A Dane County Civilian Climate Corps

Project funded by the Dane County Office of Energy and Climate Change

Operation Fresh Start

Supported by **Briarpatch Youth Services** City of Madison Dane Co. Land & Water Resources Dept. Dane County Department of Human Services Dane County Office of Energy and Climate Change **Dane County Parks** Elevate Groundswell Conservancy Madison Children's Museum MG&E Movin' Out, Inc. Nomad Planners, LLC **Project Home** Reach Dane **RISE Wisconsin** Ronald McDonald House Charities of Madison Serve WI Slipstream Sustain Dane United Way of Dane County University of Wisconsin-Madison University of Wisconsin-Madison Extension

June 27, 2023



DANE COUNTY

Joe Parisi County Executive

May 15, 2023

Readers:

Over the last year Operation Fresh Start, with support from the Dane County Office of Energy & Climate Change, has developed a long-term plan to engage underserved youth in the fight for climate action. This plan to establish a Dane County Civilian Climate Corps identifies a set of priority issues for workforce development, targets specific populations for program recruitment, and outlines potential partnerships and funding opportunities for its implementation.

This collaborative process has engaged stakeholders across the county, from industry professionals, nonprofits, and other entities that share the goal of creating a strong and diverse workforce of professionals ready to increase renewable energy, improve energy efficiency, and implement conservation goals.

The Dane County Climate Action Plan (CAP) centers on creating equitable opportunities for engagement on climate action. Accomplishing this requires innovative solutions that ensure all communities benefit from a transition to clean energy solutions. We want all of our communities to realize the benefits from a clean energy transition, in terms of lower energy bills, better indoor and outdoor air quality, and access to family-sustaining clean energy careers. The Dane County Civilian Climate Corps has the potential to help us achieve the vision articulated in the CAP.

We are heartened that this planning process coincided with the federal government passing the Inflation Reduction Act (IRA), the most significant climate action ever in the United States. The Dane County Civilian Climate Corps can help ensure that IRA benefits are distributed equitably across the county both in terms of households served and new career opportunities. A Civilian Climate Corps will be able to assist in filling a workforce gap in industry professionals able to meet the projected additional demand in renewable energy and energy efficiency expected from the IRA's tax credits.

With this plan in place, we now to turn to implementation. We recognize that workforce development requires multi-faceted solutions and we invite all organizations to assist in bringing this plan from paper to action. No one organization can take this challenge on alone. We are fortunate to have Operation Fresh Start within Dane County given their existing track record of recruiting and training underserved youth and thank them for their leadership through this process. We are excited to see what comes next!

Sincerely,

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Joe Parisi Dane County Executive

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History

During his first administration, as The Great Depression ravaged the United States economy, forcing nearly 25% of the working population out of work, President Franklin D. Roosevelt famously passed New Deal legislation to reboot the economy and get people back to work. Part of that legislation included funding for a Civilian Conservation Corps that offered unmarried men between the ages of 17-28 jobs in conservation, natural resources, and land management, putting millions of men to work on land owned by federal, state, and local governments. Between 1933 and 1942, the Civilian Conservation Corps worked on infrastructure projects such as building roads, bridges, parks, campgrounds, dams, and telephone lines, which are still used today.

In the 80 years since the end of the original CCC, the Earth's surface temperature has increased dramatically; the last seven years have been the hottest recorded, dating back to the mid-1800s when scientists began recording temperatures. Society is entering uncharted territory as atmospheric levels of greenhouse gases continue to rise. Carbon dioxide levels today are higher than anything that has occurred for hundreds of thousands of years.

History has shown naturally occurring changes in the Earth's climate throughout the millennia. Yet, the patterns in recent decades demonstrate the human-caused climate change the planet is experiencing currently. This is a human problem with a human solution.

A part of President Joe Biden's American Jobs Plan called for setting aside \$10 billion to launch a new CCC—Civilian *Climate* Corps—to combat this problem in the 21st century. Like its predecessor, the Civilian Climate Corps would employ thousands of young people to work on infrastructure projects through the lens of climate change, aiming to strengthen the country's natural defenses and rebuild public lands in disrepair.

As of November 2022, the US Congress has yet to pass legislation to fund a Civilian Climate Corps. However, Congress has taken historic action on climate change by authorizing more than \$500 billion in funding for climate action through the Bipartisan Infrastructure Law and the Inflation Reduction Act.

Impetus

Dane County has long led in its own facilities' energy efficiency, renewable energy, and environmental action. For more than a decade, Dane County has invested millions of dollars annually in these efforts. Five years ago, Dane County Executive Joe Parisi established the Dane County Office on Energy & Climate Change to develop and implement a countywide <u>Climate Action Plan (CAP)</u>. The CAP, published in 2020, creates a roadmap for deep decarbonization, reducing countywide emissions by half by 2030 and enabling Dane County to achieve countywide carbon neutrality by 2050. Achieving the ambitious metrics outlined will require mobilizing public and private stakeholders across Dane County and will create hundreds of new career opportunities.

Creating a local Civilian Climate Corps aligns with the CAP vision because it provides emerging adults with hands-on opportunities to mitigate climate change in our community while delivering direct benefits to local underserved communities. This plan focuses on training and job opportunities that align with industries that can provide climate solutions across sectors such as home energy efficiency, renewable energy, and natural resources.

Background and Purpose

As part of the <u>Executive Order on Tackling the Climate Crisis at Home and Abroad</u>, issued on January 27, 2021, the federal government instituted a Civilian Climate Corps with climate goals ranging from "conserve and restore public lands and waters, bolster community resilience, increase reforestation, increase carbon sequestration, protect biodiversity, improve access to recreation, and address the changing climate." Nationally and in Dane County, AmeriCorps members are already engaging in climate change mitigation and carbon sequestration activities through flood management, water quality improvement, tree planting, and urban forest management.

In 2022 Dane County Executive Joe Parisi dedicated resources in 2022 towards the development of a Dane County Civilian Climate Corps plan, asking the Madison nonprofit organization Operation Fresh Start to lead the community through this planning process. Operation Fresh Start was chosen as it is the only Dane County nonprofit singularly focused on emerging adults between 16-24 transitioning from education into employment. Operation Fresh Start has significant experience engaging young people in transformative conservation and energy-efficient construction. Work is conducted in crews of 6-10 participants led by an OFS Supervisor who is both a mentor and a trainer, guiding the young people through their site work.

Operation Fresh Start was contracted to lead this effort with the community to build a plan for a Civilian Climate Corps with the following goals:

- 1. Prepare Dane County to be a national leader in Climate Corps efforts and prepare for partnerships with future State and National efforts.
- 2. Develop a Civilian Climate Corps model that aligns with Dane County's <u>CAP</u>.
- 3. Develop engagement strategies for low-income emerging adults to access hands-on experience and career pathways in green industries.
- 4. Focus local environmental and conservation priorities toward environmental equity.

Through this program, the Dane County CCC will serve:

- **Dane County emerging adults**, emphasizing those residing in and connected to underserved communities.
- Green Industry Employers by preparing ready-to-work diverse employees for future careers.
- **Historically underserved communities** that can directly benefit from climate mitigation efforts in their neighborhoods.

In Dane County specifically, Climate Corps activities could positively impact critical components of <u>the</u> <u>Dane County Climate Action Plan</u>, including:

- Building, retrofitting, and new construction to increase energy efficiency in buildings. (pages 83 84)
- Accelerating solar and wind power and working with utilities and other stakeholders to identify and pursue clean energy projects opportunities (pages 108 through 113)
- Planting, restoring, maintaining, and expanding urban forests (pages 123 -124)

National and local climate leaders recognize that changing the trajectory of climate change in our lifetime is a hands-on endeavor and that a Civilian Climate Corps is necessary to achieve climate goals.

The social impact of these efforts will be significant. Emerging adults from marginalized communities will be able to focus their interests and concerns about climate change into viable career paths and make a positive difference in the communities with the greatest need for climate change mitigation efforts.

By providing hands-on experience and training for various jobs in green industries, the participants will be empowered to cultivate their passion while developing their careers. Regional employers will benefit from a diverse group of trained and ready-to-work entry-level employees. And the community will benefit from equitable climate change efforts with tangible results.

Further, this initiative will focus on environmental equity. Compared to more affluent areas of the County, low-income communities often face the brunt of climate change. These include increasing toxic algae blooms in stagnant water, flooding streets and homes, invasive plant species, and unusable and unsafe public spaces in the environment. Housing and public facilities often need to be improved in energy efficiency and green design and building. Through this plan, there will be an emphasis on limiting and mitigating climate change, specifically in the areas with this greatest need.

Planning Process

Operation Fresh Start was tasked with engaging the community in developing a Dane County Civilian Climate Corps (CCC) through a spoke-and-wheel community input process. The planning process included broad community input by engaging community leaders in older youth engagement and climate change reduction and mitigation.

The process included the development of two key structures for outreach, engagement, and plan development:

Core Project Team: (5-7 community members) who are leaders from nonprofits, academia, and businesses actively engaged in climate change, mitigation, and environmental equity. This group shares ownership of a Dane County CCC Plan that outlines the program's vision and goals.

Advisory Team: (20-30 members) are representatives from nonprofits, academia, and businesses engaged in climate change, mitigation, environmental equity, and emerging adult employment and training.

In addition, this plan and program design have been informed by the voices of young adults in the community through surveys, interviews, and focus groups.

See Appendix A for a complete list of team members and organizations that dedicated time and expertise to developing this plan.

The initial goal of the Core and Advisory teams was to create a unifying Mission and Vision for a future Dane County Civilian Climate Corps:

Mission: To Launch underserved youth into climate change adaptation and mitigation careers. **Vision**: The Civilian Climate Corps will create a youth-oriented workforce that will positively and permanently impact climate change in Dane County.

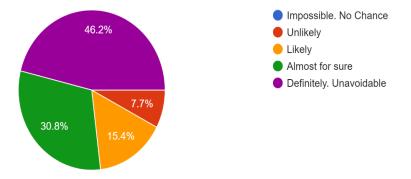
Stakeholder Input

From the beginning of the planning process, the Core and Advisory teams' work was designed to engage stakeholders and subject matter experts in a dialogue and listen to their experiences and knowledge on climate change and their understanding of career potential in green industries. Information was collected through interviews, surveys, and research with youth service providers, employment and workforce experts, and climate change scientists. Participating organizations include MREA, Slipstream, Project Home, Elevate, Dane County Land and Water, and Sustain Dane. Information was gathered through small breakout groups to develop community consensus on the CCC mission/vision and identify potential funding sources. Information was also collected from stakeholders regarding training capacity and labor needs to understand where they may need young people working, what credentials they require, and what training is available.

Surveying Emerging Adults

Emerging adults between 17-24 were given the opportunity to share their voices directly through a survey and indirectly through interviews with youth employment organizations. Surveys were sent to Operation Fresh Start programming participants, Briarpatch Youth Services, and other community organizations. This effort is pointed toward individuals who fit the demographic profile of potential CCC participation to provide opinions to inform plan development. The surveys focused on youth and emerging adults' perspectives on the importance of climate change in their lives and their views on career prospects in green industries.

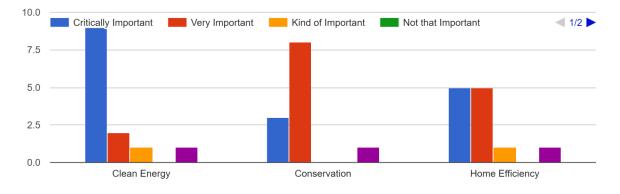
Over 90% of respondents felt that climate change would affect their futures. This correlates with a national <u>Environmental Impact Survey produced by 4H and Harris created in 2022</u> concerning the national youth perspective that found that over 84% of youth feel that climate change will affect their life in the future:



Survey Question: In the future, what are the odds that climate change will impact your daily life?

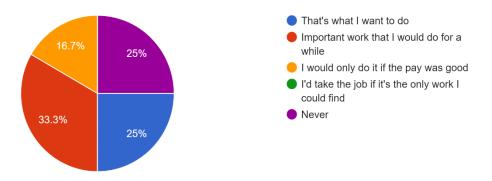
Of those surveyed, **74% percent felt that combatting climate change is not only important to work but also** work they would want to engage in. While this is significant, it is essential to note that only 25% felt that this was something they would engage in for a while. This highlights that young people wish to work in this area but may need help understanding the long-term employment prospects in this area.

The survey then asked respondents which area of CCC work may be most important in combatting climate change through a crew work model. The survey respondents feel that clean energy is the most critically important strategy:



Survey Question: How influential are these strategies for fighting climate change (even if you don't want to do them for work)?

Survey Question: How interested would you be in hands-on work Specifically, focused on fighting climate change?



The voices of young people have been an asset throughout the development of this plan, ensuring any future programming is not only focused on climate change impact but is also relevant to the target population so they may more likely engage in this work.

Employers' Participation

The Dane County Civilian Climate Corps process began with an in-depth analysis of employment opportunities and economic forecasting for green industries, including Conservation, Energy Efficiency, and Clean Energy production. Upon the advice of Dennis Winters, Chief Economist at the Department of Workforce Development, we selected specific O*NET codes (see list below) and pulled job market analysis on each of those O*NET codes from what was then called Burning Glass. O*NET is a national database of occupational information. Burning Glass, now called Lightcast, is a labor market analytics

company that includes data from government sources, online job postings, and online profiles and resumes to provide analyses of specific labor sectors.

•	Tree Trimmers and Pruners 37-3013.00				
•	Foresters 19-1032.00				
•	Forest Fire Inspectors and Prevention Specialists 33-2022.				
•	Environmental Restoration Planners 19-2041.02				
•	Water Resource Specialists 11-9121.02				
•	Weatherization Installers and Technicians 47-4099.03				
•	Fish and Game Wardens 33-3031.00				
•	Wind Turbine Service Technicians 49-9081.00				
•	Solar Photovoltaic Installers 47-2231.00				
	Concornation Franzy Ffinianay Close Franzy				
	Conservation Energy Efficiency Clean Energy				

Business leaders and employers in the three focus areas were engaged to verify these results (see Appendix A).

This analysis was completed to ensure that this plan will focus on high-growth, high-demand industries. This process included engaging with over twenty employers of individuals in green sectors and mitigation.

Through this analysis, the following general employment trends were found in each area of focus:

Clean Energy

The U.S. Bureau of Labor Statistics (BLS) projects job growth in occupations related to helping the environment or conserving natural resources. Two fields with the fastest employment growth from 2020 to 2030 are wind turbine service technicians (a 68-percent increase) and solar photovoltaic installers (a 52-percent increase). The data also show that each occupation had a median annual wage higher than the \$45,760 median for all workers in 2021. The typical education required to enter these occupations varies.

Although there is anticipated growth in these areas, access to full-time career positions in these fields is limited by employer job descriptions focusing on four-year education rather than practical hands-on experience. Further, full-time positions often are given to individuals who have engaged in multiple limited-term or seasonal jobs with companies. Any effort for CCC to engage young people in these careers should include qualification/certification attainment and developing further partnerships to assure year-round training and employment. Economic factors and job growth may provide the necessary pressure for employers to evolve traditional hiring practices.

Energy Efficiency

Improving energy efficiency in residential and commercial properties is one of the most cost-effective and quickest ways to cut carbon emissions and lower utility bills. The industry suffered significant losses during the first year of the COVID-19 pandemic yet began a rebound in 2021 and has since become one of the fastest-growing industries. Green jobs are poised at current growth rates to grow by 10 million in the United States over the coming years. Tens of thousands of workers are employed in some aspect of

Energy Efficiency. That number will only grow as the construction industry begins to take on more and more green initiatives, calling for workers with appropriate skills.

Although this area may present the most significant opportunity for employment growth, it also has the least developed pipeline. Often this work is performed by independent contractors who are an aging group. Thus, this workforce will leave the most significant opportunity for new workers as they transition out of the workforce in the coming years. This creates employment opportunities for CCC participants looking to enter this residential and commercial construction sector.

However, this particular area calls for a more fluid approach to training. The work, particularly in residential settings, does not lend itself to formalized "crew" activities; the effort will be made to provide adequate training and mentoring for CCC participants to put them into positions to succeed. The Energy Efficiency sector of green and climate-focused labor offers the best opportunities for entrepreneurially-minded young people motivated to start their own businesses to work as independent contractors. It is also an example of a CCC program's importance in avoiding rigidity in its structure to allow young people to engage in varying opportunities despite what might initially seem like a programmatic misfit.

Conservation

The conservation focus is on mitigating the impact of climate change. This includes land management in natural areas and efforts to eliminate heat islands, improve water quality in urban areas, and reduce the amount of carbon dioxide in the atmosphere through carbon sequestration in plants and trees. Significantly increased employment opportunities in this sector may emerge in traditional public and private land management organizations such as the Wisconsin Department of Natural Resources, Dane County, and the City of Madison Parks and Engineering.

There are opportunities for sustainable income for young people in these career fields and interest by employers in developing further pipelines towards employment. While this area may not rival the sheer number of job growth, there are developed relationships and program-sustaining training programming. The conservation arena may provide the most accessible opportunity to build on existing programming and could be used as a model for other CCC employment path development.

Youth Development

Climate change, urbanization, and the COVID-19 pandemic have dramatically shifted employment opportunities, particularly for young adults entering the job market. This transformation is anticipated to create new green jobs. However, only some jobs created by this transformation will be career-sustaining, allowing a worker both the opportunity for earnings growth and career advancement. <u>A</u> <u>career-sustaining green job could include any of the following</u>:

- Contributes substantially to protecting or restoring ecosystems and biodiversity
- Reduces resource consumption and inefficiency
- De-carbonizes the economy
- Minimizes or altogether eliminates all forms of waste and pollution
- Encourages and supports people's well-being

Across all sectors in the United States, there are currently <u>10.7 million job openings</u> and <u>9.4 million</u> <u>unemployed or underemployed people</u>, making for an increasingly competitive job market. This calls for increased training options for young people entering the workforce. The emerging adult population exiting high school and not immediately engaged in post-secondary education are at an immediate and dramatic disadvantage. They often lack job search skills and priority qualifications such as advanced credentials or a driver's license to compete with other candidates for career positions in climate fields.

More than 4,000 Dane County residents ages 16-24 are living in poverty and not connected to education or self-sufficiency through employment. The pre-pandemic pathway for emerging adults to enter the workforce has eroded, and there is a need to build a new system that empowers young adults to transition into life-sustaining careers. The growing green industries allow young adults to enter into careers if provided the opportunity to train and receive the necessary skills, certifications, and other credentials to make them viable candidates.

A Dane County Civilian Climate Corps will allow these young adults to learn and create access points that have not previously existed for them while paying them a sustainable wage while they train. Emerging Adults will achieve prerequisites for work in these industries, including OSHA safety certification, driver's license, and industry-specific certification in fields such as solar installation, energy efficiency management, and arborist pre-apprenticeship.

The CCC Plan

Young adults struggle to gain a foothold as the economy slowly returns to pre-2020 levels. Young workers' unemployment rates jumped from 8.4% to 24.4% from spring 2019 to spring 2020. According to the Bureau of Labor Statistics, current rates show the 10.6% unemployment rate for young workers is more than double the overall unemployment rate of 3.6% nationally. High unemployment for this age group results in negative long-term impacts. Even before the pandemic, more than 4,000 Dane County young adults lived in poverty and disconnected from education or self-sufficiency through employment.

For the young person, employment means stability and money to spend on housing, food, clothing, and entertainment. It can make them feel more secure due to medical insurance, paid time off, and other fringe benefits. Stable, career-sustaining employment can allow them to build generational wealth and end the cycle of poverty.

In recognition of the need for more rigorous training in actual job situations to prepare young people for success on work sites, the Dane County CCC is designed for high school graduates seeking to begin careers in Conservation, Energy Efficiency, and Clean Energy. The CCC gives young adults the ability to earn while they learn. With the goal of placement into a career-track job, participants earn necessary certifications and work side-by-side with industry professionals. Hence, they forge a path into career-sustaining employment and break the cycles of poverty.

The Dane County Civilian Climate Corps **is a two-tiered program** with dual purposes: *to complete projects that reduce and reverse the impacts of climate change in Dane County while simultaneously preparing emerging adults for careers in green industries.*

The CCC will engage young adults in three specific areas of climate work that will both provide opportunities for employment training and significantly help Dane County reach climate-related goals:

- 1. Ensuring public health and safety, including safe drinking water, healthy air quality, working conditions, etc.
- 2. Ensuring equitable environmental assets (street trees, public green space, clean streets, etc.) for all communities in need, regardless of location or economic status.
- 3. Engaging under-represented populations in conservation-related employment opportunities
- 4. Inviting community members to become active stakeholders in shared urban environments.

With an environmental equity focus, the CCC will engage young adults from impoverished communities in projects that significantly impact historically overlooked communities. Comparatively, many low-income communities lack the amenities of wealthier neighborhoods. Barriers in these areas manifest in the form of toxic algae blooms, flooding streets and homes, invasive plant species, and unusable and unsafe public spaces. A higher percentage of houses in these areas lack energy-efficient windows and appliances and need weatherization and electrification updating. CCC crews will work with community organizations to update these homes and collaborate with members of these communities to determine highest need conservation projects, including clearing invasive plants, improving water infiltration and circulation to prevent toxic algae, and flood mitigation initiatives to make the spaces safer, healthier, and viable for thousands of residents.

Focus Areas for CCC Work:

- Energy Efficiency: through this work, emerging adults will reduce energy use in residential and commercial buildings, thus reducing carbon emissions. The work focus is on low-income housing and affordable homes.
 - Home Weatherization: protecting a building and its interior from the elements, particularly from sunlight, precipitation, and wind, and modifying a building to reduce energy consumption and optimize energy efficiency. Weatherization reduces energy burdens for families, increases energy equity, creates thousands of jobs, reduces greenhouse gas emissions and stress on the power grid, and, in turn, makes homes more resilient to the effects of climate change.
 - Electrification: adapting homes from gas heating and cooking to electric. <u>Building</u> <u>electrification brings</u> cleaner air and healthier homes, and expands access to affordable clean energy and energy efficiency to reduce monthly energy bills for pollution-burdened communities.
- **Conservation**: This work will focus on improving public lands' resiliency and environmental health through increased carbon sequestration.
 - Land/resource management: Projects may include prairie enhancement/establishment of habitat for carbon sequestration and developing natural environments that promote bike and pedestrian usage to reduce reliance on carbon-producing automobiles.
 - Stormwater management: A significant impact of climate change is greater variability in weather patterns, including more intense storms with greater amounts of precipitation. Emerging adults will develop and maintain stormwater management systems emphasizing community green spaces and natural areas as water retention and flood control systems.
 - Identifying and Ending Heat Islands: areas of excessive heat and flooding are more prominent in neighborhoods with higher BIPOC populations. The CCC will mitigate this

impact through environmental stewardship, including flood mitigation, carbon sequestration, and building tree canopies in these areas.

• **Clean Energy Infrastructure**: Developing wind and solar energy infrastructure will offset the burden on Dane County's electrical grid. With growing incentives for natural resource energy, the solar and wind markets are expanding. Both commercial and residential solar offers opportunities for CCC participants to work on infrastructure projects that will help reduce climate impact on energy use while also learning crucial skills for future employment in the industry.

At full implementation, programming will include young adults and older youth working in each of these areas of focus as CCC work crews and/or pre-apprentices work side by side with industry leaders in these fields.

To address our environmental equity and climate justice values, climate change literacy will be a core component of the CCC curriculum. It is important for CCC members to acquire technical skills and the education that can move them from an underserved community that other groups must engage with to a community ready to collaborate on climate change solutions.

Currently, climate change literacy is not mandatory in K-12 schools in Wisconsin. Individuals who want to learn more about climate change must seek it out on their own or enroll in University programs. By embedding climate literacy into workforce development programs, we can reach a population that is not privileged to other forms of education.

What do we mean by climate literacy?

Climate change literacy includes knowledge of climate impacts and terminology that will serve them in life decisions on where to live and measures they can take to protect their families and assets. In addition, the CCC members need to understand the technologies being developed in their chosen field to help accelerate the adoption of new ideas.

Finally, by being climate literate, CCC members can serve as climate ambassadors in their community, sharing the science, the climate impacts, and solutions. This will help create a more informed and responsible generation of residents who will be better prepared for the challenges posed by climate change.

Referrals and Recruitment

The CCC will be developed through a scalable program based on a flexible program design. Young people will perform climate change mitigation and reduction activities in crews of six to eight or by individuals placed in internships or apprenticeships. Area organizations working in the emerging adult employment fields demonstrate recruitment and referral strategies and as partners can be used both as models and partners.

Recruitment partners include:

- Madison Metropolitan School District
- Operation Fresh Start (Legacy, CareerScape, and CareerPoint programs)
- The University of Wisconsin and Madison Area Technical College
- State of Wisconsin Department of Workforce Development Job Center
- Other non-profits: Big Step, Latino Academy, etc.

Operation Fresh Start, a long-standing Dane County organization focused on training and employment of emerging adults, is well positioned as a potential pipeline to divert young people suited for and interested in CCC work. As a CCC partner, Briarpatch Youth Services will be a valuable asset in engaging with at-risk youth.

CCC will accept referrals from partner organizations, participate in local job fairs aimed at the target population, and work with local employers to reach out to unsuccessful applicants. The CCC and employer pipeline will work both ways, with successful CCC program graduates moving into careers as well as referrals with industries referring underqualified young people to the CCC.

During the recruitment process, a CCC Program Coordinator will support the young person to choose a track of CCC work. This will include conversations about their strengths and interests, as well as career paths and job opportunities in each field.

Program Structure

The programming will primarily be crew-based and separated into two tiers. Some smaller-scale projects (residential and commercial solar installation, electrification infrastructure installation) lend themselves to more of a centralized training and scattered internship model completed ad-hoc through partner organizations focused on infrastructure improvements in the nonprofit or affordable housing sectors.

Conservation, Energy Efficiency, and Clean Energy align directly with a two-tier crew-based model. Through this curriculum, CCC programming will develop skills and competencies and facilitate transition and retention into climate-related and green employment. Enrollment will center on emerging adults living in poverty and most in need in the region.

Tier 1 participants consult with and develop an attendance plan that includes connection with community resources to overcome obstacles such as childcare, transportation, housing, and mental/physical health. Instruction includes First Aid/CPR, chainsaw, and pesticide certifications. Participants spend three weeks in the classroom & lab and six weeks practicing skills on training sites. Also, two weeks are spent exploring specific career opportunities in the community. An anticipated 75% of participants will enroll without a driver's license, which is needed for most employment opportunities in this field. Participants will co-enroll in a driver's license attainment program, which includes classroom and behind-the-wheel lessons.

Tier 2 participants will complete an industry-recognized pre-apprenticeship curriculum while honing and attaining certifications. The table below includes certifications identified by discussions with employers in the field.

	Energy Efficiency	Conservation	Clean Energy
Certifications Earned	EPA lead renovator	Chainsaw	NAPSEP credentials
	Asbestos operation and	Pesticide Applicator 6.0	
	management	Wildland fire (S-130/S-	
		190)	
		FEMA Safety Training	
		ICS-100	
Training Partners	Slipstream, Elevate	Operation Fresh Start	MREA, OFS

Smaller crews traditionally complete Energy Efficiency work; the above-outlined program structure may include focused training time before engaging in job shadowing or internships. The training in this area will allow for both group and individual mentorships allowing participants to learn hands-on skills in the field at their own pace. This is an emerging field, and credentials will be added to the curriculum as needed.

Clean Energy may follow a hybrid model combining elements of the conservation and Energy Efficiency formats. Larger green building infrastructure projects like solar fields and wind farms lend themselves to crew work but also have a built-in apprenticeship training apparatus for workers in this industry.

Energy Efficiency and Clean Energy allow for tier one engagement as a crew leading to an individualized internship/apprenticeship as the participant enters tier two and demonstrates employment-ready skills.

Program Duration and Participant Benefits

When fully funded, the Dane County Civilian Climate Corps could serve 30 emerging adults per year with ten youth in each focus area. The programming week for a participant will be approximately 32 hours/week for 3 to 6 months as a young person completes the competency-based curriculum. Each young person will earn a \$15/hour wage while engaging in programming to afford basic living expenses, including housing, food, and clothes, while focusing on their future career. Through a competency-based curriculum, CCC programming will develop skills and aid the transition and retention into employment or apprenticeship.

Based on entry skills, participants will complete the program in 3-6 months. As participants demonstrate skills and proficiency for employment transition, they can job shadow and work directly with an employer. Placement is a coordinated effort between employers to provide a transition with no gap in work or income. To assure retention, CCC staff will mentor participants for at least one year following placement; this is essential to good programming with young adults and directly aligns with a key strategy of the Madison Region's comprehensive economic development strategy for the years 2019-2024 to leverage best practices for growing the region's talent base.

Programmatic Goals

A Dane County Civilian Climate Corps, if fully funded and completing projects in each focus area, can engage 30 emerging adults a year. Although crews may function differently depending on whether they engage in Clean Energy, Energy Efficiency, or Conservation programming, crew members will provide Dane County with over 48,000 hours of dedicated climate work performed by emerging adults in our community.

The outcomes of this work will include the following:

- Completion of significant projects to develop green infrastructure, move communities towards electrification and reduction in carbon-producing energy usage, and mitigate climate change impact through a reduction in heat islands, improving flood control and water quality.
- Preparing and placing 30 emerging adults into full-time green sector employment opportunities.

Transitioning into Careers

The Department of Energy has supported the creation of career maps in Solar Energy, Green Building, and Climate Control Technology (also known as HVAC). These resources allow participants and prospective participants to see potential career pathways.

Click on the interactive <u>Solar Career Map</u> to see career opportunities and pathways.

Click on the interactive Green Buildings Career Map for career opportunities and pathways.

Click on the Careers in Climate Control Technology (HVAC/R) map for career opportunities and pathways.

Having dual purposes of limiting climate change factors and mitigating its effects, and providing a launching pad for young people into green careers provides a unique mix of hands-on training and career exploration preparation. The program will include job shadowing with employers or unions in the young person's chosen career path, application/resume development, career mapping, job placement, and continual support for retention in career employment.

Addressing climate change locally will take concerted effort and collaboration across industries and sectors. This proposed Dane County Civilian Climate Corps is one path of many needed to help the county achieve its stated goals. An emphasis on projects leading to greater environmental equity will provide a focus for the work to be completed by the CCC. Differing from mainstream environmentalism, environmental equity, and justice pushes beyond preserving distant wilderness areas to focus on communities, people, and urban ecosystems.

Budget and Scalability

The vision for a Dane County CCC includes three distinct climate change reduction and mitigation tracks, each with a separate path to employment (Energy Efficiency, Conservation, and Clean Energy Infrastructure). The annual budget below is based on running one crew of 6-8 participants in each of the three tracks. However, this model leaves flexibility to start small and grow as needed.

Operational Budget			
	Single Crew	Three Crew	
Expenses	Costs	Costs	
		4	
Staffing	\$164,000	\$328,000	
 Program Manager (1) 			
 Crew Supervisor (1 per Crew) 			
Participant Stipends	\$155,000	\$465,000	
Administration	\$30,000	\$60,000	
Operating Supplies and Tools	\$15,000	\$41,000	
Occupancy / Space	\$12,000	\$18,000	
Transportation (vehicle maintenance			
and fuel)	\$9,000	\$27,000	
Vehicle (s)	\$35,000	\$105,000	
Total Expenses	\$420,000	\$1,044,000	

Potential CCC Funding

When this process began, there was a great deal of optimism that a national Civilian Climate Corps movement was to be established through federal legislation. On the national level, the news is both good and bad. The good news is President Biden created a federal CCC through an Executive Order, with some initial funding for development at the federal level. However, there is no development of a central CCC entity within the federal government. The core funding in the Build Back Better plan has not been approved and is no longer in the legislative pipeline.

Instead, there is a wide arc of direct, federal, and non-federal funding sources to consider:

Fee-for-Service Funding: Much as OFS has successfully built a Conservation Academy/ Grad Crew model through partnerships with land steward organizations, a significant share of CCC funding can be attained through the development of cost sharing/fee-for-service model. Model development takes time and engagement to ensure successful long-term partnerships.

Foundation and Charitable Giving: Through the planning phase, private and corporate foundation partnerships have been identified, including the Couillard Foundation, Alliant Energy Foundation, Wisconsin Office of Energy Innovation, and others. Attaining funding through these sources requires relationship development, proposal development, and shepherding through each individual Foundation process.

The City of Madison and Dane County Partnerships: Although this may include additional funding, some of this could be accomplished through re-orienting current partnerships towards a climate resiliency focus. This could include coordination in focusing currently funded conservation efforts towards climate change mitigation. This effort will involve strategic conversations with existing partners.

Federal Funding: Although no longer expected to be singularly funded at the level previously expected through the bygone Build Back Better legislation, there has been an emphasis in federal budgets—through the Inflation Reduction Act and Infrastructure Act—resulting in

measures that will fund elements outlined in this plan. In order to accomplish this work, there will be a need for workforce training. In addition, the budgets of AmeriCorps, the Department of Interior, and the Department of Energy all include measures supporting CCC efforts. The majority of funding is likely to be project-based rather than funding the workforce development aspects of this plan. These funding sources may be available to State, County, and local government and/or directly to nonprofit organizations.

The implementation of this plan will include assessing these funding sources by continuing to develop partnerships at the various levels of government. This will take time and relationship development, as well as proposal writing, shepherding, and coordination.

Next Steps

This plan presents opportunities for developing a Civilian Climate Corps that is a model for other communities. The next steps will entail building on existing successful programming in the conservation focus area while developing partnerships and pathways to engage young people in the green infrastructure and energy efficiency focus areas.

Some of this work is already taking place. Operation Fresh Start is currently implementing an Equitable Recovery Grant with the City of Madison, which includes a focus on environmental stabilization and flood mitigation in the Warner Park and Allied Drive Neighborhoods.

In 2023, the Operation Fresh Start Conservation Academy will increase its climate focus through a deepening partnership with Dane County Land and Water Resources. This programming, which inspired The Dane County Civilian Climate Corps, will spend 10-15 weeks specifically focused on flood mitigation, decreasing run-off pollution, and other climate-related initiatives throughout Dane County.

Additional next steps include:

- *Partnership development:* The CCC will develop deep partnerships with various organizations involved in training and fee-for-service work completed by CCC crews. The plan provides the general format. Continuing work will take us to the point of agreements and contracts.
- *Funding Development:* Without a singular federal entity investing in CCC work, Operation Fresh Start will work with partner organizations to develop grant applications that align with plan priorities. Funding will support time to research, coordinate, and write applications.
- *Resource Planning and Implementation:* Determining staffing levels, tools, vehicles, and staff training requirements for implementing priority elements of the CCC Plan.
- *Participant outreach and recruitment:* Engage partners and directly reach out to emerging adults to explain CCC and recruit potential participants.

The component necessary to ensure success is a cohesive infrastructure around this program and investment in the training and management of Dane County's emerging adults. With federal funding likely to focus on climate mitigation projects, there will need to be a continuing local focus on the youth development, planning, and management of a program if it is to meet both the environmental and workforce development goals.

Conclusion

This report is the culmination of 12 months of work of a dozen Dane County organizations collaborating on the same goals: To mitigate the impact of climate change on our communities while creating pathways to life-sustaining employment for members of our communities in greatest need. The recommendations contained in this document do not represent every possible solution to these problems, and the hope is that any plan to address the issues of climate change and emerging adult employment act in harmony with this plan and any/all others because it will take a broad-based approach to reverse the negative trends we see in our communities and throughout the country.

Any CCC project completed not only benefits families and residents in historically neglected areas, each one is a training ground for emerging adults to gain experience that will catapult them into sustainable careers, ending poverty cycles and allowing opportunities to build generational wealth. Launching a CCC will immediately employ 30 of these young adults, but that is just the start. This program is designed to scale up. As more community needs are identified, more young people can join crews and gain valuable experience. Each year thousands of emerging area adults are leaving high schools without a path forward into education or a career. A Dane County CCC can be a pathway available to new graduates in need of a career and motivated to work in conservation and green industries. This program will contribute to a stronger and more diverse workforce while preparing the community for future climate catastrophes.

Appendix A: List of Committee Members

Core Team

Name	Title and Organization
Maria Hart	Principal, Nomad Planners, LLC Co-Chair Infrastructure Working Group, WICCI
Tony Abate	Conservation Director, Groundswell Conservancy
Dean C.	Program Coordinator, Briarpatch Youth Services
Bossenbroek	
Laura Hicklin	Director, Dane Co. Land & Water Resources Dept.
Mel Askay	Climate Specialist, Dane County Office of Energy and Climate Change
Greg Markle	Executive Director, Operation Fresh Start
Karen Pritchard	Data Coordinator, Operation Fresh Start

Advisory Team

Advisory realit	
Name	Title and Organization
Kelly Ruppel	Ronald McDonald House Charities of Madison, Executive Director
Kathryne	
Auerback	Executive Director, Movin' Out, Inc.
Heather Crowley	Dane County Human Services
Pedro Salazar	Youth Justice Coordinator. Dane County Department of Human Services
Deb Gilpin	Madison Children's Museum, Aldo Leopold Nature Center & Nature Preschool
Robert B. Beattie	Teaching Faculty, Nelson Institute for Environmental Studies, UW–Madison
Michelle Regier	Senior Accountant, RISE Wisconsin
Gabrielle Dahl	UW-Milwaukee Alumna
John Charles	Board Member - Friends of Starkweather Creek, Volunteer Organizer - Troy
Newman	Community Gardens
Breanna Grow	Community Impact Program Manager, United Way of Dane County
	Sustainable Design Specialist, Energy Strategist, UW-Madison Division of
Sherrie Gruder	Extension
Kyle Minks	Watershed Manager - Dane County Land and Water
Joleen Stinson	Interim Director, Dane County Parks
Scott Williams	Research and Education Coordinator, Wisconsin Energy Institute, UW-Madison
Madeline Dumas	City of Madison Engineering Division
Carrie Breunig	Groundswell Conservancy, Board Chair, and Goodman Community Center LOFT Teen Program Manager
Dick Rideout	Retired, WI DNR, former State Urban Forestry Coordinator, and UF Policy & Partnership Specialist
Jen Everson	Reach Dane
Jim LaGro	Professor, Department of Planning and Landscape Architecture Editor-in-Chief, Landscape Journal: Design, Planning, and Management of the Land
Brian McMahon	Deputy Director, Operation Fresh Start
Cory Rich	Construction and Conservation Manager, Operation Fresh Start
Shane Otto	Land Restoration Specialist, Dane County Parks
Robin Lee	Fiscal Officer, Serve WI

Brenda Baker	Vice President of Exhibits, Facilities & Strategic Initiatives, Madison Children's Museum
Jessica Price	Sustainability and Resilience Manager, City of Madison
Christie Baumel	Deputy Mayor, City of Madison
Robin Lisowski	Director of Service Solutions
Abigail Corso	Chief Strategy Officer, Elevate
Nathan Schultz	Energy Auditor, Project Home
Laura Paprocki	Residential and Community Services Manager, Madison Gas and Electric
Valora Gutierrez	Sustain Dane