



**The Mayor's Fund
for Philadelphia**

REQUEST FOR PROPOSALS

**Philadelphia-Wide Coordinated Computer Refurbishing and Tech Support
Operation Delivered to the Digital Literacy Alliance**

Issued by:

The Mayor's Fund for Philadelphia

On behalf of the City of Philadelphia Office of Innovation and Technology and its Digital Literacy Alliance

Questions about this RFP should be submitted to digital.equity@phila.gov by August 15, 2022.

Proposals must be received no later than September 16, 2022. A pdf version of the proposal must be emailed to mayorsfund@phila.gov AND digital.equity@phila.gov.



SECTION I – INTRODUCTION

A. Statement of Purpose

The City of Philadelphia’s Office of Innovation and Technology (“OIT”) and the Mayor’s Fund for Philadelphia (the “Fund”) seek an entity to coordinate a city-wide computer recycling, refurbishing and community tech support effort. The goal of this effort is to create a sustainable model for providing free and low-cost devices and city-wide technical support to residents in need to extend the lifespan of residents’ devices. We envision a model that includes:

- 1) a robust device collection operation that includes e-waste vendors/recyclers with current accreditation under the [e-Stewards](#) or [R2 certified](#) appendix B standards¹.
- 2) a device refurbishment program that follows established standards for data sanitization and security².
- 3) a device redistribution program through which residents can receive free and / or low-cost devices.
- 4) a program that offers reasonable free or low-cost tech support that includes IT help desk support and device repair to Philadelphia residents in need across the City.

This opportunity will provide start-up funding for the first two years of operations for the winning Applicant to provide these services in Philadelphia, with the expectation that the selected Applicant develops a sustainable funding model for continued operations beyond Year 2.

B. Department Overview

The Mayor’s Fund works in close partnership with the City of Philadelphia (“the City”) and private sector partners to develop and run initiatives that reflect Mayoral priorities and seek to improve the quality of life for all Philadelphians. The Fund will serve as the fiscal administrator for this contract opportunity. OIT will serve as the project manager for this effort on behalf of the Fund.

OIT provides technology services and solutions to City of Philadelphia operational departments and directly to the public through digital services on [phila.gov](#). OIT has been a key player in the City’s digital inclusion efforts for residents since 2010 with the creation of the KEYSPOt program of public computer centers and the formation of the [Digital Literacy Alliance](#) in 2016. The onset of the COVID-19 pandemic expanded OIT’s priorities to seek solutions for a digital divide that disproportionately impacts low-income households and communities of color in Philadelphia.

¹ Applicants must provide evidence that they or their partners have current accreditation under the eStewards or R2 Appendix B standards, as recommended by the Federal EPA, including DoD 5220.22-M data sanitization method, or the DoD 3-pass method & third-party audit certification of the effectiveness of their data security controls.

² Applicants must be able to demonstrate that they or their partners use NIST 800-88 guidelines for data sanitization for all recycled products or components which store data.



The Digital Literacy Alliance (“DLA”) is a broad coalition of institutional stakeholders working to alleviate the digital divide in Philadelphia. It defines digital literacy as “the ability to access technology and the Internet and use those tools to find, evaluate, share and create content.” The DLA develops strategy, manages an existing seed fund, oversees funded programs, and seeks additional funding with the assistance of relevant stakeholders and coalition members.

The goals of the DLA are:

- To provide financial support to programs in Philadelphia that address issues of digital literacy and inclusion
- To serve as a convener of stakeholders and partners from diverse sectors who are interested and invested in closing the digital divide in Philadelphia
- To serve as a resource for best practices and innovations in digital literacy programming and policy-making

To date, and on behalf of the DLA, OIT has administered grant awards to over 35 different non-profit organizations across the city with annual funding cycles between \$175,000 and \$225,000. In lieu of a 2022 grant cycle, the DLA has prioritized the need for a coordinated city-wide computer refurbishing and tech support operation, and will allocate its grant budget to this contract opportunity.

C. Problem Statement and Background

The pandemic demonstrated that having one or more working internet devices in a household is a necessity for residents. Nineteen percent of Philadelphia households (approximately 119,000) still do not have a working computer, laptop, desktop, and / or tablet. This percentage increases among certain populations -- 37% of low-income residents, 41% of seniors, and 42% of Hispanic residents whose primary language is Spanish lack access to a large-screen device. Cost is cited as the number one barrier. While a smart phone may be useful for some online tasks and telehealth, research shows that relying exclusively on smartphones in wireless service plans is associated with poorer outcomes for students and a reduction in labor participation.^{i ii}

One critical gap identified by our key partners that developed the City’s Digital Equity Plan is the lack of a large-scale recycling and refurbishing initiative in Philadelphia that can provide a steady-stream of devices to those in need. In December 2020, with funding from AT&T and Santander Bank, OIT launched [PHLDonateTech](#) to bring together several recyclers and small-scale refurbishers and address the immediate need during the pandemic. This effort collected over 4,800 devices and distributed over 1,000 free devices to residents in 2021. This was a small-scale pilot and the City is interested in seeding a more sustainable and robust effort.

The PHLDonateTech pilot program revealed several capacity challenges:

Device Recycling Challenges

- Difficulty collecting enough quality equipment to meet resident need.



**The Mayor's Fund
for Philadelphia**

- Limited resources and capacity to strategize how to bring in equipment in bulk.
- Lack of physical space in Philadelphia to store and transition equipment.

Device Refurbishing Challenges

- Limitations in organizational capacity affected the number of devices and frequency that devices could be shipped / delivered to local organizations and / or directly to individuals.
- Limitations in staff and volunteer capacity affected how many devices could be refurbished in a timely manner.
- Difficulty finding parts to refurbish devices could be expensive and increase overall costs.

Device Technical Support Challenges

- Limited staff capacity for providing IT help desk support, and troubleshooting / or repairing devices.

Through this RFP, OIT and the Fund seek to seed an entity with the experience to build on the success and knowledge gained from the PHLDonateTech pilot. The selected entity will coordinate and sustain an operation that can provide a robust integrated device ecosystem that a) collects devices, b) refurbishes and distributes devices, and c) provides level 1/2/3 help desk / IT support on devices. (See appendix A for definitions). OIT is also interested in ways in which workforce training could be incorporated into this work and lead to a more highly-skilled workforce.

D. General Disclaimer

This RFP does not commit the Fund or the City to award a contract. This RFP and the process it describes are proprietary to the Fund and the City and are for the sole and exclusive benefit of the Fund/City. No other party, including any Applicant, is intended to be granted any rights hereunder. Any response, including written documents and verbal communication, by any Applicant to this RFP, shall become the property of the Fund/City and may be subject to public disclosure by the Fund/City, or any authorized agent of the Fund/City.

SECTION II – PROPOSED SERVICES

A. Scope of Work

OIT and the Fund seek an entity to coordinate a city-wide computer recycling, refurbishing and community tech support effort in Philadelphia. OIT aims to learn a) what applicants perceive to be the best model for recycling, refurbishing and tech support in Philadelphia, b) what local entities or partnerships would be involved, and c) how that model could be sustained beyond initial startup funding.

Required components of a proposed solution must include:



**The Mayor's Fund
for Philadelphia**

- Demonstration of a robust strategy for the collection of devices and ability to build partnerships with national and local companies or organizations to pick up bulk donations of devices.
- Commitment to accredited e-waste vendors/recyclers and standards for data sanitization and security.
- Ability to hold, secure, and refurbish devices in a timely manner.
- Distribution of devices via an online store and a "storefront" model or in partnership with local organizations that offer a consistent schedule of days and/or hours for residents.
- A model that provides a set number of free devices each year to be determined by the Applicant and offers a sliding scale price point of devices at \$50 or less.
- Demonstration of a Help Desk / Tech Support model that has multi-linguistic capacity and provides free or low-cost Level 1/2/3 repair and technical assistance by phone and in person on a consistent schedule.
- Collaboration with local partners. This can include one or more of the following: local refurbishers, recyclers, recreation centers, libraries, digital navigator organizations, or other local digital inclusion partners to support any aspect of the proposed solution for refurbishing, distribution or technical support.

Applicants are encouraged to provide additional information as part of their solution. Examples include but are not limited to:

- Use of the Affordable Connectivity Program or other federal programs to support device and internet access.
- Ability to work with schools or other larger entities to offer tech support and device repair.
- Experience providing or integrating workforce IT training or bringing in apprentices or students from Workforce Training programs to support operations.

The Fund and OIT anticipate awarding a contract to one selected Applicant who will serve as the "prime" contractor for the delivery of these services, but Applicants may propose additional organizations to be subcontracted by the winning Applicant as part of the Applicant's team. The Fund and OIT will accept proposals from a range of solution providers. Responses need not be limited to local organizations or companies. Applicant proposals should demonstrate understanding of Philadelphia's local context and, if not a local organization, should demonstrate having committed local partners. Applicants should consider public infrastructure / assets, such as libraries and recreation centers, as well as local community-based organizations in their service delivery plan. Lastly, applicants must be able to demonstrate an ability to sustain operations beyond any initial funding from this RFP.

B. Tangible Work Products

- Online and Storefront presence



**The Mayor's Fund
for Philadelphia**

- Marketing materials
- Hotline for tech support
- Written Progress Reports as determined by contract
- Quarterly data that may include but are not limited to:
 - Number of devices collected as part of any local campaign
 - Number and types of devices distributed to local entities and/or directly to local residents
 - Number of help desk tickets submitted and resolved
 - Demographics of residents who received devices including geography, race, ethnicity, and age to demonstrate devices are reaching those who need them most

C. Timeline

Milestone	Date
Release of RFP	7/18/22
Pre-proposal webinar (Registration required)	8/02/22 at 10:30 a.m. EST - REGISTER HERE 8/03/22 at 1:00 p.m. EST - REGISTER HERE
Questions due from applicants	8/15/22
Question responses posted publicly	9/02/22
Proposals due	9/16/22 at 11:00 p.m. EST
Applicant interviews	9/19/22-9/30/22
Final selection	10/14/22
Kick-off meeting	10/28/22
Contract signed	12/31/22

Field Code Changed

Field Code Changed

The Fund and OIT anticipate that the work under this RFP will be accomplished over a two-year funding cycle ending by December 31st, 2024, unless the timeline proposed by Applicants provides acceptable rationale for a longer timeframe based on funding requested.

D. Budget

The Fund and OIT seek to understand the full cost of the proposed project over a 2-year period. Applicants should anticipate conversations about budgets as part of any finalist interviews and be able to demonstrate areas where the budget could be reduced, increased, or altered to meet the needs of the City. Applicants will be required to provide a 10% funding match as part of their proposal budget in year one and a 25% match in year 2.

E. Location of Work

OIT expects distribution of devices for this project to be done solely within Philadelphia County with attention to the neighborhoods with the least access to devices and internet and in partnership with local trusted entities. Work with recyclers or other partners involved in this device ecosystem can be done nationally, regionally, or remotely if the applicant is able to demonstrate that this is the most cost-effective way to operate.



SECTION III – GENERAL TERMS

The Mayor's Fund for Philadelphia serves as a Fiscal Sponsor for projects and programs administered by The City of Philadelphia and City-Related Agencies in support of the Mayor's core priorities. The Fund is responsible for implementing procedures that honor Chapter 17-1400 of the Philadelphia Code.

By submission of a proposal in response to this RFP, the Applicant agrees that it will comply with all contract monitoring and evaluation activities undertaken by the City and the Fund.

For this contract opportunity, the Mayor's Fund has agreed to act as the "Fiscal Sponsor" for the City of Philadelphia's Office of Innovation and Technology to facilitate services described above. The contract or contracts resulting from this RFP will be held between the Fund and the selected Applicant(s).

What follows are contractual terms the chosen Applicant will be expected to agree to. By submitting a proposal in response to this RFP, the Applicant acknowledges and agrees to be bound by these terms unless otherwise noted in the Applicant's proposals. The Applicant may suggest alternative language to the following terms, and at the Fund's sole discretion, negotiation may be possible to accommodate an Applicant's requested changes during the contracting phase.

A. Insurance Requirements

The standard minimum insurance policy requirements to be maintained by Vendor of The Mayor's Fund are listed below. Vendor must maintain:

1. Workers' compensation (or similar) insurance as required by the jurisdiction where the Services are performed
2. Commercial general liability insurance (including products liability, completed operations and contractual liability coverage) with minimum limits applicable to bodily injury and property damage of \$1,000,000 per occurrence, and \$2,000,000 in aggregate, and containing a waiver of subrogation against The Fund
3. Excess or umbrella insurance with minimum limits of \$1,000,000 per each occurrence and in the aggregate and containing a waiver of subrogation against The Fund
4. Errors and omissions insurance with minimum limits of \$1,000,000 combined single limit

Such policies must (a) be in Vendor's name unless agreed upon in writing by The Fund, (b) include The Fund and its employees as additional insureds, (c) not have a deductible exceeding \$25,000 per claim, and (d) be placed with insurers reasonably acceptable to The



Fund, having a Best's rating of no less than "A-". These minimum insurance amounts are not to be construed as limiting a Contractor's right to obtain additional coverage and higher liability limits at Contractor's discretion. Contractor may be required to provide proof of insurance at the Fund's discretion.

B. Confidentiality

Through performance of the Agreement resulting from this RFP, the selected Vendor may receive or have access to Confidential Information of The Fund and OIT, which may include certain information concerning the Services and other information not generally known to the public. Vendor shall not disclose any Confidential Information it receives from The Fund and the OIT to any person or entity except (a) employees or contractors of Vendor, and (b) Vendor's professional advisors who have a need-to-know such information, provided such professional advisors have agreed in writing to maintain the confidentiality of such information pursuant to confidentiality agreements containing confidentiality obligations that are not materially less restrictive than those contained in this Agreement, or such professional advisors are bound by law or codes of professional conduct to keep such matters confidential. Vendor shall inform such employees having access or exposure to Confidential Information of Vendor's obligations under this Agreement. Vendor shall use not less than the same degree of care (but no less than a reasonable degree of care) to avoid disclosure of such Confidential Information as Vendor uses for its own confidential information of like importance. Vendor shall use reasonable efforts to ensure that Confidential Information and all materials relating to The Fund and the OIT at the premises of Vendor or in the control of Vendor shall be stored at locations and under such conditions as to prevent the unauthorized disclosure of such information and materials. Vendor may not use the Confidential Information for any purpose other than for the performance of to the Services under this Agreement. This obligation shall survive the termination of this Agreement. Vendor shall return The Fund and the OIT's materials, if applicable, to The Fund promptly upon termination of this Agreement or earlier if requested by The Fund.

"Confidential Information" means all non-public information in whatever form transmitted, whether written, electronic, oral or otherwise, including without limitation business plans, specifications, design plans, drawings, software, data, prototypes and other business and technical information that is disclosed by The Fund and the OIT pursuant to this Agreement and that is marked as "confidential" or "proprietary" (or, if disclosed orally, designated as confidential upon disclosure) or which, under the circumstances surrounding disclosure, a reasonable person would deem as confidential. Notwithstanding the foregoing, Confidential Information shall not include information that: (a) is independently developed by Vendor or lawfully received by Vendor free of restriction from another source having the right to so furnish such information; (b) is or becomes generally available to the public without breach of this Confidentiality Agreement by Vendor; (c) at the time of disclosure, was known to Vendor free of restriction; or (d) is required to be disclosed pursuant to any statute, law, rule or regulation of any governmental authority or pursuant to any order of any court of



competent jurisdiction; provided however, that: (e) the Vendor shall use commercially reasonable efforts to notify The Fund and the OIT before disclosure, (f) Vendor shall disclose only such portion of the information as is legally required; and (g) the disclosed information is not "Confidential Information" only for the purpose of and to the extent of the required disclosure, and otherwise remains "Confidential Information" subject to the terms and conditions of this Agreement.

C. Representations, Warranties, and Covenants

The selected Vendor represents, warrants and covenants that so long as the Agreement resulting from this RFP has not been terminated: (a) Vendor has full power and authority to enter into and perform its obligations under the Agreement; (b) entering into and performing its obligations under the Agreement (i) will not violate or breach any agreement binding on Vendor; and (ii) does not result in a conflict of interest between the Services or Works to be provided under the Agreement and Vendor's other activities. Vendor shall advise The Fund and the OIT of any conflict of interest that arises during the performance of the Agreement. (c) the Services and Works will: (i) be created and originated by Vendor and may be conveyed to The Fund under the Agreement free and clear of claim of ownership by others; (ii) not violate or infringe any proprietary information, non-disclosure, copyright, patent or other intellectual property or contractual right; (iii) not violate any applicable law, rule or regulation; (iv) conform with the Agreement, be performed in a workmanlike and professional manner, be of high quality, and in no event, be of a quality less than the quality of services performed and work product created by a skilled consultant with expertise in the area for which Vendor is providing the Services; and (v) be free of errors and that all failures of the Services or Works furnished hereunder will be corrected to conform with the Agreement.

D. Indemnification

The selected Vendor shall indemnify, defend and hold The Fund and the OIT harmless from and against any damage, loss, liability, obligation, claim, litigation, demand, suit, judgment, cost or expense including, without limitation, reasonable attorneys' fees ("Claims") that may be made: (a) for bodily injury, death, or damage to real or tangible personal property, including theft, resulting from the acts or omissions of Vendor, its employees or agents; (b) in connection with Vendor's breach of its obligations under the Agreement; (c) by any third party alleging that the Services or Works violate any proprietary information, non-disclosure, copyright, patent or other intellectual property or contractual rights; and (d) in connection with Vendor's recklessness, gross negligence, willful misconduct, or violation of applicable law. The Fund and the OIT may participate at its expense in any Claim, and The Fund and the OIT's prior written consent is required for settlement of any Claim.

Except for the indemnification covenants contained in the first paragraph of this Section, for which no cap shall be applicable, if Vendor has any other liability to The Fund and the OIT



for any Claims, such liability shall in all cases whatsoever be limited to the greater of (e) any amount of insurance Vendor is required to carry as set forth in the Agreement, and (f) the total amount received by the Vendor for the Services under the Agreement.

SECTION IV – SUBMISSION REQUIREMENTS

A. Executive Summary: (no more than 1 page)

Provide an overview of your proposed model, why your organization/company is the right entity to execute this project and what impact you hope to have on Philadelphia and/or its residents.

B. Proposal Description: (no more than 10 pages)

The proposal should respond to the Problem Statement above and the following key concerns below.

1. **Describe in detail your ability and experience collecting and recycling devices and how you would leverage this model for Philadelphia.**
 - a. Describe any local or national partners you have that demonstrates your ability to have an ever-ready flow of devices.
 - b. If you are partnering with a specific recycler or recyclers, please provide details on who these companies are and why they are selected, certifications they have, and any internal audits of those partners that you do.

2. **Describe how you would set up operations in Philadelphia.**
 - o Describe how and where you would store and refurbish equipment.
 - o Describe your data security measures, certifications you possess, and provide a downstream chart that demonstrates your security and data protection measures at every stage.
 - o Provide the minimum specifications for equipment that your organization uses for distributing devices to residents and the reason behind these specifications.
 - o Describe how devices are packaged and any materials you provide along with your devices.

3. **Provide details on your proposed model to distribute devices to Philadelphia residents in need including through an online store, storefront locations, or other means.**
 - o How many devices in a year do you propose to distribute? How many devices will be free? How many will be low-cost?
 - o How will you decide who receives free vs. low-cost devices (some percentage must include free devices)?



- How will you ensure that all residents in need receive devices at no more than \$50?
- How and which local partners will you work with as part of your distribution model? Please provide letters of support from any entities you intend to partner with.

4. Describe your proposed community tech support operation and what is covered by your tech support solution.

- How will you make your tech support operation available to residents across Philadelphia regardless of where they live and whether they receive a device from you? How many days/week or days/month will you aim to provide this service?
- If you intend to collaborate with one or more local partners on a tech support operation, please describe these partners. Please provide letters of support from any entities you intend to partner with.
- Describe any measures you will take to hire and train local talent as part of your solution.

5. *Optional:* The city is interested in practical ways to integrate workforce training into a proposed solution. Describe a workforce training model that is currently employed by your organization or could be incorporated into your solution.

- Describe any certifications, credentials, apprenticeships, or pre-apprenticeships that you offer or would provide as part of an IT career pathway.
- If relevant, what national or local workforce training partners would you collaborate with as part of your proposal?
- What technology or IT employers would you work with to place students upon graduation of training programs?
- If responding to this question, provide a line item in your budget outlining the costs of incorporating workforce training into your solution.

6. *Optional:* Describe any other added benefits or innovative components to your model that is outside the scope of work of this RFP.

C. Timeline (no more than 2 pages)

Provide a detailed 2-year timeline of your proposed solution with major milestones. The Applicant should state the number of days following authorization to proceed by which it will be ready to start the work, including any mobilization time.

D. Organizational Infrastructure and Partnerships (no more than 3 pages)



**The Mayor's Fund
for Philadelphia**

1. Provide a statement of qualifications and capability to perform the services sought by this RFP, including a description of relevant experience with projects that are similar in nature, size and scope.
2. Please describe your staffing plan and the team that will implement this project. The proposal must identify the teams' qualifications by skill set, experience level, and ability to complete the work. Resumes of all personnel so identified should be included in Applicant's proposal. Experience with "like" projects should be cited.
3. Outline any partnerships necessary to implementing your proposal.
4. Describe the annual income of your organization and how your organization manages finances, including any financial management software and accountability standards used.
5. This RFP is to seed funding for an entity to lead this work beyond the 2-year scope of this contract. Describe how this city-wide program would continue once the contract period has ended, either in its entirety or in another capacity. What additional resources will you leverage? How will you create revenue to support this program?

A. Cost Proposal:

Applicants must provide a detailed cost proposal, which must include:

1. A budget narrative and a line-item breakdown of the costs for specific services and work products proposed; and
2. A match of 10% in year 1 and 25% in year 2. Match can include in-kind services and/or direct cash.

The proposed price must include all costs that will be charged for the services and tangible work products the Applicant proposes to perform and deliver to complete the project. Any contract resulting from this RFP will provide for a not-to-exceed amount in the compensation section of the contract. Please note that the Fund and the City are not entitled to any revenue generated through the delivery of the services.

B. References:

Include contact information for a minimum of (2) references who can speak to the applicant experience with similar types of work as that described in this RFP.

C. Deadline for Submission:



**The Mayor's Fund
for Philadelphia**

Responses to this RFP must be emailed as a single pdf by **11:00 PM EST September 16, 2022** emailed to: mayorsfund@phila.gov AND digital.equity@phila.gov.

D. Proposal Review and Selection Process:

The DLA has created a transparent and ethical process for grantmaking and will again use that process for this RFP. Applicants are encouraged to participate in an informational pre-proposal webinar, offered on **Tuesday, August 2nd at 10:30 a.m. EST and Wednesday, August 3rd at 1:00 p.m. EST**. Applicants must register for the webinar in order to receive the virtual meeting invite; see SECTION II, C. Timeline for registration links. Applicants will have approximately two months from the public grant announcement to submit a full proposal. Submissions will be evaluated by a review committee of DLA members and members of key departments in the City who will meet and evaluate applications based on the answers Applicants provide in response to SECTION IV. It is expected that a limited number of interviews will be offered to finalists. Based on these evaluation criteria and further discussion, the review committee will make its final recommendations to the full DLA membership.

The successful candidate will be the person/firm who demonstrates the knowledge, experience and ability to perform the work effectively.



Appendix A: Definitions

COMPUTER RECYCLING

Process of taking devices at the end-of-life cycle and breaking them down to their most basic elements for reuse.

COMPUTER REFURBISHMENT

Process of taking used devices and making them usable for new users

DEVICE

Refers to a laptop, desktop, tablet, or smartphone.

DIGITAL NAVIGATORS

Digital navigators are trusted guides who assist community members in internet adoption and the use of computing devices. [Philadelphia's Digital Navigators](#) are trained to help support residents with accessing and applying for free or low-cost devices and internet, support residents with everyday online tasks, and make referrals to formal digital skills classes.

TECHNICAL SUPPORT

Advice service provided, usually over the phone, to help people with problems using computers. Technical support is distinguished here from *digital navigation for the purposes of this RFP*, which helps residents on how to use properly working common software, an application, or basic functions of their device. Tech Support can refer to a range of *IT helpdesk support* that often requires a more skilled technician.

- **Level 1:** Support that can mostly be done over the phone with someone familiar with common device problems such as:
 - resetting a device password
 - re-booting a device
 - finding/opening/manipulating an application on a device
- **Level 2/3:** Support that requires a more skilled technician and is sometimes referred to as "break/fix". It can include but is not limited to:
 - troubleshooting, diagnosing and/or fixing a software, hardware, or connectivity problem with a device or with peripheral devices that are not working properly
 - fixing or replacing a part of a device
 - running virus software
 - re-installing an operating system

¹ Hampton, K. N., Fernandez, L., Robertson, C. T., & Bauer, J. M. Broadband and Student Performance Gaps. James H. and Mary B. Quello Center, Michigan State University. <https://doi.org/10.25335/BZGY-3V91>



**The Mayor's Fund
for Philadelphia**

ⁱⁱ Sánchez, Alvaro, Scavette, Adam, "Broadband Subscription, Computer Access, and Labor Market Attachment Across U.S. Metros" [Research in Action Lab](https://www.philadelphiafed.org/community-development/workforce-and-economic-development/broadband-subscription-computer-access-and-labor-market-attachment-across-us-metros). Federal Reserve Bank of Pennsylvania. June 2021.
<https://www.philadelphiafed.org/community-development/workforce-and-economic-development/broadband-subscription-computer-access-and-labor-market-attachment-across-us-metros>