

# Montgomery County High Road Economic Inclusion Framework for an Equitable Climate-Ready Economy



This report was prepared by the following organizations:



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Emerald Cities Collaborative is a national non-profit organization based in Washington, D.C. with affiliate offices in Boston, Los Angeles, New York, Oakland, San Francisco, and Seattle. Founded in 2009, Emerald Cities has the stated goal of creating sustainable, just, and inclusive “high-road” local economies.

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## Executive Summary

### Context

The Montgomery County Climate Action Plan was published in June 2021. The goal of the plan is to provide a roadmap to reduce greenhouse gas emissions by 80% in 2027 and 100% by 2035; and help community members adapt and build resilience to climate hazards. The plan identified 87 climate actions. In addition to its stance on climate, the Plan charted a course to address racial and economic disparities. In spite of being the most populous, diverse, and wealthy county in Maryland, equity issues persist, especially with Blacks and Latinos who experience worse outcomes: wealth, education, employment, and advancement.

Climate Action represents an enormous economic opportunity for all Montgomery County residents. At least \$8.432 billion<sup>1</sup> in public investments are going into infrastructure, transportation (including EVs), and capital improvements related to the climate action plan over the next several years. However, the goal of creating new, diverse businesses, generating family-sustaining jobs, and reducing employment gaps will not be fully achieved without an intentional focus and fixing individual and system-level barriers.

The Framework for an Equitable Climate-Ready Economy (the “Framework”) outlines a set of strategies to ensure racial and economic disparities are addressed through climate actions. Economic Inclusion includes high-road employment and contracting opportunities and improved access to those opportunities for historically marginalized people and communities, including BIPOC, women, immigrants, and opportunity youth. High-road refers to policies and business

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<sup>1</sup> *Estimated Public Investments related to Climate Action: Time period – From 2028 See Table 3 on page 55 for a detailed enumeration of investments*

practices grounded in economic, social, and environmental responsibility. Policies that reward the high-road approach encourage competition based on the best value for the whole community by favoring firms that internalize the true costs of business-provide good wages, safe working conditions, benefits, and growth opportunities, adhere to laws and regulations, and pursue social justice (diversity, inclusion, and democratic practices) and environmental stewardship.

### **Scope**

Emerald Cities Collaborative, Inclusive Economics, and Healthcare Without Harm contracted with the Department of Environmental Protection to develop the Framework for the Climate Action Plan which focuses on three areas: Workforce Development, Business Development, and Anchor Strategies to support the emerging food sector.

Inclusive Economics conducted a labor market analysis. Emerald Cities conducted a landscape analysis of the business ecosystem reviewing the conditions for business owners who are minority, female, and disabled (MFD) to access business opportunities created by the county's climate actions. Healthcare Without Harm conducted an analysis of local conditions to take an anchor strategy in the food sector to scale.

The team, working closely with DEP, conducted desk audits, 31 interviews and one focus group with local stakeholders in private, government, and nonprofit sectors as part of the development of this framework. Based on the findings, the group developed high-level recommendations and specific recommendations for immediate action.

### **Key Findings**

The County's climate policies and plans are driving demand for jobs and business opportunities, with the greatest demand in the architecture, engineering, and construction sectors including transportation, water ecosystem, and waste infrastructure.

Significant Federal investments and support for climate-related infrastructure and economic development expand both the potential climate and economic impacts of Montgomery County's climate plans but require dedicated staffing and effort to apply for these federal, state, and local funds.

A gap exists between labor demand and labor supply, reflecting the national shortage of workers and businesses in key areas: architecture, engineering, construction, as well as green and smart technologies.

Montgomery County has good economic inclusion policies and fairly extensive, albeit decentralized and fragmented workforce and business ecosystems. The Climate Action Plan and its economic potential is Montgomery County's best-kept secret—little known or understood in the broader community as well as the larger workforce and business ecosystems.

Montgomery County's economic development infrastructure is not yet fully developed to meet its CAP equity and inclusion goals and that of the federal [Justice 40 initiative](#), the current Administration's Justice 40 initiative, encouraging states and local governments to invest 40% of their federal climate and clean energy grants and loans to benefit environmental/climate justice and disadvantaged communities.

Climate action initiatives present a unique economic opportunity to address racial and social inequities in the labor market but require an intentional, collaborative strategy. Job quality and job access strategies need to be strengthened, especially for Blacks and Latinos who experience the greatest disparities with respect to wealth, education, employment, and advancement.

## **Emergent Cross-Cutting Themes**

This three-part investigation includes separate findings and recommendations, yet there were several cross-cutting themes:

### ***From Ecosystems Fragmentation to Alignment***

Montgomery County's workforce and small business delivery systems are disconnected and fragmented, weakening the ability to effectively engage and connect the workers and businesses to emerging opportunities in the Climate Action Plan. Organizations and agencies that serve as touchpoints for individuals and MFD businesses form ecosystems that must be aligned toward the goal of economic inclusion.

### ***From Disengagement to Active Participation***

While the Climate Action Planning process engaged multiple stakeholders from Montgomery County's most disadvantaged communities, the interviews and the focus group conducted for this report indicate individuals and businesses are unaware of the Climate Action Plan and the investments underway. As a result, these parties are disengaged and unlikely to identify the economic benefits of implementing climate action. Increasing active participation of individuals and businesses must include continuous convenings, engagement, and feedback from communities where economic inclusion is likely to have the greatest impact on racial equity in the county.

Public and Private Investments are required to ensure the county achieves economic inclusion by facilitating job-producing projects that open up climate action to its economic inclusion potential. Public investments in energy, transportation, and other climate projects, and direct investments in projects in low-and-moderate income communities are best able to optimize community benefits that promote utilization of workers and businesses from these communities.

Private investments can be leveraged, provided incentives or mandates are reflected in Montgomery County policies and contracts that promote utilization of local workers and businesses.

Strengthening the capacity of local organizations to conduct outreach, training, technical assistance, and function as network managers and program implementers will lead to successful delivery of high-road economic inclusion, increasing the participation of workers and businesses from some of the most disadvantaged communities in Montgomery County. This will require intentional strategy toward creating alignment within the ecosystem and funding to support implementation.

### **Recommended Actions**

Each work area developed a set of recommendations and specific actions for county officials. A highlight of recommended immediate actions follows:

- 1. Strengthen Systems/Delivery Infrastructure**
  - Hire a dedicated economic inclusion manager within DEP to convene and align programs and to pursue federal funding;
  - Host (DEP) or identify a convener of a climate-focused inter-agency collaboration (DEP), visioning and targeted sector development strategy;
  - Invest in small business outreach and community infrastructure;
  - Strengthen/Refine Montgomery County's RFPs and other implementation tools for local hire, targeted hire, and local procurement.
- 2. Strengthen Education/Training Infrastructure**
  - Pursue relevant Federal Funding programs to create/expand education and training opportunities (Energy Auditor Grant Program, Building Training and Assessment Centers, Career Skills Training, Building Codes Implementation);



- Establish a Minority Business Training Program in green buildings, green infrastructure, and other climate-related contracting opportunities;
- Develop a High Road Training Partnership (HRTP) to develop multiple pathways into careers for in-school and opportunity youth, as well as un/underemployed adults that include apprenticeships (union and non-union), community college, community-based programs, and other workforce education and training programs.

**3. Build Public-sector Pathways to Job/Business Access**

- Directly fund or subsidize projects in or that benefit disadvantaged, environmental, and climate justice communities that will (1) accelerate energy and climate resilience in schools, community centers, affordable housing, churches, and other community-serving facilities, etc.; (2) create workforce and business opportunities for local residents in the green economy; and
- Establish a Climate Action Business Incubator (CABI) program for diverse contractors with specific focus on community-serving projects (see above).

**4. Initiate an anchor strategy for the nascent local food sector**

- Convene anchors, Montgomery County Food Policy Council, and the County to review report;
- Adopt the Good Food Purchasing Program framework to enable and set a structure for collaboration across institutions; and
- Coordinate with Anchor Institutions' leadership to catalyze further growth in the local food system. Building partnerships is a part of the infrastructure that needs to be built and supported to develop a fully formed anchor strategy.

## **Conclusion**

Montgomery County faces a historic opportunity to address the challenge of climate change and to create conditions for racial and economic justice. Harnessing these opportunities requires the engagement of multiple stakeholders in multiple sectors: government, civil society, the private sector, and communities. We hope these recommendations chart a path forward towards a just, sustainable, and inclusive local economy.

## **Acknowledgements Stakeholders Interviewed**

We would like to thank each organization and individual on this list who contributed to this project. Their insights were invaluable to this project.

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## SECTION 1: BACKGROUND

In June 2021, Montgomery County (Montgomery County) published its Climate Action Plan (CAP) to minimize and adapt to the impacts of climate change, while ensuring a livable, healthy, economically vibrant, and racially inclusive economy.

The climate goals are among the country's most progressive, including cutting greenhouse gas (GHG) emissions by 80% by 2027 and 100% by 2035. The Climate Action Plan details the effects of a changing climate on Montgomery County and includes strategies to reduce GHG emissions and climate-related risks to the County's residents, businesses, and the built and natural environments ([Department of Environmental Protection, Montgomery County, Climate Home Page](#)).

The CAP articulates the importance of racial equity and social justice in its plan and programs, recognizing "actions that have the potential to exacerbate inequalities should include corrective, neutralizing measures; to the extent possible advance racial equity and social justice." ([Montgomery County Climate Action Plan](#), June 2021).

To better articulate ways to link the CAP's climate, economic, and racial equity goals, the Department of Environmental Protection contracted with the Emerald Cities Collaborative (ECC) and its partners Inclusive Economics (IE), and Health Care Without Harm (HCWH) to develop a **High Road Economic Inclusion Framework for an Equitable Climate-Ready Economy**.

Economic Inclusion pertains to the employment and contracting opportunities associated with the CAP and strategies to ensure access to these opportunities for historically marginalized people and communities, including minority populations, immigrants, women, and opportunity

youth. Opportunity youth are young adults 16-24 years old who are either out of school, unemployed or under-employed.

High-road refers to policies and business practices that ensure Montgomery County remains a sustainable, fair, inclusive, and desirable place to live and work for all residents and businesses, with special attention given to populations and communities with the greatest challenges. This requires non-extractive policies that encourage competition based on quality rather than cost. The high-road approach favors firms that internalize the true costs of business by providing good wages, benefits, safe working conditions, growth opportunities for workers, as well as adhering to sustainable business practices and diversity and inclusion.

The CAP's focus on climate, high road jobs and businesses, and racial equity align with the Biden Administration's policies and federal investments. Montgomery County is well-positioned to leverage investments from the Infrastructure Investment and Jobs Act (IIJA) which provides \$1.2 Trillion dollars to state and local governments to build out their climate-resilient infrastructure, prioritizing investments that promote job quality and racial equity as codified in the Administration's [Good Jobs Challenge](#) and Justice40 [Executive Order #14008](#), respectively.

The good jobs challenge is a call for an enduring post-Covid economic recovery that will rebuild the middle class. Justice40 seeks to spend 40% of federal infrastructure funds to fix long-standing health, employment, environmental, and climate challenges within disadvantaged communities.

Therefore, this High Road Economic Inclusion Framework provides essential guidance for undertaking this intersectional work of climate, economy, and equity.

### **Project Components**

The project included three separate, but related components:



- **Workforce Development Framework:** A high road workforce framework that aligns with Montgomery County’s racial equity, economic development, and climate action objectives. This included identifying high growth sectors and the estimated job potential embedded within the Climate Action Plan, quantifying job estimates for 2–3 key actions in the plan. In addition, the framework identified career pathways into these high-road, climate-aligned growth sectors, outlining different entry points for various underrepresented and historically marginalized people: veterans, BIPOC youth, low-wage workers, incumbent workers, and women.
- **Business Economic Development Framework:** An examination of the opportunities and challenges of growing and engaging Montgomery County’s small business community, including small, minority women, veterans, and disadvantaged businesses in climate action work and other high-growth sector opportunities. This included building a picture of the demand-side infrastructure, including the regulatory environment and agency roles in promoting utilization of these businesses; conducting a scan of mid-term and private sector revenue and investments in climate actions and business opportunities; and assessing the supply-side ecosystem design to facilitate access to sector opportunities.
- **Anchor Strategy Framework:** Reviewing the state of the emergent local food sector and developing recommendations for a possible build-out of a sustainable, local food supply chain.

### Research Questions

This report provides the County with insights into the following questions:

- What publicly funded climate action policies and projects will shape economic opportunities for workers and businesses from disadvantaged communities?
- How does the County mobilize agencies and organizations to leverage climate actions to create economic opportunities?
- What is the landscape in terms of enabling policies, workforce development, business support, and anchor strategy ecosystems to promote high-road economic inclusion through climate action?
- What gaps are making economic inclusion policies and practices difficult to implement? What can be done to address these gaps?

### **Methodology: Economic Inclusion in Four Steps**

The research team used a range of primary and secondary research methods for this study. This included thirty-one (31) stakeholder interviews and one focus group (see acknowledgements) as well as extensive reviews of online and printed documents from numerous sources.

The investigation of the workforce and small business components assessed (1) labor market demand, (2) labor market supply, (3) the workforce and business development ecosystem, and (4) Montgomery County’s economic inclusion delivery systems. The overall methodology entailed:

#### ***Assessment of Labor Market Demand***

The study examined four key drivers of climate-related jobs and business opportunities, including:

**Policy Assessment.** Montgomery County’s climate and economic inclusion (diversity and inclusion) policies determine the legislative environment that will spur investments and job-

generating projects, the quality of those jobs, and the accessibility of the economic opportunities for different Montgomery County residents. The study conducted desk audits of federal, state, and local economic inclusion policies.

**Economic Analysis.** Inclusive Economics reviewed all 87 actions outlined in the Climate Action Plan. Using a proprietary job calculator, they estimated potential job impacts of the CAP's plans for Clean Energy, Buildings, Transit, Carbon Sequestration, and Climate Adaptation, based on investment projections and other assumptions (see Employment Impact Methodology in Appendix 1).

**Project Financing.** We scanned public and private investments to determine the potential sources and amount of funding available for job-producing projects and to identify the size of the project pipeline for business opportunities.

**Programs/Project Review.** The final demand-side driver entailed an assessment of pipeline projects and existing programs that are already demonstrating job creation potential.

### *Assessment of Labor Supply*

Each team member assessed the supply of diverse workers and businesses to meet the labor demand. The information highlights gaps between available work, workers, businesses, and the available economic opportunities

### *Ecosystem Assessments*

Interviews and desk audits of organizations, programs, and major stakeholders in the workforce and small business ecosystems were conducted to determine the existing Montgomery County and community-based resources that can be leveraged/deployed to provide outreach, assessment training, capital, buying power (in the case of Anchors), technical and supportive services to link disadvantaged communities to climate-related job and business opportunities.

### *Economic Inclusion Delivery System*

A review of Montgomery County's economic inclusion infrastructure, including its project delivery methods, RFPs and contracts, monitoring and evaluation tools and outcomes to determine if there were system-level barriers to economic inclusion.

Finally, the Anchor report examines the potential of leveraging the assets of Montgomery County's major employers to support the CAP's agricultural/food priorities and provide a frame for Life Sciences.

## **SECTION 2: Montgomery County's HIGH ROAD ECONOMY: THE BASELINE**

Montgomery County has established a foundation for growing a sustainable, just, and inclusive high road economy. Its climate goals, policies, and investment coupled with its economic inclusion policies form the essential baseline. The 87 initiatives in its Climate Action Plan seeds this new and emerging “climate sector” with jobs and business opportunities redesigning, engineering, and rebuilding its built and natural environments to mitigate and adapt to climate change.

Montgomery County's economic inclusion policies create the framework that ensures the benefits of the CAP strengthen the local economy and are broadly accessible to Montgomery County residents, including those historically left out of the primary (mainstream) economy.

This section highlights these baseline policies and initiatives that help shape the types and distribution of jobs and business opportunities within Montgomery County's CAP.

### **Baseline Definitions and Why they Matter**

This report's focus on a High Road Framework aligns with the Paris climate agreement that states that a just transition (from fossil fuels to a sustainable economy) is achieved “through socially responsible and green investment, low-carbon development strategies, and by providing decent work and social protection for those whose livelihoods, incomes and employment are affected by the need to adapt to climate change and by the need to reduce emissions to levels that avert dangerous climate change.”

The on-ramps to a just transition require “high road” and “economic inclusion” policies and practices, as defined in the following sections.

## *High-Road*

High-road policies and strategies encourage competition based on quality rather than cost and favor firms that internalize the true costs of business by providing good wages, benefits, growth opportunities, and working conditions, adhering to laws and regulations as well as best practices with respect to social responsibility and environmental stewardship.

High road is often used to refer to “job quality” and more specifically, unionized labor. High road refers to all forms of non-extractive business practices—those that respect our human and natural resources. This suggests that policies and practices that support unionized labor, but not environmental sustainability are not “high road.” Conversely, policies, practices, and firms that are not unionized but evidence the best qualities of unionized labor—worker rights, wages, benefits, workplace safety—and are socially and environmentally responsible are high road.

The characteristics of high road jobs:

- Family-sustaining wages
- Comprehensive benefits
- Training and opportunities for growth
- Worker voice on the job
- Strong health and safety standards
- Non-extractive

The characteristics of high road firms:

- Socially responsible
- Ethical, and not in violation of labor standards
- Demographically diverse and inclusive
- Governed fairly and transparently

- Engaged with communities
- Manage their supply chain in economically, socially, and environmentally responsible ways

### ***Economic Inclusion***

An inclusive market economy ensures that anyone regardless of their [gender](#), place of birth, family background, age, or other circumstances over which they have no control has full and fair access to labor markets, finance, and entrepreneurship and, more generally, economic opportunity. This requires intentional workarounds eliminating structural barriers to hiring, contracting/procurement, and educational and financing systems to create equal opportunity.

Economic inclusion entails taking proactive steps to create jobs, business, and wealth creation opportunities for disadvantaged and underrepresented populations to create an inclusive market economy and address intergenerational income and wealth disparities.

### **Climate Policies Driving Montgomery County's High Road Economy**

Montgomery County established aggressive GHG emissions reduction targets, including reducing GHG emissions 80% by 2027 and 100% by 2035. This goal is the basis of the Climate Action Plan (CAP) and catalyzes public and private investments to support the transition to a robust, sustainable, fair, and inclusive high road economy.

While the Climate plan includes many initiatives to achieve these outcomes, the greatest and most immediate economic potential entails clean energy, green buildings, and green fleet (transportation), requiring expanded capacities primarily in the architecture, engineering, construction (AEC) sectors, and facilities operations and maintenance.

Life sciences is a sector the County wants to grow and the sustainable food sector is emergent. An anchor strategy could entail life sciences companies purchasing local, sustainable

food for corporate cafeterias. This is within the purview of the Montgomery County Economic Development Corporation (MEDC).

The following policies and initiatives represent the key economic drivers of Montgomery County's CAP.

### **The Clean Energy Sector**

The State of Maryland provides the County with a favorable policy environment to create jobs and business opportunities in the renewable energy sector. The State and Montgomery County are committed to migrating the State's economy from fossil fuels as the primary energy source to renewable energy as part of their climate solutions. The State's net metering and renewable portfolio standards offer incentives and penalties that will spur businesses in the architecture, engineering, construction, facilities management, and related businesses. Moreover, embedded within the State's net metering laws are "wealth creation" strategies, which are particularly invaluable tools for MOCO's lower-income residents, providing not only utility savings but also income generation mechanisms.

#### **Net Metering/Aggregate Net Metering/Virtual Net Metering**

**Maryland Code §7-306 and COMAR 20.50. 10** established the rules and regulations of net metering in Maryland. Net metering refers to excess production of renewable energy by a household, business, or community (e.g., community solar) that can be sold back to the local utility, giving the ratepayers "energy credits" on their next bill. Systems eligible for net metering must be less than two megawatts (MW) in capacity or 200 percent of the owner's annual baseline electricity usage. This policy has "wealth creation" potential for households that generate their own renewable energy. The program has a capacity of 1,500 MW but is currently undersubscribed. This policy not only helps drive demand for renewable energy, but a solar



build-out in low-and-moderate income families and communities can be a substantial benefit in lowering high utility bills.

**Aggregate Net Metering** brings the same energy savings and income generation potential to agriculture producers, nonprofits, and municipal governments and their affiliated organizations.

**Virtual net metering** is the vehicle Maryland is using for its seven-year community solar pilot program. The pilot was extended by legislation in 2021. This program focuses on low- and moderate-income customers with 30% of its capacity directed to those participants and another 30% directed toward brownfield site development.<sup>2</sup>

The County has taken advantage of the community solar pilot programs, including several community solar projects in development:

The Department of General Services has community solar development projects like the Oaks Landfill Solar Project<sup>3</sup> It holds the promise of being the largest solar project on Montgomery County property. It is a six-megawatt project expected to provide as much GHG emission reduction as pulling 1,740 cars from the road.

The Green Bank led the financing for a community solar project with the Paddington Square Apartments in August 2021.<sup>4</sup> This program was a part of the pilot program and was the County's first project that included a set aside for low- and moderate-income households. This project is expected to provide as much GHG emission reduction as removing 51 cars from the road per year.

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<sup>2</sup> <https://pv-magazine-usa.com/2021/09/02/maryland-regulators-unanimously-expand-community-solar-pilot/>

<sup>3</sup> <https://www.montgomerycountymd.gov/DGS-OES/SP-OaksLandfill.html>

<sup>4</sup> <https://mcgreenbank.org/paddington-square-news/>

### ***Renewable Energy Portfolio Standard***

Maryland’s Renewable Energy Portfolio Standard (RPS), passed in 2004 with multiple revisions and updates. During the years since its passage it has driven jobs in the clean energy sector. The legislation aims to “capture the economic, environmental, fuel diversity, and security benefits of renewable energy; establish a market for renewable energy in Maryland; and lower the cost of obtaining electricity generated from renewable sources.”<sup>5</sup>

Overall, the RPS program places requirements on electricity suppliers to purchase a targeted percentage of their energy from renewable sources. Suppliers not able to meet the goal are subject to penalties which are paid into the Maryland Strategic Energy Investment Fund. This fund is used to develop and implement various clean energy programs and resources<sup>6</sup> and is supplemented by state budget allocations, principals and interests on loans, interest and investment earnings, and other public or private sources.<sup>7</sup> While the County may not currently be a major beneficiary of this policy initiative, it might be better positioned to do so with stronger business and community advocacy.

### **The Building Sector**

Buildings represent 40% of carbon emissions and comprise a major climate action for reducing Montgomery County’s carbon emissions. Since 2004, the County has implemented a set of progressively rigorous green building policies that mandate energy use disclosure and upgrades, representing the greatest potential for job creation in the energy services and construction sectors. These green building policies include:

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<sup>5</sup> <http://www.psc.state.md.us/electricity/renewable-energy/>

<sup>6</sup> <https://www.psc.state.md.us/electricity/maryland-renewable-energy-portfolio-standard-program-frequently-asked-questions/>

<sup>7</sup> <https://law.justia.com/codes/maryland/2013/article-gsg/section-9-20b-05/>

### ***Residential Energy Disclosure Legislation***

Enforced by the Office of Consumer Protection, Montgomery County requires home sellers to provide energy cost and consumption records and information on residential energy efficiency opportunities. The law was enacted in 2009.<sup>8</sup> It ensures home buyers understand a home's energy performance before the completion of the sale.

### **Commercial Building Energy Benchmarking**

The Commercial Building Energy Benchmarking law passed in 2014, the first disclosure law to be adopted at the County level in the country, and is managed by the Montgomery County Department of Environmental Protection. Benchmarking lays the foundation for subsequent and more rigorous building policies that drive opportunities in numerous entry-level opportunities in data entry and analytics, energy auditing, and architecture, engineering, and construction jobs. The law requires the owners of certain buildings to benchmark their energy use. Based on the 2020 annual Montgomery County Energy Benchmarking Report, there was an 89% compliance rate for covered properties representing 614 properties and 1,114 buildings submitting data.

### **Building Energy Performance Standards (BEPS)**

On April 19, 2022, the County adopted Bill 16-21 establishing a new Building Energy Performance Standards (BEPS).<sup>9</sup> The law expands the number of buildings covered by benchmarking requirements, establishes energy performance standards for these buildings, and creates a Building Performance Improvement Board to help implement the law.<sup>10</sup> This contributes to the work described in many of the climate actions relating to energy efficiency retrofits of existing buildings within the County.

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<sup>8</sup> <https://www.montgomerycountymd.gov/green/energy/home-incentives-projects.html#disclosure>

<sup>9</sup> <https://www.montgomerycountymd.gov/green/energy/beps.html>

<sup>10</sup> Ibid

The Racial Equity and Social Justice Impact Statement from the Office of Legislative Oversight (OLO) noted that the bill as proposed would “favorably impact racial equity and social justice in Montgomery County.”<sup>11</sup>

### ***Electric Vehicle (EV) Infrastructure Policies and Investments Program***

EV Infrastructure Development will be big business for Montgomery County in the next few years. In 2020, the Montgomery County Department of Transportation said Maryland is expecting 300,000 electric vehicles and hybrids on state roads by 2025. This will be substantially boosted with \$5B in investments available in the Infrastructure Investment and Jobs Act to build out a national network of EV charging stations.

Montgomery County estimates 10,000 current EV drivers. Yet, there are only 20 public charging stations across locations in Bethesda, Silver Spring, and Wheaton.<sup>12</sup> With federal investments, the county is well-positioned to support the growth of the EV industry with access to public and private electrical outlets for residents and commuters.

The work includes the installation of charging stations, requiring construction electrical and laborer trade skills. The greatest opportunity for disadvantaged workers will be in maintenance of these charging stations, which are semi-skilled occupations.

### **Revenue Streams Driving Demand**

Policies alone do not create jobs, but they are signals for public and private investment that do. The more robust and diverse the revenue stream the greater the economic impact.

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<sup>11</sup>[https://apps.montgomerycountymd.gov/cellims/DownloadFilePage?FileName=2707\\_1\\_17800\\_Bill\\_16-21\\_Committee\\_20211028.pdf](https://apps.montgomerycountymd.gov/cellims/DownloadFilePage?FileName=2707_1_17800_Bill_16-21_Committee_20211028.pdf)

<sup>12</sup><https://www.montgomerycountymd.gov/dot-parking/ElectricVehicle.html>

Montgomery County currently has several revenue streams to implement job-producing climate projects: The Capital Improvements Program (CIP), The Green Bank, and Federal funds. Each of these will need to be leveraged to maximize the CAP's job and business potential.

### *Capital Improvement Budget*

The FY23 Approved Capital Budget and the FY23-28 Capital Improvements Program include substantial investments for climate-related infrastructure development and construction projects. This includes \$1.4 billion for climate resilience, transportation improvements, energy efficiency, and maintenance projects as delineated below<sup>13</sup>.

- \$710 million in mass transit improvements to reduce the climate impact of transportation in the County, including \$408 million for bus rapid transit planning and implementation and \$152 million to begin to transition Ride On to a zero-emission fleet;
- \$340 million for pedestrian and bicycle transportation facilities to encourage active modes of transportation and reduce short-distance car trips;
- \$163 million to fund maintenance projects that increase the energy efficiency of county government, MCPS, Montgomery College, and M-NCPPC facilities through building envelope repair and replacement of obsolete mechanical and electrical systems;
- \$12.5 million in added funding for projects to help achieve net-zero energy use in new or renovated facilities, including Holiday Park Senior Center, the White Flint Fire Station, the 6th District Police Station, and \$4.4 million to help achieve near net-zero energy use in the renovated Kennedy Shriver Aquatic Center; and

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<sup>13</sup><https://apps.montgomerycountymd.gov/BASISCAPITAL/Common/Index.aspx?FY=2023&VER=APPROMBF>

- \$174 million for projects that maintain and improve the County’s resilience to extreme weather through stormwater management and maintenance and rehabilitation of waterways.

These investments can be cross hatched with various actions in the CAP like T-1: Expand Public Transit, for example, one of the primary actions for jobs and inclusivity potential.

### ***Green Bank***

The Montgomery County Green Bank<sup>14</sup> dedicates its work to “accelerating affordable energy efficiency and clean energy investment” within the county. Their initial funding was an infusion of \$15 million with funding from the Exelon-Pepco merger. On February 1, 2022, Montgomery County Council passed the Montgomery County Green Buildings Now Act which allocates 10% of the fuel-energy tax revenue each year to the Montgomery County Green Bank (Green Bank). According to the webpage, the Green Bank could receive an estimated \$18 million annually in funding to support clean energy projects in the County, providing the depth of resources needed for the Green Bank to partner with private capital to meet the market demand for clean energy projects.

The Green Bank’s 2020 annual report offers insights into the types of projects and related jobs and business opportunities. In 2020 \$2.5 million in projects were funded for residential and commercial properties, leveraging funds from lending partners. Their contracting partnerships include 18 commercial energy performance contractors, nine commercial and residential solar PV installers, three geothermal installers, six residential home performance contractors, and five

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<sup>14</sup> <https://mcgreenbank.org/>

residential HVAC contractors that provide a solid base for current and future climate-related initiatives.

### **Federal Spending Bills**

Significant federal spending bills have been passed and are or can be available to Montgomery County to implement/fund its climate actions. Specifically, the county received \$204.1 million in unrestricted grants from the American Rescue Plan Act (ARPA) to offset the county's revenue losses, continue government services, and support businesses and residents with further aid in recovery. These funds, if still available, can be used for its climate initiatives, especially if it also increases the tax base through high road jobs and business opportunities for un- and underemployed populations. The County will have to determine the availability of ARPA funds to sharpen these assumptions. Most importantly, Montgomery County can access a variety of competitive and formula grants within the \$1.2 trillion Infrastructure Investment and Jobs Act (IIJA) for a range of CAP programs. The County, however, must proactively apply for competitive infrastructure and economic development grants and otherwise seek access to the state's formula funding that includes, \$1.7b over five years for healthy, sustainable transportation, \$63m for electric vehicle infrastructure, \$84m for clean water infrastructure and energy efficiency and climate resilience projects.

A sample of formula/non-competitive funding that Montgomery County can pursue for state and federal sources includes:

- **Department of Energy (DOE)**
  - State Energy Program – SEP (cross-sector/workforce) - \$500M
  - Weatherization Assistance Program - \$3.5B
  - Energy Efficiency & Conservation Block Grant Program (EECBG) –

\$550M

- Energy Efficiency Revolving Loan Fund Program - \$250M
- **Department of Housing and Urban Development (HUD)**
  - CDBG, HOME & HOME ARP

**Relevant competitive grants that Montgomery County can apply for include:**

- **Department of Energy (DOE)**
  - Building energy codes T.A. & training
  - Energy Efficiency /Renewable Energy in public schools
  - Electric grid upgrade (in development)
  - Smart Grid Investment (in development)
  - Connected Communities Program
  - Local Governments seeking STATE SEP
  - Communities LEAP
- **FEMA**
  - Building Resilience Infrastructure and COMMUNITIES (BRIC)
- **Economic Development Agency (EDA)**
  - American Rescue Plan Act/Good Jobs challenge

**Montgomery County'S ECONOMIC INCLUSION POLICIES**

While Montgomery County's climate policies and investments define the type and scale of jobs and business opportunities, the County's economic inclusion policies determine the distribution of these benefits. That is, labor and community standards provide the framework for



the quality of jobs and businesses and the extent to which these opportunities stay within the local economy and benefit local and disadvantaged residents and businesses.

In general, the County has affirmed its commitment to an inclusive economy in key policies and programs. Several enabling legislation and executive rulings are in place and provide the basis for building a high road climate economy. These are amplified by the federal administration's encouragement for racial equity and good wage, union jobs to access its federal funding.

### **Workforce Labor and Community Standards**

The major pillars of Montgomery County's high road labor and community standards have developed over two decades and include the following from the earliest to the most recent:

**Prevailing Wage Provisions:** Passed originally in 2008 and outlined in section 11B-33C<sup>15</sup> of the Montgomery County code, the Montgomery County prevailing wage law requires prevailing wage rates be paid to construction workers on county-financed contracts. These wage rates differ across specific construction-related jobs and are outlined by the state of Maryland's Division of Labor and Industry.

**Banning the Box:** Montgomery County enacted a Ban-the-Box ordinance in 2015, with recent amendments that went into effect in February 2021 prohibiting employers with at least 15 full-time employees in Montgomery County from conducting a criminal background check on a job applicant or otherwise inquiring about the criminal or arrest history of an applicant prior to the completion of a first interview.

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<sup>15</sup> [https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco\\_md/0-0-0-71760](https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md/0-0-0-71760)

**Minimum Wage Law:** Montgomery County passed a minimum wage floor of \$15 that took effect in 2020 for employees of businesses employing 26 or more workers, and by 2022 for all others not exempted by state or federal law.

**Racial and Social Justice Policy:** Montgomery County adopted a racial and social justice policy ([Bill 27–19](#)) on December 2, 2019, after an extensive community engagement process. The bill established an infrastructure—office, advisory committee, departmental staff and rules—for advancing equity and inclusion in county operations. It requires all departments to develop and annually report on their racial and social justice plan. It also specifies the importance of examining the greenhouse gas impacts of Montgomery County’s master plan on racial and social justice.

**Local Hire Policy:** Recent legislation: [Bill 35-21, Concerning Prevailing Wage Requirements-Construction Contracts-Amendments](#), requires construction projects to “include best efforts for local hiring . . . requiring best efforts to hire Montgomery County residents for at least 25% of the new jobs to complete County financed construction projects.” In addition, the legislation expands prevailing wage requirements on county-financed projects as well as those under public-private partnerships such as energy services contracts.

### **Supplier Diversity**

The county codified its commitment to Minority, Female, Disabled-Owned (MFD) firms through numerous policies, directives, and programs. The procurement process is primarily guided by [Chapter 11B – Contracts and Procurement Regulations](#) of Montgomery County Code, most recently updated through September 1<sup>st</sup>, 2021. It describes common general [procurement practices](#) along with requirements for compliance programs within the county, including the MFD Program, the Local Small Business Reserve Program (LSBRP), the Local Business

Preference Program (LBPP), the Local Business Subcontracting Program (LBSP), the Wage Requirements Law Program, and the Prevailing Wage Law Program. Individual requirements for each are highlighted below. Like other communities, Montgomery County organizes contracts within the Office of Procurement into categories of construction, goods or commodities, and services (professional and non-professional).

Effective October 1, 2021, The Office of Procurement added the U.S. Department of Veterans Affairs (VA), “Service-Disabled Veteran Owned Small Business” certification as Disabled. This certification will be added to the MFD business program.

### **Summary**

The County’s commitment to using its climate initiatives to build a high-road economy is rooted in a County-wide policy environment dedicated to building a strong local economy with screens of opportunities for all. A structured economic inclusion infrastructure is required, however, to move from policy to economic and community impact. This includes aligning Montgomery County’s workforce and business support systems and sharpening its implementation tools to deliver on CAP’s local economic development potential, particularly for disadvantaged residents and businesses. The following sections examine ways to bolster the high-road baseline for optimal outcomes.

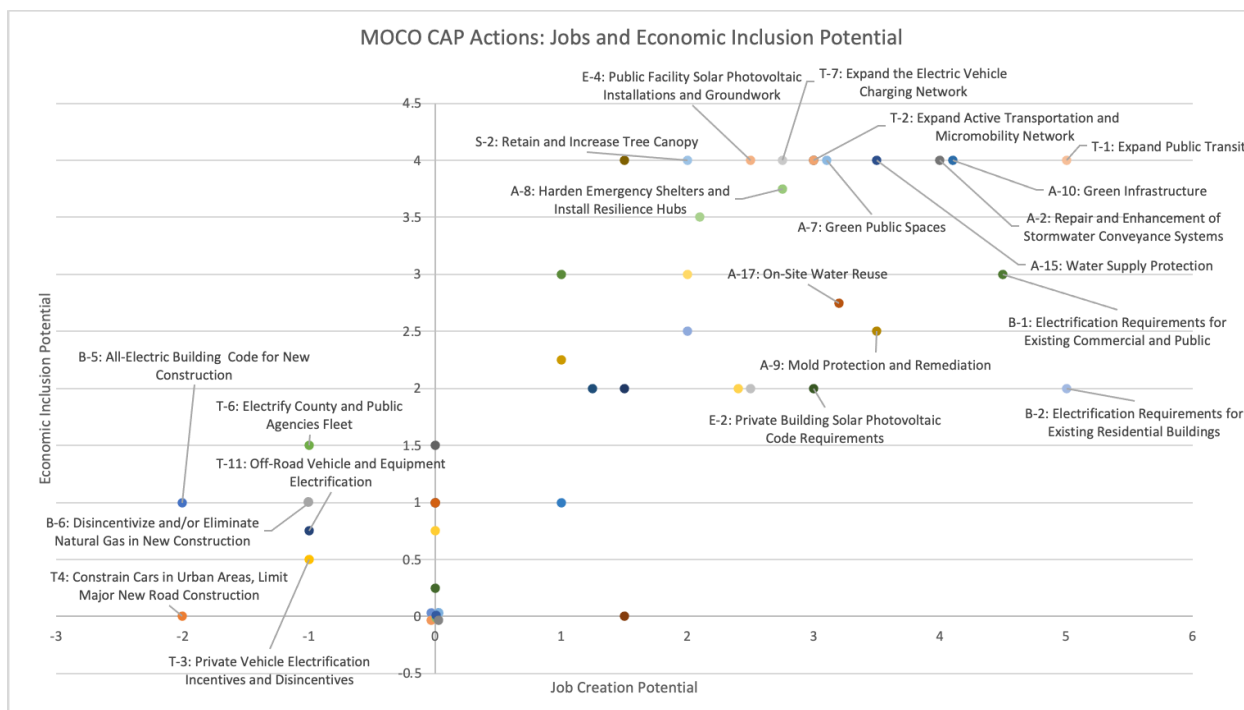
## **SECTION 3: BUILDING A HIGH ROAD WORKFORCE**

### **Labor Demand**

The climate policies and investments identified in Section 2 set the stage for significant job growth for Montgomery County. This section presents job estimates within the CAP's high-demand sectors (i.e., for transit, water, EV charging, public building retrofits, local public or utility-owned solar, etc.). These actions are shown in the upper right quadrant in the scatterplot shown in the graph below.

### **Figure 1**

## Montgomery County CAP Actions: Jobs and Economic Inclusion Potential



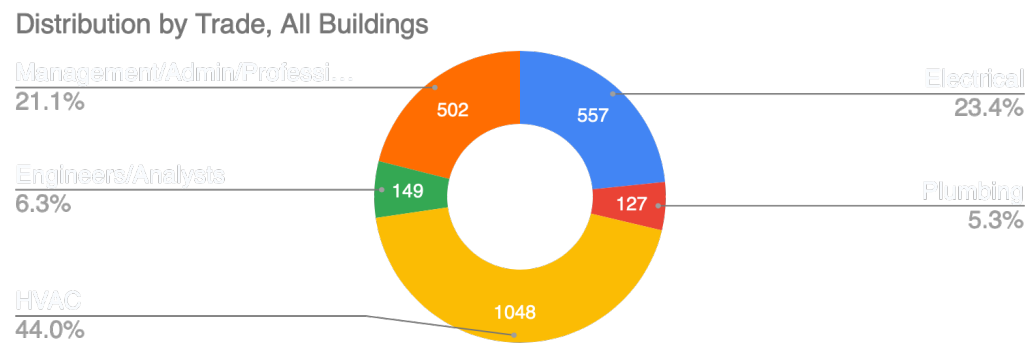
The vertical axis of the graph enumerates the economic inclusion potential of each climate action. The horizontal axis cites the number of jobs generated by the action. Some climate actions will result in job loss while others will generate jobs. The zero-function line is slightly left of center on the graph. Climate actions to the left of the zero function result in job losses while those to the right represent the potential for job gains. Climate actions in the lower left quadrant will result in job losses and have the lowest economic inclusion potential. Those in the upper right quadrant have the greatest potential for job gains and economic inclusion.

Further analysis was conducted to determine job estimates based on market potential in the building sector. The analysis showed that to decarbonize the building sector a total investment (public and private) of \$17.9–22.8 Billion is required. If fully capitalized, this would result in an Average Annual FTE Jobs of 2600–3360 per year from 2022 through 2050.

**Total Job Potential: All Buildings Efficiency + Electrification**

**Figure 2**

*Distribution by Trade, All Buildings*



**Legend**

- Orange 502= Management and Administration Professions
- Green-149= Engineers/ Analysts
- Gold-1048= HVAC
- Red-127= Plumbing
- Blue-557= Electrical

**Figure 3**

*Rules of Thumb*

### **Rules of Thumb:**

1. **PUBLIC FUNDING:** The higher the percentage of public funds used for an action, the greater the influence to support economic inclusion
2. **TOTAL SPENDING IN LOCAL ECONOMY:** The more money, public and private, that is spent in the local economy, the greater the job creation and economic opportunity potential
3. **INFRASTRUCTURE:** The CAP actions with the highest job creation and economic inclusion potential are related to public infrastructure (i.e. for transit, water, EV charging, public building retrofits, local public or utility-owned solar, etc.)
4. **PROCUREMENT:** Innovation can be mainly supported by an Anchor Strategy that leverages institutional procurement power to support local producers and makers (i.e. food, recycled materials, wood products from waste wood, etc.)

Based on the jobs and economic inclusion potential in the CAP, occupations in high-growth areas were identified in the building, clean energy, transportation, and climate adaptation sectors. The occupations were then split into the following categories: on-the-job-training (OJT) and short-term certifications, skilled trades, specialty/licensed trades, and professional post-secondary degrees. Identifying the occupations is an important step in building out the high-road workforce pathway in the County and assessing what training programs already exist in the workforce ecosystem and where the training gaps are for these occupations. The occupational assessment is summarized in the table below, which can be explored in larger format:

[Montgomery County Climate Career Pathways & Ecosystem Mapping.](#)

This table illustrates the various occupations aligned with Montgomery County's CAP.

**Table 1***High-Growth Climate Occupations*

Career Framework	Buildings: Building Retrofits & Energy Efficiency	Buildings: Electrification	Clean Energy: Renewable	Clean Energy: Battery Storage	Transportation: Infrastructure	Transportation: Transit Operators	Transportation: EV Charging	Climate Adaptation: Water & Sewage
OJT/Certificate	CAD Designers, Weatherization Specialists, Home Energy Raters, Sales Representatives, Outreach Specialists		Solar Installers, Solar Technicians, Solar Sales, Engineering Technicians, Site Assessors			Bus Drivers, Train Operators, Station Agents		Systems Operators
Skilled Trades	Carpenters, Laborers, Roofers, Glaziers, Insulators	Carpenters, Laborers	Laborers, Roofers		Carpenters, Laborers, Iron Workers, Pile Drivers		Laborers	Laborers, Carpenters
Specialty/Licensed Trades	Sheet Metal Workers, Mechanical Electricians, HVAC Technicians, Mechanics and Installers, Test and Balance Technicians	Sheet Metal Workers, Mechanical Electricians, HVAC Technicians, Mechanics and Installers, Plumbers	Electricians, HVAC Technicians, Plumbers	Electricians	Operating Engineers, Surveyors	Mechanics, Electricians	Electricians	Pipefitters, Plumbers, Steamfitters, Operating Engineers
Professional	Auditors, Analysts, Engineers, Project Managers, Building Scientists, Lighting Designers, Drafts Persons	Auditors, Analysts, Engineers, Project Managers	Project Managers, Solar Energy Systems Designers, Software Engineers, Structural Engineers, Project Developers	Energy Storage Engineers	Engineers, Project Managers	Engineers	Project Managers	Project Managers

**Workforce Supply**

The economic potential of the Montgomery County Climate Action Plan is determined by the demand for workers and the availability of skilled workers—labor supply—to meet the demand. The supply of skilled workers in the Architecture, Engineering and Construction (AEC) sector presents a major challenge to Montgomery County’s climate and economic goals.



Construction is one of the 10 largest industries in Montgomery County and the Capital Region. According to WorkSource Montgomery's [Local Area Workforce Plan 2020-2024](#), as of 2020, there were over 73,000 people employed in construction occupations in the Capital Region. Construction has also been identified as an industry critical to the economic health of Montgomery County and a growing source of family-sustaining careers for residents.

As robust as this sector is, the demand for 2600–3360 full-time equivalents per year from 2022 through 2050 presents a major challenge given the nationwide labor shortage in the industry and the DMV region.

National data suggests that the industry is facing a severe labor shortage in every market and trade and among wage and hourly employees.

A total of [430,000 new workers were needed in 2021](#), according to an “average growth analysis” by the U.S. Bureau of Labor Statistics (BLS). Yet with potential infrastructure spending, this is not shaping up to be an average growth year. [The U.S. Chamber of Community Construction Index report](#) for the 2nd Quarter 2021 reported a booming commercial construction market, but 88% within the Industry are experiencing moderate to high difficulty finding skilled workers, and 35% of firms have been turning down jobs. According to [Dodge Data Analytics](#), the rise of green jobs tightens the labor market further as it requires different skills to achieve green construction standards.

The construction labor demand is challenged by an aging workforce, young people not attracted to the industry, and the changing demographics of the U.S. workforce. The National Electrical Contractors Association (NECA), for example, reports that 10,000 electricians are retiring each year, replaced by only 7,000 new entrants. At the same time, the [US Bureau of Labor Statistics](#) projects the electrical field will grow 8% between 2019 and 2029.

It is critically important to ramp up investments to meet the workforce needs of the green building sector and to target the demographics (young, Black, Indigenous, and People of Color) of today's labor pool.

### **Job Quality**

The majority of the job-creating actions identified in the Montgomery County Climate Action plan fall into the construction industry. This industry aligns well with the principles of High-road workforce development (HRWD).

HRWD has two objectives: (1) improve the quality of jobs so that they better support workers' economic self-sufficiency, upward mobility, and overall welfare; and (2) increase access to jobs for people who need them most and who have been historically excluded from career-track, family-sustaining employment.

These include most jobs in clean energy, buildings, transportation infrastructure, and climate adaptation sectors. When these jobs are performed by union workers, assurances exist that wages and benefits are fair, safety standards high, training robust, and avenues for advancement clear. Historically, women and people of color have been underrepresented in unionized construction trades. Ensuring equitable access to these unionized occupations for people who are underrepresented and/or experience barriers to employment requires an intentional approach, one that lays out clear career pathways from recruitment to training to placement in apprenticeship programs as well as to the necessary wrap-around services that ensure success.

### *Job Access: 2019 Racial Equity Profile*

The Office of Legislative Oversight's (OLO) 2019 Racial Equity Profile for Montgomery County report<sup>16</sup> provided a good sense of where disparities lie in key areas relating to the Climate Action Plan since the two primary areas of analysis focused on construction earnings and unemployment across demographics. The OLO report separates the data into White, Black, Asian, Latino, and Other, which includes American Indians, Alaska Natives, Native Hawaiians, other Pacific Islanders, and those of two or more races.

The table below shows the average construction monthly earnings and the percent of White average from 2012 to 2016.

**Table 2**

*Average Construction Monthly Earnings and Percent of White Average 2012–2016*

Year	White		Asian		Black		Latino		Other	
2012	\$5,437	100%	\$4,172	76.7%	\$3,817	70.2%	\$3,463	67.3%	\$3,578	65.8%
2013	\$5,483	100%	\$4,197	76.5%	\$3,908	71.3%	\$3,594	69.2%	\$3,604	65.7%
2014	\$5,713	100%	\$4,277	74.9%	\$3,998	70.0%	\$3,761	69.7%	\$3,813	66.7%
2015	\$5,839	100%	\$4,454	76.3%	\$4,178	71.6%	\$3,933	71.1%	\$3,955	67.7%
2016	\$6,019	100%	\$4,634	77.0%	\$4,255	70.7%	\$4,047	71.1%	\$4,043	67.2%

The disparity is clear. Minority communities are not earning wages comparable to their White counterparts in an area with great potential for growth with general infrastructure and climate-related infrastructure actions in the CAP.

In this report, unemployment data tells a similar story. In 2017, Asian and White unemployment rates were the same at 3.3%. Following those two demographics is a direct imbalance as Latino unemployment was 151.5% more than White and Asian unemployment, and

<sup>16</sup> <https://www.montgomerycountymd.gov/OLO/Resources/Files/2019%20Reports/RevisedOLO2019-7.pdf>

Black unemployment was more than double at 7.5%. Similar to construction earnings above, this disparity report shows these as two primary areas for improvement and by leveraging various actions in the CAP, can be a means to achieving equitable outcomes.

### **Workforce Ecosystem**

The Montgomery County workforce ecosystem includes over 100 community-based organizations and service providers who provide workforce development resources to county residents. The county's lead workforce development agency, Worksource Montgomery, links local and regional economic development and workforce efforts in the County. The County's community college, Montgomery College, has a workforce development department to link students to credentialing opportunities that qualify them for good jobs.

A complete inventory of workforce programs and service providers was conducted to understand the workforce ecosystem in Montgomery County as it relates to the construction climate careers pathway and identified occupations. This inventory of organizations is listed in Appendix 2: Workforce Ecosystem Inventory.

The figure below is a map of the organizations and their programs in Montgomery County that need to work together to build strong career pathways to climate-related careers. A more detailed and larger version of the map is available [Montgomery County Climate Career Pathways & Ecosystem Mapping](#), referenced previously.

**Figure 4***Montgomery County Workforce Ecosystem***Challenges**

Montgomery County’s climate action plan is rich in opportunities and workforce programs and resources to support workers. The major challenges to building a pathway to high road workforce include:

- **Labor Shortage:** There are more jobs than workers or workers interested in this sector of the economy. A robust pipeline of workers is needed immediately with outreach, training, and supportive services for Montgomery County’s workforce of the future, which is largely a growing workforce of minorities, women, and veterans currently underrepresented in the climate, energy, environment, and construction sectors. The

- fact that the energy, building, and transportation sectors are increasingly technology driven offers a unique opportunity to attract Gen X, Y, and Z into rebuilding the county to be smarter, healthier, and more resource efficient.
- **Job Quality:** The absence of structured and productive pathways into family-wage careers, benefits, economic mobility, and continuing education and skills training. While union jobs offer this, it lacks racial and gender diversity or opportunities to enter into apprenticeship pipelines. Building trades apprenticeship programs and other high-road skills training programs must proactively work to build pathways into high-quality career paths.
  - **Job Access:** The predominance of minorities in low-wage climate-related fields and lack of open access to union construction apprenticeship programs.
  - **Lack of Knowledge and Coordination:** WorkSource Montgomery is a catalyst for aligning the support services of various workforce entities, and is increasingly aware of building the climate workforce and identifying climate job opportunities.

### **Recommendations**

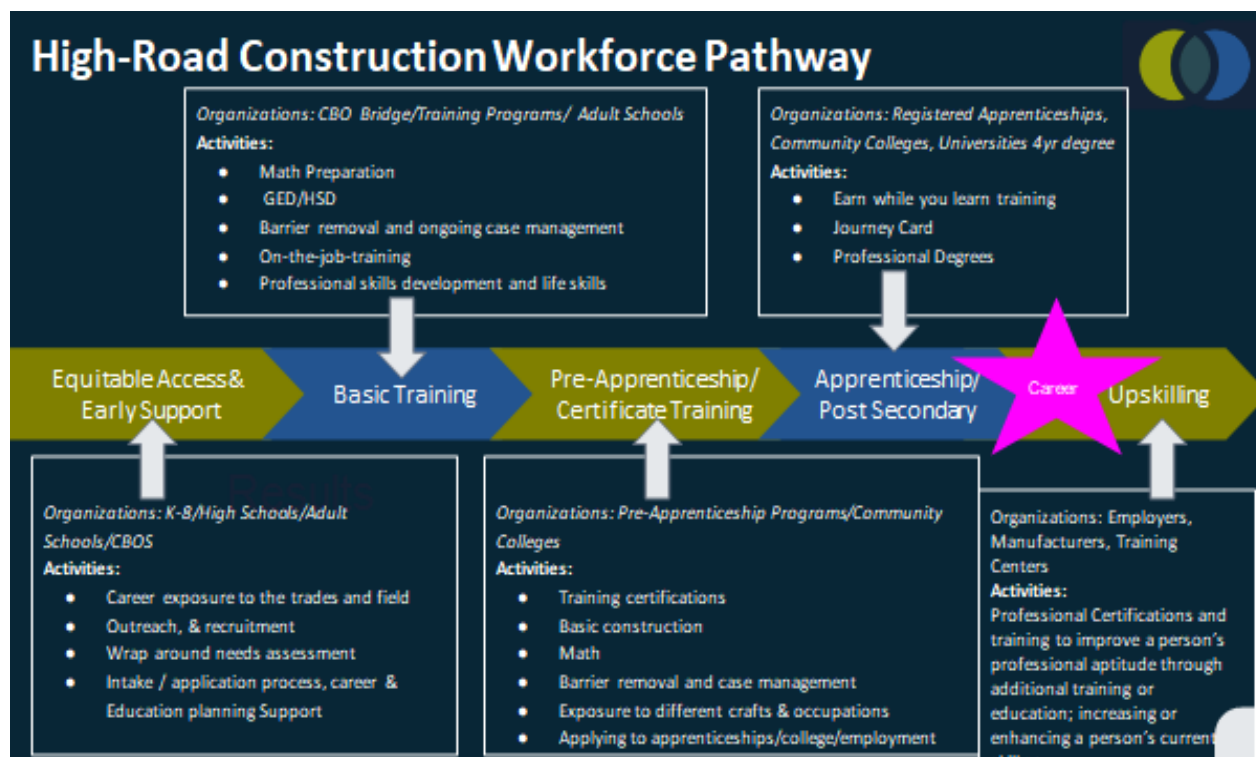
Build a High-Road Training Partnership (HRTP) to foster alignment between different organizations within the ecosystem: WorkSource Montgomery, Montgomery College, community-based organizations, business associations, public agencies, apprenticeship training programs, high schools, and employers. The purpose is to build multiple pathways leading to high-quality jobs for all Montgomery County's residents. To be effective this approach requires an HRTP that is demand and industry driven, has a high degree of alignment among workforce partners, and focuses on equitable access and job quality for workers.

Broadening access to apprenticeships and other work-based learning opportunities and fostering greater alignment between existing entities will foster efficiencies within the ecosystem, making sure a skilled local workforce is available when jobs are available. These jobs pay family-sustaining wages. Efficiencies in the ecosystem facilitate more reliable access to quality jobs for more workers. Also, training pathways leading to high-road jobs need to be fully integrated into this system. Expanding access to quality apprenticeship training sponsored by Joint Apprenticeship Training Committees (JATCs) in the Baltimore-DC Metro Building and Construction Trades Council will broaden the menu of opportunities.

The figure below illustrates the different entry points on the high-road construction climate careers workforce pathway and the programs and services provided at each stage in the pathway and organizations involved.

**Figure 5**

*High-Road Construction Workforce Pathway*



To be effective, this approach requires a level of coordination and partnership between key stakeholders: apprenticeship and pre-apprenticeship programs, contractors, government workforce and sustainability departments, community-based training organizations, high schools, and other key stakeholders. It requires a demand- and industry-driven high-road training partnership (HRTP) with a focus on equitable access and job quality for workers. WorkSource Montgomery is well-positioned to coordinate the HRTP. The organization has developed an [Asset Map](#) to connect employers and job seekers.

### **Addressing Racial Disparities through a High Road Training Partnership**

To address the racial disparities outlined in the OLO, the proposed HRTP will have to promote policies and implement programs that directly address systemic barriers that:

- Increase the number of applicants to unions and other high-road apprenticeship opportunities to meet labor shortages;
- Invest in equitable access and pathways to apprenticeship, particularly for Blacks and women, the most underrepresented groups in union apprenticeship programs;
- Address issues faced by undocumented residents to align with Montgomery County's ban the box policy;
- Promote college graduation through partnerships with community-based organizations and high schools

Specific strategies are outlined below.

### ***Supporting Equitable Access and Pathways to Apprenticeship***

- **Enact Policies that Build Demand for Apprentices:** Project Labor Agreements (PLAs) and Community Workforce Agreements (CWAs) require contractors to follow certain guidelines with respect to the workers they hire for taxpayer-funded



projects. PLAs, CWAs, and union partnerships help meet local community needs by specifying participation with people with conviction records, under-represented women, youth, and other targeted groups. Successful agreements can include funding for pre-apprenticeships. Thus, CWAs can promote local and targeted hiring and target disadvantaged groups in the labor market, including—for example—the formerly incarcerated. In addition, state and local governments can use their purchasing power and investments in government infrastructure to create demand for diverse apprentices.

- **Overcoming Discrimination:** Although unlawful, discrimination on the basis of race and gender still plagues many apprenticeship programs and can impact a participant's ability to get into a program. For example, few women are in the building trades, and some still see women as unable to perform physical work. Once hired, they still face sexism and discrimination on the job. Stereotypes also apply to people of color and people with records. Some apprenticeships still do not take people with records, which must be changed.
- **Increase Funding to be Consistent and Adequate to Support Public Policy:** The lack of consistent and adequate funding for pre-apprenticeship and workforce programs makes it difficult to run comprehensive programs that provide wrap-around support services. Often, funding is based on one-year contracts, which makes it difficult for a program to plan and expand services. Most existing programs have not had funding that is adequate and consistent to provide the kinds of services participants need. The following program components should be funded:
  - Training, equipment, and career transition services;

- Wrap-Around Support Services: mental health, child care assistance, transportation, record expungement, driver's license, case management, etc.;
- Robust stipends and/or fair hourly wages for people in training;
- Pay initial union dues and tools and/or any other apprenticeship costs;
- Provide funding for three years of career support services to support a person when having difficulty and in need of additional services on and off the worksite.

### **Promote Equitable Access to Pre-apprenticeship and Apprenticeship Programs**

Pre-apprenticeship and apprenticeship programs can promote equity, overcome discrimination, and provide a pathway into a high-road career:

- Remove occupational licensing barriers wherever practical for those with records;
- Prioritize funding for pre-apprenticeships, specifically for people of color, women, disconnected youth, and those with records and focus on training them in high-growth, high paying industries to mitigate occupational segregation in low-paying jobs;
- Expand career exposure to apprenticeships at the high school level and partner with high schools to incorporate MC3 pre-apprenticeships and other industry recognized credentials that support entry-level access to into their curriculum;
- Provide pre-apprentices with information about a variety of industries and skills so they are able to make an informed decision when choosing their occupation;
- Invest more in skills building, especially math skills, so that even competitive apprenticeship programs are attainable;

- Develop policies that register and certify pre-apprenticeship. Registering and certifying pre-apprenticeship can ensure credible, quality, industry-driven programs that serve underrepresented populations.
- Expand partnerships with union-affiliated programs. Multiple apprenticeship pathways are available: employer-sponsored apprenticeships, apprenticeships sponsored by colleges and business associations, and union apprenticeships. Evidence suggests union-sponsored apprenticeships have higher completion rates than non-union programs. To strengthen union programs, the County could require that government-funded pre-apprenticeship programs in the construction sector use the Building Trades Multi-Craft Core Curriculum (MC3) and other industry-recognized credentials that facilitate access to entry-level positions and apprenticeship pathways.
- Ensure individuals from underserved communities have access to JATC training facilities by providing prospective apprentices with appropriate transportation options to get to apprenticeship training facilities or by developing satellite programs located within the County. At this time, all JATC training facilities are located outside of Montgomery County.
- Develop and fund a High-Road Training Partnership in Montgomery County to support an equitable pathway to apprenticeship by funding the collaboration and partners.

### *Supporting Undocumented Residents*

- **Pathway to Citizenship:** Montgomery County has a large immigrant population, many of whom are undocumented, advocating for pathways to citizenship at the Federal level can help these individuals contribute to the formal labor market and

economy while meeting labor market demands and filling shortages. Develop an advocacy agenda for the county.

- **Support Undocumented Residents:** Work with partners to determine effective ways to support undocumented workers and students and provide county funding to those organizations for this work.

### *Removing Legal Barriers for Returning Citizens*

- **Remove Legal Barriers that Prevent People with Records from Participating in Certain Programs and Professions:** Montgomery County has a ban the box law, but some programs do not permit people with criminal records from participating. This can be a major barrier to obtaining well-paying work. Therefore, remove occupational barriers wherever possible for people with records.
- **End Blanket Bans on People with Certain Records:** People who participate in a workforce training program, complete the required training, and are endorsed by the program should get individualized consideration for their suitability.
- Require that participants only get excluded for convictions directly related to the practice of the occupation they are trained to do.
- Get rid of broad and outdated terms in hiring practices.

### *Promoting College Graduation through Partnerships with Community-Based*

#### *Organizations and High Schools*

- **Promote Partnership Between Community College and Community-Based Organizations:** Graduation rates can be low for first-generation and disconnected students and colleges do not always have the resources to adequately support these students. They also do not track a student's long-term success post-graduation.

Community-based organizations are usually set up to track a person's success post-graduation, which can include higher education and/or employment outcomes.

Community-based organizations also understand the unique challenges facing these students and can provide the necessary wrap-around support services needed to succeed in college. Supporting partnerships that combine community college courses with community-based services leads to more successful employment and educational outcomes.

- **Promote Partnership between Community College and High Schools:** Students learn about college and career opportunities in high schools. Developing robust career exploration and college readiness programs at the high school level that expose students to careers in the construction and climate sectors can support the pipeline development of future workers.

## SECTION 4: BUILDING A HIGH ROAD BUSINESS SECTOR

Montgomery County is known for its vibrant business community and has established meaningful support services to attract, retain, and expand high-end, high-growth sector businesses. The major investments underway and the projected growth of the emerging climate sector requires similar business support services. While the climate sector is emerging, it is considered by available research to be one of the fastest-growing sectors in the nation's economy<sup>17 18 19</sup>. Moreover, unlike Montgomery County's current targeted growth sectors,<sup>20</sup> the business opportunities related to the climate sector offer the greatest opportunities to increase opportunities for small, minority, female, disabled persons-owned firms, narrowing wealth and income disparities. Moreover, small businesses are known as the largest job generators and the first source of hiring halls for local and minority residents.

This section describes the opportunities and challenges in building a high road business sector to support Montgomery County's CAP, including an assessment of labor demand, supply, access (DEI), its ecosystem, challenges, and recommendations.

### Labor Demand

The demand for small businesses is driven by Montgomery County's climate policies and investments identified in Section 2. In short, businesses offering professional services (energy auditing, engineering, architecture, facilities operations and maintenance, marketing, etc.), goods and services (appliances, equipment, construction materials, etc.), construction trades, facilities operations, and maintenance) are in significant demand to meet CAP's clean energy, green

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<sup>17</sup> IEA (2021), Renewables 2021, IEA, Paris <https://www.iea.org/reports/renewables-2021>

<sup>18</sup> <https://www.wri.org/insights/growth-renewable-energy-sector-explained>

<sup>19</sup> <https://www.forbes.com/sites/energyinnovation/2019/04/22/renewable-energy-job-boom-creating-economic-opportunity-as-coal-industry-slumps/?sh=1aa8dac23665>

<sup>20</sup> Life Science/Bio-Tech, Health, Hospitality/Tourism, Agribusiness, Information Technology, and Cybersecurity.

buildings, transportation, and water infrastructure goals. The demand requires enhanced knowledge and skills in advanced and green technologies, equipment, software, and operations. Table 3 summarizes the projected spending on federal, state, and county projects over the next six years, providing a proxy for the scale of anticipated business opportunities.

**Table 3**

*Estimated Public Investments related to Climate Action: Time period – From 2028*

Project	Investment	Time Horizon
CIP Climate Actions	\$1.29 Billion	6 years
Other CIP Investments -including \$146.2 Million for affordable housing projects	\$3.71 Billion	6 years
Green Bank Investment Pipeline	\$105 Million	\$18 Million per year over 6 years minus \$3 Million on the street
Federal Transportation Infrastructure and Innovation Act (Purple Line)	\$1.7 Billion	4–5 years
Federal Infrastructure Investment and Jobs Act (Maryland)	\$1.39 Billion	4 years
EV Charging Stations	\$9.3 Million	
Water Infrastructure	\$144 Million	
Total	\$8.432 Billion	

## Labor Supply

The availability of knowledgeable and experienced firms to undertake the CAP initiatives is challenged by a general labor shortage in relevant fields, as well as severe underrepresentation of minority, female, disabled, firms (MFD) firms in all sectors of the climate economy.

Montgomery County is home to a number of medium and large-sized firms in the construction and building sectors. According to Dun and Bradstreet business data 22 construction firms (NAICS codes: 236116, 237110, 237120, and 237130) are located within Montgomery County as a headquarters (4) or locally-based firm (18), averaging 90 employees with Rockville Housing Enterprises being the largest with 1,048 employees. In terms of supplier

diversity, nine of the 22 firms were classified as U.S. minority-owned companies. While not all of these 22 firms had data on total annual sales, the average was \$4,750,351 with the highest total listed as \$15,000,000 and the lowest as \$98,200.

A total of 86 firms are in the building sector (NAICS codes 236210 and 236220). Six are headquartered in Montgomery County. One has only a branch office. The other 79 are locally-based firms. The average number of employees across these companies is 75. The Whiting-Turner Contracting Company leads with 4,560 total employees. Thirty-five (n=35) of the 86 are minority-led and 21 are female-led. Data on total annual sales was not given by all firms in this list but of the ones where data were collected, the average came out as \$4,850,965 with the highest being \$50,000,000 and the lowest at \$19,488.

These large firms are well positioned to take on the large, multi-million infrastructure and building projects in the pipeline, including the full array of water, energy (utility-scale), transportation, and building (commercial/institutional) projects. Energy Service Companies (ESCOs) are, for example, preferred vendors for many of Montgomery County's large-scale energy efficiency projects, utilizing performance contracting for off-balance-sheet financing.

There are two reasons, however, to build the capacity of smaller and more diverse firms to participate in this dynamic business environment. First, Tier 1 firms need a network of experienced and skilled Tier 2 vendors/suppliers to subcontract on these major projects. A focus group on supplier diversity within Energy Service Companies (ESCOs) including Johnson Controls recently conducted by Emerald Cities revealed the strain the industry shares in finding diverse subcontractors with the capacity to do performance-based contracting. This challenge is felt throughout the AEC industry where there is a general shortage of firms, especially among already underrepresented demographics with the specialized skills and capacities to undertake



high-risk projects requiring high levels of capital, bonding, insurance as well as advanced green technologies expertise.

Large firms are turning away small-scale projects to pursue larger, more lucrative infrastructure project opportunities available throughout the Country. Montgomery County is competing with cities across the country undertaking similar projects for a limited pool of experienced firms. It is a “sellers” market. That means the job of re-engineering and rebuilding the plethora of smaller, community-scale and local projects identified in the CAP, including retrofitting residential buildings and churches, installing EV charging stations, developing green infrastructure projects, etc. requires a large pool of tier 2 and tier 3 vendors.

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While this study did not obtain available data on Montgomery County’s Tier 2 and 3 contractors, national data suggests that the industry is facing a severe shortage of firms in every market and in every trade.

As in the case of other high-growth sectors, it is critically important to grow and support local businesses in the AEC sector to realize the CAP’s goal of leveraging its investments to strengthen the local economy through a targeted program of training and technical support. The District of Columbia, for example, runs a series of energy efficiency workshops throughout the year for local contractors and is currently examining more specialized training for minority contractors. CAP-related investments open up opportunities for a full range of businesses in the design, engineering, development, installation, and operations of energy, water, and transportation projects.

### **MFD Access**

Not only is Montgomery County’s climate economy compromised by the shortage of skilled contractors/consultants/vendors to meet its huge demand but is also challenged by systemic barriers to providing access to diverse firms.

Montgomery County economic inclusion policies are well articulated and grounded in a legally defensible Disparity Study completed in 2022. The study—conducted every five years—sets the diversity targets for MFD owned firms in professional, non-professional, construction, and goods and services areas, based on the difference between the number of available firms and their utilization rates on Montgomery County funded projects. The most recent goals (2022) are delineated in Table 4.

**Table 4**

*Montgomery County Utilization Goals in 2022*

	<b>Construction</b>	<b>Professional Services</b>	<b>Non- Professional Services</b>	<b>Goods</b>
Current Goals	21%	19%	22%	10%

Goals for solicitations issued on or after January 1, 2022	21%	19%	22%	10%
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Based on a conservative estimate of \$8.4 billion of climate-related infrastructure spending over the next six years within Montgomery County, the supplier diversity spend is reflected in Table 5.

**Table 5**

*Estimated 2022-2028 Diversity Spend by Service Type*

	Estimated Total spend	MFD Goals	Estimated Inclusion \$\$
Construction	\$9b	21%	\$1.89b
Professional Services @19%	\$9b	19%	\$1.71B
Non-professional services	\$9b	22%	\$1.98b
Goods	\$9b	10%	\$900m

These numbers highlight the level of investment needed to align with Montgomery County's diversity targets and the number and/or level of capacity of MFD firms needed to respond to this demand.

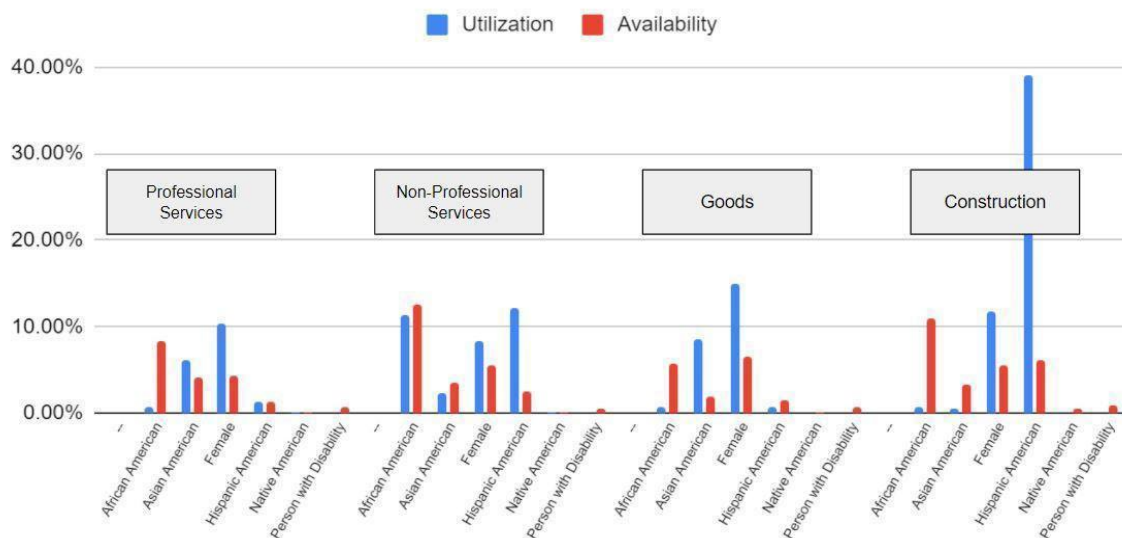
While the most recent MFD Annual Report<sup>21</sup> shows that Montgomery County is meeting its overall supplier diversity goal(s), Figure 4 below indicates a persistent disparity across these procurement categories for certain groups of MFD vendors. The data from the Fiscal Year 2021 Office of Procurement MFD report compares the utilization rates for MFD firms compared to their availability in the local market.

<sup>21</sup> <https://www.montgomerycountymd.gov/pro/report/>

The graph indicates that African American firms have lower utilization across all procurement categories. Hispanic American and women-owned firms, in contrast, have high utilization rates, boosting the overall supplier diversity goals for the county.

**Figure 6**

*Utilization Based on Demographic Categories*



The obvious need is to increase African American utilization, but the data masks the importance of building a pipeline across all demographics to meet the growing demand. A sustained program of information, outreach, training, and support is needed to reach emerging businesses. Focus groups and interviews with Hispanic business assistance organizations, for example, suggest that many more Hispanic American firms are willing to participate but are being left out of this conversation. In a focus group hosted by Impact Silver Spring, contractors complained that they could not find work in Montgomery County and were typically working outside the county. When asked about the contracting opportunities related to the Montgomery County CAP, one contractor said, “More opportunities are given to big companies rather than smaller ones within the County. We are willing to do the work.”

## **Business Ecosystem**

Montgomery County has a decentralized, three-tiered business ecosystem focused on (1) Corporate Business Support Services, (2) Business Compliance, and (3) Small business assistance organizations. These entities have unique and essential roles in Montgomery County's economic and business development efforts. None are currently organized, however, to effectively support either the CAP or to build the capacity of small, minority, disadvantaged businesses in the climate economy.

## **Corporate Business Development**

The **Montgomery County Economic Development Corporation (MCEDC)** is Montgomery County's main economic development agency. Formed as a non-profit 501c.3 five years ago, it focuses on traditional economic development strategies of business attraction, expansion, and retention of corporations in predominantly professional, white-collar, high-wage sectors. They target the growth of businesses in the life sciences/biotech, cyber and information technology, agribusiness, hospitality/tourism, health systems, financial services, and advanced manufacturing.

MCEDC's sector focus is neither on the CAP nor particularly on MFD business development. MCEDC and CAP's overarching goals of environmental sustainability, workforce, livable communities, and economic inclusion, however, are squarely aligned, warranting a strategic partnership. The jobs and businesses related to building climate-resilient infrastructure (e.g., supply chain, food, energy, transportation, green infrastructure) directly contribute to Montgomery County's economy, as well as provide the safety and quality of life that attract and retain other major employers.

### **Case Example: United Therapeutics Recommending County's Role in Getting to Know Local MFD Contractors**

The ECC team interviewed the Montgomery County team at United Therapeutics- Alyssa Friedrich (Chief People Officer), Avi Halpert (Vice President of Corporate Real Estate), and Thomas Kaufman (Senior Director of Corporate Real Estate) on their building projects related to their corporate Environmental, Sustainability, and Governance Goals and their approach to hiring MFD firms for construction projects. The company has already achieved net-zero emissions across campuses, including Montgomery County.

Avi Halpert said, "There is always the renovation and a level of demolition and moving and cleaning services that are constant through the year. Sometimes it could take time to get the first purchase order [that meets] our risk management and workers comp standards." The company has no explicit goals related to hiring MFD businesses. It tracks these businesses despite a lack of a mandate to do so. The primary objective is keeping things within the state and neighboring counties. The company encourages general contractors to look for qualified subcontractors or consultants classified as MFDV. They are currently letting the number of MFD contractors grow organically and measuring who is participating in these projects.

They suggested the county could be more helpful in helping to prequalify contractors and in facilitating introductions between these contractors and United Therapeutics by organizing meet and greet events where contractors and other businesses introduce themselves to United Therapeutics (UT) staff and UT staff describe potential opportunities.

### **Business Incubators**

The County operates three innovation centers/incubators located throughout the region to spur enterprise development in target sectors as part of their Business Innovation Network. There are four other incubators operating within the County, including the Bethesda Green Business Incubator.

The capacities of these seven incubators could be pooled and leveraged to generate businesses that respond to the priorities of the CAP. Particular consideration should be given to

using these centers, particularly in lower-income communities, to provide business development services for MFD firms in the climate sector.

The County and MCEDC-given their research and convening powers- can help grow two new promising sectors of the climate economy: eco-services and sustainable foods. Agribusiness is already an MCEDC target sector. By convening Anchor Institutions, such as health institutions, the County and MCEDC can leverage anchor institutions' climate commitments and spending power to help build a sustainable food sector (see Section 5: Anchor Strategies).

Similarly, the concentration of firms in life sciences in Montgomery County uniquely positions it as a leader and innovator in the research, development, and commercialization of ecosystem products and services. The life sciences sector was valued at \$852.88 billion, globally and is poised to grow at a rate of 17.83% from 2022 to 2030<sup>22</sup>. Opportunities for business expansion, attraction and creation are embedded in innovations related to the market demand to mitigate and adapt to global warming, ecosystems change, the loss of biodiversity, and manufactured pollutants. COP26, the most recent global convening of Paris Accord members, revealed growing awareness that climate change cannot be adequately addressed without tackling the molecular basis of changes in ecosystems and finding biomolecular solutions.

The demand for leading-edge eco-solutions ranges from studying the ecosystem effects of climate change on new infectious diseases and increased spread of antimicrobial resistance, aridification, loss of forestry and ocean life to replacing chemical synthesis with naturally occurring enzymes and/or microbial communities for plastics, pharmaceuticals, and other environmental toxins. Research reveals the potential of mining genome data for finding biobased

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<sup>22</sup> Vision Research Reports, The global biotechnology market is expected to be worth around US\$3.44 trillion by 2030 from US\$852.88 billion in 2020, published April, 2022. <https://www.visionresearchreports.com/biotechnology-market/37875>

chemicals that can replace their fossil-based counterparts with significant GHG emissions reductions. A bio-economy would focus on replacing energy-intensive manufactured materials with materials generated by biotechnology (e.g., fungal mycelium) and exploring the use of algae and prokaryotes for carbon sequestration.

MCEDC is in a good position to convene the Life Sciences Industry, Health Sector, and other Anchor Institutions to explore the potential of developing a climate science cluster and a sustainable food sector.

### **Business Assistance and Compliance Offices**

Three small business offices focus on fulfilling Montgomery County's regulatory and compliance functions. These accountability functions monitor and facilitate the County's wage, inclusion, and employment laws, representing critical "implementation tools or 'instruments'" of effective high-road business infrastructure, but they each could be enhanced. Specifically:

#### ***The Business Advancement Team***

The Small Business Navigator and Business Liaison Officers provide outreach and support services to small businesses to help them navigate rules, regulations and licensing; permitting; procurement, or simply improved communication with county departments and agencies. They also connect small businesses to the County's grant and loan programs.

The Business Advancement Programs with its centralized 'outreach' functions can take on a more proactive role in connecting the full range of stakeholders in the ecosystem if adequately funded. But it is considered under-resourced and underdeveloped for that function.

#### ***The Procurement Office***

This office is charged with recruiting all minority-owned businesses to provide goods, construction, and services to the county, including:



- notifying all businesses of procurement opportunities;
- providing information to business owners about the procurement system;
- providing referrals for technical assistance, sureties, and financing;
- reviewing procurement procedures to remove artificial barriers to competition

This office manages all the programs critical to a high road strategy: the MFD Program, the Local Small Business Reserve Program (LSBRP), the Local Business Preference Program (LBPP), the Local Business Subcontracting Program (LBSP), the Wage Requirements Law Program, and the Prevailing Wage Law Program.

This office will need to take a more active role to address the continued underrepresentation of African Americans in the procurement goals as well as re-examining its procurement rules to accommodate small and minority participation in large scale climate infrastructure projects. The work includes identifying systemic barriers to procurement, including project delivery methods, unbundling project scope/size to make them more accessible for small contractors, and improving RFPs and contract procurement language and evaluation criteria to ensure supplier diversity (see Section 5: Implementation Tools).

### *The Compliance Office*

This office in Montgomery County ensures adherence to the County's labor and business standards, including earned sick and safe leave law, minimum wage requirements, a domestic workers law, and the Fair Criminal Record Screening Standards Law. Monitoring and reporting are important components of an economic inclusion initiative (see Section 5: Implementation Tools).

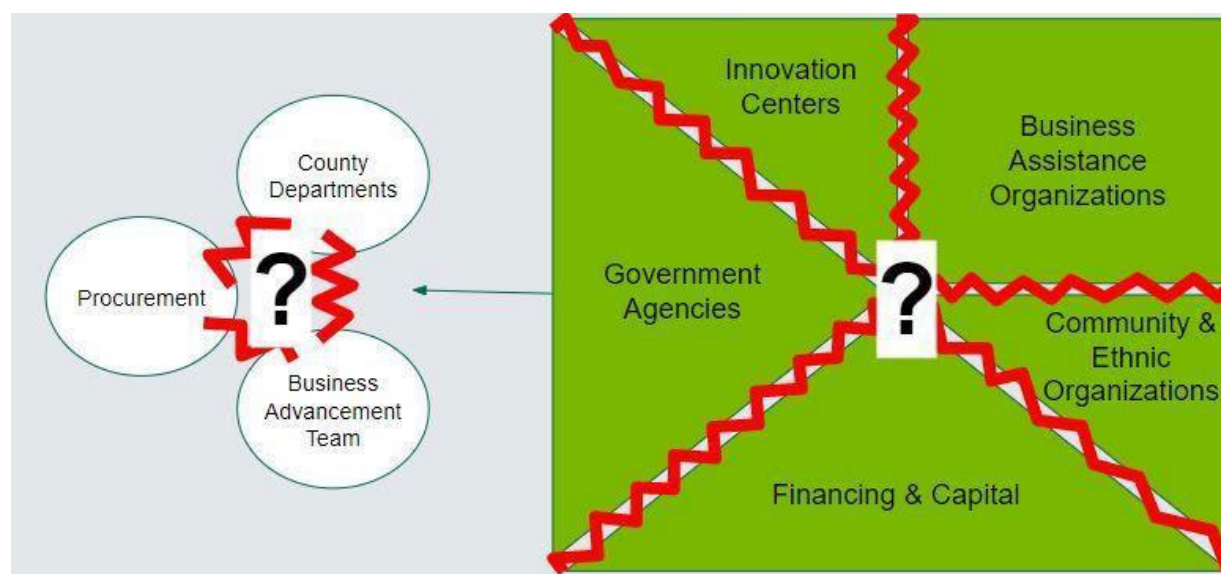
### *Community-Based Business Assistance Organizations*

Community-based business assistance organizations provide a full range of support and capacity building for small, local, disadvantaged firms to be more competitive. A total of 27 trade associations and membership organizations, 12 business resource organizations, and other community-based organizations provide advocacy, training, capital, and one-on-one technical assistance in business certifications and financing. An inventory of organizations can be found in Appendix 3.

A few organizations in this ecosystem have some capacity to support Montgomery County's CAP. The Latino Economic Development Center (LEDC) added solar-related projects to their portfolio, with credit enhancement from the Green Bank. Bethesda Green works specifically to incubate green business development in Montgomery County.

Most organizations, however, while essential players in the ecosystem, are uniformly unfamiliar with the prospects of CAP for their clients, are disconnected from each other, and are frustrated by the lack of information and access to small business support within Montgomery County.

This general assessment of Montgomery County's business ecosystem demonstrates a robust number of organizations and a suite of services that can and should be essential contributors to connecting local businesses to the climate economy, as illustrated in the following graphic:

**Figure 7***Contributors to Connecting Local Businesses to the Climate Economy*

Each of these units needs to strengthen its offerings to serve the climate and the supplier diversity agenda, and they must be better aligned with each other. There is not a strong connection between these organizations, leading to the inability to collaborate and assist communities on education and resources throughout the county. This creates challenges for community members and small business leaders to know what is available and who to call on for help when looking for access to contracts, capital, or training in certain trades. Some of these issues were reflected in the comments from the interviews and focus group sessions:

- “[It’s] hard to know what’s available.” (Referring to the Business Assistance Services through the county.)
- “No one at the County is holding economic development, and there is no one to think about [small business assistance].”

- “The current County Executive has an office to help small businesses to assist them in traversing the County’s regulatory requirements. They play more of a liaison function.”
- “More opportunities are given to big companies rather than smaller ones within the County willing to do the work.”
- “There is no one helping us with access to contracts or development of our businesses.”
- “Financing is not adequate. There is a need for a direct lending facility versus credit enhancement.”

### Challenges to Building a High Road Business Sector

Montgomery County is rich in business support services but they need to be harnessed to address the promise and challenges of building a high road climate economy. In general, the economic development and business assistance organizations in Montgomery County include innovation centers (7), business membership organizations (23), business resources organizations (11), and other community-based organizations. Taken together, however, Montgomery County’s economic development/small business ecosystem has been variously described as “not working well,” “under-resourced,” and “hard to know what’s available.” The development of the small business sector appears nominally supported and *pro forma* in nature.

Leveraging Montgomery County’s climate commitments and investments to benefit small, local, and demographically underrepresented firms must address several factors.

- The gap between the demand for and the supply of knowledgeable and skilled firms in the climate space;
- The absence of training programs and coaching for businesses specifically in the high

- growth areas of the CAP;
- More rigorous procurement implementation tools to connect underrepresented businesses, especially African-American-owned firms to Montgomery County's procurement opportunities;
  - Montgomery County's underdeveloped and resourced small business support infrastructure;
  - Lack of awareness of the CAP and its economic development goals and disconnect within a far-ranging ecosystem;
  - The lack of alignment of Montgomery County's economic and business development operations to support the CAP and its economic inclusion goals

### **Recommendations**

A network management approach will help foster greater coherence among independent organizations. This approach would involve convening stakeholders to identify how each organization can support small businesses as they access projects enabled by CAP-aligned investments. One organization should take on this responsibility. Specific strategies associated with his role are:

- Aligning the business ecosystem
- Building the capacity of small businesses
- Improving Policy Implementation

### ***Aligning Business Ecosystem***

- Hire an Economic Inclusion Network Manager within DEP to inform, connect, and coordinate Montgomery County's business ecosystem actors to the CAP and to assist with federal and state infrastructure funds

- Simplify access to and increase resources for Montgomery County’s small business system
- Convene key organizations in financing, business development, and ethnic organizations to advise on orienting business incubators towards achieving economic inclusion through climate action projects

### *Building the Capacity of Small Business*

- Conduct ongoing MFD outreach through ethnic business associations, community-based organizations, churches, and civic organizations to promote climate actions as economic opportunities
- Leverage existing business incubator centers and establish new Climate HUB in disadvantaged communities to provide CAP information, training, technical assistance, and support for MFD
- Establish free training workshops for MFD contractors to strengthen competencies in public bidding, subcontracting, and undertaking CAP projects (e.g., energy auditing)
- Leverage the network of business support organizations to develop and implement services for MFD Businesses
- Establish a publicly funded Justice 40 program focused on engaging MFDs on climate projects in targeted low-income communities

### *Improving Policy Implementation*

- Cite enabling legislation in RFPs, including MFD procurement targets for specific demographic groups, including performance service contracts, and rother privately funded projects

- Direct primes to describe their past performance hiring small MFD businesses in prior projects
- Encourage primes to complete MFD utilization plans at the proposal stage
- Right-size projects to create access for MFD businesses
- Hold primes accountable for prompt payment
- Increase project financing/utility incentives & business lending for MFD

## **SECTION 5: HIGH ROAD IMPLEMENTATION TOOLS**

A strong set of implementation tools is the ultimate glue to diversity and inclusion. Maryland’s regulatory environment does not allow Montgomery County to mandate hiring or contracting on the basis of geography or demographics. Consequently, Montgomery County’s local and supplier diversity policies are limited to a “Good Faith Effort” standard. This section identifies best practice tools for strengthening the intended outcomes within the purview of the Procurement and Compliance Offices and all contracting functions.

### **Inclusion Goals in Public vs. Privately-Funded Projects**

Publicly funded or subsidized projects or those that require public entitlements/approvals or entail a government contract are best able to advance Montgomery County’s economic inclusion goals. Montgomery County has leverage to define the scope and anticipated outcomes of a project and embed its inclusion goals into the project. This includes Performance Service Contracts used by energy service companies (ESCOs). ESCOs across the country are incorporating diversity and inclusion requirements into their bids, as part of their offerings to public entities. Even though these are ESCO-financed projects with costs paid through energy savings, ESCOs recognize that winning the bid—for current and future projects—requires meeting clients’ needs, including diversity and inclusion.

It is more difficult to impose economic inclusion goals on private projects. An increasing number of firms, however, embrace environmental and social goals (ESGs) and are adopting the U.N.’s sustainable development goals to lift its brand as a socially responsible business. Montgomery County is well served by a “rising tide” of consumers and governments who expect higher standards of business practice.



Besides inclusion standards and guidance on public-sector projects, and self-motivated companies, “incentives” might help businesses do the right thing, such as access to low-cost financing, etc.

### **High-Value vs. Low-Cost Bids/Solicitations**

Project bids/solicitation documents must be designed to reflect the high road goals of the county. Low-cost bids are the least likely to deliver on Montgomery County’s high road objectives. Instead, “best value” contracts should be the basis for awarding contracts for services.

A core element of high-road bids is how a company addresses labor issues: compensation, skills, diversity, and inclusion. High-road firms pay their workers livable wages, offer a competitive benefits package, and encourage continuous training. These businesses use subcontractors with similar qualities and they embrace diversity and inclusion within their workforce and their vendor/supply chain policies and protocols.

The companies that choose to make these kinds of investments are structured around goals such as client and staff retention, market leadership, long-term sustainability, and positive community impact. These companies pride themselves on quality service, repeat business, and referrals, so they are incentivized to keep clients satisfied. These companies attract the best talent with competitive salaries and professional development support, and their leadership prioritizes staying abreast of the latest technologies.

Such business practices will not be your low-cost bidder. Consequently, the bids should reflect, wherever possible, objective and quantifiable analysis and “best value” criteria should be prescribed and predetermined in the Request for Proposals or Invitation for Bids.

### **Requests for Proposals Selection Criteria**

The Bid/Solicitation/RFP is the best instrument to evaluate how well the bidders have considered and will meet Montgomery County's local and diversity goals. The selection criteria for Montgomery County's projects should rate social, environmental and community benefits of the bid, including workforce and supplier diversity in its proposal evaluation criteria. These criteria would include:

- firms' diversity and inclusion track record delineated by occupational levels (C-Suite, management, professional, and support staff) answering the question are they "walking the talk."
- past diversity and inclusion performance on past projects, including references/examples
- DEI proposal/plans for current/proposed project

### **Staffing/Utilization Plans**

Confidence in a bidder's/business' intent and ability to meet Montgomery County's economic inclusion goals increases with the use of staffing and business utilization plans. This is requested either as part of the proposal or before the contract is executed. This plan identifies with as much specificity as possible the types of jobs and business opportunities, the number of apprentices, workers from target populations, subcontractors that will be used, and the stages of the project, salary, and contract value for targeted populations.

### **Evidence of Good Faith Effort**

Evidence of Good Faith Efforts must be made as explicit as possible to effectively evaluate the quantity, intensity, and results of these efforts. The RFP should identify for firms how Montgomery County will evaluate good faith efforts. This goes beyond standard

“advertising” opportunities to proactively address the standard barriers to participation. Some examples include evidence that the firm:

- broke down or combined elements of work into economically feasible units to facilitate diversity and inclusion;
- worked with the community, minority trade, workforce organizations, and labor unions identified by Montgomery County and included in bid documents;
- provided MFD firms with line of credit, equipment, bonding, insurance, capital to participate in the project; or
- negotiated partnership agreements with workforce organizations and/or joint ventures with business organizations

### **Monitoring and Compliance**

Few would argue with the statement “What gets measured gets done!” The common equivalent to this phrase across many industries is key performance indicators or KPIs. The Compliance Office has an important role in this regard to use best-in-class monitoring and reporting systems. These data systems provide “real-time” information on project performance to allow for corrective action during the project’s lifespan and a greater likelihood of success.

### **Liquidated Damages**

The ultimate tool to deliver on the economic inclusion goal is enforcement. Many government-funded projects include penalties for non-compliance. The use of real-time monitoring systems and proactive monitoring involving local workforce organizations help to meet the hiring goals as the project unfolds, as opposed to a system designed to penalize businesses after the fact.

## SECTION 6: ANCHOR STRATEGIES

Leveraging the climate commitments and buying power of Anchor Institutions can be an effective strategy for addressing the climate adaptation goals of Montgomery County's Climate Action Plan: to be resilient against the impacts of climate change.<sup>23</sup> Anchor institutions have the financial, political, and social capital to transform not only their businesses to be more sustainable but can also signal changes that catalyze entire markets such as food and energy. Local communities will be more sustainable and climate resilient as a result.

Anchor institutions are defined as large, nonprofit and public organizations that, once established, tend to remain rooted in place and are often the largest employers in communities. In the Montgomery County assessment, the following are deemed anchor institutions: Hospitals, Universities, Colleges, the Montgomery County Public School System, Federal agencies (including Veteran Affairs hospitals and National Institutes for Health [NIH]), and the County itself. Across the country, anchor institutions are recognizing their "anchor mission" to harness their significant resources to address social and environmental determinants of health in the communities they are situated in and serving. Anchors can leverage their assets to:

- Direct a greater percentage of their purchasing power toward local community-based vendors
- Purchase local, sustainably produced, and/or non-toxic materials and products
- Commit to local, diverse, and equitable hiring, workforce development, and employee wellness
- Provide workforce training for people needing assistance in the community

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<sup>23</sup> Montgomery County Climate Action Plan: Building a Healthy, Equitable, Resilient Community, June 2021. <https://www.montgomerycountymd.gov/green/Resources/Files/climate/climate-action-plan-printer-friendly.pdf>

- Incubate the development of new businesses, including social enterprise among nonprofits
- Invest in green buildings and green energy
- Improve waste management
- Direct grants and social investment funds to local and regional initiatives that will promote equitable economic development and healthy, vibrant communities
- Advocate for local, regional, and national policy, systems, and environmental change
- Provide capital or low-interest loan financing to community development financial institutions (CDFIs). An example from the perspective of a healthcare institution is [UCSF's Anchor Institution Initiative](#) launched with the accompanying report, "[Advancing Health Equity in San Francisco: An Assessment of UCSF's Anchor Institution Capacity and Recommendations for Strategic Direction.](#)"

An Anchor strategy has the potential to grow a more robust sustainable food economy as well as the eco-bioscience sector alluded to in the discussion of the role of the Montgomery County Economic Development Corporation in Section 4. This study specifically focused on the potential to build an Anchor-driven sustainable food sector.

Healthcare Without Harm conducted a [preliminary assessment](#) of the climate, social, and workforce commitments of 32 major employers in Montgomery County. Although nine of the 32 employers reported what was considered medium to strong environmental and social commitments, none were "outward facing," with an affirmative focus on influencing GHG emissions through their purchasing power or with a focus on directing their purchasing power toward local community-based vendors.

Yet, an infrastructure to generate local demand in the food sector is emerging. During the pandemic, the MANNA Food Center's [Farm to Food Bank program](#) in partnership with Montgomery County Food Council received an influx of funding from COVID relief dollars into the state. This effort was a response to getting more food to community members and increasing the number of farms engaged in the Farm to Food Bank program from 4 to 11 farms. Between January and June 2021, that number increased to 22 farms and is now at 30 contracted farms. This significantly increased local foods going to county residents. The program's success can be credited to finding a competitive price point to pay farmers and make their participation viable. Efforts are being made to make the program more financially sustainable and finding a price point in the middle of retail and wholesale averages.

The larger ecosystem supporting food production from local farms, while still small, has enough raw materials to be taken to scale if anchor institutions intentionally target local procurement. Montgomery County holds one of the most progressive and best examples of conservation policies in the country via the Agricultural Reserve. This declares 93,000 acres of land, about a third of the county's land resources, as protected for farmland and agricultural purposes. Given the robust amount of land and the active and engaged Montgomery County Food Council, there is opportunity for even greater engagement of local farmers and producers, food businesses, and procurement. However, there is a need to increase investment in food system infrastructure. Return on investment is possible through institutional policy changes and the development of local partnerships between both supply and demand stakeholders. What follows is a series of options for further development of anchor strategies in the food sector.

## **A Framework for Anchor Institution Engagement**

Anchor institutions serve their communities through their hiring and purchasing practices, as well as investing in their local communities and businesses. Purchasing foods produced, processed, and transported in ways protective of public and environmental health, institutions—like hospitals—can make a profound difference in the market and in the food settings of the people they serve. There are three models for engaging anchor institutions: (1) engagement by a single institution, (2) collaborative anchor to anchor engagement, and (3) finding ways for community and anchor institutions' collaboration.

### **Single Anchor Institution Engagement**

Working with a single institution allows for a partnership to develop and a deeper understanding of the functions and levers within the entity. This can lead to creating, reforming, and/or establishing investment in various practices and policies within the institution that better serves its community. For instance, within health care institutions, relationships are typically developed with one or multiple “champion(s),” typically including physicians, food service staff, sustainability staff, or other key stakeholders who then are better positioned to elevate sustainable and equitable practices and policies to decision-makers or can make these decisions themselves. Projects within food programming can span anywhere from values-based purchasing to diverting food waste within their cafeterias or across campuses to building social programming within the hospital, such as an onsite farmers market or rooftop garden. Developing partnerships with a single institution builds momentum for further and more collaborative work down the road.

### **Anchor-to-Anchor Engagement**

Anchor-to-Anchor Engagement is the most common approach as an anchor strategy. Setting up collaborative bodies consisting of representatives from anchor institutions provides a place for multiple anchors to peer-to-peer network, share ideas, and collaborate on finding solutions to building more local, sustainable, and equitable supply chains. This model enables a structure for collaborations working to accelerate inclusive and equitable strategies that respond to the local needs and challenges of their communities. In particular, hospitals and health systems convene to make connections and support each other through partnership, learn from each other by sharing best practices and challenges, and develop tools that result in place-based investment and growth.

### **Anchor-to-Community Collaboration**

Lastly, we use a community-anchor collaboration strategy where community stakeholders are convened with anchor institutions and organized to improve community health, wealth, and climate resilience. For more information, please refer to the HCWH and ECC partnership on [Anchors in Resilient Communities \(ARC\)](#).

Institutional purchasing provides an important opportunity to scale up sustainable food initiatives to be more inclusive and to engage supply chain partners. Institutions' food purchasing policies and related initiatives can embed social and environmental values within the supply chain by changing the practices of distributors, manufacturers, processors, and producers at regional and national levels. Even small shifts can have major impacts. The ARC approach provides an important opportunity to link what today are largely separate farm-to-institution efforts among the public school districts, university, and healthcare sectors, and government-owned establishments. While a lot of information is available on best practices and lessons



learned, there is a great need for formal cross-sector and community collaboration that funnels the strength of each of these food purchasing streams into a single, coordinated channel in Montgomery County.

Anchor institutions play a part in the larger ecosystem that makes up Montgomery County. Embedded in the findings and recommendations, we identify the valuable assets and work occurring in Montgomery County and how that can be leveraged beyond an anchor strategy.

## Recommendations

### Anchor Collaboration

- Standardize and define the terms “local” and “sustainable” and set goals and standards alongside anchor institutions for local and sustainable purchasing. This would set the stage for further expectations of the anchors to take actions that advance the CAP and more directly understand their contribution.
- Deepen the relationships with the anchors that were interviewed as well as a broader list of actors. Through partnership and collaboration, there is an opportunity for anchors to apply pressure for a circular food economy, where stakeholders along the food value chain can ensure better design, marketing, production, and pricing processes from farm to plate to waste.
- Consider the [Good Food Purchasing Program](#) to enable and set a structure for collaboration across institutions. HCWH is partnering in the [Anchors in Action](#) alliance, with the Center for Good Food Purchasing and Real Food Generation to co-develop a shared institutional food purchasing standard that will be released in fall 2022. This universal standard will further facilitate collaboration beyond the usual

reach of the Good Food Purchasing programs.

- Find champions and leadership within the anchor institutions to catalyze, in coordination with county officials, further growth in the food system, making local and sustainable food more accessible to institutions, their customers, and the communities they serve.
- Engage anchors to make a commitment to a progressively larger percentage of local, sustainable food purchasing that they can build on over time, create indicators for measuring success, and manage further progress.
- Through anchor engagement strategies, institutions can collaborate to address and set policies for local and sustainable spending and access to local vendors that filter throughout each anchor organization working in conjunction with a collaborative body that is setting a shared set of policies.
- A more thorough assessment of the food service and procurement infrastructure at institutions for anchors to identify their ability to set specific goals related to local or sustainable food procurement.

### **Anchor-to-Anchor Collaboration**

- Convene and coordinate with other like-institutions (e.g., universities/colleges to convene, hospitals to convene, etc.) to share procurement and sustainability policy and local procurement goals.
- The County is currently conducting a disparity study; however, anchors are not able to utilize this study since the vendors differ at these institutions and the County and anchors are not currently aligned. The County needs to align the current and/or future disparity studies with institutions for the prioritization of local and sustainable

- purchasing. This is an issue that can be leveraged and discussed through a collaborative governing body that includes different stakeholders in the system—individuals who represent local farmers, representatives from anchor institutions and other interested parties. This is called an anchor table. Currently, anchors give preference to MWBE vendors, adjusting MWBE bid price by 10% to subsidize costs and make bids more competitive. After the adjustment, if the bid from MWBE is at a better price, the anchor will award it to that vendor. For a similar policy and/or program to be placed with local vendors, a disparity study needs to be conducted. A barrier for institutions to conduct these studies has been the costs of the study to the institution itself. Therefore, if the County could include and/or align its vendors with the anchor institutions within its jurisdiction, this could be one mechanism enabling anchor institutions to purchase more goods and services from local businesses..
- Institutions should set local procurement goals in concert with the Montgomery County Food Council and the Office of Agriculture. Entities aforementioned could provide technical assistance to institutions along with HCWH, where feedback and national examples can be shared to right-size the goals of Montgomery County institutions.

### **Community-Anchor Collaboration**

- Implement the [Anchors in Resilient Communities](#) (ARC) to increase sustainable foods, economic opportunities, and community resilience. Anchors in Resilient Communities is a multi-sector collaborative developed and facilitated by Emerald Cities Collaborative (ECC) and Health Care Without Harm (HCWH). Based on work conducted in the San Francisco Bay Area, ARC provides a strategy for long-term

- anchor institution engagement with community partners that leverages their economic, political, community benefit, and investment assets to support and create resilient, equitable, and sustainable communities. Through a foundational assessment process that gathered information from over 200 diverse community stakeholders, the ARC advisory team identified the opportunity to impact the ecosystem of food production and delivery in the San Francisco Bay Area while bringing economic development to the underserved communities in the region. Bringing together anchors and community-based stakeholders translates successful strategies to address identified health needs; uncover food system gaps; create good jobs; and improve access to healthy, local, sustainably produced foods, while contributing to climate action resilience.
- Develop an advisory group of anchor institutions to guide a foundational assessment to identify issue area investment opportunities (e.g., food, climate, energy) that provide the greatest lever to catalyze systems change, growth, and viability. This step will further the process started with the High-Road Economic Framework and allow for a more comprehensive picture of the challenges and opportunities that have started to be uncovered, while also co-creating and implementing new paths forward in partnership with anchors and their communities.
  - Simultaneously, leverage the county's disparity study to align vendors across both the County and anchor institutions to support MWBE and local businesses.
  - Leveraging the collaboration of the Food Council's Environmental Impact Working Group (EIWG), the model of a [circular food economy](#) can be examined and incorporated into implementation within a community-anchor strategy.

## Strengthening the Local Food System

- Host a convening among Montgomery County Food Policy Council, anchor institutions, the County, and other players. This is imperative to changing purchasing policies and practices.
- Expand the Farm-to-Food-Bank model. This program establishes the availability of locally-sourced, high-quality food. It has been a critical solution to food insecurity in the County. Taking this existing model to scale ensures demand for local goods as relationships with anchors are being developed simultaneously. Expanding the existing model sets the stage to strengthen the local food supply ecosystem.
- Facilitate intentional collaborations to plan for the further development of the food sector. For example, the Montgomery County Economic Development Corporation can collaborate with the Department of Agriculture to engage local agricultural businesses in future economic development program planning.
- Invest in technical assistance, equipment, and education focused on regenerative agricultural practices. This should be targeted to farmers within the [Montgomery County Agricultural Reserve](#).
- Develop a farm incubator, food aggregation hub, cold storage, and meat processing facility in the county. These would be major additions to aid food production and distribution of local fresh food in the County.

## SECTION 7: SUMMARY RECOMMENDATIONS

### Important Shifts towards Creating High-Road Economic Inclusion through Climate Action

Intentionality is the most important element of any effort to create high-road economic inclusion through climate actions. The Montgomery County Climate Action Plan explicitly stated its intentions to address racial and economic disparities through the 87 actions outlined to reduce GHG emissions 80% by 2027 and 100% by 2035. Federal-infrastructure investments and private-sector investments, coupled with the Montgomery County Capital Improvement Program (CIP) investments will provide over \$8 billion for climate action over the next 5–6 years. This is a substantial headway towards the total investments needed to realize the full jobs potential through 2050 where the estimated required investments are \$17.9 billion to \$22.8 billion for all buildings.<sup>24</sup> In addition to fueling demand through investments, the County has created a policy environment ripe for economic inclusion through local hire, prevailing wage, and enabling legislation that promotes hiring MFD businesses as primes, second, and third-tier contractors on County construction projects.

#### **Achieving the goal of High Road Economic Inclusion: Systemic Shifts Required**

Yet, disparities persist and systemic shifts are needed to ensure high-road economic opportunities are available for all of Montgomery County's residents. We recommend the following systemic shifts as the County moves toward fully realizing its ambitious agenda.

- **From Ecosystems Fragmentation to Alignment:** Montgomery County's workforce and small business delivery systems are disconnected and fragmented, weakening the ability to effectively engage and connect the workers and businesses to emerging

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<sup>24</sup> Analysis by Inclusive Economics for Montgomery County, October 8, 2021.

- opportunities associated with the Climate Action Plan. Organizations and agencies that serve as touch points for individuals and MFD businesses form ecosystems that must be aligned towards the goal of economic inclusion.
- **From Disengagement to Active Participation:** While the Climate Action Planning process engaged multiple stakeholders from Montgomery County's most disadvantaged communities, interviews and focus group discussions suggest individuals and businesses seeking opportunity are unaware of the Climate Action Plan and the investments underway. As a result, these parties are disengaged and unlikely to identify the economic benefits of implementing climate action. Increasing active participation of individuals and businesses must include continuous convening, engagement and feedback from communities where economic inclusion is likely to have the greatest impact on racial equity in the County.
  - **Public and Private Investments** are required to ensure the County achieves economic inclusion by facilitating job-producing projects that open up climate action to its economic inclusion potential. Public investments in energy, transportation, and other climate projects and direct investments in projects in low-and-moderate income communities are best able to optimize community benefits that promote the utilization of workers and businesses from these communities. Private investments can be leveraged, provided incentives or mandates are reflected in Montgomery County policies and contracts that promote the utilization of local workers and businesses.
  - **Strengthening the Capacity of Local Organizations** to conduct outreach, training, technical assistance, and to function as network managers and program implementers,

will lead to successful delivery of high-road economic inclusion, increasing the participation of workers and businesses from some of the most disadvantaged communities in Montgomery County. This will require intentional strategy toward creating alignment within the ecosystem and funding to support implementation.

### **Recommended Actions**

A summary of the recommended immediate actions follow:

#### **Strengthen High-Road Delivery Infrastructure/Systems**

- Hire a dedicated economic inclusion manager within DEP to convene and align programs and pursue federal funding
- Host, or identify a host, for inter-agency collaboration and visioning to design and implement a targeted sector development strategy
- Invest in small business outreach and community infrastructure
- Strengthen/Refine RFPs and other implementation tools for local hire, targeted hire, and local procurement

#### **Strengthen Education/Training Infrastructure**

- Pursue relevant Federal Funding programs to create/expand education and training opportunities (Energy Auditor Grant Program, Building Training and Assessment Centers, Career Skills Training, Building Codes Implementation)
- Establish a Minority Business Training Program in green buildings, green infrastructure, and other climate-related contracting opportunities
- Develop a High Road Training Partnership (HRTP) to develop multiple pathways into careers for in-school and opportunity youth as well as un/underemployed adults that include apprenticeships (union and non-union), community college, community-



based programs, and other workforce education and training programs

### **Build Pathways to Job/Business Access**

- Develop a public-sector funded program to foster both energy and climate resilience in schools, community centers, affordable housing, churches, and other community-serving facilities, and facilitate workforce and business opportunities for local residents in the green economy
- Establish a Climate Action Business (CAB) Incubator program for diverse contractors with specific focus on community serving projects

Initiate an anchor strategy for the nascent local food sector:

- Convene anchors, Montgomery County Food Policy Council, and the County to review the report;
- Adopt the [Good Food Purchasing Program](#) framework to enable and set a structure for collaboration across institutions
- Coordinate with Anchor Institutions' leadership to catalyze further growth in the local food system - building partnerships is a part of the infrastructure that needs to be built and supported to develop a fully formed anchor strategy.

These recommendations are within reach of Montgomery County. The county has all that's required to leverage climate action to set the stage for local economic development inclusive of racial equity. The time is right. The resources are in place. The political will is there. All that is required is aligned action to achieve these ambitious goals. These recommendations provide a framework for aligned action to begin.

## Appendix 1: Employment Impacts Methodology Memo

### Employment Impacts: Data Needs

This memo describes the data required to estimate jobs corresponding to key actions in the Montgomery County Climate Action Plan. It briefly outlines the potential employment impacts associated with each category of climate action.

### Clean Energy

If there are the policies and incentives in place to develop local clean energy resources, this could be a significant source of construction phase jobs. Efforts will be required to make sure these are good quality jobs that are accessible to under-represented workers. This can be accomplished through Project Labor Agreements or Community Workforce Agreements with targeted hire standards.

### E-1: Community Choice Energy Program and E-2: Private Building Solar Photovoltaic Code Requirements and E-3: Promote Private Solar Photovoltaic Systems and E-4: Public Facility Solar Photovoltaic Installations and Groundwork

How many MW of local power/solar would be developed across the following sectors: Utility scale? Community-scale? Rooftop?

### Buildings

Existing building retrofits for efficiency and electrification could be a significant source of new construction, maintenance, and repair jobs. Efforts will be required to make sure these are good quality jobs that are accessible to under-represented workers. Eliminating gas in new construction will lead to a net loss of jobs, particularly acute for plumbers, pipefitters, and laborers. Efforts to improve job quality and union density in other areas of construction can

mitigate these negative impacts. Gas utility workers will be negatively impacted by efforts to reduce gas use in buildings.

#### **B-1: Electrification Requirements for Existing Commercial and Public Buildings**

How many existing buildings and existing building square feet would be retrofit?

#### **B-2: Electrification Requirements for Existing Residential Buildings**

How many existing buildings and residential units, single family, small multifamily, large multifamily would be retrofit?

#### **B-3: Energy Performance Standard for Existing Commercial and Multifamily Building**

How many existing buildings, square footage, and residential units would participate, and how what level of energy savings would be achieved (i.e., 10-15%, 15-30%, 30%+)?

#### **B-4: Electrification Incentives for Existing Buildings**

How much money would go to incentives, in which sectors, and what percent of project costs would be covered?

#### **B-5: All-Electric Building Code for New Construction and B-6 Disincentivize and/or**

#### **Eliminate Natural Gas in New Construction and B-7 Net Zero Energy Building Code for New Construction**

What is the new construction trajectory for commercial and residential buildings? Which sectors would be affected by this policy? How many workers are currently employed in natural gas infrastructure, piping in new buildings, and distribution?

### **Transportation**

Investments in transportation infrastructure and expansion of public transit service could both be good sources of new jobs. Fleet electrification could support manufacturing jobs if

efforts are made to require local content or local assembly with local hire standards, such as outlined in the U.S. Employment Plan by Jobs to Move America.

### **T-1: Expand Public Transit**

What is the estimated investment for associated infrastructure (i.e. bus lanes, bus stops, park & ride facilities, etc.)?

What is the percent expansion of transit operations or how many transit workers would be required?

### **T-2: Expand Active Transportation and Micromobility Network**

How many new miles of bikeways?

How much investment is projected for additional active transportation infrastructure?

### **T-3: Private Vehicle Electrification Incentives and Disincentives and T-7 Expand the Electric Vehicle Charging Network**

How many level 2 and level three charging stations will be installed?

How much money is set aside for affected worker transition support?

### **T-4: Constrain Cars in Urban Area, Limit Major New Road Construction**

How much money would go to new infrastructure?

How much less money will be spent on new road construction?

How will revenue from congestion pricing be allocated?

### **T-5: Zero Emissions Public Buses and School Buses and T-6 Electrify County and Public Agencies Fleet and T-11 Off-Road Vehicle and Equipment Electrification and T-13 Advocate for Rail Alternative Fuels**

What percent of the new fleet or new equipment will be assembled locally? What percent of the fleet will have local content. If >0%, how many of each type of vehicle will be locally assembled? What percent of fleet content will be local?

**T-8: Transportation Demand Management and Telework Strategies and T-9 Traffic Management Systems and T-10 Electric Vehicle Car Share Program for Low-Income Communities**

If any infrastructure investments are considered, how much money will be spent on what? If expansion of transit is envisioned, how much?

**Carbon Sequestration**

To the extent that carbon sequestration efforts require investments in infrastructure, these actions could be a good source of new jobs. In addition, efforts to create and develop markets for related products (e.g. salvaged wood products, agricultural products, value-added food products, etc.) can support local job creation. County and institutional procurement and sourcing are good opportunities to support market development.

**S-1: Retain and Increase Forests and S-2: Retain and Increase Tree Canopy and S-3: Restore and Enhance Meadows and Wetlands**

What is the estimated public investment for these activities? How many new urban forestry and/or wetland restoration staff positions does the county anticipate creating?

In terms of percent expansion, what is the anticipated increase in demand for urban forest and wetland restoration workers?

What is the value of salvaged wood products that the County might procure in the future, to support the growth of a local wood products industry? (see last bullet on p.186 of CAP) What

types of salvaged wood products would the County procure (e.g. construction materials, finish materials, furniture, biochar, etc.)?

What is the expected value of saplings and seedlings the county will purchase locally to support these goals?

#### **S-4: Regenerative Agriculture**

What is the value of food procured by the county and other local institutions (e.g. school district, hospitals, and other anchor institutions) and what percent of food procurement would these institutions be willing to purchase locally?

#### **S-5: Restore Soil Fertility, Microbial Activity, and Moisture-Holding Capacity**

How many new positions does the County anticipate adding to manage this program? Or what is the annual investment the County will make in these efforts?

#### **S-6: Whole System Carbon Management and Planning**

What are the public and private sector jobs anticipated that workforce development efforts would train people to fill? (see last bullet on p.196)

### **Climate Adaptation**

To the extent that climate adaptation efforts require investments in infrastructure, these actions could be a good source of new jobs. When incentives and subsidies are used to encourage particular investments and behaviors, there is an opportunity to influence job quality and job access associated with the jobs supported by those public investments.

**A-1: Water Infrastructure Resilience and A-2: Repair and Enhancement of Stormwater Conveyance Systems and A-10: Green Infrastructure and A-15: Water Supply Protection and A-16: Flood Rescue Resources and A-17: On-Site Water Reuse and A-19: Advocacy for Off-River Water Storage**

What is the anticipated public and private investment in related infrastructure projects?

**A-4: Extreme Weather Energy Efficiency Building Code and A-5: Climate-Adapted Housing Incentives/Subsidies and A-6: Green, Cool, PV Roof and Pavement Code and A-20: Study Potential for Buildings in the County to Flood and Possible Remedies**

What is the anticipated annual public incentive or subsidy to encourage landlords and low-income homeowners to retrofit buildings with technologies supportive of these goals?

**A-7: Green Public Spaces and A-8: Harden Emergency Shelters and Install Resilience Hubs**

What is the anticipated public and private investment in infrastructure and construction projects?

**A-9: Mold Protection and Remediation and A-11: Climate-Adapted Development Standards and A-12: Storm water Retention Credit Training and A-13: Ban Stormwater Management Requirement Waivers**

What is the anticipated public and private cost of these actions?

### **Government Actions**

These actions may require an expansion of the public sector workforce. Ensuring equitable access to these positions, as well as to contracting opportunities can support economic inclusion.

### **G-1 to G16: All Actions**

How many new FTE staff positions will be created to meet these goals?

What is the approximate dollar value for professional service contracts to meet these goals?

What percent of contracted work will be set-aside for small, women and minority-owned firms?

## **Public Engagement, Partnerships, and Education Actions**

These actions may require an expansion of the public sector workforce. Ensuring equitable access to these positions, as well as to contracting opportunities can support economic inclusion.

### **P-1 to P-19: All Actions**

How many new FTE staff positions will be created to meet these goals?

What is the approximate dollar value for professional service contracts to meet these goals?

What percent of contracted work will be set-aside for small, women and minority-owned firms?



## Appendix 2: Workforce Ecosystem Inventory

There are four organizations, alongside the high schools, community-based organizations, employers/contractors, and public agencies, that are critical to a functioning high-road climate sector workforce ecosystem in Montgomery County. These organizations play a vital role in training and connecting the workforce to high-road opportunities, they all have significant strengths, but need stronger alignment.

### **Worksource Montgomery**

Worksource Montgomery (WSM) is the lead workforce development entity for Montgomery County and runs the County's Workforce Development Board. Its mission is threefold:

- To meet the talent attraction, development, and retention needs of strategic industries;
- To meet the needs of the underemployed and unemployed;
- To develop career pathways that lead to sustainable wage jobs and support a thriving mission

WSM runs the American Job Centers in Wheaton and Germantown and also offers H.I.R.E (Helping Individuals Reach Employment) pop-up services in a range of county libraries and community centers throughout the year. It has a strong relationship with Montgomery College and partners on several workforce programs.

Historically, WSM was not viewed as a trusted partner in the community, but in January 2021, Anthony Featherstone joined as the new CEO and brought on a new leadership team. This new team's goals are to gain trust in the community as well as work to align Montgomery's workforce system that is resource rich (lots of programs), but systems poor (needs stronger alignment to create a pathway). WSM wants to become the connective tissue to the workforce

system and they are currently embarking on an asset mapping project of all the workforce training and services providers in the County to better understand the services and gaps and how best to coordinate this ecosystem. WSM has also built a new community impact department focused on building trust with the community.

WSM has some strong relationships with a few of the Union Building Trades like the IUPAT, but it could benefit from a stronger relationship with the Baltimore-DC Metro Building and Construction Trades Council given all the large infrastructure projects in Montgomery County that have Project Labor Agreements (PLAs). Federal workforce dollars will also be supporting initiatives that provide equitable access to career pathways in the union construction careers and therefore, building a strong partnership would be timely.

### **Montgomery College**

Montgomery College (MC) is an esteemed community college that serves all of Montgomery County and offers many (credit & noncredit) workforce development programs at all three MC campuses, the Gaithersburg Business Training Center (GBTC), and at various other locations throughout Montgomery County. Many of its campuses are in the Purple Line Corridor. MC is one of the most crucial workforce training providers in the County and a lynch pin in the workforce system.

The Gudelsky Institute for Technical Education, at the Rockville Campus, offers notable programs related to climate careers in the following areas: automotive technology, and building and construction technology. MC also offers many other climate related courses, certificate, and degree programs outlined in the above *Climate Careers Ecosystem Map*. Some of its related classes and programs are Solar PV Design and Installation, Renewable and Sustainable Energy Technologies, Wind Generator Systems, Solar Thermal Design and Installation Classes, and

more. MC is also currently working with WorkSource Montgomery to develop a Green Building Pre-apprenticeship program. While some relationships with union apprenticeship programs exist, the College has strong relationships with many non-union entities, and there is an opportunity to strengthen the relationship with the Baltimore-DC Metro Building and Construction Trades Council.

Out of roughly the 55,000 students at MC, about 20,000 students are enrolled in the workforce development department, which provides non-credit and credit classes in skills training, upskilling courses, test prep and English Language Skills. A large portion of these students are low-income and have barriers to employment and require additional support and resources to be successful. Many of these students are first generation to go to college, are English Language learners, and need support preparing for and navigating college. The College also has workforce development reentry programs in partnership with the prisons.

While the College offers robust workforce programming it does not have the funds or expertise to help these students with the additional support services and resources they need to thrive. Partnering with community- based organizations (CBOs) who understand the unique challenges a student may face, can increase graduation rates and employment success. MC is not required to track graduation, job placement, and earning rates though it conducts student follow-up in a variety of program funding models. CBOs often have funding to provide wrap-around services as well and are held accountable for tracking success outcomes. Supporting and funding partnerships between MC and local CBOs is mutually beneficial because with the additional support students are more likely to complete their training and gain employment or continue their education. Also, providing MC with more consistent funding for internal Career Navigators can

also help students better navigate their career pathway and understand the opportunities in the climate sectors.

For many first generation students college can be overwhelming. CBOs and High Schools are often the first introduction a person gets to thinking about college as an option. It is also where they learn about various career options and pathways. Climate related occupations are often misunderstood and people don't always realize that these jobs pay well and have opportunity for advancement. Fostering partnerships between high schools, CBOS, and Montgomery College about the college's robust workforce programming in climate related sectors and providing career exposure opportunities is an essential step in shoring up the pipeline of workers in these fields

### **Baltimore-DC Metro Building and Construction Trades Council**

The Baltimore-DC Metro Building and Construction Trades Council (BDCBT) serves Montgomery County. The BDCBT supports the 22 construction unions in the greater Baltimore/Washington, DC/Northern Virginia region. Each union affiliated with North America's Building Trades Unions has its own apprenticeship program. In total, there are over 30 specialized apprenticeship programs.

The BDCBT encourages public and private investments in the construction industry that provide continued and increased access to career training and employment through Multi Craft Core (MC3) pre-apprenticeship programs and jointly-managed apprenticeship programs. The BDCBT works with community, owners, developers, contractors, and elected officials to establish a high-road construction model where construction workers are paid family-sustaining wages, have access to benefits, and safety standards are enforced.

Currently the BDCBT runs Multi Craft Core (MC3) pre-apprenticeship programs in Baltimore City with Goodwill, Maryland State, Prince George's County and DC Department of Youth and DC Department of Employment Services, but there are no MC3 Programs in Montgomery County.

MC3 pre-apprenticeships are workforce training programs that prepare participants to apply for, enter, and successfully complete a building trades apprenticeship program. Because of the unique relationship between registered apprenticeship programs, employer partners, and MC3 pre-apprenticeship programs, program participants experience an 80% placement rate into apprenticeship.

#### ***Multi-Craft Core Curriculum (MC3)***

In 2007, the National Standing Committee on Apprenticeship and Training of North America's Building Trades Unions identified common elements from all building trades' apprenticeship programs, without regard to a particular craft.

In other words, a "common core curriculum." This was the basis for the Multi-Craft Core Curriculum (MC3), which is increasingly being used as the foundation for pre-apprenticeship programs across the United States.

The specific topics that are taught in the Multi-Craft Core Curriculum include:

- General orientation to apprenticeship
- Intro to the construction industry
- CPR and first aid
- OSHA 10-hour safety certification
- Blueprint reading
- Applied mathematics for construction
- Identifying and preventing sexual harassment and discrimination
- History of the construction industry
- The heritage of the American worker
- How to interview effectively
- Green construction techniques and standards

The Multi-Craft Core Curriculum provides a gateway to a career in any of the Building Trades; from high school to joint registered apprenticeship to community and four-year college and beyond.

When a person is in an apprenticeship they receive paid education and training. On the job-site, apprentices work with a skilled journey worker, getting practical hands-on experience necessary to learn the craft. Once they reach journey-level status they are encouraged to continually upgrade their skills and further their education.

While construction jobs are easy to find, not all construction jobs are high-road. Becoming a skilled journey worker via a joint industry registered apprenticeship program guarantees a high-road career and can be a pathway to upward mobility.

There is a significant opportunity for the County and other key institutions to build a stronger partnership with the BDCBT given the County's climate action goals, the current PLAs on large infrastructure projects, the current labor shortages in the construction industry, and the projection that many trade workers will be retiring soon.

Montgomery County has been focused on the Biotech industry and other white-collar jobs, and insufficient effort has been made to develop the pipeline of workers for the construction industry. Not everyone wants to attend a 4-year university and union construction provides a well paying career.

Montgomery County has a large youth population, but many of them don't know that construction is a well paying career option. There is not enough education at the high school level about construction careers and apprenticeship opportunities. Many of the high schools in Montgomery County do not have Career Technical Education (CTE) programs. Thomas Edison High School, as well as [Seneca Valley High School](#), have a strong construction CTE program and partners with the Baltimore-DC Metro Building and Construction Trades Council, and more CTE programs like this could benefit the community. The BDCBT is exploring partnering with high schools to run MC3 programs in high schools. On the *Construction Climate Careers*

*Ecosystem Map*, 15 high schools were identified as key partners due to their location in priority neighborhoods.

### **Purple Line Corridor Coalition**

The Purple Line Corridor Coalition's (PLCC) mission is "to ensure the Purple Line light rail creates a place of opportunity for all who live, work and invest in the corridor through a commitment to increasing access via public transportation to housing choices, job and business opportunities, and communities that are vibrant and sustainable." It is a multi-sector public-private-community collaboration led and administered by the University of Maryland's National Center for Smart Growth (NCSG) in partnership with a coalition of community organizations, state and local governments, nonprofits, philanthropies, and businesses. PLCC led the creation of the Community Development Agreement for the Purple Line Corridor which articulates a collective vision for vibrant economic and community development along the 16-mile corridor where job creation and workforce development are significant components.

Two key workforce strategies of PLCC are:

- Build a balanced and productive labor market through the creation of new and targeted workforce training programs;
- Increase access to jobs created by Purple Line for workers living in the corridor and small or disadvantaged business enterprises

The Purple Line will create a great deal of direct jobs in the building and operations of the light rail, but it will also attract a great deal of investments that will create jobs along the stations. It presents a great economic development opportunity for the region and the PLCC works to ensure that it is equitable.

The development of the Purple Line light rail will create many high-road climate careers, but ensuring that both the construction and transit operator jobs are filled by local workers should be a priority. Currently, the Maryland Transit Administration is selecting a new contractor and with this an opportunity to develop a strong Community Workforce Agreement that will lay the groundwork for meeting local and targeted hire goals. Establishing a mechanism for enforcing these local and targeted hire goals is critical, as there was a great deal of tension with the last contractor who brought in 40% of workers from out of state.

The PLCC created a workforce development white paper called, Corridor Workforce Policy-Framing White Paper: Ensuring A More Inclusive and Equitable Workforce Recovery in The Post-Pandemic Era. The white paper outlines many important workforce strategies and best practices for the region, one being supporting pathways to pre-apprenticeship and apprenticeship.



## Appendix 3: Small Business Support Ecosystem

Montgomery County's small business support ecosystem is a collection of a variety of organizations taking on multiple functions and providing resources to businesses in and around Montgomery County. This listing includes innovation centers, business support organizations, and business membership organizations. Moving forward, many of these organizations will be key players in accelerating the recommendations of this report and the goals of Montgomery County.

### **Innovation Centers and Incubators**

Innovation centers in Montgomery County offer space for businesses to operate, resources to keep them engaged, and networking opportunities for them to grow.

### **Business Innovation Network**

The Business Innovation Network is a group of three centers founded in the past by the Montgomery County Department of Economic Development.

### **Rockville Innovation Center**

Located in Rockville, this center has 45 offices, three conference rooms, and a virtual incubator program giving startups the chance to work.

### **Germantown Innovation Center**

This center has 48 offices, 12 wet-labs, two conference rooms, and a multi-purpose room giving life sciences and biotechnology companies space to increase their efforts.

### **Silver Spring Innovation Center**

Renovated in 2020, Silver Spring's incubator offers 37 offices and two conference rooms for companies involved primarily in information technology and cybersecurity. It is also located in a HUBZone.

### **Other Incubators**

- Bethesda Green Incubator
- The Nonprofit Village
- Biohealth Innovation
- OST Global Solutions, Inc.

### **Business Support Organizations**

Below is a compilation of organizations located inside or near Montgomery County that provide various resources, education, technical assistance, and networking opportunities to businesses in the County or statewide.

- Latino Economic Development Center
- Leadership Montgomery
- Impact Silver Spring
- Maryland Economic Development Association
- Maryland Women's Business Center
- Montgomery County Economic Development Corporation
- Montgomery County Media
- Nonprofit Montgomery
- Washington D.C's SCORE Chapter
- Maryland's Corridor Region Small Business Development Center

### **Business Membership Organizations**

The listing below is an inventory of various councils, chambers, and organizations that provide opportunities for Montgomery County businesses to operate and further examine the resources available through these working groups.

## **Chambers of Commerce**

- Maryland Black Chamber of Commerce
- Asian American Chamber of Commerce
- Gaithersburg-Germantown Chamber of Commerce
- Ethiopian American Chamber of Commerce
- Greater Bethesda Chamber of Commerce
- Greater Silver Spring Chamber of Commerce
- Hispanic Chamber of Commerce of Montgomery County
- Mid-Atlantic Hispanic Chamber of Commerce
- Montgomery County Chamber of Commerce
- Olney Chamber of Commerce
- Poolesville Area Chamber of Commerce
- Potomac Chamber of Commerce
- Rockville Chamber of Commerce
- Wheaton-Kensington Chamber of Commerce

## **Councils and Other Related Groups or Organizations**

- Capital Region Minority Supplier Development Council
- Maryland Tech Council
- Commercial Real Estate Women - Maryland Suburban Group
- eWomenNetwork - Montgomery County Chapter
- Monte Jade Science and Technology Association of Greater Washington
- Montgomery County Small Business Association
- Women Business Owners of Montgomery County

- Women in BIO
- Women Presidents Organization