Under the Green Umbrella: A Census of Civic Environmental Stewardship Organizations in the City of Philadelphia

For the Stewardship Mapping and Assessment Project (STEW-MAP)

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Executive Summary

The purpose of this white paper is to describe the organizational characteristics of the groups engaged in environmental stewardship in Philadelphia. This project also explores geospatial characteristics of these groups and their organizational networks, but these areas are beyond the scope of this paper.

- One hundred and ninety-five organizations completed a survey out of the initial sample of 665 organizations, rendering a response rate of 29.3%.
- About 40% reported engaging in all five components of environmental stewardship. Eighty-eight percent of the organizations said that they aim to *conserve* local environments, 81.5% *advocate* for the environment, 78% *educate* the public about their local environment, 70% *manage* areas of the local environment directly, and 60% *monitor* the quality of the local environment.
- Sixty-two percent of responding organizations employ one person or fewer; however, these organizations report high rates of volunteers (73%) and members (75%).
- One third of responding organizations are less than ten years old; a full 60% are less than 25 years old.
- Nearly half of responding organizations have an annual budget of $10,000 or less; a quarter of these organizations have annual budgets of $1,000 or less. Only 18 of 151 organizations (12%) have annual budgets of over $1 million.
- Membership dues account for the primary source of funding for 24% of responding organizations; funding from government agencies was the second most cited primary source of support for 20% of these organizations.
- Eighty-five percent of responding organizations work in and provide services to *land* environments (parks, community gardens, etc.). Forty-eight work on the built environment (schools, green buildings, etc.) and 28% work in *aquatic* environments (waterfronts, wetlands, etc.).
    - In land environments, most (58%) work in parks.
    - In built environments, most (61%) work in recreation centers.
    - In aquatic environments, most (83%) work on watersheds and sewersheds.
- Most organizations work on lands owned by local governments (53%).
- The most commonly cited key services that the organizations provide are: community organizing (47%); the provision of physical labor (37%), and; the provision of equipment and plant materials (31%).
- Most organizations share information online, through a website (59%) or blog (19%). Half share information at the neighborhood level, 23% at the city level, 11% at the regional level, and seven percent at the national level.
- An organization's level of professionalization is predicted by their tax exemption status, their organizational age, and their primary source of funding.

Introduction

Urban, metropolitan areas are vital sites of environmental stewardship. City-centered groups are working to maintain, study, and protect the environment within their cities and in the surrounding areas. Research on urban environmental stewardship has been conducted in several cities across the United States, including New York (Svendsen and Campbell, 2005, 2008; Fisher, Campbell, and Svendsen, 2012; Connolly *et al.*, 2013; Locke *et al.*, 2014), Seattle (Romolini, Grove, and Locke, 2013; Wolf *et al.*, 2011), Chicago (Belaire *et al.*, 2011), and Baltimore (Romolini, Grove, and Locke, 2013). The present white paper adds to this body of literature by presenting findings from a survey of the organizations engaging in environmental stewardship in Philadelphia.

Philadelphia is the fifth largest city in the United States, and is the largest metropolitan area in the state of Pennsylvania. Despite its size, however, Philadelphia is not exceptionally racially diverse. The population has nearly identical African American (43%) and White (41%) populations, in sharp contrast to national averages (13 and 78%, respectively). Latino (12%) and Asian citizens (4.3%) make up a much slimmer minority than they do nation-wide (17 and 5.3%, respectively). Approximately 12% of the city's population is foreign-born.

Philadelphia also demonstrates medium levels of economic affluence. The metropolitan median household income is $37,016, a full 30% below the national median ($53,046). Similarly, Philadelphia's current poverty rate is 26.2%, twice the national rate. There is a relatively low level of educational attainment in Philadelphia: 80% of adults have

a high school diploma or higher, five points lower than the national average, and 23% of those adults have a college degree or better, five points lower than the national average.[1]

However, despite being economically underprivileged, and within the context of other metropolitan social and political issues, Philadelphia has an active community of organizations that participate in urban environmental stewardship activities. In the face of complex land use regulations, limited green space, and urban sprawl, this community of stewards engages various tactics and organizational forms to take action toward improving the city of Philadelphia and its surrounding regions. In the following pages, we describe these civic organizations, their institutional arrangements, and the ways that they are directly engaging in environmental stewardship. We also provide some analysis of the levels of professionalization present in these organizations, and how professionalization is related to organizational structure and types of stewardship.

Data and Methods

The full study explores the organizational characteristics, physical 'turf' or boundary of stewardship groups, and the social networks of civic stewardship groups in the City of Philadelphia. It builds upon findings from a pilot assessment of urban stewardship in six cities in the north-eastern United States that was conducted in 2004 with the Urban Ecology Collaborative Research Committee (for a full discussion, see Svendsen and Campbell, 2008), as well as findings from STEW-MAP assessments conducted in other US cities including New York (Svendsen and Campbell, 2005, 2008; Fisher, Campbell, and

[1] All demographic information drawn from the US Census Bureau. http://quickfacts.census.gov. Retrieved December 2014.

Svendsen, 2012), Seattle (Romolini, Grove, and Locke, 2013; Wolf *et al.*, 2011), Chicago (Belaire *et al.*, 2011), and Baltimore (Romolini, Grove, and Locke, 2013).

Sampling frame

In the first phase of the project, researchers worked to assemble a sample population of active stewardship groups in Philadelphia. Critical to this work was the Philadelphia Field Station of the US Forest Service as they helped to provide names of active organizations and networks. Building on the extant research on local environmentalism cited above and the methodologies of STEW-MAP studies conducted in other cities[2], this study focuses on the work of Philadelphia's civil society organizations (for a full discussion of civic groups, see Baldassarri and Diani, 2007). We include in this group of organizations both non-profits and informal community groups that serve any of the following five key stewardship functions: conserving, managing, monitoring, advocating for, or educating their friends, neighbors, or public officials about the local environment (for a full definition of stewardship, see Fisher, Campbell, and Svendsen, 2012).

Previous studies looking at local environmentalism have found that national directories of non-profit groups are inadequate in their representation of local groups (Kempton *et al.* 2001, Andrews and Edwards, 2005; see also Andrews, 1997, Brulle *et al.*, 2007). As in previous STEW-MAP studies, we began by compiling a list of all stewardship groups in Philadelphia. The citywide sample of civic stewardship organizations was compiled by contacting public agencies and non-profits working on environmental and

[2] For more on other STEW-MAP cities, see the STEW-MAP website: www.stewmap.net

natural resource issues at the citywide scale and requesting access to their lists of organizational partners.

In this way, we compiled a list of 32 organizational sources. By referencing these organizational databases to develop our sample population, we guard against any potential biases based on the source of organizational contact information (see e.g. Brulle *et al.* 2007). Further, we used a snowball sampling method in which organizations providing data were asked to suggest other organizations as potential data providers, consistent with established snowball sampling methods (see Glaser and Strauss, 1967). We continued with this snowball method until we reached saturation, when no new organizations were recommended to us. This approach allowed us to capture the core network of stewardship groups associated with the citywide environment and natural resource management in Philadelphia (see Table 1 for a list of all of the databases used to develop the sampling frame).

Table 1: Databases in the Sampling Frame

Academy of Natural Sciences	Passyunk Civic Association
Center City District	Pennsylvania Audobon
Center in the Park	Pennypack Environmental Center
Cobbs Creek Environmental Center	PhillyStake
East Falls CDC	REI Plymouth Meeting
Fairmount CDC	Schuylkill Center for Environmental Education
Fairmount Park Conservancy	Schuylkill River Park
Flying Kite Media	Schuylkill River Project
Frankford CDC	South Kensington Community Partners
GRID Magazine	Sustainable 19125
Manayunk CDC	Tookany-Tacony-Frankford Watershed Partnership
Mariposa Co-op	University City District
Morris Arboretum	Weavers Way Co-op
New Kensington Neighborhood Association	West Mt. Airy Neighborhood Association
Overbrook Environmental Center	Wissahickon Environmental Center
Partnership for the Delaware Estuary	Young Involved Philadelphia

Once all of the individual organizational databases were collected, we compiled a master list of stewardship groups bases on six criteria:

(1) *location*—groups located outside the city limits of Philadelphia were removed from the sampling frame, although groups located within the city limits working at regional, national, or international levels were included so long as they also worked within the city as well;

(2) *organization status*—individuals without a specific organizational affiliation were removed from the sample, as the unit of analysis for this study is stewardship organizations and not individual stewards;

(3) *civil society actors*—we removed all public agencies, governmental offices, and private businesses from the sampling frame;

(4) *accurate contact information*—groups without valid email or phone numbers were eliminated from the sample;

(5) *active organizations*—groups that were no longer active, closed, or no longer involved in stewardship activities were dropped from the sample; and

(6) *stewardship*—groups included in databases that did not report engaging in any of the five components of stewardship—conserving, managing, monitoring, advocating for, or educating about the local environment—were removed from the sample.

Unique identifiers were assigned to each group to ensure that they could be properly tracked. In order to merge listings from multiple data providers, groups were matched via organization name, contact name, and email address. Because some groups, especially informal groups, change names, locations, and leadership frequently, some organizations were listed under different names or contact information in different

databases. Adding further complexity to the process, some individuals were listed as the leaders of multiple, distinct groups. This issue created the possibility of some error or replication of groups within the sampling frame. However, every attempt was made to reconcile duplicate entries and organizational contact information was verified via organizational directories, direct contact with organizations, and web searches. These criteria and deleted duplicates reduced our initial sample of 1,091 down to a final sample of 665 organizations.

Organizational Survey

Next, we conducted a citywide census of all of the groups that remained in the sample once selection criteria had been applied.[3] The survey was modeled on surveys used in previous STEW-MAP studies in other cities, and was adapted to fit the specific geographic, organizational, and social landscape of Philadelphia. The survey asked questions about organizations' stewardship activities, organizational history, capacity, and professional structure. The survey also asked about the geographic location and scope of these groups' activities, and their ties to other civic organizations, businesses, and government agencies. The survey was pre-tested on a group of organizational leaders and was refined based on feedback from this group. The final survey consisted of 22 questions, most of which were close-ended in format.

The citywide survey was administered primarily online using Qualtrics survey software. Surveys were administered with a standardized recruitment text, over a period of

[3] Data were collected in accordance with the rules of the University of Maryland Institutional Review Board (Protocol #404781-1).

9 months from June 2013 to March 2014. Whenever possible, email was the preferred method of contact with organizational representatives. If a provided email address was determined to be invalid (i.e. a 'bounceback' message was received), a web search was conducted to find a new, correct email address. In cases where no valid email was available, organizations were contacted via their physical address and sent a paper copy of the survey via US mail. Organizations for which no valid email or physical addresses were available were dropped from the sample.

All organizations received general reminders at two weeks, four weeks, and six weeks if they had not completed the survey. Organizations for which phone numbers were listed in the contact dataset, or for which phone numbers could be located via web searches, also received personalized phone call reminders between the fifth and eighth months of the data collection period. In addition, a description of the study was included in organization listservs and in a local "green" magazine. Information about the study was also provided at meetings for several large groups. Overall, 195 groups participated in the survey, representing a response rate of just under thirty percent (29.3%). This response rate is better than that of previous STEW-MAP cities[4] and is within the common range for mail-in and Internet surveys of organizations (for a full discussion, see Hager *et al.* 2003). Data were entered into a spreadsheet and, where appropriate, given a numerical code. Data were analyzed using PASW Statistics 17 (SPSS) statistical software.

[4] Response rates for previous cities include: 18.3% for New York, 26.9% for Baltimore, and 25.4% for Seattle.

Results

Stewardship and Services

Organizations were asked to note the key goals of their organizations with regard to environmental stewardship. They were asked to choose as many options as apply from the aforementioned list of five key stewardship activities. Less than half of the organizations (81 organizations, or 41.5%), reported engaging in all five components of environmental stewardship. Of the 195 organizations that responded to this question, 171 (88%) said that they aim to conserve local environments, 159 (81.5%) advocate for the environment, and 152 (78%) aim to educate the public about their local environment. One-hundred and thirty-seven organizations (70%) manage areas of the local environment directly, and 117 (60%) monitor the quality of the local environment.

Not surprisingly, most of these organizations (110 organizations, 56%) said that the environment is a core element of the organization's identity. Beyond the environment, organizations reported having a broad range of foci. Seventy-nine (40.5%) focus on community improvement and capacity building, fifty-seven (29%) work in recreation and sports, and 54 (28%) work in education. Forty-four (22.5%) work in local neighborhood development and 41 (21%) focus on culture and the arts. Fifty-eight organizations (30%) focus on youth, and 27 (approximately 14%) focus on seniors. Sixteen (eight percent) focus on shelter and housing and 15 (approximately 7.5%) focus on public health, including mental health. Fifteen organizations focus on crime and criminal justice, 14 (approximately seven percent) work in employment and jobs, and 11 (approximately 5.5%) work in human services. Ten organizations (five percent) work in science, technology, and social science research, nine focus on animals (4.5%), and nine are religious organizations. Nine

focus on transportation, four (two percent) focus on legal services and civil rights, and only two (one percent) focus on international cooperation, foreign affairs, and national security (see Table 2).

Table 2: Aims of the Organization

	Freq	*Percent*
Conserve local environment	171	87.7%
Advocate for the local environment	159	81.5%
Educate the public about the local environment	152	77.9%
Manage some area of the local environment	137	70.3%
Monitor the quality of the local environment	117	60.0%
Group's primary focus		
Environment	110	56.4%
Community improvement/capacity building	79	40.5%
Youth	58	29.7%
Recreation and Sports	57	29.2%
Education	54	27.7%
Development	44	22.6%
Arts, Culture	41	21.0%
Seniors	27	13.8%
Housing/Shelter	16	8.2%
Public health	15	7.7%
Crime, Criminal Justice	15	7.7%
Employment, Jobs	14	7.2%
Human services	11	5.6%
Research in science, tech, social science	10	5.1%
Animal-related	9	4.6%
Religion	9	4.6%
Transportation	9	4.6%
Legal services, Civil rights	4	2.1%
International, Foreign Affairs, National Security	2	1.0%
Other	31	15.9%

Respondents were also asked to identify, from a list of options, all of the services that their organizations provide. Of the 195 organizations responding to this question, nearly half (92 organizations, 47%) identified themselves as community organizers. Seventy-two organizations (37%) provide labor, including volunteers, paid employees, and students. Sixty organizations (31%) provide plant materials and equipment for

stewardship projects. Fifty-two organizations (27%) provide work in public relations and outreach, 44 organizations (23%) provide educational curricula, and 17 (approximately 9 percent) provide buildings and facilities. Fifteen organizations (approximately 8 percent) provide technical assistance, 13 (approximately 7 percent) provide grants, and 13 provide data services. Six organizations (3 percent) provide computing services, three (1.5%) provide legal services, and 39 organizations (20%) provide other services (see Table 3).

Table 3: Services Offered

	Freq	*Percent*
Community Organizing	92	47.2%
Labor	72	36.9%
Plant Materials/Equipment	60	30.8%
Public Relations/Outreach	52	26.7%
Educational Curricula	44	22.6%
Buildings/Facilities	17	8.7%
Technical Assistance	15	7.7%
Grants	13	6.7%
Data	13	6.7%
Computing/Internet	6	3.1%
Legal Resources	3	1.5%
Other	39	20.0%

Locations

Respondents in the sample were asked to describe the types of site in which they operate or provide services. A list was provided and organizations were asked to fill in as many options as apply. Table 4 presents the distribution of responses to this question. As Philadelphia is a river town near the Atlantic coast, it makes sense that many of these organizations claimed to work in a combination of land, aquatic, and built-environmental settings.

The most common site type was the land-based environment, which includes settings like parks, community gardens, and vacant lots. This site was reported by 85% of the respondents. About half (48%) reported working in the built environment, in settings like recreation centers, school yards, and green buildings. Fifty-four organizations (about a quarter) reported working in or providing services to aquatic environments, such as streams, wetlands, and watersheds.

Table 4: Sites of Work

	Freq	*Percent*
Land Environment	*162*	*84.8%*
Park	94	58.0%
Community Garden	81	50.0%
Street Tree	71	43.8%
Vacant Land	52	32.1%
Public Right of Way	47	29.0%
Playing Field/Ballfield	36	22.2%
Natural/Resoration Area	29	17.9%
Flower box/ Planter	24	14.8%
Greenway/Rail-trail	18	11.1%
Dog Run	13	8.0%
Botanical Garden/Arboretum	12	7.4%
Built Environment	*92*	*48.2%*
Recreation Center	56	60.9%
Schoolyard	37	40.2%
Front/Backyard	28	30.4%
Green Building	17	18.5%
Apartment Grounds	12	13.0%
Rooftop	9	9.8%
Courtyard/Atrium/Plaza	8	8.7%
Aquatic Environment	*54*	*28.3%*
Watershed/Sewershed	45	83.3%
Stream/River/Canal	34	63.0%
Wetland	16	29.6%
Waterfront/Beach/Shore	7	13.0%

Of the organizations that work in *land environments*, 94 (58%) work in public parks. Eighty-one organizations (50%) work in community gardens. Seventy-one organizations

(approximately 44%) plant trees in street settings and 52 (32%) maintain vacant lands. Forty-seven organizations (29%) work in public right of way, 36 (22%) work on playing fields and ball fields, and 29 (18%) work in natural restoration areas. Twenty-four organizations (15%) maintain flowerboxes and planters, 18 (11%) work on greening railways, 13 (eight percent) maintain dog runs, and 12 (seven percent) work on botanical gardens and arboreta.

Of the organizations reporting work in the *built environment*, 56 (approximately 61%) work in recreation centers. Thirty-seven organizations (40%) work in schools and 28 (30%) work in residential yards. Seventeen organizations (18%) work in green buildings and 12 (13%) work on apartment building grounds. Nine organizations (approximately 10%) work on urban rooftops, and eight (approximately nine percent) work in public courtyards, atria, and plazas.

Of the organizations reporting work in *aquatic environments*, 45 (83%) work in watersheds and sewersheds. Thirty-four (approximately 63%) work on streams, rivers, and canals. Sixteen (approximately 30%) work on wetlands, and seven (approximately 13%) work on waterfronts, beaches, and shores.

These organizations also shared information about the ownership of the properties on which they operate, presented in Table 5. Like previous questions, respondents could answer with as many options as apply to their organizations. It is not surprising that most of these settings are public, government-owned spaces. Of the 191 groups responding to this question, 102 (53%) work on properties owned by local governments. Eleven organizations (approximately 6 percent) work on properties owned by state governments, and seven (approximately 4 percent) work on properties owned by the federal

government. Fifty-three organizations (28%) work on properties owned by non-profits, 39 organizations (20%) report working on properties owned by individuals, and 12 (seven percent) work on corporate-owned land. Twenty-seven organizations (14%) reported working on land under another, unspecified type of ownership.

Table 5: Ownership of Property

	Freq	*Percent*
Local Government	102	53.4%
Nonprofit	53	27.7%
Individual	39	20.4%
Corporation	13	6.8%
State Government	11	5.8%
Federal Government	7	3.7%
Other	27	14.1%

Finally, we asked the organizations in our sample whether and how they share information. Of the 189 organizations responding to this question, 111 (approximately 59%) share information through their websites and 36 (19%) maintain a blog. Ninety-nine (50%) participate in conferences and meetings at the neighborhood level, 44 (23%) at the city level, 21 (11%) at the regional level, and 13 (7 percent) at the national level. One hundred and eight organizations (57%) use flyers and signage. Eighty-four organizations (44%) communicate with local media, and 10 (approximately 5 percent) use national media. Seventy-two (38%) use direct mail and newsletters, 65 (34%) use door-to-door outreach, and 56 (approximately 30%) use a listserv. Fourteen organizations (approximately 7.5%) share information over the radio, and 13 (approximately seven percent) use television. Table 6 presents these findings.

Table 6: Sharing Information

	Freq	*Percent*
Website	111	58.7%
Flyers/ Signs	108	57.1%
Neighborhood Conferences/Mtgs	94	49.7%
Local Media	84	44.4%
Direct Mail/Newsletter	72	38.1%
Door-to-Door Outreach	65	34.4%
Listserv	56	29.6%
City Conferences/Mtgs	44	23.3%
Blog	36	19.0%
Regional Conferences/ Mtgs	21	11.1%
Radio	14	7.4%
National Conferences/Mtgs	13	6.9%
Television	13	6.9%
National Media	10	5.3%
NA/No Sharing	7	3.7%

Organizational Characteristics

Turning now to the organizational characteristics of the stewardship groups in the sample, we asked respondents how many people were involved in their organization. Specifically, we asked how many *paid staff* their organization employed, how many *volunteers* filled active and instrumental roles, and how many *members* paid for membership or donated money, but did not fill an active role. To minimize non-response rates, we offered a range of answers in favor of a fill-in; in other words, contact people did not need to know exact answers, but were invited to estimate these numbers.

Table 7: Organization Size (with Percentages)

	0-1 people	*2-3*	*4-5*	*6-10*	*11+*
Paid Staff	101 (62%)	25 (15.3)	8 (4.9)	10 (6.1)	19 (11.7)
Volunteers	7 (4.3)	10 (6.2)	9 (5.6)	18 (11.1)	118 (72.8)
Members	15 (10.3)	6 (4.1)	7 (4.8)	8 (5.5)	109 (75.2)

Note: Percentages run across

Most of the responding organizations had very few paid employees. Of the 163 organizations who responded to this question, 101 organizations (62%) reported having none or one paid staff person, followed by 25 (15%) reporting two to three paid staff, eight (5%) reporting four or five paid staff, 10 (six%) reporting six to 10 paid staff, and 19 organizations (12%) reporting 11 or more paid staff members.

Given that so few paid employees staff these organizations, it makes sense that many of the groups in our sample reported high numbers of volunteers. Almost two-thirds (118, or nearly 73%) reported 11 or more volunteers. Only seven (four percent) reported having one or no volunteers. Ten (six percent) reported two to three volunteers, nine (5.5%) reported four or five volunteers, and 18 (11%) reported six to 10 volunteers.

Organization memberships followed a similar pattern. Here, membership denotes a paid subscription to the organization's activities and programs, but does not denote an obligation to participate. Instrumental limitations—such as available office space or location of the organization's headquarters—wield less influence on membership than they do on employment and volunteers. In that light, it makes sense that these organizations rely heavily on members to fill their rosters. Only 15 (about 10%) reported having one or no members. Six organizations (about 4 percent) reported two to three members, seven (nearly 5 percent) report four to five employees, eight (5.5%) reported six to 10 members, and three-quarters (109 organizations) reported having 11 or more paying members. The results are presented in Table 7.

The lower incidence of paid employment may be due, in part, to the relative youth of these organizations. The distribution of the organizational ages of these stewardship groups is presented in Table 8. Of the 177 organizations that reported their year of

establishment, one-third (60 organizations) are less than 10 years old. Forty-nine of these organizations (28%) are 10 to 25 years old, 13 (7 percent) are between 50 and 100 years old, seven (approximately 4 percent) are 100 to 150 years old, and five (approximately 3 percent) are between 150 and 200 years old.

Table 8: Age of Organization

	Freq	*Percent*
1-10 years	60	33.9%
10-25 years	49	27.7%
26-50 years	43	24.3%
51-100 years	13	7.3%
100-150 years	7	4.0%
151-200 years	5	2.8%
DK/NA/Missing	18	10.2%

The trend in organizational age correlates with trends in organizational annual budget size, as one would expect. Table 9 reports results from the 151 organizations that provided information on their budgets. One quarter (38 organizations) reported having annual budgets of $1,000 or less. Another quarter (35 organizations, approximately 23%) reported having between $1,000 and $10,000 annually. Another quarter (38 organizations, 25%) reported having between $10,000 and $100,000 in their annual budget. Twenty-two organizations (approximately 15%) had between $100,000 and $1 million dollars. Eighteen organizations (12%) had more than $1 million.

Table 9: Annual Budget

	Freq	*Percent*
$0-1k	38	25.2%
$1k-10k	35	23.2%
$10k-100k	38	25.2%
$100k-1mil	22	14.6%
$1mil+	18	11.9%

Unsurprisingly, the most commonly cited source of funding for these organizations was membership dues. Of the 156 organizations that reported their primary funding

source, 37 (24%) reported membership dues as their primary source of funding. Thirty-one organizations (approximately 20%) cited government agencies as their primary source, 20 organizations (13%) reported fees and program income, 11 organizations (seven percent) pointed to private foundations. Only four organizations (2.5%) reported corporate giving and sponsorships as their primary sources of funding. The rest of the sample (53 organizations, 34% of the responding sample) reported other unspecified sources of funding. Table 10 summarizes these findings.

Table 10: Primary Sources of Funding

	Freq	*Percent*
Indiv. Memberships	37	23.7%
Government Agencies	31	19.9%
Fees/Program Income	20	12.8%
Foundations	11	7.1%
Corporate Giving/ Sponsorship	4	2.6%
Other	53	34.0%

Most of these organizations have registered for formal non-profit 501(c)3 tax status. This tax status is a specific provision of the US Internal Review code for non-profit organizations, which exempts eligible and registered organizations from some federal income taxes.[5] Of the 182 organizations that reported their tax status, half (91 organizations, about 50%) reported having 501c(3) status. Thirty-four organizations (19%) reported being community groups without status, 21 organizations (12%) reported being an independent branch of a larger 501c(3) organization, and 19 organizations (ten percent) receive funding through a bigger 501c(3) organization. Four organizations (only 2%) are school-based, and one of these organizations is religiously affiliated. Twelve organizations (approximately seven percent) were in the process of applying for status.

[5] For more information, see http://en.wikipedia.org/wiki/501(c) (Accessed 6 July 2009).

Note that this question was open-ended on the survey, and so respondents were asked to fill in as many options as apply to their organization. Nine of these organizations (5 percent) also reported affiliation with government agencies and eight (approximately 4 percent) reported being in a private/public partnership. Eight organizations reported having 501c(4) status, and 24 organizations (13%) described their tax status as "other." Four organizations (approximately two percent) reported that they are not tax-exempt (see Table 11).

Table 11: Tax Status

	Freq	*Percent*
501(c)3 Status		
Has Status	91	50.0%
Community Group (no status)	34	18.7%
Branch of Larger Org.	21	11.5%
Receives Funding through Larger Org.	19	10.4%
Has Applied for Status	12	6.6%
School-Affiliated Group	4	2.2%
Religious Group (no status)	1	0.5%
Other	24	13.2%
Government Agency	9	4.9%
501(c)4	8	4.4%
Public/Private Partnership	8	4.4%
Not Tax exempt	4	2.2%

Analysis

In the following section, we present the findings of our statistical analyses of these data. Following the work of Fisher and colleagues (2012), we examine the role of organizational professionalization in environmental stewardship. We begin our analysis with a brief discussion of how we operationalize an organization's level of professionalization, contextualizing it within the relevant literature. We then turn to the organizational characteristics that predict professionalization.

Constructing a Professionalization Index

Understanding the professionalization of civic organizations has long been the focus of research within the social sciences (McCarthy and Zald, 1997; Oliver, 1983). In many, more recent cases, the purpose of these studies is to understand the relationship between organizational resources and the tactics they employ (Andrews and Edwards, 2004; Fisher, Campbell, and Svendsen, 2012). In the case of stewardship organizations, the level of professionalization describes how much these groups "rely… on paid leaders and 'conscience' constituents who contribute money and are paper members rather than active participants" (Staggenborg, 1988: 585). Here, we diverge somewhat from the common definition to include budget size in the index, which can serve as a proxy for both member contributions to the organization and for the organization's stewardship capacity.

Table 12 demonstrates the significant relationship between professional capacity and budget size. The most commonly cited services—community organizing, the provision of labor, materials and equipment—were concentrated in the lower range of budgets. The middle range of budgets was dominated by services that require greater levels of specialization, such as the development of educational curricula, grantmaking, and technical assistance. Organizations with higher budgets were more likely to provide specialized and instrumental services, such as legal and computing help, the provision of buildings and facilities, and the collection and maintenance of stewardship data. This relationship suggests that, along with staff size, the financial capacity of the organization matters for their professional operations ($\chi^2 = 69.795$, $p < 0.01$).

Table 12: Services Offered, by Organization's Annual Budget Size

	<$1k	$1k-10k	$10k-100k	$100k-1m	>$1m	Chi-Squared
Community Organizing	21	25	29	8	8	
Labor	20	16	22	7	5	
Plant materials / Equipmen	15	14	18	6	5	
Public relations / Outreach	7	16	14	8	4	
Educational Curricula	5	11	10	11	6	
Grants	2	1	5	3	1	
Technical Assistance	1	2	5	3	3	
Data	1	5	2	3	1	
Legal Resources	0	0	2	0	1	
Buildings / Facilities	0	0	3	6	7	
Computing / Internet	0	1	3	0	2	
Other	8	8	9	9	4	
Total	**80**	**99**	**122**	**64**	**47**	**69.795****

**p<0.01

Organizational capacity and focus, then, relates to the level of professionalization that these organizations demonstrate.

For the purposes of our analyses, we employ a Professionalization Index, following the work of Fisher, Campbell, and Svendsen (2012). We do so by adding an organization's annual budget to their number of paid staff. Our *Annual Budget* variable is a categorical variable that consists of five discrete categories (see Table 9). Each category is assigned a number, such that organizations with $0 to $1,000 annually is scored as 1, organizations with $1,000 to $10,000 are scored as 2, and so on. Our Paid Staff variable is also categorical, and also consists of five discrete categories (see Table 7). As with *Annual Budget*, these were coded such that organizations with one or no paid staff members are scored as 1, those with two or three are scored as 2, and so on.

These recoded variables were added together into an index; the mean of these two added scores represents each organization's Professionalization Score. Organizations with a score of less than one are eliminated from this part of the analysis, as scores of less than

one indicate missing data in one of the constituent variables. As a result, we were left with 162 organizations with valid professionalization scores.

We consider organizations with a score of 1.0 to 2.0 to show *low* levels of professionalization, as they employ very few individuals and work with very small budgets. Organizations with scores from 2.5 to 3.5 show *medium* levels of professionalization, and those with scores of 4.0 to 5.0 show *high* levels of professionalization. As Table 13 demonstrates, the majority of organizations in this sample showed low levels of professionalization (105 organizations, approximately 65%). Thirty-six organizations (22%) showed medium levels and 21 (13%) showed high levels of professionalization.

Table 13: Professionalization Index

	Freq	*Percent*
Low	105	64.8%
Medium	36	22.2%
High	21	13.0%
Total	**162**	

Next, we look at organizational tax status. As might be expected, the largest proportion of low-scoring organizations in our sample did not have 501c(3) status. Fifty of the 105 organizations in this low-scoring group (48%) have no 501c(3) status. Thirty-eight of these organizations (36%) do have status, and 17 low-scoring organizations (16%) had some other tax status. Contrast this finding to the medium-level organizations, where the vast majority do have status (30 organizations, 83%). Only four organizations at this level of professionalization (11%) had no such status, and two organizations (5.5%) had some other tax status. This trend holds true for the high-scoring group as well; 19 of these organizations (90%) have 501c(3) status, compared to only two (approximately 9.5%) who do not. A Pearson's chi-squared test demonstrates this relationship to be statistically

significant ($\chi^2 = 37.298$, $p < 0.001$; see Table 14). Groups that have status also tend to be more professional, over all.

Table 14: Relationship between Professionalization and Tax Status

	Professionalization Score						
	Low		Medium		High		Pearsons'
	N	%	N	%	N	%	Chi-Squared
No 501c(3)	50	30.9%	4	2.5%	2	1.2%	
Yes 501c(3)	38	23.5%	30	18.5%	19	11.7%	
Other	17	10.5%	2	1.2%	0	0	
Total	**105**	**64.81%**	**36**	**22.22%**	**21**	**12.96%**	**37.298*** **

*** p<0.001; percentages are relative to all responding organizations

We also looked at the relationship between level of professionalization and organizational age. Among groups with low levels of professionalization, 43 organizations (41%) are ten years old or newer. Twenty-nine organizations in this group (approximately 28%) are between 11 and 25 years old, 17 (16%) are between 26 and 50 years old, and 11 (10%) are more than 50 years old. Organizations with medium professionalization scores are older on average. Nine organizations in this group (25%) are ten years old or newer, while 11 (30.5%) are between eleven and 25 years old. Seven organizations (19%) are between 26 and 50 years old, and nine are more than 50 years old. This trend holds true in the high-level group as well; seven organizations (33%) in this group are between 11 and 25 years old, nine (43%) are between 26 and 50 years old, and five (24%) are more than 50 years old. In short, older organizations demonstrate higher professionalization, whereas younger organizations demonstrate lower, consistent with findings from previous work in New York (Fisher, Campbell, and Svendsen, 2012). Chi-squared tests show that this relationship is statistically significant ($\chi^2 = 20.995$, $p < 0.001$; see Table 15).

Table 15: Relationship between Professionalization and Organization Age

	Professionalization Score						
	Low		Medium		High		Pearson's
	N	%	N	%	N	%	Chi-Squared
Ten years or fewer	43	27.4%	9	5.7%	0	0	
Eleven to 25 years	29	18.5%	11	7.0%	7	4.5%	
26-50 years	17	10.8%	7	4.5%	9	5.7%	
More than 50 years	11	7.0%	9	5.7%	5	3.2%	
Total	**100**	**63.7%**	**36**	**22.9%**	**21**	**13.4%**	**12.185***

* $p<0.05$; percentages are relative to all responding organizations

We also looked at the relationship between professionalization and an organization's primary source of funding. In the low-scoring group, 13 organizations (12%) receive their funding primarily from government agencies. Five organizations (approximately five percent) receive funds from private foundations, 28 (27%) receive funding from individual membership payments, and 10 (9.5%) receive funding from income derived from the organization's own programs. Four organizations (approximately four percent) receive funding from corporate sponsorship and 40 (43%) receive funding from some other source.

On the other hand, organizations in the medium-level group receive funding primarily from government agencies, on average (eight organizations, 22%). Six organizations in this group (17%) receive funding primarily through private foundations, and only four organizations (11%) receive funding through individual membership payments. Seven organizations in this group (19%) receive funding through program-derived income, and nine organizations (30.5%) either receive funding from other sources.

Lastly, in the high-level group, 10 organizations (approximately 48%) receive funding from government agencies. Only four (19%) receive funding primarily through individual memberships, and three (14%) receive funding primarily through program-

based income. Three receive their funding primarily through some other source. Level of professionalization is significantly associated with sources of funding; those with lower levels of professionalization rely more on individual membership payments for funding, whereas more professional organizations tend to receive funding through government agencies ($\chi^2 = 29.81$, $p < 0.001$; see Table 16). While previous work has found evidence of a relationship between funding *level* and organizational activities, these results represent the first statistically significant relationship established between professionalization and *sources* of funding (Fisher, Campbell, and Svendsen, 2012).

Table 16: Relationship between Professionalization and Primary Funding Source

	Professionalization Score						
	Low		Medium		High		Pearson's
	N	%	N	%	N	%	Chi-Squared
Gov't Agencies	13	8.4%	8	5.2%	10	6.5%	
Foundations	5	3.2%	6	3.9%	0	0	
Indiv. Membership	28	18.2%	4	2.6%	4	2.6%	
Fees/Program Income	10	6.5%	7	4.5%	3	1.9%	
Corporate Giving	4	2.6%	0	0	0	0	
Other	40	26.0%	9	5.8%	3	1.9%	
Total	**100**	**64.9%**	**34**	**22.1%**	**20**	**13.0%**	**29.81*** **

*** p<0.001; percentages are relative to all responding organizations

Conclusion

As this white paper has reported, Philadelphia's civic environmental stewards are a diverse and active lot. Most of the organizations in our sample are small, by many measures; they are, on average, less than ten years old, staffed by very few paid employees, and work with very limited annual budgets. However, we note a higher rate of 501c(3) tax status among these young organizations. This fact may signal a growth of entrepreneurial interest or opportunity structures in Philadelphia. It may also suggest that these organizations are still

in the process of establishing roots within the community, and are relatively untested. Further work investigating this trend in 501c(3) status among young organizations can address these questions directly.

We note that Philadelphia's stewardship organizations are largely membership-driven; membership dues were the most commonly cited source of funding, and volunteers and paying members outnumber paid employees among their rosters. These organizations also work in diverse settings, across land, water, and the built environment. Primary operations are land-oriented, and are focused on the care and maintenance of public parks. Most of this work is conducted on public lands owned by local, state, and federal government, but a sizeable proportion of this work happens on land owned by non-profits, corporations, and individuals. Community organizing was the most cited example of the services that these organizations offered, but responses were diverse, ranging from physical labor to educational development and outreach, to data collection. These organizations also shared information with one another and their communities in number of ways. While face-to-face interactions were cited as popular modes of communication, the Internet was the most popular medium through which these organizations stayed connected.

A number of questions arise from this research. Are younger groups working in more traditional modes of land management or expanding into new areas of urban waters, watersheds, and sewersheds? What are the gaps and overlaps between these groups in terms of their distribution across the city? What is the spatial differential among these groups in terms of their levels of professionalization, or the income levels of the neighborhoods in which they operate? What is the shape of the social network among these

organizations? Who are the key organizations in the network, and how do these organizations cluster? What do the structures of cooperation and communication look like within this network? Future research should not stop at the structural characteristics of these organizations, but also measure and model the effectiveness of these organizations as both civic organizations and environmental stewards.

The starting point for answering many of these questions lies in the geospatial and social network data from the survey, which can speak to a number of these questions, and can refine them for future avenues of inquiry. The analyses are in progress, and results from those analyses are forthcoming.

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