

Image Sources: Rockville Science Center and Station North Tool Library

Shared Tools, Stronger Communities:

How Tool Lending Programs Advance Environmental, Equity, and Economic Goals in Montgomery County

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About the Fellow



Sarah Hoffman is an incoming secondyear Master of Community Planning student at the University of Maryland. Her primary background and experience are in education and youth engagement, serving in three AmeriCorps education service programs, with additional interests in food access and sustainability. She has previously served as a research assistant for the National Center for Smart Growth and for the Stormwater

Infrastructure Resilience and Justice Lab. During her first year of graduate school, Sarah has also proudly supported a built-environment after-school program, worked as a teaching assistant for a food education program, and worked weekly at Takoma Park Farmers Market. It is her dream to use urban planning as a conduit to foster joy, creativity, and empowerment among youth and broader communities. Sarah was born in Japan, grew up in Northern Virginia, and earned a double degree in Political Science and Criminology from The Ohio State University.

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Executive Summary

Tool lending programs—including tool libraries, libraries of things (LoT), and tool banks—are initiatives in which patrons can borrow tools at little to no cost. The history of these programs originates in the 1940s due to economic hardship and has since evolved to incorporate values of environmental sustainability and equitable access to resources. While tool lending programs vary in their structure and operations, their main characteristics are:

- Operate as a nonprofit.
- Rely on volunteers and donations.
- Charge an annual membership fee.
- Run additional programming to supplement tool lending.

In recent history, Montgomery County has been home to three tool lending programs. Two previous programs in Takoma Park and through Montgomery County Public Libraries have since closed. The only operating tool lending program is the Rockville Science Center Makerspace and Tool Library (RSC Tool Library). The RSC Tool Library is currently looking to relocate to a larger space to accommodate their growing collection of tools and to allow for bigger events and classes.

Tool lending programs were found to promote the County's objectives of environmental responsibility, economic vitality, and social equity through several mechanisms (**Table 1**).

Table 1: Summary of the Impacts of Tool Lending Programs

Objective	Mechanism	Description
Environmental responsibility	Material reuse and waste reduction	 Maximize tool use compared to individual ownership Extend the life of tools Promote waste reduction through material sharing, reuse, and repair programs
Environmental responsibility	Climate change and disaster resilience	 Support disaster response, recovery, and preparation by providing tools, equipment, and personnel to communities Support stormwater management projects.
Economic Vitality	Business and entrepreneurship support	 Lower barriers to entry for aspiring entrepreneurs Serve as spaces of innovation Assist with placemaking initiatives
Economic Vitality	Education and skill development	 Housed within or are partnered with educational institutions Offer classes for various skills and projects
Economic Vitality	Cost savings	Save patrons money on home repair and other projects
Social Equity	Reducing barriers to tool access and skill development	 Enable everyone to access tools and knowledge Offer targeted supports and programming for marginalized and underrepresented populations
Social Equity	Support for nonprofit and community organizations	Save nonprofit partners money on tools, allowing for additional spending on staff and services
Social Equity	Practical community development	 Evolved into vibrant community gathering spaces Bring social and practical benefits Facilitate intergenerational relationships

Montgomery County has various opportunities to become more involved in tool lending programs. An evaluation across five criteria (affordability, timeline, geographic accessibility, community involvement, and equity outcomes) identified the three best recommendations (**Table 2**).

Table 2: Summary of Three Recommendations

Recommendation	Description
Conduct a community need and interest assessment	 Identify interest in the program and desired tool types and programming across populations and geographies Inform the expansion or creation of tool lending services
Explore mobile or modular options in partnership with RSC Tool Library	 Tool inventory can be moved around in a van or portable container. Maximizes accessibility and reach.
Run repair cafe events in partnership with RSC Tool Library	 Events in which community members can bring in broken items to be repaired with the help of volunteers. Could be hosted throughout the County at various facilities on a regular basis Could coincide with other waste reduction and recycling efforts.

Montgomery County has a unique opportunity to partner and invest in a valuable community asset, the RSC Tool Library. A partnership would support the growth and expansion of the tool library, broadening shared access to tools and knowledge and delivering environmental, economic, and equity benefits for the County.

Introduction



A group of patrons in Station North Tool Library in Baltimore City Image Source: Station North Tool Library

In Baltimore City, the ability to borrow tools has enabled residents to develop skills, start businesses, maintain green spaces, repair and upgrade their homes, teach new skills, and build community. Station North Tool Library (SNTL) in Baltimore is a nonprofit tool lending program that provides borrowing access to a wide range of tools and hands-on classes that teach patrons how to use these tools. SNTL demonstrates the opportunities for tool lending programs to generate tangible benefits for patrons and their communities

Definitions

Tool lending programs include three types of tool lending models: libraries of things (LoTs), tool libraries, and tool banks.² **LoT** is the larger umbrella term for a space or organization that extends the library concept from lending books to other items, including any equipment, tools, or

¹ Station North Tool Library. "Stories." Station North Tool Library, 2015.

² For ease of writing, the term "tool lending programs" will be used throughout the paper to refer to all three models, unless otherwise specified.

goods.³ Within LoTs are **tool libraries**, a type of LoT that focuses specifically on tools, whether they be mechanical or power tools. **Tool banks** are a subset of tool libraries, but rather than loaning out tools to individual patrons, they loan out tools to community-based organizations, nonprofits, and other charitable groups.⁴

A related and often co-located type of program are makerspaces. A **makerspace** is a collaborative and communal workspace for people to create, learn, and share by utilizing a variety of tools, technologies, materials, and other resources. One interviewed stakeholder helped explain the difference between makerspaces and tool lending programs: the former allows patrons to "dine-in" and use tools, while the latter allows patrons to take tools "to-go" and use them elsewhere.

Research Questions

This paper will explore two main research questions:

- 1. How do tool lending programs promote Montgomery County's goals of environmental responsibility, economic vitality, and social equity?
- 2. What opportunities are available for the Montgomery County Council to leverage its funding, legislative, and programmatic authority to support and partner with tool lending programs?

The three goals of environmental responsibility, economic vitality, and social equity are cited from Montgomery Park's sustainability plan and align with *Thrive Montgomery 2050's* outcomes across environment, economy, and equity.⁶

³ Baden, Denise, Ken Peattie, and Adekunle Oke. "Access over Ownership: Case Studies of Libraries of Things." Sustainability 12, no. 7180 (2020).

⁴ ToolBank USA. "Our Story," May 2, 2025.

⁵ Xavier University. "Makerspace: Makerspace for Education," 2023.

⁶ <u>Hickman, Kayla, and Adrienne Thomas. "Fiscal Year 2023-2027 Sustainability Plan." Montgomery Parks, 2022.; Montgomery Planning. "Thrive Montgomery 2050." Montgomery Planning, March 12, 2025.</u>

Methodology

Four main data sources are utilized in this report: 1) stakeholder interviews, 2) academic literature, 3) annual reports of tool lending programs, and 4) reports from Montgomery County.

First, 12 stakeholder interviews were conducted with 11 individuals (see Appendix, *Table A1*). Those interviewed included tool lending program employees and Montgomery County government employees in various related offices and departments. Stakeholders were contacted via email and interviews were conducted in-person, over the phone, and in virtual meeting rooms. References to information shared in interviews will be indicated by a parenthetical citation of the interviewed organization (see Appendix, **Table A1**).

Second, a literature review was conducted by searching relevant terms—such as "tool libraries" and "library of things"—on the University of Maryland library database and Google Scholar.

Annual reports from established tool lending programs reviewed to quantify the engagement, demographics, and impact of tool lending programs across the country (see Appendix, **Table A2**). In addition to annual reports, one toolkit from Shareable—a nonprofit actively involved in tool lending programs—was included, serving as a comprehensive guide for those interested in starting or growing a tool lending program in their community.

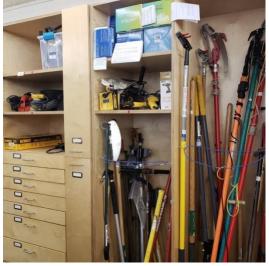
Finally, Montgomery County reports were reviewed to understand the current state, trends, and needs in the County, specifically regarding the environment, equity, and economy (see Appendix, **Table A3**). Additional online resources are used throughout the report.

Overview of Tool Lending Programs

History

The formal inception of tool lending programs began during World War II, with community members in Grosse Pointe, Michigan responding to resource shortages by pooling together tools and resources to borrow from each other. Originally operated by the Grosse Pointe Rotary Club, the tool library is now operated under the Grosse Pointe Public Library and remains in existence to this day.⁷

Tool lending programs experienced



Available hand tools at Grosse Pointe Public Library in Michigan Image Source: Grosse Pointe Public Library

a significant wave of growth during the 1970s, with several dozen opening across the country to "help act as urban revitalization and job creation programs". The most prominent tool lending program that opened during this period was the Berkeley Tool Lending Library in Berkeley, California, which opened in 1979 with \$30,000 from a federal Community Development Block Grant. This program remains in operation today, however other programs nation-wide faced several challenges that led them to close, including logistical difficulties of manually keeping track of inventory, the rise of consumer culture, and the increase of cheap products

made overseas.9

⁷ Hamilton, Samantha. "What's Mine Is Yours: The History of U.S. Tool-Lending Libraries." SJSU School of Information Student Research Journal 11, no. 2 (2021).

⁸ Llewellyn, Tom. "How Libraries of Things Build Resilience, Fight Climate Change, and Bring Communities Together." Shareable, April 17, 2019.

⁹ Ibid.

A second wave for tool lending programs occurred during the 2000s in the wake of the global financial crisis and the implementation of cloud-based software. During this time, tight budgets due to the struggling economy meant that it made more sense for people to borrow for cheaper. Additionally, cloud-based software, such as myTurn, has allowed libraries to keep better track of inventory and increase convenience for patrons using tool lending programs. 11

Since the start of the COVID-19 pandemic, interest in tool lending programs has grown again due to trends of self-help, do-it-yourself, and maker movements and the continued rise of platforms such as YouTube and Etsy. Additionally, this growth may also be a response to the uncertain post-pandemic economy, more compact living, and increased interest in new modes of consumption. Overall, interest in tool lending programs tends to align with periods of economic uncertainty and awareness of environmental and social issues (**Table 3**).

Table 3: History of Tool Lending Programs

Period of	Notable Programs	Motivation:	Motivation:	Motivation:
Growth		Environment	Economy	Equity
1940s	Grosse Pointe Public Library	No	Yes	No
1970s	Berkeley Tool Lending Library, Columbus Tool Library	Yes	Yes	Yes
2000s-	Richmond Grows Seed Lending	No	Yes	Yes
2010s	Library, Station North Tool			
	Library			
2020s	Chicago Tool Library, PVD	Yes	Yes	Yes
	Things			

¹⁰ Ibid.

¹¹ Hamilton, "What's Mine Is Yours".

¹² Lynch, Nicholas. "Borrowing Spaces: The Geographies of 'Libraries of Things' in the Canadian Sharing Economy." Tijdschrift Voor Economische En Sociale Geografie 114, no. 2 (2023).

¹³ Söderholm, Jonas. "Borrowing Tools from the Public Library." Journal of Documentation 72, no. 1 (2016).

Operations

Formation

Tool lending programs are most often formed by communities in response to specific community needs or desires and start as bottom-up, volunteer commitments (**Table 4**).¹⁴

Table 4: Formation of Tool Lending Programs

Program	Formation		
Station North Tool Library	 Started as a "Sharpening Cart", a service to sharpen knives and scissors for free Wanted to start conversations about "what got in the way of people maintaining their homes, their surroundings, or even just having fun learning to make 'stuff'".15 		
Greenbelt Makerspace Cooperative Tool Lending Library	Neighborhood residents interested in tools and equipment found each other		
DC Tool Library	Employee of the DC Department of Parks and Recreation was informally loaning out tools to gardeners		
RSC Tool Library	 Opened as a complement to the makerspace. Current manager of the tool library has a background in environmental sciences and was looking for a tool library in Montgomery County to save money (RSC). 		

¹⁴ Ameli, Najine. "Libraries of Things as a New Form of Sharing. Pushing the Sharing Economy." The Design Journal 20, no. 1 (2017).

¹⁵ Station North Tool Library. "Annual Report." Station North Tool Library. Station North Tool Library. 2024.

These examples suggest that county partnerships with tool lending programs could be most effective when they recognize and build upon grassroots energy.

Organizational Status

The organizational status of tool lending programs varies widely and can impact funding opportunities and streams, such as eligibility for grants and consistency of funding from local jurisdictions. ¹⁶ Broadly, programs are categorized either as free-standing or within the local government. Free-standing programs can be registered nonprofits, cooperatives, fully grassroots, or for-profit companies. A 2023 survey of 82 LoTs worldwide found that almost three-quarters are nonprofits. ¹⁷ Within the local government, tool lending programs are most often housed within the public library system given the similarity of models. ¹⁸

Missions and Values

Most free-standing tool lending programs will adopt a specific mission, often related to issues of environmental sustainability, inclusivity, and social justice. ¹⁹ Locally, Baltimore ToolBank's mission is to serve and empower community organizations by providing tools, equipment, and expertise, while DC Tool Library's mission is to provide residents equitable access to tools to empower them to contribute to their communities (BTB and DCTL). When housed within a government department, such as the DC Public Libraries (DCPL), the program is less likely to have explicit missions (DCPL). ²⁰ In fact, patrons seem to be more motivated by practical considerations rather than any sort of higher cause or ideology. ²¹

¹⁶ Lynch, "Borrowing Spaces".

¹⁷ Shareable. "The State of Libraries of Things 2024." Shareable. Shareable, 2024.

¹⁸ Llewellyn, "How Libraries of Things".

¹⁹ Baden et al., "Access over Ownership".

²⁰ Cohn, Sarah B. "Lending Seeds, Growing Justice: Seed Lending in Public and Academic Libraries." The Library Quarterly: Information, Community, Policy 94, no. 2 (2024).

²¹ Söderholm, Jonas. "Tool Lending Librarianship." Journal of Librarianship and Information Science 50, no. 4 (2018).

Tool Inventory, Acquisition, Management, and Maintenance

Items included in tool lending programs range from gardening, hand, and power tools to kitchen, audio-visual, and computer tools. Having a wider range of items can increase the range of potential patrons and reduce the chance of disappointment, however, it also requires more staff knowledge and the availability of adequate storage.²² For example, the Baltimore ToolBank has a narrowly focused tool inventory, collecting those geared toward volunteerism (BTB). Some programs conduct community needs and interest surveys to understand the tools that users want or need.²³ Baltimore ToolBank's inventory is influenced by what community organizations want, and the Greenbelt Makerspace Cooperative Tool Lending Library maintains a wish list for requested items (BTB and GMC).

Tools are acquired mainly through donation or purchasing, with over a third of surveyed LoTs obtaining their tool inventory through donation.²⁴ Donations provide a free method to build tool inventory, support material reuse, and engage the broader community. However, they require the adequate staff to sort and evaluate donated tools given their variable quality.²⁵ Government-run programs may be constrained by the rules of local government: the new tool library through DCPL is almost entirely built from new purchases as DCPL has rules about donations (DCPL).

Most tool lending programs manage their tool inventory through online lending software programs, the most popular of which is myTurn (DCPL).²⁶ These software programs allow patrons to view the tool inventory, and, if desired, make a reservation. However, the DC Tool Library described

²² Baden et al., "Access over Ownership".

²³ Shareable, "The State of Libraries".

²⁴ Ibid.

²⁵ Baden et al., "Access over Ownership".

²⁶ myTurn is a cloud-based software platform that helps organizations track and loan out products.

how a reservation system can be difficult to manage as it is dependent on people returning items on time. Therefore, they found that a first-comefirst-serve model better fit their desires and put less pressure on people to return items on time (DCTL).

Maintaining and repairing tools are critical for a successful tool lending program. Over 69% of surveyed LoTs report the use of volunteers to maintain tools, including several of the interviewed tool lending programs: the Baltimore ToolBank, the Greenbelt Makerspace Cooperative Tool Lending Library, and the DC Tool Library. ²⁷

Membership and Fee Systems

There are several options available for membership and fee systems:

- **Systems:** no membership system, membership open to anyone, membership open to residents of a certain geography, or shared membership with a public service system.
- **Members:** individuals, community organizations, nonprofits, businesses, or government agencies.
- **Fees:** no fees, fees based on the individual tool being borrowed, monthly or annual membership fees, or pay to borrow with time volunteered or through donations.

Having some sort of membership system can help boost visitation and establish a core base of patrons (RSC). Fewer than a fifth of surveyed LoTs charge nothing for tool lending.²⁸ The Baltimore ToolBank found that when tools were free to borrow, tools would get abused and returned on time less frequently (BTB). The most common fee option is an annual membership fee, with many utilizing a sliding scale membership fee based on the patron's income.²⁹ The Greenbelt Makerspace Cooperative Tool Lending Library suggests members to pay slightly under a dollar for every

²⁷ Shareable, "The State of Libraries".

²⁸ Ibid.

²⁹ Ibid.

thousand dollars of their income for their annual membership dues (GMC). Some programs also offer scholarships for lower-income households.

Staffing

Many tool lending programs rely heavily or entirely upon volunteers: almost half of all surveyed LoTs had no paid staff.³⁰ Volunteers help lower costs for programs, support tool maintenance, and engage the broader community. The Baltimore ToolBank only has three paid-staff members and host volunteer projects regularly to help with tool maintenance (BTB). However, over relying on volunteers can create challenges for the program. DC Tool Library identified volunteer retention as a major challenge for the program, and the Greenbelt Makerspace Cooperative Tool Lending Program described difficulties with coordinating volunteers (DCTL and GMC).

Location and Space

Surveyed LoTs identified the choice of location as one of the most crucial decisions, and those interested in opening an LoT are suggested to think of community needs, community use, and transportation options when locating their library.³¹ To address accessibility challenges, some programs have adopted a mobile and modular approach, with one Canadian LoT creating a mobile version that can drop-off items at one's door and another managing multiple sites in "reused shipping containers that can be relocated to fit the accessibility challenges of local communities".³²

LoTs operate through a wide variety of spaces including shipping containers, storefronts, indoor shopping centers, mobile trucks or vans, public libraries, community centers, and churches. If developed or managed

³⁰ Ihid

³¹ Frick, Leanna, Paige Kelly, and Tom Llewellyn. "The Library of Things Toolkit." Shareable, Shareable, 2024.

³² Ibid, 167.

through the government, the program may share space with public facilities. Even free-standing programs can partner with public facilities for space: PVD Things—a cooperative tool library in Providence, Rhode Island—houses some of their tools through the public library branches to increase accessibility to non-members.³³ Financial constraints mean that tool lending programs often rely on free or discounted space to operate. The Greenbelt Makerspace Cooperative Tool Lending Library initially operated out of a former dry cleaner for free in exchange for helping to clean up and repurpose the facility (GMC).

Programming

Ninety-one percent of surveyed LoTs provide services other than tool lending.³⁴ These services include hands-on education programming, repair events, safety classes, events around specific projects or trades, job training, material swaps, service events, and social events. A major highlight of the Greenbelt Makerspace Cooperative Tool Lending Library is the repair cafe, a quarterly event in which community members can bring broken items into the library to learn how to repair them with volunteers (GMC). Although not a tool lending program, the Silver Spring Time Bank described their material swap and skill-sharing events, during which patrons can swap various materials with others and provide advice and give lectures on skills (SSTB). Programming can also help bring in significant amounts of revenue for tool lending programs when there are fees for programs.³⁵

Funding and Expenses

Funding for tool lending programs tend to be a mix of grants, donations, and fees through membership, programming, and tool lending.³⁶ While grants are highly valued by programs, they can place

³³ Shareable, "The State of Libraries".

³⁴ Ibid.

³⁵ Ihid

³⁶ Baden et al., "Access over Ownership".

additional stress on staff due to the application process and can limit the capacity of programs to explore different initiatives due to the requirements of grants.³⁷ Tool lending programs often run on small budgets: over half of surveyed LoTs have an annual budget of \$14,999 or less.³⁸

The most significant expenses for tool lending programs are often insurance and rent for space.³⁹ Many programs will have an insurance policy for their properties (tool inventory and space) and for liability covering damages to property and people because of tool lending.⁴⁰ Having the proper insurance is important to provide reassurance and protection for staff and volunteers at tool lending programs (DCTL). The Greenbelt Makerspace Cooperative Tool Lending Library has patrons sign a release waiver, releasing the library of liability if a person or property is damaged or injured (GMC).

In conclusion, tool lending programs are highly diverse in their structure and operations but are often formed in response to local needs and interests and rely on community engagement and modest fees.

³⁷ Lynch, "Borrowing Spaces".

³⁸ Shareable, "The State of Libraries".

³⁹ Frick et al., "The Library of Things Toolkit".

⁴⁰ Ibid.

Tool Lending Programs in Montgomery County

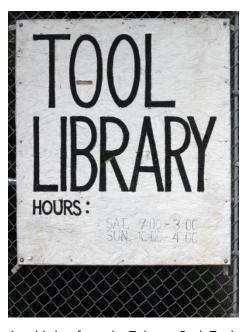
Takoma Park Tool Library⁴¹

Description and Background

The Takoma Park Tool Library originally opened around 20 years ago. The tool library was overseen by the city's Housing and Community Development Office, ran out of a trailer parked at the community center, had no membership, was entirely free to use, had a part-time employee, and only offered mechanical tools to reduce liability issues.

Successes

Its original location was accessible to many residents, making it a substantially popular program in its early years.



An old sign from the Takoma Park Tool Library Image Source: takomabibelot/Flickr

Challenges

The library eventually moved to the public works building, making it much harder to access for most residents. Additionally, the hours of the library were reduced, and the condition of the tools started to deteriorate as the library never included a budget to replace or refresh tools. Other challenges the library faced included a limited customer base due to the

⁴¹ All information in this section based on interview with the City of Takoma Park.

lack of power tools and the development of a tool rental program at Home Depot. As a result, the tool library closed over 10 years ago.

Lessons Learned

Accessibility is critical to ensure that as many people that want to use the program can use it. This includes ensuring the hours of operation align with times during which people can use the program, typically after people get off work and on the weekends. Additionally, having tools that people are interested in borrowing, typically more expensive and high-tech tools, is critical to ensuring popularity. Finally, maintaining the condition of tools is also important so that people feel that it is worth it to borrow from the library.

*Library Of Things: Instruments At Twinbrook*⁴²



A flyer advertising the Library of Things program. Image Source: MCPL Current Programs

Description and Background

In 2018, Montgomery County Public Libraries (MCPL) launched a Library of Things: Music program, allowing patrons to loan out a collection

 $^{^{}m 42}$ All information in this section based on interview with MCPL unless noted otherwise.

of musical instruments and instrument accessories at the Twinbrook branch.⁴³

Successes

This program was successful in the sense that patrons loaned out items frequently.

Challenges

As the program became "routine," it lacked the consistent support and funding to keep items updated and maintained. The program also lacked the funds to continue due to competing priorities in the library's budget, such as a growing interest in digital content.

Lessons Learned

People are interested and willing in lending services when the items offered are exciting and well-maintained. However, as the program continues, new items should be offered based on community interests and needs. Finally, since the program was county-managed and relied on public funding, competing priorities and the inability to charge users made financial sustainability challenging.

Rockville Science Center Makerspace and Tool Library (RSC Tool Library)⁴⁴

Description and Background

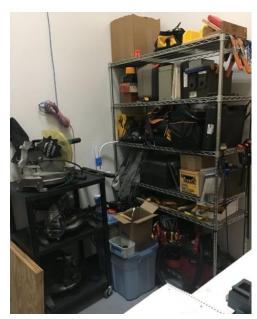
Currently, the only operating tool library in Montgomery County is the Rockville Science Center Makerspace and Tool Library (RSC Tool Library). The makerspace and tool library are part of the broader non-profit organization, the Rockville Science Center. The makerspace was the first to open, starting in 2002. At one point, the makerspace was run out of the

⁴³ Hall, Victoria (Tori) H. "The Changing Nature of Libraries." Montgomery County Government. Office of Legislative Oversight, March 3, 2020.

⁴⁴ All information in this section based on interviews with RSC Tool Library.

Rockville Memorial Library but moved after the pandemic to its current space in the Rockville Town Center due to budgetary constraints and broken equipment.

The tool library has been operating since October of 2024. The RSC Tool Library has a membership system open to residents of Montgomery County, out-of-county individuals, nonprofits, and businesses. Membership for individuals is \$60 per year, although flexible pricing is available for those with tighter budgets. Benefits of membership include free access to the tool library (except for out-of-county residents), reduced costs for classes and purchases, and access to members-only hours at the makerspace. The



Tool storage at RSC Tool Library Image Source: Rockville Science Center

makerspace and tool library run a small set of programming and classes, targeted more toward those interested in STEM topics.

Successes

The RSC Tool Library has been successful in building a robust collection of tools and equipment, frequently receiving tool donations. The tool library has also received requests from volunteers and residents to run programming, such as repair cafes and home maintenance classes.

Challenges

The biggest challenge for RSC Tool Library is having the appropriate space to store and organize their expanding tool inventory and to run the full host of events and programs they want. Additionally, when the makerspace moved out of the library into its current space, the program lost a fair number of members who may have gone on to use the tool

lending program. Despite having a core base of members, RSC Tool Library is still working on expanding its reach and services to a wider portion of the County. Finally, its location in the Rockville Town Center has made it difficult for some patrons to carry and drop-off larger and heavier tools, due to the lack of surface parking available.

Lessons Learned

Donations are a viable way to build tool inventory, and after building a core base of user and volunteers, interest in additional programming is likely to occur naturally. Outreach and engagement are critical to stay connected with members and to introduce new members, particularly when moving locations. The location and space of the tool lending program are also important, impacting the organization of tool inventory, possibilities for programming, and perceived convenience by patrons.

Table 5: Tool Lending Programs in Montgomery County

Name	Status	Туре	Facility	Staffing	Tools Offered	Cost
Takoma Park Tool Library	Closed	Government	Trailer	One part- time staff	Hand tools	Free
Library of Things: Musical Instruments	Closed	Government	Twinbrook Library	Library employees	Musical instruments and accessories	Free
Rockville Science Center Makerspace and Tool Library	Open	Nonprofit	Storefront	One part- time staff and a volunteer base	Garden tools, hand tools, power tools, tool kits	\$60 annual fee

Impact #1: Environmental Responsibility

Impact #1a: Material Reuse and Waste Reduction

County Needs and Visions

As part of the Montgomery County's Climate Action Plan, waste reduction has been established as an important goal for both emissions reductions and environmental stewardship efforts.⁴⁵ For calendar year 2022, the County produced 918,751 tons of municipal solid waste (MSW), and forecasting of waste generation in the County has MSW reaching over 1 million tons by 2034.46 Additionally, the County faces particular issues with lithium batteries entering the waste and recycling stream: "batteries cause fires in the [Materials Recovery Facility], causing a disproportionate safety burden on a primarily minority workforce". 47 With a robust recycling program, Montgomery County is looking beyond recycling initiatives toward waste reduction initiatives. Waste reduction aims to decrease the amount of waste generated and entering all parts of the waste stream.⁴⁸ Waste reduction is the preferred and prioritized method in the County to achieve zero waste over reuse and recycling (**Figure 1**).⁴⁹ In fact, new waste reduction efforts by the Department of Environmental Protection (DEP) include plans to develop a sharing or lending library, fix-it and repair clinics, and a materials exchange program.⁵⁰

⁴⁵ Montgomery County. "Fiscal Year 2024 Annual Report on Montgomery County's Climate Action Plan." Montgomery County Government, 2024.

⁴⁶ Department of Environmental Protection. "Comprehensive Solid Waste Management Plan 2025-2034." Montgomery County Government, 2025.

⁴⁷ Hickman and Thomas, "Fiscal Year 2023-2027 Sustainability Plan"; Montgomery County, "Fiscal Year 2024," 39.

⁴⁸ Environmental Protection Agency. "Waste Prevention," 2025.

⁴⁹ Department of Environmental Protection, "Comprehensive Solid Waste Management Plan".

⁵⁰ Ibid.

Figure 1: Waste Management Hierarchy Based on Montgomery County's DEP



Impact of Tool Lending Programs

Tool lending programs promote tool sharing, reuse, and repair. Patrons can avoid individual tool purchases, and tools are used by patrons at greater frequencies than individual ownership.⁵¹ Common tools, such as drills, have been found to be used for less than one hour per year when individually owned.⁵² A study of tool reuse through myTurn found that durable tools are "typically used one thousand to ten thousand percent (10 to 100 times more) compared to individual ownership".⁵³ Impact reports from tool lending programs show similar impact: in one year the Station North Tool Library facilitated the sharing of 16,555 tools; the Chicago Tool Library facilitated the sharing of 6,009 tools; and the Tool Library in western New York facilitated the sharing of more than 4,000 tools.⁵⁴ Finally, promoting tool reuse and repair prevents some people from throwing away tools with batteries that have a high risk of starting fires in waste processing facilities (RSC).

⁵¹ Llewellyn, "How Libraries of Things".

⁵² Baden et al., "Access over Ownership".

⁵³ Llewellyn, "How Libraries of Things".

⁵⁴ Station North Tool Library. "Annual Report." Station North Tool Library. Station North Tool Library. 2024; Chicago Tool Library. "Chicago Tool Library. "Chicago Tool Library. The Tool Library. "2023 Annual Report." The Tool Library. 2023.

Tool lending programs also promote waste reduction through material sharing, reuse, and repair. Several of the studied tool lending programs run repair and fix-it events, either on their own or in partnership with other organizations. Through these events, volunteers help and teach patrons to fix a wide range of items, not only preventing waste disposal at the event, but also providing patrons with the knowledge to fix items in the future. Below are some examples of the impact of repair events:

- The Greenbelt Makerspace Cooperative Tool Lending program's
 quarterly repair cafe has seen volunteers repair jewelry, bikes, and
 furniture; in 2023, the city of Greenbelt won the top Sustainable
 Maryland award, and the repair cafe was called out in the report as
 one of the highlights (GMC).
- In 2024, the Station North Tool Library partnered with the Enoch Pratt Free Library to hold a fix-it fair, repairing 110 items, potentially diverting 800 lbs. of waste, and teaching patrons how to maintain and repair items.⁵⁵
- During 2023, the Tool Library in western New York ran 11 repair cafe events for a total of 274 repairs and more than 12,000 lbs. of waste diverted. Four of these events were run in partnership with local public libraries, and the Tool Library has also partnered with the local environment and planning department to teach students how to repair broken household items.⁵⁶

In addition to running repair café events, some tool lending programs also hold regular classes on repair projects. For example, the Station North Tool library has classes on bicycle and phone repairs and on using a sewing machine.⁵⁷ Furthermore, tool lending programs can utilize donated materials to run these classes, such as fabrics for sewing classes (DCPL).

⁵⁵ Station North Tool Library, "Annual Report".

⁵⁶ The Tool Library, "2023 Annual Report".

⁵⁷ Station North Tool Library. "Classes." Station North Tool Library, 2015.

With the proper tools and skills, patrons are equipped to repair a wide range of items, preventing material disposal in the future.

Finally, tool lending libraries promote a general attitude of creative material reuse. The tool library at the Rockville Science Center described how one patron was able to use the tool library to refurbish and refinish a table they picked up at the Habitat for Humanity ReStore (RSC). Through low-cost tool lending and hands-on learning, tool lending programs encourage patrons to reduce waste and creatively reuse materials.



Left: Repair Café Event with Silver Spring Time Bank in 2018; Right: A person with a repaired electric drill at a Fix-It Fair Event at Station North Tool Library Image Sources: Silver Spring Time Bank and Station North Tool Library

Impact #1b: Climate Change and Disaster Resilience

County Needs and Visions

Climate change is already posing several challenges and threats to Montgomery County, including increasingly heavy precipitation, "hotter summers, more extreme weather events, and more frequent severe storms". 58 Of particular importance is flooding: before 2010, there were between two and four urban flooding events a year; since 2010, the numbers have increased to between 11 and 39 urban flooding events.⁵⁹ Intensifying flooding and weather events also pose an equity issue: marginalized communities and other vulnerable populations are most atrisk during these events, and these events can exacerbate existing inequalities without the proper intervention. 60 Given these challenges, the County has committed itself to reduce flood and other climate hazard risks for residents. The DEP and the Office of Emergency Management and Homeland Security (OEMHS) have both responded to climate, weather, and disaster challenges through several initiatives. Two programs of note under OEMHS are the "Resiliency Hub" project—hubs throughout the County to support communities during emergencies-and training opportunities for residents to prepare for emergencies and disasters, such as the Community Emergency Response Team (CERT).⁶¹ Tool lending programs can fit into these efforts by equipping residents with low-cost tools, repair knowledge, and community networks to prepare for and respond to weather events and disasters.

Impact of Tool Lending Programs

Tool lending programs, tool banks in particular, have grown increasingly involved in the weather and disaster resilience field. ToolBank USA has its own disaster services initiative, providing tools, equipment, and personnel to communities across the country to respond to hurricanes, floods, wildfires, and other weather events and disasters. In 2024, ToolBank's disaster services equipped nonprofits, volunteer groups, and national response organizations to rapidly respond to over 7,000 projects

⁵⁸ Montgomery County, "Fiscal Year 2024," 3.

⁵⁹ Jacobs. "Comprehensive Flood Management Plan - Phase 1 Report." Montgomery County Government, 2023.

⁶⁰ Ibid.

⁶¹ Office of Emergency Management and Homeland Security. "Training Opportunities," 2024.

for weather events and disasters and served over 80,000 people directly. Moreover, this program strengthened disaster resilience by preparing communities for future disasters and distributing disaster relief kits across the country. 62 Locally, the Baltimore ToolBank has also become involved in disaster and weather resilience. They have helped maintain eight floating

wetland units in Baltimore's Inner
Harbor, hosted rain barrel workshops
for households in partnership with the
Baltimore City Department of Public
Works, and hosted 34 environmental
volunteer projects with 23 partners.⁶³
Tool lending programs offer a practical
opportunity for the County to enhance
its resilience to climate change by
expanding access to tools and
equipment and mobilizing community
organizations to prepare for and
respond to extreme weather events.



ToolBank USA partnered with Team Rubicon to respond to Hurricane Ida in Louisiana in 2021 Image Source: ToolBank USA Disaster Services

⁶² ToolBank USA, "Our 2024 Impact." ToolBank USA, 2024.

⁶³ Baltimore ToolBank. "Impact Statements." Baltimore ToolBank, 2024.

Impact #2: Economic Vitality

Impact #2a: Business and Entrepreneurship Support

County Needs and Visions

Economic performance across a variety of indicators in Montgomery County has been mixed since the Great Recession, with slow job growth and stagnant household incomes. ⁶⁴ Entrepreneurship and small businesses will be critical in efforts to boost the economy, as more than 95% of businesses located in the County have fewer than 50 employees. ⁶⁵ Small businesses are also particularly important for minority and immigrant households, offering pathways to income and employment when other opportunities are limited. ⁶⁶ However, small businesses face high startup and operating costs. In discussing these challenges, a representative at the Business Center noted that many residents have business ideas but lack the capital to get started (BC).

The County primarily supports small businesses through its Business Center, which provides guidance and assistance on starting and growing a business, financial support through grants and incentive programming, and space in their innovation networks (BC). A tool lending program would complement existing business and entrepreneurial support services and further the County's economic goals by reducing upfront equipment costs, enabling and inspiring low-cost experimentation, and providing affordable access to tools for maintenance, repairs, and other projects.

 $^{^{\}rm 64}$ Montgomery Planning, "Thrive Montgomery 2050".

⁶⁵ DeFazio, Blaise, and Stephen Roblin. "Montgomery County Businesses' Composition." Montgomery County Government, 2022.

⁶⁶ &Access, PES, and Ochoa Urban Collaborative. "Retail in Diverse Communities." Montgomery Planning, 2021.

Impact of Tool Lending Programs

First, tool lending programs can lower barriers to entry for aspiring entrepreneurs or self-employed workers. The Chicago Tool Library was able to help a couple "confidently jump at the opportunity [to open a shop] knowing they could make it look great without having to buy all the tools necessary to make the reservations".⁶⁷ In Seattle, an individual who lost their job was able to use the tools at the library to start their own urban farm.⁶⁸ Several patrons at the Berkeley Tool Library believe that the



Ándale Market opened with the help of Chicago Tool Library

Image Source: Mia Sakai and Tim Hannifan

library has been "invaluable" for them to be able to work before they had the money for tools, especially for self-employed individuals in the construction field.⁶⁹ Finally, RSC Tool Library described how the space has supported those with at-home or online businesses, such as those on Etsy (RSC).

By loaning out tools for little or no cost, tool lending programs lower the threshold of acquiring tools and solves the "chicken-and-egg problem of what you have to have first: money, jobs, or tools". 70 Additionally, for self-employed construction workers and small-scale manufacturing and artisan businesses, tool lending programs can become an extension of the tools they own and a resource to "complete" their tool set. These programs

⁶⁷ Chicago Tool Library, "Chicago Tool Library's Annual Report," 5.

⁶⁸ Llewellyn, "How Libraries of Things".

⁶⁹ Söderholm, "Borrowing Tools," 150.

⁷⁰ Ibid, 150.

can also allow workers to test and try out different tools for little to no cost before purchasing them.⁷¹

Second, tool lending programs often turn into spaces of innovation, inspiration, and creativity, which can help entrepreneurs learn from each other and experiment. Patrons of the Berkeley Tool Library found that having access to a wide variety of tools and talking with library staff gave them inspiration and ability to try new projects. Tool lending programs are also described as sites of "cross-pollination", as artists, craftspeople, entrepreneurs, engineers, contractors, and other people come together in one space to share tools and ideas. Discussions with RSC Tool Library and Tool Library and the Greenbelt Makerspace Cooperative Tool Lending Library revealed similar feelings; the tool library was a space for people with different skills and backgrounds to share ideas, learn together, and collaborate (RSC and GMC).

Finally, tool lending programs can support placemaking initiatives to beautify storefronts and to boost visibility for businesses. A 2021 report on retail in diverse communities in Montgomery County suggested placemaking efforts—such as public art, seating, planters, and programming—to retain and strengthen diverse retail clusters. Some tool lending programs have participated and supported placemaking initiatives by providing tools, personnel, and guidance to volunteer groups. For example, the Tool Library in western New York facilitates "Service Days" to maintain public spaces in their community and supports public art initiatives by loaning tools and personnel and securing funding for murals. ToolBank USA runs a program called "Building Change" in which volunteers come out to "construct essential outdoor furniture and features,

⁷¹ Ibid.

⁷² Ibid.

⁷³ Chicago Tool Library, "Chicago Tool Library's Annual Report".

⁷⁴ &Access, PES, and Ochoa Urban Collaborative, "Retail in Diverse Communities".

⁷⁵ The Tool Library, "2023 Annual Report".

including picnic tables, raised garden beds, planter boxes, park benches, and even dog beds" which are then donated to organizations throughout the community. By equipping placemaking efforts at a low-cost, tool lending programs can support county efforts to activate and boost retail spaces.



Left: Julia Bottoms' William L. Gaiter Mural in Buffalo, painted with the help of The Tool Library; Right: Volunteers at a Building Change event with ToolBank USA in Panama City, Florida Image Sources: Buffalo Architecture and History/Chuck LaChiusa and ToolBank USA

Impact #2b: Education and Skill Development

County Needs and Visions

Montgomery County recognizes that a vibrant and strong local economy depends on a "varied pool of skills," and it hopes to achieve this in part through workforce and educational initiatives across a variety of industries. Some of the County's current efforts include 1) programs through Montgomery College; 2) supporting and referring clients to Occupational Training Providers and regional apprenticeship providers and; 3) workforce services at the Montgomery County Correctional Facility and Pre-Release Center. Tool lending programs could strengthen existing

⁷⁶ ToolBank USA, "Our 2024 Impact".

⁷⁷ Montgomery Planning, "Thrive Montgomery 2050".

⁷⁸ WorkSource Montgomery. "Local Area Workforce Plan 2020-2024." WorkSource Montgomery, n.d.

skill development programs by partnering with educational institutions and hosting hands-on skill-building classes at a low-cost and open setting.

Impact of Tool Lending Programs

Some education institutions have partnered with or created tool lending programs to support student learning and reduce financial burdens for students. In Buffalo, the Northland Workforce Training Center recognized the barrier posed by requiring students to purchase tools for certain classes.⁷⁹ In response, the center partnered with the SUNY Alfred State and Erie Community College to create a tool library for its students.⁸⁰ Additionally, because many tool lending programs rely on volunteers, these programs offer valuable experiential opportunities for students to serve as interns, volunteers, or staff. The Tool Library in western New York partners with local universities to offer internships and work-study placements, allowing students to gain hands-on experience in tool use, community engagements, and operations management while in turn providing the library with more consistent staffing.⁸¹ For younger students, especially those in trades programs, partnerships can expand access to tools and encourage exploration. RSC Tool Library is exploring a potential collaboration with Seneca Valley Highschool in Germantown, which has a robust trades program (RSC). These examples suggest that Montgomery County could strengthen career pathways and experiential learning opportunities by supporting partnerships between tool lending programs and local educational institutions.

Additionally, tool lending programs also serve as sites of education, offering public classes and individualized advice that make skills more accessible. A leading example is Baltimore's Station North Tool Library,

⁷⁹ "Minutes of the Meeting of the Real Estate Committee of Buffalo Urban Development Corporation." Buffalo Urban Development, September 17, 2019.

⁸⁰ White, Daniel. "Tool Libraries: Hammering Equity Home." Partnership for the Public Good Buffalo, 2020.

⁸¹ Mohan, Archana. "Work Study Program with Tool Library Promotes Community Engagement." <u>University at Buffalo, January 12, 2023.</u>

which runs courses on woodworking, knife making and sharpening, bike repair, sewing and stitching, electrical work, plumbing, tiling, wall repair, and floor refinishing. Even for professionals, tool lending programs have served as valuable resources to try new tools and projects and develop skills at a low-cost. Finally, tool lending programs also offer residents a chance to become instructors, sharing their expertise with others and building confidence in their own knowledge. The DC Public Library is partnering with a contractor to hold a program this summer on toilet repair, and the RSC Tool Library partnered with an electrician to run a class on the basics of electricity for new homeowners (DCPL and RSC). Supporting and partnering with tool lending programs could strengthen existing workforce development programs, open access to trades education, and allow local tradespeople to share their knowledge.

Impact #2c: Cost Savings

County Needs and Visions

Rising housing costs, higher prices for necessities like food, and stagnant wages have led many households across the country to cut back on spending and seek ways to save.⁸⁴ Montgomery County is no exception: "since 2012, the household income required to afford the median-priced home in Montgomery County has exceeded the actual median income, and this gap has steadily widened".⁸⁵ At the same time, the County is experiencing a growth in lower-income households and in the number of housing cost-burdened renter households.⁸⁶ Tool lending programs offer

⁸² Station North Tool Library, "Classes".

⁸³ Söderholm, "Borrowing Tools".

⁸⁴ Gillespie, Lane. "How Much Could You Cut Spending? Economic Concerns Have Some Americans Setting a 'No-Buy' Rule." Bankrate. Bankrate.com, May 2025; Foster, Sarah. "Inflation Rose Less than Expected Last Month, but Prices Remain High — Here's What Might Feel Most Expensive." Bankrate. Bankrate.com, April 26, 2024.

⁸⁵ HR&A, LSA, and M-NCPPC. "Montgomery County Housing Needs Assessment." Montgomery Planning, July 2020, 15.

⁸⁶ Ibid.

residents a practical, low-cost way to access tools and complete home or personal projects.

Impact of Tool Lending Programs

Cost-savings are one of the primary motivations and greatest benefits for patrons of tool lending programs.⁸⁷ During fiscal year 2023, the Tool Library in western New York reported facilitating over \$730,000 in savings for its patrons.⁸⁸ Much of this comes from enabling people to take on doit-yourself projects at home and on their properties that they might otherwise have to purchase new tools for or pay professionals to complete. Staff at the Berkeley Tool Library emphasized that a core part of their mission is helping residents maintain and improve their homes through access to tools.⁸⁹ In addition to lending tools at little or no cost, many programs also offer hands-on workshops and personalized advice on home repairs, giving people the knowledge and confidence to complete projects themselves. The RSC Tool Library explained how they had been contacted by a group of single mothers about interest in participating in courses on home maintenance and repair (RSC). The ability to make repairs and address maintenance needs independently not only saves money, but it can also help renters and homeowners preserve housing stability and improve their quality of life. Finally, for those who live in more compact homes, tool lending programs offer a solution to limited tool storage space.

 $^{^{\}rm 87}$ Söderholm, "Borrowing Tools".

Lynch, "Borrowing Spaces".

⁸⁸ The Tool Library, "2023 Annual Report".

⁸⁹ Söderholm, "Tool Lending Librarianship."

Impact #3: Social Equity

Impact #3a: Reducing Barriers to Tool Access and Skill Development

County Needs and Visions

Although Montgomery County is in the 99th percentile nationally of all counties for both household income and educational attainment, inequalities persist between demographic groups. Household growth since 2010 has been concentrated among those households at the lowest and highest end of the income distribution, reflecting a need to support lower-income households in growing their wealth. Furthermore, there are significant economic disparities across racial and ethnic groups. At the same time, the County's aging population presents another set of challenges, as the 55+ group faces declining incomes and the need to retrofit their homes if they desire to age in place.

Montgomery County seeks to grow and develop into a place where "all residents have equal access to affordable housing, healthy foods, employment, education, and more". 93 Tool lending programs could fit into existing supports for marginalized, underrepresented, and older households by offering practical and low-cost resources to maintain their homes, build skills, and start-up and operate a small business.

⁹⁰ HR&A, LSA, and M-NCPPC, "Montgomery County Housing Needs Assessment".

⁹¹ Montgomery County Community Action Agency. "Community Needs Assessment." Montgomery County Government, 2023; Montgomery Planning, "Thrive Montgomery 2050"

⁹² Lisa Sturtevant & Associates. "Meeting the Housing Needs of Older Adults in Montgomery County." Montgomery Planning, May 2018.

⁹³ Montgomery Planning, "Thrive Montgomery 2050".

Impact of Tool Lending Programs

At their core, tool lending programs are built upon the belief that everyone should have the "access and privilege to [borrow] by default." By reducing barriers, tool lending programs have been described as shared spaces where patrons of diverse backgrounds come together. Surveyed LoTs reported membership spanning a wide range of annual income levels, with most members falling in the \$30,000 to \$49,999 range. Patrons at the Berkeley Tool Library described how the library attracts people from varied ethnic and socioeconomic backgrounds, and staff at these libraries saw the diversity of patrons as a strength.

Locally, the RSC Tool Library described how people of all backgrounds come in and use the tools, and they are currently in the process of hiring an outreach coordinator focused on engaging underrepresented communities (RSC). To further open doors to lower-income individuals and historically underrepresented groups in the trades, many programs offer support for these populations. The sliding scale membership option ensures affordability, and some programs—like the Station North Tool Library—offer trust-based scholarships to those in need, ensuring no one is turned away due to cost. 97 Additionally, Station North Tool Library has launched a series of gender-protected sections of certain classes, allowing women, nonbinary, and trans patrons to enter classes in a supportive environment. The prioritization of accessibility and reducing barriers make tool lending programs a useful resource that complements Montgomery County's equity-focused initiatives to help close opportunity gaps across income, race, and gender.

⁹⁴ Söderholm, "Borrowing Tools", 147.

⁹⁵ Shareable, "The State of Libraries".

⁹⁶ Söderholm, "Tool Lending Librarianship."

Söderholm, "Borrowing Tools".

⁹⁷ Station North Tool Library, "Annual Report".



Station North Tool Library's Gender Equity Class Image Source: Station North Tool Library

Impact #3b: Support for Nonprofit and Community Organizations

County Needs and Visions

Nonprofit organizations provide critical support to residents in Montgomery County, including homelessness services, healthcare, education, and food provision. A 2025 Nonprofit Montgomery report cited 7,242 nonprofit organizations in the County. Despite the important services they provide, nonprofits face a host of struggles. These include 1) an increase in service demand following the COVID-19 pandemic, 2) declines in charitable giving, 3) staffing pressures, and 4) fluctuating political climates. Drganizations like Nonprofit Montgomery play a key role in responding to these pressures by offering advocacy, fostering

⁹⁸ Nonprofit Montgomery. "2025 State of Nonprofits in Montgomery County, Maryland." Nonprofit Montgomery, 2025.

⁹⁹ Ibid.

collaboration, and growing the capacity of nonprofits across the region. As nonprofit organizations work to do more with fewer resources, tool lending programs offer a cost-saving and mobilizing resource.

Impact of Tool Lending Programs

Many tool lending programs partner with nonprofit and community organizations by providing tools and equipment for ongoing operations and special events:

- The Buffalo Tool Library lends tools to volunteer groups to do different activities such as community gardens, plant trees, and create public art.¹⁰⁰
- During 2024, ToolBank USA
 assisted 2,646 member agencies,
 equipping over 300,000
 volunteers and assisting in over
 28,000 projects; the missions of
 these agencies included



ToolBank USA supported a veteran's nonprofit to hold a 5-day service event with beautification projects in Tampa, Florida
Image Source: ToolBank USA

- community revitalization, education, environment, housing and homelessness, and disaster relief and recovery. 101
- During 2024, Baltimore ToolBank served 303 member agencies, equipping over 27,000 volunteers, and assisting in over 1,800 projects.¹⁰²

¹⁰⁰ White, "Tool Libraries".

¹⁰¹ ToolBank USA, "Our 2024 Impact".

¹⁰² Baltimore ToolBank, "Impact Statements".

 RSC Tool Library allows nonprofits to be members and reports nonprofits using the tools and equipment in their space for operations (RSC).

Tool lending programs can generate substantial cost savings for non-profit and community organizations: during 2024, Baltimore ToolBank collectively saved partners \$757,500 on purchasing, storing, and maintaining tools for their community projections and allowed 21 organizations to hire more positions and 190 organizations to host more projects. Some tool lending programs also directly engage with service work, mobilizing community members and local nonprofit and community organizations. The Tool Library in western New York ran 12 service day events during FY 23, engaging over 300 volunteers through more than 1,000 hours of community service resulting in \$35,679 value of service. These events brought together the community to "help steward public spaces like parks, community gardens, and trails". ToolBank USA also runs a network-wide day of service on MLK Jr. Day and facilitates build days, during which hundreds of outdoor furniture is built with volunteers. Impact #3c: Practical Community Development

County Needs and Visions

As part of *Thrive Montgomery 2050*, the County is looking for ways to use community design to have a positive impact on community cohesion and social interaction. Of particular interest is supporting the County's aging population and ensuring they remain actively included in community life. Tool lending programs present a promising opportunity in this regard, as they promote both social connection and practical benefits to communities.

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¹⁰⁴ The Tool Library, "2023 Annual Report".

¹⁰⁵ ToolBank USA, "Our 2024 Impact".

¹⁰⁶ Montgomery Planning, "Thrive Montgomery 2050".

Impact of Tool Lending Programs

Across the country and abroad, patrons and staff of tool lending programs report that tool lending programs have evolved into vibrant community gathering spaces. One LoT in the UK found that almost all patrons felt better connected to their community after using the library's services, and surveyed users in Germany felt that the social aspect of LoTs was a major asset. Patrons come to tool lending programs not only to borrow tools but also to socialize with people with similar interests and hobbies, learn from others with different skills, and to talk with library staff. Notably, these spaces facilitate intergenerational interactions. At the RSC Tool Library, older patrons and retirees have become actively involved in helping younger patrons learn about and use various tools and equipment, serving as mentors (RSC). Similarly, the Greenbelt Makerspace Cooperative Tool Lending Library reported a wide range of ages in both their patron and volunteer base (GMC).

The real strength of tool lending programs lies in the fact that these social connections also generate practical outcomes. Patrons at the Berkeley Tool Library describe how the library has brought people together to make improvements to the neighborhood and provide tangible benefits to communities. Tool lending program staff also felt that they were able to meet the specific needs of patrons, providing counseling and advice to help them achieve what they want to do. To Montgomery County, supporting tool lending programs offers the opportunity to create inclusive, intergenerational community spaces for socializing and learning and to bring practical benefits to communities.

¹⁰⁷ Baden et al., "Access over Ownership".

¹⁰⁸ Söderholm, "Borrowing Tools".

¹⁰⁹ Söderholm, "Tool Lending Librarianship"; Lynch, "Borrowing Spaces".

Challenges and Limitations

Despite the host of benefits tool lending programs can provide, they do face challenges in their implementation and operation (**Table 6**). However, tool lending programs have been able to respond to these challenges with creative and community-based solutions.

Table 6: Challenges and Solutions of Tool Lending Programs

Challenge	Solutions		
Maintaining Financial	• Volunteers		
Sustainability	• Donations		
	 Crowdfunding 		
	 Charging membership and class fees 		
Meeting the Needs	 Conducting formal community needs assessments 		
of the Community	 Maintaining a "wish list" of items and classes 		
Liability Related to	 Gaining proper liability insurance 		
Injuries	 Requiring a safety course for patrons to use certain tools 		
	Providing safety equipment to patrons		
Reaching a	 Hiring an outreach and engagement coordinator 		
Mainstream	Using neutral language		
Audience	 Partnerships with governments and hardware stores 		
Hiring Qualified and	 Hiring those with experience in the trades and tool use 		
Experienced Staff	Utilizing classes to train patrons		
Accessibility and	 Mobile or modular models 		
Convenience	 Creating satellite locations 		
	 Variety of transportation options nearby, including some 		
	surface parking		
Security	Property insurance		
	Updated alarm and camera systems		
Limited Research and	 Maintaining data on tool inventory and usage 		
Data	 Maintaining data on membership numbers and growth 		
	Collecting some relevant demographic data		

Maintaining Financial Sustainability

Tool lending programs aim to reduce barriers to access by offering tools at little or no cost, but this mission can create tension between social and financial goals. Many programs struggle with financial sustainability, especially due to high rent and insurance costs (GMC). To address this, programs have successfully relied on crowdfunding, volunteers, community donations, and modest fees to help maintain affordable access while staying financially viable.

Meeting the Needs of The Community

While tool lending programs aspire to empower communities through tool provision, their impact depends on whether the tool inventory aligns with what communities need and want. The University of Maryland Makerspace Initiative emphasized that intended users and not the staff should determine the tool inventory at makerspaces and tool lending programs (UMD). To achieve this, Shareable recommends those interested in starting a LoT begin with a community needs assessment. Despite this guidance, more than half of surveyed LoTs have not conducted formal needs assessments, potentially limiting their impact and pointing to an area of improvement for future tool lending programs.

Liability Related to Injuries

As discussed earlier, tool lending programs face potential liability in the event of injury or property damage from a borrowed tool. This risk can make staff and volunteers hesitant to help patrons (DCTL). Obtaining

¹¹⁰ Baden et al., "Access over Ownership".

¹¹¹ Frick et al., "The Library of Things Toolkit".

¹¹² Shareable, "The State of Libraries".

proper liability insurance and implementing a strong user waiver are essential to alleviating these concerns.¹¹³

Reaching a Mainstream Audience

The lending model is dependent on "people's willingness to borrow, rather than, buy durable items".¹¹⁴ However, research shows that even when people express a *willingness* to borrow, it does not always translate into *practice*.¹¹⁵ This gap willingness and practice stems in part from the perception of tool lending as an alternative form of consumption, as most consumers prefer to engage in forms of consumption that are perceived as normal.¹¹⁶ Additionally, many tool lending programs lack the staff capacity to run effective outreach and engagement efforts that might attract more mainstream users (GMC). At the same time, the low rate of borrowing in practice may also be due to the lack of structured borrowing options: people are generally hesitant to borrow tools from friends and family as they are afraid of breaking tools.¹¹⁷

Tool lending programs address this barrier by offering a centralized and structured lending system that makes borrowing accessible and low risk. Moreover, tool lending programs do not need to position themselves as a complete alternative to tool ownership but rather as a complementary service. Tool lending programs should try to appeal to these practical considerations, using neutral and familiar language in programming and advertising.¹¹⁸ Some tool lending programs have hired staff to focus solely on outreach and engagement, including the RSC Tool Library (RSC).

¹¹³ Frick et al., "The Library of Things Toolkit".

¹¹⁴ Baden et al., "Access over Ownership," 3.

¹¹⁵ Ameli, "Libraries of Things".

¹¹⁶ Baden et al., "Access over Ownership".

¹¹⁷ Söderholm, "Borrowing Tools".

¹¹⁸ Cohn, "Lending Seeds, Growing Justice".

Hiring Qualified Staff

To effectively advise patrons, teach programs, evaluate donated tools, and perform tool maintenance, tool lending programs require a knowledgeable and experienced staff and volunteer base. Ideally, staff and volunteers should be experienced tool users themselves. 119 When tool lending programs are housed within public facilities, it is important not to assume that existing staff are automatically equipped to also manage tool lending programs. Local examples at the DCPL tool library and the makerspace at the Rockville Memorial Library demonstrated challenges when staff lacked the necessary technical expertise, such as improper tool care and inability to advise and supervise patrons (DCPL and MCPL). Therefore, tool lending programs should prioritize recruiting staff who are knowledgeable about tools and enthusiastic about sharing that knowledge with the community.

Accessibility and Convenience

Sustainability initiatives often struggle with perceptions of inconvenience or inaccessibility, and overcoming these barriers is key to their success. Tool lending programs can be an impractical model for people when unexpected needs arise, when transporting large or heavy tools long distances, or when inventory is stored far away (RSC). To expand access, some programs have adopted mobile or modular lending models, while others have maintained a main hub alongside smaller satellite collections in additional locations. However, these options introduce logistical challenges, such as transporting tools between locations and coordinating tool inventory across multiple sites (RSC).

¹¹⁹ Söderholm, "Borrowing Tools".

¹²⁰ Baden et al., "Access over Ownership".

¹²¹ Söderholm, "Borrowing Tools".

Frick et al., "The Library of Things Toolkit".

¹²² Shareable, "The State of Libraries".

Finally, RSC Tool Library discussed the need for some surface parking near the library to help with tool transport and drop-off, but this need can conflict with a community's efforts to reduce dependence on automobiles and minimize parking infrastructure (RSC). Ultimately, increasing accessibility and perceived convenience will require a balance with other needs, such as efficiency and sustainability goals.

Security

In 2024, the DC Tool Library experienced a string of break-ins that resulted in the theft of most of its inventory (DCTL). Upon reflection, staff acknowledged that the program had been a little too trusting and recognized the need for stronger security measures. In response, the DC Tool Library has already upgraded its alarm and camera systems to better protect its collection. Additionally, tool lending programs should consider obtaining property insurance for its tool collection.

Limited Research and Data

Finally, few formal studies and impact reports on tool lending programs have been published, making it difficult to quantify their full impact. Demographic data is also often anecdotal rather than precise, as many LoTs do not collect information on the racial, gender, income, and employment status of its members. Finding strategies to collect data to evaluate program impact, identify gaps, and make informed decisions while also maintaining user privacy remains a key challenge for tool lending programs.

123	Ibid.			

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Opportunity #1: Conduct A Community Needs and Interest Assessment

To inform the design and implementation of an effective tool lending program, Montgomery County should conduct a formal, countywide needs and interest assessment focused on tool access, potential program uses, and partnership opportunities. This assessment will identify populations and areas of high interest in tool lending programs and will help ensure that any future investment is responsive to actual community demand.

Separate assessments should be conducted for three key stakeholder groups, with particular focus on those groups that would benefit the most from these services or that the County would hope to use these services:

- Residents: Lower-income households, Black and Hispanic households, immigrant households, older adults, renters, and new homeowners.
- **Entrepreneurs and small businesses:** artisans and crafters, small-scale manufacturing, self-employed tradespeople and construction workers, and immigrant-, minority-, and women-owned or -serving businesses.
- Nonprofit and community organizations: Housing and home repair organizations, neighborhood organizations, environmental and conservation nonprofits, community gardens, and workforce development and reentry programs.

The assessment should gather input on:

- desired tool types;
- · interest in programming, courses, and support services; and
- **intended project types** (e.g. home repair, crafting, work).

Opportunity #2: Partner with RSC Tool Library

Rather than establishing a county-run tool lending program from the ground up, Montgomery County can pursue a formal partnership with the existing RSC Tool Library. This option represents the most cost-effective and logistically feasible option, as the tool library already possesses the necessary tools, staffing, software, and insurance required to operate a tool lending program. Additionally, because the tool library would remain under the Rockville Science Center—a nonprofit organization—this partnership would offer greater operational flexibility around issues such as fees and donations. Some patrons may also not be as open to donating tools or signing waivers if the program was run by the government. Finally, the tool library already has an existing base of users who could serve as early champions, helping to promote and grow the program countywide.

For the initial phase, the partnership should focus solely on the tool library and not the makerspace. While future collaboration with the makerspace may be beneficial, tool lending is less resource-intensive, only requiring secure storage rather than space to use tools. Makerspaces often involve specialized infrastructure, such as ventilation and power requirements, and higher-cost, more advanced equipment, which demands trained staff for supervision and support (RSC).

In return, Montgomery County could offer a variety of resources to help scale-up and expand the reach and impact of the tool library. Montgomery County should explore two primary avenues for collaboration:

(1) partnerships on the location and space for the tool lending program and (2) partnerships on programming and events.

Option #2a: Partnerships on Spaces and Locations

The main partnership opportunity for Montgomery County is working with RSC Tool Library to find a larger, appropriate, and accessible space. Finding a new space will help the program properly organize and expand their tool inventory and host more events for the County.

Co-location with Public Facilities

Co-location can have benefits, such as enhanced service delivery, facilitating multi-generational and multi-purpose community destinations, and supporting economic development efforts. When the Rockville Science Center Makerspace was in the Rockville Memorial library, it was helpful to be near other events, and it allowed people to take advantage of the makerspace more frequently (MCPL). Potential colocation options include:

- MCPL: MCPL is actively looking for opportunities to maximize their facilities for economic and workforce development strategies. MCPL is the facility with the most familiarity with lending programs and Rockville Science Center. Finally, libraries already serve as venues for public programs and community events, making it easier to integrate tool lending-programming.
- **Recreation Centers:** Like libraries, Montgomery County Recreation (MCR) hosts a wide range of classes and events through its recreation centers. Some focus areas of recreation centers that could overlap with tool lending programs include arts and crafts classes, S.T.E.A.M. classes, senior programming, and youth development programming.
- **Montgomery College:** The Gudelsky Institute for Technical Education (GITE) at Montgomery College's Rockville campus offers automotive technology, building and construction technology, and

¹²⁴ <u>Bolan Smart Associates. "Montgomery County Colocation of Public Facilities." Montgomery Planning,</u> April 2018.

¹²⁵ Hall, "The Changing Nature of Libraries".

workforce technology programs.¹²⁶ Additionally, (GITE) houses two labs that offer hands-on training and programs for students. Montgomery College's Science, Engineering, and Technology (SET) program operates the Engineering Innovation Center, a makerspace with 3D printers, CNC Machines, and free on-site tool access and use.¹²⁷ Having a tool lending program on-campus could further support students enrolled in GITE and SET and complement existing labs and makerspaces.

 Resiliency Hubs: The OEMHS has completed one "Resiliency Hub" at the Bette Carol Thompson Scotland Neighborhood Recreation Center in Potomac.¹²⁸ Tool lending programs could be included as part of the community benefits of the Resiliency Hubs, helping communities respond during emergency events.

Co-location is not without challenges. Shared space can lead to scheduling conflicts between the tool lending program and the host facility, and visitors may be uncertain about who to approach with questions or concerns. Challenges could be overcome with clear agreements and communication between the tool lending program and host facility.

Strategic Placements Beyond Public Facilities

Montgomery County should also explore location and space opportunities for the RSC Tool Library beyond public facilities. These could include vacant, underutilized, or new properties in areas with high interest or demand in tool lending programs or where tool lending programs could support ongoing environmental, economic, and equity projects. Where possible, these spaces should be provided for free or reduced cost to

¹²⁶ Montgomery College. "Gudelsky Institute for Technical Education," 2025.

¹²⁷ Montgomery College. "Engineering Innovation Center," 2025.

Montgomery County Recreation. "Montgomery County Celebrates New 'Resiliency Hub' at Scotland Community Recreation Center," 2023.

support the expansion of programming and staff for RSC Tool Library. Preferred spaces would have the following qualities:

- sufficient square footage to accommodate tool storage and reduce reliance on vertical shelving systems;
- some on-site surface parking to allow patrons to easily load and unload large or heavy equipment into vehicles; and
- density of population and businesses to ensure accessibility and proximity to potential users.

Some potential areas in the County that might benefit from a tool lending program include:

Arts and Entertainment
Districts (Bethesda,
Silver Spring, and
Wheaton): These areas
are designated by the
Maryland State Arts
Council and offer
incentives such as tax
incentives to encourage
the arts as an activity and
economic development



The annual Wheaton Arts Parade and Festival Image Source: CultureSpotMC

strategy.¹²⁹ A tool lending program in these areas could further enhance the districts' branding as creative and entrepreneurial hubs, while providing artisans and makers with access to affordable tools. These areas also already have high foot traffic and large residential and business populations. In Wheaton, a tool lending program could complement the upcoming Wheaton Arts and Cultural Center, which

¹²⁹ Maryland State Arts Council. "Arts & Entertainment Districts," 2022.

- will feature performance spaces, classrooms, galleries, and colocation with affordable housing.¹³⁰
- Other Arts Areas (Gaithersburg, Germantown, and Rockville): The Arts Barn in Gaithersburg, the BlackRock Center for the Arts in Germantown, and the Artists & Makers Studios in Rockville all offer opportunities to collaborate with a tool lending program. Collaboration with tool lending programs could further cultivate these areas' branding and assist working artists. Growing populations, particularly among lower-income households, in these communities also make them appropriate locations for community outreach for tool lending programs.



Artisan's Market at the BlackRock Center for the Arts in Germantown Image Source: BlackRock Center for the Arts

• **Rock East:** Rock East in Rockville has been identified as a notable cluster of industrial space in the County, particularly of "local makers

Montgomery County Department of General Services. "Wheaton Arts and Cultural Center," 2023.

¹³¹ Noahs' Preferred Properties. "Explore the Arts in Montgomery County," April 23, 2025; Visit Montgomery. "Artists & Makers Studios," March 24, 2025.

¹³² HR&A, LSA, and M-NCPPC, "Montgomery County Housing Needs Assessment".

and craft beverage products". A tool lending program could reinforce the district's identity, support makers and entrepreneurs, and create opportunities for skill-sharing and collaboration among entrepreneurs. There would also be a built-in user base with the existing creative businesses and light industries in the district.

Mobile and Modular Options

To maximize accessibility and reach, the County should also consider options to partner with RSC Tool Library to offer mobile and modular tool lending options. The Rockville Science Center has considered this as an option, with a van or trailer housing a set of tools from the library and

having the ability to rotate locations around the County or drop-off tools at specified locations (RSC). This may be particularly useful to reach areas of the County that likely lack the density and foottraffic to sustain a tool library of this size. This option would best be paired with programming to maximize advertising and interest in the tool library when it does visit different communities.



ToolBank USA utilizes a truck and trailer to move tool inventory around

Image Source: ToolBank USA

¹³³ <u>Toth, Peter. "Small-Scale Manufacturing." Montgomery County Government, 2019; Explore Rockville. "Rock East District," February 12, 2025</u>.

Option #2b: Partnerships on Programs and Events

RSC Tool Library has been contacted by a variety of community groups about interest in running additional programming (RSC). However, their current space is not conducive to larger-scale programming, and they lack the adequate personnel to properly advertise and conduct community outreach for their programs. Therefore, the County would be an appropriate partner to host these events in public facilities, sponsor these events, and advertise these events using communications resources.

Repair Cafes

Repair cafes are one of the most popular types of programming run through tool lending programs, and as mentioned earlier, DEP is planning to create fix-it and repair clinics. To reduce the time, tools, and personnel required to create these from the ground-up, the County should partner with the RSC Tool Library for these clinics. These events could be held at various libraries, recreation centers, and schools throughout the County on a monthly or quarterly basis and could coincide with other waste reduction and recycling efforts, such as hazardous waste collection events.

Classes

Classes that may be of interest to the County that could be run in partnership with the RSC Tool Library include:

- Home repair and maintenance: Includes electrical, plumbing, and other tool basics. RSC Tool Library is already interested in running these classes and has received interest from community members (RSC). Could be run in partnership with MCPL, Housing and Community Affairs (HCA), or Health and Human Services (HHS) to support renters and homeowners.
- **Skills and trades development:** Woodworking, metal work, bike repair, sewing, automotive repair, and more. Classes could be run in partnership with MCPL, Montgomery College, or the Business Center.

- RainScapes: These classes could teach residents how to build their RainScape project, a DEP program which allows residents to receive a tax rebate and help reduce stormwater runoff.¹³⁴ Projects include rain gardens and rain barrels. The RSC Tool Library could partner with DEP to provide tools for a course.
- Home retrofitting: Currently, the County has a Design for Life Tax Credit Incentive program, which "encourages property owners to make a range of accessibility improvements" through property tax credits. However, utilization is low in part due to lack of awareness and "insufficient upfront resources to make the modifications". The County could partner with the RSC Tool Library through MCPL, Department of Permitting Services, HCA, or HHS to run a course on improvements that they could make on their own, such as creating a ramp to the entrance.
- Emergency preparation and response: OEMHS already works with a
 variety of community and nonprofit organizations to provide training
 opportunities to residents to prepare and respond to emergency
 situations. An additional partnership with RSC Tool Library could
 provide further courses on emergency preparedness and response,
 including home repair after a flooding event or preparing a home for
 a hurricane.

Service Events

The Montgomery County Volunteer Center organizes service events, partnering with local nonprofit and community organizations to mobilize the County to give back to communities.¹³⁷ The County could partner with RSC Tool Library to help supply tools and equipment during these events

¹³⁴ Department of Environmental Protection. "RainScapes," 2025.

¹³⁵ Lisa Sturtevant & Associates, "Meeting the Housing Needs," 55.

¹³⁶ Ihid 55

¹³⁷ Montgomery County Maryland Volunteer Center. "Days of Service," 2024.

and encourage County residents to donate unused tools. Additional service events that could be conducted with the provision of tools through the RSC Tool Library include:

- Tree planting initiatives: RSC Tool Library could collaborate with Tree Montgomery (a DEP program that provides free shade trees) and Reforest Montgomery (a Maryland-National Parks and Planning Commission (M-NCPPC) initiative supporting reforestation) to host volunteer events for tree planting and care.¹³⁸
- Neighborhood clean-up and public art events: Following the
 example of Baltimore ToolBank and the Tool Library in western New
 York, the County could host clean-up, stewardship, and public art
 service events in public and retail spaces in the County, focusing
 particularly on diverse retail areas and public spaces that need the
 most care.
- Building days: To further beautify public and retail spaces, the
 County could host events like ToolBank USA's "Building Change",
 bringing together volunteers and tools from the RSC tool library to
 build a variety of outdoor furniture to be donated to parks,
 nonprofits, neighborhoods, and businesses.

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Montgomery Planning. "Reforest Montgomery," April 24, 2025; Tree Montgomery. "Tree Montgomery," 2025.

Opportunity #3: Support RSC Tool Library

In addition to or in lieu of partnerships for space and programming, the government could provide pilot funding to the RSC Tool Library to secure a larger facility, expand its range of services, or hire additional personnel to coordinate government and community partnerships. This pilot could include evaluation requirements to measure environmental, economic, and equity impacts, as well as community engagement. Findings from this evaluation period would inform decisions about continued or expanded support.

Opportunity #4: Establish A County-Run Tool Lending Program

The County also has the option to create its own tool lending program. While a county-run model offers clear potential, it also presents logistical and operational challenges. First, the County would need to hire staff with technical expertise in tools to manage inventory, assist users, and maintain tools. Depending on the County's policies with donations, it would need the proper time and staff to sort through donated tools or money to purchase new tools. Staff would also need the proper expertise and knowledge to repair tools as they wear and break down. Finally, the County would need to obtain liability insurance to protect them in the case of injury to a person or damage to property. Starting a county-run tool lending program is promising, but would require a significant upfront investment in staffing, equipment, and infrastructure.

Evaluation of Opportunities

Description of Criteria

To evaluate the opportunities and recommendations above, each were evaluated against five criteria: 1) cost, 2) timeline, 3) geographic accessibility, 4) community involvement, and 5) equity outcomes (**Table 7**). These evaluations are approximate and relative to each other, and options were judged in their ideal state rather than the realistic scenario.

Table 7: Criteria for Evaluation of Opportunities

Criteria	Questions	Ratings		
Affordability	How affordable or cost-effective is this	• 1: low affordability		
(A)	option for Montgomery County to start	• 2: medium affordability		
	and operate?	• 3: high affordability		
Timeline (T)	How quickly could Montgomery County	• 1: slow timeline		
	launch and/or complete this option?	• 2: medium timeline		
		• 3: quick timeline		
Geographic	How easy would it be for county residents	• 1: low accessibility		
Accessibility	with interest in demand in tool lending	• 2: medium accessibility		
(GA)	programs to access it based on proximity	• 3: high accessibility		
	and transit?			
Community	How much is community input and	• 1: low involvement		
Involvement	feedback influencing the tool lending	• 2: medium involvement		
(CI)	program under this option? Does the	• 3: high involvement		
	option engage the broader community?			
Equity	What is the potential for this option to	• 1: low potential		
Outcomes	directly produce equitable outcomes	• 2: medium potential		
(EO)	through the tool lending program across	• 3: high potential		
	racial, socioeconomic, gender, and other			
	demographics?			

Findings And Recommendations

Table 8: Evaluation of Opportunities and Recommendations

Option	Agencies	Criteria (A)	Criteria (T)	Criteria (GA)	Criteria (CI)	Criteria (EO)	Total
#1: Community Assessment	Any	3	2	3	3	3	14
#2a: Co-location	MCPL, MCR, OEMHS	3	2	2	2	2	11
#2a: Strategic Placements	M-NCPPC	2	2	2	3	2	11
#2a: Mobile and Modular	Any	3	2	3	3	2	13
#2b: Repair Cafes	MCPL, MCR, DEP	3	3	2	3	2	13
#2b: Classes	Any	3	2	2	2	3	12
#2b: Service Events	Volunteer Center, DEP	3	3	1	2	3	12
#3: Financial Support	Council, Grants	2	2	2	1	2	9
#4: County-run Program	DEP	1	2	2	2	2	9

Ideally, the best option would have high affordability, a quick timeline, high accessibility, high community involvement, and high potential for equity outcomes. Based on this standard, the three best opportunities and recommendations for the County are (1) conducting a community needs and interest assessment, (2) partnering with RSC Tool Library to explore mobile and modular options, and (3) partnering with RSC Tool Library to run repair cafe events (**Table 8**). The first option is essential for identifying needs and interest and informed targeted service delivery. The second is a quick way to expand the geographic reach of the current tool library beyond Rockville to areas with high needs and interest without having to rent a full space. Finally, the last option will engage the community through a volunteer event, help promote a culture of reuse and repair, and can be targeted to serve communities and populations in the County.

Conclusion

Tool lending programs emerged as a grassroots solution to economic hardship and as a response to growing interest in environmental sustainability and community self-reliance. These programs complement and advance Montgomery County's objectives of environmental responsibility, economic vitality, and social equity. The County has a variety of potential opportunities to get involved with tool lending programs, either by partnering with or supporting the RSC Tool Library or starting their own programs. Moving forward, the County should conduct a community needs and interest assessment, partner with RSC Tool Library to explore mobile and modular options, and partner with RSC tool Library to hold repair cafe events. By partnering with an existing tool lending program and making community-informed decisions, Montgomery County can bring environmental, economic, and equity benefits to the County through shared access to tools and knowledge.

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Appendix

Table A1: Stakeholder Interviews

Affiliation	# of Interviews	Parenthetical Citation
Tool Lending Program Employees	6	
Rockville Science Center Makerspace and Tool Library	2	(RSC)
District of Columbia Public Libraries	1	(DCPL)
Baltimore ToolBank	1	(ВТВ)
Greenbelt Makerspace Cooperative	1	(GMC)
DC Tool Library	1	(DCTL)
Montgomery County Government Employees	3	
Montgomery County Public Libraries	1	(MCPL)
Business Center	1	(BC)
Office of Emergency Management and Homeland Security	1	(OEMHS)
Other Stakeholders	3	
UMD Makerspace Initiative	1	(UMD)
City of Takoma Park	1	(ТКРК)
Silver Spring Time Bank	1	(SSTB)
Total Interviews	12	

Table A2: Annual Reports and Toolkit

Report	Organization	Location	
The Library of Things Toolkit	Shareable	National	
The State of Libraries of Things 2024	Shareable	National	
2024 Annual Report	Station North Tool Library	Baltimore, MD	
Chicago Tool Library's Annual Report 2020	Chicago Tool Library	Chicago, IL	
2023 Annual Report	The Tool Library	Western New York	
Our 2024 Impact	ToolBank USA	National	
2024 Impact Report	Baltimore ToolBank	Baltimore, MD	

Table A3: Montgomery County Documents

Document Name	Environment	Equity	Economy
Thrive Montgomery 2050	Yes	Yes	Yes
Montgomery County Housing Needs Assessment	No	Yes	Yes
Meeting the Housing Needs of Older Adults	No	Yes	Yes
Montgomery County Colocation of Public Facilities	Yes	Yes	Yes
Community Needs Assessment	Yes	Yes	Yes
Retail in Diverse Communities	No	Yes	Yes
Fiscal Year 2024 Annual Report on Montgomery County's Climate Action Plan	Yes	Yes	No
Montgomery Parks Fiscal Year 2023-2027 Sustainability Plan	Yes	Yes	Yes
Comprehensive Solid Waste Management Plan	Yes	No	No
Comprehensive Flood Management Plan - Phase 1 Report	Yes	No	No