Digital Equity and Justice in Maryland:
Challenges and Opportunities

Final Research Report

By Colin Rhinesmith, Ph.D.

Final Report Submitted to Economic Action Maryland on July 12, 2023
Digital Equity and Justice in Maryland: Challenges and Opportunities

This report was written by Dr. Colin Rhinesmith, Founder and Director of the Digital Equity Research Center at the Metropolitan New York Library Council, with research assistance from Candace Hernandez, Becca Quon, Chris Ritzo, and amalia deloney and published by Economic Action Maryland.

This work is licensed under the Creative Commons Attribution-ShareAlike 4.0 International license.

Please include the following attribution when citing this report:


Acknowledgements

# Table of Contents

**Executive Summary**  

**Introduction**  
- Defining Digital Equity  
- Defining Digital Justice  
- Digital Injustice and Opportunity in Maryland  
- Research Overview  

**Digital Equity Challenges**  
- Barriers to Broadband Access, Adoption, and Use  
- Unique Needs of Older Adults  
- Unique Needs of Marylanders with Disabilities  
- Privacy and Security  

**Barriers to Digital Justice**  
- Housing  
- Employment  
- Criminal Justice  
- Finance  

**State Laws, Policy Recommendations, and Advocacy Campaigns**  
- Housing  
- Employment  
- Criminal Justice  
- Finance  

**Broadband Access as a Public Utility**  
- Internet as a Utility v. an Infrastructure  
- A Vision of Broadband as a Regulated Utility  

**Realizing Digital Equity and Justice in Maryland**  
- Recommendations from Maryland Residents  
- Recommendations from Maryland and National Experts  
  - Promote public alternatives to commercial internet service providers  

**Conclusions and Next Steps**  

**Appendix I: Research Design**  

**Appendix II: List of Experts Interviewed and Consulted**
Executive Summary

This report presents findings from a study of the digital equity and justice challenges facing Maryland residents, as well as opportunities and policy recommendations to address these challenges. The research focused on gaining a deeper understanding of the landscape of issues related to providing universal broadband access and achieving digital equity and justice for all residents in Maryland during a moment of both unprecedented federal funding available to states through the Infrastructure Investment and Jobs Act and the potential for increased digital harms through both technological and market forces. The goal of this study is to inform Economic Action Maryland,¹ and similar organizations, in their work to identify effective programs, practices, and policies that can be used to develop a digital equity policy agenda to advance justice and empower people across the state.

The findings in this report are drawn from the analysis of qualitative data gathered during 5 focus group sessions with a total of 61 participants in Baltimore City and across the state. In addition, interviews were conducted with 24 experts in Maryland and across the nation to gain their insights for the research. Based on this analysis of data with the 85 total participants in this project over the six-month research period, January to June 2023, the following key findings emerged as significant digital equity challenges and opportunities for Maryland.

Digital Equity Challenges

The following five areas were identified as the most significant digital equity challenges, particularly for individuals and families on limited monthly incomes.

1. **Affordability** is the largest barrier to internet access regardless of where you live in the state. More support is needed to promote awareness and outreach for government subsidies such as the Affordable Connectivity Program (ACP) to help residents sign up.

2. **Reliability** of internet connectivity is a major barrier in both urban and rural areas across Maryland. In urban areas, a reliable connection can be a challenge due to dependence on wireless-only connectivity. In Baltimore City, people’s experiences with slow, unreliable internet speeds when they should have faster internet has caused some concern about the practice of digital discrimination.

¹ [https://econaction.org/](https://econaction.org/)
3. **Reluctance to use and distrust of the internet** are two interrelated issues that were reported by several participants in this study. Both issues were identified as barriers to digital equity largely due to people’s concerns about online scams and other predatory behavior online. Distrust includes a lack of faith in government-funded programs, including subsidies to support digital access. This was acutely relevant in Baltimore due to past failures and broken promises from city officials in the past administrations. This report suggests that additional research may be needed to discern reluctance from distrust as a barrier to digital equity for residents in Baltimore and across the state.

4. **Lack of digital skills** was identified as a significant barrier to digital access, adoption, and use, particularly among older adults. Research participants strongly recommended that additional support for targeted digital skills training must be pursued to address social and digital inequities among residents across the state.

5. **Privacy and security** are two major concerns for residents in Maryland – issues that are closely related to distrust of the internet. Marylanders are keenly aware of and concerned with being victims of identity theft and other cyber crimes that have targeted individuals, particularly those who are low-income, people of color, and older adults.

Vulnerable populations are even more susceptible to digital inequities. In response, specific measures should be taken to address their unique digital equity challenges and advance opportunities. For example,

- **Older adults** experience unique challenges related to digital access due to significant concerns about isolation, internet safety, and a lack of digital literacy skills. Research participants indicated ongoing social and technical support is needed to address the digital equity needs and barriers facing older adults in Maryland.

- **Children and adults with disabilities** in Maryland faced unique barriers during the COVID-19 pandemic and many of these challenges remain. Marylanders with disabilities need support in gaining access to affordable, reliable high-speed internet, while also obtaining the assistive devices needed to help children and adults be successful in their everyday lives.
Barriers to Digital Justice

Study participants experienced significant barriers to digital justice, and national experts shared their insights on digital harms impacting low-income communities and communities of color, particularly at the intersection of technology and the following four areas: housing, employment, criminal justice, and finance.

1. **Housing.** Data brokers and tenant screening companies threaten people’s ability to access housing. National experts shared their research on how the profitability of personal data can lead to discrimination against formerly incarcerated individuals and other vulnerable populations.

2. **Employment.** Online algorithmic decision-making tools reinforce existing biases in the physical world that impact people’s access to employment. The use of AI in online hiring practices can introduce unintentional bias and discrimination.

3. **Criminal Justice.** Predictive policing using AI and facial recognition software present a barrier to digital justice both for those formerly incarcerated as well as those who have not directly experienced the criminal justice system.

4. **Finance.** Data brokers and fintech companies' use of aggregated data result in racial discrimination during credit checks and other financial interactions where networked devices are used.

A review of existing state laws, policy recommendations, and advocacy campaigns are included as a way to conceptualize what is being done, as well as what still needs to be done, to address the digital harms introduced above.

Community members offered several recommendations to help mitigate digital inequities across Maryland, rooted in local cultural context and knowledge.

1. **Provide broadband for all.** Regardless of where you live, Marylanders across the state shared a unified voice that underscored the importance and need for universal access to high-speed, reliable, and affordable internet service in every community.

2. **Solutions should be informed by intentional engagement** with residents most impacted by digital inequities in areas across the state. Digital equity initiatives that involve partnerships between multiple stakeholders must be rooted in processes of
mutual trust and reciprocity that are often developed through intentional community engagement efforts over time.

3. **Approach digital equity through a racial justice lens.** Respondents, particularly in Baltimore City, noted that this is particularly important because of the history of redlining and other racially discriminatory policies that have disproportionately impacted communities of color.

4. **Engage major health care providers as partners in digital equity initiatives.** These efforts might include developing local telehealth initiatives and gaining insights from lessons learned in the community health space that involve community members as partners in developing local solutions to public health challenges.

**Experts in Maryland and nationwide offered their recommendations for advocacy organizations like Economic Action Maryland working to advance digital equity and justice.**

- **Promote public alternatives to commercial ISPs.** Maryland should continue to support municipal broadband efforts, as well as consider additional options for the public provision of broadband service across the state. Promoting public alternatives to corporate monopoly internet service providers (ISPs) increases competition in the marketplace and can enhance transparency, accountability, and opportunities for consumer protection, including enhanced protection of users’ data.

- **Make digital justice a priority.** Because those who are impacted by housing, employment, and medical insecurity are often the same people impacted by digital inequality, national experts recommended that organizations like Economic Action Maryland prioritize digital justice in their local and state advocacy efforts.

- **Connect digital justice to other focus areas.** National experts interviewed for the research also argued that because digital justice issues are connected to so many other basic needs, organizations like Economic Action Maryland should look across their focus areas to see how each is impacted by digital inequalities and develop campaigns to address these issues for those most impacted.

- **Join national advocacy efforts to advance digital equity and justice.** The experts interviewed for this study not only urged Economic Action Maryland to join larger national advocacy efforts to advance digital equity and justice, several offered to
collaborate with Economic Action MD directly to further develop their digital justice strategy.

- **Work with local communities to develop a set of digital justice principles.** National experts also recommended that organizations like Economic Action MD should work closely with local communities across the state to imagine a vision where technology works for people and not the other way around. This work can help to inspire and provide an offensive, rather than a defensive, mechanism to support local and state advocacy efforts.
Introduction

In 2021, the Abell Foundation published a study by Dr. John Horrigan titled “Disconnected in Maryland.”\(^2\) The research used data from the 2019 American Community Survey and found that 520,000 households in Maryland did not subscribe to a wireline broadband, or high-speed, internet connection. In addition, the study showed that almost 391,000, or 18% of all households, did not have a desktop or laptop computer. 108,000 households in Maryland with children under the age of 18 did not have a wireline connection during this time, and the report identified that these households “suffering from the ‘homework gap’ are disproportionately poor, African American, and Hispanic.”

Maryland is certainly not alone in its challenges ensuring equity in the provision of universal broadband, networked devices, and digital skills for all residents in the state. In fact, $65 billion was allocated in 2021, under the Infrastructure Investment and Jobs Act\(^3\) (IIJA), to advance universal access and digital equity across the nation – an unprecedented investment in the social and technical infrastructure needed to realize a policy vision that first emerged during the mid-1990s with the advent of the world wide web.\(^4\) However, as those most vulnerable to digital inequalities get connected through these federal and state initiatives, how can digital equity advocates work to ensure this increased access, adoption, and use of networked technologies results in more good than harm?

This report contributes qualitative data and evidence in support of this current federal effort as well as to existing state broadband initiatives such as Connect Maryland,\(^5\) while calling attention to the digital harms and threats facing residents in Maryland with regards to housing, employment, criminal justice, and finance. The research highlights multiple perspectives from community members in Baltimore City and across the state and offers insights from experts in Maryland and across the nation. The goal is to show not only the challenges facing Marylanders but also the opportunities to achieve digital equity and justice in ways most meaningful to residents across the state.

While this report centers on the unique challenges and opportunities facing residents in Maryland, examples and recommendations from other states are highlighted to illustrate what is possible when advocacy and social movements align to advance digital equity and justice.

\(^2\) [https://abell.org/publication/disconnected-in-maryland/](https://abell.org/publication/disconnected-in-maryland/)


\(^5\) [https://dhcd.maryland.gov/Broadband/Pages/default.aspx](https://dhcd.maryland.gov/Broadband/Pages/default.aspx)
Defining Digital Equity

The term “digital equity” has been used primarily in the K-12 technology and education space for over 20 years. This focus on equity has centered the unique needs and opportunities of historically marginalized populations. As such, digital equity has always been a social justice issue. For example, in a paper written by Judge, Puckett, and Cabuk (2004) published in The Journal of Research on Technology in Education, the authors defined digital equity in the following way:

*Digital equity is a social justice goal of ensuring that all students have access to information and communications technologies for learning regardless of socioeconomic status, physical disability, language, race, gender, or any other characteristics that have been linked with unequal treatment.*

More recently, the phrase digital equity has been fully integrated into the lexicon of national digital inclusion efforts led by practitioners and supported by local, state, and federal policy initiatives. The National Digital Inclusion Alliance has defined digital equity in this way:

*Digital equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.*

Subsequently, this definition of digital equity has become a standard in the field due in part to its inclusion in the IIJA Digital Equity Act.

This report assumes a definition of digital equity that is perhaps more aligned with the one offered by Judge, Puckett, and Cabuk (2004). In doing so, digital equity is presented in this study as the process whereby social justice is the goal. This approach is also aligned with Economic Action Maryland’s vision, which its website states “envisions an inclusive and just economy in which all Marylanders’ basic needs are met and historical injustices are healed.”

---

7 https://www.digitalinclusion.org/definitions/
8 https://broadbandusa.ntia.doc.gov/funding-programs/digital-equity-act-programs
9 https://econaction.org/about/#who-we-are
Defining Digital Justice

While digital equity has become a more widely known focus and goal of digital inclusion efforts, another view of this work can be understood through the concept of “digital justice.” Often recognized by the visionary organizing work led by the Detroit Digital Justice Coalition that emerged during the NTIA’s Broadband Technology Opportunities Program under the Obama Administration, digital justice was defined in the following way:

> Founded in 2009, the Detroit Digital Justice Coalition (DDJC) is comprised of people and organizations in Detroit who believe that communication is a fundamental human right. We are securing that right through activities that are grounded in the digital justice principles of access, participation, common ownership, and healthy communities.\(^{10}\)

In contrast to conceptualizations of digital equity as solely an issue of “information technology capacity,”\(^{11}\) digital justice “provides spaces through which people can investigate community problems, generate solutions, create media, and organize together.” Digital justice centers those historically impacted and targeted by media and technology to imagine a new kind of community where technology works for them and not the other way around.

Digital Injustice and Opportunity in Maryland

The research presented in this paper builds on an existing body of knowledge and local experience that highlights the role of structural inequalities, primarily racial and economic inequities, in shaping digital injustice. In doing so, this study joins other research efforts that have used critical theoretical frameworks as a lens for uncovering the ways in which historical systems of oppression shape people’s everyday access to technology.

This approach includes understanding how Baltimore’s history of redlining in the city\(^{12}\) has impacted people’s ability to access affordable high-speed internet, networked devices, and digital skills training. For example, when compared side-by-side, neighborhoods that have been historically redlined overlap with the neighborhoods with low rates of broadband

\(^{10}\) Detroit Digital Justice Coalition. (2023). “About” [https://www.detroitdjc.org/about-1](https://www.detroitdjc.org/about-1)

\(^{11}\) [https://www.digitalinclusion.org/definitions/](https://www.digitalinclusion.org/definitions/)

adoption.\textsuperscript{13} This issue, more recently identified as “digital redlining”\textsuperscript{14} considers people’s everyday experiences at the intersection of technology, poverty, and structural inequality. In doing so, additional insights are revealed to help understand the barriers to digital equity for residents across the state of Maryland, as well as the opportunities and recommendations provided by the public to inform state digital equity policy initiatives.

This report is grounded in the understanding that historically marginalized communities in urban and rural areas across the state bring essential strengths and perspectives to these topics. Therefore, the word “opportunity” is used intentionally in this study to emphasize the unique expertise and knowledge not only of the state and national experts interviewed for this study, but also of people across the state who participated in our focus group sessions. The people of Maryland are experts in their own lived experiences and realities and thus have helped to inform the findings, analysis, and recommendations found in this report.

Research Overview

This report presents findings from a research project focused on the landscape of issues related to universal broadband access, digital equity, and related community standards at the intersection of networked technologies and their implications for residents in Maryland. Economic Action Maryland requested research consulting services from Dr. Colin Rhinesmith, Founder and Director of the Digital Equity Research Center at the Metropolitan New York Library Council and a national expert on digital equity and meaningful broadband adoption initiatives, to produce: (1) a preliminary report with findings from the research in Baltimore City and (2) a final white paper on the research findings centered on digital equity and justice challenges and opportunities across the state of Maryland. This paper presents the final research report based on the research conducted over a five-month period between January and May 2023.

The findings in this report are drawn from the analysis of qualitative data gathered during 5 focus group sessions with a total of 61 participants in Baltimore City and across the state. In addition, interviews were conducted with 20 experts in Maryland and nationwide to gain their insights. Based on this analysis of data with the 85 total participants who participated, the


\textsuperscript{14} See https://www.fcc.gov/task-force-prevent-digital-discrimination
following key findings emerged as significant digital equity challenges for residents across the state.

Digital Equity Challenges

This section details some of the most significant barriers to digital access, adoption, and use experienced by residents across the state, as reported by our research participants in rural and urban areas during focus group sessions. The first section highlights some of the most significant barriers to internet access for residents, including: affordability, reliability, reluctance, distrust, and digital skills. The second section describes the unique needs of older adults and Marylanders with disabilities within this context of needs and barriers to digital access. The last section describes some of the more visible challenges regarding access to networked technologies in areas related to privacy, surveillance, and security online.

Barriers to Broadband Access, Adoption, and Use

Affordability

Participants reported that affordability, or lack thereof, is the most significant barrier to digital access both in terms of affordable broadband service and broadband-enabled devices. Respondents in our focus group session explained that not everyone in Baltimore can afford to own a laptop computer and not everyone has access to a smartphone or smart device. This finding is supported by recent research from John Horrigan who found that statewide, “Approximately 391,000 Maryland homes do not have a desktop or laptop computer, or 18% of all households” and that “Close to 290,000 Maryland households have neither a desktop, laptop, nor tablet computing device in their homes. That is 13% of households without these digital access tools.”

While affordability was identified as a barrier to digital access, accessing federal programs to address this barrier has also been a challenge. For example, government subsidies such as the Affordable Connectivity (ACP) Program need additional outreach and awareness to help residents sign up and take advantage of the program, as recently reported in a study by Brian Whitacre, a professor at Oklahoma State University, and his colleagues. As one of our interviewees explained, trust in federal subsidy programs also remains a barrier.

---

15 https://abell.org/publication/disconnected-in-maryland/
16 https://www.fcc.gov/ACP
17 https://www.benton.org/blog/half-acp-eligible-households-still-unaware-program
Even though we do have really great subsidies between the federal and state programs, people just aren't buying that they're not gonna get upsold or there's not gonna be additional fees. So the lack of trust in that commercial space is a huge issue to adoption and it takes a lot of hand-holding and trusted messengers to get past that.

Others noted that in Baltimore City, not all affordable housing is wired with high-speed internet service, so those who qualify for both housing and internet bill support may not be able to connect with service.

Reliability

Accessing a high-speed, reliable, and affordable internet connection proved to be particularly challenging not only for our focus group participants in rural communities, but also for participants in Baltimore City, as well.

For rural communities that rely on satellite connectivity, finding a reliable internet connection can be difficult. When asked, during our focus group in Kent County, about the most significant challenges facing residents after affordability, several participants explained that reliability was a major issue. As one participant explained, “I have HughesNet and I'm not really satisfied because it's always roaming and I live out in the rural area and if it's a rainy day or the tree's a certain way, you get nothing.” Another participant added, “I live in a rural area and there's a lot of water and trees and I was with HughesNet and now I had to cancel because I couldn't get the internet.”

Reliability came up in Baltimore within the context of slow internet speeds in certain areas – an issue related to digital discrimination and redlining. As one of our expert interviewees, who has worked closely with residents in Baltimore, explained,

I've heard... I don't know about the cost being more, but I have heard of like, you're able to get the service, but the internet quality isn't as great as where you were before. And I'm curious to see the research that the FCC conducts, because I know some of the ACP outreach grant programs, they were doing something similar when it comes to the availability data from that map they created. A lot of the times, the ISPs would report that they had this certain internet quality and then you would find out from the residents that live there, "Actually, we don't get those speeds." So, yeah, so I do know internet speeds and internet quality is something that affects people.
The Federal Communications Commission (FCC) Task Force to Prevent Digital Discrimination is currently undertaking a study to “develop model policies and best practices state and local governments could adopt to help prevent digital discrimination in their communities.” This work must be completed by November 2023, as mandated by Congress.18

Reluctance and distrust

Several respondents noted that residents were reluctant to use the internet. This is true even as more and more people are required to use the internet in their everyday lives. As one focus group participant, who works closely with local residents in Baltimore, reported, “We're faced with community members who say, ‘I don't actually need internet service. I don't use the internet.’” Other study participants stated that residents feel like they are being “forced” to use the internet because everything is being moved online.

At the same time, other Marylanders explained that people feel significant distrust in paying corporate providers for the internet. As one focus group participant reported, “People just aren't buying that they're not gonna get upsold or there's not gonna be additional fees.” Researchers such as Seeta Peña Ganghadharan19 have argued that a history of racial profiling in the pre-internet era has negatively impacted trust and safety of people of color in the online world. As a result, this report maintains that additional research may be needed to determine the extent to which people are reluctant v. distrustful of the internet since these are key barriers to digital access, adoption, and use for residents across the state.

Development of digital skills

The digital literacy skills needed to effectively navigate issues related to internet security, as well as to push back against distrust of the internet, was reported as a significant need among residents across the state. As one focus group participant in Baltimore inquired, “How do we empower people and train people and provide the skills needed where they are able to take precautions to very real attempts to attack them through phishing attempts and things of that nature?”

Other study respondents noted that digital equity initiatives must include significant training to assist local residents in being able to effectively use the internet and devices. Another focus group participant underscored the importance of treating people with respect in digital literacy programs by stating, “The people that are confused, they're not stupid, they're just not being

18 https://www.fcc.gov/task-force-prevent-digital-discrimination
taught.” Workforce development programs and other initiatives focused on advancing online healthcare literacy should include human-centered approaches to technology training.

**Unique Needs of Older Adults**

Study participants overwhelmingly noted the need to support older adults in their access, adoption, and use of broadband internet service and digital devices. This includes both digital skills training as well as the ongoing social and technical support that older adults in particular need to feel less isolated and to be successful in their engagement with digital technologies.

**Digital skills training**

Several respondents noted that older adults need additional support with digital skills training. This is because older adults may be reluctant to use the internet, distrustful of the internet, or they may not feel safe and secure using the internet. As one focus group participant noted, “it’s our elders in our communities that are being preyed upon and excluded.” Other respondents described how they work with the older adults in recreational centers and other local trusted institutions where they feel comfortable and supported to help advance their digital skills.

Other respondents felt that older adults were being misconstrued as a group that does not participate actively online, and should not be looked at as a homogenous group. As one participant noted, there is an “assumption that we as older adults only use the technology for telemedicine or for maybe occasional church activities.” Another noted that it’s important “ensure that older adults are recognized as part of the digital equity arena.” This includes making sure that older adults receive both the social and technical support needed to be successful in their digital access, adoption, and use of technology.

**Isolation and safety**

Older adults, particularly those without immediate family members, can feel lonely and isolated in their everyday lives. This fact often gets compounded without access to technology that can keep them connected to loved ones. One of our focus group participants in eastern Maryland noted that older adults in rural areas are particularly vulnerable without access to affordable internet service.

*My concern because this is my father, is in the Crocker Neck area, there’s a lot of seniors there and for them one to be able to afford [internet service], but it also for me being his daughter, it's a safety issue. For the times that we're living in, everything, there's a lot of stuff that you need internet, even like to go to Johnsontown, your phone doesn't work.*
You get to a certain area and the service cuts. That's email, phone calls, you can't even text. That's an issue. And to me it's more of a safety concern knowing that my parents, if anything should happen for my brother and I to be able to get to them or them to get a... Or and even just taking care of business that they call me and I jump on internet where I'm at to help, but they don't have this kind of service that they need to do normal, everyday things that other people take for granted.

Technology access and training can help older adults in Maryland feel more connected to their communities and empowered to participate actively online.

**Unique Needs of Marylanders with Disabilities**

Children and adults with disabilities in Maryland faced unique barriers during the COVID-19 pandemic and many of these same challenges remain. Marylanders with disabilities need support in gaining access to affordable, reliable high-speed internet, while also obtaining the assistive devices needed to help them to be successful in their everyday lives.

**Broadband access and assistive technology**

During our interview with staff at Disability Rights Maryland, the state’s designated Protection & Advocacy agency for people with disabilities, we learned that school-aged children were particularly vulnerable during the pandemic due to a lack of broadband access and assistive devices needed to remain in school and continue to succeed. As Leslie Seid Margolis, Managing Attorney/Policy Counsel for Disability Rights Maryland explained,

> We found there certainly were many kids we represented who could not learn virtually for a variety of reasons. They couldn’t access the technology on their own. They didn’t have the kinds of accommodations and the kinds of tools that they would need to be able to independently access computers. Their families weren't necessarily able to serve as one-to-one assistance and do the kind of hand-over-hand access that kids needed. Or they weren't able to look at a screen and absorb the information coming to them. But even for those who could learn that way, there were barriers in terms of the instructional platforms. Some of those platforms were not accessible to kids who were blind. It's very difficult for kids who were deaf to access. For kids with autism, very very challenging. We found that for kids whose first language was not English, technology was really difficult.

Universal design is another critically important issue that everyone can benefit from when universal design principles are incorporated into the design of software and computing
platforms. Assistive technology specialists who work in school systems can also benefit not only from applying universal design principles in their work, but in considering digital equity as part of their work, as well. Leslie added,

> And so in our world of disability rights, we've been very focused on making sure that people with disabilities, and particularly students with disabilities, have access to technology that will enable them to live more independent lives, to make educational progress.

Marylanders with disabilities and the organizations and advocates who support them should have their voices and issues included in any state digital equity initiative.

**Privacy and Security**

Focus group participants in Maryland noted that they do not always feel safe using the internet. As one participant mentioned, “digital equity is not just getting access to the internet, it’s making sure that we don’t give communities access to the internet and they’re immediately preyed upon by cyber criminals.” Other respondents noted that “criminals are preying upon vulnerable members of our society” and low-income residents, especially seniors, are susceptible to such crimes. As such, several respondents noted serious concerns that residents in both rural and urban areas have with regards to their internet safety and security online.

The women who participated in our women’s focus group at Turnaround Tuesday were particularly concerned about the ability of commercial web companies to track their locations. Located in Baltimore, Turnaround Tuesday’s mission is “To prepare, train, and connect ‘returning,’ unemployed, and underemployed citizens to living wage jobs and to build a vibrant public life.”20 As one of our focus group participants mentioned, "Do you want Google search to know your location? And I always put no, cancel, no, whatever.” One of the members of the Baltimore Digital Equity Coalition who participated in our focus group added, "how do we empower people and train people and provide the skills needed where they are able to take precautions to very real attempts to attack them through phishing attempts and things of that nature."

Our focus groups and interviews with Maryland residents highlighted some of the more visible challenges and threats that people experienced day-to-day once they’d gained access to the internet. However, it was only through our interviews with national digital justice experts and

---

20 [https://turnaroundtuesday.org/](https://turnaroundtuesday.org/)
through our review of recent research on the barriers to digital justice, that it became clear just how pernicious networked technologies can be in discriminating against those already marginalized in society.
Barriers to Digital Justice

The Detroit Digital Justice Coalition (DDJC) principles highlight what is possible when communities that have been historically undermined by media and technology center access, participation, common ownership, and healthy communities. More recent developments in artificial intelligence, machine learning, and algorithmic decision-making have highlighted just how threatening these technologies can be to the possibilities imagined by the DDJC and others already marginalized by commercial media and technology systems.

This section highlights some of the most pressing threats in four areas: housing, employment, criminal justice, and finance. The findings reflect some of the digital harms facing Maryland residents at the intersection of digital technologies and fundamental human needs, while highlighting the efforts of researchers, advocates, and activists working to ensure that technologies create more good than harm.

Housing

A recent report by the OECD (2022), titled "Measuring the Value of Data and Data Flows" plainly shows that data has enormous value. "In the United States, the revenues from direct sales of data were estimated at USD 33.3 billion in 2019." The report adds, "Venture capital investments in ‘big data’ firms, which reflect the investors’ evaluation of the future revenues of these firms, reached USD 35.6 billion in 2021." The data also provide context for understanding why “big data” firms have emerged to utilize and combine disparate data sets to exploit low-income communities and communities of color for profit.

The COVID-19 pandemic provided an opportunity for digital exploitation at a time when those most vulnerable were subject to eviction. In their 2022 Op-Ed titled, “Tenant Screening Companies Profit from Eviction Records, Driving Housing Insecurity” Tinuola Dada and Natasha Duarte from Upturn detail how "Tenant screening companies aggressively market their services to landlords as indispensable tools for choosing a tenant." In their research to advance justice at the intersection of technology design, governance, and use, the authors’ research highlights how tenant screening companies re-packing people’s “credit, criminal, and eviction records” to help landlords choose tenants.

21 https://www.detroitdjc.org
23 https://shelterforce.org/2022/07/19/tenant-screening-companies-profit-from-eviction-records-driving-housing-insecurity/
Dada and Duarte’s article also highlights the role of data brokers\(^{24}\) who “collect eviction records from court websites and store them in proprietary databases, where they can be added to tenant screening reports and haunt people for years or even decades.” Data brokers can often be understood within a more traditional marketing and advertising sphere, as Katharina Kopp from the Center for Digital Democracy explained in the following description,

> Data is a valuable commodity, and so there are companies who have identified this as a business that if they collect data and amass data and then either rent it out or sell it or provide insights about the data that they have, that they can make a lot of money. So this is how these data brokers come about. They have again, traditionally worked maybe offline or virtually in the marketing space, and would amass advertising lists that companies could use to market products, customers to market to. And now they really do this and at scale. Most people can’t really can’t fathom how much data these brokers have amassed and they do different services. Like they might help a company also to sort out their own data that they have.

> The company might have only email addresses or they might have only IP addresses or certain bits and pieces of an individual that then with the help of a data broker they can sort of say, oh, now I know who this person is and I can now pull additional data. Maybe I can pull additional demographic data or financial data. I can sort of get a fuller picture of a customer set that a company might have and they might have only some data on it. So the data brokers specialize in different aspects of enriching and enhancing the data that the company’s collecting. And you can just go and buy datasets, or say I want a particular demographic with a certain FICO score and wanna target only those individuals because I have limited resources and I want to be really efficient. And so the data brokers can help with that.

Akina Younge, Director of Movement Collaborations at the UCLA Center for Race and Digital Justice\(^{25}\) highlighted for us the role of data brokers with regards to the digital harms impacting poor communities and communities of color.

> I think another big issue is the ways that, and this I feel like, is less talked about, but feels important to me at least and the folks I work with is the way that people’s data is collected on the Internet and especially through Internet service providers and how

\(^{24}\) [https://epic.org/issues/consumer-privacy/data-brokers/](https://epic.org/issues/consumer-privacy/data-brokers/)

\(^{25}\) [https://digitaljustice.ucla.edu/](https://digitaljustice.ucla.edu/)
that's packaged and sold to data brokers. And there's a lot of other people who know what that pipeline looks like and can articulate it with a little more confidence than I can. But I, at least, feel like it feels very important because it's happening to everyone.

Hannah Sassaman, Executive Director People's Tech Project and a 20-year veteran working at the intersection of community power and tech and media justice, further described how the impacts of data brokers and tenant screening companies threaten people's ability to access housing.

Access to housing is deeply mediated by access to the internet, and the digital literacy and the support required to advocate for yourself in an economic housing market that is only getting worse. And particularly in cities like Baltimore or other major cities, particularly bad for working class people of color, black and brown people.

Digital equity advocates working to connect historically marginalized communities must be aware that the technologies and platforms that are often necessary to access housing are not always fair or private.

**Employment**

The participants in our women's focus group at Turnaround Tuesday (TAT) in Baltimore described the importance and value of the internet, not necessarily for profit, but for addressing their everyday needs. As one of the women in our TAT focus group described,

I think there's a bunch of little intricacies that we use the internet for at home that we're not really thinking of now. But for example, nowadays we don't shop in person all the time. You got Amazon or your grocery store that you put in you order and it show up and it's already ready. You have all sorts of issues that in your personal life, it's not really a problem until it's in front of you. So your car breaks down. Now I gotta start looking at used cars. You need a new place to stay. Now I'm looking up houses or apartments, all these things. You get an issue, you need the internet now to solve your problem because that phone book solution doesn't exist anymore.

Another TAT focus group participant mentioned, “Yeah, applying for jobs, you can't go into any place anymore and fill out an application. Everything has to be done online.” And another participant explained,

---

26 [https://turnaroundtuesday.org/](https://turnaroundtuesday.org/)
So for me, it actually helps me all around the board, for employment, job searching, setting up my resume, for entertainment... But it actually helps me... Oh, if something is needed from my employer, right away I can do it right on my computer and send it right via email, all of that.

While the internet has been recognized as essential for applying jobs, as well as working online since the lockdown during the COVID-19 pandemic, the data industry behind employment practices online doesn’t always treat everyone fairly when it comes to applying to jobs online. As more companies rely on algorithmic decision-making to assist with hiring “the right person” for the job, researchers, activists, and progressive policymakers have been asking questions about the potential harms that come from such over-reliance on predictive computational models to serve hiring and employment goals.

Olga Akselrod is a Senior Staff Attorney in the Racial Justice Program at the American Civil Liberties Union. Olga explained to us some of the challenges with employers using AI to make decisions, such as hiring, firing, promotions, and even employee management and surveillance.

> With regards to employment, a huge percent of companies are using artificial intelligence tools to make employment decisions. Those decisions span the gamut of the kinds of decisions employers may make.

> Within the hiring process itself, 99% of Fortune 500 companies and a very large percentage of other companies are using automated tools that can have discrimination built in them. They are used to screen candidates, to assess candidates, and even to interview candidates. You have tools like resume screeners that are used instead of people to review resumes. A lot of resumes are never seen by a human being. They are often assessed by an automated tool.

> There are also assessments where some of them are traditional style personality assessments that are sort of multiple choice questions. Some of them are next generation assessments where they are essentially gamified and people are asked to play a video game, and the assessment measures how they played that game as a way of measuring their personality characteristics...

> What all of these tools have built into them is a major risk of discrimination based on race, gender, disability, and other protected characteristics.
One major concern is that a lot of these tools are designed using historic data at a company in terms of who they’ve hired before or who the “successful” employees were at a company, and the data about those folks is what is used to train the AI to recognize a successful employee. Discrimination in its past hiring practices get baked into the AI as sort of ground truth about what makes a good employee.

The tools also seek to measure personality traits that are not job related or necessary for the job, and may reflect cultural norms or be proxies for disabilities or other protected characteristics.

These are exactly the types of issues that federal agencies, such as the Federal Trade Commission, Consumer Financial Protection Bureau, and the Equal Employment Opportunity Commission (EEOC), have been working on to ensure that networked technologies do not discriminate and reinforce existing biases offline. In an article by Andrea Hsu for National Public Radio reported earlier this year, networked technologies may introduce bias into the employment screening process. However, the larger challenge might be knowing when you’ve been discriminated against. As Hsu’s article highlights,

The problem will be for the EEOC to root out discrimination - or stop it from taking place - when it may be buried deep inside an algorithm. Those who have been denied employment may not connect the dots to discrimination based on their age, race or disability status.  

Criminal Justice

The complicated and highly fraught intersection of technology and criminal justice was highlighted during the following exchange between several focus group participants during our womens’ focus group at Turnaround Tuesday (TAT) in Baltimore earlier this year.

Speaker #1: I think that the society that we live in, when somebody gets convicted of a crime, they go to prison, they do their sentence and they come out, they're not exonerated from the crime that they have committed, even though they have technically paid the price of that crime. And so there are things that are being done to these people where they're still being harassed, they're still being... You know what I'm

https://turnaroundtuesday.org/
They're still being degraded. They're still being manipulated as far as with the system and the fact that technology is growing, especially in the police force in a way that is allowing them to continue to harass these people and try to call it the law or... You know what I'm saying? Or try to make it seem like it's legal when ethically it shouldn't be possible.

Speaker #2: Great point.

Speaker #3: Well, with law enforcement, they can tap into your phones, track your locations, all from your phone, from the internet service...

Speaker #1: Not just that, they can put in a request to get every text message that you've had in the last year or the last 5 years.

This passage between the women at Turnaround Tuesday provides evidence that formerly incarcerated individuals are aware of the ongoing ties between the criminal justice system and networked technology as a less visible, but still oppressive, system in our society. Furthermore, when data brokers are introduced into this system with a profit-motivated incentive, the barriers to digital justice for formerly incarcerated individuals increase.

Jonathan Moore is the Founder and CEO of Rowdy Orb.it, based in Baltimore. Moore has worked with formerly incarcerated individuals to promote digital equity by providing technology training and skills with a focus on putting networked technology in the hands of community members who live in the city. Moore shared his concerns about the ongoing barriers for formerly incarcerated individuals in Baltimore.

When you start talking about policy and legislation that exists in the banking industry that doesn't allow people to touch a computer because it's connected to banking. If I look at it from the prison industrial complex, I can actually put those barriers in place that already exist and adopt them into the digital world. Thus precluding people with criminal backgrounds from participating in the digital economy.

And so I think that as you go through... it's like, okay, well then what are the barriers that exist in the physical world that can easily be transferred in the digital world to create these barriers that exist today? And so when I'd start talking to people about...
banking, 'cause when we were training people with criminal backgrounds, they couldn't work for the banking industry and they couldn't touch certain things that had a certain amount of a transaction. Well, if that goes over the internet and that goes through the pipes and it goes to a device, well, technically that person cannot work for that organization. Because everything is being transferred over data.

Predictive policing using AI and facial recognition software present another barrier to digital justice both for those formerly incarcerated as well as those who have not experienced incarceration. The Electronic Privacy Information Center has done extensive research on facial recognition and has found it to be a dangerous surveillance system. As they explain on their website,

*Biometric surveillance systems, particularly face surveillance systems, poses significant threats to privacy. The increasing capabilities of facial recognition algorithms and easy access to photos online by private companies and governments has supercharged the deployment of face surveillance systems. Facial recognition allows for covert or even remote identification on a mass scale without consent. DNA, heart rate trackers, and other biometrics can reveal sensitive health data. EPIC is focused on stopping face surveillance and limiting collection and use of other biometric information.*

Persistent surveillance both online and off helps to fuel the USD $36 billion (see OECD report above) industry where data can be repurposed and sold to companies across various sectors of our digital economy, not only in areas related to housing and employment, but also the “prison industrial complex” as Jonathan Moore from Rowdy Orbit explained.

**Finance**

Access to the internet is often touted as a vehicle to promote access to online banking and other financial services that have exploded in recent years, due in large part to the rise of “fintech” or financial technology. Fintech has been widely adopted by banks and other financial services providers which rely on this technology driven by software, algorithms, and applications. As a recent Forbes article explains,

*Banks use fintech for back-end processes—behind-the-scenes monitoring of account activity, for instance—and consumer-facing solutions, like the app you use to check your account balance. Banks also use fintech to underwrite loans. Individuals use fintech to access many bank services, including paying for purchases with a*
smartphone and receiving investing advice on their home computers.\textsuperscript{29}

This is another area where data brokers offer great value to fintech companies that rely on personal data to inform the use of credit checks, loans, and other potential financial opportunities for, as well as discrimination against, vulnerable populations.

In a recent study by Charlton McIlwain (2023)\textsuperscript{30} that looked at race-based digital advertising targeting, the author found that “payday loan and similar businesses in the financial services sector differentially target Black consumers with more potentially risky product offerings through their digital advertising” (p. 26). Data that are generated based on this type of racial discrimination in advertising can impact a consumer’s credit scores. As Dr. Safiya Noble at UCLA explained to NPR’s Marketplace in 2022,\textsuperscript{31}

“Many times credit scores are built on history of all kinds of other aggregate data, so people who look like you,” said Safiya Noble, a professor of gender studies and African American studies at the University of California, Los Angeles.

“And this is where we start to get in trouble,” Noble said. “If you are part of a group that has traditionally been denied credit or been offered predatory products, then your profile may, in fact, look more like those people and you will be dinged.”

When these sorts of discriminatory practices combine with a person’s ability to pay for internet access, additional challenges to realizing digital equity and justice get introduced. As Brandon Forester at MediaJustice explained in our interview,

A utility debt can have a large impact on a person’s life, because if you get caught in one of those contracts and then your contract doubles after the year, you know, you have the introductory rate, and then you can’t afford it anymore. One, they’re gonna impact your credit, two they’re gonna send you to collections three, they’re not gonna let you sign up for their internet again, and it’s not like you have a dozen other providers, they’re the only player in town. You’re not gonna be able to get internet from anybody, and then that impact, that one thing on somebody’s credit could be the difference between having access to all of these other kinds of possibilities in life. Housing, transportation, employment.. the list goes on.

\textsuperscript{29}https://www.forbes.com/advisor/banking/what-is-fintech/
\textsuperscript{30}https://www.policylink.org/resources-tools/algorithmic_discrimination
\textsuperscript{31}https://www.marketplace.org/shows/marketplace-tech/credit-scores-and-the-bias-behind-them/
Akina Younge at the Center for Race and Digital Justice argued that discriminatory practices by data brokers and other fintech companies demand action to curb such abuses. As Younge explained, “there is need for transparency and advocacy by either the users themselves or the ISP” (internet service provider). Younge went on to explain that more community-owned broadband providers would help to “open up the door for control and conversations around how your data is being collected.”
State Laws, Policy Recommendations, and Advocacy Campaigns

This section details some of the current state laws, policy recommendations, and campaigns led by public interest advocacy groups working to address the social and technological discrimination in housing, employment, criminal justice, and finance presented through the examples in the previous section. The purpose is to provide Economic Action Maryland and other state advocacy organizations with examples of existing efforts to advance digital equity and justice with its communities across their state.

Housing

Activists, advocates, and policymakers have been working to address the harmful impacts of data brokers and tenant screening companies on vulnerable populations seeking housing. For example, in their comments, “Urging the Biden Administration to Address Technology’s Role in Housing Discrimination,” Upturn provided the following federal policy recommendations to address digital harms to vulnerable populations:

1. Address disparate impacts in housing-related technologies.
2. Help local jurisdictions evaluate and affirmatively further fair housing.
3. End discriminatory background screening as a barrier to housing.
4. Proactively enforce against discriminatory uses of technology and records in housing decisions.33

At the local level, the Oakland City Council in California unanimously passed Oakland’s Communications Service Provider Choice Ordinance,34 which the Electronic Frontier Foundation both supported and described in the following passage on their website.35

The newly minted law frees Oakland renters from being constrained to their landlord’s preferred ISP by prohibiting owners of multiple occupancy buildings from interfering with an occupant’s ability to receive service from the communications provider of their choice.

32 https://www.upturn.org/work/proposals-for-the-biden-administration-to-address-technology-housing/
33 https://www.upturn.org/work/proposals-for-the-biden-administration-to-address-technology-housing/
34 https://www.eff.org/document/oaklands-communications-service-provider-choice-ordinance
35 https://www.eff.org/deeplinks/2021/10/victory-oaklands-city-council-unanimously-approves-communications-choice-ordinance
Employment

The White House Office of Science and Technology Policy recently published the Blueprint for an AI Bill of Rights that identified five principles to ensure that AI does not do more harm than good. One of these principles focuses on protections against algorithmic discrimination. Under this principle, the Bill of Rights states,

*You should be able to opt out, where appropriate, and have access to a person who can quickly consider and remedy problems you encounter . . . Automated systems with an intended use within sensitive domains, including, but not limited to, criminal justice, employment, education, and health, should additionally be tailored to the purpose, provide meaningful access for oversight, include training for any people interacting with the system, and incorporate human consideration for adverse or high-risk decisions.*

State legislation

At the state level, Illinois introduced HB 2557, the Artificial Intelligence Video Interview Act. The law now requires employers who use artificial intelligence to analyze video interviews to do the following:

- Provide notice: Employers must inform applicants that AI will be used to analyze their interview videos. (A provision requiring written notice was removed from the bill.)
- Provide an explanation: Employers must explain to the applicant how their artificial intelligence program works and what characteristics the AI uses to evaluate an applicant's fitness for the position.
- Obtain consent: Employers must obtain the applicant's consent to be evaluated by AI before the video interview and may not use AI to evaluate a video interview without consent.
- Maintain confidentiality: Employers will be permitted to share the videos only with persons whose expertise or technology is needed to evaluate the applicant.
- Destroy copies: Employers must destroy both the video and all copies within 30 days after an applicant requests such destruction (and instruct any other persons who have copies of the video to destroy their copies as well).

The bill was amended in 2022 to mandate state reporting requirements for employers using AI
The District of Columbia reintroduced the Stop Discrimination by Algorithms Act of 2023 to prevent algorithmic discrimination in employment decisions. As the Potomac Legal Group explains on their website,

“The Stop Discrimination by Algorithms Act of 2023 would prohibit algorithmic discrimination by employers and require service providers to ensure that their AI tools are compliant with the law. The bill includes regulations for employers and prohibits algorithmic discrimination in other areas, such as consumer credit decisions, education and housing. The new bill would force employers to contractually require that their AI service providers comply with the proposed law. Employers would be required to conduct an annual discrimination audit, which must be conducted by a third party and has a reporting requirement. Employers would also have a poster requirement informing employees about the law, as well as a required pop-up notice on certain systems.”

Policy recommendations

In their policy recommendations section on “Technology's Role in Hiring Discrimination,” Upturn adds the following,

1. Gather information about employers’ use of hiring technologies, and proactively investigate discriminatory practices.
2. Modernize guidance for selection procedures and expand recordkeeping requirements.
3. Hold workshops and convenings on hiring technologies, and make more information available to the public.

Criminal Justice

This section provides an overview of some of the state legislation and related campaigns that

38 https://www.upturn.org/work/proposals-for-the-biden-administration-to-address-technologys-role-in-hiring/
have been introduced both in Maryland and across the country to prevent discrimination by AI.

**State legislation**

On the topic of facial recognition and predictive policing, there are several state laws including one in Maryland which aim to prevent abuse of facial recognition tools by law enforcement.

- **Alabama's Act No. 2022-420**\(^{39}\) limits the use of facial recognition to make arrests.
  - (a) A state or local law enforcement agency may not use facial recognition technology match results as the sole basis to establish probable cause in a criminal investigation or to make an arrest.
  - (b) To establish probable cause in a criminal investigation or to make an arrest, a state or local law enforcement agency may use facial recognition technology to match results only in conjunction with other lawfully obtained information and evidence.

- **Maryland HB1068:**\(^{40}\) which would establish a Commission on Responsible Artificial Intelligence in Maryland, is currently under consideration. Economic Action Maryland wrote a letter of support for the bill.\(^{41}\)

- **Maryland SB192:**\(^{42}\) Criminal Procedure - Facial Recognition Technology - Requirements, Procedures, and Prohibitions is also currently under consideration. SB192 establishes requirements, procedures, and prohibitions relating to the use of facial recognition technology by a law enforcement agency under certain circumstances, and more.

**State of Maryland legislation**

- **Maryland HB 33:**\(^{43}\) Commercial Law - Consumer Protection - Biometric Data Privacy. Currently under consideration. Regulating the use of biometric data by private entities. EPIC wrote a letter of support for the law.\(^{44}\)

---

\(^{39}\) [https://www.billtrack50.com/BillDetail/1416013](https://www.billtrack50.com/BillDetail/1416013)


\(^{41}\) [https://mgaleg.maryland.gov/cmte_testimony/2023/hgo/1QR0KLzV8f4nlo9-nVlySbI_C3Q8qWMVv.pdf](https://mgaleg.maryland.gov/cmte_testimony/2023/hgo/1QR0KLzV8f4nlo9-nVlySbI_C3Q8qWMVv.pdf)


\(^{44}\) [https://epic.org/documents/maryland-sb169-biometric-identifiers/](https://epic.org/documents/maryland-sb169-biometric-identifiers/)
- **Maryland HB 807**: Currently under consideration. Establishing generally the manner in which a controller or a processor may process a consumer's personal data. EPIC also wrote a letter of support for the law.

### Advocacy campaigns

Upturn, MediaJustice, and the Electronic Frontier Foundation (EFF) have presented policy recommendations and launched campaigns to prevent widespread digital and cellular surveillance by law enforcement. For example, in their work to curb the power of law enforcement agencies to search mobile phones, Upturn (2020) presented the following policy recommendations:

- **Recommendations to reduce the use of mobile device forensic tools (MDFTs):**
  - banning the use of consent searches of mobile devices,
  - abolishing the plain view exception for digital searches,
  - requiring easy-to-understand audit logs,
  - enacting robust data deletion and sealing requirements, and
  - requiring clear public logging of law enforcement use.

Similarly, MediaJustice launched their Drop Policy Tech campaign, which argues,

- “Law enforcement agencies nationwide are adapting to the digital age in ways that extend the powers of the United States’ already racially biased criminal legal system. From using social media as a tool of “predictive policing” to the adoption of surveillance drones in major cities, these practices are being advanced without public knowledge or consent—most severely impacting communities of color living on lower incomes. We demand more transparency and less policing.”

EFF launched their Stop Reverse Demands campaign in 2023 to advance A.B. 793, a California bill authored by Assemblymember Mia Bonta to protect people seeking abortion and gender-

---

45 [https://mgaleg.maryland.gov/cmte_testimony/2023/hgo/12Pp32dyY05pDlnxUT8TYo64V2jHYbE_.pdf](https://mgaleg.maryland.gov/cmte_testimony/2023/hgo/12Pp32dyY05pDlnxUT8TYo64V2jHYbE_.pdf)
47 [https://www.upturn.org/work/mass-extraction/](https://www.upturn.org/work/mass-extraction/)
48 [https://mediajustice.org/campaign/drop-police-tech/](https://mediajustice.org/campaign/drop-police-tech/)
affirming care from dragnet-style digital surveillance. These state laws, policy recommendations, and campaigns are necessary not only to prevent barriers to digital equity, but as Hannah Sassaman, Executive Director of People’s Tech Project told us, “What tools like this do is they aggravate those existing systems and they do something worse, they bury that racism under a veneer of accuracy science.”

Finance
This final section presents some of the state and federal policy recommendations that have been introduced by public interest advocates to help prevent discrimination by AI.

Policy recommendations

In 2021, Upturn submitted recommendations in their “Memo Addressing Technology's Role in Financial Services Discrimination.” As the authors stated, “We offer the following proposals for the Biden-Harris administration and federal financial regulators for addressing the ways that technology and data can lead to discrimination in consumer credit.”

1. The CFPB and other agencies should ensure robust measurement and remediation of discrimination.
2. Agencies should encourage the use of alternative data for underwriting that is voluntarily provided by consumers and has a clear relationship to their ability to repay a loan.
3. Agencies should clarify standards for Special Purpose Credit programs, which could help address legacies of discrimination and encourage creation of less discriminatory credit models.
4. The CFPB should issue new modernized guidance for financial services advertising.
5. The CFPB should revise and reincorporate the underwriting provisions of its 2017 payday lending rule

On the topic of screening and scoring, EPIC argued the following,

As more entities rely on these tools to supplement and replace human decision-making, the inherent risks associated with these tools become more urgent. Scoring and screening tools are problematic for a variety of reasons, including: Bias and Accuracy Issues, Insufficient Transparency and Accountability, Opacity and Secrecy, Lack of Notice and Denial of Procedural Due Process: Discrimination.

50 https://www.upturn.org/work/proposals-for-the-biden-administration-to-address-technologys-financial/
EPIC argued that screening and scoring tools need to be regulated and offered the following policy recommendations in response:

Although civil rights laws exist to protect against certain types of disparate impact for members of protected classes, there is insufficient regulation about the use of these screening and scoring tools. Lawmakers must develop standards for the regulation of these tools and hold entities deploying these tools accountable. There must be oversight and enforcement that can mitigate and remedy harms caused by these tools. There also must be greater transparency and accountability mechanisms in place.
Broadband Access as a Public Utility

This section reports on whether Marylanders believe the internet should be treated as a public utility like electricity and water and whether there is a role for the government to help provide and regulate internet access. As part of the study, participants were asked to respond to the following question: “Do you think the internet should be considered a utility like electricity or water?” If so, a follow-up question was asked, “Should the government pay for internet access?” This section highlights some of the perspectives and insights from this set of questions.

Internet as a Utility v. an Infrastructure

Most of the participants in this study viewed the internet as a utility. The following response from one of the focus group participants perhaps best summarizes the sentiments shared by many.

*The internet is functionally a utility. We all need it. We all desperately need it to engage fully in society. I like to use the analogy though of like, when we look at how internet service is provided relative to other utilities, like imagine if BGE throttled electricity service for low-income customers and prevented you from taking a hot shower or cooking a meal during peak hours? And that's what's happening in the internet service world. Imagine if water utilities throttled service or put caps on the amount of water that a low-income customer could consume, we would see that as inhuman. And I think we really need to begin having conversations about the types of internet service that we're providing to historically redlined communities that are essentially living behind a systemic inequity that was designed with purpose and continues to really impact generations, historically, and really consider what internet service as a utility would look like more broadly in the United States. We're talking about Baltimore in Maryland, but really throughout our country, this is something that... Yeah.*

At the same time, a few people saw the internet more as infrastructure that should be treated not like water and electricity, but like streets and sidewalks, or something “that could not be taken away by the city.” As another respondent shared,

*The idea for me is that the utility, it is about... It relies on usage and things like that, but sidewalks are pretty equal across the board. My sidewalks don't depend on how much sidewalk I use or how often I walk on it, it's just there, available for my use. It also takes*
away some of the conversation about deployment and things like that, it's just something that exists. We think about sidewalk repair, but we don’t... When we think about sidewalks, they're just something that comes along with it. You don't have to worry about throttling it back and forth, it just is. If let's say the weather changes and the concrete mixture needs to be changed, then yes, then we have to take steps to do that. But in general, it should just be something that just comes along with... As the responsibility of institutions, particularly governments.

Practically every participant in this study, including our focus group participants and interviewees, believed that because the internet is so essential, like electricity and water, it should be considered a utility. While many were not sure of the implications of what it would mean to treat broadband like a public utility, most agreed that the internet should be available for everyone.

We asked amalia deloney, Founder and Principal of ACD Consulting to weigh in on this question.

Yes, there should be a public subsidy for sure, but I also think it's about how can the government and civil society be catalysts for thinking about new creative ways to deliver the service? So I like the utility reference because I think people understand, if you're a landlord, you shouldn't be renting a home that doesn’t have running water and a sewage system, but I think we have to stretch what we're thinking when it comes to thinking about how we subsidize the internet to moving beyond a $30-month subsidy for two years to thinking about way more robust protections that are super definitive like they are with a home without a toilet. What does this mean for a multi-unit housing, what does this mean for private landlords, what does this mean for apartment buildings, new development and cities, should they be required to negotiate certain contracts, should they be required to lay fiber?

A Vision of Broadband as a Regulated Utility

Olivia Wein, Senior Attorney at the National Coalition for Consumer Law, offered an explanation of what might be possible if broadband could be regulated as a utility, based on her experience working in other areas where regulated utilities exist.

What can you do if broadband internet service is regulated? If it's regulated, it means a regulatory body has jurisdiction over the utility. Clear legal jurisdiction over the operation of a utility service, means (I'm not necessarily talking about rate design), you

37
can tackle affordability. You can address credit and collection practices; deposit rules; late fees that affect the cost of the monthly bills. A regulator in these spaces can look at the creation of affordability programs. You can also get at enforcement of consumer protections and service quality standards. These are all things that a regulator can regulate with a regulated utility.

In energy, in Maryland, we have rate-payer funded energy efficiency programs under the EmPOWER umbrella of programs. That’s the EmPOWER surcharge on your electric and natural gas bills if you are served by a regulated energy company. There are EmPOWER programs for all residential and business customers to reduce energy usage. There are also multi-family low-income EmPOWER programs and single-family low-income EmPOWER programs. It’s very structured. Utilities come up with a three-year plan for their energy efficiency EmPOWER programs and they also report twice a year to the Maryland Public Service Commission on their progress, so there’s accountability. Interested parties are able to ask questions and file comments on the 3-year plans and the six-month reports to the Commission.

Again, if you have a regulator with clear jurisdiction and authority you can have that kind of reporting and transparency. You can also have a playing field that is more equitable. This is something that you see, for example, in California which has a state law and regulations establishing an intervenor compensation system at the California Public Utility Commission. But all state utility commissions have rules for intervention. The proceedings in front of the utility commission are not just a space for utilities to come before the regulator, but a consumer group, a community-based organization, an environmental organization, they can intervene in a proceeding involving the regulated utility. In California the intervenor compensation program provides a process for intervenors to be paid for the costs of the intervention. That is not as common in other states. So there are a lot more structural things that can happen in a regulated space that can promote a fairer process and more oversight and transparency.

With a regulated utility, there is a lot more transparency in terms of data reporting. The regulator can require the regulated utility to provide, for example data -- monthly data (thus, longitudinal data) on disconnections and arrearages). In some states, utility commissions require energy companies to report (and Illinois this includes private water companies) zip code level data on arrearages and disconnections. Illinois is mapping this data.
A utility regulator can not only monitor disconnection data, but adopt policies to address high disconnection rates. In Illinois, on the energy side, legislation passed for performance-based rate making that includes an affordability metric. Low-income consumer advocates were able to get affordability metrics for two large electric companies. These utilities have an incentive to lower the disconnection rate by 10% annually in the 20 zip codes with the highest disconnection rates. They are rewarded if they succeed and they are punished if they miss their target.

So, I am probably throwing things out that are pie in the sky with broadband. But right now, where we are at with broadband is you're out of luck. You are at the mercy of the company to do the right thing regarding affordability and consumer protections. They only do it for as long as they feel like it, unless it’s a merger condition and then it’s until the end of the merger condition term -- and then for as long as they feel like it.
Realizing Digital Equity and Justice in Maryland

Based on the findings above, recommendations in this section are provided to Economic Action Maryland and similar organizations across the country working to support people who are struggling with housing, economic security, medical debt, and more. The section begins with some of the perspectives that resonated with residents across the state and concludes with a synthesis of insights from state and national public interest advocates working to advance digital equity and justice.

Recommendations from Maryland Residents

Study participants offered several suggestions for organizations like Economic Action Maryland to help mitigate digital inequities, including the following actions described in this section.

Provide broadband for all

- **Regardless of where you live, broadband should be available for everyone.**
  Marylanders in Baltimore City and in rural areas across the state shared a single voice that underscored the importance and need for universal access to high-speed reliable internet across the state.

Build trusted relationships with impacted communities

- **Solutions should be informed by deep engagement** with residents most impacted by digital inequities. As one focus group participant noted, “People need help. Yeah. You’re gonna have to meet them where they’re at.” This also includes engagement with older adults. As another participant emphasized, “Empower, engage, educate and motivate older adults in our networks to ensure that older adults are treated and respected as assets to the community, not burdens.”

Approach digital equity through a racial justice lens

- **Approach digital equity through a racial justice lens.** Respondents noted that this is particularly important because of the city’s history of redlining and other racially discriminatory policies. The issue of redlining was also highlighted during a recent public hearing in Baltimore hosted by the Federal Communications Commission, as Statescoop reported this week, “Compared to similarly sized cities, Baltimore’s broadband speeds are poor, said Taylor Carter-Disanto, the city’s deputy director of broadband and digital equity. Historic redlining maps overlaid with present-day
broadband access show a strong correlation between low-income households and weak internet signals, she said.\(^{51}\) As a result, racial equity and justice should be centered in digital equity initiatives particularly in Baltimore City.

Engage major health care providers as partners

- **Engage major health care providers as partners in addressing the digital equity barriers.** This might include local telehealth initiatives and gaining insights from lessons learned in the community health space that involve community members as partners in developing local solutions. As one interviewee in Baltimore explained,

> There's a huge opportunity related to telehealth if you look at the data on connectivity in Baltimore. One of the challenges, probably a larger challenge, honestly, is around older populations. And so engaging health providers and health insurers is a really good idea there. There's things about telehealth that cut both ways for their bottom line, but on that, there's an opportunity, and they have a vested interest in providing devices connectivity and services. And ideally that would be coordinated and not three separate relationships you had to have, because it's hard to talk with insurers, health providers and ISPs if you're an older person and make all that work together.

Recommendations from Maryland and National Experts

Study participants offered several suggestions, particularly for Economic Action MD and similar organizations to help mitigate digital inequities, including the following actions described in this section.

Promote public alternatives to commercial internet service providers

- **Support municipal broadband and other public broadband alternatives to commercial ISPs.** Maryland should continue to support municipal broadband efforts, as well as consider additional options for the public provision of broadband service across the state. Promoting public alternatives to corporate monopoly providers increases competition in the marketplace and can enhance transparency, accountability, and opportunities for consumer protection, including enhanced protection of users’ data. Maryland has supported municipal broadband efforts and other network infrastructure projects through grant programs, mostly in partnership with private ISPs,\(^{52}\) in recent


years. The state should continue to explore alternative options that advance local control over public broadband infrastructure projects in both rural and urban areas.

Make digital justice a priority

- **Add digital justice as a focus area to advocacy work.** Because those who are impacted by housing, employment, and medical insecurity are the same people impacted by digital inequality, national experts recommended that organizations like Economic Action MD prioritize digital justice in their local and state advocacy efforts.

Connect digital justice to other focus areas

- **Use digital justice as a lens across all focus areas.** National experts interviewed for the research also argued that because digital justice issues are connected to so many other basic needs that organizations like Economic Action MD should look across their focus areas to see how they are impacted by digital inequalities and develop campaigns to address these issues with those most impacted.

Join national social movements to achieve digital equity and justice

- **Join national advocacy efforts to advance digital equity and justice.** The experts interviewed for this study not only urged Economic Action MD to join larger national advocacy efforts to advance digital equity and justice, several offered to speak with Economic Action MD directly to help develop their digital justice strategy.

Work with communities across Maryland to imagine a vision of digital justice

- **Work with local communities to develop a set of digital justice principles.** National experts also recommended that instead of constantly being in a reactionary position with regards to the issue of technology oppression and social justice, organizations like Economic Action MD should work closely with local communities across the state to imagine a vision where technology works for people and not the other way around. This work can help to inspire and provide an offensive, rather than a defensive, mechanism to support local and state advocacy efforts.
Conclusions and Next Steps

This report provided findings from a study of the digital equity and justice barriers facing residents in Baltimore City and across the state and included community-based solutions to solve these problems that participants shared during the research. The study found several significant barriers to digital access, adoption, and use, including issues related to affordability, reluctance, distrust, digital literacy, privacy and security. In addition, the research found that older adults and Marylanders with disabilities have unique needs that require customized solutions, including digital skills training, assistive technology access, and ongoing social and technical support.

Study participants experienced significant barriers to digital justice, and national experts shared their insights on digital harms impacting low-income and communities of color, particularly at the intersection of technology and the following four areas: housing, employment, criminal justice, and finance. Several state laws, policy recommendations, and advocacy campaigns were then highlighted to show how consumers, policymakers, and activists are pushing back against the harms threatening vulnerable populations.

Practically all participants viewed the internet as a utility just like electricity and water, and as such internet service provision requires government support to ensure that everyone can gain access. However, a few participants noted that the internet should be treated more like public infrastructure, than a utility, to ensure that it serves everyone equally and cannot be taken away from residents. The report also introduces a vision of broadband as a utility.

Several participants offered recommendations to address the digital equity challenges facing residents across the state. In Baltimore City, these recommendations included making sure that digital equity issues use a racial justice lens because of the city’s history and legacy of systemic racism and structural inequality. It was also recommended that digital equity solutions must be informed by deep community engagement with residents most impacted by digital inequities across the state. Participants felt strongly that digital equity initiatives should engage major health care providers as partners in addressing the barriers to digital access, adoption, and use.

Experts in Maryland and nationwide offered their recommendations for advocacy organizations, like Economic Action Maryland working to advance digital equity and justice. These recommendations included: promoting public alternatives to commercial ISPs; making digital justice a priority area; connecting digital justice to other focus areas; joining national advocacy efforts; and working with local communities to develop a vision for digital justice.
Appendix I: Research Design

The preliminary findings presented in this report respond to the following research question:

*What is the landscape of issues related to universal broadband access, digital equity, and related community standards in Baltimore City and across the state of Maryland?*

In order to respond to the above research question, Dr. Colin Rhinesmith, Founder and Director of the Digital Equity Research Center at the Metropolitan New York Library Council and the Principal Investigator for this research project, submitted a research proposal to an independent Institutional Review Board that stated the following research activities.

- **Phase 1** - the researchers will conduct interviews with key stakeholders in Baltimore and across the state of Maryland and focus groups with residents across Maryland led by a local subcontractor.

- **Phase 2** - the researchers will conduct additional interviews with Maryland and selected national non-profit organizations, legislators, thought leaders, and policy specialists on promising programs, policies, and practices, as well as additional interviews with organizations, legislators, and advocates in cities and states that have passed legislation and introduced programs. The purpose will be to better determine effective programs, best practices, what policies may be fungible, and outcomes to date of initiatives that have been implemented.

Between January and May 2023, a total of 85 people participated in the study, including all of the interviews and focus group sessions. Several of the focus group participants represented organizations, such as public libraries and other community-based organizations, that work with low-income individuals and families in Baltimore and in rural areas across the state.

The following charts below provide more sociodemographic information about the participants in our focus group sessions.
Age. What is your age?

- 65 to 74: 55 to 64
  - 9.8%: 23.0%
- 75 or older: 75 or older
  - 3.3%: 23.0%
- 18 to 24: 18 to 24
  - 6.6%: 13.1%
- 25 to 34: 25 to 34
  - 27.9%: 16.4%

Diagram 1. Respondents' self-reported age

Race. Which of the following best describes your race?

- White or Caucasian: Black or African-American
  - 23.3%: 63.3%
- Some other race: More than one
  - 1.7%: 1.7%
- Native American/American Indian: Native American/American Indian
  - 6.7%: 6.7%
- Asian or Asian-American: Asian or Asian-American
  - 1.7%: 1.7%

Diagram 2. Respondents' self-reported race
Diagram 3. Respondents' self-reported gender

Gender. What is your gender identity?

- Male: 44.3%
- Female: 54.1%
- Non-binary person: 1.6%

Diagram 4. Respondents' self-reported educational attainment

Education. What is the highest level of school you have completed or the highest degree you have received?

- High school graduate (...): 14.8%
- Two-year associate degree: 9.8%
- Some college, no degree: 21.3%
- Some postgraduate or professional degree: 8.2%
- Four-year college or university degree: 19.7%
Household Income. What is your total annual household income from all sources, and before taxes?

- Prefer not to answer: 14.8%
- Less than $20,000: 18.0%
- $20,000 - $30,000: 9.8%
- $40,000 - $50,000: 8.2%
- $50,000 - $75,000: 21.3%
- $75,000 - $100,000: 9.8%
- $100,000 and over: 18.0%

Diagram 5. Respondents’ self-reported annual household income
Appendix II: List of Experts Interviewed and Consulted

- Olga Akselrod, American Civil Liberties Union
- Stephanie Alphee, Digital Harbor Foundation
- Jane Brown, Robert W. Deutsch Foundation
- Andrew Coy, Digital Harbor Foundation
- Charlotte Davis, The Rural Maryland Council
- amalia deloney, ACD Consulting LLC
- Barbara Eucebio, Robert W. Deutsch Foundation
- Brandon Forester, Media Justice
- Nicholas Garcia, Public Knowledge
- William Honablew, Office of Broadband and Digital Equity, Baltimore City
- John Horrigan, Benton Institute for Broadband & Society
- Urmila Janardan, Upturn
- Christopher Kingsley, Annie E. Casey Foundation
- Katharina Kopp, Center for Digital Democracy
- Leslie Margolis, Disability Rights Maryland
- Tacha Marshall, Disability Rights Maryland
- Jonathan Moore, Rowdy Orb.it
- Samantha Musgrave, Project Waves
- Claudia Wilson Randall, Community Development Network of Maryland
- Sabrina Roach, Washington State University Extension
- Houman Saberi, Community Tech NY
- Hannah Jane Sassaman, People’s Tech Project
- Olivia Wein, National Consumer Law Center
- Akina Younge, Center for Race & Digital Justice, UCLA
- Corian Zacher, Next Century Cities