

# **COMMUNITY REPAIR EVENTS**

COMMON, BEST, AND BETTER PRACTICES FOR  
BUILDING COMMUNITY THROUGH REPAIR

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## Overview

Community Repair Events (CREs), including Fixit Clinics and Repair Cafés, are community supported events that provide free repair services and support for do-it-yourself fixers. To date, no research has been conducted and shared with the public to suggest best practices. This paper aims to capture common practices, highlight some of the best ones, and recommend suggestions for better practices based on a literature review, website scan, and an informal survey and follow-up interviews with Community Repair Event Coordinators.

This document is part of a larger study that aims to understand if Community Repair Events result in behavior and attitude shifts that lead to a higher likelihood of participants 1) choosing to attempt repairs on household items themselves, or 2) choosing to take those items to professional repair service instead of discarding them and purchasing new replacement items.

## Methodology

The research methodology included the following elements:

- **Literature review:** A scan of academic and popular media accounts of the CRE movement. The literature review revealed little academic writing analyzing CREs. One academic article discussed gender dynamics related to repair and another article provides an analysis of volunteer motivations. CRE websites generally included motivations for hosting CREs, event calendars, event descriptions, volunteer recruitment materials, and sometimes other links to other resources. An impressive number of videos describing the CRE movement were identified. No articles discussing program evaluations or community impacts were identified in the literature review;
- **Website scan:** A review of the websites belonging to organizations participating in this study (10 such organizations from across the US and Canada);
- **Questionnaire:** Representatives from all participating organizations completed an informal online survey consisting of 26 questions about their CRE offerings; and
- **Follow-up interviews:** Representatives from nine of the participating organizations took part in 60-minute follow-up interviews to help clarify any questions the research team had from their survey responses and to take a deeper dive into their CRE programs.

While this study may be the first formal research performed about CRE best practices, it is not meant to be presented as exhaustive or authoritative. Thousands of CREs exist throughout North America, South America, Europe, Asia, Africa and Oceania. The movement towards community repair is growing in popularity and more research may serve to confirm, deny or correct these findings.

### **Participating CRE Coordinators**

Kelly Bell	Repair2Reuse, Lane County, Oregon Waste Management
Alejandra Duarte	City of Austin, TX Fixit Clinic
Gene Homicki	West Seattle Fixers Collective
Lauren Gross	Repair PDX (Portland)
McKenzie Jones	City of Flagstaff, AZ Fixit Clinic
Nancy Lo	Hennepin County, MN Fixit Clinic
Paul Madger	Repair Café Toronto
Peter Mui	East Bay Fixit Clinic, Fixit Clinic Founder & Consultant
Jessica Ramey	Marion County, OR Repair Fair & Share
Peter Skinner	Repair Café Palo Alto

### **Project Funding**

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### **What is a Community Repair Event?**

Often called Repair Cafés or Fixit Clinics, Community Repair Events (CREs) are free events that bring people who need household items fixed together with repair enthusiasts and professionals to work on and hopefully repair their broken items. CREs date back to 2009 when Peter Mui held the first East Bay Fixit Clinic in Berkeley, CA and simultaneously, Martine Postma offered the first Repair Café in Amsterdam, NE.

CREs can include a wide array of item categories to be fixed, from toys and bicycles to electronics and power tools. CREs generally cite a 70% rate of successful repairs. And while not every item gets fixed, there's a good chance that they will and most participants will learn something about the way their item worked from the CRE experience.

## **CRE goals include:**

- Educating the public about the vast amounts of waste thrown away daily and the environmental and social impacts of throw-away culture ;
- Showing how repair can prevent much of that waste <sup>1</sup>;
- Revealing how industrial design can limit repairability <sup>2</sup>;
- Increasing access to repair services and do-it-yourself repair knowledge<sup>3</sup> ; and
- Demonstrating that repairing household items is a fun and viable option.<sup>4</sup>

## **Repair Cafés and Fixit Clinics -- what's the difference?**

Organizations offering CREs aim to change participants' attitudes and behaviors about repair and throw-away culture. They aspire to get participants questioning why many products lack durability and repairability, and provide access to skilled professional and hobbyist "fixers" or "coaches." While all CREs are designed to meet the particular needs of their communities and to fit within their organizers' capacity, they generally fit into one of two formats: Repair Cafés or Fixit Clinics. Though their goals and overall approach to providing repair services are the same, a nuanced difference in the philosophy and format of these events distinguishes their approaches from one another.

Essentially, Repair Cafés "give a person a fish" while Fixit Clinics aim to "teach a person to fish" (or at least make an individual feel comfortable casting a line). Repair Cafés offer participants the option of working on their projects collaboratively with a fixer to attempt the repair or to simply stay with their item while a fixer works on it for them. The Fixit Clinic approach emphasizes that the fixer acts more as a coach, enabling the participant to explore their broken item and supporting the participant as they attempt to fix it themselves.

The Repair Café approach may make events more accessible to a wider audience while leading to increased waste prevention. In contrast, given the high cost of professional repair services, the Fixit Clinic format might lead to longer-term behavior change by empowering participants to attempt repairs on their own. The Fixit Clinic format also allows events to run efficiently with a smaller group of volunteers, since one-on-one engagement isn't

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<sup>1</sup> "About - Repair Café." n.d. <http://www.repaircafe.org/about>.

<sup>2</sup> Peter Mui, interviewed by Anya Dobrowolski on the telephone, February 16, 2017.

<sup>3</sup> "Repair2ReUse." Accessed March 24, 2017. <https://sites.google.com/site/eugenerepair2reuse/>.

<sup>4</sup> "Repair Fair & Share." Marion County Oregon - Home. Accessed March 24, 2017. <http://www.co.marion.or.us/PW/ES/disposal/events/Pages/RepairFair.aspx>.

necessary throughout the entire repair. Choosing an approach and clearly communicating the format before offering events helps manage expectations for both volunteers and participants.

## Benefits and Barriers

CRE coordinators commented on the benefits and barriers to participation in CREs, as well as barriers to repair in general. The aggregated responses below reflect their observations of, and conversations with, participants as well as their personal experiences.

### Benefits of attending CREs:

- **Building community:** Creating new friendships, community connections, and working toward the common good; taking part in a fun community event; raising awareness for zero-waste programs; and growing partnerships between different organizations;
- **Self-sufficiency, confidence and alignment:** Being part of something that aligns with individual values; learning and sharing skills (including creative problem-solving); gaining permission -- both to try to repair items and also to let them go if they aren't fixable; and
- **Getting things fixed:** Getting items repaired; encouraging household cost savings; understanding our stuff more; encouraging repair as an option -- it works!

### Barriers to accessing CREs:

- **Logistical considerations:** Issues with locations, including transportation and parking; ease of finding a location that draws users; irregular event frequency and timing;
- **Building an audience:** Reaching an audience beyond the green choir; difficulty with marketing and outreach (could be related to small budgets); and
- **Day-of participation:** Participants wanting to bring large items (refrigerators, cars, etc); fear of breaking items that participants depend upon.

### General barriers to repair (professional services and do-it-yourself options):

- Cost of professional services;
- Lack of access to or knowledge of professional services;
- Fear and lack of knowledge of how to do DIY repairs;
- Ease of disposability and subsidized costs of new products that make them more affordable than repairing broken items; and

- Structural impediments such as design barriers, lack of easily-found replacement parts, or design that intentionally impedes repair.

## **Common and Best Practices for Community Repair Events**

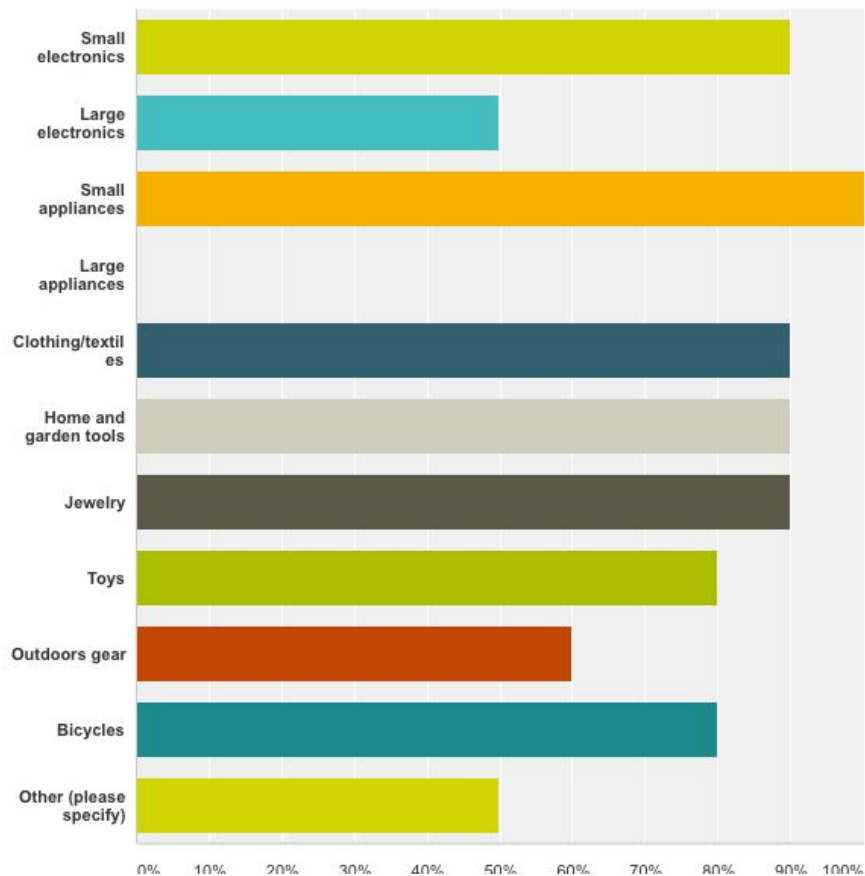
### **Event Organization**

#### ***Item Categories***

In an online questionnaire and follow-up phone interviews, CRE coordinators identified the types of items repaired during their events. The most common items were small appliances (10), small electronics (9), clothing/textiles (9), home and garden tools (9), jewelry (9), toys (8) and bicycles (8). Community repair events also commonly included outdoors gear (6) and large electronics (5). Responses to "other" included knife sharpening, small furniture, books, board games, and computers. Two respondents indicated that their only restriction was "large" or "oversize items," emphasizing that items should be easily carried or transported. The graph below illustrates coordinators' responses.

## What types of items do you accept at your events? (choose all that are appropriate)

Answered: 10 Skipped: 0



**Figure 1. Questionnaire responses regarding item categories accepted.**

Seven of 10 coordinators said they keep their events "general," by including several product categories. Repair Café Toronto offers targeted-category events, such as jewelry repair cafés or troubleshooting workshops, as a supplement to their monthly multi-category events.

Multi-category events allow more opportunity for engagement and buy-in from both volunteers and participants. Participants are less likely to wait six months to fix their toaster if small appliances repair or coaching are available infrequently. Likewise, volunteers get multiple opportunities to volunteer if scheduling for a single event does not work.

### **Creating community**

Most coordinators noted that one of the benefits of community repair events is the new bonds built between community members. One reason that CREs may inspire friendships

and camaraderie is because of the events' community-affirming atmosphere. Peter Mui of the organization Fixit Clinic suggests that Fixit Clinics should feel like “a party for the coaches that the public is invited to be part of.” Community repair events act as the parties' generous hosts, offering refreshments to volunteers and often to participants, as well. Repair Café Toronto even has volunteers baking treats onsite during their events. Some coordinators provide live music, offer event swag such as t-shirts and buttons to volunteers, and make personal introductions between participants and volunteers. At Fixit Clinics, coaches are encouraged to “float” around the room, promoting connections and cross-pollination of repair approaches that might not occur in a one-on-one event format. Fixit Clinics also encourage a blurring of lines between coach and participant, which discourages social hierarchies from forming. Encouraging volunteer fixers to ask one another for help on projects helped volunteers feel like they were part of a tighter-knit group, and coordinators view a sense of group membership as being an important part of fixers' and coaches' loyalty to CREs.

### ***Organizing participants and keeping them happy***

Making sure participants are engaged throughout their time at a CRE is a key part of the event's success. Event participants commonly wait for an extended period of time to see a fixer or to work with coaches. Most CREs allot 30-60 minutes for fixers to work on a given item, which means that later arrivals might not be seen for up to several hours (or at all), depending on volunteer availability. This can contribute to impatience and even dissatisfaction among event participants.

Encouraging participants to show up early, expect to wait, and plan to only have one item worked on per turn is recommended. Fixit Clinics provide online pre-registration, guaranteeing that participants will be seen during a designated timeslot, which helps to prevent longer waiting and has proven helpful in estimating the need for volunteers and material resources. Most CREs have a ticketing system so that participants are seen in the order in which they arrive. Toronto Repair Café separates items by category before assigning a number, meaning that each item category (textiles, small electronics, etc.) has a separate ticketing system. This system has proven successful in Toronto but their founder, Paul Madger, stressed in his interview that it is critical to communicate this system clearly to



participants to avoid confusion and frustration when they see a later-arriving participant with a different item type ahead of them.

Encouraging those waiting to wander around the event and observe other repair projects, as well as providing table activities to occupy kids and adults can help to stave off boredom and impatience. Two examples of fun options for table activities include puzzles and take-apart tables, where participants disassemble and explore already-broken items provided by the event coordinators.

## **Volunteer Coordination**

### ***Recruitment***

Coordinators shared their most successful volunteer recruitment strategies, which generally fell into the categories of local media, online, word-of-mouth, and connections with local volunteer organizations. Surprisingly, none of the study participants mentioned posting flyers as a recruitment strategy, although flyers are recommended by Repair Cafés International's *Organize Your Own Repair Cafés* manual and Fixit Clinic provides a flyer template for volunteer recruitment.

Local newspapers and television stations produced stories or shared calls for volunteers with their audiences. Although none of the participating coordinators mentioned it, advertising for volunteers in local papers is also an option. Most event coordinators employ online volunteer recruitment through social networks, email listservs and local newsletters (accomplishing outreach through their own organizations' channels along with neighborhood associations, partnering organizations and local government). Coordinators use Nextdoor.com and Facebook as their primary social media recruitment tools. Word-of-mouth strategies included engaging local volunteer groups, like the Master Recyclers in Lane County, Oregon, to help recruit volunteers using existing informal social networks, asking event participants to mention the events to friends, and having a CRE volunteer sign-up sheet available during related events. Coordinators also reach out to local volunteer recruitment organizations like United Way and to compatible community groups such as Makerspaces and informal tinkering clubs.

### ***Volunteer roles***

Volunteers are key to the success of community efforts, especially CREs. Five of the 10 study participants represented all-volunteer CRE providers. Offering a variety of ways to pitch in can help attract a wide array of skill sets and a diverse volunteer pool. Survey participants recruited volunteers to play the following roles in community repair events:

Fixers or coaches (10)	Check-in (1)	Dedicated web researcher (1)
Event hosts (7)	Marketing (1)	Bakers and food wranglers (1)
Organizers (5)	Web design (1)	Sewing and sewing machine instruction (1)
Registration (1)	Runners (1)	
Reception (1)	Set up/Tear down (1)	

These responses revealed that while the key human resources needed are fixers, hosts and organizers, assistance with other tasks can be helpful. "Registration," "reception," and "check-in" answers came in as comments in the "other" category and those duties might also fit within the role of "event hosts." The low numbers of volunteers performing event organization and pre-event services may be due to the presence of professional staff serving those roles in half of the organizations represented by study participants.

### ***Apprenticeship Programs***

The Repair Cafés events in Palo Alto and Toronto both offer volunteer apprenticeship programs in addition to the roles listed above. Palo Alto's program recruits college students studying product design and engineering to give them a firsthand look at the barriers to repairability and help them think about how to design for it in their future careers. The program requires an application and typically yields 12-15 apprentices per event. Peter Skinner, Repair Café Palo Alto's founder, says that the program also helps bring age diversity to their volunteer corps since many participants continue on as long-term volunteers after their day-long apprentice experience is over. Repair Café Toronto's apprenticeship program is less formal, providing on-the-job training for any would-be fixers. Apprentices in Toronto shadow fixers during the event so they can learn more about repair and become more confident when they join as volunteer fixers for future events.

### ***Training***

While eight coordinators reported that they provide some sort of volunteer training, the extent of the training varies in format and formality. Most trainings take place in person just

before the beginning of the event and have a casual atmosphere. One organization said their training seeks only to show due diligence to satisfy liability concerns and that they want to avoid having their volunteers "sucked into a half-day orientation." Repair PDX has offered volunteer trainings between events on an infrequent basis, although they were well-attended by both new and prior volunteers. Repair Café Toronto sends a concise volunteer manual to anyone who has signed up online as a volunteer. Some topics commonly covered in CRE trainings include house rules and safety instruction, event goals, volunteer expectations, logistics and participant flow, and participant management

### **Managing participant expectations**

Participant expectations should be considered in both the design of the event and in how it is marketed to the public. If the public expects to attend a community repair event for a free repair, they will have different expectations and attitudes towards the event than if they expect it to be a workshop-style learning experience. As mentioned above, Fixit Clinics and Repair Cafés often cite 70% successful repairs, so while it is likely that participants will walk out with a fixed item, some repairs may not be completed at the events. Fixit Clinic's tagline clearly articulates that items may or may not be fixed and that the event is an opportunity for participants to learn about their items: "Do-it-Together disassembly, troubleshooting, and repair. Open it up. See how it worked. Hopefully fix it." Repair Café International's tagline, "Toss it? No way!" may imply a guaranteed repair but those potential expectations are mediated by providing a set of "House Rules" that make it clear that successful repair is not a guarantee. Developing a descriptive yet snappy tagline and integrating house rules into liability waivers or posting them where they are easily seen can help set participant expectations before repairs are attempted.

### Repair Café International House Rules

- *The work carried out in the Repair Café is performed free of charge on a voluntary basis by the repair experts at hand.*
- *Visitors carry out the repairs themselves whenever possible, but repair experts on site can help if necessary.*
- *The fact that the repairs are being performed by unpaid volunteers reflects the allocation of risks and limitation of liability. Neither the organisers of the Repair Café nor the repair experts are liable for any loss that may result from advice or instructions concerning repairs, for the loss of items handed over for repair, for indirect or consequential loss or for any other kind of loss resulting from work performed in the Repair Café. The limitations set forth in these house rules shall not apply to claims declared justified on the basis of liability arising by virtue of applicable consumer protection legislation which cannot be lawfully superseded.*
- *A voluntary donation is greatly appreciated.*
- *Any use of new materials such as leads, plugs, fuses, ready-made kneebends or applications will be paid for separately.*
- *Visitors offering broken items for repair do so at their own risk.*
- *Experts making repairs offer no guarantee for the repairs carried out with their help and are not liable if objects that are repaired in the Repair Café turn out not to work properly at home.*
- *Repair experts are entitled to refuse to repair certain objects.*
- *Repair experts are not obliged to reassemble disassembled appliances that cannot be repaired.*
- *Visitors to Repair Café are solely responsible for the tidy removal of broken objects that could not be repaired.*
- *To cut down on unnecessary waiting times during busy periods, a maximum of ONE broken item per person will be examined. The visitor will join the back of the queue if there is a second item for repair.*

*Source: House rules - Repair Café. (n.d.). Retrieved from <https://repaircafe.org/en/house-rules/>*

## **Venue selection**

Coordinators' priorities for selecting venues can be aggregated into four broad categories: people, location, spatial characteristics, and amenities. In addition to these categories, organizers might also consider whether or not a given venue would be able to continue offering community repair events in the future.

### ***People***

Ideally, locations selected for community repair events enhance event success by providing access to a new audience of participants, volunteers or both. Some locations are even able to provide paid staff to help with event coordination or hosting.

### ***Location***

The coordinators surveyed offer their community repair events in a variety of settings, including: partnering non-profit organizations' event spaces; libraries; museums; community

centers and other governmental organizations' spaces; schools; community events with opportunities for tabling; churches; schools; makerspaces; and college and university campuses. Lauren Gross of Repair PDX mentioned having limited success with offering their Repair Cafés at commercial businesses because of space limitations.

When deciding between potential locations, it's helpful to consider ease of finding the location (including street visibility), ease of travelling to the location (including parking and transit accessibility), ease of stumbling upon a location, and neighborhood proximity so participants can return home to get parts or pick up more items to be repaired.

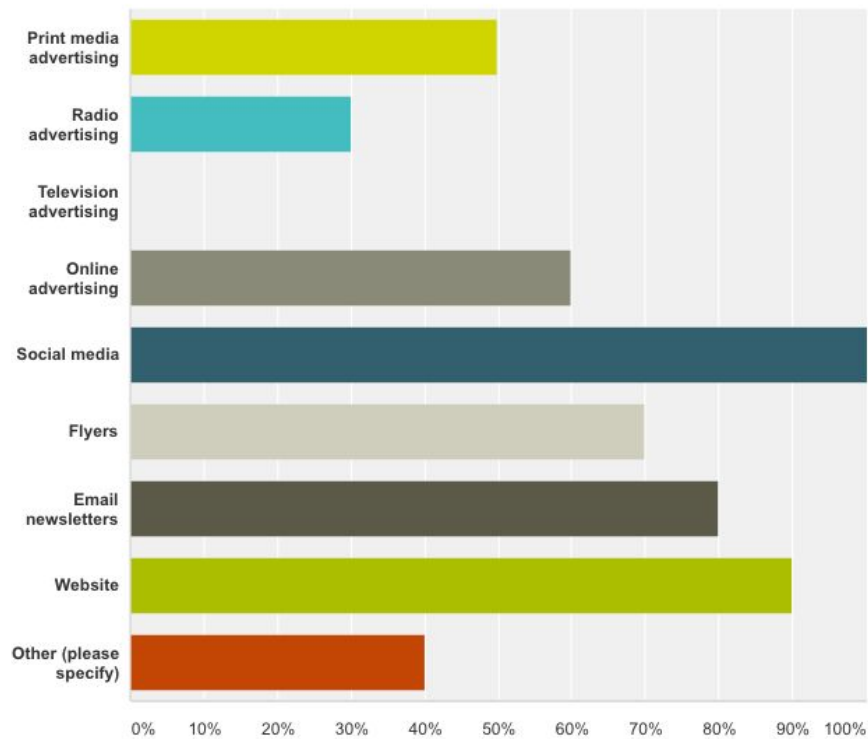
### **Event Promotion**

CRE coordinators promote their events using a variety of tools to entice participants. Digital outreach includes websites, email newsletters, other online advertising, and social media. Nine of 10 respondents have websites, eight use email newsletters and six use other online advertising. All community repair events use social media. A scan of participant's websites and social media outlets found that eight use Facebook to promote their organizations and all but one of those used Facebook Events to reach potential participants. Nine publicize events via Twitter and four via Instagram. However, not all Twitter and Instagram promotion came from accounts created by the event organizers. Some were simply volunteers or other admirers using hashtags to highlight the events in their own posts.

More traditional methods of outreach used include print advertising, flyers, and community calendars provided by local media outlets. Three participants consider the event venues to be the primary providers of event promotion, and one uses press releases to obtain coverage from local media outlets.

## How do you promote your repair events? (open ended)

Answered: 10 Skipped: 0



**Figure 2. Questionnaire responses regarding promotion methods.**

### ***Spatial Characteristics***

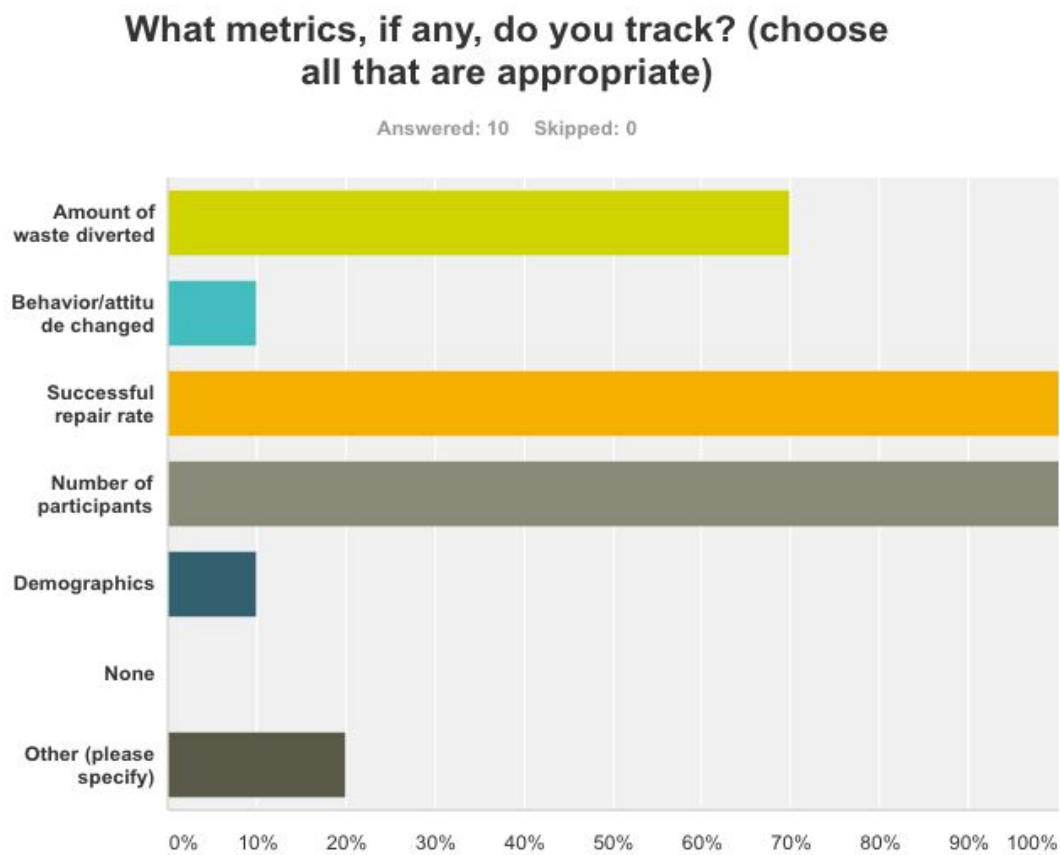
Coordinators report that the following spatial characteristics support successful community repair events:

- An open floor plan so tables and chairs can easily be rearranged;
- Sufficient space for the expected number of volunteers and participants;
  - One participant suggested space for 20 tables;
- Good lighting, both electric and daylight;
- Space for registration and demonstration areas;
- Smooth, clean floors so it is easy to find dropped parts;
- Dry conditions and protection from rain;
- Primarily interior space although access to outdoor space is a bonus; and
- Good ventilation.

## Amenities

The coordinators surveyed require the following amenities to be onsite, ideally provided by the hosting venue:

- High speed wifi internet access sufficient to support several streaming videos on separate devices simultaneously;
- Durable, easy-to-clean work surfaces;
- Lots of electrical outlets on different circuits to avoid blowing fuses;
- Access to water;
- Tables & chairs; and
- Flipcharts and/or whiteboards.



**Figure 3. Questionnaire responses regarding metrics for success.**

## Program Evaluation

Clearly defined, relevant metrics and consistent data collection will help guide the direction of community repair events. Having data to support program success is also important when approaching potential funders. When asked what metrics they use and how they collect data, 10 out of 10 CRE coordinators responded that they track the number of event participants and successful rate of repair, while seven of 10 also track the amount of waste diverted (measured by weight or number of items). The graph below shows the spread of responses. "Other" responses did not offer other metrics, but rather spoke to methodology for data collection.

Predictably, no organizations collected data on event participants' behavior or attitude shifts. In follow-up interviews, three coordinators specifically mentioned that they asked for feedback on improving events. One of those interviewees, when asked about their positive questionnaire response to measuring behavior or attitude change, conflated their data on feedback for improving events with measurement of behavior or attitude change.

Unfortunately, satisfaction with the event is not an adequate indicator of attitude shifts or future behavior changes.

Coordinators most commonly collected data using entry and exit surveys, and by counting and weighing repaired items. Participant interviews, which were only used by one study participant, were used to solicit satisfaction with the events. Volunteers collected data about amounts of waste diverted, successful repair rate, and the number of participants at events.

Several interviewees expressed that data collection was one of their major sticking points. The lack of standardized data collection methodology among CREs, as well as the general busyness of the events, may contribute to their lack of clear metrics. Another factor may be that no specific volunteer or staff roles for data collection seem to be designated. Data collection, however, can be included with other volunteer roles. Creating a standardized data collection method with clear instruction for volunteers or staff is mandatory to developing useful and consistent metrics for CRE's both during events and when collecting follow-up longitudinal data.





## **Liability & Risk Management**

Coordinators address liability and risk management in a variety of ways. Seven of 10 have event *participants* sign liability waivers. Five of ten respondents have *volunteers* sign liability waivers. Four of ten respondents have *both* participants and volunteers sign liability waivers. Two interview respondents also require their venue owners to craft extra waivers that release the venue from liability in addition to the presenting organization. One respondent does not use liability waivers in any form. Two CRE presenters also use photo, audio, and/or video releases. Only one coordinator surveyed called out carrying liability insurance specifically, but it is likely that any governmental or tax-exempt nonprofit organization offering community repair events would retain a liability insurance policy.

## **Funding & Partnerships**

Coordinators' estimates of the cost to host repair events, including paid staff time, varies widely, ranging from \$50 to \$2,900 per event. The highest costs reported were related to staff time to coordinate events. Only government agencies paid staff for events. Government agencies, nonprofit and grassroots presenters sometimes obtained in-kind donations of staff time offered by the venues donating space for repair events. Other expenses cited include advertising/outreach, parts and tools, and refreshments. Because materials costs for CREs are relatively low, nonprofit and grassroots organizations can offer the events at low cost by offsetting staff time with volunteer hours.

Funding sources for community repair events often relate to the type of agency offering them, although seven of 10 coordinators received government funding to some extent. If a government agency was the presenting organization, funds generally came from the presenting departments' budgets. Two nonprofit and grassroots organizations received funding in the form of grants or sponsorships from local government and other mission-aligned nonprofits. Both grassroots organizations, Repair Café Toronto and RepairPDX, relied almost exclusively on tip jar donations for their annual operating costs along with some in-kind donations for event promotion and food provided through partnerships with local businesses, government organizations and event venues. The City of Flagstaff, Palo Alto Repair Café, and Repair Café Toronto have all partnered with hardware stores to receive discounted or free parts and/or delivery of parts and supplies. All CRE coordinators found venue donations for their events -- one of Fixit Clinic's priorities in venue

selection. To broaden CREs' reach, Repair Café Toronto organizers are encouraging other local organizations to offer their own community repair events. As these programs grow, sponsorships from mission-aligned businesses, foundations and nonprofits can provide additional funding to bolster the growth and financial sustainability of community repair events.

## Recommendations for Better Practices

The sections above highlighted some of the common and best practices currently employed by CRE coordinators participating in this study. The recommendations below draw on and build upon these practices.

- 1) Define specific desired outcomes.** Clearly defining desired outcomes can have major impacts on program design. For example, if a desired outcome is for participants to feel comfortable trying repairs on their own at home, then their level of involvement in the repair should be higher than if the goal is to simply divert waste from landfills. On the other hand, if the goal is to make participants more likely to use repair businesses, coordinators may choose to provide resource lists or coupons to repair services and may seek out more repair professionals to serve as fixers or coaches during events. While multiple goals or outcomes can inform program design, if they are unclear, it can be difficult to plan CREs and choose appropriate metrics to evaluate them.
- 2) Choose metrics carefully.** Like desired outcomes, program evaluation can steer the direction of programming decisions. For example, if a desired outcome is increased likelihood that participants will attempt repairs in the future, measuring the amount of waste diverted may be irrelevant. The metrics selected are likely to be closely linked to the goals of the organization offering the CRE, but they must also be linked to desired programmatic outcomes.
- 3) Offer multi-category community repair events.** CREs offering opportunities to repair items of many types give more opportunities for a variety of participants and volunteers to get involved.

- 4) Consider offering a hybrid event format.** Repair Café and Fixit Clinic formats provide distinct approaches for community repair events. However, an event that hybridizes the approaches -- i.e., a free repair service combined with a "do-it-together" workshop -- could appeal to a wider range of participants and draw larger crowds.
- 5) Manage participant expectations.** Consider using event pre-registration to guarantee spots to participants. Make sure the registration process is clear. Post sets of house rules in hard-to-miss locations. In promoting events, be sure promoters and the public understand the nature of the event. Is it a free repair service, an educational opportunity, or both?
- 6) Keep participants and volunteers busy.** Provide activities, such as puzzles and take-apart tables, to keep participants occupied on busy days. Keep extra projects on-hand for fixers and coaches to work on during slow days. Partnering with a lending library, such as a tool library, to keep a stock of projects available is a great way to be sure that projects are available for fixers and helps other local organizations.
- 7) Seek partnerships and sponsorships.** This study reveals that community repair events could better utilize local partnerships and business sponsorships. The predominant partnerships are for venue use and promotion. Two contributing factors may be: 1) government agencies running CREs may already have funds to pay for coordinators and supplies; and 2) all-volunteer programs may lack the time needed to cultivate partnerships and sponsorships. Nevertheless, community partnerships and business sponsorships can help spread the word, and the work, in the long run by providing food, promotional opportunities, discounted supplies, and financial donations -- all of which contribute to CREs' success and long-term sustainability.

## References

"About - Repair Café." n.d. <http://www.repaircafe.org/about>.

Alejandra Duarte, interviewed by Anya Dobrowolski on the telephone, February 14, 2017.

Charter, Martin and Scott Keiler. 2014. "Grassroots Innovation and the Circular Economy: A Global Survey of Repair Cafés and Hackerspaces"  
<http://www.research.ucreative.ac.uk/2722/1/Survey-of-Repair-Cafes-and-Hackerspaces.pdf>.

"City of Flagstaff Official Website - Fix-it Clinic." City of Flagstaff Official Website. Accessed March 24, 2017. <http://www.flagstaff.az.gov/index.aspx?NID=3231>.

"Fixit Clinic | AustinTexas.gov - The Official Website of the City of Austin." Home | AustinTexas.gov - The Official Website of the City of Austin. Accessed March 24, 2017. <https://www.austintexas.gov/event/fixit-clinic>.

"Fixit Clinic." n.d. <http://fixitclinic.blogspot.com>.

"Fix-It Clinics | Hennepin County." Hennepin County, Minnesota. Accessed March 24, 2017. <http://www.hennepin.us/residents/recycling-hazardous-waste/fix-it-clinics>.

"Home - Repair Café." n.d. <http://www.repaircafe.org>.

"House rules - Repair Café." n.d. <https://repaircafe.org/en/house-rules/>.

Jessica Ramey, interviewed by Anya Dobrowolski on the telephone, February 13, 2017.

Kelly Bell, interviewed by Anya Dobrowolski on the telephone, February 13, 2017.

Lauren Gross, interviewed by Anya Dobrowolski on the telephone, February 13, 2017.

McGRANE, SALLY . "An Effort to Bury Throwaway Culture One Repair at a Time." New York Times (New York, NY), MAY 8, 2012.  
<http://www.nytimes.com/2012/05/09/world/europe/amsterdam-tries-to-change-culture-with-repair-cafes.html>

McKenzie Jones, interviewed by Anya Dobrowolski on the telephone, February 16, 2017.

Muñoz, Pablo and Boyd Cohen. "Sharing cities and sustainable consumption and production: towards an integrated framework." The Journal of Cleaner Production, 134, Part A. 15

October (2016): 87–97.

[https://www.researchgate.net/publication/280386827\\_Sharing\\_Cities\\_and\\_Sustainable\\_Consumption\\_and\\_Production\\_Towards\\_an\\_Integrated\\_Framework](https://www.researchgate.net/publication/280386827_Sharing_Cities_and_Sustainable_Consumption_and_Production_Towards_an_Integrated_Framework).

Nancy Lo, interviewed by Anya Dobrowolski on the telephone, February 15, 2017.

Paul Madger, interviewed by Anya Dobrowolski on the telephone, February 15, 2017.

Peter Mui, interviewed by Anya Dobrowolski on the telephone, February 16, 2017.

Peter Skinner, interviewed by Anya Dobrowolski on the telephone, February 16, 2017.

"Repair Café Toronto – Toss it away? No way!" n.d. <http://repaircafetoronto.ca/>.

"Repair Fair & Share." Marion County Oregon - Home. Accessed March 24, 2017. <http://www.co.marion.or.us/PW/ES/disposal/events/Pages/RepairFair.aspx>.

Repair PDX. Accessed March 24, 2017. <http://repairpdx.org/>.

"Repair2ReUse." Accessed March 24, 2017. <https://sites.google.com/site/eugenerepair2reuse/>.

Rosner, Daniela K. "Making Citizens, Reassembling Devices: On Gender and the Development of Contemporary Public Sites of Repair in Northern California." *Public Culture*, 26, no. 1 (2014) 72: 51-77. [http://people.ischool.berkeley.edu/~daniela/files/Rosner\\_Public\\_Culture.pdf](http://people.ischool.berkeley.edu/~daniela/files/Rosner_Public_Culture.pdf).

Tdarci. 2012. "Springs, Spools, and Power Cords—Getting Real at the FixIt Clinic." East Bay Mini Maker Faire (blog), September 16. [www.ebmakerfaire.wordpress.com/author/tdarci](http://www.ebmakerfaire.wordpress.com/author/tdarci).

Uchitelle, Louis. 2012. "A Nation That's Losing Its Toolbox." *New York Times*, July 21.

West Seattle Fixers Collective | Fixing the World (or at Least West Seattle). Accessed March 24, 2017. <http://www.wsfixers.org/>.