularly problematic. Contrast ratio deals with the contrast of colors (black and white for example) on a website. If the contrast is not sufficient, i.e. colors are too similar (for example, a light green background with dark green text), visually impaired people (which includes the elderly) will have a hard time reading the content of a website. ACTion Alexandria has several low contrasting areas with key navigation information that are difficult for someone who is visually impaired to read according to the color ratio analysis. This includes links such as "View the 2016 green ideas" which is light green in color and is juxtaposed against a white background. Another problematic area includes the "Using this site" area where a yellow background is juxtaposed with light gray letters.

The second failed characteristic: resize text, deals with a website's ability to change text size in a way that is responsive to the dimensions of a computer screen.

When text size is increased via a web browser, letters should adjust in size and position to avoid cut-off from monitor dimensions so all the presented information is visible.

ACTion Alexandria fails this test because when text size is increased, the letters do not respond to computer monitor dimensions and information is cut-off. Again, this becomes problematic for people who are visually impaired as information that is pertinent to site navigation and overall information dissemination is hindered in its delivery (figure 5-1).

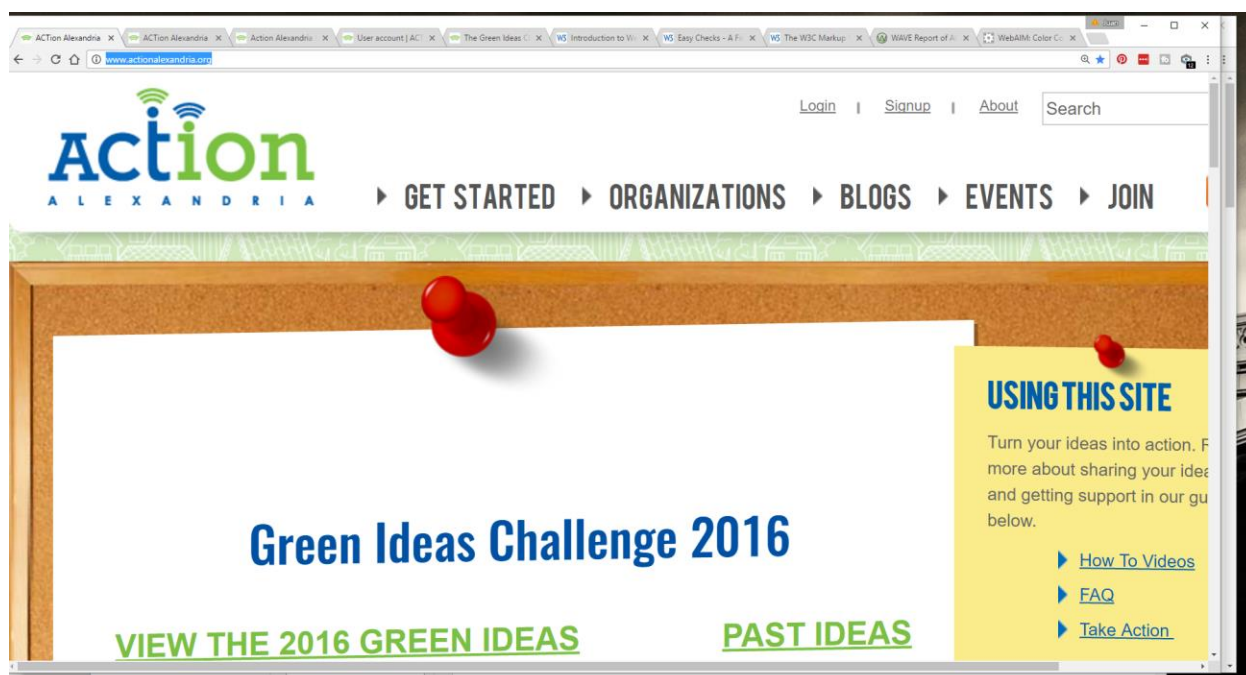


Figure 5-1. Example of increasing text size and non responsive letter (ACTion Alexandria, 2016).

The third failed characteristic: keyboard access, deals with the ability to forgo the use of the computer mouse and navigate a website using only the computer keyboard. This is particularly useful for someone who may lack the locomotion to use a computer mouse. A website must provide the function of pressing the “tab” button on a computer keyboard to access “Focus selection” (Web Accessibility Initiative, 2014, n. p.), which is an outline box that moves as the user presses the tab key to show the user what function on the website is being selected. As the user presses the tab button on his/her

keyboard, the focus selection moves to another website function which can include a link, button, clickable image, or any other interactable item on the web site. For ACTion Alexandria the option of focus selection is not present, which deters the ability to only use a keyboard in order to navigate the site.

For the foreign language barrier, the analysis examined whether ACTion Alexandria provided translations for languages present within the City of Alexandria. The ACTion Alexandria Website is presented in English in its entirety. There are no other translations in any other language present within the ACTion Alexandria website. Moreover, there is no option for a translation (such as a button that leads users to an alternate site translated into another language). According to the 2006 – 2010 American Community Survey, 29% of Alexandrians 5 years old or older speak a language other than English at home (City of Alexandria, 2016). The most common language groups other than English in Alexandria are: Spanish (16,156 speakers), African languages (5,687 speakers), Arabic (2,038 speakers), French (1,667 speakers), Persian (1,083 speakers), Korean (826 speakers), German (720 speakers), Tagalog (696 speakers), Chinese (613 speakers), Hindi (606 speakers), Urdu (600 speakers), and Vietnamese (495 speakers).

Finally, to analyze internet infrastructure, this study looked at broadband availability and locations that offered free internet access. Broadband internet availability was determined by analyzing digital divide data from [broadbandmap.gov](http://www.broadbandmap.gov) (see: <http://www.broadbandmap.gov>). The Digital Data Divide analysis shows no gaps in broadband internet access. Providers such as Comcast Corporation offer speeds of 100Mbps – 1 Gbps. Internet speed was consistent for all Census blocks, with the

exception of three blocks that had speeds of 10-25 Mbps,³ Though the analysis focused on residential areas, all blocks were accounted for including commercial and public space areas which includes businesses, residential areas, and parks. Further, the 2013 American Community Survey states that 92.6% of Alexandrian's have a computer at home (City of Alexandria, 2014). This may suggest that Alexandrian's have access to ACTion Alexandria via broadband. Nevertheless, the American Community Survey does not take into consideration whether homes have subscriptions to internet providers or can even afford such services. In the 2016 Council of Virginia's Future report it was determined that 75.4 percent of households in Virginia access the internet through a broadband internet subscription (Council of Virginia's Future, 2016). It stands to reason that it is possible for a home to have a computer but still not have access to the internet.

To account for citizens that may not have access to internet services at home, this study also looked at locations within the Alexandria city borders that offered free wifi access to people. A total of 75 locations were determined to have free internet access available. Most places were businesses such as coffee shops (20 locations), fast food establishments (21 locations), supermarkets (10 locations) and big box retailers (1 location). Three public libraries were also identified (appendix C). When looking at free wifi location data, it is important to note that most are businesses that offer this service to paying customers. For example, the use of Starbuck's free internet access assumes patronage at the Starbuck's location where the internet is being accessed. It can be argued that internet access at business locations is not actually "free" since some form

³ 10-25 Mbps is an average speed for most homes that use broadband access and would not affect access to ACTion Alexandria.

of monetary patronage is expected. Though the cost of a coffee may be inexpensive compared to the cost of internet service, it's still presents an extra step for the citizen that wants access to internet service. It would be inconvenient for a citizen to visit a coffee shop specifically to engage in public participation. However, it's not clear whether the business barrier would be enough of a deterrent for a citizen who is interested in participating in ACTion Alexandria's social media civic engagement platform.

Yet another cost that can be associated with free wifi locations is the need for a mobile device that can access the internet provided such as a laptop, tablet, or cell phone. If a citizen from Alexandria cannot afford a desktop computer to access the internet from his or her home, he or she might also not be able to afford a mobile device such as a laptop or even a tablet. With no mobile device to access the free wifi hotspots, the Alexandria citizen would still have no access to "free internet". This is potentially remedied through the public libraries' free internet access since they offer equipment such as desktops for Alexandrian's to use. However, there are only three public libraries in Alexandria, which then assumes that Alexandria citizens have transportation to reach these libraries, another cost of access. It would be beneficial to incorporate the location of free wifi hotspots on a GIS map and see their distribution throughout the City of Alexandria in order to determine free wifi deserts (locations that have no access to free wifi).

Though most of the findings are inconclusive, several aspects of ACTion Alexandria do not meet standards of representation. For example, the access analysis highlighted barriers within the ACTion Alexandria website that limited access of those

people who struggle with visual disabilities and speak a second language. Also, those who use ACTion Alexandria may not represent the sociodemographic composition of the city's overall population. Without the data to assess the users of the site, such an assertion is not currently possible. Lastly, Alexandria has no gaps in broadband coverage, but this does not take into account whether people in Alexandria can afford internet services. These conclusions present varying challenges and possible solutions that will be discussed in the next chapter.

CHAPTER 6 DISCUSSION

The City of Alexandria via its community foundation ACT for Alexandria and partnership with nonprofit private and public grants created what is considered one of the most successful social media platforms for public participation: ACTion Alexandria. Given current reservations from practitioners, scholars, and theorists concerning established civic participation methods (such as public meetings, workshops and surveys), ACTion Alexandria had promise to be a leading example of a successful application of social media that would be as legitimate and effective (if not more) as established civic participations methods. In order to explore this possibility, Arnstein's Ladder of Participation was used as a theoretical standard of evaluation with the first of five extrapolated characteristics: representation, explored in this study. In order to meet the representation characteristic, the study looked for evidence that ACTion for Alexandria had a direct representative relationship with citizens of Alexandria. Because ACTion Alexandria's Facebook and Twitter accounts and its website do not capture demographic data, this study examined the relationships between ACTion Alexandria and neighborhood organizations in Alexandria with the assumption that the neighborhood organizations represented the demographics found within the neighborhoods represented.

Demographic Representation

Though ACTion Alexandria does not claim to represent all demographics in Alexandria, it does seek to give citizens "a platform that provides everyone a voice" (About Action Alexandria, 2016). Their efforts to accomplish the goal of providing everyone a voice can be seen on the website in the form of action, featured actions, and

idea challenges. Being a small scale citizen engagement feature, actions and featured actions may seem as if they are not a form of public participation. However, they provide a form of communication between local government and citizens of Alexandria, which results in specific needs being met according to the public interest. Moreover, these small scale civic engagement features are advantageous because though not specifically targeted as a rung within the Ladder of Participation, Arnstein did discuss the distrust between citizens and their local governments (1969), and as the literature highlights, this distrust leads to ineffective public participation.

Aside from actions and featured actions, ACTion Alexandria also employs the use of Idea Challenges to identify major projects, to receive feedback from Alexandrians, and to implement these projects. This is where ACTion Alexandria demonstrates its expected form of public participation by connecting local governments, nonprofit organizations and citizens of Alexandria in a dialogue of idea exchanges. When the local government or a nonprofit organization creates an idea challenge (seeking feedback concerning a proposal such as the creation of a park or the amendment of a public health policy), members of ACTion Alexandria submit detailed proposals on the ACTion Alexandria website where other ACTion Alexandria members vote on their favorite. If an idea manages to earn enough votes, the idea from the member is brought to the attention of the local government where they also vote. The proposal with the highest vote is then implemented. This is reminiscent of what Arnstein discusses as partnership within her ladder with the caveat of who makes the final decision. The stakeholders on the website identify their desired solution through the democratic process of voting. Moreover, the results are evident in real time and are

obvious to everyone on the website, which can serve as a form of accountability for public officials and can help ensure that the public interest is being realized. Based on her paper, Arnstein would have approved of this methodology, with the caution regarding generation of the final decision. It is still possible (though no evidence exist to suggest this has happened) for public officials to disregard the vote from members of ACTion Alexandria and do something different. Currently, no binding agreement exists between the local government and ACTion Alexandria to guarantee the implementation of the suggested solution from the ACTion Alexandria community. Arnstein would argue that such a binding agreement is necessary to ensure that residents hold the power to affect the decisions made by public officials.

Another caution for ACTion Alexandria would be the possibility of not accurately representing the population of Alexandria. Though an analysis of ACTion Alexandria reveals processes of engagement with citizens of Alexandria (Action and Idea Challenges for example), no evidence exists to support demographic representation. This includes the lack of data from social sites such as Facebook, Twitter, and the ACTion Alexandria website. Further, though the research attempted to find partnerships between ACTion Alexandria and neighborhood organizations, the findings did not yield enough evidence to establish a definitive partnership. This does not mean that ACTion Alexandria does not work with neighborhood organizations, rather no established expectation appears to exist for services rendered from ACTion Alexandria to neighborhood organizations. This goes back to a necessity for an established and binding agreement, but this time it would be between ACTion Alexandria and the citizens of Alexandria in order to guarantee that the interest of the public is being met.

Further, looking at contributions and civic engagement initiatives from 2011 -2015, there is no evidence of ACTion Alexandria working directly with local neighborhood organizations listed on their website (appendix D).

While a significant amount of evidence shows ACTion Alexandria working with local nonprofit organizations, which results in civic engagement, Arnstein would argue that it is important to have a direct link with stakeholders in order to claim that you serve the people. The public interest must be the driving force in any action taken by ACTion Alexandria, and it must be clear to any observer that the public interest is being met. This is important, not only for the satisfaction of stakeholders but also for the accountability of decision makers and practitioners. With no definitive agreement between ACTion Alexandria and neighborhood organizations in light of the lack of demographic data from the website and outlets such as Facebook and Twitter, representation is a difficult case to make. A solution would be to do a survey of the citizens in Alexandria to see who uses ACTion Alexandria. This survey would include questions that would identify a person's race, socioeconomic status, language, etc. Another solution would be to use the zip code from people who enroll in ACTion Alexandria. One of the requirements for creating an account with ACTion Alexandria is to provide the interested person's zip code. By looking at the zip codes on the website, it is possible to see which areas in Alexandria are represented.

Barriers to Access

Aside from demographic representation, the study also looked at barriers of access for the ACTion Alexandria website. Two barriers were examined: consideration of disabilities and consideration of foreign languages. The results of consideration for

disabilities showed that the website is not user friendly for people who possess poor vision (people with visual impairment and the elderly). This is problematic because it directly affects the access of people who are visually impaired from participating in ACTion Alexandria's civic engagement platform. Arnstein would argue that this, if not fixed, would be a method of disenfranchising a group of people. Not affording medical care is a problem that would be associated with the "have-nots" (Arnstein, 1969, pg. 216). Though there is no evidence to suggest that a blatant disenfranchisement from ACTion Alexandria towards people with disabilities exists, an unintentional disenfranchisement could be taking place. This can be fixed with a simple redesign of the ACTion Alexandria website, which would include a color palate change to colors with higher contrast. The redesign would also include coding that would make the website change when increasing the size of text in order to present all the information in a single screen without scrolling to the left or right. This would allow people who are not familiar or even intimidated with navigating through a web page to have easy access to information. Lastly, the ACTion Alexandria website needs to incorporate coding that enables a user to access the website with only the mouse, which is a feature currently absent from the ACTion Alexandria website. This feature would enable people with limited hand motor skills to tap a keyboard (as opposed to move a mouse from side to side or scroll using fingers) in order to navigate the website.

Consideration for disabilities is one of two barriers on the ACTion Alexandria website. The second barrier is the consideration for languages. Though Alexandria's language demographic is predominantly English, 29% of Alexandrians 5 years old or older speak a language other than English at home with the most common language

group being Spanish (16,156 speakers) (City of Alexandria, 2016). However, the ACTion Alexandria website does not have an option of translating the website into another language. Further, there is no translated content on the site. With a total population of 153,511 and a Hispanic or Latino demographic percentage of 16.7% (United States Census Bureau, 2016), a strong potential exists that this language barrier would prohibit some among this population from accessing the website. It is possible, for citizens of Alexandria who speak a second language at home to have a strong understanding of the English language.

Another problem is information flow. The foreign citizen of Alexandria may not be able to access information from ACTion Alexandria that would educate him/her on public issues, potentially barring him or her from participating in civic engagement. This lack of information access is similar to the manipulation examples given by Arnstein from the Ladder of Participation. Here the public officials are not so much concerned with the stakeholder's acquisition or even understanding of the available information, but rather are more concerned with the presence of the stakeholder (so as to fulfill a legal requirement of public participation). The lack of a language translation for ACTion Alexandria also echoes some of the criticism in the literature for Social Media as a public participation tool, mainly that the lack of knowledge in using technology could hinder access to the public participation platform. Though with ACTion Alexandria, this issue concerns the lack of translation technology. In order to remedy this barrier a mirror site which is translated into a different language is needed, with the option of switching between languages via a button on the site. Sites that have incorporated this

mirror translation of a site use flags denoting a specific language that the user recognizes and is able to click to translate the site into his/her language (figure 6-1).

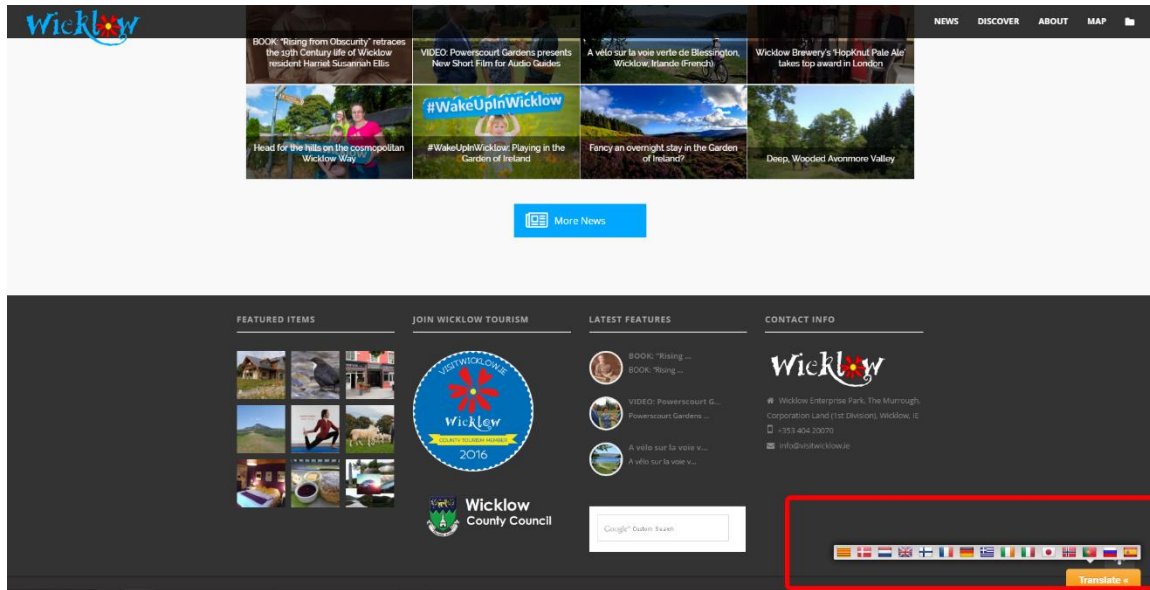


Figure 6-1. Website showing options for different translation (options outlined by the red box) (Wicklow, 2016).

After demographic representation and barriers of access, this study also looked at internet infrastructure which was divided into broadband availability and locations that offer free internet. For broadband availability, the study used digital divide data from broadbandmap.gov and found that all Census cell blocks within the city limits of Alexandria had access to broadband. This would seem to indicate that all households have access to ACTion Alexandria via the internet. However, the broadband availability data does not take into consideration citizens of Alexandria who do not own a computer or do not have access to internet providers (services are unaffordable for example).

Further study is needed in order to assess how many people access the internet from home, which may mitigate a key issue with public participation – lack of time and ability to attend these meetings. Information on the ACTion Alexandria website is

available when the stakeholder decides to access it. This is not the case with public meetings that are scheduled during a specific time block. Though time is not one of the criticisms used by Arnstein to denote disenfranchisement, time can act as a tool to target specific groups of people. For example, if a public meeting takes place at 3pm, many working households are not be able to attend the meeting. An older demographic (retirees) however would be able to attend the 3pm meeting and provide their representation and input. Arnstein was not particularly interested in the disenfranchisement of certain age groups as much as she was with disenfranchisement based on race and/or income. However any form of disenfranchisement is an affront to public participation, something that Arnstein would agree with and something that critics of public participation highlight on a consistent basis. The use of the internet to access a civic engagement platform eliminates time constraints as a barrier so people who would normally not be able to participate in 3pm meetings can now participate at whatever time is more convenient for them.

Access to a civic engagement tool on the internet also eliminates place as a barrier, which makes participation potentially difficult particularly for low income groups. For example, if a public meeting is held in an area without bus service, it creates a significant barrier for a person who does not own a vehicle. Arnstein outlined additional concerns regarding disenfranchisement even if these excluded groups might be able to attend the meeting, including manipulation of the agenda or presentation process to keep them from genuinely participating. An online civic engagement tool such as ACTion Alexandria can eliminate these disenfranchising actions by providing an

accessible “place” (the internet) and allowing the participant of the online civic engagement tool the time to digest the information located on the website.

Though accessing the internet from home allows the citizen of Alexandria to avoid an access barrier to ACTion Alexandria due to location, for citizens that cannot afford internet services a location barrier is still possible. If a citizen cannot afford internet service but wants to participate in the ACTion Alexandria civic engagement tool, the citizen would have to find a place that offers free internet. There are 75 locations in Alexandria that offer free internet, however the locations may be inaccessible to people of low socioeconomic status if transportation is required in order to access the free internet locations. Opportunities for future studies exist where locations of free wifi hotspots are placed on a GIS map in order to see the free internet locations in reference to urban areas with low socioeconomic demographics.

Aside from free internet locations, the fact that most “free internet” locations are owned by businesses raises the question of the cost of free internet. Though the internet service provided by businesses in Alexandria is free to the consumer, this “free internet” is often associated with required patronage. Moreover, free internet locations require the use of expensive hardware in order to gain access to the internet such as laptops, tablets, and smart phones. These hidden costs can potentially be barriers for someone of low income. Though not specifically referring to the hardware needed to access free internet, the literature does highlight the concern of hardware availability when proposing the use of social media as a public participation tool. If low income citizens cannot afford internet and cannot afford hardware to access the internet via a free internet provider, then it is possible that some low income citizens are not being

represented. Further investigation is needed to ascertain whether a scenario exists where citizens are not participating in ACTion Alexandria's online civic engagement due to the inability to afford hardware or to access the internet. A solution would be to establish places in Alexandria that not only provide free internet, but also provide hardware to access the internet. Currently three locations in Alexandria provide both free internet and hardware to access it. They are all public libraries that provide computers for patrons. ACTion Alexandria could work with local businesses to make available stationary devices (i.e. tablets) that patrons can use to access the internet. A similar initiative is being employed by Delta at the La Guardia and JFK airports in New York city. iPad tablets are connected to lounge chairs that passengers then use to access the internet without the use of their phones. Similar technology could be applied to willing businesses.

Conclusion

Looking at the case study of ACTion Alexandria it is possible to highlight aspects within the website that demonstrate the potential for a democratic and legitimate form of public participation. These aspects include the website's use of Actions, Featured Actions, and Idea Challenges. However, this study is not able to offer a conclusive analysis of ACTion Alexandria's ability to meet the extrapolated criteria of representation from Arnstein's Ladder of Public Participation. The lack of contractual agreements between Alexandria neighborhood organizations and ACTion Alexandria may offer evidence that ACTion Alexandria may not be representative of the demographics in Alexandria. Nevertheless, the lack of these agreements is not enough

evidence to emphatically state that ACTion Alexandria does not represent the citizens of Alexandria. More research is needed.

One aspect that does seem problematic is ACTion Alexandria's lack of website design that accommodates people with disabilities and people who speak foreign languages. When looking at ACTion Alexandria's web design, it was determined that they had poor consideration for people with disabilities (specifically visual impairment and hand motor skills) and no language translation alternatives. This presents the potential for a website access barrier. In spite of these findings, there are variables that need further exploration such as identifying how many Alexandrians are not fluent in English.

Aside from web design access barriers, the analysis that looked into internet infrastructure demonstrated that Alexandria has no gaps in broadband access. However, further study is needed to determine variables such as internet affordability and equipment that enables access to the internet (PC, laptop) ownership. Another finding from the internet infrastructure analysis highlighted the availability of 75 locations that provided "free" internet. Nevertheless, this finding is not enough to ascertain if people without internet access at home have access to the internet from these 75 locations. Further analysis is needed in order to look into the distribution of these 75 locations and the affordability of the "free" internet access, since most of these locations are business owned and may require patronage to access the free internet.

This study only analyzed the first out of 5 extrapolated principles from Arnstein's Ladder: representation. This leaves four more principles that need analysis in order to ascertain whether ACTion Alexandria is a form of citizen power. However, before an

analysis is done into the other four principles, it is suggested that the principle of representation be established first (which this study is not able to do). This is due to representation's democratic importance for the four remaining principles (information flow, intent flow, assurance of consideration, and decision and proposal implementation).

APPENDIX A
CHARACTERISTICS EXTRAPOLATED FROM ARNSTEIN'S LADDER

Table A-1. Characteristic extrapolation from Arnstein's Ladder of Participation

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl	Notes
Manipulation	"have been contrived by some to substitute for genuine participation" (pg. 217).	Representation	X		No genuine participation = no representation. Representative concerns are not being shared.
	"The CAAs use them to 'prove' that 'grassroots people' are involved in the program, but the program may not have been discussed with 'the people'" (pg. 218).	Representation	X		False representation = no representation. Representation is a concern.
	"illusory form of participation" (pg. 218).	Representation	X		No genuine participation = no representation. Representative concerns are not being shared.
	"people are placed in rubberstamp advisory committees or advisory boards for the express purpose of 'educating' them or engineering their support" (pg. 218).	Representation	x		Accommodate or facilitate a person's presence in order to create an illusion of representation.
	"Real objective...not to enable people to participate" (pg. 217).	Representation	x		No participation = no representation
"Real objective...not to enable people to participate" (pg. 217).	Mechanism of implementation		x		Implied mechanisms to discourage participation.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"How...goals and policies are set" (pg. 216).	Mechanism of implementation			Arnstein highlights mechanism of implementation as a concern and something to take note of. Proposal example asks for approval before obtaining input from the stakeholders. The intention is to initiate construction of the project with no mechanism for refusal.
	"We need your signatures on this proposal for a multiservice center which will house ..." (pg. 218).	Intent Flow	X		Intent flow is one sided from power holders to stakeholders. Intention is one directional from power holder to stakeholder and does not consider stakeholder.
	"Real objective...not to enable people to participate" (pg. 217).	Intent Flow	x		Intention is one directional from power holder to stakeholder and does not consider stakeholder.
	"it was the officials who educated, persuaded, and advised the citizens, not the reverse" (pg. 218).	Intent Flow	x		Intention is one directional from power holder to stakeholder and does not consider stakeholder.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"it was the officials who educated, persuaded, and advised the citizens, not the reverse" (pg. 218).	Information flow	x		Flow is one directional, from powerholder to stakeholder.
	"Federal guidelines for the renewal programs legitimized the manipulative agenda by emphasizing the terms 'information-gathering'" (pg. 218).	Information flow	x		Information gathering highlights a one way information flow.
	"people are placed in rubberstamp advisory committees or advisory boards for the express purpose of 'educating' them or engineering their support" (pg. 218).	Information flow	x		"educating" highlights information reception role of stakeholder. One sided information flow from power holder.
	"the have-nots join in determining how information is shared" (pg. 216).	Information flow			Arnstein highlights "how information is shared" as a concern and an object to take note of.
	..."but to enable powerholders to 'educate' or 'cure' the participants" (pg. 217).	Information flow	x		Flow is one directional, from power holder to stakeholder
	"each rung corresponding to the extent of citizens' power in determining the end product" (pg. 217).	Final Decision			Arnstein highlights "Decision" as a concern for all rungs.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	... "but to enable powerholders to 'educate' or 'cure' the participants" (pg. 217).	Final Decision	x		"to enable powerholders to 'educate'... Education implies decision has already been made by the educator (powerholder). Power holder makes final decision.
Therapy	"have been contrived by some to substitute for genuine participation" (pg. 217).	Representation	X		No genuine participation = no representation. Representative concerns are not being shared.
	"Real objective...not to enable people to participate" (pg. 217).	Representation	X		No participation = no representation.
	"Real objective...not to enable people to participate" (pg. 217).	Mechanism of implementation	X		Implied, mechanisms to discourage participation.
	Arnstein's example of a father losing his child in a Pennsylvania hospital (pp. 218 – 219).	Mechanism of implementation	x		Mechanism of disenfranchisement established. Mechanism for stakeholder to reach powerholder absent and ambiguous.
	"How...goals and policies are set" (pg. 216).	Mechanism of implementation			Arnstein highlights mechanism of implementation as a concern and something to take note of.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"citizens are engaged in extensive activities but the focus of it is on 'curing' them of their 'pathology'" (pg. 218).	Intent Flow	x		Focus shows intent. Intent is one directional from power holder to stakeholder.
	"Real objective...not to enable people to participate" (pg. 217).	Intent Flow		X	Intention is one directional from power holder to stakeholder and does not consider stakeholder.
	"the have-nots join in determining how information is shared" (pg. 216).	Information flow			Arnstein highlights "how information is shared" as a concern and an object to take note of.
	..."but to enable powerholders to 'educate' or 'cure' the participants" (pg. 217).	Information flow		X	Flow is one directional, from powerholder to stakeholder.
	"each rung corresponding to the extent of citizens' power in determining the end product" (pg. 217).	Final Decision			Arnstein highlights "Decision" as a concern for all rungs.
	Arnstein's example of a father losing his child in a Pennsylvania hospital (pp. 218 – 219).	Final Decision	x		The carelessness of the hospital staff was not investigated; the final decision to "phone" staff so that "it never happens again" rests on the power holder.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	..."but to enable powerholders to 'educate' or 'cure' the participants" (pg. 217).	Final Decision	X		"to enable powerholders to 'educate'... Education implies decision has already been made by the educator (power holder). Power holder makes final decision.
Informing	"that allow the have nots to hear and to have a voice" (pg. 217).	Information flow		x	"have a voice" implies information shared from stakeholders to power holders. "have nots to hear" implies power holders sharing information. Two way information flow.
	"the have-nots join in determining how information is shared" (pg. 216).	Information flow			Arnstein highlights "how information is shared" as a concern and an object to take note of.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"However, too frequently the emphasis is placed on a one way flow of information - from officials to citizens" (pg. 219).	Information flow	x		This seems to contradict Arnstein's statement on pg. 217. This looks like an explanation of the circumstance surrounding information flow. The appearance of a two-way information flow is possible when in reality, the only information being considered is that of the power holder. "have a voice" implies a stakeholder is present and thus represented. Final decision rests upon the power holder.
	"that allow the have nots to hear and to have a voice" (pg. 217).	Representation		x	
	"People have little opportunity to influence the program designed 'for their benefit'" (pg. 219).	Final Decision	x		
	"each rung corresponding to the extent of citizens' power in determining the end product" (pg. 217).	Final Decision			Arnstein highlights "Decision" as a concern for all rungs.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"They lack the power to ensure their views will be heard" (pg. 217). "There is no follow through, no muscle hence no assurance of changing the status quo" (pg. 217).	Mechanism of implementation	x		No mechanism exists for implementing the expressed intent of the stakeholder.
	Arnstein's example of Model Cities citizen planning meeting in Providence, Rhode Island where two tot lots were placed in the black neighborhood and four in the white neighborhood (pg. 219).	Intent Flow	x		The act of intimidating stakeholders with lengthy jargon concerning placement of tot lots while other options were available denotes a pre-established intent. This denotes a one-way intent flow from power holder to stakeholder.
Consultation	"that allow the have nots to hear and to have a voice" (pg. 217).	Information flow		x	"have a voice" implies information shared from stakeholders to power holders. "have nots to hear" implies powerholders sharing information. Two-way information flow.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"the have-nots join in determining how information is shared" (pg. 216).	Information flow			Arnstein highlights "how information is shared" as a concern and an object to take note of.
	"People are primarily perceived as statistical abstractions and participation is measured by how many come to meetings, take brochures home, or answer a questionnaire" (pg. 219).	Intent Flow	x		People are not viewed as a source of intention rather as a statistic. The intention still flows from a power holder to a stakeholder.
	"What citizens achieve in all this activity is that they have 'participated in participation.' And what powerholders achieve is the evidence that they have gone through the required motions of involving 'those people'" (pg. 219).	Representation	x		Power holders use the participation of stakeholders to fulfill participation requirement. Power from stakeholder is absent but their involvement is accounted for.
	"that allow the have nots to hear and to have a voice" (pg. 217).	Representation		x	"have a voice" implies stakeholder is present and thus represented.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"What citizens achieve in all this activity is that they have 'participated in participation.' And what powerholders achieve is the evidence that they have gone through the required motions of involving 'those people'" (pg. 219).	Final Decision	x		Implied. When citizens' achievement is demoted to participation, it implies citizens lack the power to guarantee their interests. Final decision is implied to rest on the power holder.
	"each rung corresponding to the extent of citizens' power in determining the end product" (pg. 217).	Final Decision			Arnstein highlights "Decision" as a concern for all rungs.
	"They lack the power to ensure their views will be heard" (pg. 217). "There is no follow through, no muscle hence no assurance of changing the status quo" (pg. 217).	Mechanism of implementation	x		No mechanism exists for the implementation of the expressed intent of the stakeholder.
	"How...goals and policies are set" (pg. 216).	Mechanism of implementation			Arnstein highlights the mechanism of implementation as a concern and something to take note of.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
Placation	"Simply a higher level of tokenism...ground rules allow have-nots to advise, but retain for the powerholder the continued right to decide" (pg. 217). "the have-nots join in determining how information is shared" (pg. 216).	Information flow		x	"allows have-nots to advise" information flowing from stakeholders to powerholders.
	"Department of Housing and Urban Development (HUD) was determined to return the genie of citizen power to the bottle from which it had escaped...Therefore HUD channeled its physical social-economic rejuvenation approach for blighted neighborhoods through city hall....this gave local city councils final veto power over planning and programming..." (pg. 220).	Intent Flow	x		Arnstein highlights "how information is shared" as a concern and an object to take note of. Implied. The measures taken by power holders imply the unwillingness to represent the interest of the stakeholder. Intent is one directional from power holder to stakeholder.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	<p>"Simply a higher level of tokenism...ground rules allow have-nots to advise, but retain for the powerholder the continued right to decide" (pg. 217). "each rung corresponding to the extent of citizens' power in determining the end product" (pg. 217).</p>	Representation		x	<p>Stakeholders are advising indicating they are present. Physical representation takes place, power holder's right to decide may hinder theoretical representation. The concern of representation is implied.</p>
	<p>"Placation strategy...to place a few 'hand-picked' worthy poor on boards of community action agencies...if the traditional power elite hold the majority of seats, the have-nots can be easily outvoted and outfoxed (pg. 220).</p>	Final Decision			<p>Arnstein highlights "Decision" as a concern for all rungs. Though citizens are given power to influence decisions, the power is dependent on the majority, which all but guarantees the decision of the poor won't be taken. Final decision still rests with the power holders.</p>
		Final Decision	x		

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"How...goals and policies are set" (pg. 216).	Mechanism of implementation			Arnstein highlights the mechanism of implementation as a concern and something to take note of.
	"The rights and responsibilities of the various elements of those structures are not defined and are ambiguous" (pg. 220).	Mechanism of implementation	x		Though present, the mechanism of implementation is ambiguous.
	"Simply a higher level of tokenism...ground rules allow have-nots to advise, but retain for the powerholder the continued right to decide" (pg. 217).	Mechanism of implementation	x		Ground rules exist to enable power holders to implement their final decision.
Partnership	"increasing degrees of decision-making clout" (pg. 217).	Final Decision			Decision making clout highlights ability for stakeholders to influence the final decision. Concern for final decision exists.
	"each rung corresponding to the extent of citizens' power in determining the end product" (pg. 217).	Final Decision			Arnstein highlights "Decision" as a concern for all rungs.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"power is in fact redistributed through negotiation between citizens and powerholders" (pg.221).	Final Decision		x	Redistribution of power implies an equal share of power. Citizens have power to affect decisions.
	Arnstein's example of how the Philadelphia neighborhood residents attended the meeting, objected to the powerholders' 400-page document, and established a partnership with power holders (pg. 222).	Representation		x	Implied. Citizens are present at meeting, enough to warrant changes.
	Arnstein's example of how the Philadelphia neighborhood residents attended the meeting, objected to the powerholders' 400-page document, and established a partnership with power holders (pg. 222).	Intent Flow		x	Intention from power holders (for the citizens to accept policies outlined in the 400 page paper) was curtailed. Citizens made a counter intention known and eventually established (longer time frame to read the paper resulting in edits to the 400 page document. Intent flow is bi-directional.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"the have-nots join in determining how information is shared" (pg. 216).	Information flow			Arnstein highlights "how information is shared" as a concern and an object to take note of.
	"citizens can enter into a partnership that enables them to negotiate and engage in trade-offs..." (pg. 217).	Information flow		X	Negotiation is taking place; implied, information is being shared between power holders and stakeholders.
	"they agree to share planning and decision-making responsibilities through such structures as joint policy boards, planning committees and mechanism for resolving impasses" (pg. 221).	Mechanism of implementation		x	Mechanisms for the share of power are evident and established.
	"How...goals and policies are set" (pg. 216).	Mechanism of implementation			Arnstein highlights mechanism of implementation as a concern and something to take note of.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
Delegated power	"increasing degrees of decision-making clout" (pg. 217).	Final Decision		x	Decision-making clout highlights ability for stakeholders to influence the final decision. Concern for final decision exists.
	"Negotiations between citizens and public officials can result in citizens achieving dominant decision making authority..." (pg. 222).	Final Decision		x	Citizens have influence in making the final decision.
	"each rung corresponding to the extent of citizens' power in determining the end product" (pg. 217).	Final Decision			Arnstein highlights "Decision" as a concern for all rungs.
	"have-not citizens obtain the majority of decision-making seats, or full managerial power" (pg. 217)	Final Decision		x	Final decision rests upon the citizens.
	"the have-nots join in determining how information is shared" (pg. 216).	Information flow			Arnstein highlights "how information is shared" as a concern and an object to take note of.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"The Hill Neighborhood Corporation has eleven representatives on the twenty-one member CDA board which assumes it has a majority voice when its proposed plan is reviewed by the CDA" (pg. 222).	Representation		x	Majority representatives present from the neighborhood corporation.
	"The Hill Neighborhood Corporation has eleven representatives on the twenty-one member CDA board which assumes it has a majority voice when its proposed plan is reviewed by the CDA" (pg. 222).	Intent Flow		x	Implied. Proposed plan is implied as being up for debate. Intent is not one-dimensional, rather, a bi-directional flow exists between public officials and stakeholders.
	"The Hill Neighborhood Corporation has eleven representatives on the twenty-one member CDA board which assumes it has a majority voice when its proposed plan is reviewed by the CDA" (pg. 222).	Mechanism of implementation		x	Mechanism guarantees power to stakeholders.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"How...goals and policies are set" (pg. 216).	Mechanism of implementation			Arnstein highlights the mechanism of implementation as a concern and something to take note of
Citizen control	"increasing degrees of decision-making clout" (pg. 217).	Final Decision		x	Decision-making clout highlights ability for stakeholders to influence the final decision. Concern for final decision exists.
	"neighborhood corporation with no intermediaries between it and the source of funds" (pg. 223).	Final Decision		x	Stakeholders have complete say in the decision taken on proposed projects.
	"have-not citizens obtain the majority of decision-making seats, or full managerial power" (pg. 217)	Final Decision		x	Final decision rests upon the citizen.
	"each rung corresponding to the extent of citizens' power in determining the end product" (pg. 217).	Final Decision			Arnstein highlights "Decision" as a concern for all rungs.
	"the have-nots join in determining how information is shared" (pg. 216).	Information flow			Arnstein highlights "how information is shared" as a concern and an object to take note of.

Table A-1. Continued

Arnstein's Rungs	Sentence of evidence	Characteristic	Excl.	Incl.	Notes
	"neighborhood corporation with no intermediaries between it and the source of funds" (pg. 223).	Intent Flow		x	Implied. No power holder with contradictory intent. Intent flow is one-directional though it is inclusive of the public interest.
	"neighborhood corporation with no intermediaries between it and the source of funds" (pg. 223).	Mechanism of implementation		x	Direct access to source of funds.
	"How...goals and policies are set" (pg. 216).	Mechanism of implementation			Arnstein highlights mechanism of implementation as a concern and something to take note of
	"People are simply demanding that degree of power (or control) which guarantees that participants or residents can govern a program or an institution, be in full charge of policy and managerial aspects, and be able to negotiate the conditions under which 'outsiders' may change them" (pg. 223).	Representation		x	Implied. The subject of the desire of control is the citizens.

Source: Arnstein (1969).

APPENDIX B
WEB ACCESSIBILITY ANALYSIS TABLE

Table B-1. Action Alexandria web accessibility analysis

Test performed	Goal	Pass/Fail
Page title	Web page tabs clearly define content of page.	Pass
Image text alternatives	Coding for web readers describing images.	Pass
Headings	Coding outline matches design of website with corresponding H-tags.	Pass
Contrast ratio	Ratio between colors.	Fail
Resize text	Text resizing should change format of website to accommodate all information.	Fail
Keyboard access	Website should be accessible through the keyboard only (not through the mouse).	Fail

APPENDIX C
FREE INTERNET AVAILABILITY TABLE

Table C-1. Free internet in Alexandria breakdown

Free internet providers	#s in Alexandria	Notes
Café shops (Starbucks)	20	
Fast food establishments (McDonalds)	21	
Hotels	14	
Supermarkets (Whole Foods)	10	
Big box retailers (Staples)	1	
Other business (Auto shop, gardening, etc.)	1	
Books Stores (Barnes and Nobles)	1	
Public Libraries	3	Sherwood Regional Library
Public parks/spaces	1	
Restaurants/bars/grills	3	Bob Evans Restaurant, Cosi restaurant.

See: <http://www.openwifispots.com/FinderDirectoryCity.aspx?City=Alexandria&State=VA>

APPENDIX D
ACTION ALEXANDRIA FIVE YEAR REPORT

ACTion Alexandria Five Year Report 2011-2015

Summary: ACTion Alexandria, the online civic engagement initiative of ACT for Alexandria, was launched on February 7, 2011, to engage community members to take action and share resources, with the ultimate goal of improving the lives of all who live and work in Alexandria.

This report details the major accomplishments of ACTion Alexandria from 2011-2015. Over the five year period, ACTion's focus shifted from supporting individual nonprofit organizations to concentrate more on civic engagement initiatives as well as on programs that support the nonprofit sector more broadly.

For each year, the report outlines the major contributions to nonprofit organizations, the larger civic engagement initiatives and the key metrics for the year. If you would like further information about any of ACTion's activities, please contact Kerrin Horning at kerrin.horning@actforalexandria.org or by calling 703-739-7778.

2011:

Contributions to Nonprofit Organizations:

- ALIVE!: Helped ALIVE! Collect 30 bags of food which helped feed 2,476 individuals
- Carpenter's Shelter: Raised \$1,495 to be used for afterschool snacks for children at the shelter.
- Center for Alexandria's Children: Collected 54 toys for the CAC's developmental playgroups.
- Community Lodgings: Gathered more than 900 diapers for families at Community Lodgings.
- Computer C.O.R.E.: Raised \$1,299 for the computer skills program.
- Friends of Guest House: Raised \$1,000 for Friends of Guest House.
- Healthy Families Alexandria: Raised \$1145 toward the purchase of 75 child home safety kits.
- Higher Achievement: Raised \$1,000 to help pay for four field trips for 90 scholars.
- Holiday Sharing/Community Partners Toy Drive: Raised \$2,785 for the annual toy drive.
- Neighborhood Health's Arlandria Health Center for Pediatrics: Collected 320 servings of pediatric electrolyte solution.
- Space of Her Own (SOHO): Raised \$2,640 for the SOHO Mentoring Program with The Art League.
- The Reading Connection: Collected 120 books for the We Are Readers summer reading program.

- Spring2ACTion: In 2011, ACTion launched Spring2ACTion, an online giving day benefitting nonprofits serving Alexandria, which is now an annual event. In 2011, Spring2ACTion raised \$104,156 from 1,265 donors for 47 local nonprofits.

Civic Engagement Initiatives:

- Quality of Life Indicators Challenge: A collaboration between The Partnership for a Healthier Alexandria, Virginia Tech, and ACTion to give Alexandria residents the opportunity to prioritize the most important quality of life indicators. The indicators were intended to help identify areas of focus in the Alexandria Community Health Improvement Plan (CHIP). 900 votes were cast during this challenge.
- Alexandria Campaign on Adolescent Pregnancy (ACAP): Worked with Teens Talk, a group of T.C. Williams students to launch a video contest that would encourage conversations about teen pregnancy.
- Project Play: Teamed up with The Partnership for a Healthier Alexandria and ACOAN to launch Project Play, a city-wide campaign to improve playspaces in Alexandria. In its first year, Project Play granted \$15,000 in Spruce Up grants for playgrounds in Alexandria.

Key Metrics for 2011:

- \$120,018 in community investment
- 3,720 items donated for Alexandria nonprofits
- 357 actions taken on the site by Alexandria citizens

2012:

Contributions to Nonprofit Organizations:

- Center for Alexandria's Children: Collected items for 50 attachment kits to be used at local shelters to promote healthy child development.
- Spring2ACTion: In its second year, Spring2ACTion raised \$319,333 from 3,698 donors for 72 nonprofits serving Alexandria.

Civic Engagement Initiatives:

- KaBOOM! Community Build at Alexandria Redevelopment and Housing Authority (ARHA): Working in partnership with ARHA and KaBOOM!, ACTion helped lead the building of a new playground. The playground build was funded by a \$75,000 grant from KaBOOM!
- KaBOOM! Playful Cities Grant: Thanks to the efforts of Project Play, KaBOOM! recognized Alexandria as one of their 2012 Playful Cities.
- Green Ideas Challenge: Thanks to a grant from the Dominion Foundation, ACTion awarded \$2,500 to projects making Alexandria greener and more sustainable.

- Ask the Candidates Challenge: A discussion forum which allowed community members to post and vote for questions they would like to ask City Council candidates. The questions were then posed in a candidates' debate.
- What's Next Alexandria?: An idea challenge to gather ideas from community members on improving civic engagement.
- Code for NoVA Partnership: ACTion collaborated with Code for NoVA, a chapter of Code for America, to work on projects such as a community indicators data clearing house and Project Play's playground finder website, now called NOVA Plays.

Key Metrics for 2012:

- \$444,406 in community investment
 - 200 items donated for Alexandria nonprofits
 - 128 actions taken on the site by Alexandria citizens
 - 229 ideas or opinions shared on the site
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2013:

Contributions to Nonprofit Organizations:

- Caring for Kids Grant Challenge: ACTion, in partnership with RunningBrooke, offered a grant challenge for local organizations working with children and youth in Alexandria. Six organizations were awarded a total of \$20,000, including the Alexandria Coalition on Obesity Action Network (ACOAN), the Alexandria Police Youth Camp, Alexandria Tutoring Consortium, Center for Alexandria's Children, Cora Kelly PTA and QuinTango.
- Holiday Sharing Toy Drive: Raised \$2,000 to help support the annual toy drive.
- Spring2ACTion: Raised \$659,591 from 5,872 donors for 97 nonprofits. The funds raised represented a 106% increase over the previous year.

Civic Engagement Initiatives:

- What's Next Alexandria?: Continued to partner with the City and Alexandria community members to draft a list of principal engagement categories.
- Children & Youth Master Plan: ACTion worked with City Staff and the Youth Master Plan Design Team to develop an online forum for the Youth Master Plan process.
- Alexandria Community Health Improvement Plan (CHIP): Continued to gather online feedback for the draft plan and helped to organize two community meetings.
- What's Your Bright Idea for Alexandria?: Instituted an ongoing idea challenge to collect general ideas for improving Alexandria.

- King Street Bike Lanes: More than 300 community members weighed in on expanding bike lanes. All comments and poll results were shared with The City of Alexandria.
- Alexandria Photo Contest: ACTion asked community members to submit photos of what they are thankful for in Alexandria. Individuals submitted 25 photos.

Key Metrics for 2013:

- \$659,591 in community investment
- 134 items donated for Alexandria nonprofits
- 188 actions taken on the site by Alexandria citizens
- 145 ideas or opinions shared on the site

2014:

Contributions to Nonprofit Organizations/City Sponsored Projects:

- Brent Place Apartments Desk Drive: ACTion partnered with The City of Alexandria, Bienvenidos, Wright to Read, Community Lodgings and Samuel Tucker Elementary School to receive donations of gently used desks and to raise \$910 to purchase 47 additional desks for children at Brent Place Apartments.
- Double Dollars Campaign: ACTion partnered with the City of Alexandria, the Alexandria Child Obesity Action Network (ACOAN) and RunningBrooke to raise \$1,525 for the SNAP double dollars campaign at the Old Town Farmer's Market.
- Fall into Giving: In 2014, ACTion piloted Fall into Giving, an online drive for goods and items benefiting nonprofits serving Alexandria. In total, 491 items were collected from 62 donors for 28 nonprofit organizations, for a total estimated value of \$5,000.
- Giving Tuesday Photo Challenge: ACTion promoted this national day of giving by hosting a photo challenge. The winning nonprofit, The Child & Family Network Centers, received a small prize to benefit its programs.
- Ramsay Recreation Center Holiday Party: ACTion co-sponsored a holiday celebration for children attending the Ramsay Recreation Center. More than 100 children participated in the event with their families.
- Spring2ACTion: In 2014, Spring2ACTion raised \$1,031,282 from 7,516 donors for 121 nonprofits.

Civic Engagement Initiatives:

- Pet Adoption Initiative: ACTion partnered with local animal welfare organizations to promote pet adoption. Five animals were adopted during this initiative.
- ACTive Kids Contest: ACTion collaborated with local nonprofits, Alexandria Soccer Association, YoKid, and Jane Franklin Dance to encourage community members to share ideas for keeping kids healthy and active.

- Green Ideas Challenge: ACTion, thanks to a generous sponsorship from the Dominion Foundation, granted \$5,000 for projects making Alexandria greener and more sustainable.
- Family Game Night: ACTion partnered with the Department of Recreation, Parks & Cultural Activities to host a family game night to promote continued learning for more than 70 young students over the summer months.
- Food Truck Pilot Program: 94 community members responded to an online poll on ACTion regarding the food truck pilot program.

Key Metrics for 2014:

- \$1,040,117 in community investment
- 819 items donated for Alexandria nonprofits
- 36 actions taken on the site by Alexandria citizens
- 198 ideas, opinions or votes shared or cast on the site

2015:

Contributions to Nonprofit Organizations/City Sponsored Projects:

- Fall into Giving: In the second year of the initiative, Fall into Giving raised 1,515 items for 39 nonprofits from 396 donors, for a total estimated value of \$24,959, a significant increase over 2014.
- Spring2ACTion: In 2015, Spring2ACTion continued to grow, raising \$1,276,909 for 129 nonprofits from 9,431 donors.
- Nonprofit Technology Challenge: Through this challenge, three nonprofits, RunningBrooke, the Alexandria Symphony Orchestra, and The Women's Center, received pro-bono web development and design service from Code for NoVA.
- Ramsay Recreation Center Holiday Party: ACTion once again partnered with Ramsay Recreation Center to organize a holiday party for children attending the recreation center.

Civic Engagement Initiatives:

- Green Ideas Challenge: Through a grant from the Dominion Foundation, ACTion awarded \$5,000 to four projects making Alexandria greener and more sustainable. These projects were led by the following organizations: Mount Vernon Community School, Jefferson-Houston School, UpCycle Creative Reuse Center and Cora Kelly School.
- Just Play!: ACTion partnered with William Ramsay Recreation Center as well as the Family and Community Engagement (FACE) Center of ACPS and 13 other nonprofit partners to host a game night for 130 children and families. Participants received information on nonprofit services as well as free games, books, craft supplies and healthy snacks.

Key Metrics for 2015:

- \$1,296,809 in community investment
- 1,642 items donated for Alexandria nonprofits and community members in need
- 16 actions taken on the site by Alexandria citizens
- 336 ideas, opinions or votes shared or cast on the site

Key Metrics from 2011-2015

Year	2011	2012	2013	2014	2015
Community Investment	\$120,018	\$444,406	\$659,591	\$1,040,117	\$1,296,809
Items Donated	3,720	200	134	819	1,642
Actions Taken	357	128	188	36	16
Online Ideas, opinions or votes	n/a	229	145	198*	336*

*Includes votes for the Green Ideas Challenge

Key Initiatives from 2011-2015

Spring2ACTion					
Year	2011	2012	2013	2014	2015
Dollars Raised	\$104,156	\$319,333	\$659,591	\$1,031,282	\$1,276,909
Unique Donors	1,265	3,698	5,872	7,516	9,431
Number of Participating Nonprofits	47	72	97	121	129

Fall into Giving		
Year	2014	2015
Items Donated	491	1,515
Number of Donors	62	396
Number of Participating Nonprofits	28	39
Estimated Value of Items	~\$5,000	\$24,959

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BIOGRAPHICAL SKETCH

Juan Castillo was born 1981 in New York, New York. He has a bachelor of design with a major in architecture from the University of Florida. He spent four months studying abroad in Vicenza, Italy where he gained a deep appreciation for urban design. His desire is to see a strong transportation grid that successfully connects major cities in the United States via high speed rail. He also believes that traveling by train is one of the best ways to experience the U.S.