

## Exhibit C1 - Scope of Work

### Section 3: Scope of Work

The scope of work can be defined into 5 tasks described below:

#### 1) Youth Air Protectors

Over the course of the proposal, we will work with 30 youth total across three cohorts to guide the project forward. Youth perspectives will inform the communication strategy and outreach within the community, with the involved youth becoming Air Protectors for Fairfield. We will guide them through the implementation and design process around green infrastructure interventions. Youth will complete the program with a new sense of instilled leadership, connection to their community and environment, and as local experts on air quality within their neighborhoods.

Youth Air Protectors will participate in a [One Planet Living](#)-based curriculum experience exploring the current air quality situation, analyze community data, environmental data and local solutions. They will work on demonstration projects that improve the environment in communities hardest hit by environmental challenges, and create personal action plans. Additionally UC Davis Air Quality Research Center and the local government of Fairfield will provide technical expertise and guidance, helping to translate larger concepts around air quality to understandable terms for the youth and their communities.

The overarching goal of the experience is to build leadership and an expanded worldview among youth while building capacity within their communities. Through their work with local government leaders, review of important environmental data, hands-on work on mitigation projects and presentations to community members and community organizations as required by the Air Protector program, the youth involved will address the environmental justice issues that most deeply affect their communities while also educating their communities about those issues.

In particular, they will study some of the exposure indicators and population characteristics from [CalEnviroScreen 4.0](#) as well as data from the monitors installed across the impact area as part of this proposal. Protectors will review the data in conversation with stakeholders in Fairfield and discuss what actions the residents, stakeholders and community members can take to address issues around air quality. Concurrently with community conversations, Youth Air Protectors will co-facilitate and co-lead green infrastructure pilot projects across the community, implementing physical change with a coalition of residents and peers.

Through this experience the Youth Air Protectors will be equipped with the knowledge and skills around community change, instilled with an understanding of air quality impacts to their community and connected to a network of community champions to support them on projects into the future.

### **Outcomes:**

Attendance and participation will be critical to the success of this particular component of the project. We plan to engage youth with community members through 6 public workshops around pilot projects, and 2 community listening sessions. We additionally will track the impact of the youth air quality campaign that is developed, measuring the engagement and reach when possible through digital tracking (i.e. views and clicks) and in person at tabling events and community conversations.

Harder to track will be the impact of the program on the youth. Longer-range impact may result in different professional pathways, civic engagement, and activism into the future which is difficult for us to follow beyond exit surveys, and professional development plans. With a knowledge transfer between youth cohorts, we plan to demonstrate the capacity to not only learn while in the program, but teach their peers and members of the community of their experience.

### **Metrics:**

- Number of youth in the program
- Number of youth led outreach events and presentations
- Promotional materials and campaigns created by youth
- Outreach effectiveness through documented media circulation

### **Benefits:**

- Community building among all the youth participating in the program. This project creates a space where youth can learn, share ideas, have common interests, goals and experiences; fostering a community of change-makers.
- Greater community cohesion between youth and partners engaged through the life of the project. The youth will become well-acquainted with community members, organizations and other stakeholders.
- Increased youth engagement in civic work. We believe that with more youth participation in community work, the community will better reflect the needs of the youth.

- Professional development and leadership experience for the youth participants. As they work through the curriculum and community projects they will gain valuable experience that will be applicable in future professional pathways and educational opportunities.

**Challenges:**

- Youth involvement, as time is filled with many activities and competing priorities in participants' daily lives. Keeping youth participants focused on larger goals and consistently engaged will be critical to achieving outcomes..

## **2) Community Education & Engagement Campaign**

This proposal includes a Fairfield education campaign tailored to the needs of the community around air quality. In any risk communication strategy, be it air quality or climate change, context is everything. Utilizing the Youth Air Protectors' perspective and lived experiences within the community, Sustainable Solano, Solano Public Health and UC Davis Air Quality Research Center will work together to create an air quality education campaign that is community centered and accessible across Fairfield.

Through intensive community engagement across 2 listening sessions, a project launch community meeting and shared resident perspectives, the Youth Air Protectors will craft an air quality campaign based on the needs of the impact area. The campaign will focus on individual and community action around air quality. From publications, posters and guides to larger actions on local billboards and bus stops, we plan on elevating a community conversation around local monitoring efforts, and actions residents can take to improve air quality and mitigate hazards in the impact area.

Included in the proposed budget, community engagement collateral and workshops will be centered around the needs and communication channels of the community. Additionally, we plan to equip community members participating in community events with affordable DIY air filters for home use and K95 masks to address impacts from poor air quality and distant smoke.

The green infrastructure pilot projects discussed in Task 4 will be another tool to engage the community. Through interactive community workshops for each pilot project we plan on continually gathering insight on how to improve communication and reach new populations in the focus area. The efforts of this proposal are not just to reach as many

people as possible within the impact area, but to connect efforts and conversations in as many possible ways to build a community advocating for improved air quality.

### **Outcomes:**

Campaign collateral in the form of flyers, brochures, posters, videos and websites, as well as larger market platforms like billboards, bus wraps and bus stop signage will help curate a community conversation and education around air quality. Through these efforts we will explore effective channels through tracking engagement data, and message resonance with listening groups, social shares across digital platforms and press coverage.

Additionally, participant engagement metrics from attendance at community events will help measure success, and the increased community capacity through education and understanding on how air quality improvement can be achieved from the individual to the community level.

### **Metrics:**

- Number of community events
- Number of Participants
- Outreach effectiveness data

### **Benefits:**

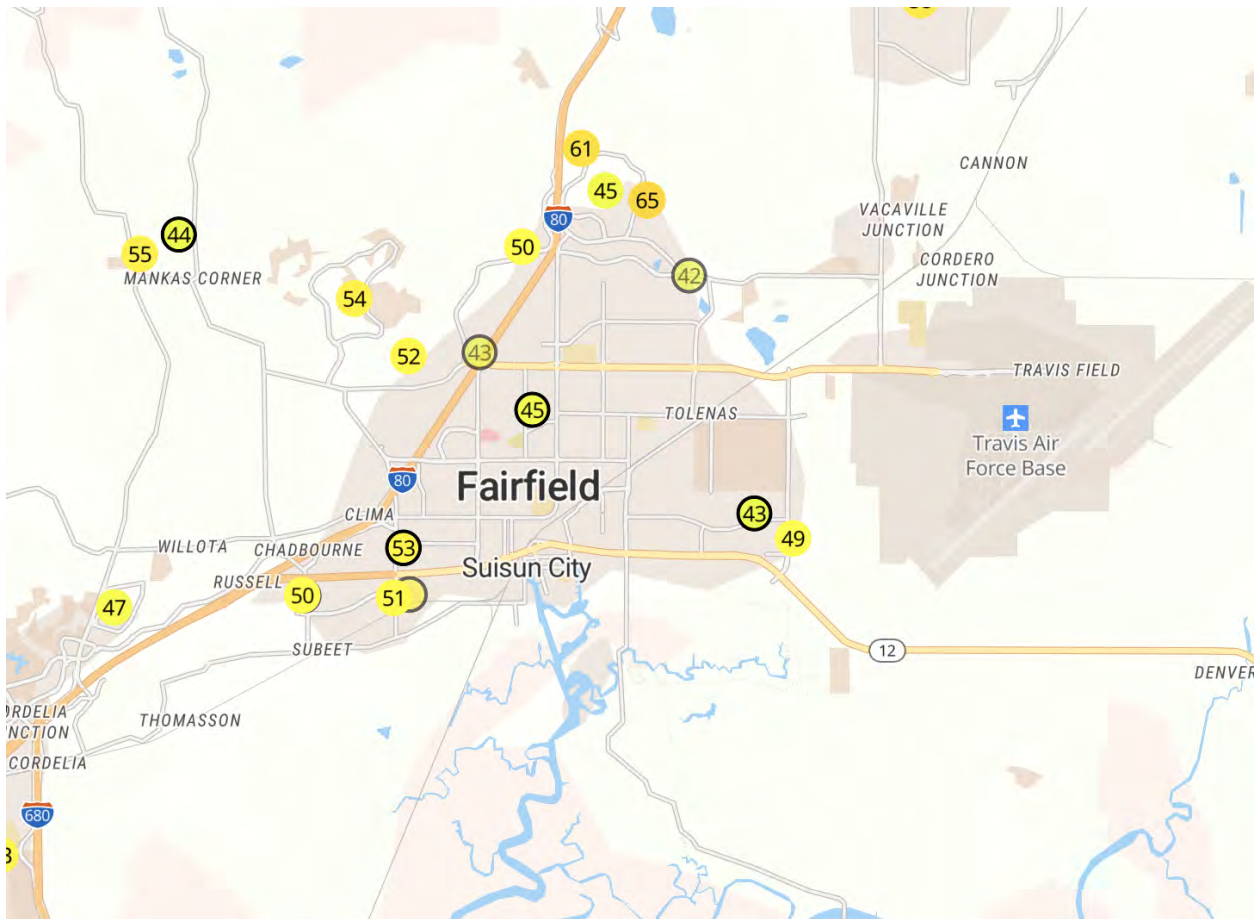
- This proposal increases the capacity of air quality knowledge in the impact area of Fairfield
- This proposal provides an adaptable place-based model that can inform communities across Solano County.

### **Challenges:**

- Building trust within socially vulnerable communities. As an outside organization in some of the community spaces, new relationships can be difficult to build with other community groups.
- Creating a “sticky” project that resonates with the community beyond the course of the work.
- A lot of the work through mapping and data research can relay a disconnect with lived reality on the ground. Census tracts and block data offer an incomplete vantage point of a community, and only when enmeshed in work on the ground does the full picture of how communities work come into view.

### 3) Monitoring Network Across Fairfield

This proposal includes creating a community air monitoring program across the impact area. Currently Fairfield lacks a communitywide air monitoring system that comprehensively covers the impact area and wider city. Swaths of the impact area are unmeasured and the residents lack information to respond and advocate for better conditions locally. Utilizing public sites across Fairfield like schools, fire departments and libraries, we propose to fill in the map where there are monitoring gaps.



Map of Purple Air Monitor Locations as of September 2021

#### Outcomes:

Utilizing Purple Air monitors due to the affordability and widely used interface, we will install 10 exterior monitors across the impact zone. From these installations we will gain further clarity of how air quality differs and changes across the area and those

populations impacted. Though impact and use will be difficult to measure, the overall more granular picture presented over the entirety of Fairfield will add to the community narrative of how air quality impacts daily life and how we can better prepare for air quality degradation.

**Metrics:**

- Number of Purple Air Monitors Installed

**Benefits:**

- Greater increased community capacity and awareness of air quality through better monitoring.
- Creation of longitudinal data the community can use to observe patterns and how events like wildfire, emissions, etc., impact air quality around the area.

**Challenges:**

- Challenges with installs at public host sites across impact area. Due to the difference of buildings and sites, installations will look different across the area.

#### **4) Green Infrastructure Pilots**

Green infrastructure provides an immediate tangible benefit to the community in the form of beautification and shade as well as long-term improvements in air quality and emissions reductions. In educating youth around air quality, implementing green infrastructure projects that could benefit them and their communities and families will immediately demonstrate the capacity for change in this type of work. Pilot projects will be defined by youth and partners within the impact area. Increasing walkability, reducing emissions, and creating environments for better air quality across the impact area will add relevance for youth that will inform their communication with the community and monitoring around air quality.

Utilizing partner data from the City of Fairfield and Solano Public Health with community input, Sustainable Solano will develop 3 pilot sites around the community impact area. These pilot sites will address long-term strategies such as carbon sequestration and environmental improvements that can address air quality. Our previous work has determined that much of the impact area [lacks adequate tree canopy](#), and from [our own assessments](#) we found conditions further contribute to complications around heat and air quality. With a [walkability score of 32](#) out of 100,

Fairfield has much room to improve active transportation like walking and biking across the city to help reduce emissions. The pilot projects will highlight and improve pedestrian infrastructure on highly traveled routes through the community by updating crosswalks, planting trees and supportive plants to encourage residents to walk or bike. The projects will decrease emissions through decreased car travel, revamp current urban infrastructure and add a sense of ownership and pride to the community.

As we've learned from our past green infrastructure projects, these hands-on activities with a tangible outcome show that actions speak louder than words. In a community that lacks investment, this presents an opportunity for capacity-building with the Youth Air Protectors, residents and stakeholders across Fairfield.

### **Outcomes:**

Three sites in the impact area will be transformed, guided by Youth Air Protectors and advised by green infrastructure experts. Community engagement and vision will be led by the youth and facilitated with impacted neighbors and stakeholders. Centering the youth in the process will demonstrate the validity of their perspectives as well as further build community cohesion.

Over the course of the proposal, we anticipate 90 trees and few intersection upgrades to help transform corridors within the impact area. Working with a site designer, arborist and transportation specialist, these transformed sites will begin to physically connect the community across the impact area. Our previous Resilient Neighborhood work in Vallejo showed that transforming the community on a street block level instilled an environmentally sustainable ethos across the community. We hope to replicate such connections here..

With this preliminary understanding of the work we anticipate that roughly 4,500 pounds of carbon will be sequestered each year. In addition, these projects will reduce energy loads of surrounding buildings, improve localized air quality and moderate temperatures in the community. These will be measured across the entirety of the proposal. Upon completion they will also support active transportation, by promoting walking and cycling over emission heavy transportation. From previous work we have also seen how a site transformation like these pilot projects will ripple through a community. Our projects spark change in neighboring blocks as residents and stakeholders initiate their own projects in their own yards and sites.

### **Metrics:**

- Trees planted and other complementary plants

- Carbon sequestration based on plants and trees selected
- Before and After Use Counts of pedestrian corridors to understand traffic changes

**Benefits:**

- Increased capacity through a community-driven approach. As residents and community stakeholders engage in transformation projects, they will realize the process of implementing change within their own communities.
- The pilot projects will create a sense of community cohesion, community ownership and long-term air quality improvements from trees and better pedestrian thoroughfares. Residents and participants will have civic pride and a model to continue building towards.

**Challenges:**

- Though we plan to work efficiently and intentionally at these projects, sites often have hidden challenges not understood till implementation.
- Stewardship of the projects, post proposal. The pilots will be as low maintenance and sustainable as possible within our scope, but as with any project working with a city and partners, it will require developing a long-term maintenance plan when needed for each site.

## **5) Youth-Driven Community Air Plan**

Youth will experience a journey of processes and education relating to air quality in their community. They will be transformed into local experts and in turn educate their families and peers about how air quality impacts their communities. Throughout the grant period multiple conversations and coalitions will form as part of this work. Development of a Youth-Driven Community Air Plan will help that work continue to grow and manifest change. Capturing what was learned from all parties involved, the plan will set a direction forward for how the impact zone and Fairfield can continue to make an impact around air quality into the future.

The Youth-Driven Community Air Plan will document the process, but also collect insights and opportunities for the community impact area. A living document, it will show the progress the community has made, as well as the future steps needed to continue in this work. This public-facing document will be the framework for the coalition of partners and advocates to continue funding, implementing, and developing projects around air quality in the impact areas of Fairfield.



Working with the City of Fairfield, Solano Public Health, UC Davis Air Quality Research Center and the Youth Air Protectors, we will craft the plan in response to current and expected needs of the impact area as it relates to air quality and future development goals. In addition, the plan will encompass hazard mitigation efforts that can be done by the community or on an individual resident basis. The plan will summarize our findings with the outreach campaign and the outcomes of the pilot projects.

**Outcomes:**

The plan development process will in itself be an engagement metric as a number of community members and stakeholders weigh in on priorities and direction for the impact area. In addition to summarizing all findings over the course of the proposal, these tools will live in one cohesive place to continue to be utilized by the coalition of partners into the future. This work will be the basis for future projects and lay the groundwork for continued improvement in the impact area of Fairfield.

**Metrics:**

- Written document plan

**Benefits:**

- Increased community capacity with organizations, partners and residents in the impact areas. A clear roadmap towards continual impact.
- Summary of processes, insights, and challenges while implementing this work in the impact area.
- A strengthened coalition of air quality advocates who have helped build the plan and look forward to implementing parts of it in their work into the future.

**Challenges:**

- Unclear implementation beyond proposal cycle. The knowledge gained from this proposal and partner work will be difficult to track and continue to hold accountable in implementation.