Exhibit C1 - Scope of Work

Section 3: Scope of Work

Task 1: Work Plan Development

Introduction

Good planning is key to the implementation of a successful program, and a work plan is an essential component of accomplishing this. Additionally, a work plan makes clear to all participants and interested parties the details and expectations of the Youth AIr Quality Advocates project. The YAQA team has many combined years of experience in planning complex projects including school monitoring, educational programs, and quality assurance project plans, which will enable the team to complete this work plan efficiently and make it comprehensive and understandable.

Community Support and Participation: YAQA will work with high schools throughout East San Jose, and letters of support from the school district are attached. We will also work closely with the City of San Jose, and have received support from San Jose Mayor, Sam Licardo (see attached letter). Apart from the school community, fundamental to YAQA is the idea that students be the main drivers of community engagement, choosing which direction or outreach and involvement they feel are the most important. Any questions from community members about the monitoring plan and curriculum can be directed to the project team.

Community Specific Purpose: East San Jose is home to a number of disadvantaged and low-income communities, and, like much of California and the West, the air quality is impacted annually by wildfires. The education and air monitoring in YAQA will help enable students and residents to identify and take action on the potential health effects of breathing in polluted air.

Scope of Actions: The air monitoring of this project intends to support students and communities in discovering, measuring, and addressing sources of local air pollution. See the monitoring objectives below for more.

TDE will work to implement and adjust their AirActions curriculum within the schools. They will also be an important part of designing the YAQA teachers workshops. In addition, TDE will provide monitoring support, both planning and technical.

Finally, YAQA will develop the tools required to monitor, provide quality assurance, analyze data and develop a report that can be used by teachers to help put their students' measurements into actionable context.

Task 2: Monitoring

The monitoring objectives for this project are to:

- use air sensors that have been validated and inter-calibrated against reference instruments for educational purposes and for collecting data for action.
- use air sensors in monitoring local air quality to identify local sources.
- use air sensors to monitor local air quality and adjust behavior to avoid personal exposure to pollution.

We will be monitoring for PM2.5, CO, CO2, and possibly NO2 using air sensors in both fixed and mobile applications, and monitoring may occur over several days to as long as a semester. These devices will be evaluated against reference instruments operated by the BAAQMD.

Students will intercalibrate their sensors against the stationary sensors at each school, as well as, against other sensors in the class. These measurements are intended to track trends and differences in local measurements for intercomparison purposes and are not intended to be Federal Reference Measurements.

Because each monitoring case study will be student designed and conducted, the exact data requirements and data quality objectives may vary. In addition to the air sensors, we anticipate making the following types of data available to teachers and students:

- Local emissions sources (BAAQMD)
- Local businesses that might be emitting pollution (City of San Jose)
- Local weather conditions including wind speed/direction (National Weather Service and the BAAQMD site)
- Other nearby air quality data (BAAQMD and CARB)

Task 3: Community Engagement

Engaging the local community around air quality is an integral part of YAQA. Teachers and students will create a “pathway of engagement” for their communities. They move in spaces outside of their classrooms, taking the knowledge and skills that they’ve developed and learned with them on to their parents and guardians, mentors and friends, opening up the potential for a ripple effect of change. This “pathway of engagement” effect is an important consideration in YAQA.

The key components of YAQA focus on understanding air quality, measuring it, and most importantly - taking action to improve local air quality. The program is designed to encourage students to identify a problem that they’re concerned about and use data and knowledge about air quality to advocate for change. Action and engagement with

the community is self-generated by students and supported by teachers through the curriculum. As shown in Figure 4, there are multiple opportunities for students to engage people and organizations that contribute to air pollution. Students can reach out to:

- other students, banding together, teaching and supporting one another in the process of identifying sources of air pollution and seeking local changes.
- parents about air pollution, its sources, and actions that parents can take to reduce air pollution (e.g., idling).
- neighborhood and community organizations on actions they can take to improve air quality and get information out.
- businesses with actions they may take to reduce air pollution, from emission reduction practices, such as carpooling or telecommuting to reducing their use of energy or fossil fuel consumption.
- government leaders to demonstrate to them how locally collected data can help identify problems and to work with them to advocate for policy development/changes. These government leaders would include: mayors, city council members, air quality regulators, and more.
- school administrators to help implement school-wide policies regarding reducing student and teacher exposure to air pollution and implementing emissions reductions campaigns on campus.

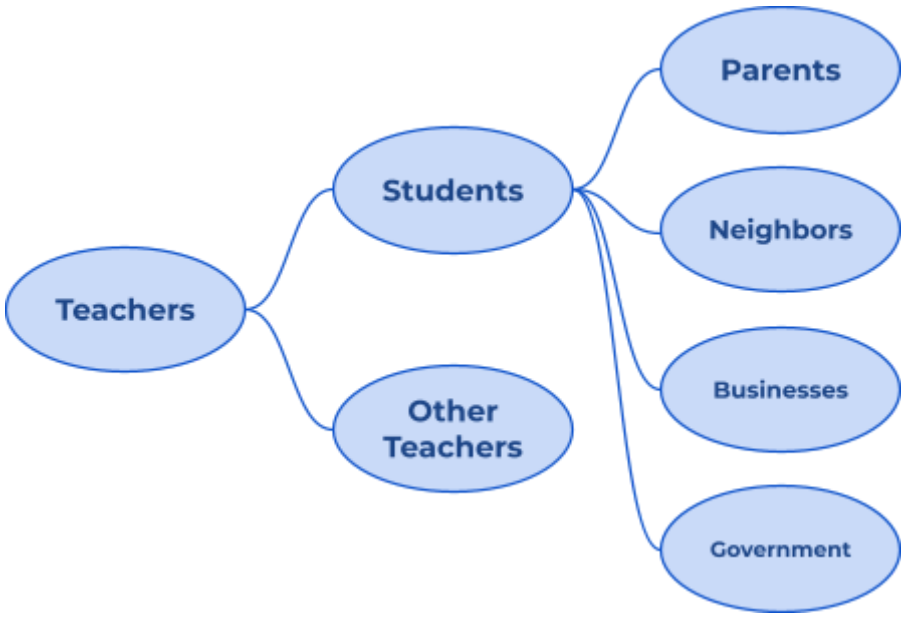

Figure 4: The path of engagement and education. Students will be given the resources to perform outreach to the parts of their community they believe will be best served/most impactful.

Additionally, YAQA materials will be translated into Spanish and Vietnamese, with teacher input being taken into account on which languages would be the most helpful.

Task 4: Workforce Development

The YAQA project will incent local businesses and corporate sponsors to provide opportunities for priority-population students as interns and provide pathways for future high-quality employment. A recent survey of local employers sponsoring internships finds significant demand for the types of STEM skills YAQA seeks to develop.[9] YAQA will also teach students to use analysis tools and develop critical thinking skills. Additionally, employers are increasingly seeking workers who do not require a traditional 4-year degree to perform a wide variety of skilled jobs.[10]

Another key aspect of YAQA's approach to workforce development is the emphasis on sustainability of the program beyond the AB617 funding period. The project will be designed to be self-sustainable, with grants and stipends, funded by corporate sponsors and gifts, and awarded to participating teachers and staff to help defray any out-of-pocket costs and expenses. SSV is well positioned to accomplish this task and specific efforts will include 1) seeking sponsorship from SV businesses whose granting missions align with education and environment topics, 2) expanding the program to other school districts in the Bay Area, focusing on economically and environmentally disadvantaged communities, and 3) working with the Bay Air Quality Management District to extend the reach of the program.

Task 5: Reporting

As described in detail in this section and subsequent Work Plan, YAQA will collect, analyze, and report data on a variety of required topics, including:

- Program evaluation/quantification metrics and included in the the biannual progress reports using the format specified
- Teachers using program per semester
- Student projects per semester
- Number of students enrolled in the program
- List of actions taken and meetings with community, government officials, and agencies
- Student and teacher success stories
- Selected summaries of student presentations
- Comparative and aggregated student-collected data vignettes

[9] "Internship Jobs Within 25 Miles", Indeed.com, https://www.indeed.com/q-Intern-l-Silicon-Valley,-CA-jobs.html?vjk=78d3be39dc0a652b
[10] Kalita, S. Mitra. Fortune, February 2, 2021. https://fortune.com/2021/02/02/ibm-salaries-jobs-training-new-collar-covid-economy/

- Final report as specified in the guidelines

As required by CARB, all appropriate data collected, analyzed, and reported for the YAQA project will be made publicly available, will comply with Appendix E of CARB's Blueprint document, and will be available to CARB upon request. Further, YAQA will leverage CARB's Community Air Quality Viewer (AQ-View) to help visualize and share relevant and appropriate data, and make it available to the public.

Data Security and Privacy

1. Data will be collected and stored on an SSV-provided secure database and will be available to students, teachers, and other stakeholders including CARB.
2. Curriculum and educational materials - stored on a private Google drive open to all teachers in the District. Student case studies will be stored for each School on a shared Google drive.