

# Participatory E-Planning With Civic Crowdfunding: Donor Background, Involvement, and Social Capital Outcomes

Robert Goodspeed, University of Michigan, Ann Arbor, USA

## ABSTRACT

Civic crowdfunding, or recruiting participants and collecting financial donations online for local development projects with public benefits, is an increasingly popular method for participatory e-Planning at the neighborhood scale. However, little is known about the donors' backgrounds, project involvement, or social capital outcomes. This article reports on a survey of 154 donors to ten such projects that finds that they are geographically diverse, are older and whiter than the project tracts, report some volunteering activities, and experience modest changes to social capital outcomes. The article discusses implications of the findings, such as how practitioners can ensure inclusion of diverse people and encourages participation among donors, and what future research is needed.

## KEYWORDS

Civic Crowdfunding, Community Development, Locality Development, Participatory E-Planning, Social Media

## INTRODUCTION

The use of web-based technologies—especially social media—has become central to participatory e-Planning in many countries. This is because social media has become widely adopted by residents, facilitates broad participation, and is widely accessible via mobile phones. However, although advocacy groups (e.g., Obar, Zube, & Lampe, 2012) and community-based organizations (e.g., Al-Kodmany, Betancur, & Vidyarthi, 2012) have widely adopted social media and report that they use it to organize collective action, studies in planning have found a gap between online discussions and the actions which shape urban places. Afzalan and Evans-Cowley (2015) found a diverse array of neighborhood groups on Facebook. However, most were limited to general information sharing and discussion, and municipal planners were often unaware of these groups. A study of the use of social media by Polish non-governmental organizations (NGOs) found they used social media like Facebook for a variety of purposes, but concluded that planning actions still primarily resulted from face-to-face contacts (Grabkowska, Pancewicz, & Sagan, 2013). Horelli et al. (2015) document the use of social media for self-organized grassroots projects in Finland but do not describe how such projects can be cultivated in other places. Kleinhans, Van Ham, and Evans-Cowley (2015) observe “there is much wishful thinking, but little validated knowledge on the utility, mobilizing potential and effectiveness of social media and mobile applications in creating either meaningful public participation or facilitating self-organization by citizens who are taking over the reins in providing service and local regeneration efforts” (Kleinhans et al., 2015, p. 242).

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This article focuses on an emerging method for participatory e-Planning called civic crowdfunding, reporting on the results of an exploratory study. Civic crowdfunding involves the use of social media and dedicated websites by individuals and organizations to raise funds and recruit volunteers for neighborhood improvements like community gardens, public murals, and playground rehabilitations. Civic crowdfunding takes its inspiration from the broader idea of crowdfunding: “efforts by entrepreneurial individuals and groups—cultural, social, and for-profit—to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet” (Mollick, 2014, p.2). All crowdfunding centers on a webpage that presents a project idea, describes the fundraising goal and deadline, displays the current number of donors and amount of funds raised, and communicates project updates (Bone & Baeck, 2016). Several websites exist that facilitate crowdfunding exclusively for civic projects. After creating a page on these websites, project leaders typically solicit donations by promoting their project on social media networks, although they may also engage in other outreach activities.

The term civic crowdfunding has come to be used for crowdfunding projects that aim to provide a broad public benefit (Davies, 2014b) or community service (Stiver, Barroca, Petre, Richards, & Roberts, 2015), and where donors receive at most a token reward in exchange for their contribution. For the purposes of this paper, civic crowdfunding is defined as recruiting participants and collecting financial donations online for local development projects with public benefits. Most existing crowdfunding research focuses on financial outcomes such as achieving the fundraising goal, or the total amount raised, and neglects social outcomes, which are important to evaluate civic crowdfunding as a community development method. Although they share a common term, civic crowdfunding is therefore very different from the better-known commercial crowdfunding models where donors receive a product or financial interest in a company. As a result, there is a need for exploratory research on civic crowdfunding which investigates social questions related to its community improvement goals. This paper addresses this gap by presenting the results of a survey of donors to ten civic crowdfunding projects which investigate donors’ characteristics, project volunteering activities and intentions, and social capital outcomes.

Crowdfunding is the subject of a growing body of research, which has investigated how social media promotion (Borst, Moser, & Ferguson, 2017; Lu, Xie, Kong, & Yu, 2014), project presentation (Mollick, 2014), and creator characteristics (Davidson & Poor, 2015) relate to the number of donations and amount raised. Other work, focused on crowdfunding models where donors receive financial benefits, has adopted economic perspectives to explain differences between local and remote investors (Agrawal, Catalini, & Goldfarb, 2015) and analyze alternative crowdfunding models (Belleflamme, Lambert, & Schwienbacher, 2014). However, Stiver et al. (2015) observe that civic crowdfunding projects typically define success differently than forms of crowdfunding where donors are motivated by financial incentives. They note that civic crowdfunding should also investigate these projects’ impact on the community. Similarly, after noting that a high percentage of civic crowdfunding projects reach their financial goals, Davies (2014c) argues that the following questions about them are crucial: to what extent are they participatory, and do they increase or decrease social inequality? Similarly, a recent report by the UK charity Nesta has suggested that civic crowdfunding may present a variety of benefits that extend beyond the amount of money raised, such as attracting new first-time donors, mobilizing supporters, and improving transparency. The same report also speculates that civic crowdfunding may negatively impact diversity, equality and participation outcomes (Bone & Baeck, 2016).

These calls for a greater understanding of civic crowdfunding’s impact on community, participation, and social equity suggest the need for research that views civic crowdfunding not only as a method of fundraising, but also as a method of community development. Stiver et al. (2015) note that civic crowdfunding typically focuses on a local community. Analyzing 1,224 civic crowdfunding projects posted to seven leading platforms, Davis concludes that they fall into four categories (Davies, 2015). The most common type describes projects which illustrate community

agency, defined as projects that can be realized directly by the project organizers. Other projects may serve as a signaling device to communicate interest in a project to government whose implementation assistance is needed, to extend existing public-private partnerships, or to respond to specific needs caused by government austerity.

This paper focuses on projects that illustrate community agency, since they are the most common type of civic crowdfunding project, resemble existing participatory community development approaches, and are where social outcomes are most relevant. Within two longstanding typologies of community development activities, most civic crowdfunding projects could be categorized as locality development, where professionals work with residents to solve their own problems (Rothman, 2008), or local services development, where people provide their own services by taking local initiative (Checkoway, 1995). For simplicity, this paper uses the term local development to encompass both (for recent discussions see Bhattacharyya, 2004; Maton, 2008). Checkoway (1995) notes that local development strategies have important limitations, since community problems often result from forces outside the community, and the strategy may be used to make local communities take responsibility for previously government-provided services. However, Davies notes that although there are exceptions, the majority of civic crowdfunding projects are “far from the core of public service provision” (Davies, 2014a).

Practically speaking, many communities have turned to local development out of necessity where external assistance was not forthcoming, or where such assistance has diverged from locally perceived needs (Berry, Portney, & Thomson, 1993; Medoff & Sklar, 1994). Rothman and Checkoway also observe that communities often mix local development with other strategies. In fact, as explained below, some of the projects studied here received matching funds from government agencies. However, the author acknowledges that critics have raised important questions about how civic crowdfunding relates to shifts in government service provision (Bieri, 2015; Rosenman, 2015), and issue discussed further below. Any local development initiative undertaken with minimal or no external support raises important normative and empirical questions about how community development goals are best accomplished. Brabham (2017) offers one response to these concerns, arguing that crowdfunding and governments should coexist in a hybrid model due to the different logic of each. The aim of this paper is to provide insights to scholars and practitioners about the nature of this emerging community development method, to better understand its role within the full suite of possible strategies.

Neighborhood residents have diverse, and at times conflicting, economic and other interests in their neighborhoods (Davis, 1991). These interests in turn explain resident motivations to engage in local development initiatives. Research has documented how social capital both results from—and explains—local development. An extensive body of recent research has developed the concept of social capital to describe varying social conditions in neighborhoods, and linked it with various outcomes experienced by residents (Carpiano, 2007; Forrest & Kearns, 2001; Lochner, Kawachi, & Kennedy, 1999). Neighborhood social capital encompasses both social characteristics like relationships and trust, and the existence of formal organizations, both of which are related to neighborhood stability (Temkin & Rohe, 1998). Researchers have found that bonding social capital—strong ties within close-knit groups—plays a more important role than weaker bridging social ties in explaining local civic activism (Altschuler, Somkin, & Adler, 2004; Larsen et al., 2004). However, social capital is not a panacea; it can be related to negative outcomes like unhealthy behaviors (Carpiano, 2007) and may perpetuate inequality (Stephens, 2008).

This paper focuses on three measures of social capital drawn from the literature. Some researchers focus on the number and strength of relationships between people, using the term bonding social capital to describe relationships among similar people, and bridging social capital to describe relationships across different groups (Altschuler et al., 2004; Jung, Gray, Lampe, & Ellison, 2013; Larsen et al., 2004). Therefore, the survey in this study includes questions about whether donors met new people or experienced strengthening or weakening of their relationships as a result of their involvement in the civic crowdfunding project. Other researchers have viewed social capital as a general attribute of

community, and measure it about inquiring about residents' sense of community (Carpiano, 2007; Lochner et al., 1999). Following in this tradition, the survey also contains a question asking about whether donors felt the civic crowdfunding project "resulted in stronger or weaker ties between people in this neighborhood."

Next the paper turns to a discussion of the existing civic crowdfunding research, which serves to introduce the three research questions for this paper. Although this section describes specific hypotheses proposed by the existing literature, the paper does not present formal hypotheses given the exploratory nature of this study and the limited amount of previous research which takes a social perspective.

First, local development efforts have typically focused on neighborhood residents, but civic crowdfunding projects are open to donations from any individual with internet access regardless of location, which raises the interrelated questions of the motivations and locations of donors. The one existing study on this topic concluded from a qualitative analysis of six civic crowdfunding projects that they all involved offline communities of local residents, previous or affiliated supporters, or members of the wider community (Stiver, Barroca, Petre, et al., 2015). Investigating crowdfunding investments in musicians, Agrawal et al. (2015) find that preexisting relationships can account for differences in donations between local and distant donors. Since civic crowdfunding benefits are local, theories of local development would suggest that residents with the strongest interest in neighborhoods would participate, which would result in highly localized donation patterns (Davis, 1991). However, more distant donors might be attracted if motivations not related to these local benefits are sufficiently strong, such as a desire to support project creators (Gerber, Hui, & Kuo, 2012). Finally, in addition to their location, the demographic characteristics of donors are relevant to an understanding of the social equity effects of civic crowdfunding. Therefore, the first research question is: what are the stated motivations, geographic location, and demographics of project donors?

Second, successful local community development strategies require not only financial resources, but also the ability to recruit new members. Only suggestive evidence is available on this issue for civic crowdfunding. In the UK, 27% of people who gave to civic crowdfunding projects reported offering to help or volunteering with the project they had supported, but this statistic is limited to 72 respondents to a broadly distributed online survey (Baeck, Collins, & Zhang, 2014, p. 85). Similarly, the civic crowdfunding platform Ioby claims that 53% of its donors have volunteered with a project, but its methodology and the variations in volunteering across projects and platforms are both unknown (Ioby, 2016). Therefore, the second question is: what are the volunteering intentions and activities of civic crowdfunding project donors?

Finally, local development initiatives seek to build community, increasing social capital in the form of new and stronger ties among project participants. Existing research has examined social capital related to project creators, but has not investigated whether crowdfunding practices might lead to changes to relationships among donors. In a survey of artists who had used crowdfunding, Davidson and Poor (2015) found that projects that attracted a greater percentage of donors previously unknown to the artists were more successful, and those that relied on known supporters were related to weaker intentions by artists to use crowdfunding again. Studies have explored how the effectiveness of promotional messages differs according to the audience's relationship with the project creator (Borst et al., 2017) and analyzed how creators might best leverage their networks (Hui, Gerber, & Gergle, 2014). The third research question is: what are the changes to the reported number and strength of donors' relationships, as well as donors' perceived changes to neighborhood social capital, that result from civic crowdfunding projects?

## RESEARCH METHODS

The primary research method used in this study was a survey conducted among donors of civic crowdfunding projects. In order to distribute the survey to all donors to a set of particular projects,

projects were selected from Ioby and Patronicity, two well-established civic crowdfunding platforms in the United States. Projects were selected according to the following criteria: 1) they featured local development projects; 2) their fundraising periods ended during the study period (November 2015 through July 2016); 3) they had diverse project sponsors, neighborhood types, project types, and metropolitan areas. In total, 15 projects were considered for the research project, but five were eliminated: two leaders did not agree to distribute the donor survey, one was cancelled before the leader launched it, one was scheduled to occur too late for study inclusion, and one project targeted high school students as participants and was therefore excluded under the study's human subjects research protocol.

The selected projects (described in Table 1) are typical of what Davies (2014b) found in a large-N analysis of civic crowdfunding projects, and include projects related to public art, community gardens, and events in public spaces. Projects on the two platforms differed in two main ways. First, only the Patronicity projects had donor rewards, such as thank you notes or event invitations. Second, all of the Patronicity projects participated in a program jointly administered by the Michigan Economic Development Corporation (MEDC) and the Michigan Municipal League (MMC), which provided matching funds if they met their fundraising goals and provided a videographer to help create a fundraising video. The projects are located in growing and declining neighborhoods (found through an additional analysis not reported here) in five cities in three U.S. states.

After qualifying projects were identified, the project leaders were contacted and asked to distribute the survey to their project donors. To maximize the response rate and minimize recall problems, and because project timelines varied widely, the survey was administered shortly after the fundraising campaign ended, but typically before most in-person events or volunteering activities had occurred. Project leaders were asked to send a reminder roughly one week after the initial email. As Table 1 shows, the response rate for each case ranged from 9.0% to 55.6%, with an overall response rate of 17.7%. The response rate is consistent with expectations for this type of survey, since it is higher than recent telephone surveys (Dillman, Smyth, & Christian, 2014, p. 260) and close to the 20% achieved by an email surveys of university students conducted using survey best practices (Dillman et al., 2014, p. 336; Sax, Gilmartin, & Bryant, 2003).

The complete donor survey is attached in the Appendix. One set of questions addressed donor locations, motivations, and demographics. Motivations included those identified by Gerber et al. (2012) (rewards, belonging to a community) and others that may apply to civic projects. To measure project involvement, donors were asked about their volunteering history and intentions. To measure social capital, instead of using standard approaches which collect social tie information at a single point in time (e.g., Altschuler et al., 2004; Carpiano, 2007), questions asked about *changes* to the number and strength of respondents' ties with people similar or different from themselves, as well as perceived changes to neighborhood social capital. Social capital was measured this way since changing social capital is often an explicit aim of local development activities.

## RESULTS

### Who Donates, and Why?

Across all projects, survey responses show that the donors were roughly equally divided among neighborhood residents (25%), city residents (25%), regional residents (32%), and those from outside the region (18%) (Table 2). All projects had donors from the same city or neighborhood, and some from outside of the city or region. There was no relationship between donation amount and place of residence ( $\chi^2(12) = 15.73, p = 0.20$ ) or race ( $\chi^2(24) = 22.78, p = 0.30$ ).

Project donors were older, whiter, and less Hispanic than the population within the tracts where the projects were located (Table 3). However, when the one New York City tract which included most Hispanics was excluded, the percentage Hispanic was 3%, the same as the composition of the

Table 1. Overview of civic crowdfunding projects studied

Project Name	Project Description	Location	Platform	Fundraising Goal	% of Goal Reached	# of Donors	Survey Responses	Survey Response Rate
Brightmoor Artisan Community Kitchen	Building renovation for kitchen and café	Detroit, MI	P	\$30,000	103*	145	13	9.0%
Fiber Art on The Avenue	Art workshops and outdoor art installation	Detroit, MI	P	\$10,000	106*	129	32	24.8%
McGee Community Commons	Plaza with garden and public art	Detroit, MI	P	\$38,250	114*	264	50	18.9%
Point West Art and Trail Project	One-mile multi-use trail in public park, public art installation	Lansing, MI	P	\$13,000	103*	94	13	13.8%
Pop Up Art: Special Edition	Public art	Lansing, MI	P	\$7,500	108*	77	7	9.1%
Potter Playground Project	Park renovation	Mt. Pleasant, MI	P	\$25,000	137*	51	18	35.3%
Revolutions Bicycle Ambassadors at Peabody Elementary School	Youth bicycle education program	Memphis, TN	I	\$3,945	100	43	6	14.0%
Frayser Mural	Public mural	Memphis, TN	I	\$1,010	100	9	5	55.6%
Reactivate a Community Garden on Warwick St. in East New York	Renovate community garden	New York, NY	I	\$1,683	149	31	3	9.7%
Dis/Location (Fort Tryon)	Dance classes and performance in park	New York, NY	I	\$3,125	74	25	7	28.0%
Totals				\$133,513		868	154	17.7%

Note: \* Patronicity projects only received matching funds if their goals were met, lobby projects received no matching funds.

project donors. Most donors did not live in the project neighborhood, but instead worked there (9%), were interested in the project idea (29%), or had some other neighborhood tie (35%) like friends or family. Almost all resident donors were homeowners.

**Table 2. Place of residence, connection to project, and donation amount**

Place of Residence	Neighborhood (%)	City (%)	Region (%)	Outside the Region (%)
All Projects	25	25	32	18
Connected to project	20	26	35	18
No connection to project	34	23	29	14
Donation Amounts				
\$1-\$10	1	0	2	1
\$11-\$50	9	16	15	4
\$51-\$100	5	5	7	5
\$100-\$500	5	2	5	6
\$501+	3	2	4	1

Note: *n*=150 for donation amounts

Among all donors, the highest-rated motivations for giving to the civic crowdfunding project were helping others and improving the neighborhood (Table 4). The mean scores for the motivations were compared among two donor sub-groups: neighborhood residents and non-residents, and donors connected to the project and donors with no connection to the project. As Table 3 shows, the differences in most motivation scores between these groups were not statistically significant. However, neighborhood residents reported statistically significant higher scores for “improving my neighborhood,” “belonging to a community,” and “meeting new people” ( $p < 0.10$ ) than non-residents. Similarly, respondents who were connected to the project reported statistically significant higher scores for “feeling a sense of achievement,” learning new things,” and “developing a positive reputation in my community.” As discussed further below, this mixed picture suggests donors may fall into several sub-groups, each with distinct motivations.

### **Did They Become Involved in the Projects?**

Project donors reported high average scores on how likely it was they would volunteer with the projects in the future across all projects (ranging from 2.0 to 1.2), and 19% had already volunteered for the project (Table 5). Specific volunteering activities included serving on planning committees, assisting with the promotion on social media, contributing graphic design skills, and providing other assistance through in-person volunteering.

### *Do Donors Experience Social Capital Outcomes?*

In general, donors reported only minor changes to the strength of existing social ties, reporting a mean score of 3.1 for changes to ties with people from similar backgrounds and 3.2 for changes to ties with people from different backgrounds, where 3 corresponded with “slightly stronger” (Table 6). However, many donors reported meeting new people, and a total of 24% reported meeting two or more people different from themselves. A majority of respondents reported that they perceived an increase in neighborhood social capital, with 26% reporting much stronger ties and 31% reporting moderately stronger ties between people in the project neighborhood.

**Table 3. Donor demographics, place of residence, and place-based interests**

Demographics	Project Tracts (2010-2014 ACS)	Project Donors
Median Age	32 <sup>a</sup>	57
Race		
White alone (%)	25	82
African American alone (%)	55	13
Asian alone (%)	2	1
Two or more races or some other race (%)	15	5
Ethnicity		
Hispanic or Latino (%)	24	3
Not Hispanic or Latino (%)	76	97
Categories	Percent	
Residents	26	
Homeowners	23	
Renters	3	
Non-Residents	75	
Work in the neighborhood	9	
Other neighborhood tie	35	
Interested in idea only	29	
Own property	2	

*Notes.* <sup>a</sup> Reported age for project tracts is the population-weighted average of the medians.

## DISCUSSION

This section discusses the results for each of the three research questions and concludes with a review of limitations and suggestions for future research.

### Donor Characteristics

The results on donor characteristics provide several new insights to the literature. First, they provide details about the members of the wider community that Stiver et al. (2015) observed participating in civic crowdfunding projects. This group falls into several categories, such as those interested in the neighborhood, those interested the project idea, and those with other ties to neighborhood. On balance, the data suggest that the altruistic motivations described by Gerber et al. (2012) play a larger role in explaining motivations for most donors than the place-based interests described by Davis (1991). Donors reported a variety of motivations that were broadly similar across different types of donors, and all agreed that the donation rewards were a relatively unimportant motivation. However, the statistical differences described on some motivations suggest that important differences could be observed for the two donor sub-sets considered. Donors who lived in the project neighborhood may be more motivated by a desire to participate in community, and improve their own neighborhood. Donors who are project participants report motivations related to project success, such as a feeling of achievement, learning new things, and developing a positive reputation. The data also support the idea that crowdfunding can reach new people who are not otherwise involved in an initiative (Bone & Baeck, 2016).



Table 4. Self-reported donor motivations

Motivations	Mean Rating <sup>a</sup>	Neighborhood Residents (N=34)	Neighborhood Non-Residents (N=111)	t	Connected to Project (N=112)	No Direct Connection to Project (N=33)	t
Helping others	4.0	3.8	4.1	1.421	4.0	3.9	0.592
Improving my neighborhood	3.4	4.4	3.0	-4.714**	3.4	3.6	-0.633
Belonging to a community	3.1	3.7	2.9	-3.084**	3.2	2.9	0.928
Feeling a sense of achievement	2.9	3.1	2.9	-0.867	3.1	2.5	1.959*
Matching donation <sup>b</sup>	2.7	3.2	2.8	-1.224	2.8	2.4	1.364
Learning new things	2.4	2.4	2.4	-0.303	2.6	1.9	2.382**
Developing a positive reputation in my community	2.3	2.6	2.2	-1.081	2.4	1.4	1.766*
Meeting new people	2.2	2.5	2.1	-1.800*	2.2	2.1	0.563
Donation reward <sup>b</sup>	1.4	1.5	1.3	-1.072	1.5	1.2	1.422

Notes: <sup>a</sup> Scale: 1 = not at all influential, 2 = slightly influential, 3=somewhat influential, 4=very influential, 5 = extremely influential. <sup>b</sup> Computed for Patricity projects only. \* p < 0.10. \*\* p < 0.05.

Table 5. Donor volunteering likelihood and donor volunteering experience

	Likelihood of Future Activities <sup>A</sup>	Volunteered or Provided Other Assistance (%)
Total	1.8	19
Neighborhood residents	1.6	28
Neighborhood non-residents	1.9	16
Connected to project	1.6	22
No direct connection to project	2.5	8

Notes: <sup>a</sup> Scale: 1 = extremely likely, 2 = moderately likely, 3 = slightly likely, 4 = neither likely nor unlikely, 5 = slightly unlikely, 6 = moderately unlikely, 7 = extremely unlikely.

From the practitioner’s perspective, the survey results show that civic crowdfunding has a mix of strengths and weaknesses. The main strengths seen in the survey data are that civic crowdfunding succeeded in attracting many donors outside of the projects’ neighborhoods, and many donors who reported no previous project ties, such as friends and family of neighborhood residents, people who work in the area, and those with other ties such as alumni of local schools and colleges. Although involving such people raises the question of how a community initiative wishes to define community, it may make civic crowdfunding an attractive strategy for neighborhoods with a small number of residents or limited capacity. The main weakness is the potential for civic crowdfunding to exacerbate

**Table 6. Donor social capital outcomes**

	<b>Strength of Ties – Similar<sup>1</sup></b>	<b>Strength of Ties - Different<sup>1</sup></b>	<b>% Met Two or More New People Different From Them</b>	<b>Change in Neighborhood Social Capital<sup>1</sup></b>
Total	3.1	3.2	24	2.0
Neighborhood residents	2.9	3.0	38	2.2
Neighborhood non-residents	3.2	3.2	20	1.9
Connected to project	3.0	3.1	30	1.9
No direct connection to project	3.4	3.3	6	2.3

Notes: <sup>1</sup> Scale: Much Stronger (1), Moderately stronger (2), Slightly stronger (3), No change (4), Slightly weaker (5), Moderately weaker (6), Much weaker (7).

unequal participation in neighborhood development, since these people tended to be older and whiter than neighborhood residents.

In many of the cases examined, the crowdfunding complemented in-person organizing activities like attending neighborhood meetings, which leaders undertook specifically to reach people who may not donate to the crowdfunding campaign and improve the overall diversity of people involved in their projects. Several of the project leaders took deliberate steps to tailor their outreach strategies to ensure their desired participation in their projects. For example, Mandisa Smith, the leader of the Fiber Art on The Avenue project, reported refraining from using her business’s email list (which contained geographically diverse customers) to promote what she hoped would be a neighborhood-based project. Similarly, when raising funds for a small community mural project in the Memphis suburb of Frayser, Lynsi Hartman avoided tapping into her own personal network, since she wanted to avoid the project donors being dominated by wealthier people who lived elsewhere as opposed to local residents. The Warwick Street community garden project in New York City chose to prioritize event invitations for local leaders and neighborhood residents. In some cases, these measures to restrict participation may have reduced the projects’ fundraising success.

### **Donor Project Involvement**

Although the project survey occurred too soon to fully capture the extent of donor involvement, the results provide support for the hypothesis that civic crowdfunding is useful not only for fundraising but also for recruitment (Baek et al., 2014; Ioby, 2016). However, although 19% of all donors reported volunteering, only 8% of donors with no connection with the project reported volunteering (Table 5). From a practitioner’s point of view, these data suggest that donors may have an untapped willingness to volunteer that is not being fully utilized. This might be addressed in several ways. Project leaders may need to create more opportunities for donors to participate, instead of viewing them exclusively as financial backers. New technical features on the websites could better inform donors of other ways to assist with the project when they make a donation, such as by allowing them to sign up for particular tasks or events.

One obstacle to involving donors more extensively in the projects is their geographic dispersion. Although a majority of donors live outside of the neighborhood, 82% are within the same metropolitan area, which suggests that they may be available to participate in discrete in-person activities such as volunteering days. The 18% of donors who live outside of the regions where the projects are located

pose an even greater challenge, but they might contribute to the project remotely by assisting with online promotion or applying skills to discrete tasks that can be conducted remotely, such as graphic design or assisting with online communications.

### **Donor Social Capital Outcomes**

Although the most prominent feature of civic crowdfunding is collecting donations from individuals over the internet, the survey revealed that many—but by no means all—donors reported social outcomes such as forming and strengthening social ties and improving the perceived social cohesion of their neighborhoods. The primary contribution of this finding to the literature is to show that social capital not only explains why outreach messages succeed (Borst et al., 2017) or how leaders identify donors (Hui et al., 2014), but also may be produced by civic crowdfunding projects. Some civic crowdfunding projects may result in changes to the social capital of the donors, allowing them to form new ties, strengthen existing ties, or change their perceptions of a neighborhood. However, since these benefits accrue to an unrepresentative group of donors, civic crowdfunding may hold the potential to further exacerbate social inequalities, by further boosting the social capital of the relatively privileged.

### **Limitations and Future Research**

This study has several important limitations. First, the survey response rate is relatively low, which may introduce nonresponse bias. Although the potential effect of this bias is unknown, if non-respondents are also less motivated to be involved in the project, the effect would be to increase the observed prevalence of volunteering and positive changes to social capital. In addition, the results may be effected if there are systematic differences between the two platforms studied. However, t-tests found no significant difference at the 99% confidence level of the age, likelihood of volunteering, amount of donation, and percent who volunteered between donors to the two projects. As described above, projects on both platforms had broadly similar donor geographic distributions. If there are differences, the overall findings will be more strongly influenced by donors to Patronicity, since they comprise 86% of the responses.

Other limitations to the research design suggest directions for future research. First, the survey was conducted relatively soon after the completion of the fundraising phase of the project, and the study considers only short-term project outcomes. Although the projects largely met their financial goals, civic crowdfunding projects may face barriers to realizing their project ideas. In addition, social capital may rely on in-person volunteering activities which continue until the project's completion. Future research could collect longitudinal data to better understand the extent to which crowdfunding donors become involved in these initiatives and explore projects' long-term neighborhood impact.

The study does not account for important variations in the nature of civic crowdfunding practices among the projects. Although the project leaders were all provided generally similar instructions from the staff associated with each platform and engaged in similar practices, they differed in how they went about conducting outreach and promotion or presenting their project. Both large-N analysis and intensive case research are needed to better understand these variations. However, the author expects some of the findings from the broader crowdfunding research to apply, e.g., projects are more successful when they obtain early donations, feature well-written descriptions, use effective visual materials, etc. (e.g., Etter, Grossglauser, & Thiran, 2013; Lu et al., 2014; Mollick, 2014).

Finally, research could investigate the relationship between crowdfunding and broader societal shifts. Crowdfunding can be viewed as one specific instance of what has come to be known as the platform economy, where economic transactions are mediated by platforms (Kenney & Zysman, 2016). The result can be significant power for the platform owner, although Kenney and Zysman point out platforms also include nonprofit initiatives like Wikipedia. Although the two civic crowdfunding platforms studied here use different structures (Patronicity is a private company and Ioby is a nonprofit corporation), they both view themselves as social enterprises and work closely with government

and nonprofit partners. As in other fields, these new actors raise a set of complex empirical and normative questions (Bennett, 2015). As they grow, they may begin to be perceived as an alternative to traditional fundraising or outreach techniques. However, this could result in profound consequences, since it seems likely projects which are appealing to social media audiences may differ in important ways from those preferred by traditional funders such as government or foundation grant programs. In the case of public arts, Brabham (2017) forcefully argues that crowdfunding and public-sector investments serve distinct goals, but observes that crowdfunding relies on a market logic which is often deployed to critique government initiatives. In the cases examined here, the project leaders viewed crowdfunding as primarily about outreach, and financially as only a complement to existing sources. As civic crowdfunding matures within community development, future research could probe the role it plays, and whether it is related to shifts in the amount or type of local development projects which receive financial support.

## CONCLUSION

Social media has become a ubiquitous e-Planning tool, used by a wide range of urban stakeholders to foster discussion, participation, and engagement (Al-Kodmany et al., 2012; Willems & Alizadeh, 2015). Despite early hopes that it might lead to a “paradigm shift” in urban planning (Anttiroiko, 2012), the use of social media has generally not replaced existing top-down approaches with more participatory, bottom-up models (Afzalan & Evans-Cowley, 2015; Kleinhans et al., 2015). Therefore, although the goals of most civic crowdfunding projects are typically modest, it is a significant development since it presents a model for participatory e-Planning where social media participation not only results in fundraising—but also potentially fosters civic participation by the donors.

Crowdfunding is a fundraising method increasing in popularity in many sectors. Although most attention has been focused on forms of crowdfunding where participants receive valuable rewards or other economic benefits, in urban neighborhoods a growing number of place-based projects are using civic crowdfunding as a method of participatory e-Planning to recruit participants and collect financial donations. A growing body of research investigating crowdfunding more generally has explored various aspects of this phenomenon. This article views civic crowdfunding as an example of a local development. As a result, it investigates research questions concerning donors’ characteristics, group involvement, and social capital outcomes, which have been neglected in existing crowdfunding research.

This paper investigates these issues by drawing on a survey of donors to ten typical civic crowdfunding projects drawn from two leading civic crowdfunding platforms in the United States. The survey reported here finds that civic crowdfunding projects attract donors not only from the project neighborhood, but also from elsewhere in the region or from a different region entirely. Donors are older and whiter than the population in the tracts where the projects are located. Some donors—even those who reported no connection with the project or did not live in the neighborhood—reported volunteering. All donors reported that they were likely to engage in future activities with the projects. Similarly, donors reported that projects somewhat strengthened their social ties, and on average they reported that the projects resulted in moderately stronger perceived social cohesion of the neighborhoods.

Urban neighborhoods in the US face a variety of challenges. Few of these projects—and few civic crowdfunding projects in general—aim to provide the improved infrastructure and public services many neighborhoods require. However, the community development field has found important connections between small-scale locality improvements and success in broader reforms. Small projects can launch a virtuous process of building community power and resources. Local development initiatives, such as those in the projects described here, are an essential ingredient in creating vibrant neighborhoods that better meet their residents’ diverse needs. This paper highlights civic crowdfunding as a new strategy for such initiatives, contributing to an improved understanding of it among community development practitioners and scholars.

## **CONFLICT OF INTERESTS**

The authors declare no conflict of interests.

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## APPENDIX: CIVIC CROWDFUNDING DONOR SURVEY

### Project Involvement

1. How did you first hear about this crowdfunding project?
  - From the project (creator/leader) (individual or organization)
  - From friends or acquaintances
  - Through a meeting, event, or flyer in my neighborhood
  - Through the media (newspapers, local websites, radio, etc.)
  - Through the crowdfunding platform it was featured on
  - Other: \_\_\_\_\_
2. How much did you donate to this project?
  - \$1-10
  - \$11-50
  - \$51-100
  - \$100-500
  - \$501+
3. In addition to your donation, describe your involvement in the project:
  - I volunteered or provided other assistance
  - I was asked, but did not volunteer or provide other assistance
  - I have no involvement
  - Other: \_\_\_\_\_
4. What is your connection to the project and/or organization?
  - Former participant, volunteer or staff member
  - Past donor
  - Current volunteer, participant or staff member
  - Friend/Family of volunteer, participant or staff member
  - No direct connection to the individual/organization
5. How recently have you donated to a past project of this leader/creator?
  - Never donated before
  - Less than 1 year
  - 1-5 years
  - More than 5 years

[If volunteer]
6. Please describe the volunteering or other assistance you provided the project (check all that apply):
  - Volunteered in-person, Hours: \_\_\_\_\_
  - Assisted with promoting the project
  - Provided technical assistance which utilized my skills, Describe: \_\_\_\_\_
  - Other: \_\_\_\_\_

[If volunteer]
7. Describe your volunteering experience with this project:  
[essay box]
8. How similar were your interests in the project with those of the project creators/leaders?
  - Extremely similar
  - Very similar
  - Somewhat similar
  - Neither similar nor dissimilar

- Somewhat dissimilar
  - Very dissimilar
  - Extremely dissimilar
  - Not enough information to know
9. How likely are you to engage in future activities with the individuals who organized this project?
- Extremely unlikely
  - Unlikely
  - Neutral
  - Likely
  - Extremely likely
10. What effect did your involvement in this project have on the strength of ties you have with people in the neighborhood?
- Ties with people with similar backgrounds to me
  - Ties with people different backgrounds from me
- Scale for the questions above:

Much stronger

Somewhat stronger

Neither stronger or weaker

Somewhat weaker

Much weaker

Much less

11. How many new people did you meet or develop new relationships with through this project?
- People similar to me
  - People different than me
- Scale:  
0, 1, 2, 3, 4, 5+
12. Overall, do you think that this project resulted in stronger or weaker ties between people in this neighborhood?
- Much stronger
  - Somewhat stronger
  - Neither stronger or weaker
  - Somewhat weaker
  - Much weaker
  - Don't know

### Engagement and Residency

13. Which of the following activities were you involved in within the last 12 months?
- Volunteered in your city
  - Voted in an election
  - Attended a neighborhood or block organization meeting
  - Attended a public meeting
  - Wrote to an elected official
  - Attended a rally, protest, or other political event
  - Other: \_\_\_\_\_
14. Where do you live?
- In the same neighborhood as this project
  - Not in the same neighborhood, but in the same municipality as this project
  - The same region as this project
  - Outside the region where this project is located

[Live in neighborhood]

15. Which category best describes you?

- I rent a private apartment in the neighborhood
- I occupy a home I own, and there is a good chance I will sell the property in the next five years
- I occupy a home I own, and I am not planning to sell the home anytime soon
- I am a public housing tenant in the neighborhood
- I live in the neighborhood through another arrangement (live with friends, in a shelter, homeless)
- I own a property with limits on how much I can earn from sale (shares in a co-op, other limited-equity arrangement)

[Do not live in neighborhood]

16. Which category best describes you?

- I am more interested in the project idea than the specific neighborhood
- I am a landlord in the neighborhood
- I am a financier of development in the neighborhood
- I am a developer in the neighborhood
- I buy property with the aim of re-selling it at a profit in the neighborhood
- I am interested in this neighborhood for another reason: \_\_\_\_\_

### **Crowdfunding Website**

For the following questions, think about how the project you funded was presented on the civic crowdfunding website, as well as the website's functionality in general.

17. Rate the quality of information on the project page about these topics:

- The goals of the project
  - How the funds would be used
  - In addition to donating, how I could help
- Scale for the above questions (displayed as a matrix)
- 1- Poor
  - 2- Fair
  - 3- Good
  - 4- Very good
  - 5- Excellent
  - No information provided

18. Please rate the following motivations for donating or volunteering with the project:

- Donation rewards (sticker, t-shirt, gift certificate)
  - Matching donations
  - Learning new things
  - Belonging to a community
  - Meeting new people
  - Helping others
  - Developing a positive reputation in my community
  - Improving my neighborhood
  - Feeling a sense of achievement
  - Other (comment box)
- 1- Not at all influential
  - 2- Slightly influential
  - 3- Somewhat influential
  - 4- Very influential

5- Extremely influential

Demographics

19. What is your age?
20. Are you of Hispanic, Latino, or Spanish origin?  
Yes  
No
21. What is your race? *Mark one or more boxes.*  
White  
Black or African American  
American Indian  
Asian American  
Middle Eastern or Arab American  
Some other race: \_\_\_\_\_
22. Any other feedback or comments:  
[Essay Box]

*Robert Goodspeed is an Assistant Professor of Urban Planning at the University of Michigan's Taubman College of Architecture and Urban Planning. He holds a Ph.D. in Urban and Regional Planning from the Massachusetts Institute of Technology, an M.C.P. from the University of Maryland, and a B.A. in history from the University of Michigan. His research investigates how new information technologies can be used to improve cities, and involves mixed-methods studies of innovative urban planning practice and analysis using geographic information systems.*