Baltimore
GROW Center

The Baltimore GROW Center is a program of

Funding provided by

Support from our partners

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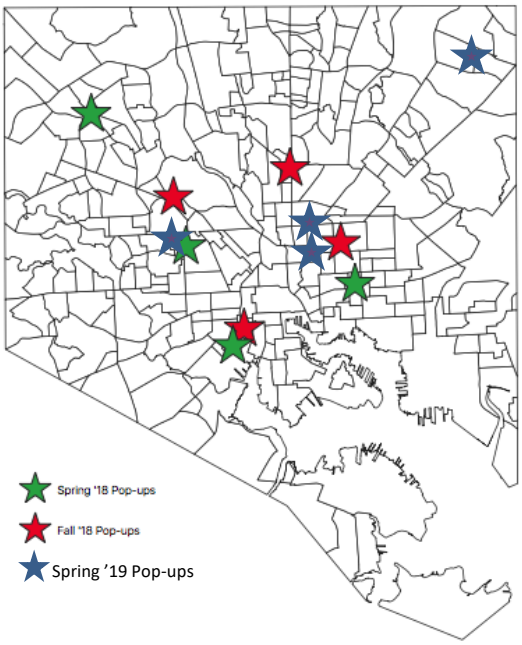
Executive Summary

For the past two years, the Department of Public Works (DPW) collaborated with federal, city, non-profit and community partners to host nineteen GROW (**G**reen **R**esources and **O**utreach for **W**atersheds) Center events across Baltimore.



Baltimore GROW Centers are intended to be greening resource hubs with the goal of increasing citizen capacity for implementing community greening and stormwater management projects. These hubs provide people with access to free/low cost materials and plants, as well as training and/or information to develop skills and connections for undertaking greening projects.

With funding from USDA/Forest Service, the GROW Center events, pop-ups and workshops, were visited by 695 participants, representing over 100 neighborhoods in Baltimore City. In total, 376 trees and 39+ yd^3 of mulch were given away, over $2,000 worth of native plants and 121 recycling bins were sold, 16 workshops on community greening and stormwater management were offered, and city residents were able to network with various greening experts.

The 2018-2019 GROW Centers were a continuation of a pilot held in April/May 2016

(See *The Neighborhood GROW Center 2016 Pilot Project – Final Report*).

Spring 2018	
Pop-up #1 Easterwood/Sandtown Park & Playground April 14, 2018 10am-12pm	**Pop-up #2** Baltimore Community ToolBank April 21, 2018 10am-2pm
Pop-up #3 400 Block N. Duncan St. C.A.R.E. Community April 28, 2018 10am-2pm	**Pop-up #4** Langston Hughes Community Center May 5, 2018 10am-2pm
Fall 2018	
Pop-up #1 Pigtown Bloom the Boulevard Sept. 15, 2018 9am-12pm	**Pop-up #2** 32nd St Farmers Market Waverly Commons Sept. 22, 2018 9am-12pm
Pop-up #3 Oliver Community Baltimore Food Hub Oct. 6, 2018 9am-12pm	**Pop-up #4** Parks & People Foundation Plant/Seed Swap Oct. 13, 2018 10am-1pm
Spring 2019	
Pop-up #1 Easterwood/Sandtown Park & Playground April 6, 2019 9am-12pm	**Pop-up #2** Oliver Community Farm April 13, 2019 9am-12pm
Pop-up #3 HEPP Park April 27, 2019 9am-12pm	**Pop-up #4** Bethel Playscape / Oliver May 4, 2019 9am-12pm
Fall 2019	
Pop-up #1 Langston Hughes Community Center October 12, 2019 9am-12pm	**Pop-up #2** Gateway Park in Darley Park October 26, 2019 9am-12pm
Pop-up #3 Stillmeadow Community Fellowship Church November 2, 2019 9am-12pm	

A community member transports materials to nearby homes.

The purpose of these and future GROW Centers is to test different delivery models and gather insights into what a GROW Center might resemble. Data collected in Spring 2018 informed pop-ups held in Fall 2018 and subsequently pop-ups and workshops held in Spring 2019 and Fall 2019. This work will also be used to inform a future GROW Center feasibility study.

Background

The GROW Center concept originated with the intersection of several city initiatives: Waste-To-Wealth Initiative, promoting a reuse economy to mitigate urban wood, food and construction waste streams; increasing the urban tree canopy to 40%; MS4 Permit goals to encourage stormwater management on private property and to reduce polluted runoff; and the Growing Green Initiative to promote the revitalization and greening of Baltimore's many vacant lots. In order to support these four initiatives, the GROW Center concept was conceived.

The intersection of these initiatives is illustrated by the following example. By promoting the reuse of materials, residents can access affordable materials that can be used in vacant lot greening projects. These may include reclaimed lumber or mulch to create or maintain rain gardens and community gardens as well as planting new trees. These activities subsequently benefit community revitalization while also supporting stormwater management through increased greenspace, permeable surfaces, and more trees planted.

After the GROW Center idea percolated for a couple of years, the Baltimore Office of Sustainability organized a pilot project at the Baltimore Community ToolBank in April 2016. This pilot consisted of workshops every Saturday and Sunday for five consecutive weekends. Reuse/greening materials were also available through purchase and giveaways. The success of this pilot showed promise for the concept's feasibility.

The USDA/Forest Service, one of the collaborators in and funder of the GROW Center idea, is interested in aligning the GROW Centers with their efforts to collaboratively develop an Urban Wood and Land Restoration Economy. The goal of this effort is to turn urban wood generated from deconstruction and urban forestry activities into a source of revenue and social impact on a large scale; creating jobs, improving lives and livelihoods, and promoting sustainability at local and regional scales. Among other things, the effort connects residents with materials from deconstruction and urban forestry operations that can be used to green lots - thereby creating new community greenspace, reducing pollutant runoff, and increasing Baltimore's urban tree canopy.

DPW, an original partner of the 2016 pilot, took up the GROW Center concept for further development. After securing grant funding from USDA/Forest Service to match already designated funds, DPW applied for and was selected in July 2017 to receive a University of Maryland, Baltimore County Peaceworker Fellow to act as GROW Center Coordinator. The responsibility of the GROW Center Coordinator was to further test the GROW Center concept by organizing "pop-ups" and

Residents with Greening Experts at Easterwood/Sandtown GROW Center.

workshops. "Pop-ups" were temporary events that would last a few hours and be located in different locations across the city. These pop-ups would include free/reduced cost materials and greening experts. Workshops would address different topic areas and be led by various partner organizations. The Peaceworker Fellow, Travis Lageman, planned and coordinated three seasons of GROW Center pop-ups and workshops beginning in Spring 2018.

Guiding Questions

In the early planning stages of the GROW Centers, staff developed five guiding questions that would be explored:

1. What greening materials are of interest and how are they accessed?
2. What training/education is of most interest?
3. What are best practices for information dispersal?
4. What resources are needed to implement GROW Center activities?
5. Who are GROW Center partners?

Funding

DPW was awarded a $100,000 USDA/Forest Service Grant. Specifically, the funding supports: (1) a feasibility study and business plan for GROW Centers, and (2) testing and refining the delivery model of GROW Centers through 'pop-up" and workshop events in the community. In line with the second purpose, funding from the USDA/Forest Service paid for workshop facilitation and venue stipends. Other logistical items were paid with a combination of DPW and Forest Service funds as well as in-kind staff time from the various partners.

Final Budget (Detailed in Appendix One)	
Workshop Facilitation	$2,100
Venue Stipend	$3,000
Logistics/Other Materials	$5,494
Printing/Advertisements	$674
Staff	$33,940
Total	**$45,208**

Partners

In Baltimore City, many non-profits and community groups perform work related to greening, stormwater management, and community development. Following the advice of Andy Cook, the organizer of the 2016 Pilot, GROW Center planners aimed to avoid competing with already existing groups and instead amplify their efforts. GROW Centers sought to bring partners together to showcase work already happening and resources available to residents and community leaders. In doing so, GROW Centers made use of partners' technical expertise and knowledge. This gave residents a taste of what Baltimore has available, while also fostering new connections between residents and GROW Center partners. DPW engaged partners in the following four ways:

1) Host Sites

2) Materials Suppliers

3) Greening and Resiliency Experts

4) Workshop Facilitators

1) Host Sites

Several criteria were used for selecting pop-up locations. These included targeting different areas (specifically underserved areas), sites with sufficient outdoor space and/or positive indicators of community greening, previous revitalization projects and recommendations by partners from their own work in a given neighborhood, and a combination of outdoor and indoor locations.

2) Materials Suppliers

These partners provided materials for giveaway, purchase and/or display. Usually, each supplying partner was responsible for transporting their materials to/from the pop-up site as well as for sale (except for a couple Fall 2018 and Spring 2019 pop-ups).

A resident picks up a truckload of mulch from GROW Center #2.

3) Greening and Resiliency Experts

Several government and non-profit organizations participated as greening, health, and resiliency experts in an "Ask the Expert" capacity. The purpose was to provide information about gardening, vacant lot adoption, community health, extreme event mitigations, and other city initiatives.

4) Workshop Facilitators

In order to build community capacity for performing vacant lot greening and stormwater management, workshops were identified as an important component of the GROW Center. Workshop topics were sourced from a survey of city residents and through collaboration with partners.

The following partners facilitated workshops at GROW Center Pop-ups:

- Baltimore Orchard Project (Civic Works)
- Blue Water Baltimore
- Tree Baltimore
- Edible Eden Foodscapes
- UMD-Extension – Master Gardeners
- UMD-Extension – Watershed Protection and Restoration Program

- Department of Housing and Community Development
- Parks & People Foundation
- Your Baltimore Community Development
- Baltimore Peoples Climate Movement
- Institute of Local Self-Reliance and Baltimore Compost Collective

Programming

GROW Center pop-ups encompassed combinations of three main programmatic components: 1) Materials, 2) Greening Experts, and 3) Workshops. Pop-ups varied from two to four hours in length and had materials and greening experts available. Some pop-ups incorporated workshops, whereas others did not. In Spring 2019, workshops were held as stand-alone events from the pop-ups. This adjustment is described later in the report.

Mulch from Camp Small provided in buckets for residents to take away.

1) Materials

Materials were provided for both free and at cost. Free items included mulch from Camp Small (using 5-10 gallon planter buckets provided by Tree Baltimore to carry mulch away), and trees of 1-2 gallon size. The tree giveaway was a replication of Tree Baltimore's standard tree giveaways.

Initially, native plants were available for purchase from Blue Water Baltimore's

Herring Run Nursery offered native plants for sale at each pop-up.

Herring Run Nursery. Sizes consisted mostly of quart and gallon pots, ranging from $7 to $17 per pot. In Spring 2019, Edible Earth Landscape Design replaced Herring Run Nursery as the native plant vendor, selling plants at $5/quart. Recycling bins, 18 and 25 gallon, were also for sale at pop-ups.

Details Deconstruction displayed different brick products (full, chipped, and crushed aggregate) as well as some larger stone. Originally, reclaimed lumber was to be available, but it was discovered that the lower grade lumber targeted for the GROW Center was no longer being collected.

An example sheet for reclaimed materials re-use was provided at the Details table (See Appendix Five). Residents also collected Details contact info if they were interested in making an order at a later date.

Display of different brick products by Details Deconstruction.

Master Gardeners share knowledge and free seeds with GROW Center attendees

2) Greening and Resiliency Experts

Greening and other experts were available at each pop-up so that each attendee could network with various organizations or ask specific questions. A raffle was introduced at the Spring 2018 pop-ups to encourage attendees to visit all materials and experts, as well as fill out a feedback survey. Residents were given the survey at check-in and told about the raffle, which was a $20 gift card to the Herring Run Nursery. Initially residents had to visit each table and have the survey initialed. In later pop-ups this was changed to simply completing the survey.

3) Workshops

As noted earlier, the workshops were organized around two themes: residential stormwater management and community greening (see page 9). Most workshops were 1 hour and were either lecture-style with demonstrations or hands-on (i.e. Tree Planting, Rain Barrel). Pre-registration was encouraged through EventBrite and all workshops were offered for free.[1]

Miscellaneous

- Tables and chairs were provided to the material suppliers and experts, with an additional table and tent set up to provide drinking water for attendees. This table also had coloring sheets and a trash - themed corn-hole game for children.
- Participants in the Rain Barrel Workshop had the cost of their rain barrel subsidized to only $25 (vs. $70).
- Participants in the Pollinator Garden workshop had the opportunity to choose a free, one quart-sized pollinator plant from Herring Run Nursery.
- At pop-up #4 in Fall 2018, Master Gardeners demonstrated/helped attendees make seed starters to take home.

Participants in the rain garden workshop examine rain gardens at the Baltimore Community ToolBank.

The "kids" table at each GROW Center offered coloring and a trash themed corn hole game.

[1] One of the rain barrel workshops required a $25 registration fee, which was the cost of the rain barrel. See page XX.

GROW Center Workshop List

	Workshop	Facilitator
Stormwater Management	**Intro to Rain Gardens**	Baltimore Orchard Project – Civic Works
	Rain Barrels	Blue Water Baltimore
	Downspout Disconnection	UMD – Extension Watershed
	Pollinator Gardening	Edible Eden Foodscapes
Community Greening	**Intro to Urban/Community Gardening**	Your Baltimore Community Development
	Container Gardening	UMD – Extension Master Gardeners
	Tree Planting/Care	Tree Baltimore
	Placemaking for Greenspaces	Parks & People Foundation
	Adopt-a-Lot	Department of Housing and Community Development
	Potted Fruit Trees	Baltimore Orchard Project – Civic Works
	Community Organizing/Resources	Your Baltimore Community Development
	Growing Healthy Communities	Baltimore Peoples Climate Movement
	Mindfulness and Greenspaces	Phillip McKnight
	Composting 101	Institute of Local Self-Reliance and Baltimore Compost Collective

Promotion

Promotion of GROW Center pop-ups was carried out through the following avenues:

- DPW Social Media Accounts: Facebook, Twitter and NextDoor
- DPW Customer Report (newsletter included in the Water Bill for every customer in Baltimore City)
- Partner Social Media Accounts & Newsletters
- Flyers in select cafes/businesses around each pop-up location
- Lawn Signs around each pop-up location
- Host Site communications with local communities
- Cold calls to Faith Organizations
- Tabling at Baltimore Office of Sustainability Annual Open House
- WBAL-TV 11 aired an interview with GROW Center Staff Spring 2018
- WOLB included a brief segment on the October 12 GROW Center pop-up the day prior
- DPW Press Releases
- Neighborhood canvassing

Spring 2018

DPW organized four pop-ups across Baltimore City over four consecutive Saturdays from April 14th to May 5th 2018. The GROW Center "popped-up" in these locations for several hours, offering materials for sale/giveaway, free workshops, and networking/consultation with greening experts.

Host Sites

Greenspaces

Two of the pop-ups were located at community managed green spaces. The first pop-up was held at Easterwood/Sandtown Park & Playground of West Baltimore. This space was a Parks & People Foundation project in collaboration with the Matthew Henson Community Association, which turned a series of vacant lots into a new community space. The third pop-up was located in the C.A.R.E. community in East Baltimore at 400 Block N. Duncan Street, a community space created in collaboration with Civic Works. Both of these sites were chosen for their geographic location, walkability, community greening engagement, and opportunity to showcase vacant lot revitalization projects.

Baltimore Community ToolBank

The ToolBank served as the venue for the second pop-up (as well as providing tools and equipment for all pop-up events). The ToolBank was a good fit for a GROW Center due to its role in the 2016 Pilot. This was also an opportunity to locate a pop-up in South Baltimore with ample indoor venue space.

BWB leads residents in a Rain Barrel building workshop at Baltimore Community ToolBank, GROW Center #2.

Langston Hughes Community, Business & Resource Center

Langston Hughes Community Center occupies the former Langston Hughes Elementary School, located along Reisterstown Road in the Park Heights neighborhood of Northwest Baltimore. The location was selected for its experience in hosting various community programs, ample outdoor and indoor space, and a community that was interested in greening.

At Langston Hughes GROW Center #4, a resident learns about the Bmore Beautiful Initiative.

Materials

Materials for giveaway included mulch and trees. Materials for sale include native plants and recycling bins. Materials on display/for order included brick and brick aggregate.

TreeBaltimore / Camp Small

TreeBaltimore, which is staffed by the Department of Recreation & Parks, is the city umbrella organization for increasing the tree canopy. They hold numerous tree giveaways and plantings, as well trainings to help residents become "Tree Keepers" to care for street trees and forest patches. Camp Small, part of Tree Baltimore, is Baltimore's wood waste processing facility. Wood waste from tree maintenance in the city is brought to Camp Small where it is sorted as logs or processed into mulch and woodchips. This material is free to community groups or at cost to individuals who can pick it up from the facility (located on Cold Springs Ave near I-83). At all four pop-ups, TreeBaltimore and Camp Small provided free trees and mulch along with information on tree species and planting suggestions.

Blue Water Baltimore / Herring Run Nursery

Blue Water Baltimore (BWB) is a non-profit working to restore the quality of Baltimore's waterways, including planting trees and rain gardens, monitoring water quality, and advocating for water pollution reduction. Herring Run Nursery, a program of BWB, specializes in plants native to the Chesapeake Bay watershed. Herring Run offered a variety of plants for sale at each pop-up. This provided an opportunity for them to reach new markets as opposed to selling only at the nursery located near Mt. Pleasant Park in Northeast Baltimore.

Residents perusing the native plant offerings of Herring Run Nursery at GROW Center #3.

Details Deconstruction

Details is a social enterprise project of the non-profit Humanim, Inc. that performs deconstruction of vacant buildings. Deconstruction allows the reclamation of materials that are then sold for reuse. Details displayed samples of various deconstruction materials including reclaimed bricks and their new brick aggregate pieces that could

be used in community greenspace projects. Pricing sheets were also available for residents interested in purchasing from Details at a later time.[2]

Greening Experts

The following government and non-profit organizations participated as greening experts in an "Ask an Expert" capacity.

- *Bmore Beautiful*, a Mayoral initiative, works on beautification efforts in communities by partnering with residents. Many participants signed up with Bmore Beautiful, making a pledge to keep their communities cleaner and greener.
- *Department of Housing and Community Development* representatives were available to address questions related to adopting vacant lots and recent changes to the process.
- *University of Maryland Extension – Master Gardeners* brought free seeds and a wealth of knowledge related to plants and gardening. They also shared information about the Master Gardener program, and how to enroll in it.
- *Baltimore Office of Sustainability / Department of Planning* provided information about the city's new Green Network Plan to address vacancies through greenspaces. They also had copies of the Green Pattern Book, discussing ways to revitalize vacant lots with residents.

Participants in the Tree Baltimore-led "Tree Planting/Care" workshop next to one of the newly planted trees at Langston Hughes Community Center, GROW Center #4.

[2] Due to staffing issues, Details was only able to participate in the 2018 pop-ups.

Data & Analysis

Various forms of data collection were performed to assess the GROW Center. Data was collected through the following means:

- Feedback Surveys: Completed by Participants, Greening Experts, Facilitators, Host Sites, and Materials Suppliers
- Registration Forms at Check-in/Pre-Registration Forms from EventBrite
- Materials Purchase/Pick-up Forms from Material partners: BWB and TreeBaltimore

Partner groups and attendees were surveyed to gather general feedback of the event. For example, attendees were asked to use a Likert Scale of 1-5 to indicate how they enjoyed the GROW Center, while experts were asked how good of a fit they felt the GROW Center was for their organization. (Appendix Four).

All other data was cleaned and organized in Mircosoft Excel, and analyzed using Excel and ArcMap. Maps were produced to perform analyses and see where GROW Center attendees orginated.

- 35% of Pre-registered attendees showed up to GROW Centers
- 204 total registrations for workshops with 65 (est.) actually attending
- 2,341 Individuals reached through DPW Facebook Event
- 14,392 page views of events with DPW NextDoor Promotion;130 unique users
- 78.5% of attendees used their own vehicle to transport materials
- 81% of attendees intended to use materials for residential purpose
- 30% of all attendees had 1 year or less of community greening experience vs. 28% with more than 1 year. (42% didn't respond, who are likely novice greeners)

GIS Analysis

Collecting addresses allowed for analysis using Geographic Information Systems software, ArcMap. This analysis revealed neighborhoods attendees originated from, characteristics of these neighborhoods, and travel distance (Table 1).

Table 1: (*All numbers in miles*)				
Pop-up Number	**1**	**2**	**3**	**4**
Average Distance	2.04	2.87	2.12	2.76
Max Distance	5.68	6.05	5.96	9.26
Min Distance	0.06	0.00	0.06	0.05

It appears that attendees traveled further to GROW Centers with workshops (Pop-ups #2 and #4) as compared to those without (#1 and #3). Map 3 shows that attendees tended to visit pop-ups that were nearby. As shown in Map 1, attendees came from 86 different neighborhoods. The five neighborhoods with the most attendees were: Frankford, Hampden, Glen, CARE, and Mt. Washington. The respective attendee count for each was 6, 5, 5, 4, 4. The remaining neighborhoods attracted 1-4 attendees each. This was also shown using community statistical areas (Appendix Six).

A density analysis was performed to determine areas of high attendee density (Map 2). High density areas tended to be near pop-up locations: West Baltimore, East Baltimore, and Park Heights. The ToolBank did not have as many local attendees due to the nature of the industrial area in which the ToolBank is located.

Density analysis allowed further analysis by comparing areas of high to medium density comparison with data related to GROW Center goals. These goals include increasing the tree canopy and promoting vacant lot revitalization/community managed green spaces.

The following datasets were used:

- Tree Canopy Cover
- Number of Community Managed Open Spaces
- Median Household Income
- Percentage of Residential Properties Vacant & Abandoned.

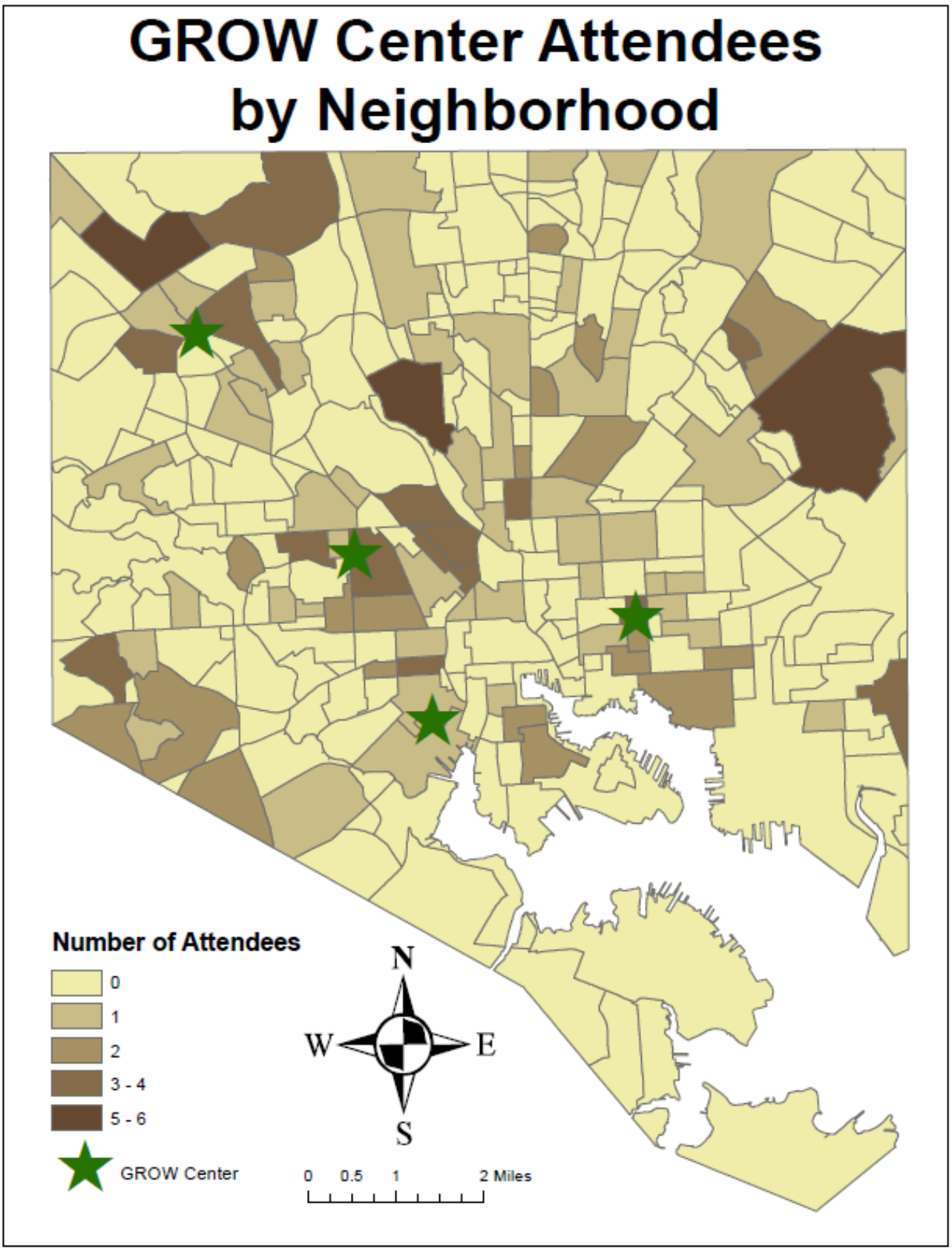
Indicator data is from Baltimore Neighborhood Indicators Alliance.

This data was used to determine average values of residents in each density zone as found in Table 2. Analysis showed areas of higher attendee density are areas characterized by less tree canopy, lower median income, higher numbers of community managed open spaces and higher percentages of vacant lots. This result gives some confidence that through targeted siting, GROW Centers can reach areas of high potential impact and address issues of equity. This impact may be realized through opportunities to perform vacant lot greening and increase tree canopy goals.

Table 2

BNIA Data Year	**Indicator**	**Attendance**		
		High	**Med**	**Low**
2016	Median Household Income ($)	38,325	47,926	50,267
2015	% Residential Properties that are Vacant & Abandoned	12.83	6.56	3.03
2015	# of Community Managed Open Spaces	27.81	13	3.75
2011	% Tree Canopy Cover	21.31	27.96	28.65

Map 1


GROW Center Attendees by Neighborhood
Number of Attendees
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5 - 6
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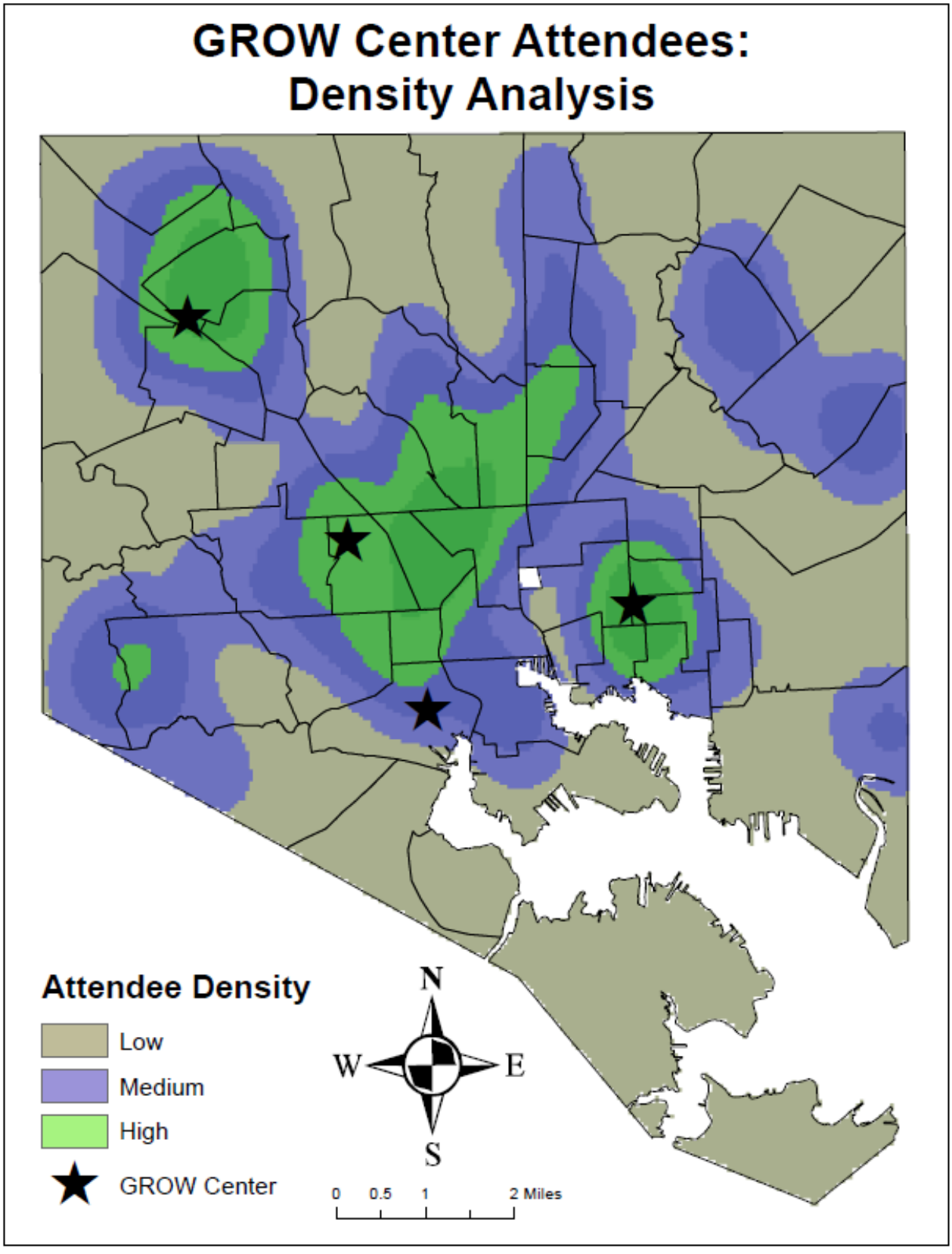
Map 2


GROW Center Attendees:
Density Analysis
Attendee Density
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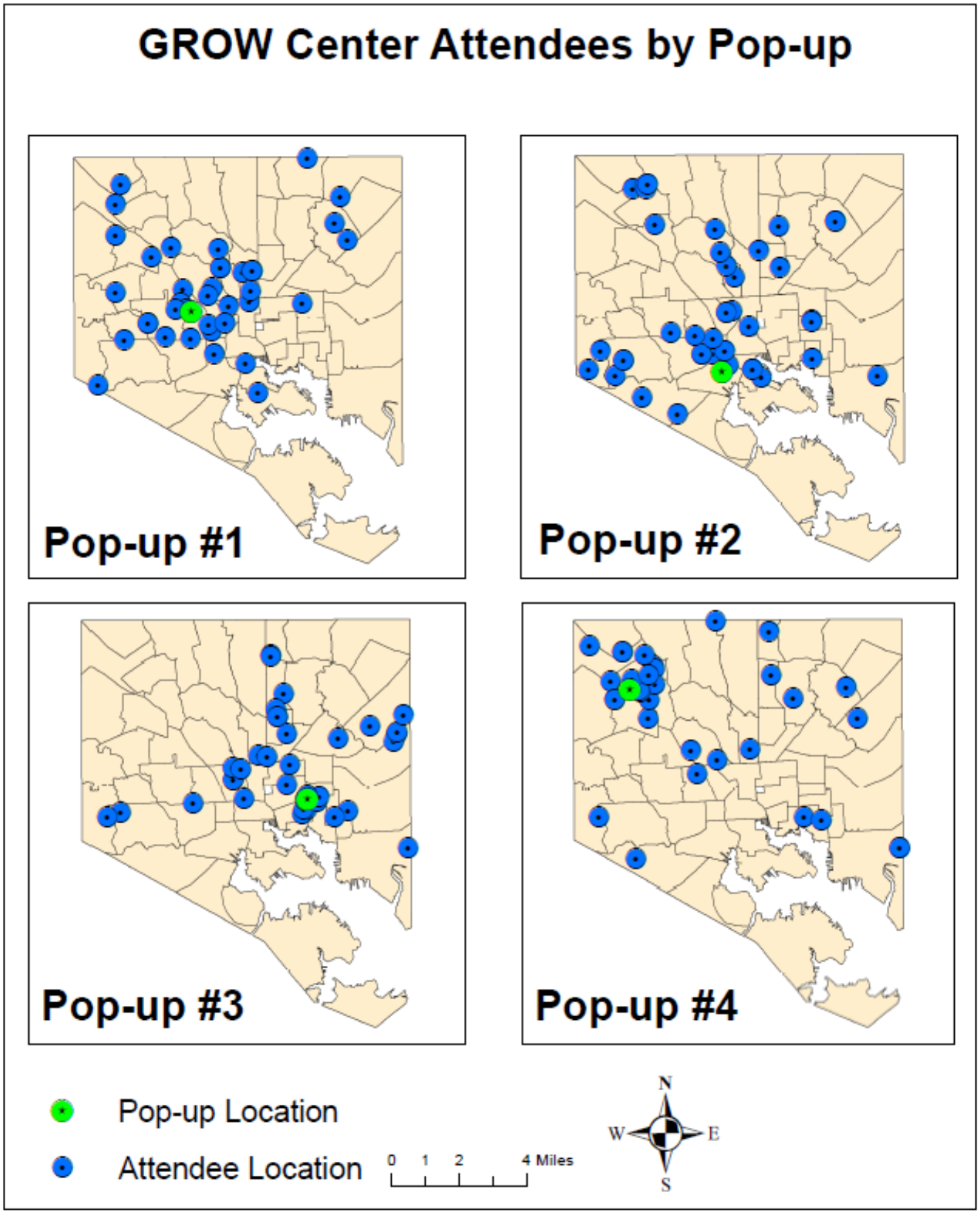
Map 3


GROW Center Attendees by Pop-up
Pop-up #1
Pop-up #2
Pop-up #3
Pop-up #4
Pop-up Location
Attendee Location
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Lessons Learned

In addition to data collection and analysis, GROW Center staff reflected on the overall process and efficacy by returning to the guiding questions set beforehand.

1. What greening materials are of most interest and how did people access / transport them?

- Most popular were trees, mulch and native plants that were acquired for residential use.
- This pop-up model was capable of providing resources to a large number (200+) of people.
- People prefer free items while at-cost items (i.e. native plants) can be barriers to many residents. Making at-cost items cheaper or free/subsidized (i.e. rain barrels) should be considered in order to increase accessibility.
- Most materials were taken in smaller quantities (i.e. 1 or 2 buckets of mulch). This correlates with the intended residential use noted by attendees.
- Residents tended to travel to nearby GROW Centers to get materials

2. What training/ education is of most interest to community members?

- Interest exists for many types of training and education such as rain barrels, composting, and tree-related programming. (See Appendix Four)
- Despite pre-registration interest, the percentage of pre-registered people who attended was low. This might be contributed to busy times of the year (i.e. Spring), conflicting commitments, having no registration fee and social media interest without commitment behavior.
- Future workshops might omit registration limits in order to realize more actual attendees while still being free.

Attendees learning about Details reclaimed materials: brick, stone, & brick aggregate.

- While instituting a fee could add unnecessary complication and restrict attendance, it should be considered if free workshops continue to have low attendance.
- Although workshop turnout was low, facilitators gave positive feedback about meaningful interactions with participants.
- The $200 facilitation stipend copied from the 2016 pilot is difficult to justify if funding is an issue and workshop attendance is low.

3. What are best means for dispersing information about the GROW Center?

- Social Media (i.e. DPW Twitter/Facebook) and word-of-mouth proved effective while print adverts are important for reaching individuals without internet access.
- Different methods of attracting residents passing by should be explored. For example, a drummer showed up at a pop-event and some residents attended after hearing the drums.
- EventBrite worked well for GROW Center pre-registration. Managing online event pages, registration processes and data collection was seamless.

Attendee checking in at GROW Center #3, C.A.R.E. Community

- An important consideration is to ensure all partner advertising is received by GROW Center staff for consistency. This can bolster outreach.
- Promotion by partners may need to be discussed further in partner meetings to set clear expectations.
- The raffle/passport encouraged attendees to visit each partner and proved very useful for providing opportunities for outreach by each partner.

Attendees happy with the information and free tree from GROW Center #3.

- The prepared list of spring events (Appendix Five) also allowed for attendees to learn about other GROW Center related events.

4. What resources are needed for GROW Center activities?

- Resources required by GROW Center are mostly logistical: tables, chairs, printouts, water, electronic equipment, print advertisements, transportation, and staff.
- It took 2 months to prepare agreements, 2 weeks getting paperwork signed by partners and the DPW Director, and 2-3 weeks for payment by the City Foundation. When creating new agreements, schedule ample time (~3 months) to ensure quick payment.
- Depending on GROW Center funding source, different processes may need to be undergone to allow for timely payment to partners and should be considered.
- Reducing the amount of paperwork would be helpful. Due to Federal funding, agreements required additional paperwork that confused many partners.
- Having at least two GROW Center staff at events is absolutely necessary - one at check-in and one floating around to assist partners and workshops.
- Partnering with sites that held other concurrent activities was a "double-edged sword." Outreach potential increased, but sometimes GROW Center operations did not get proper attention.
- Four hours for GROW Centers was too long when considering non-workshop pop-ups. Most people arrived in the first two hours, with some arriving before the scheduled start time to get materials.

5. What GROW Center partners are needed?

- Every partner who participated in the pop-ups expressed interest in being part of future GROW Center events.
- When searching for partners they can be classified into four categories: workshop facilitators, material suppliers, experts and host sites.
- Appropriate partners can be identified through the robust greening network in Baltimore based on goals/needs of GROW Centers

6. Miscellaneous

- Data collected at check-in was often difficult to accurately discern due to poor hand-writing/recording by attendees. Promulgating different means of collection will be beneficial (i.e. Tablet Check-in)
- The use of a raffle for collecting participant surveys and ensuring attendees visited all partners was very successful. (13 surveys pre-raffle vs. 56 post-raffle)

Remarks

While this GROW Center pop-up model proved successful in many ways, it was noted that 81% of GROW Center attendees who came for materials intended to use them at their homes. While providing residents with access to materials is a central component of the GROW Center, it is also a priority to have these resources used in community greening (i.e. vacant lot revitalization).

In this regard, GROW Center programming could be targeted towards new community groups who have recently adopted vacant lots or are applying for grant funding from local funders. Targeting these groups could also foster potential for larger usage of materials and more robust workshop turnout.

GROW Center users were more likely to attend the pop-up location closest to them. Targeted areas included lower median income, less tree canopy, higher vacant lot percentages and higher numbers of community managed open spaces. These areas are desirable for GROW Center programming goals as well as address issues of equity, and should be considered in future planning of GROW Center events.

Dispersing GROW Center pop-ups across Baltimore City afforded access to a large number of people (200+) and neighborhoods (86). Part of this success is likely due to the effectiveness of partner and DPW city-wide promotions. Developing a GROW Center network based on this outreach is potentially invaluable, considering the abundance of "new greeners" the pop-ups attracted.

Finally, the main hurdles encountered by GROW Center staff during planning were cumbersome bureaucratic procedures. While some may have been slow due to first-time growing pains, finding ways to streamline these in GROW Center programming should be considered.

Partners from the first pop-up GROW Center at Easterwood/Sandtown Park & Playground.

Fall 2018

GROW Center check-in table at Pop-up #1.

Summary

In the Fall of 2018, DPW held four Saturday morning pop-ups in September and October, with slight programming modifications. This section describes Fall GROW Center programming, changes made from Spring 2018, metrics, highlights, and lessons learned.

Changes from Spring '18

Based on the reflections made in the Spring, it was decided to keep the same general structure of the pop-ups while making small changes to programming and organization (Table 1).

As in the Spring, the Fall GROW Center consisted of pop-ups on four Saturdays. While the primary components of the GROW Center, including materials partners, greening experts, and workshops, were kept generally constant, the length was shortened from four to three

Pop-up #1:
Pigtown Bloom the Boulevard Event
9/15/18, 9am-12pm
705 Washington Blvd, 21230
Pop-up #2:
Waverly Commons
9/22/18, 9am-12pm
432 E. 32nd St, 21218
Pop-up #3:
Baltimore Food Hub
10/6/18, 9am-12pm
1412 N. Wolfe St., 21213
Pop-up #4:
Parks & People Foundation
Plant/Seed Swap
10/13/18, 10am-1pm
2100 Liberty Heights Ave, 21217

hours, after evaluating Spring events and partner feedback. Workshops were offered multiple times at one of the pop-ups and did not require pre-registration. A cooking demo was also planned to connect with the Fall harvest but fell through. Coffee chaff for composting was introduced as a new giveaway in addition to the usual trees, mulch, and plant sales. Recycling bins were available for sale at all pop-ups instead of one during the Spring.

Promotion and advertisement of the GROW Center was performed in the same fashion as in the Spring except for the addition of canvassing supplementing the effort for two pop-ups. Logistics of GROW Center coordination generally remained the same but were supplemented by additional DPW Staff and use of Baltimore City Circuit Court Community Services Program (CSP) volunteers.

TABLE 1: DIFFERENCES

1. New Locations	GROW Centers ventured into four new neighborhoods: Pigtown, Waverly, Oliver, and Parkview/Woodbrook (aka Auchentoroly Terrace).
2. Sharing Events	One of the most significant changes was sharing or joining another group's greening event instead of holding a GROW-only event. For pop-up #1 and #4, the GROW Center was included in an existing event. At #1 the GROW Center joined Pigtown's Autumnal Bloom the Boulevard event, which included cleaning and maintenance of greenspace and tree pits along Washington Blvd. At #4, the GROW Center joined Parks & People Foundation's 2nd Annual Plant/Seed Swap where residents exchange plants, seeds and other garden materials.
3. New Venue Types	In the Spring, the GROW Centers were held in green spaces, at community centers, and unique/partner spaces like the ToolBank. Fall pop-ups included a farmers market (Waverly), parking lots (Pigtown), and new developing spaces (Food Hub).
4. Workshops/Demos	Workshops were offered multiple times and did not require pre-registration, as compared to the Spring where workshops were held one time and encouraged pre-registration. A cooking demo was also planned to complement the idea of Fall harvest, but fell through with our partner, School of Food.
5. Community Services Program (CSP)	A program of the Circuit Court for Baltimore City, CSP provides community service hours as an alternative to jail for non-violent offenders. This provided additional assistance for pop-up set-up, clean-up and general event help that was not available in the Spring.
6. Canvassing/Outreach	In addition to the promotional methods used in the Spring, door-to-door canvassing (specific to the pop-up neighborhoods) supplemented promotion for pop-ups #2 and #3. CSP volunteers assisted with this activity.
7. Handling Materials Giveaways/Sales	Due to the inability of some partners to attend all events, the GROW Center handled some material giveaways/sales on their own. For example, DPW staff picked up mulch from Camp Small (using a small dump truck) and distributed it at Pop-up #2. This was also done for Recycling Bins and Native Plants from the Herring Run Nursery.
8. Materials Changes	Spring 2018 indicated that pop-up GROW Centers were not appropriate venues for Details to sell their deconstruction materials, which shifted their role from material supplier to greening expert in the Fall. GROW Center staff learned about coffee chaff (coffee bean husk) from local coffee roasters, which can be used as a compost material. A small amount of chaff was collected from Zeke's Coffee and Vent Coffee Roasters to give away to attendees.

CSP volunteers allowed the GROW Center to handle materials giveaways without representatives from TreeBaltimore, BWB, or DPW Recycling present. For example, GROW Center staff were able to distribute mulch, sell native plants and sell recycling bins without their respective partner staff.

Holding pop-ups in four different locations in the Spring proved successful in reaching large number of attendees from all over Baltimore City. This approach was replicated in the Fall by holding pop-ups in four different areas, two of which in partnership with other events.

Attendee with their new tree. Photo credit Cailin McCough, ACT.

During the Spring 2018 pop-ups, DPW staff were approached about co-hosting events in the Fall. For example, after advertising and holding a pop-up at the Baltimore Community ToolBank, Pigtown Main Street contacted GROW Center staff about partnering in their Bloom the Boulevard event. Parks & People Foundation also reached out to collaborate on their annual Plant & Seed Swap event.

Data

Materials

- 114 Trees given away
- 10+ yd^3 Mulch given away
- 47 Recycling Bins sold

Attendance, Workshops & Promotion

- 165 Attendees total
- 57 Neighborhoods represented
- 16% Eventbrite turnout
- 5 Workshop Attendees
- 12,202 views on NextDoor
- 1,200 people reached on Facebook

Data Summary

Data collected from this round of pop-ups was more qualitative in nature as opposed to the Spring. This was due to the difficulty in coordinating data collection at partner events. For example, collecting GROW Center registration data at the first Fall pop-up was overshadowed by the organizing partner's own data collection focused on volunteer turnout. Furthermore, use of mulch materials for planned work at the same pop-up was not captured effectively due to the many activities happening simultaneously.

Attendee numbers (165) were still very positive while reaching a variety of neighborhoods (57). Sixteen percent of pre-registered attendees actually attended the GROW Centers, meaning most of our attendees came from walk-ups and co-events. This demonstrated a benefit of partnering with another event; it afforded the GROW Center opportunity to reach an audience even when pre-registered attendees did not show up.

Miscellaneous

- Plant sales were very poor (4 total) at the two pop-ups where plants were sold by the GROW Center.
- An additional estimated 10.5 yd^3 of mulch was left on GROW Center sites that residents and site partners were able to use after the GROW Center events.
- 30 lbs of coffee chaff was given away over the last two pop-ups.
- Some workshops/demos fell through, while other workshop data collection issues existed that were mostly logistical.

Comparison: Spring vs. Fall

As mentioned earlier, GROW Center programming in the Fall tried a few different approaches. Experiencing the "greening scene" in the Fall was a learning experience. While a brief look at the calendars of some of our partners (TreeBaltimore, Blue Water Baltimore, and University of MD Extension) shows that just as many events are happening in the Fall as in the Spring, the two seasons have different connotations. Spring spurs thoughts of new growth, development and activity, whereas Fall is about harvesting and preparing for the ensuing winter.

GROW Center-specific attendance might have been impacted by the weather. While GROW Centers were fortunate to have good weather for most of the pop-ups (despite a threatening hurricane for the first event), the last pop-up was noticeably cooler. October is when Fall begins, looking at pre-registration numbers from Eventbrite saw a steady drop. (#1: 42, #2: 36, #3: 22, #4: 18)

Attendees talking with BOP representative after potted fruit tree workshop at GROW Center #2.

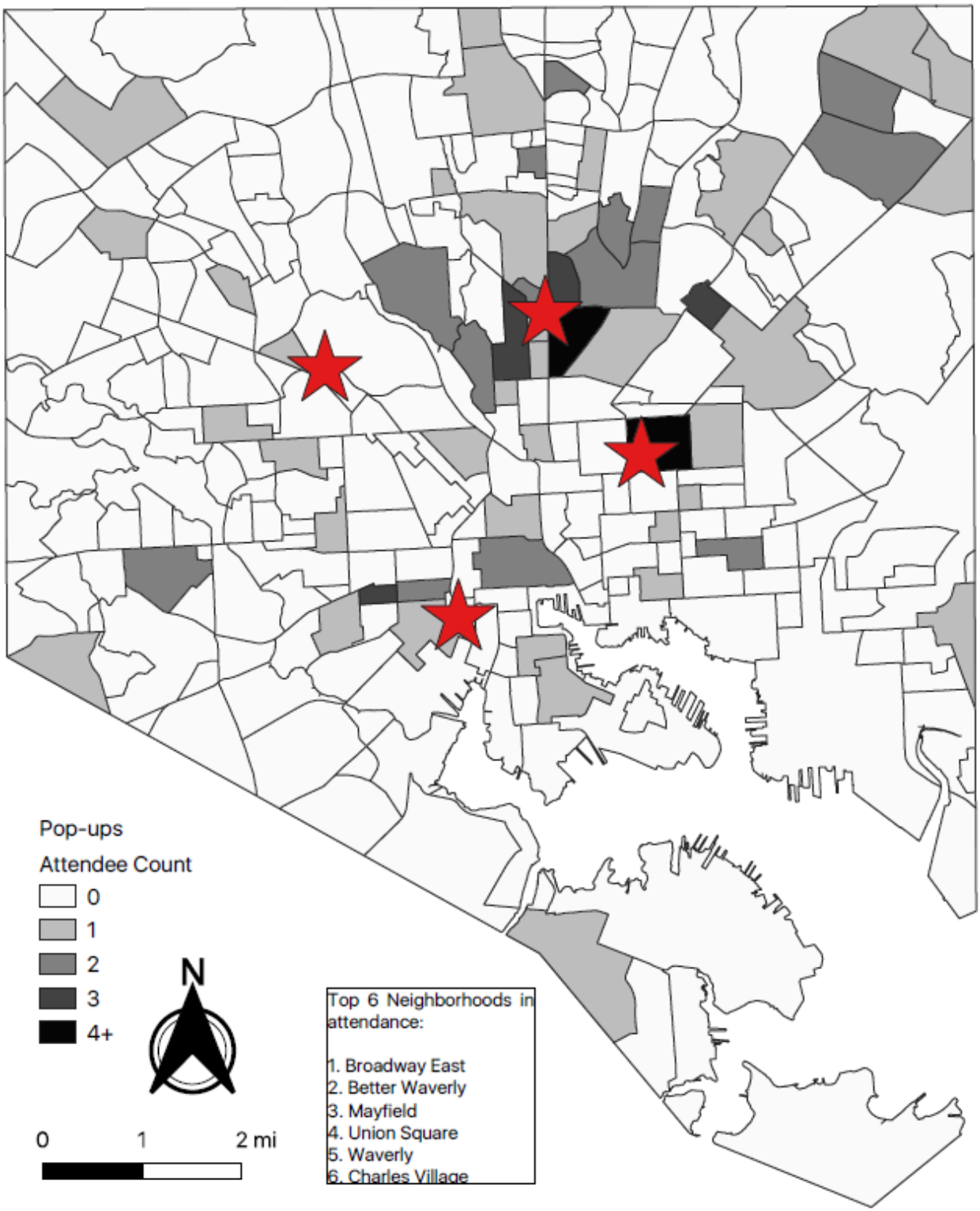
Regarding materials, while we saw a noted drop in individual mulch use, we saw a similar number of free trees as in the Spring. Plant data was not available as two of our partner events provided their own plants for sale/giveaway, and data was not collected. As mentioned before, recycling bins were available at all pop-ups this time instead of just one.

Due to insufficient data collection at half of the pop-ups, the geography of Fall GROW Center users cannot be determined comprehensively. If one observation can be made with collected data, a slight clustering occurred at our second pop-up (Waverly) replicating the clustering observed in the Spring (Map 2). This further suggests that while people will attend from further away, many attendees still prefer the closest GROW Center.

Geography

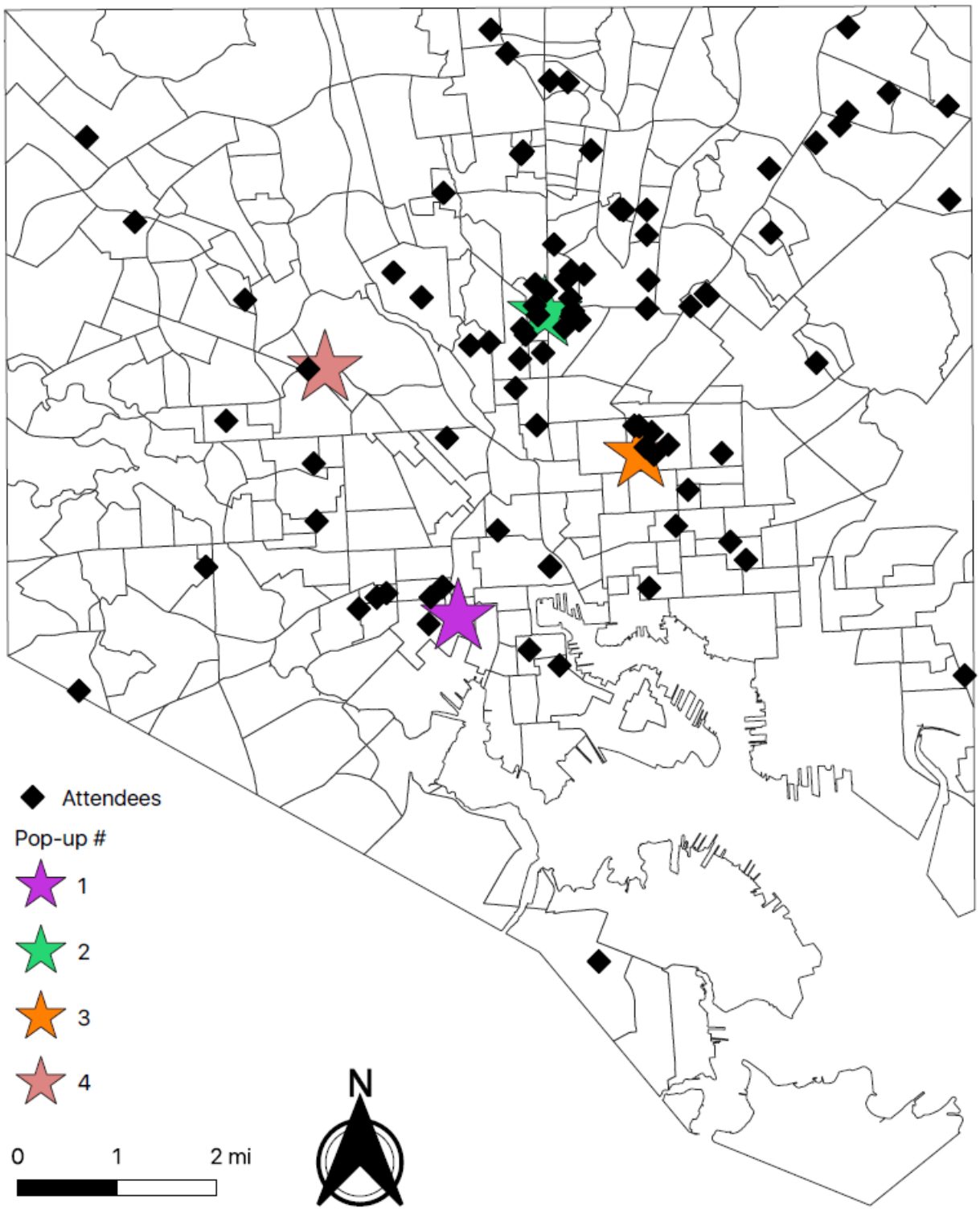
Map 1

Baltimore GROW Center Attendees by Neighborhood



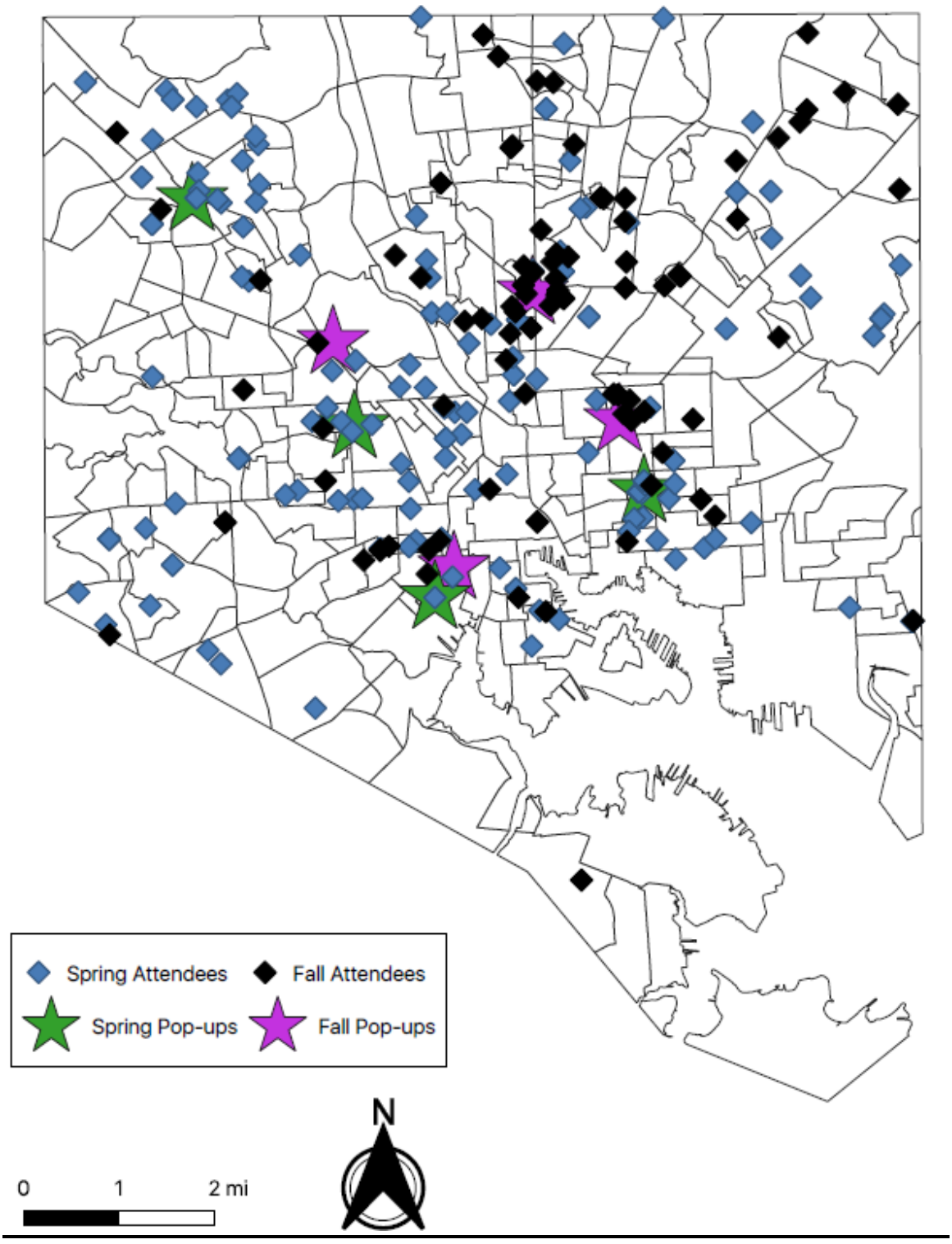
Map 2

Baltimore GROW Center Attendees
Fall 2018



Map 3

Baltimore GROW Center Attendees
Spring & Fall 2018 Combined



Pigtown's flower sale at GROW Center #1.

Sharing events was the most significant change from Spring to Fall. While beneficial (See Lessons Learned #2), coordinating with another event complicated logistics and planning, and led to misunderstood expectations by the co-event partner in one instance. For example, at the first pop-up our co-event partner was communicating with our mulch supplier for their work activities while GROW Center staff were also coordinating with the mulch supplier. As a result, the mulch supplier was confused about expectations agreed upon for the event and brought less mulch than was desired by the co-event partner. This illustrates the need to set clear expectations, responsibilities and communications when sharing an event.

Lessons Learned

1. Workshop Issues

Workshop turnout was very poor. Offering the same workshop multiple times and advertising the workshop specifically during promotion did not seem to help. When factoring poor workshop attendance in the Spring, it may indicate that pop-up events are not suitable spaces for workshops, especially with concurrent activities.

2. "Where is the GROW Center?"

An exciting observation this Fall were having attendees at co-hosted events who asked specifically for the GROW Center. Some wanted updates on future GROW Center events via a mailing list. Also encouraging were Fall attendees who had previously attended the Spring pop-ups. This type of interest shows promise for future GROW Center activities and development of a user base. It also demonstrates that the GROW Center can stand out amongst other organization's greening activities.

Furthermore, the relationship of sharing events as well as GROW Center outreach is important to highlight. By sharing events attendees specifically interested in one event will subsequently be exposed to the other event, thus increasing outreach. Therefore, a reciprocal benefit exists when sharing events. Also, GROW Centers continue to provide a venue for materials, workshops, and partners to build their outreach through exposure to "new greeners" or non-usual suspects like in the Spring.

CSP Volunteers helping unload mulch for giveaway.

3. DPW Giveaways

Additional hands (extra DPW staff and CSP volunteers) allowed the GROW Center staff to handle more materials than in the Spring, including giveaways and sales. This showed that GROW Center staff could source materials from partners without needing those partners at pop-ups. Staff were able to effectively deliver materials to attendees but with only partial knowledge of those materials and their respective organization. This might be addressed by preparing talking points and/or information sheets.

4. Outreach & Attendance

Overall attendance for Fall events was lower as compared to the Spring. However, one notable benefit of sharing events is the ability to reach other partners' audiences. For example, even with very low GROW-specific turnout at pop-ups #1 and #4, the GROW Center was able to reach new audiences through the Pigtown and Parks & People Foundation events. Also, the GROW Center was again able to reach many neighborhoods (57) even if a smaller number than in the Spring (86).

5. Family Friendly

The GROW Center tested a more kid-friendly event at pop-up #3. American Communities Trust, the Food Hub site developer, hired a face painter and bounce house for the event. The idea was to highlight the space to anyone passing by as well as make it more fun and inviting due to the unfamiliar nature of the Food Hub (even if it did not connect to greening).

Unfortunately, no kids or families showed up to the event. Our primary inference for this, and the relatively low turnout, was due to the nature of the space (still under construction) and disconnect with the neighborhood (people do not really know what is happening at the Food Hub). One local suggested having music to attract nearby individuals. This is reminiscent of the drummer that was at pop-up #1 in the Spring, which drew in residents walking by the event. However, the GROW Center is probably too "fresh" of a concept to sufficiently activate a new space like the Food Hub. Better outreach prior to the event may be needed for a similar space in the future.

DPW collecting mulch for giveaway from Camp Small facility.

6. Materials

Similar to the Spring, materials were mostly taken by individuals and in smaller quantities (i.e. one or two trees; a couple buckets of mulch). It was noted that intended material use was still primarily for home/residential despite reaching out to community greening groups during advertising. Also of note was individuals asking if the GROW Center would show up at the same location multiple weeks so that they could come back and get more materials. This was particularly requested for the mulch, as many individuals did not have the immediate capacity to take away larger quantities of mulch.

Remarks

In summary, holding GROW Center events in Autumn revealed the following:

- Running these events again, regardless of the time of year, helps to refine the planning and logistics process. For instance, sharing an event with another organization required more detailed planning, setting of clear expectations, and managing shared partners. In the future this may include a shared work plan that clearly defines roles and expectations of each organizing partner.
- Greening activities are not as well attended in the Fall as compared to the Spring. However, this should not imply that events are a complete failure in the cooler months when other factors may be at play (outreach, inactivated spaces, etc.)
- As shown by the numbers, mulch and trees were popular with GROW Center attendees. Furthermore, GROW Center reached a large audience again.

- Outreach and networking at these events are continually beneficial. By visiting new areas staff learned about new partners and resources (such as CSP), potential venues, a new lower-cost native plant source, and coffee chaff.

Looking Ahead

Lessons learned from 2018 foreshadow an exciting Spring 2019 for GROW Centers. New resources, suppliers, partners, venue locations, and schemes of planning can be tested now that Spring and Fall have been compared using a similar baseline. For example, GROW may have a standalone workshop on certain evenings or hold an exclusive workday on a greenspace which are separate from materials giveaways. In this way, GROW has its programmatic elements on separate days as opposed to at a single event.

Attendees with their new trees at GROW Center #3.

Spring 2019

In collaboration with previous and new partners, DPW held a third round of GROW Centers that maintained the model used in 2018 with some updates; four pop-ups and five workshops were held across the city. All pop-ups were Saturdays 9am-12pm, while workshops ran from 6:30pm-7:30pm on weekdays. This section discusses adjustments, data, lessons learned, and a recommendation for future GROW Center programming.

Composting 101 Workshop at Filbert St Community Garden by Baltimore Compost Collective and Institute of Local Self-Reliance.

Changes

While the single-day pop-up model was maintained, other changes were made to programming. These included:

1. Standalone Workshops

Due to poor attendance and difficult logistics holding workshops during pop-ups, USFS partners recommended holding workshop events separately. These were held on Tuesday and Thursday nights at various sites across the city. Some workshops were hands-on training like rain barrel building and composting. Others involved discussions on the importance of greenspace-health connection and how this relates to mindfulness, social justice and community health. The workshops doubled as opportunities to showcase other community supported spaces in the city, like Filbert Street Community Garden and Civic Works' Center for Sustainable Careers.

Pop-ups	Workshops
Easterwood/Sandtown Park n' Playground April 6, 2019 1537 McKean Ave, 21217	***Build Your Own Rain Barrel*** with Blue Water Baltimore April 4 & May 2, 2019 Civic Works Center for Sustainable Careers 3501 Brehms Ln, Suite B, 21213
Oliver Community Farm April 13, 2019 1300 N Bond St, 21213	***Growing Healthy Communities*** with BPCM April 9, 2019 Langston Hughes Community Center 5011 Arbutus Ave, 21215
HEPP Park April 27, 2019 2399 Pinewood Ave, 21214	***Mindfulness & Greenspaces*** with Phillip McKnight April 25, 2019 Patterson Park Pagoda
Bethel Playscape May 4, 2019 1500 N Bethel St, 21213	***Composting 101*** with Institute of Local Self-Reliance & Baltimore Compost Collective April 30, 2019 Filbert St Garden, 1317 Filbert St, 21226

2. New Native Plant Vendor

A chance encounter at a Fall 2018 event introduced GROW staff to a native plant vendor, Edible Earth Landscape Design. After discussions with the vendor about a potential partnership and the need to make plant prices more accessible to attendees, an agreement was made. Not only was the new vendor able to offer plants at more affordable prices (i.e. $5/quart vs. $7/quart), the vendor's schedule was more flexible than that of the larger Herring Run Nursery.

Edible Earth Landscape Design selling native plants/shrubs at Easterwood/Sandtown GROW Center.

3. Social Media Co-Hosts

In order to boost advertising methods, DPW asked host partners to be co-hosts of GROW Center Facebook events or create duplicate ones online. For example, the Growing Healthy Communities workshop partnered with Baltimore Peoples Climate Movement (BPCM). By adding them as a co-host, GROW was able to reach the 751 people that follow BPCM's Facebook page. Their duplicate Facebook event also identified 37 people who planned to attend and 197 interested.

4. Electronic Recycling (E-Recycling)

DPW Solid Waste staff shared information about Washington, DC's Roll-off Days, where DC's Mayor's Office and DPW popped-up at schools offering bulk trash disposal, electronics recycling and donation of household items/clothing. Since one of the goals of the GROW Center is to reduce and divert waste streams, it was agreed that the pop-ups would offer electronic recycling, which was implemented at the last three.

5. Locations

As in past GROW Center seasons, new pop-up locations were sought. For example, an interaction from Fall 2018 identified HEPP Park as a possible site. This was exciting as it resulted in the first GROW Center event at an urban forest patch! Two new greenspaces were selected in East & South Baltimore as pop-up and workshop locations. Two locations from Spring 2018 were repeated.

BWB Facilitator assisting with rain barrel construction at the 2nd rain barrel workshop located at Civic Works Center for Sustainable Careers.

6. Workshop Pre-payment

Despite the initial rain barrel workshop being completely booked thru pre-registration (20 total) only seven attended. This prompted staff to offer the rain barrel workshop again in order to use the remaining rain barrels that DPW purchased. This time, however, a pre-payment registration link was set up with the facilitating partner Blue Water Baltimore. This method resulted in a 100% attendance at the second workshop.

Data

Materials

- 100 Trees
- ~15 yd^3 Mulch
- 98 Native Plants ($935)
- 53 Recycling Bins ($419)
- 100+ Seed Packets
- 6+ 30 Gallon bags Coffee Chaff
- 14 Rain Barrels Built
- Modest E-Recycling Dropped off

Attendance

- 263 Total Attendees
- 85 Workshop Attendees
- 178 Pop-up Attendees
- 91 Neighborhoods
- 44 Return Attendees
- 36% Eventbrite Turnout

Community Service Program volunteer preparing buckets of mulch for giveaway at the Oliver Community Farm GROW Center.

Data Summary

GROW Center had solid turnout reaching 250+ individuals from 91 neighborhoods. This high number is likely a result of the additional standalone workshops that contributed 85 attendees represented 44 neighborhoods. This illustrates the already demonstrated outreach capability of mobile GROW Center pop-ups and the importance of community partnerships in promotion.

Attendees purchasing recycling bins from DPW Recycling.

Collecting demographic data (see page 37 for graphs) provides insight into the populations reached by GROW Center programming. Out of all events, 56% of attendees identified as women, 31% as men, and the remaining as Other or Not Responding (13%). Also, GROW Center programming attracted roughly equivalent populations of Caucasian/Whites and African-American/Blacks, 37% and 32% respectively. Asian, Latino or Other represented 10% combined. It should be noted that 21% did not answer this question. According to 2018 Census data, Baltimore is characterized by a 30% to 62% split between Whites and Blacks respectively.

With regards to age, the majority (64%) of attendees ranged from 26-64 years. The two largest groups, 35-54 and 26-34, accounted for 28% and 22% respectively. The reason

that the majority of the GROW Center's demographic are older-young adults to middle age adults may be that this group is more likely to have residential spaces (i.e. home gardens, yards) to use GROW Center resources. However, GROW is still reaching younger adults (18-25) and elder individuals (65+) who may still have their own spaces or participate in community-oriented greening. This should be taken with some caution as 20% of respondents did not share their age. Furthermore, this is representative of Baltimore's age distribution according to 2018 Census data where 55.8% of the population is in the 26-64 range.

Asking attendees how they found out about GROW Center revealed a wide array of responses. Word-of-mouth from friends/neighbors accounted for 21% of responses, while online methods including Facebook, NextDoor and other means like email accounted for nearly 41%. Partner and community organizations also proved useful (11%). Again, 20% of respondents did not provide an answer. These numbers demonstrate the importance of an online presence as well as making use of partners' existing promotional methods.

Attendees picking out free seeds leftover from Parks and People's/GROW Centers joint event in Fall 2018.

On the resource side, giveaways/sales were respectable. A similar number of trees were given away in addition to a large amount of mulch. It should be noted, however, that the number of individuals collecting mulch was less than previous GROW Centers. Hosting pop-ups at greenspaces allowed for remaining mulch to be left for use in the space. Nearly 100 native plants were sold while new materials giveaways of seeds (leftover from GROW Center & PPF's Plant/Seed Swap last Fall) and coffee chaff (provided by Zeke's) were also well received. E-Recycling was used sparingly but may be a result of insufficient promotion and lack of attendee awareness.

263 Attendees

100 Trees

98 Native Plants ($935)

53 Recycling Bins ($419)

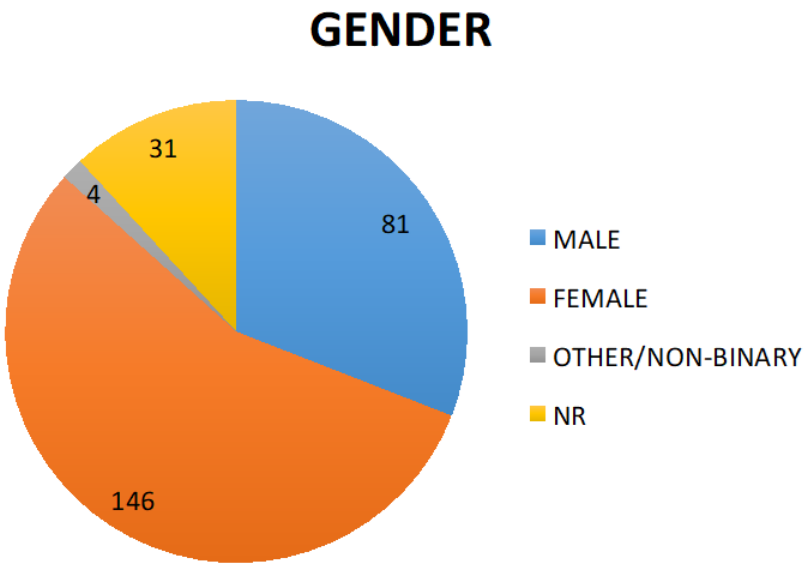
100+ Seed Packets given away

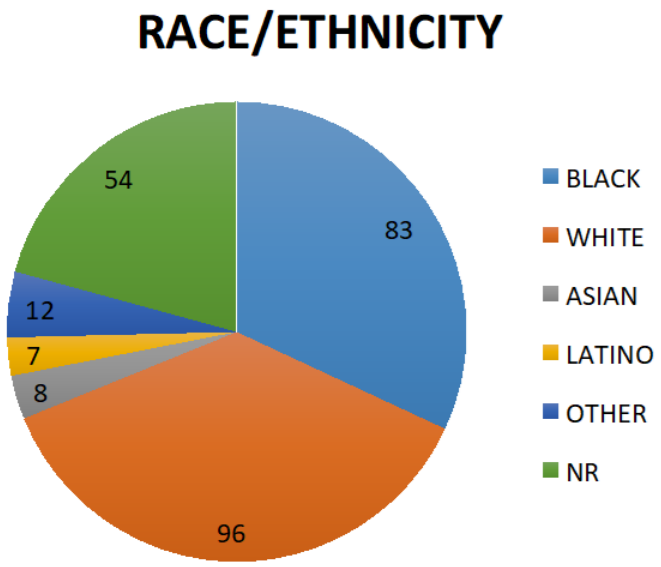
Six 30 gal bags Coffee Chaff

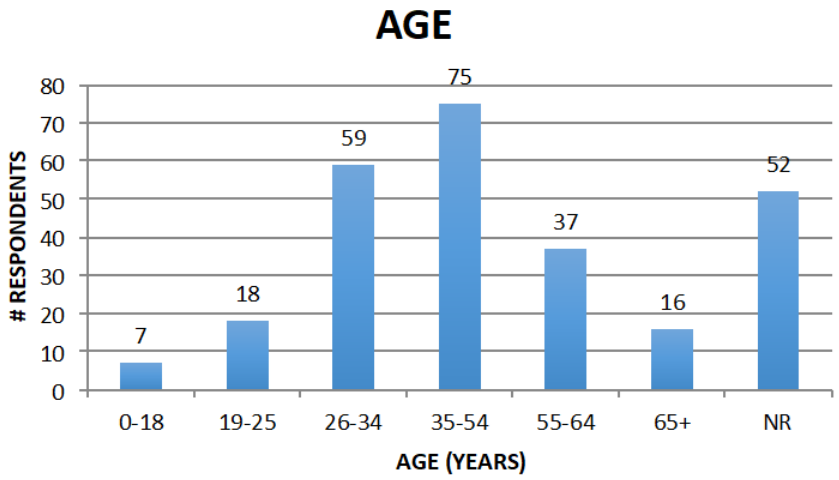
15 yd^3 Mulch

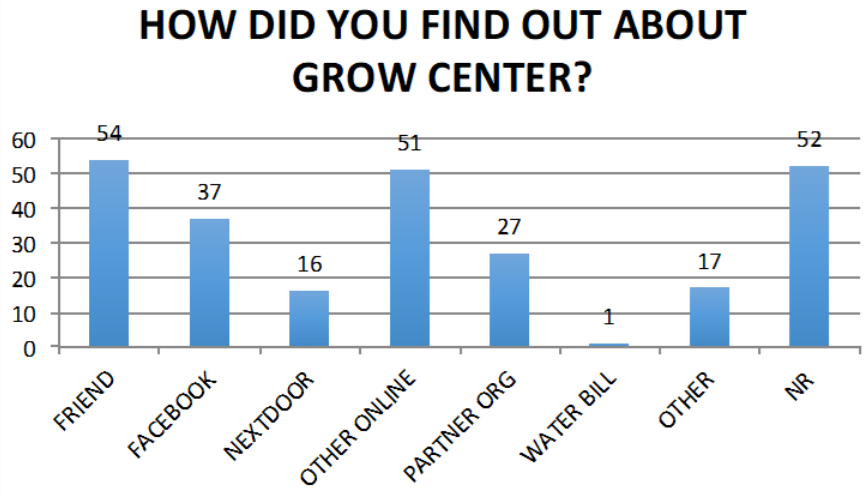
14 Rain Barrels Built

Demographic Data

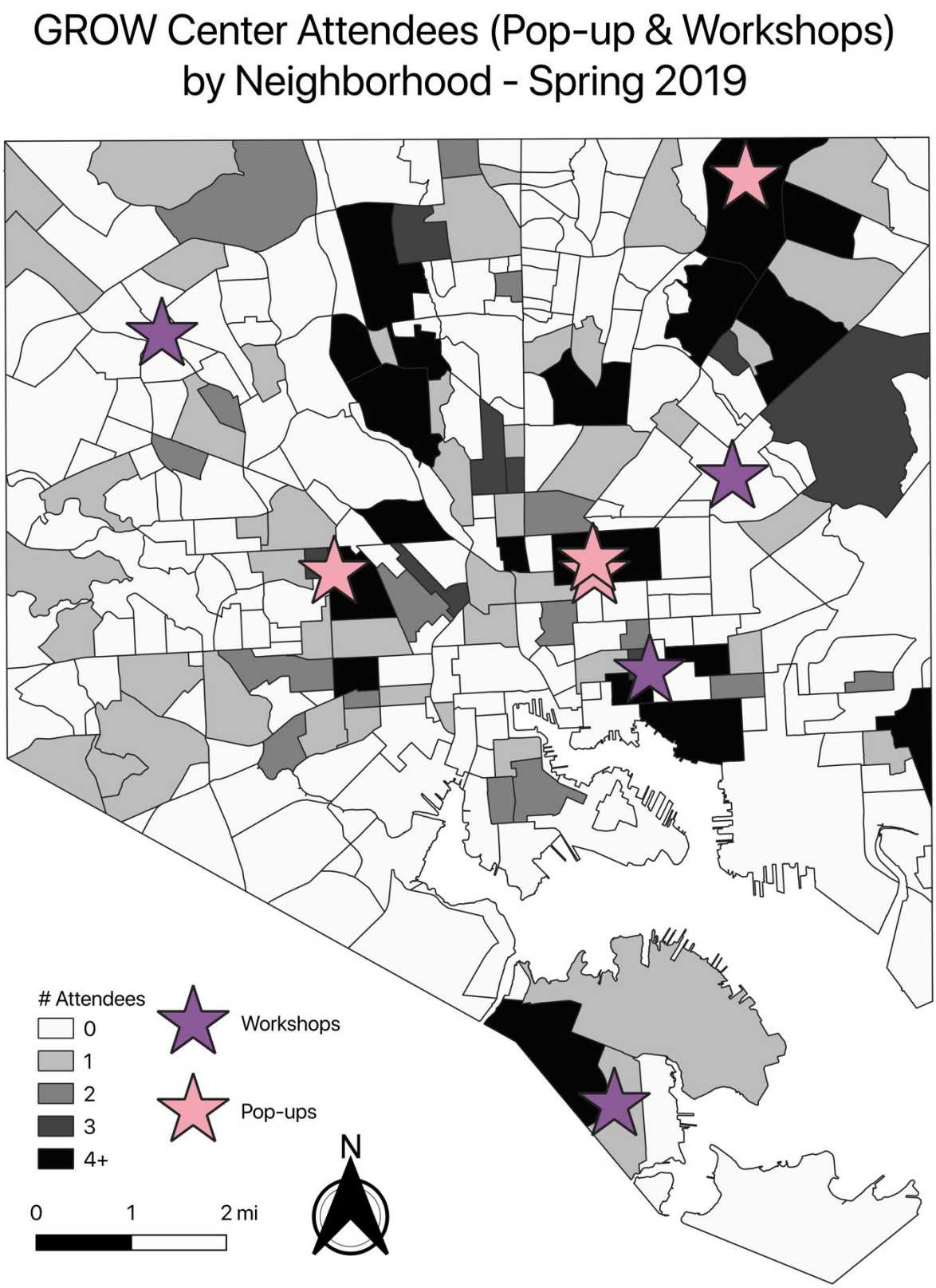






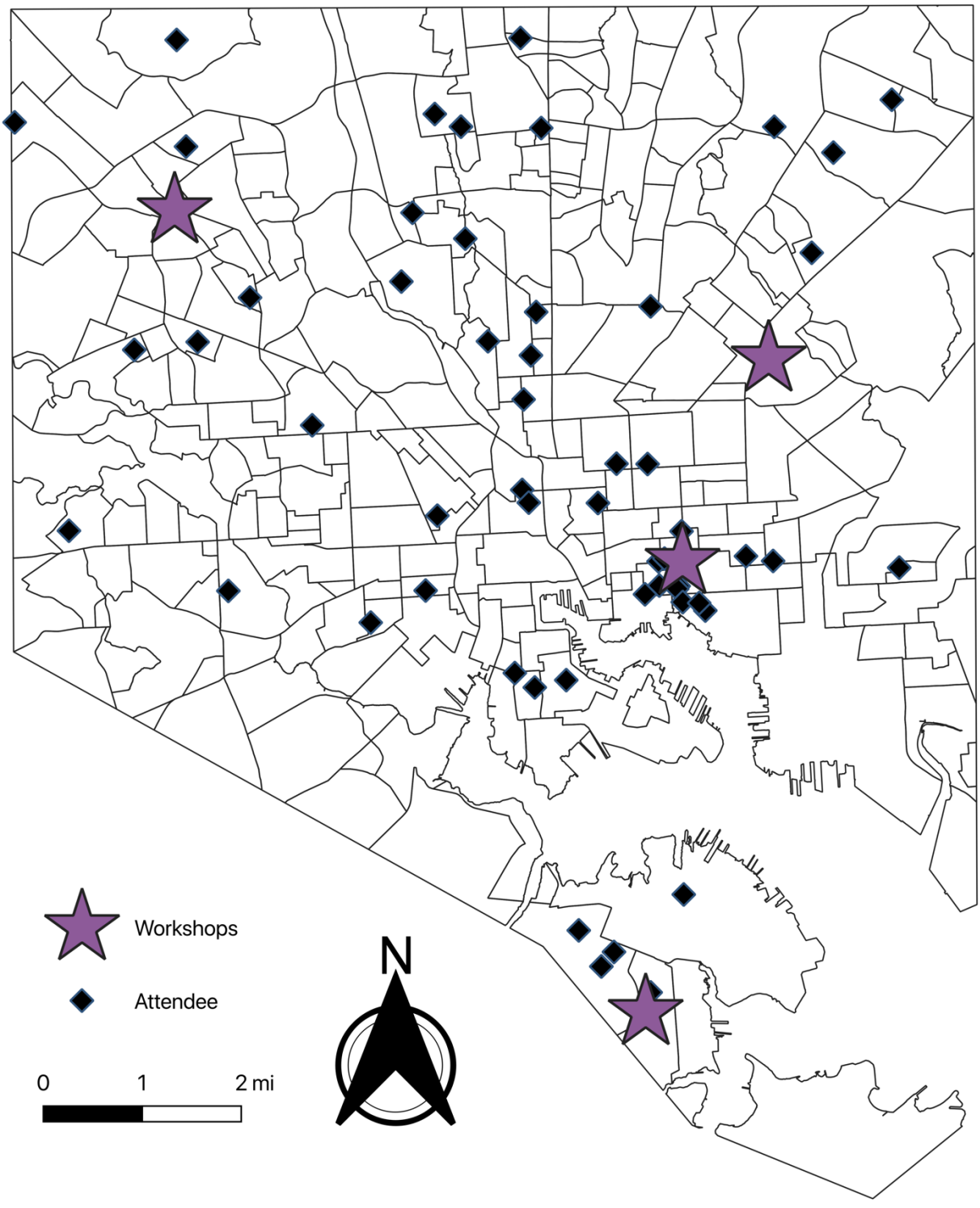


Geography

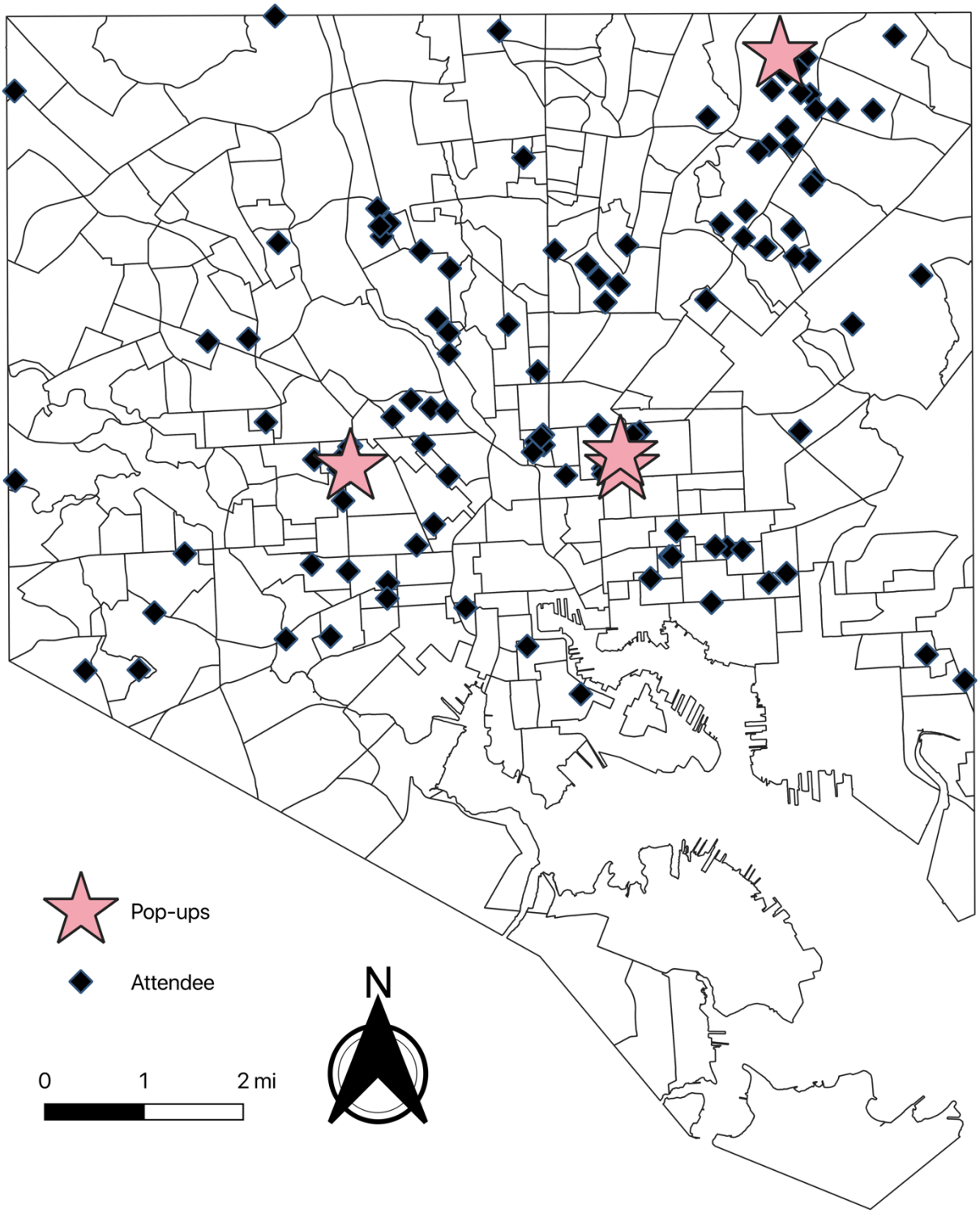


The top ten neighborhoods contributing 6 or more attendees were the following: Oliver, Hamilton Hills, Graceland Park, Ednor Gardens-Lakeside, Franklin Square, Greenmount West, Sandtown-Winchester, Upper Fells Point, and Waltherson.

GROW Center Workshop Attendees
Spring 2019



GROW Center Pop-up Attendees
Spring 2019



Lessons Learned

1. Partners are Important

Perhaps an obvious lesson, but it is important to reiterate. GROW Centers are not possible without the resources provided through our arsenal of partners, and therefore it is important to consider the continued hectic schedules of those partners. For example, holding an event the same day as the Fruit Tree Fair meant that DPW staff had to organize tree and mulch giveaways without Tree Baltimore present at the pop-up by calling on additional staff and volunteers.

The composting workshop at Filbert St Garden had a great turnout thanks to substantial promotion by the facilitators and community partners.

Specifically, community partners are another critical component of GROW Centers. GROW Centers should prioritize having them at pop-up events. This provides opportunity for outside visitors to learn about how these greenspaces developed while also providing community organizers the opportunity to share information with their own communities. Leveraging these community partners also contributes to long-term relationship building where the GROW Center is welcomed back, such as at Easterwood Sandtown Park or Langston Hughes Community Center.

Facilitation partner, BPCM, did an excellent job of promoting the Growing Healthy Communities Workshop to its audience resulting in a young attendee demographic that was also racially representative of Baltimore.

Lastly, employing the networks of all partners (resources, community, facilitators) allows for improved outreach. Whether it was duplicating or making partners co-hosts of online events, greater numbers of individuals were reached. This also afforded different populations, as with the Growing Healthy Communities workshop. BPCM strongly promoted the event, resulting in attendees who were younger and racially representative of Baltimore. Furthermore, these outreach channels attracted larger numbers of participants, such as at the Composting 101 workshop. The facilitator/community partner was able to reach large numbers of participants and help GROW achieve its largest workshop attendance to date. (A count revealed 40 participants despite failing to capture all info through registration.)

2. Recognize Different Values

A lesson that stood out from this round of pop-ups is the repeated recognition of the value of GROW Center programming. This was recognized by three parties: community partners, attendees, and DPW.

Community partners and host sites recognize the value that GROW Center offers to help activate spaces in their communities. For instance, Easterwood / Sandtown Park n' Playground community association not only expressed interest in GROW Center returning for this Spring, but also continuing to return in future seasons. Additionally, this group and the Oliver Community (partner for pop-ups 2 & 4) sought confirmation from GROW staff that enough people came to justify future partnerships. This demonstrates that community organizers value what GROW provides for their communities so much so that they are concerned with providing a suitable event environment. Meanwhile, other communities continue to reach out to GROW for future partnerships and events.

Phillip McKnight leads a discussion on mindfulness and its relevance to greenspace and importance for health. This workshop took place outside the Pagoda at Patterson Park.

Attendees also recognize the value of GROW Center programming. This could be something as simple as an attendee from the HEPP Park area visiting HEPP Park for the first time due to the GROW Center event, or attendees from a neighborhood across the city discovering beautiful greenspaces like Bethel Playscape in an area of East Baltimore that is home to many vacancies. Also, GROW Center programming that includes workshop topics like mindfulness and social justice, which position conversations around greening in a human context rather than traditional environmental education are appreciated by attendees. Some individuals admitted surprise as to why DPW would hold a workshop on these topics and asked about future events. Not only are these topics that attendees care deeply about, but they provide an alternative channel for outreach to residents that might not normally understand DPW's environmental mission. Furthermore, these illuminate a connection between resources offered at GROW Centers and addressing issues of health and equity, which many might not normally associate with a public works agency.

For this reason, DPW GROW staff recognize the benefits that this programming provides for both outreach and public relations. These non-traditional topics are important to show that DPW prioritizes the preferences of Baltimore's residents. In doing so, DPW still promotes its larger goals while providing opportunities for residents to emotionally connect with and better use greenspaces in their communities. Furthermore, the GROW Center provides an avenue to be flexible and experiment with different approaches.

3. Meaningful Interactions

Many GROW/partner staff have interactions with attendees that highlight the mission of the GROW Center, greening, and other related goals to benefit Baltimore communities. Meaningful interactions are important for GROW Center programming. These include engaging children, effective organization of activities at pop-ups, and using non-traditional workshop topics.

Engaging children has not been a primary motivation for GROW Center other than providing some small activities for children at the event like coloring or a trash-themed corn hole game. GROW Center has recognized the need to provide a space for families in order to remove a potential attendance barrier. The events in Oliver

After the Growing Healthy Communities panel discussion, many attendees stayed after engaging in rich conversations with GROW staff, community partners, and panel speakers.

communities presented some important lessons on ways to engage children that may sprout a later-stage appreciation of trees, plants and clean greenspaces.

One volunteer, a certified tree arborist with the nonprofit Flowering Tree Trails of Baltimore, brought paper fortune tellers inscribed with tree facts. Children were able to make the fortune tellers and then share them with staff and other attendees, encouraging discussions and learning. This also resulted in some of the children wanting to plant seeds to take home. By activating these spaces neighborhood children were able to attend and enjoy the activities, which associates greenspaces with fun.

Holding simultaneous activities (workshops, clean-ups) at the pop-up events, while potentially meaningful, still encounter difficulty. For example, a nature walk and trash clean-up were organized at the HEPP Park pop-up. However, few people volunteered with the trash pick-up, and the nature walk almost did not happen. This may be due to there being other resources available at the pop-up; many individuals come to the GROW Center for one specific reason and then leave. While the nature walk was likely a very meaningful interaction with the HEPP Park forest patch for the adults and children that participated, this was missed by those who were not able to spend more time at the pop-up. Better advertisement of these other activities could improve their attendance.

Finally, non-traditional workshop topics related to greening, such as the Growing Healthy Communities workshop with BPCM and the Mindfulness & Greenspaces workshop, are also important for meaningful interactions. These events drew individuals who might not otherwise attend a GROW event for materials or information. Therefore, not only is greater outreach achieved, but the discussions introduce other important topics like health and justice and their relationship to greenspace. As a result, this may provide a new set of attendees from different but related motivation and allow GROW Center staff to learn from groups with aligned work not encountered in traditional environmental education.

Logistics

Two new observations on logistics were made during this round of pop-ups. First, having a (pre-loaded) card for GROW Center purchases would streamline pre-/post-event procedures. For example, many

Attendees participating in a nature walk through the forest patch at HEPP Park GROW Center.

organizations from which DPW makes GROW Center purchases require payment at purchase rather than submitting an invoice. This makes procuring some items (i.e. Home Compost Bins, refreshments) difficult. This could also ease payments of stipends.

Second, having Blue Water Baltimore require pre-payment for the second rain barrel workshop realized 100% attendance. While the fee was $25 (which was a subsidized cost of the rain barrel) this provides some confidence that a small fee or sliding scale fee may be a viable option for future GROW workshops. However, if partner networks are well leveraged as in the Composting and Growing Healthy Communities workshop, attendance may be substantial without a fee.

The Oliver community (2nd from right) played a pivotal role in activating/promoting the two GROW events in East Baltimore.

Group of kids excited after planting seedlings and learning tree facts at the Oliver Community Farm GROW Center.

Fall 2019

GROW Center pop-ups continued into their fourth season. However, given the loss of the Peaceworker Fellow and staff schedules, only three pop-ups were held (instead of the typical four – see table below). Again, all pop-ups were Saturdays from 9am-12pm. This section includes adjustments, data, lessons learned, and recommendations for future GROW Center programming.

Pop-ups
Langston Hughes Community, Business and Resource Center October 12, 2019 5011 Arbutus Ave, 21215
Gateway Park in Darley Park October 26, 2019 Harford Rd and Normal Ave, 21213
Stillmeadow Community Fellowship Church November 2, 2019 5110 Frederick Ave, 21229

Changes

With the exception of there being only three pop-up events rather than the typical four, the Saturday morning pop-up model was maintained. Changes that were instituted were new partners, no workshops or e-cycling, and holding a pop-up at a faith-based organization.

1. New Partners

The pop-up events included many partners from previous seasons, including TreeBaltimore (trees and mulch), Maryland Cooperative Extension Master Gardeners, UMD Watershed Program, Bmore Beautiful, and Edible Earth Landscape Design (native plant vendor). However, there were some new partners. One was a research fellow from the Cary Institute, who was conducting community research on green infrastructure. Additionally, the Health Department and Mayor's Office of Emergency Management were new to the GROW Center.

Edible Earth Landscape Design, a local nursery, provided affordable native plants for sale.

The third pop-up was hosted by Stillmeadow Community Fellowship, a church located in an area that saw damaging floods and was subsequently selected as a Resiliency Hub by the Baltimore Office of Sustainability (BOS) (see #3). In order to provide flooding resources and information to residents, the Climate and Resilience Planner for BOS was contacted and invited to participate in the third pop-up. The planner also connected DPW to her cohorts in the Health Department and the Mayor's Office of Emergency Management, both of which were interested in participating in the pop-ups.

Finally, at pop-up #2, DPW's Human Resources staff attended with information on an upcoming DPW job fair and general information on employment opportunities and the hiring process. HR handouts and other job information were subsequently made available at pop-up #3.

2. No Workshops or E-cycling

With the loss of the Peaceworker Fellow, staffing for organizing the pop-ups and workshops was limited. Initially, several workshops and partners were considered and approached. Due to a combination of partners being busy and identifying a Fall appropriate workshop it was decided to not hold a workshop. Workshop topics were a challenge experienced in planning the Fall 2018 pop-ups as well.

E-cycling was piloted in Spring 2018 at three pop-ups, keeping with one of the themes of the GROW Center – waste diversion. However, only a small amount of material was dropped-off, yet it required having a separate vehicle. Due to having one less staff person in the fall, and the modest amount collected, it was decided not to offer that service again.

3. Faith-Based Organization Host

As mentioned previously, pop-up #3 was held at Stillmeadow Community Fellowship Church. The church is one of BOS's Resiliency hubs as well as home to a 10 acre forest and stream, and has been partnering with the US Forest Service, DPW, Interfaith Partners for the Chesapeake (IPC), and other non-profits and city agencies to create a "Peace Park" on its property. Given the existing partnerships, as well as the church being an anchor in the community, they were approached to host a GROW Center. The church's parking lot was ideal for the pop-up, providing a large, visible area for tables, materials, and parking for attendees.

Previously all pop-ups were held on public property (community spaces) or at a non-profit (ToolBank, Parks & People, Langston Hughes Resource Center). Holding the pop-up at a faith-based organization was an opportunity to physically connect with the church's congregation and community as well as advance a shared narrative of stewardship and resilience. IPC is working with dozens of faith-based organizations in Baltimore City; holding future pop-ups at other churches, synagogues, or mosques can build on IPC's work in creating new greening stewards and provide the GROW Center with new audiences.

Data

Materials

- 52 Trees
- ~5 yd^3 Mulch
- 90 Native Plants ($480)
- 21 Recycling Bins ($159)
- Three 30 Gallon bags Coffee Chaff

Attendance[3]

- 61 Total Attendees
- 30+ Neighborhoods
- 8 Return Attendees (13%)
- 42 New Attendees (69%)

Data Summary

Attendance at the GROW Centers was less than in the Spring and 50% less when compared to the Fall 2018 pop-ups. This can partially be due to not being able to get all attendees to register at the sign-in. In particular, the layout of the second GROW Center at Darley Park was such that many people stopped to get trees and mulch and did not go to the sign-in table, which was opposite across the space.

However, based on the sign-in sheet, nearly 70% of all attendees were new to the GROW Center, which highlights the increasing number of people accessing the GROW Center resources.

[3] Attendance is based on sign-in sheets. Due to the layout of the various pop-ups, there were people attending who did not sign-in. Thus, the number of attendees is higher but the actual number is unknown.

Additionally, 66% of attendees identified as women and 30% as men, with the remaining as Other or Not Responding (5%). Racially, 44% identified as African-American/Black, 21% Caucasian/Whites, and 13% Asian, Latino or Other. It should be noted that 25% did not answer this question. According to 2018 Census data, Baltimore's populace is 62% Black and 30% White.

With regards to age, the two largest groups were 35-54 and 55-64, accounted for 41% and 26% respectively. The Fall 2019 pop-up saw a higher percentage in these age groups than Spring 2019. When including the 26-34 age group, the total percentage is 78%, which is higher than Baltimore's age distribution according to 2018 Census data where 55.8% of the population is in this age range.

Asking attendees how they found out about the GROW Center pop-up revealed again a wide array of responses. Social media accounted for the most attendees (30%), followed by people walking or driving by (23%), and friends or neighbors[4](19%). Partner and community organizations also proved useful (15%). This demonstrates the importance of an online presence along with being in highly visible locations.

On the resource side, mulch and trees were most popular and the main draw for people to attend, followed by recycling bins. Tree giveaways were less than previous seasons, even when factoring in one fewer pop-up than usual. Regarding mulch, most of it was again distributed in small quantities, 2-4 five-gallon containers. However, at the third pop-up residents from the Fells Point neighborhood arrived near the end of the pop-up and filled a small pickup truck. Later they posted photos on social media of using the mulch to replenish street tree pits in the community.

Lessons Learned

The following are reflections on the Fall 2019 pop-ups that reinforce previous observations and add new ones.

1. **The pop-ups are still attracting new people.**

As noted, 69% of the people who completed surveys had never attended a GROW Center pop-up. A concern in community engagement is that the same people are attending meetings and events. While there were a number of returnees (including one couple who has attended ALL of the pop-up events) it is encouraging that the word is spreading.

2. **Interest from new partners is growing**

Because the third pop-up was located at one of the Baltimore Office of Sustainability's Resiliency Hubs, BOS was approached to attend that pop-up. This led to the Health Department and the Mayor's Office of Emergency Management asking to participate as well. Additionally, DPW's Office of Human Resources attended the second pop-up to promote an upcoming job fair and provided material for the third pop-up. Finally, two groups conducting research on green infrastructure also participated. These new partners not only expanded the resources available to attendees but also broadened the network among themselves. In addition to the new partners, all of the partner organizations from the Spring pop-ups continued into the Fall.

3. **Everyone is busy**

One of the challenges in organizing the Fall pop-ups was coordinating schedules. This started with DPW; due to staff schedules only three pop-ups could be scheduled. And while there were new partner organizations in addition to continuing partners, not all of organizations could attend each pop-up, or

[4] NextDoor was included in this category

had minimal staff. Fall is a busy time for tree planting and school activities, which impacted attendance.

4. Fall is different from the Spring

The difference between Fall, when people are putting gardens to bed, and Spring, when people are excited about planting, was reinforced again in 2019. Attendance was less in the Fall pop-ups than in the Spring, and it was more difficult planning for workshops (which is why none were held). The same reflection was made in Fall 2018, which led to the separation of pop-ups from workshops in Spring 2019.

Recommendations

After four seasons of GROW Centers, many lessons have been learned - from what types of materials and workshops residents are interested to logistics for holding events. However, what has been noticed consistently is that many individuals attend for one specific purpose. These individuals may stop by for a free tree, to buy a recycling bin, or drop off electronics before heading out to the next weekend activity. The potential exists to capture these individuals and introduce them to other resources. Although, this may not always be the case, this highlights the benefit of having a brick and mortar location(s) that people can stop to get or do "that one thing."

A brick and mortar location could still offer other info/materials to introduce attendees to resources they might not originally know about. In doing so, the staff can provide meaningful interactions regarding the resources available. There could also be multiple locations (as suggested in the 2016 Pilot Report), taking advantage of existing partner sites like Camp Small or the ToolBank to hold GROW Center activities.

However, pop-ups in different areas have demonstrated the benefit of being mobile and providing access to groups that may not be serviced by a storefront location.

Furthermore, partnering with community groups has been vital to achieving strong outreach potential for both GROW and its partners. This has been compounded by highlighting/activating existing greenspaces within these communities and the critical social interactions that happen between staff, communities, partners and participants.

Therefore, a hybrid approach of mobile and brick & mortar may be considered. Additional staff are likely needed, or a partner organization to co-locate with, or a rotating schedule could be implemented. This way, a brick and mortar location might be open on a specific day, with mobile pop-ups happening on occasion. Workshops would supplement the resource pop-ups to attract the peripheral greeners who are interested in topics related to greening but may not have made the connection. Meanwhile, this continues the original vision of providing education and training in addition to materials.

Partners to consider where a GROW Center could be co-located included Camp Small, Details material yard, and the Parks & People Foundation.

Appendices

A1 – Budgets

A2 – Flyers

A3 – Data Collected

A4 – Survey Results

A5 – Handouts

A6 – Additional Maps

A1a – Budget: Spring 2018

GROW Center Spring 2018 - Budget					USFS		In-Kind		
Item	Description	QTY	RATE	SUBTOTAL	USFS	USFS (City Fdn)	DPW (in-kind cash)	DPW (in-kind	Other
Workshop Stipend	Stipend for 4 facilitators	4	$200.00	$800.00		$800.00			
Location Stipend	Stipend for event space	4	$200.00	$800.00		$800.00			
Printing Shop items	1 banner, 6 lawn signs, 2 large welcome posters	1	$656.00	$656.00			$656.00		
Pollinator Plant Giveaway	Give away of free pollinator plants to workshop participants	8	$7.00	$56.00	$56.00				
Raffle Gift Certificates	Herring Run Nursery gift certificates given away for survey collection	2	$20.00	$40.00	$40.00				
Compost / Garden Mix	3 bags of mix from Baltimore Community ToolBank for workshop	3	$5.00	$15.00	$15.00				
Chairs Rental	20 chairs rented from Baltimore Community ToolBank for 4 weeks	20	$3.00	$60.00	$60.00				
Rain Barrel Subsidy	Subsidized cost of rain barrels for workshop participants	15	$45.00	$675.00	$675.00				
Porta-John	1 porta-john for GROW Center pop-up #3	1	$40.000	$40.00			$40.00		
DPW Truck (Mileage)	Transport of pop-up materials at 4 pop-up events and 1 pre-pop-up materials transport to the ToolBank.	41	$0.54	$22.14			$22.14		
Tables	10 Tables for pop-up events (DPW)	10	$28.00	$280.00			$280.00		
Tents	2 Tents at each pop-up from DOT Special Events	8	$100.00	$800.00					$800.00
Snacks	Light snacks for partners at 4 GROW Center pop-ups	4	$8.00	$32.00					$32.00
Mileage	Personal Vehicle usage for GROW Center events/preparations	140	$0.54	$75.60					$75.60
Staff: DPW - Pop-ups	3 staff at 4 pop-up events	66	$60.00	$3,960.00				$3,960.00	
Staff: Experts	4 Partner Organizations at 4 pop-ups (hrs)	44	$30.00	$1,320.00					$1,320.00
Staff: Facilitators	Volunteer facilitators at 4 pop-up events (per event)	4	$200.00	$800.00					$800.00
Staff: Materials	12 materials providers total over 4 pop-ups (hrs)	56	$30.00	$1,680.00					$1,680.00
Blue = Workshop; Red = Printing; Purple = Location; Orange = Logistics; Green = Staff		**TOTAL:**	**$12,111.74**	**USFS EXPENSES:**		**$2,446.00**	**DPW in-kind:**	**$4,958.14**	**$4,707.60**

A1b – Budget: Fall 2018

GROW Center Fall 2018 - Budget					USFS		In-Kind		
Item	Description	QTY	RATE	SUBTOTAL	USFS	USFS (City Fdn)	DPW (in-kind cash)	DPW (in-kind	Other
Workshop Stipend	Stipend for facilitator	1	$200.00	$200.00		$200.00			
Location Stipend	Stipend for event space	4	$200.00	$800.00		$800.00			
Lawn Signs	New lawn signs for promotion	2	$9.00	$18.00			$18.00		
Chairs Rental	Chairs rented from Baltimore Community ToolBank for 4 weeks	25	$3.75	$93.75	$93.75				
DPW Truck (Mileage)	Transport of pop-up materials at 4 pop-up events	120	$0.535	$64.20			$64.20		
Tables	Tables for pop-up events (DPW)	12	$28.00	$336.00			$336.00		
Tents	3 Tents at 3 pop-ups from DOT Special Events	9	$100.00	$900.00					$900.00
Mileage	Personal Vehicle usage for GROW Center events/preparations	56.7	$0.535	$30.33					$30.33
Staff: DPW - Pop-ups	4 OCAL staff at 4 pop-up events (hrs)	105	$60.00	$6,300.00				$6,300.00	
Staff: Experts	5 Partner Organizations at 4 pop-ups (hrs)	54	$30.00	$1,620.00					$1,620.00
Staff: Facilitators	Volunteer facilitators at 2 pop-up events (per event)	2	$200.00	$400.00					$400.00
Staff: Materials	4 Materials Suppliers at 4 pop-ups (hrs)	27	$30.00	$810.00					$810.00
Staff: Volunteers	Volunteers from CSP Program to help at GROW Center events and canvassing	48	$15.00	$720.00					$720.00
Blue = Workshop; Red = Printing; Purple = Location; Orange = Logistics; Green = Staff		**TOTAL:**	**$12,292.28**	**USFS EXPENSES:**		**$1,093.75**	**DPW in-kind:**	**$6,718.20**	**$4,480.33**

A1c - Budget: Spring 2019

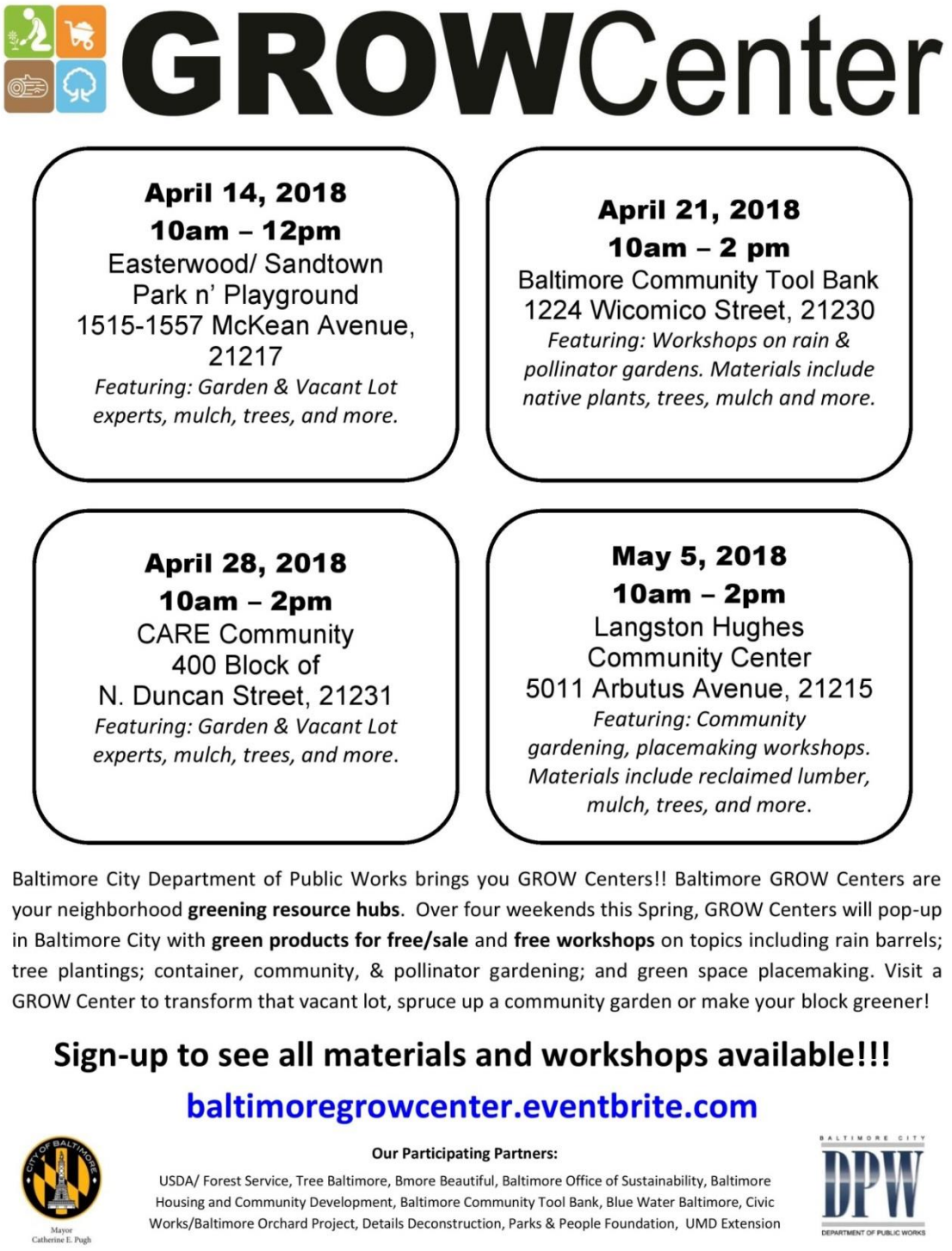
GROW Center Spring 2019 - Budget					USFS		In-Kind		
Item	Description	QTY	RATE	SUBTOTAL	USFS	USFS (City Fdn)	DPW (in-kind cash)	DPW (in-kind	Other
Workshop Stipend	Stipend for 4 facilitators	4	$200.00	$800.00		$800.00			
Workshop Stipend	Stipend for BPCM Panel	1	$300.00	$300.00		$300.00			
Location Stipend	Stipend for event space	4	$200.00	$800.00		$800.00			
Rain Barrel Subsidization	25$ Subsidization per rain barrel for two workshops	14	$25.00	$350.00	$350.00				
Home Compost Bins	Bins raffled off at composting workshop	2	$35.00	$70.00	$70.00				
Raffle Gift Certificates	Herring Run Nursery gift certificates given away for survey collection	4	$20.00	$80.00	$80.00				
Chairs Rental	20 chairs rented from Baltimore Community ToolBank for 5 weeks	20	$3.75	$75.00	$75.00				
Utility Knives Rental	6 utility knives rented from Baltimore Community ToolBank for 5 weeks	6	$0.50	$3.00	$3.00				
DPW Truck (Mileage)	Transport of pop-up materials using DPW Trucks	202.8	$0.535	$108.50			$108.50		
Mileage	Personal Vehicle usage for GROW Center events/preparations	84.3	$0.535	$45.10					$45.10
Tables	11 Tables for pop-up events from Prettyboy Reservoir	11	$28.00	$308.00			$308.00		
Tents	2 10 x 15 Tents at each pop-up from DOT Special Events	2	$100.00	$200.00			$200.00		
Refreshments	Snacks for workshop events (Chips, Candies, Strawberries)	1	$30.00	$30.00					
Staff: DPW - Pop-ups	5 staff at 4 pop-up events (hrs)	88	$60.00	$5,280.00				$5,280.00	
Staff: DPW - Workshop	3 staff at 5 workshops (hrs)	28	$60.00	$1,680.00				$1,680.00	
Staff: Experts	10 Partner Organizations at 4 pop-ups (hrs)	30	$30.00	$900.00					$900.00
Staff: Facilitators	1 volunteer facilitator at two workshops (event)	2	$200.00	$400.00					$400.00
Staff: Materials	12 Materials Providers at 4 pop-ups (hrs)	36	$30.00	$1,080.00					$1,080.00
Staff: Volunteers	6 volunteers at 2 pop-ups (hrs)	18	$15.00	$270.00					$270.00
Blue = Workshop; Purple = Location; Red = Printing; Orange = Logistics; Green = Staff		**TOTAL:**	**$12,779.60**		**USFS EXPENSES:**	**$2,478.00**	**DPW in-kind:**	**$7,576.50**	**$2,695.10**

A1d - Budget: Fall 2019

GROW Center Fall 2019 - Budget					USFS		In-Kind		
Item	Description	QTY	RATE	SUBTOTAL	USFS	USFS (City Fdn)	DPW (in-kind cash)	DPW (in-kind	Other
Location Stipend	Stipend for event space	3	$200.00	$600.00		$600.00			
Raffle Gift Certificates	Herring Run Nursery gift certificates given away for survey collection	3	$20.00	$60.00					$60.00
Chairs Rental	24 chairs rented from Baltimore Community ToolBank for 4 weeks	24	$3.50	$84.00	$84.00				
Chair Replacement	Replacement cost for missing chair	1	$24.95	$24.95	$24.95				
DPW Truck (Mileage)	Transport of pop-up materials using DPW Trucks	22	$0.535	$11.77			$11.77		
Tables	11 Tables for pop-up events (DPW)	11	$28.00	$308.00			$308.00		
Tents	2 10 x 15 Tents at two pop-up from DOT Special Events	2	$100.00	$200.00			$200.00		
Refreshments	Supplies for workshop events (Candy, paper towels)	1	$16.00	$16.00					$16.00
Staff: DPW - Pop-ups	3 staff at 3 pop-up events	54	$60.00	$3,240.00				$3,240.00	
Staff: Experts	8 partner groups total over 3 pop-ups (hrs)	92	$30.00	$2,760.00					$2,760.00
Staff: Materials	2 materials providers total over 3 pop-ups (hrs)	24	$30.00	$720.00					$1,080.00
Purple = Pop-up Location; Orange = Logistics; Green = Staff		**TOTAL:**	**$8,024.72**	**USFS EXPENSES:**		**$708.95**	**DPW in-kind:**	**$3,759.77**	**$3,916.00**

A2 – Flyers

Spring 2018: Flyer (Also translated to Spanish)



Fall 2018: Flyer

Fall 2019: Flyer

GROWCenter

Join DPW at one of our Pop-up Greening Resource Hubs!

Free trees, mulch, and chaff
Native plants and recycling bins for sale
Various experts will be on hand to answer your greening questions

All Pop-Ups are 9am-12noon

10/12/19	Langston Hughes Community, Business and Resource Center	5011 Arbutus Ave, 21217
10/26/19	Gateway Park at Darley Park	Harford Rd & Normal Ave, 21213
11/2/19	Stillmeadow Community Fellowship Church	5110 Frederick Ave, 21229

Need more info? Call 410-396-0732 and ask for Mark Cameron

For more information visit https://publicworks.baltimorecity.gov/grow-center, call 410-396-0732, or email mark.cameron@baltimorecity.gov. Funding for GROW Centers is provided through a USDA Forest Service Grant. USDA is an equal opportunity provider, employer and lender.

A3 – Data Collected (Spring 2018)

Collection Method	Data Collected
Event Check-in/EventBrite Registration	• Name • Address • Phone Number • E-mail Address • How did you find out about GROW Center? • What materials are you here to get? • Are you here as a resident or part of a Community, Faith or Business group? • Years of community greening experience?
Materials Purchase/Pick-up Sheet	• Name • Amount of Material • Transport Method (Car, Walking, Public Transport) • Intended Use of Material (Residential, community, business, school, faith, other) • Intended Use Address
Feedback Survey – Participants	• How would you rate the GROW Center? (Likert Scale: 1-5) • What other workshops and/or materials would you like to see at GROW Centers? • Any other comments or suggestions?
Feedback Survey – Materials Suppliers	• How did the space work for giving out your materials? Anything lacking or needing improvement? • What were prevalent topics/conversations had with individuals regarding material use? • Any other comments?
Feedback Survey – Host Sites	• How did you feel about hosting the GROW Center? • Are there any recommendations you would make for future GROW Centers? • How did you feel about the overall planning process? • Any other comments?
Feedback Survey - Facilitators	• How did the space work for facilitating your workshop? • Is there anything the GROW Center could have provided to improve facilitation? • Any other comments?
Feedback Survey – Greening Experts	• Please estimate the number of people who asked questions • Were there any prevalent topics asked? • Was the GROW Center a good fit for your organization? • Any other comments?

*All methods carried out by DPW/GROW Center staff with the exception of the Materials, collected by each Material Supplier on behalf of DPW/GROW Center staff. All data provided voluntarily.

A4 – Survey Results (Spring 2018)

Participants	• Rankings: 5 out of 5 (x47); 4 out of 5 (x17); 1 out of 5 (x2) * both had positive remarks, may have chosen wrong number • Overall: Great event with lots of knowledgeable people. Very informative • Plants were pricy. • Recommendation for a series of classes on basics of gardens around town for a month or two. • Other Materials/Topics: Tools, Recycling, Bonsai, Rain Barrels, Trees (x6), Green Roofs, More Plants for Sale (x3), Kid Activities, How to start a garden (x2), Centrally located, brick & mortar year round GROW Center, Composting (x3), Container Gardening (x3), Planting Schedule Creation, Planting Incentives, "How to" demos, Soil Education (x3)
Facilitators	• Overall: Space worked very well • Having tools on site made workshop very easy. • It is important to meet people halfway. Get resources in their hands even if they arrive late to a workshop. • Ensure facilitator is best suited for particular workshop topic.
Experts	• Overall: Great event with lots of people. • Prevalent Topics: Adopt-a-lot (x2), Water Access (x2), Side Yard Program, Purchasing Property (x2), [Vacant lot] Gardening (x5), Baltimore Green Network, Container Planting (x2), Soil Testing (x3), Seeds/Planting (x4), Pest Management, Connecting youth to clean-ups/green-ups
Materials Suppliers	• Overall: Space worked well for materials giveaway/selling. • Selling plants out of back of pick-up truck is ideal. • Prevalent Topics: Perennial vs. Annual, Soil Quality, Competing Plants, Tree Height, Tree ID, Tree Care, Who is this organization?, Benefits of Natives, Tree Planting Locations
Host Sites	• Overall: Happy with event and being included. Good for the community • Wished it was a little bigger with more vendors • Ensure that partners clean-up well • Print flyers for community distribution (by host site) • Planning process was easy and worked well. (x3)

*Survey results sorted and aggregated.

A5 – Handouts

Handout 1

Reclaimed Materials Uses

Container Gardens/Planters

Furniture

Edging

Brick Paths

Bird Baths

Tree ring

Crushed Brick/Stone Paths

Handout 2

SPRING 2018
GREENING EVENTS:

$$ = Registration Fee | Parks & People | Tree Baltimore

Blue Water Baltimore | Charm City Farms | Civic Works

MAY 6 – Herring Run Nursery Sale
MAY 6 – Plants & People (Parks & Recreation – Every Sunday until October)
MAY 8 – Solar Workshop
MAY 9 – Pollinator Gardens
MAY 9 – Herring Run Nursery Workday Wednesday
MAY 10/11- Outfall Screening Blitz
MAY 12 – TreeGiveaway @ Waverly Farm Market
MAY 12 – TreeGiveaway @ Cylburn Arboretum "Market Day"
MAY 12 – Edible, Medicinal, & Useful Plant and Mushroom Walk **$$**
MAY 12 – Paint & Plant a Pot for Mom @ Herring Run Nursery **$$**
MAY 17 – Getting Grounded: Forest Bathing Walk (Cylburn Arboretum) $$
MAY 19 – Notable Tree Bus Tour
MAY 19 – Tree Giveaway @ Herring Run Nursery
MAY 22 – Storm Drain Art Workshop **$$**
MAY 23 – Carroll Park Stewardship
MAY 24 – Getting Grounded: Forest Bathing Walk (Cylburn Arboretum) $$
MAY 26 – Low Tech Mushroom Growing **$$**
MAY 26 – Forestry Board TreeGiveaway @ Herb Fest
JUNE 1 – Tree Giveaway @ Summer Sounds, Belvedere Square
JUNE 2 – Pollution 101 & Outfall Screening Blitz Training
JUNE 3 – TreeGiveaway @ "Under the JFX"
JUNE 5 – Tree Giveaway @ Farmers Market in Lauraville
JUNE 6 – Soil & Water Management Workshop
JUNE 9 – Edible, Medicinal, & Useful Plant and Mushroom Walk **$$**
JUNE 9 – 3rd Annual Baltimore Floatilla $$
JUNE 16 – Mushroom Growing 101: Beyond Low-Tech **$$**
JULY 18 – Event Management 101

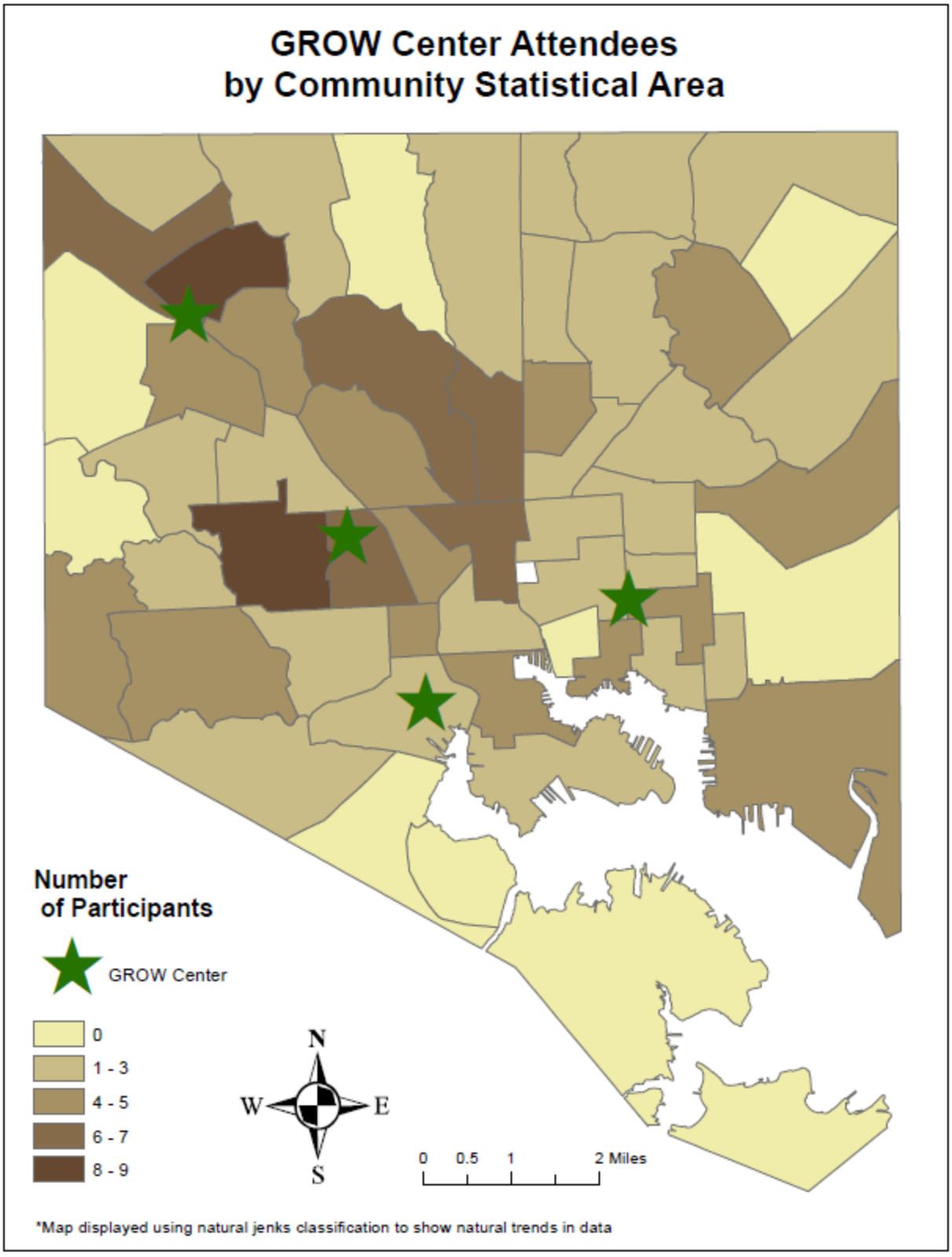
Mayor
Catherine E. Pugh

***For more info on a particular workshop/event, visit the organizer's website. ***

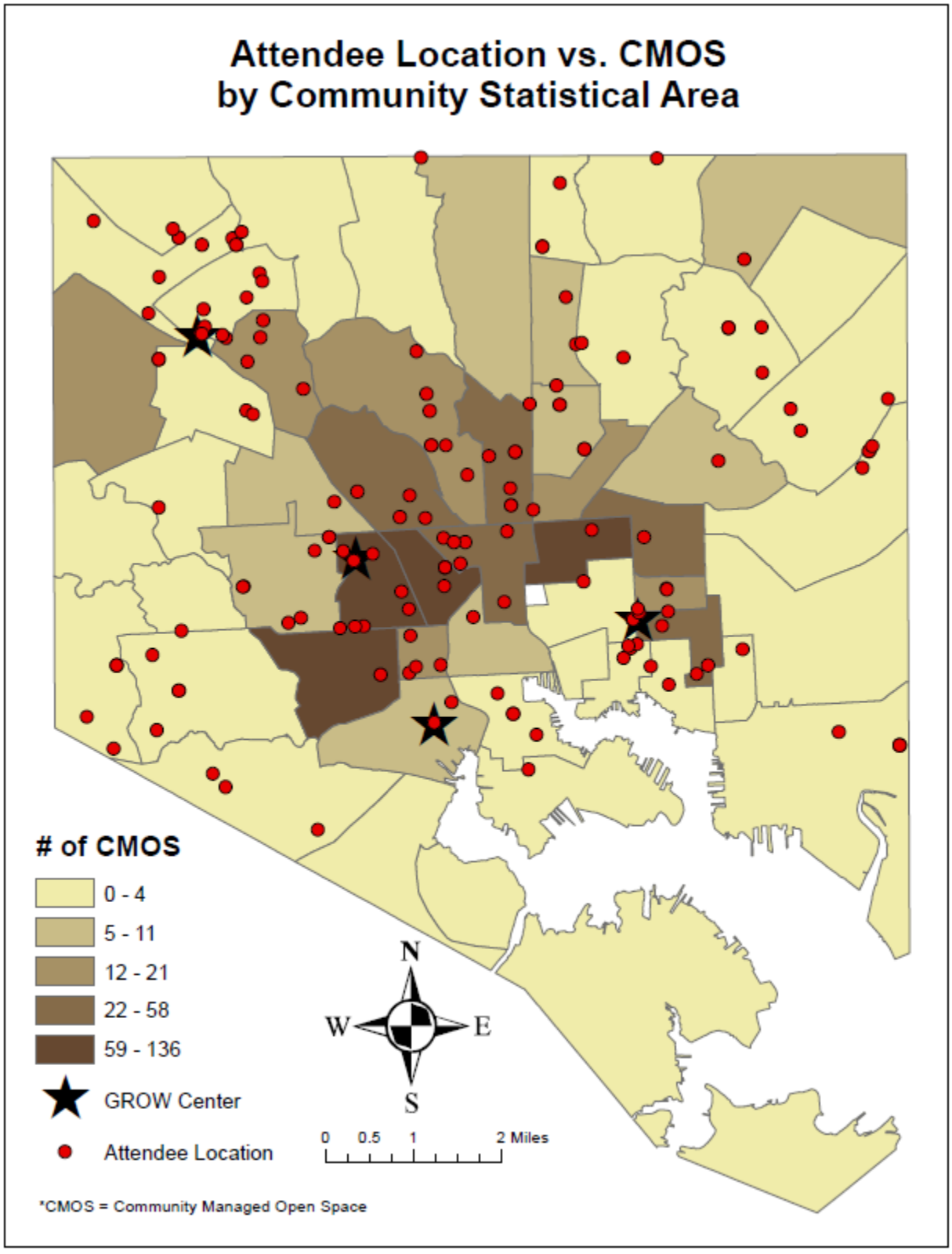
BALTIMORE CITY DPW
DEPARTMENT OF PUBLIC WORKS

A6 – Additional Maps

Map 1: (Spring 2018)

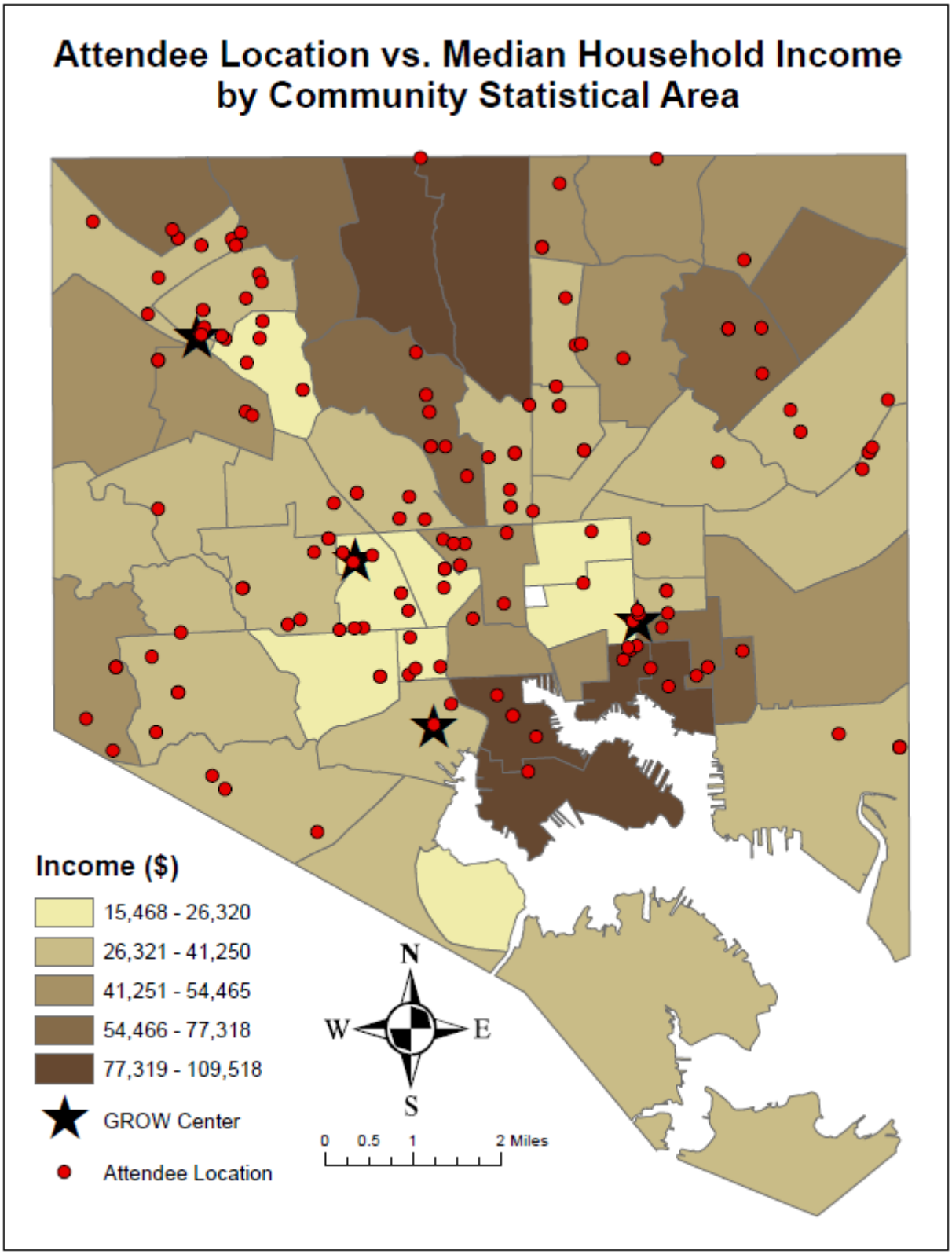


Map 2: (Spring 2018)



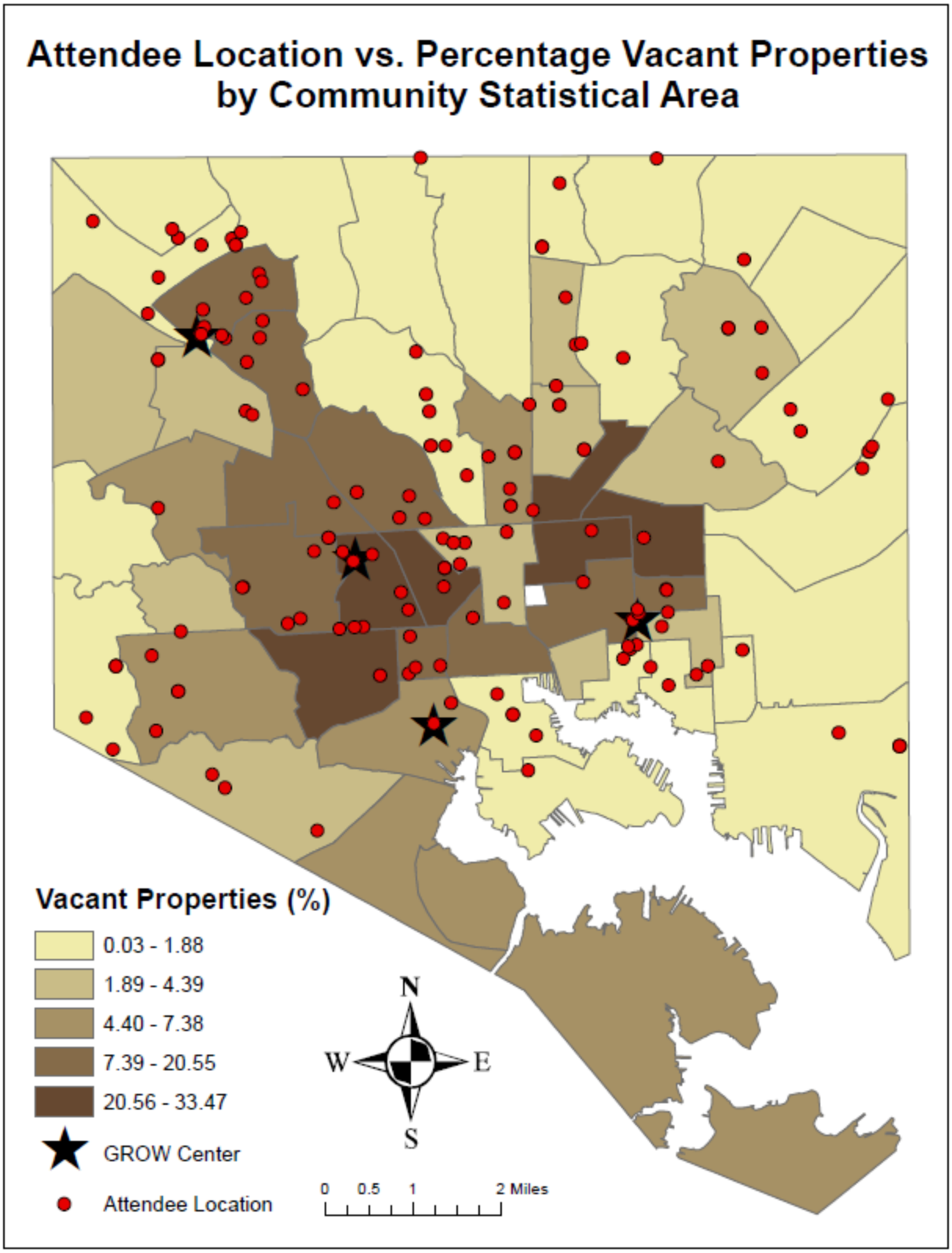
*Data from BNIA-JFI Vital Signs (Sustainability 2015 Dataset): https://bniajfi.org/vital_signs/data_downloads/

Map 3: (Spring 2018)



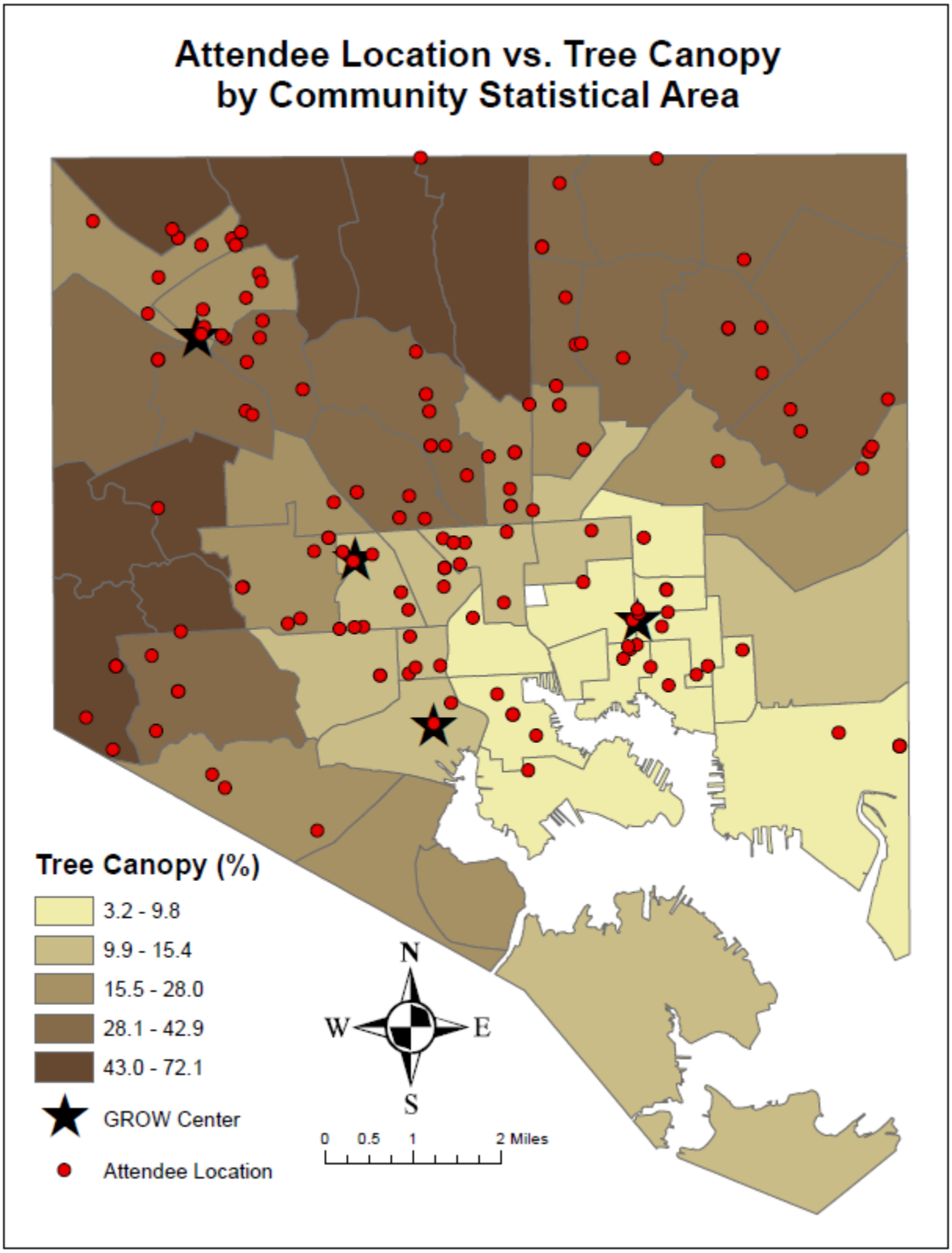
*Income data from BNIA-JFI Vital Signs (Census Demographics 2016 Dataset): https://bniajfi.org/vital_signs/data_downloads/

Map 4: (Spring 2018)



*Data from BNIA-JFI Vital Signs (Housing 2015 Dataset): https://bniajfi.org/vital_signs/data_downloads/

Map 5: (Spring 2018)



*Data from BNIA-JFI Vital Signs (Sustainability 2011 Dataset): https://bniajfi.org/vital_signs/data_downloads/

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