

Organization information

Preferred email address*

This email address will be used for all future communications. Please make sure this inbox is being monitored, including the spam folder.

Diane.painter@makersmiths.org

Organization name*

Makersmiths, Inc.

Organization address 1*

106 Royal Street, SW Leesburg, VA 20175

Organization address 2

785 S. 20th Street Purcellville, VA 20132

City or Municipality*

Loudoun County

State/Province/County*

Virginia

Zip code*

20175

Country*

USA

Phone number*

703-509-3177

Secondary point of contact*

Brad Hess

Secondary point of contact's email*

Brad.Hess@makersmiths.org

Secondary point of contact's phone number*

571-271-9265

Website*

www.makersmiths.org

Annual budget of organization*

Your Answer **Need that information from John D**

Operation budget of organization*

Please provide a one page balance sheet including the organization's operating budget for the previous year broken down by major expenditures and revenue categories. PDF file only. **Need a one-page balance sheet. Would John be able to provide this?**

History of organization*

Maximum 1000 characters.

Your Answer **[history to be added by Brad Hess]**

Organization registration

Community Grants are intended for nonprofit and certain public organizations. We will not fund for-profit companies through this program.

Charitable status*

Make your selection... Nonprofit organization Public organization

Charity number

Your Answer 47-1939431

Is your organization a local, regional or national government or is your organization funded by a local, regional or national government?*

- Yes
- No

If you answered yes to the above question, can you please confirm that your organization has its own bank account, different from that of the local, regional or national government? N/A

- Yes
- No

CANCEL

Compliance information

Have any Google staff, officers or directors (or to your knowledge, immediate family members thereof) been members of your organization's board or officer group within the last 12 months? *

- Yes
- No

If you answered "Yes" to the question above, please explain here:

Your Answer

Are any of the funds intended for advocacy or public policy? *

- Yes
- No

To your knowledge, are any current government officials, employees or civil servants employed by this organization or are they members of this organization's board or officer group? *

- Yes
- No

If you answered "Yes" to the question above, did the government officials, employees or civil servants solicit or otherwise take part in the grant request? N/A

- Yes
- No

If you answered "Yes" to the question above, please explain here: N/A

Your Answer

Are any grant funds being used to improperly benefit government officials, employees, or civil servants? *

- Yes
- No

On behalf of my organization, I affirm that we do not have any dealings or programs involving or located in US sanctioned countries (as of June 2016, these countries/regions include Cuba, Iran, North Korea, Sudan, Syria, and Crimea). *

- I affirm
- I do not (or cannot) affirm

If you cannot affirm the above statement, please explain here:

Your Answer

Grant application

The Data Center Community Grants Program supports eligible organizations and initiatives focused on specific areas that Google values. Review the community outreach page for your [location](#) for more information.

Email communitygrants@google.com with questions.

Project name*

Makersmiths STEM/KidWind Engineering Initiatives

Project narrative*

Maximum 3000 characters.

Google's community outreach for Loudoun County, Virginia addresses the following: 1) Environmental initiatives that continue to operate carbon neutral facilities and strive to become carbon free by 2030; and 2) Google's US data center investments that contribute significantly to job growth and income gains at local, state and national levels.

Recognizing that there is a gap between the technology competencies of K12 school graduates and the demands of universities and the job market, Makersmiths, Inc. strives to work with youth to develop new technology skills and foster logical thinking, problem-solving, creativity, and teamwork, all valuable skills that today's industries require of employees, including those who might eventually work for a Google Data Center.

For example, as a non-profit, community-based organization, Makersmiths takes an educational approach that encourages youth to become collaborators and innovators that will lead to finding solutions to relevant problems. This approach integrates a variety of STEM initiatives and emphasizes student-driven exploration, communication, and collaboration whenever we work with youth. When working with youth in our community, Makersmiths members serve as volunteer mentors to students who need help completing school projects that are entered in the district's annual Science and Engineering fairs and the Maker Showcases. For example, students learn computer skills such as Arduino programming, computer-assisted design (CAD) and database construction. Students also learn manufacturing skills that are needed to operate

equipment such as a 3D printer, laser cutter or a CNC machine that is needed in the process of constructing a school project.

Since 2018, Makersmiths members have also served as coaches for middle and high school KidWind teams. KidWind is a national initiative that teaches students about the importance of renewable energies to address global warming and present and future energy needs of communities throughout the world. When KidWind participants meet as teams, they design, construct and test their small wind turbines and solar projects to determine their projects abilities to produce energy. Each year Makersmiths sponsored teams win a number of regional, state, or national challenges for their innovative student-designed and constructed wind turbine and solar projects. During these challenges, teams must determine the power output of their wind turbines as they operate in wind tunnels. They must show how much energy is produced by solar panels that cause something to happen in their solar projects. Teams must also demonstrate to judges their knowledge of the importance of renewable energy initiatives and industry careers that are needed to address global warming and to create sustainable and renewable energy for communities worldwide.

The Makersmiths STEM/KidWind Engineering Project ties into Google's community initiatives in several ways. First, Makersmiths KidWind initiatives provide youth opportunities to learn the importance of working toward a carbon free environment and ways that communities can work toward that goal by adopting wind and solar power. Second, Makersmiths members work with youth to learn important skills such as designing, constructing and manufacturing that relate directly to STEM-related careers such as engineers, electrical technicians and network engineers that are needed to operate Google's Data Centers. (2,949 characters)

Total project budget*

\$21,500

Amount of the requested funding*

\$20,000

Requested amount in US dollars - only for non-US applicants*

Numbers only **Does not appear applicable to us since we are a US applicant**

Project budget overview*

Please upload a file with a line-item budget of how the grant funds will be spent. The budget must total the exact amount of the requested grant amount. You may also provide an overall project budget, of which the grant will partially fund, but please be sure the uploaded file clearly documents what part of the overall project budget would be funded by the grant. PDF file only. [See the accompanying PDF](#)

Focus area(s)*

- Education
- Economic Opportunity
- Bridging the Digital Divide
- Sustainability
- Health and Science
- Arts and Culture

Description of how project addresses focus area selected above*

Maximum 1000 characters.

Your Answer

Population(s) served*

- Economically disadvantaged communities
- Economically disadvantaged individuals
- Nonprofit community
- Students or teachers
- Underrepresented minorities
- Women or girls
- Other

Description of populations served and how the program addresses community needs*

Maximum 1000 characters.

The Makersmiths organization recognizes there is a population of underserved students in Loudoun County that would benefit from its STEM initiatives. Underserved students are typically students from low-income backgrounds, students who are the first in their families to attend college, students who identify as members of minority groups and students who identify as female. This proposed grant initiative will address community needs three ways. First, we will partner with Loudoun County Public School System (LCPS) to provide at our makerspace sites additional resources and mentors for any student wishing to complete STEM-related projects for LCPS science and engineering initiatives. Second, our program will continue to offer coaching and resources to any student who wishes to join KidWind wind and solar teams at our makerspace sites. Third, we will provide outreach mentor and resources support for LCPS Level Up/Propel resource classes that typically address underserved populations so that they can establish KidWind teams in their schools. We already have a commitment from LCPS to offer such outreach support should we be awarded grant funding. (987 characters)

Approximate number of persons served*

Your Answer We typically serve 2-4 students in our Makersmiths locations who need help completing STEM-related projects. Last year, we coached 12 students in three KidWind teams. According to LCPS, we have an opportunity to serve four Level Up/Propel middle school classes and two high school Level Up/Propel classes (approximately 90-100 students) this coming school year, should their teachers want to become KidWind coaches.

Impact Location*

Please indicate the geographic area or communities impacted by grant. When evaluating applications we consider impact in the immediate community surrounding the Google data center.

Makersmiths serves individuals throughout Northern Virginia, but most heavily in Loudoun County. There are approximately 414,00 residents in Loudoun County, with about 80,000 students in Loudoun County Public Schools. The residents live in suburban and rural areas in the county. The two data centers are located in the suburban areas of Loudoun County that are located outside of Washington, DC.

According to the latest U.S. Census data, many residents are employed in high-tech industries.

Description of specific goals of the proposal and how impact will be measured and evaluated, including target metrics*

Goals:

Makersmiths will continue to partner with the Loudoun County Public School System to provide additional resources and mentorship support to students completing STEM-related projects as they work at Makersmiths two locations.

Makersmiths will provide training and mentoring of teachers, parents or other community volunteers working as coaches for KidWind teams located at LCPS school sites.

Makersmiths will provide resources and training to use equipment such as a portable wind tunnel, a 3D printer, a CNC machine and microprocessor kits (Arduino) to School-based KidWind teams as needed.

Indicators:

1. The organization's STEM Committee/Kidwind will document Makersmiths members volunteer mentorship support to school-aged students completing STEM-related projects for Loudoun County Public Schools' annual science and engineering fairs and maker showcase initiatives.
2. This committee will document its members' training initiatives for school-based coaches. A key person on this committee offering the training is Makersmiths member, Diane Painter, who completed in July 2022 KidWind's ReCharge Academy coaches training. She is also working with Shenandoah University to offer a KidWind Regional Challenge on March 15, 2023 for KidWind teams in the Northern Va Region.
3. Committee members Diane Painter and Brad Hess will coordinate and document the training of and use of resources and equipment funded by the Google grant to school-based KidWind teams. All assets acquired under the grant shall be owned by Makersmiths, but managed for the use of the committee in performance of grant obligations through the period of what we anticipate will be two school years 2022 through 2024.
4. The committee will report the involvement of underserved populations in project initiatives and document their accomplishments in LCPS science and engineering fairs and KidWind challenges.