

Application Submittal Checklist

The following items are required for submittal of the grant application. Please verify and check off that the items have been included in the application packet.

- 1) Certificate of Good Standing (If the Applicant is an Organization)
- 2) Declaration Statement
- 3) Verify that grant shall be used for a public purpose
- 4) Background and Summary
- 5) Service Summary and Outcomes
- 6) Budget
 - a) Budget request by source of funds ([Link](#))
 - b) Personnel salaries and wages ([Link](#))
 - c) Equipment and motor vehicles ([Link](#))
 - d) Capital project details ([Link](#))
 - e) Government contracts, grants, and grants in aid ([Link](#))
- 7) Experience and Capability
- 8) Personnel: Project Organization and Staffing



AUTHORIZED SIGNATURE

Leslie Wilkins, President and CEO

PRINT NAME AND TITLE

01/21/2022

DATE

**THE THIRTIETH LEGISLATURE
APPLICATION FOR GRANTS
CHAPTER 42F, HAWAII REVISED STATUTES**

Type of Grant Request:

Operating Capital

Legal Name of Requesting Organization or Individual: Dba:

Maui Economic Development Board, Inc.

Amount of State Funds Requested: \$ 750,000

Brief Description of Request (Please attach word document to back of page if extra space is needed):

MEDB has led progressive and equity-based STEM Education in Hawaii for more than two decades, with reach across the state through its signature programs Women in Tech and STEMworks™. It seeks to expand its Computer Science training through its partnership with Code.org to 1,000 additional teachers with an implementation reach of 50,000 students, focusing on rural and underserved communities and serve 200 additional students in its proven work-based learning models.

Amount of Other Funds Available:

State: \$ 750,000
Federal: \$ 535,000
County: \$ 1,080,000
Private/Other: \$ 205,000

Total amount of State Grants Received in the Past 5

Fiscal Years: \$ 1,276,500

Unrestricted Assets:

\$ 2,880,000

New Service (Presently Does Not Exist): Existing Service (Presently in Operation):

Type of Business Entity:

501(C)(3) Non Profit Corporation
 Other Non Profit
 Other

Mailing Address:

1305 N Holopono Street, Suite 1

City: State: Zip:

Kihei HI 96753

Contact Person for Matters Involving this Application

Name: Leslie Wilkins	Title: President and CEO
Email: lesie@medb.org, cc michelle@medb.org	Phone: 808-280-0376

Federal Tax ID#:

██████████

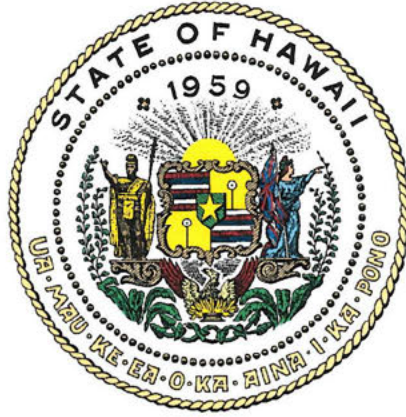
State Tax ID#

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Leslie Wilkins
Authorized Signature

Leslie Wilkins, President and CEO
Name and Title

01/21/2022
Date Signed



Department of Commerce and Consumer Affairs

CERTIFICATE OF GOOD STANDING

I, the undersigned Director of Commerce and Consumer Affairs of the State of Hawaii, do hereby certify that

MAUI ECONOMIC DEVELOPMENT BOARD, INC.

was incorporated under the laws of Hawaii on 04/26/1982 ;
that it is an existing nonprofit corporation; and that,
as far as the records of this Department reveal, has complied
with all of the provisions of the Hawaii Nonprofit Corporations
Act, regulating domestic nonprofit corporations.



IN WITNESS WHEREOF, I have hereunto set
my hand and affixed the seal of the
Department of Commerce and Consumer
Affairs, at Honolulu, Hawaii.

Dated: January 18, 2022

Director of Commerce and Consumer Affairs

Maui Economic Development Board, Inc. - ATTACHMENT B

**DECLARATION STATEMENT OF
APPLICANTS FOR GRANTS PURSUANT TO
CHAPTER 42F, HAWAII REVISED STATUTES**

The undersigned authorized representative of the applicant certifies the following:

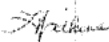
- 1) The applicant meets and will comply with all of the following standards for the award of grants pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is licensed or accredited, in accordance with federal, state, or county statutes, rules, or ordinances, to conduct the activities or provide the services for which a grant is awarded;
 - b) Complies with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability;
 - c) Agrees not to use state funds for entertainment or lobbying activities; and
 - d) Allows the state agency to which funds for the grant were appropriated for expenditure, legislative committees and their staff, and the auditor full access to their records, reports, files, and other related documents and information for purposes of monitoring, measuring the effectiveness, and ensuring the proper expenditure of the grant.
- 2) If the applicant is an organization, the applicant meets the following requirements pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is incorporated under the laws of the State; and
 - b) Has bylaws or policies that describe the manner in which the activities or services for which a grant is awarded shall be conducted or provided.
- 3) If the applicant is a non-profit organization, it meets the following requirements pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is determined and designated to be a non-profit organization by the Internal Revenue Service; and
 - b) Has a governing board whose members have no material conflict of interest and serve without compensation.

Pursuant to Section 42F-103, Hawaii Revised Statutes, for grants used for the acquisition of land, when the organization discontinues the activities or services on the land acquired for which the grant was awarded and disposes of the land in fee simple or by lease, the organization shall negotiate with the expending agency for a lump sum or installment repayment to the State of the amount of the grant used for the acquisition of the land.

Further, the undersigned authorized representative certifies that this statement is true and correct to the best of the applicant's knowledge.

Maui Economic Development Board, Inc.

(Typed Name of Individual or Organization)



(Signature)

01/21/2022

(Date)

Leslie Wilkins

(Typed Name)

President and CEO

(Title)

I. Certification – Please attach immediately after cover page

1. Certificate of Good Standing (If the Applicant is an Organization)

SEE ATTACHMENT A

2. Declaration Statement

SEE ATTACHMENT B

3. Public Purpose

(1) The name of the requesting organization or individual;

Maui Economic Development Board, Inc., STEMworks™ program

(2) The public purpose for the grant;

The mission of STEMworks™ is to provide students and teachers resources, inspiration, and tools that empower them to improve their community and the world. The purpose is to build Hawaii's future workforce through a leveled and layered approach; the proposed project expands opportunities for teachers and students to be exposed, immersed and prepared in STEM pathways through a multifaceted, educator and student professional development, career building and work-based learning programmatic plan.

(3) The services to be supported by the grant; MEDB will leverage its statewide infrastructure as a leader in STEM education and career readiness preparation programs to engage underserved students in Title 1 schools with a focus on girls and underrepresented populations. As a K-12 workforce development program founded on equity and inclusion, serving 32 schools, STEMworks™ is foundational to establishing a pipeline from secondary to post-secondary pathways in engineering, technology, computer science, and IT academies. This grant will support the development, administration, and delivery of state of the art, culturally sensitive, and standards-aligned curriculum including STEMworks'™ in-house curriculum and Code.org's suite of programs.

(4) The target group; and

1,000 K-12 DOE public/public-charter teachers and 50,000 K-12 DOE public/public-charter students from the islands of Oahu, Maui, Lanai, Molokai, Kauai, and Hawaii Island. We will also provide further intermediary support including internship placement and training for STEMworks™/IT academy alums in post-secondary programs.

(5) The cost of the grant and the budget.

Grant: \$ 750,000

Total Budget: \$2,570,000

II. Background and Summary

1. A brief description of the applicant's background;

The applicant, Maui Economic Development Board (MEDB), was established in 1982 as a private, not-for-profit 501(c)3 organization. Its mission is to provide leadership and vision in the state for the responsible design and development of a strong and diversified economy. MEDB has worked to develop and support high growth/high wage innovation industries while working to build a qualified, resident workforce to fill the demands of Hawaii's growing and emerging technical sectors. In 1999, MEDB launched the Women in Technology Project (WIT), now officially known as STEMworks™, which has been at the forefront of developing progressive, work-based learning K-12 educational initiatives that build and strengthen the science, technology, engineering, and math (STEM) education to workforce pipeline, while engaging more girls/women and underrepresented groups into STEM careers. Funded in part by the U.S. Departments of Labor, Education, Economic Development Administration (EDA), Office of Naval Research, Hawaii State Energy Office, industry, private donors, and the County of Maui, MEDB is led by a Board of Directors, whose board members include leaders from a cross section of the state's industry sectors, including emerging STEM fields, plus leaders from academia and government. The Board made the strategic commitment to dedicate half of the organization's annual \$5 million budget each year towards strengthening the STEM education to workforce pipeline to align with targeted economic development.

MEDB created STEMworks™, an original place-based, home grown innovative program that reflects Hawaii's cultural values. Currently, MEDB's STEMworks™ initiative includes 32 diverse STEM programs and original curriculum serving over 30,000 participants spanning every island in the state. The mission of STEMworks™ is to provide students and teachers resources, inspiration, and tools that empower them to improve their community and world. STEMworks™ has developed an equity centered education model that reflects Hawaii's rich demographic diversity (i.e., ethnicity, race, gender, culture, socioeconomic status, and student learning styles). The hallmark of STEMworks™ successful engagement has been the alignment of culture and science and the facilitation of industry/education relationships. The use of project-based service-learning, career exploration, and workforce learning have been the foundation for training teachers and engaging Hawaii's diverse student population.

STEMworks™ ensures that teachers are equipped to develop students' technical and professional career skills, as guided by industry needs, to grow the next generation of local business and community leadership on the islands of Oahu, Kauai, Maui, Lanai, Molokai, and Hawaii Island. The breadth of teachers across disciplines engage students in the engineering design process through use of industry standard software and STEM tools. Students develop career ready skills in areas such as computer science & coding,

cybersecurity, geographic information systems (GIS), A.I., robotics, computer-aided design (CAD), 3D printing, virtual reality, clean energy, digital media and graphic design, healthcare, drone technologies, circuitry and hardware, and agriculture.

In 2017, Code.org launched its current partnership contract with MEDB's STEMworks™ to be its Hawaii Regional Partner to expand quality computer science education to every child in Hawaii. Code.org's nationwide network provides administrative training supporting STEMworks™ with the tools and resources to cultivate a local, qualified cohort of computer science professional development facilitators. It's curriculum is aligned with standards. To date, STEMworks™ has trained 1,443 Hawaii teachers. 108 middle and high school educators from across the islands have participated in Code.org's year-long Professional Learning Program and have successfully implemented the innovative computer science (CS) curricula supporting student computational thinking, problem-solving, teamwork and communication skills. In addition, STEMworks™ trained 1,335 elementary teachers in order to build Hawaii's K-12 computer science educational pipeline. STEMworks™ will continue to expand computer science reach to schools across the islands, kicking off the 2022-23 Code.org Professional Development Program with Hawaii TeacherCon 2022, which will include Code.org's new AP Computer Science A curriculum. Code.org's new AP curriculum is approved and endorsed by the Advanced Placement Board as the pre-eminent curriculum. It will be the recommended curriculum for the proposed IT academies. MEDB will use its reach to rural and underserved populations to diversify the student pursuing Computer Science.

2. The goals and objectives related to the request; UPDATED CONTENT

1. Administer computer science professional development for teachers across the state through our partnership with Code.org. This will include new, expanded training for AP Computer Sciences. This is foundational for developing the proposed IT academies because it provides students with the computer science basics and curriculum they will need to be successful and teachers with the professional development and curricula for the academies.
2. Increase equity and access in STEM by providing remote learning opportunities for students in rural schools. These remote learning opportunities will be cultivated through our STEMworks™ program.
3. Generate interest in STEM careers through hands-on, project based learning and the engineering design process through our STEMworks™ Solutions program. Students learn how to apply the engineering design process to solve real-world problems provided by our industry partners.
4. Deliver jobs of the future training, industry recognized certificate preparation programs, and internships in alignment with the developing Hawaii 2021 - 2026 CEDS. We will

focus on the fields of technology, innovation, entrepreneurship, energy, agriculture and food production, and creative industries.

The driving mission of STEMworks™ is to develop the education to workforce pipeline that will equip our future workers with professional skills as well as technology talent to lead the next generation in developing solutions for Hawaii. STEMworks™ addresses this multifaceted challenge (preparing a well-equipped local workforce that can apply science and technology to engineer solutions) through our teacher accredited STEMworks™ professional development courses and ongoing STEMworks™ program structure where:

Objective 1: STEMworks™ trained educators engage students in cross curricular computer science applications through the STEMworks™ Regional Partnership with Code.org. Code.org is a member of the steering committee that established the K-12 Computer Science Framework. Trained teachers will increase equitable access for students of high need as well as the capacity of computer science literacy for students across Hawaii.

1. In leveled K-12 workshops (elementary, middle, and high school), teachers are provided with, and trained in, exemplary curriculum aligned to national computer science standards that will increase the capacity of computer science literacy for students.
2. Middle and high school training includes an intensive week-long computer science literacy course called TeacherCon in addition to support with quarterly workshops throughout the school year. In 2020, STEMworks™ worked with the department of education to secure approval of PDERI credits for teachers completing code.org's standards aligned training.
3. During implementation of the curriculum, students learn how to build real working apps, games, and websites through block coding, JavaScript, CSS, HTML, Python, and more. They are also exposed to career pathways in CS, internship, and scholarship opportunities.
4. Computer Science Principles training for High School teachers will include new, expanded lessons for AP computer sciences with a deeper focus on concepts such as how the internet works, and the societal impacts of computer science. Studies have shown that students who are trained in AP computer science principles are 12% more likely to enroll in college compared to peers.

Objective 2: Increase equity and access in STEM by providing remote learning opportunities for students in rural schools in STEM topics that require teachers with specialized training and subject matter expertise such as developing and deploying artificial intelligence algorithms; creating augmented and virtual reality environments; biomedical engineering; cybersecurity and more. These remote learning opportunities will be cultivated through our STEMworks™ program.

1. STEMworks™ teachers are trained to employ strategies to increase capacity in gender equity, cultural diversity, and progressive teaching methods that transcend multiple subjects while exploring and integrating industry standard/career ready technology in their classroom.
2. STEMworks™ teachers utilize state of the art, industry-aligned technology and industry connections and/or experiences with training and tools that are provided by STEMworks™ for students during the year to support STEM career exploration and project growth by:
 - a. Training and support for STEMworks™ students in learning industry-standard hardware, software, and tools, and technologies and;
 - b. Industry exposure and immersion experiences STEMworks™ students to facilitate mentoring and real world experiences, including opportunities such as: webinars through our partnership with NEPRIS, ClimbHI, virtual workshops, software training, and STEMworks™ internships.
3. To provide equity of access, the program has a priority to recruit and train teachers in schools of high need, so these student populations have access to computer science classes. In the event that teachers are unable or unwilling to be trained in high-needs schools, we have developed remote mentoring and remote classes to partner untrained teachers with trained teachers in other schools. To ensure access, for middle and high school, school principals must approve the course in the master schedule with their commitment to recruiting a diverse group of students, representative of the overall demographics of the school.

Objective 3: STEMworks™ trained educators engage students in the engineering design process (EDP) in their classrooms to support students in developing career ready employability skills as they build collaborative teamwork skills.

1. STEMworks™ teachers are trained in inquiry-based learning and the engineering design process (EDP) using our STEMworks™ EDP curriculum and to facilitate student-led, team-based applied learning.
2. STEMworks™ teachers are provided with the tools, industry-standard software, and supplies they need to implement project-based applications that aim to:
 - a. Expose and spark an interest for students in STEM.
 - b. Develop student employability skills, critical thinking and problem-solving abilities.
 - c. Promote professional skills through student collaboration, communication, and leadership skills to build collaborative team responsibilities in their classrooms.
 - d. Create meaningful products and solutions to solve real-world problems - inculcating students' sense of responsibility and stewardship for peers, their local community, Hawaii, and the world. Using the STEMworks™ curriculum in partnership with industry partners, students tackle community needs, challenges

and issues by developing innovative solutions through our STEMworks™ Solutions Challenges.

Objective 4: Deliver jobs of the future training through our original STEMworks™ original curricula, and provide opportunities for high school students to acquire industry recognized certificates in alignment with the Hawaii 2021 - 2026 CEDS in innovation, technology and cybersecurity; research, agriculture and food production; energy; and creative industries. Students will have the opportunity to apply their knowledge through work-based internships.

1. MEDB's STEMworks™ has developed, and will continue to develop, original curricula in Engineering Design Process, Renewable Energy, Drones, Augmented and Virtual Reality, Geospatial Sciences, Astronomy, Agriculture Technologies, and more. These curricula are vehicles for teachers across the state to facilitate students' learning and application of STEM concepts while enabling students to create products and evaluate highly relevant information about data, project design, and impact of solutions in their island communities. Notably, our curriculum maintains a place-based foundation, with relevance to Hawaii's culture, geography, future STEM career growth, and unique island challenges and align with required standards.
2. Throughout the year, and during the summer, students will be provided opportunities to gain industry recognized certification through online coursework, and summer boot camps. We are currently guided by the 2020 Promising Credentials in Hawaii Report, and we will stay abreast of updated industry recognized credentials.
3. MEDB has spent decades cultivating industry partnerships with small businesses, large companies, corporations, nonprofit and government programs on every island across the state. We will leverage these established partnerships to provide students with paid internships, career readiness training, and mentorship from subject matter experts.

From kindergarten to twelfth grade, all STEMworks™ curriculum and programs incorporates the Next Generation Science Standards (NGSS) in engineering design, Career and Technical Education Standards (CTE) and is further grounded in Hawaii DOE's Nā Hopena A'o (HĀ) framework and ISTE technology standards.

3. The public purpose and need to be served;

To meet our state's need for a digitally skilled population, with a focus on developing a talented, technical workforce, local students must also develop professional employability skills alongside technical skills to pursue educational and career pathways in science, technology, engineering, and math (STEM). In the Hawaii IT Workforce Needs Report, it was found that in 2020, the IT sector in Hawaii was responsible for 12,740 jobs, 3,834 hires, and 894 average annual openings. In 2018, the industry had contributed \$2.037 billion, or 2.2 percent, to Hawai'i's total nominal Gross Domestic Products¹ (GDP). The average tech industry hourly wage in Hawai'i is \$39.923, 157 percent higher than the \$15.53 ALICE Individual Living Wage. In Hawai'i, the total

employment forecast for the computer and mathematics occupation group, from 2018-2028, is an increase of 7%. With this large, projected increase in technical careers, the already existing gap in a trained, technical workforce, could potentially worsen. Our work is critical to building the education to workforce pipeline needed to fill current and future workplace demands with homegrown talent.

MEDB, in collaboration with EDAH, convened more than 800 industry stakeholders across the state to produce Hawaii's 2016-2021 Comprehensive Economic Development Strategy (CEDS) findings, and has continued to pulse industry throughout those intervening years to current, which have identified the following barriers: struggles of companies to fill technical vacancies with local talent, lack of adequate pipelines for developing such talent; supply of local tech graduates inadequate for current demand/projected growth across all sectors of our economy. MEDB, along with EDAH, have again been contracted by the Economic Development Administration to complete the 2022-2027 Counties and Hawaii CEDS, which will involve the same level of industry stakeholder engagement. This grant will be guided by the industry sector strategies to build a highly skilled technology workforce.

The U.S. Department of Labor's Workforce Innovation and Opportunity Act (WIOA) State Plan for the State of Hawaii FY-2020-2023, (<https://labor.hawaii.gov/wdc/files/2020/01/WIOA-USP-SOH-PY-2020-2023-1.29.20.pdf>)

outlines the skills needed for employability in Hawaii, including the Info Tech and Healthcare industries. The 2014- 2024 projected skills requirements for job openings in Hawaii include employability skills: mentoring, coaching, flexibility, adaptability, problem-solving, initiative, teamwork, active listening, communication, strong work ethic, dependability, reliability, time management, empathy, organizing, relationship building, negotiation, creativity, speaking, reading comprehension, coordination, critical thinking, monitoring, resource management, judgment and informed decision making, social, coordination, and perceptiveness. In our STEMworks™ program, we refer to these skills as "power skills". Each curriculum includes oration toolkits, and equity team role cards to coincide with the STEMworks™ EDP toolkit which support the development of professional employability skills (formally known as soft skills). Through the lens of STEMworks™ service learning for Hawaii, students are challenged to collaborate and reflect on their success and responsibility to teams, identifying personal growth and areas for improvement in employability skills.

Hawaii currently has 1,965 open computing jobs with salaries averaging \$83,548 for computing occupations, significantly higher than the average salary in the state (\$49,430). According to the November 2021 released *State of Computer Science Education* (<https://advocacy.code.org/>) "High schools with higher percentages of underrepresented minority students are less likely to teach computer science," and Hawaii's student population is ethnically diverse. But, "States that have provided funding for teacher professional learning in computer science have more high

schools that teach computer science.” Therefore through the STEMworks™ Regional Partnership with Code.org, teachers using computer science based curricula and training will continue to increase equitable access for students of high need as well as offer courses in K-12 schools to increase the capacity of computer science literacy for students across Hawaii.

According to the Economics & Statistics Administration United States Department of Commerce’s STEM Jobs: 2017 Update (most current as of December 2021), employment in STEM occupations grew 24.4% versus 4.0% for non-STEM occupations over the past decade, Notably, workers in STEM fields command higher wages, earning 29% more than their non-STEM counterparts in 2015. With the high cost of living in Hawaii, we recognize that STEM careers in our state are a pathway out of poverty and the first line of defense against workforce migration out of state. Additionally, the report found that nearly three-quarters of STEM workers have at least a college degree, compared to just over one-third of non-STEM workers. (STEM Jobs: 2017 update. Economics & Statistics Administration United States Department of Commerce (<http://www.esa.doc.gov/reports/stem-jobs-2017-update>)).

Despite the high demand for STEM workers and the incentive of well-paying careers, the United States struggles to sufficiently, and equitably, inspire young people to pursue STEM career pathways; particularly females. Locally, of Hawaii’s 2018 graduating class, 43% of males compared to 17.4% of females identified that they were interested in pursuing a STEM career (Hawaii’s 2018 STEM Report Card (2019) The Alliance for Science & Technology Research in America https://www.usinnovation.org/state/pdf_cvd/ASTRA-STEM-on-the-Hill-Hawaii2019.pdf). This stark contrast exposes a gender gap in STEM that may result in women making less wages than their male counterparts in STEM pathways. STEMworks™ has spent two decades establishing an extensive industry network, representing a diverse cross-section of occupations, and MEDB’s foundational focus is on gender equity in all our programs. We have spent two decades mastering how to engage females, and underrepresented populations by making STEM meaningful and culturally relevant. We also understand Hawaii’s technical workforce needs including hiring and skill set demands. By staying on the pulse of industry needs and projections, STEMworks™ is able to strengthen the education to workforce pipeline, developing standards-aligned curriculum and supporting educators and students with the relevant tools, software, and training applicable to Hawaii’s dynamic and ever-evolving tech sector.

MEDB’s work is consistently informed by research to predict future workforce needs. We are versed in the long-term employment projections of the State of Hawaii’s Department of Labor and Industrial Relations, and the U.S. Department of Labor, and regularly conduct our own primary research into workforce demands. We are aware that, in Hawaii, tech employers are often small businesses that cannot afford to train and supervise interns without external support. We also understand the need for the development of “work-ready” employability skills including clear written communication, professional demeanor, independent learning, collaboration, decision-making, and the ability to communicate technical details to a nontechnical audience.

Through the STEMworks™ Solutions program, students interface with industry mentors on developing real solutions to industry problems and community needs - gaining work-based exposure throughout the school year. During the summer, students have the opportunity to experience six-weeks of full immersion in work-based learning during our paid STEMworks™ innovation internships which partners students with employers across all STEM sectors. During the summer of 2021, six STEMworks™ interns were hired by their employer in the IT/Computer Science and Agriculture sectors. Further, as the regional partners for Code.org, STEMworks™ is able to help expand computer science access to high needs schools and underrepresented groups across the state to help ensure Hawaii students have the skills to gain access to high wage jobs in our state.

4. Describe the target population to be served.

1,000 K-12 DOE public/public-charter teachers and 50,000 K-12 DOE public/public-charter students from the islands of Oahu, Maui, Lanai, Molokai, Kauai, and Hawaii Island. We will also provide further support including internship placement, training, and job placement for STEMworks™ alumni in post-secondary programs.

5. Describe the geographic coverage:

The proposed funding will serve the islands of Oahu, Kauai, Maui, Molokai, Lanai, and the Island of Hawaii, expanding upon our existing reach statewide. The proposed funding will provide STEMworks™ and/or computer science programs to serve our existing 32 schools statewide and our 200, not previously engaged, recently trained teachers in the STEMworks™ Energy program. We are proposing to expand our reach in computer science to 1000 additional teachers reaching 50,000 additional students, and particular work on expanding our reach to Title-1 schools and rural communities.

II. Service Summary and Outcomes

1. Describe the scope of work, tasks and responsibilities;

The mission of STEMworks™ is to provide students and teachers with training, mentorship, resources, inspiration, and tools that empower them to improve their community and the world. Through a leveled and layered approach, the proposed project expands opportunities for teachers and students to explore, and become immersed in STEM pathways. The STEMworks™ program provides an array of the following educational tools, resources and professional development to K-12 Hawaii public school and public charter school teachers with a priority focus on Title-1 schools.

- Level 1 - Career Exposure**
- Level 2 - Career Exploration**
- Level 3 - Career Immersion**

Teacher Professional Development:

- **STEMworks™ Professional Development (Levels 1-3/Grades K-12)**

The STEMworks™ program begins each school year with professional development for teachers to learn how to facilitate student project-based and implement the culturally-aligned STEMworks™ methodology. During training, teachers learn to become facilitators of student-centered service learning projects, where students apply technology tools to solve an issue or problem in their communities using the engineering design process as a guide. Additional teacher professional development opportunities are provided throughout the year targeting specific subjects and software that support the various curricula. These trainings will include, but are not limited to, Code.org computer science education, Minecraft Education, training in cybersecurity, agriculture sensors and technologies, aerospace engineering, artificial intelligence applications for good, biomedical engineering, creating augmented and virtual reality environments, geospatial sciences 3D design, and CAD softwares.

- **Code.org Professional Learning Program (Level 1/Grades K-12)**

Code.org offers the following curricula in computer science literacy which combines digital and hands-on lessons: Computer Science Fundamentals (CSF) (Grades K-5), Computer Science Discoveries (CSD) (Grades 6-10), and Computer Science Principles (CSP) (Grades 9-12). Code.org curricula is aligned to CSTA K-12 CS standards. The Code.org curricula is designed as an introductory course along all grade levels to attract non-traditional students to CS, supporting equity in underrepresented groups, and prepares students to participate in an AP CSP course.

Student STEMworks™ Program:

- **In-class STEMworks™ Program (Levels 1-3/Grades K-12)**

Students collaborate in teams, using STEMworks™ portfolio of teacher curricular training and resources, to apply technology to real-world problem solving. Under the guidance of industry mentors during the school year, students create projects and solve challenges that design ethical solutions to improve their communities and the world. Industry mentorship includes classroom visits, live presentations, and web-based video conferencing. For grades K-3, teachers engage students in STEM hands-on exploratory lessons in an array of STEM fields to pursue STEM-specific electives in middle and high schools.

- **STEMworks™ AFTERSchool (Levels 1-2/Grades K-8)**

STEMworks™ AFTERSchool classes leverage student interest and engagement in STEM and are aligned to develop career employability skills. All activities are student centered, creating an environment where teachers become facilitators to engage and excite students in an array of STEM emerging technologies and pathways. These classes include, but are not limited to, coding, robotics, video game design, creative media production, 3D design and printing and more.

Curriculum (MEDB's original place-based curriculum and tools):

- **Core Curriculum:**

- **STEMworks™ Service-Learning Engineering Design Process Toolkit (Levels 1-2/Grades K-12)** In 2021, STEMworks™ expanded the Engineering Design Process Toolkit to include grades K-3. We are now able to offer a K-12 EDP toolkits to engage our youngest learners from the start of their educational journeys. These kits offer a step by step guide, supporting projects, mentorship, technology tool integration, grade-appropriate data collection activities, grade-appropriate data analysis, and message delivery strategies to share results with the community. This toolkit is aligned to standards including Next Generation Science Standards, Common Core State Standards in English and Language Arts, Career Technical Education Standards, and aligned to the Nā Hopena A`o or HĀ framework and ISTE technology standards.
- **STEMworks™ THINKit Tools and Curriculum (Levels 1-2/Grades K-12)** THINKit includes a kit of classroom educational STEM tools designed to encourage creative play and innovation. **THINKit Curriculum** and **THINKit Action and Inventor Cards** strengthens the continuum of using engineer design in STEM alongside creative learning in K-12. **Prototype:** Design, model and testing of innovations. **Coding:** Read and write in programming languages; **Virtual Reality:** Build immersive stories, interact with the world; **Digital Media:** Tell your story, design messages; **Circuits & Hardware:** Invent with electronic connections; **GIS & Drone:** Explore geospatial tech and drones. Under this award, we would like to update our ThinkIt programs to reflect the latest tools and devices.

STEM Toolkits:

- **STEMworks™ Community Needs Cards (Level 1/Grades 4-12)** provides examples of strengths and areas of need across Hawaii that impact local industry sectors.
- **STEMworks™ College Toolkit (Level 1/Grades 6-12)** helps guide students towards successful career pathway planning starting in middle school through high school. If awarded, we will update this Toolkit with new data and programs.
- **STEMworks™ Oration Toolkit (Level 1/Grades K-12)** helps students build communication and professional skills while encouraging successful teamwork, collaboration, and industry networking.
- **STEMworks™ Team Roles Toolkit (Level 1/Grade 4-12)** facilitates equity in planning and organization of team roles and responsibilities throughout an engineering design project
- **Community Resource Guide (Level 1/Grades 6-12)** provides students a resource database of community groups and nonprofits on each island to connect

with to discover potential community service-learning projects. If awarded, we will update this Toolkit with new community programs and opportunities.

- **STEMworks™ Tech Tools (Level 1/Grades K-12)** provides students and teachers a list of industry standard technology tools and software programs available to students to develop service-learning projects. STEMworks™ equips STEM labs across the state with state-of-the-art proprietary equipment, tools, software including Minecraft Education licenses as well as access to free K-12 software through partnerships with Code.org, Trimble (SketchUp Pro Software) and Esri (ArcGIS Software).

STEMworks™ Modules:

- **Drone CAD Unmanned Aerial Vehicle (UAV) Curriculum (Levels 2-3/Grades 9-12)** This module was the first original drone computer-aided design UAV Curriculum in the State of Hawaii and among the first in the nation to be aligned with New Generation Science Standards (NGSS) and ISTE standards. The curriculum guides the student through a hands-on design process, exploring the interaction between hardware, software and circuitry. Students use computer-aided design software and 3D print components of their designs. Under this award, we plan to update this module by incorporating new drone technologies (TelloEdu) and software (droneblocks) to introduce students to the integration of coding and drone flight systems. This module will also be expanded to Grades 4-8.
- **Geographic Information System (GIS) Curriculum (Levels 1-3/Grades 9-12)** STEMworks™ is the convener of the Hawaii ArcGIS Online Competition for our state. Our GIS modules promote place-based, experiential learning using GIS mapping software and data collection and data analysis tools to teach students how to create data-driven stories and how to use spatial data to make better decisions. Our current STEMworks™ module includes place-based activities exploring the Hokule'a, topographic mapping, False Killer Whales, and geospatial careers. Under this award, we will expand the module to include ahupua'a systems, natural resource management, mapping Mo'olelo, and the application of GIS for addressing the UN Sustainable Development Goals.
- **STEMworks Energy™ (formerly known as Island Energy Inquiry™) (Levels 1-3/Grades K-12)** – MEDB's original, place-based clean energy curriculum designed for Hawaii teachers that with scientific content, methodology, and engineering design processes that are aligned with elementary NGSS and Common Core Standards. This curriculum includes hands-on labs that grow core math and science principles along with skills to understand and solve the state's energy issues. Companion apps include: the STEMworks Energy™ virtual reality app and website as an industry focused tool and the Clean Energy Hawaii STEM

scientific inquiry iPad app. In 2020 STEMworks™ was awarded the Hawaii State Energy Office's contract to develop six new K-12 renewable energy modules. Each module is NGSS-aligned includes 3 hands-on laboratory exercises, are infused with career exposure and opportunities throughout. Under this award, we would expand our training to reach 100 more teachers.

Industry Standard Technology

- **STEMworks™ Lending Library (Levels 1-3/Grades K-12)**
We house a STEM lending library of software and the latest hardware technology tools which are available to loan. These supplies are a lifeline for teachers and schools with limited budgets and resources, and can be used to augment site-based classroom capabilities across the state. Our supplies include, but are not limited to: coding platforms including computers, spheros, brain control interfaces, and circuit playgrounds (using microbits); circuitry; NeuroMaker hands for biomedical engineering; makerspace prototyping supplies; CAD software and 3D printing supplies; virtual reality headsets and software; augmented reality merge cubes and software; GIS software, handheld GPS, drones; and camera and equipment for digital media.
- **STEMworks™ Software Training/STEM Workshops (Levels 1-3/Grades K-12)**
STEMworks™ facilitates training camps for students to explore STEM areas and use industry tools/software. Industry professionals skilled at engaging students provide expert guidance in technology instruction. Select student participants return to the classroom to lead student peer-to-peer training to share knowledge and skills.
- **STEMworks™ Lab Retrofit (Levels 1-3/Grades K-12)**
When feasible with funding, STEMworks™ labs are retrofitted with supplies including THINKit kits and industry standard tools including hardware and software to support student project integration throughout the year. The world of technology is always rapidly changing and tech refreshes for hardware and software are frequently needed to ensure students are versed in the state-of-the-art technologies.

Live Webinars and Subscriptions

- **STEMworks™ LIVE and Nepris (Levels 1-3/Grades 4-12)**
STEMworks™ facilitates field trips connecting students with industry professionals supporting STEM career presentations, student/professional networking opportunities, and hands-on activities to expose students to STEM careers, excite their interest, and allow them time to explore local STEM career opportunities. These field trips often coincide with national industry days such as GIS Day and Introduce a Girl to Engineering Day. Further, we are able to connect our teachers and students with professionals from all industries around the United States with the Nepris STEMworks™ subscriptions. This subscription supports customized, live industry to classroom sessions and on-demand

access to over 6,600 and growing recorded video sessions, helping teachers connect curriculum with real occupations and careers. We hope to further partner with our local version of Nepris, ClimbHI, within the year.

Regional Technology Conference

Hawaii STEM Conference (Levels 1-2/Grades 6-12)

Students and educators will participate in an annual regional technology conference where over 1,200 students, educators, industry professionals, and community leaders from across the state and nation convene on Oahu. Students will engage in two days of hands-on STEM activities led by industry professionals. These sessions will use cutting-edge STEM technologies designed to excite students to the potential of STEM as well as to the opportunities of rewarding STEM careers. Students will participate in pre-conference and on-site STEM competitions; have a chance to interact with local and national industry professionals during STEMworks™ 5x5 (5 minutes & 5 networking rounds) to explore STEM educational and career pathways; learn how to use technology tools to better their communities; and improve employability skills such as communication, leadership and entrepreneurship through onsite presentations. Students will inspire one another as they explore their peers' STEM service-learning projects designed to create positive change in their communities. K-12 educators will have the opportunity to reignite their love of teaching as they participate in two days of professional development and discover new and exciting ways to engage students in the engineering design process and the latest STEM technologies.

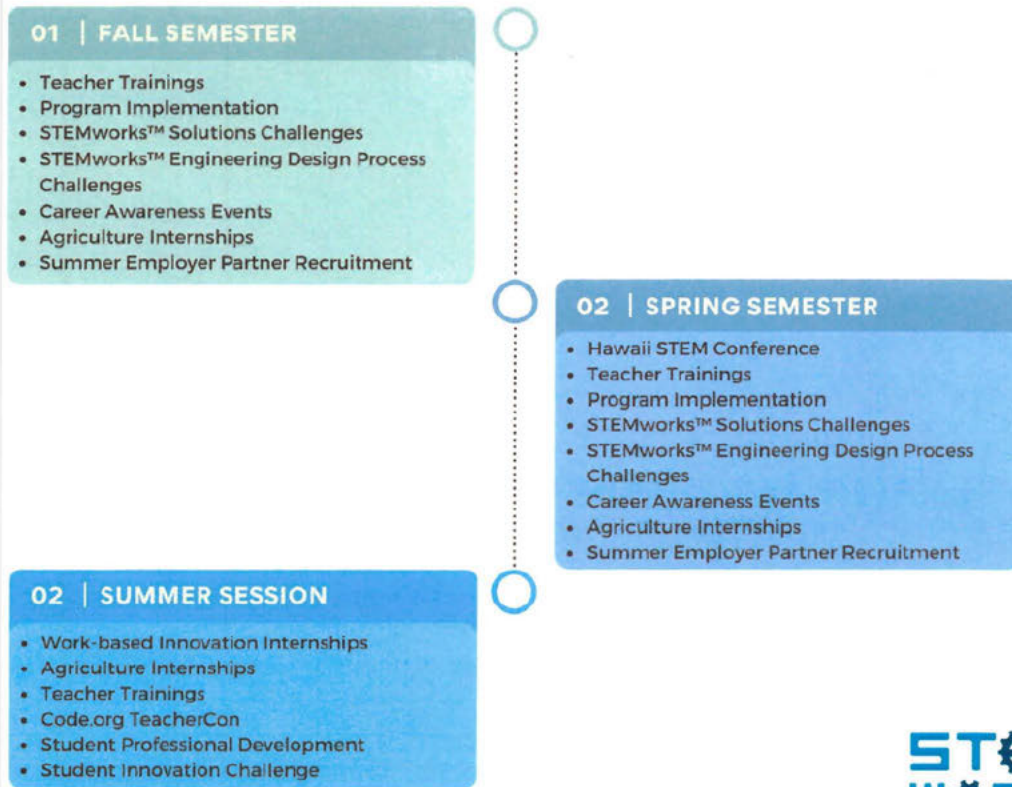
Work-Based Learning Internships:

STEMworks™ Internships (Level 3/Grades 9-12)

During the STEMworks™ Internship program, high school students are placed with host companies across the islands to become workforce ready during six weeks of career immersion. STEMworks™ cultivates relationships with our industry partners, and makes the match with the best student applicant for the job. Interns work with mentors to create a new product for the company, or provide meaningful deliverables while experiencing a professional environment. Students partake in 20+ hours of professional development to improve employability and work readiness skills. STEMworks™ has placed over 500 students across the Hawaii islands in professional STEM internships, several of whom have been hired by their host post-internship. For over 20-years, interns have worked alongside professionals in fields that include computer science, energy, healthcare, astronomy, creative media, social media marketing, environmental science, architecture engineering, agriculture and more.

2. Provide a projected annual timeline* for accomplishing the results or outcomes of the service;

STEMworks™ Annual Timeline



**Will adjust timeline to align with release of funds*

3. Describe its quality assurance and evaluation plans for the request. Specify how the applicant plans to monitor, evaluate, and improve their results; and

Code.org is a nationally recognized beacon of success in terms of computer science education and curriculum. The key to success at the state level is to have a support structure in place for teachers post-Code.org training, which STEMworks™ provides. After completion of the code.org coursework, STEMworks™ spends time cultivating relationships with each participating teacher. We convene monthly meetings to check-in and provide peer encouragement. Further support is provided as needed to lift any barriers that might arise, and to ensure high implementation rates across the state.

The STEMworks Solutions Challenges and Internship program are reviewed and vetted by our industry partners. Pre-internship, we assess each employer’s specific needs, help them identify their gaps, and match them with an intern who is best equipped and trained for the job. If interns need additional training, we provide training prior to the six-week internship program through online courses. Post-internship evaluations are requested from both interns and employers to continually gauge our programmatic performance and address any areas of improvement that are suggested.

For all of our teacher training and modules, we request pre- and post-assessments from participants to gauge lessons learned, positive outcomes, and areas for improvement. Periodically, we will hire an external reviewer to provide unbiased comments and feedback on our operating procedures, and quality of our programs.

Since the COVID-19 Pandemic, all of our surveys have been collected using either Google Forms or Qualtrics. When we resume in-person programs, we may return to some paper-based data collection which we'll then enter the data into spreadsheet form, including a scan of the original print-form.

4. List the measure(s) of effectiveness that will be reported to the State agency through which grant funds are appropriated (the expending agency). The measure(s) will provide a standard and objective way for the State to assess the program's achievement or accomplishment. Please note that if the level of appropriation differs from the amount included in this application that the measure(s) of effectiveness will need to be updated and transmitted to the expending agency.

Program	Measures of Success
Computer Science Training and IT academy Preparation through Code.org	<ul style="list-style-type: none"> ● 1,000 more teachers trained ● 85% implementation rate ● At least 50,000 students reached ● Launch new AP-board endorsed computer science curriculum and training
Work-based Learning Internships and Certification Programs	<ul style="list-style-type: none"> ● At least 200 internship placements ● 50,000+ on the job hours ● At least 100 certificates received
STEMworks™ In School Programs including Core Curriculum, Toolkits, and Modules	<ul style="list-style-type: none"> ● At least 80% of our trained teachers implement STEMworks™ programs ● At least 75% of student participants articulate an increased desire to enter STEM career pathways as a result of participation in STEMworks programs ● 85% of participants will be able to independently apply the Engineering Design Process to solve problems ● Student self-assessments of increases in technology mastery
STEMworks™ AFTERschool	<ul style="list-style-type: none"> ● Student self-assessments of increases in technology mastery ● Student self-assessments of improvements in power skills ● At least 75% of student participants articulate an increased desire to study

	<p>STEM subjects in High School</p> <ul style="list-style-type: none"> ● At least 75% of student participants articulate an increased desire to enter STEM career pathway including IT
Technology Tools including Lending Library and TechRefresh	<ul style="list-style-type: none"> ● At least 30 teachers will access and use our Lending Library ● At least 3,000 students impacted through the Lending Library Hardware Exchange ● At least 20,000 students provided with industry-aligned software including but not limited to CAD, ArcGIS, Minecraft Education, DroneBlocks, Unity, Unreal Engine, MergeEdu AR, CoSpaces Edu
Career Awareness Events	<ul style="list-style-type: none"> ● Host at least 10 career awareness events ● Engage at least 2,000 students ● At least 65% of participants will expressed increased desire to learn more the STEM career pathway explored
Hawaii STEM Conference	<ul style="list-style-type: none"> ● Eight teacher professional development trainings ● Twenty student hands-on sessions ● Seven STEM competitions ● Exposure to at least 20 STEM careers in Hawaii

IV. Financial

1. The applicant shall submit a budget utilizing the enclosed budget forms as applicable, detailing the cost of the request.
 - A. Budget request by source of funds: SEE ATTACHMENT C
 - B. Personnel salaries and wages: SEE ATTACHMENT D
 - C. Equipment and motor vehicles: SEE ATTACHMENT E
 - D. Capital project details: SEE ATTACHMENT F
 - E. Government contracts, grants, and grants in aid: SEE ATTACHMENT G
2. The applicant shall provide its anticipated quarterly funding requests for the fiscal year 2023.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
187,500	187,500	187,500	187,500	750,000

3. The applicant shall provide a listing of all other sources of funding that they are seeking for fiscal year 2023.

SEE ATTACHMENT H

4. The applicant shall provide a listing of all state and federal tax credits it has been granted within the prior three years. Additionally, the applicant shall provide a listing of all state and federal tax credits they have applied for or anticipate applying for pertaining to any capital project, if applicable.

Not Applicable.

5. The applicant shall provide a listing of all federal, state, and county government contracts, grants, and grants in aid it has been granted within the prior three years and will be receiving for fiscal year 2023 for program funding.

SEE ATTACHMENT G

6. The applicant shall provide the balance of its unrestricted current assets as of December 31, 2021. \$2,880,000

V. Experience and Capability

1. Necessary Skills and Experience

The applicant shall demonstrate that it has the necessary skills, abilities, knowledge of, and experience relating to the request. State your experience and appropriateness for providing the service proposed in this application. The applicant shall also provide a listing of verifiable experience of related projects or contracts for the most recent three years that are pertinent to the request.

STEMworks™ is a workforce development program under the umbrella of Maui Economic Development Board, has been building education programs in STEM for K-12 schools statewide for over 22 years. In particular, STEMworks™ programs are designed to reach equity of underrepresented populations in STEM fields, including girls, women, and indigenous populations. Recognizing the need for developing a career STEM pipeline, STEMworks™ curriculum and training focuses in critical thinking through engineering design practices that are applied to a multitude of high demand/high growth STEM areas for our state, including

cybersecurity, health, digital media, geospatial technology, computer-aided design and 3D printing, virtual reality, coding and programming, energy, environmental sciences and agriculture. MEDB retains independent A-133 audits annually and due to its years of unconditional opinions, clean audits, with no material weaknesses, MEDB is classified as a low risk auditee.

Verifiable list of experience of related projects of contracts from most recent three years:

- STEMworks™ in-school programming served 28 schools three years ago, growing to 32 schools statewide in Fall of 2021; the in-school program serves 10,000+ students annually.
- The statewide Hawaii STEM Conference has grown from serving 600+ students and teachers three years ago to serving 1000+ students and teachers, statewide, in 2018. Due to the pandemic, the Hawaii STEM Conference participation numbers dropped back down to 600 students, but we expect to welcome 1000+ students and teachers again in 2022.
- STEMworks™ AFTERSchool, originally funded by a 21st Century Grant is now funded annually by Maui County and private funders reaches reaches 200 and we propose to increase in the grant period
- STEMworks™ AFTERSchool, funded by Kamehameha Educational Fund, is serving over 100 students and families in one Maui County school from the Fall of 2018 through the Spring of 2022
- STEMworks™ Internships have served over 120 student high school interns in 2021
- STEMworks™ is the Code.org Regional Partner for Hawaii and participates in administrative nationwide training to support local computer science education expansion in Hawaii. STEMworks™ has trained over 1400 K-12 teachers and is actively recruiting elementary, middle, and high school teachers to participate in CS Fundamentals workshops and the Code.org Professional Learning Program supporting CS Discoveries and CS Principles curriculum training, reaching over 73,000 Hawaii DOE teachers.
- STEMworks Energy™, formerly Island Energy Inquiry™, MEDB's original, place-based clean energy curriculum, trained 675 K-12 teachers representing 75,00 students across the state and recently was awarded a contract from the Hawaii State Energy Office to develop six new standards-aligned modules for K-12. Each module includes six-hands on labs and is imbued with career awareness information. 200 new teachers have been trained.

2. Facilities

The applicant shall provide a description of its facilities and demonstrate its adequacy in relation to the request. If facilities are not presently available, describe plans to secure facilities.

MEDB operates and manages its own training facility, with state-of-the art technology and distance learning equipment, meeting all ADA compliance. Much of the training will be on-site at the participating schools.

VI. Personnel: Project Organization and Staffing

1. Proposed Staffing, Staff Qualifications, Supervision and Training

The applicant shall describe the proposed staffing pattern and proposed service capacity appropriate for the viability of the request. The applicant shall provide the qualifications and experience of personnel for the request and shall describe its ability to supervise, train and provide administrative direction relative to the request.

MEDB is a non-profit, 501(c)3 organization with 40-years of experience in program development and implementation to diversify Hawaii’s economy and build the requisite resident trained workforce. It is led by a 27-member Board of Directors from the state’s most recognized leaders in industry, government, academia, and community organizations. Its 24-member staff manages a complex project portfolio in economic and workforce development, with a funding base from federal, state, county, and private industry and community investments. Of these 23 staff, five staff are dedicated to running educational STEM programs across the state; MEDB will utilize these existing trained and dedicated STEMworks™ program staff which have a proven track record for successful all aspects of the proposed project, STEMworks™, through educational program implementation, including teacher professional development, industry software workshops and webinar, internship management, and ongoing data collection, analysis for programmatic improvement and reporting. These salaries are partially leveraged by other funding sources to implement the proposed program and looks to add two additional subject matter experts in Computer Science training.

Senior Management for the program (support proposed project at no charge to state GIA budget)

Leslie Wilkins - Maui Economic Development Board, Inc., President & CEO

Professional Experience:

In October 1999, Ms. Wilkins was hired to create, launch, and lead implementation of the Women in Technology Project (WIT), a pilot and demonstration program, designed to engage more girls, women and minorities into the Science, Technology, Engineering and Math (STEM) pipeline. Today, the program under the auspices of STEMworks™ is recognized as a “national best practices model” and annually serves 30,000 participants across the state. In her 17-year role as MEDB’s Vice President, she oversaw a \$22 million funding portfolio, including principal investigator of grants from eight federal agencies. In July 2017, she was elected as president by the MEDB Board of Directors.

Collaborations & Affiliations: Ms. Wilkins is an experienced advocate for women and workplace equity issues. She is the immediate past chair of the Hawaii Workforce Development Council (WDC) and currently retains a voting board seat on the WDC. She

serves as chair of Maui County Workforce Board and is a member of the U.H. College of Engineering Dean’s Council. She has held state and national leadership roles with the Business & Professional Women’s Organization (BPW/USA) for more than three decades.. She continues as a national trustee of the BPW Foundation. **Honors** include the 2014 Hawaii SBA Veteran Business Advocate Award; the 2001 Federal Region IX SBA Women’s Business Advocate; the 2005 International Economic Development Council (IEDC) Performance Award for a Multi-Year Local Economic Development Initiative.

Management team for the proposed project, the STEMworks™ program, includes:

1. Katie Taladay, STEMworks™ Program Manager, holds a BA in Cultural Anthropology with a Minor in Geography, an MS in Earth Science specializing in Energy and Climate and has extensive experience in Geographic Information Systems (GIS), Renewable Energy. She has 10+ years of experience as an educator, worked with the Hawai‘i Natural Energy Institute for four years, and is currently a GIS Lecturer at the University of Hawai‘i at Manoa and Kauai Community College.
2. Anna Sikkink, STEMworks™ Program Specialist for Computer Science, Regional Partner and Trained Facilitator for Code.org. Holds a BA in Information and Computer Sciences with a Focus in IT, and a minor in Astronomy from the University of Hawai‘i at Manoa. Currently completing an MS in Computer Science, and has experience in IT, computer networking, cybersecurity, and web application development as an IT Specialist for UH Manoa Student Housing.
3. Britney James, STEMworks™ Program Specialist for Agriculture. She has a BS in Agriculture and an MBA. She is a licensed teacher in the state of Hawaii with three years of curriculum development and teaching experience.
4. Giel Tolentino, STEMworks™ Program Assistant. Girl holds a Bachelor in Business Administration Entrepreneurship and Human Resource Management from The University of Hawai‘i at Mānoa. She participated in the STEMworks™ Program since 2010 during the 7th grade through robotics, digital media and the STEMworks™ Internships. She is currently working with STEMworks™ on the administration side on purchase orders, ordering materials needed for Professional Development workshops, sending materials to teachers and facilitators throughout the State of Hawai‘i, and tending to the STEMworks™ Lending Library.

These key staff members will be supplemented by other

2. Organization Chart

SEE ATTACHMENT I

3. Compensation

President and CEO	\$130,000
Program Director, Conference Services	\$88,000
Program Director, STEM Education and Outreach	\$80,000

VII. Other

1. Litigation

The applicant shall disclose any pending litigation to which they are a party, including the disclosure of any outstanding judgment. If applicable, please explain.

Not Applicable.

2. Licensure or Accreditation

The applicant shall specify any special qualifications, including but not limited to licensure or accreditation that the applicant possesses relevant to this request.

STEMworks™ instructors include three with Master's Degrees in STEM fields, a MBA, and a licensed teacher in the State of Hawaii experienced in teaching and curriculum development.

3. Private Educational Institutions

The applicant shall specify whether the grant will be used to support or benefit a sectarian or nonsectarian private educational institution. Please see Article X, Section 1, of the State Constitution for the relevance of this question.

No, funding from the grant will not be used to support or benefit any teachers, students or schools from non-sectarian private educational institutions. It will be used exclusively to support public institution teachers and build capacity for Hawaii's enrolled public education students.

4. Future Sustainability Plan

The applicant shall provide a plan for sustaining after fiscal year 2022-23 the activity funded by the grant if the grant of this application is:

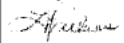
The STEMworks™ proposed program is highly leveraged and not solely dependent on the requested state funding. This GIA request will help expand our engagement, and provide for teacher demands for increased depth of the program with professional development, curricula resources, including retrofitting STEMworks™ labs with cutting edge technology tools and building local capacity for computer science literacy for sustainability in future years. Teachers trained within the DOE will continue to serve students well beyond the students counted during this one-year implementation. Teacher capacity in computer science, programming, engineering design practices and team collaborative project-based service learning activity management will remain within the DOE, as will the relationships developed with industry mentors. Each participating classroom will have access to a shared investment in lending libraries of STEM technology tools, and investment which will equip classrooms for future years.

BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2022 to June 30, 2023

ATTACHMENT C

Applicant: Maui Economic Development Board, Inc.

BUDGET CATEGORIES	Total State Funds Requested (a)	Total Federal Funds Requested (b)	Total County Funds Requested (c)	Total Private/Other Funds Requested (d)
A. PERSONNEL COST				
1. Salaries	209,060	202,460	228,850	24,000
2. Payroll Taxes & Assessments	21,470	20,793	23,503	2,465
3. Fringe Benefits	69,470	67,277	76,047	7,975
TOTAL PERSONNEL COST	300,000	290,530	328,400	34,440
B. OTHER CURRENT EXPENSES				
1. Airfare, Inter-Island				
2. Insurance				
3. Lease/Rental of Equipment				
4. Lease/Rental of Space				
5. Staff Training				
6. Supplies				
7. Telecommunication				
8. Utilities				
9. Consultants - Training Facilitators	60,000			20,000
10. Consultants - PDERI Portfolios	25,000	10,000		
11. Classroom Supplies, Software & Tech Tools	75,000	50,000	5,000	
12. Work-based Learning, incl Student Stipend	30,000	15,000	398,233	25,000
13. In-person training support costs (includes annual Teacher Con)	45,000			20,000
14. Post-Secondary training support	77,245	21,205		
16. STEMworks AFTERSchool			150,000	57,907
17. Hawaii STEM Conference		50,000		10,000
18				
19				
20. Indirect Costs, 22.5% of direct expenses	137,755	98,265	198,367	37,653
TOTAL OTHER CURRENT EXPENSES	450,000	244,470	751,600	170,560
C. EQUIPMENT PURCHASES				
D. MOTOR VEHICLE PURCHASES				
E. CAPITAL				
TOTAL (A+B+C+D+E)	750,000	535,000	1,080,000	205,000
SOURCES OF FUNDING		Budget Prepared By:		
(a) Total State Funds Requested	750,000	Michelle Cocca	808-875-2388	
(b) Total Federal Funds Requested	535,000	Name (Please type or print) Phone		
(c) Total County Funds Requested	1,080,000		01/21/2022	
(d) Total Private/Other Funds Requested	205,000	Signature of Authorized Official Date		
TOTAL BUDGET	2,570,000	Leslie Wilkins, President and CEO Name and Title (Please type or print)		

BUDGET JUSTIFICATION - PERSONNEL SALARIES AND WAGES

Period: July 1, 2022 to June 30, 2023

ATTACHMENT D

Applicant: Maui Economic Development Board, Inc.

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME ALLOCATED TO GRANT REQUEST B	TOTAL STATE FUNDS REQUESTED (A x B)
Technical Expert	1	\$70,000.00	81.86%	\$ 57,300.00
Technical Expert	1	\$70,000.00	71.43%	\$ 50,000.00
Technical Expert	1	\$70,000.00	71.43%	\$ 50,000.00
Program Director	1	\$80,000.00	40.00%	\$ 32,000.00
Program Assistant	1	\$39,520.00	50.00%	\$ 19,760.00
Contracts Manager	1	\$80,000.00	0.00%	\$ -
Program Manager, Digital Bus (Maui)	1	\$60,425.00	0.00%	\$ -
Program Manager, Digital Bus (Molokai)	1	\$60,425.00	0.00%	\$ -
Program Specialist and Intern Coordinator	1	\$65,000.00	0.00%	\$ -
Program Manager, STEMworks AFTERSchool	1	\$50,000.00	0.00%	\$ -
Program Manager, STEMworks AFTERSchool	1	\$25,000.00	0.00%	\$ -
Program Administrative Coordinator	1	\$50,000.00	0.00%	\$ -
				\$ -
				\$ -
TOTAL:				209,060.00
JUSTIFICATION/COMMENTS:				

BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

ATTACHMENT E

Period: July 1, 2022 to June 30, 2023

Applicant: Maui Economic Development Board, Inc

DESCRIPTION EQUIPMENT	NO. OF ITEMS	COST PER ITEM	TOTAL COST	TOTAL BUDGETED
NONE			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
TOTAL:				
JUSTIFICATION/COMMENTS: Not Applicable				

DESCRIPTION OF MOTOR VEHICLE	NO. OF VEHICLES	COST PER VEHICLE	TOTAL COST	TOTAL BUDGETED
NONE			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
TOTAL:				
JUSTIFICATION/COMMENTS: Not Applicable				

BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS

Period: July 1, 2022 to June 30, 2023

ATTACHMENT F

Applicant: Maui Economic Development Board,

FUNDING AMOUNT REQUESTED						
TOTAL PROJECT COST	ALL SOURCES OF FUNDS RECEIVED IN PRIOR YEARS		STATE FUNDS REQUESTED	OTHER SOURCES OF FUNDS REQUESTED	FUNDING REQUIRED IN SUCCEEDING YEARS	
	FY: 2020-2021	FY: 2021-2022	FY:2022-2023	FY:2022-2023	FY:2023-2024	FY:2024-2025
PLANS						
LAND ACQUISITION						
DESIGN						
CONSTRUCTION						
EQUIPMENT						
TOTAL:	-	-	-	-	-	-
JUSTIFICATION/COMMENTS: Not Applicable						

GOVERNMENT CONTRACTS, GRANTS, AND / OR GRANTS IN AID

ATTACHMENT G

Applicant: Maui Economic Development Board, Inc.

Contracts Total: 13,309,460

	CONTRACT DESCRIPTION	EFFECTIVE DATES	AGENCY	GOVERNMENT ENTITY (U.S./State/Hawaii/ Honolulu/ Kauai/	CONTRACT VALUE
1	Maui County Health Sector Mentoring Partners	7/1/19-12/31/2020	County of Maui	Maui County	50,000
2	Maui County Health Sector Mentoring Partners	7/1/20-12/31/2021	County of Maui	Maui County	60,000
3	Maui County Health Sector Mentoring Partners	1/1/22-12/31/2022	County of Maui	Maui County	60,000
4	Economic Diversification	7/1/19-9/30/20	County of Maui	Maui County	875,000
5	Economic Diversification	7/1/20-12/31/21	County of Maui	Maui County	925,000
6	Economic Diversification	10/1/21-9/30/22	County of Maui	Maui County	925,000
7	Maui County High Schools' Automotive Progra	1/1/20-12/31/20	County of Maui	Maui County	45,000
8	Maui County High Schools' Automotive Progra	1/1/21-12/31/21	County of Maui	Maui County	60,000
9	Maui County High Schools' Automotive Progra	1/1/22-12/31/22	County of Maui	Maui County	60,000
10	Maui County COVID Response Programs	6/1/20-12/31/20	County of Maui	Maui County	225,000
11	Maui County Adaptability Fund (CARES)	10/1/20-12/5/20	County of Maui	U.S.	5,116,000
12	Maui Film Festival	1/1/20-12/31/20	County of Maui	Maui County	100,000
13	Maui Film Festival	1/1/21-12/31/21	County of Maui	Maui County	100,000
14	Maui Film Festival	1/1/22-12/31/22	County of Maui	Maui County	95,000
15	Ka Ipu Kukui Fellows	1/1/20-12/31/20	County of Maui	Maui County	34,000
16	Ka Ipu Kukui Fellows	1/1/21-12/31/21	County of Maui	Maui County	34,000
17	Ka Ipu Kukui Fellows	1/1/22-12/31/22	County of Maui	Maui County	34,000
18	STEMworks AFTERSchool	7/1/19-9/30/20	County of Maui	Maui County	200,000
19	STEMworks AFTERSchool	7/1/20-12/31/21	County of Maui	Maui County	225,000
20	STEMworks AFTERSchool	10/1/21-9/30/22	County of Maui	Maui County	225,000
21	Maui Business Connect	7/1/20-12/31/2021	County of Maui	Maui County	50,000
22	Advancing Innovation in Maui County	7/1/20-12/31/2021	County of Maui	Maui County	200,000
23	Focus Maui Nui	6/10/20-12/31/20	County of Maui	Maui County	50,000
24	Aloha Connects Innovation (CARES)	10/1/20-12/31/20	EDAH - Economic Dev	U.S.	58,000
25	Facilitation of the STEMworks Curriculum	2/1/19-1/31/22	HI Office of Community	State	200,000
26	STEMworks Clean Energy Curriculum	5/1/20-6/30/21	HI State Energy Office	State	149,460
27	Neighbor Island Business Coaching	4/1/21-9/30/21	High Tech Developmer	U.S.	32,000
28	STEM Outreach and Engagement	7/1/17-6/30/22	New Mexico Technolog	U.S.	500,000
29	STEMworks Watershed Curriculum	10/1/18-9/30/19	National Oceanic and A	U.S.	77,000
30	STEM Outreach and Engagement	4/1/19-9/30/20	Office of Naval Researc	U.S.	650,000

GOVERNMENT CONTRACTS, GRANTS, AND / OR GRANTS IN AID

ATTACHMENT G, continued

Applicant: Maui Economic Development Board, Inc.

	CONTRACT DESCRIPTION	EFFECTIVE DATES	AGENCY	GOVERNMENT ENTITY (U.S./State/Hawaii/ Honolulu/ Kauai/	CONTRACT VALUE
31	Maui Business Connect	5/1/19-09/30/21	Economic Development	U.S.	100,000
32	Developing Hawaii's Space Economy	5/1/19-9/30/22	Economic Development	U.S.	495,000
33	STEM Talent Challenges	2/1/21-1/31/23	Economic Development	U.S.	300,000
34	Small Business Community Navigator Pilot Pro	12/1/21-11/30/23	Small Business Admini	U.S.	1,000,000
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Funding Sought for FY23

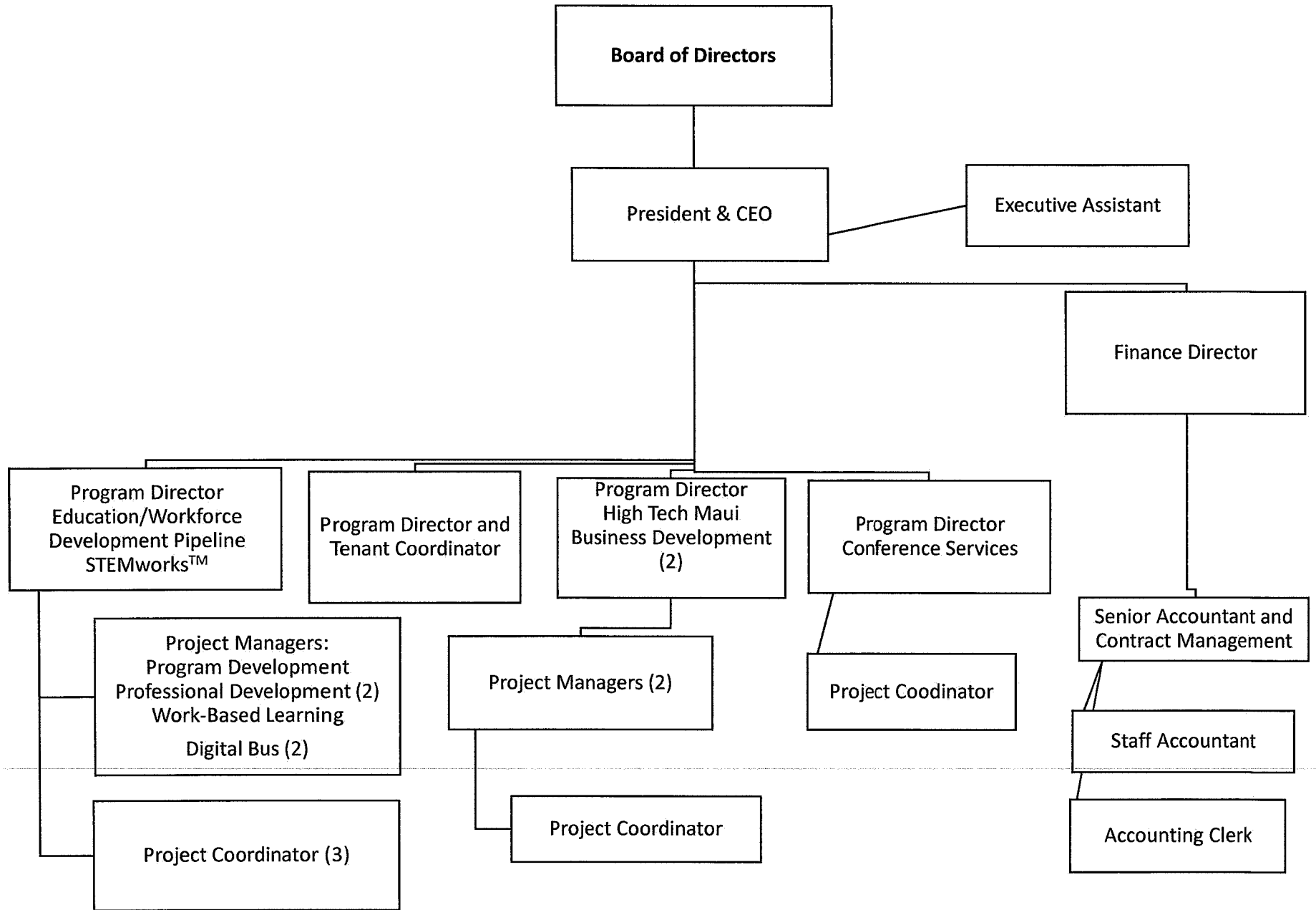
ATTACHMENT H

Applicant: Maui Economic Development Board, Inc.

Total: 5,049,000

	CONTRACT DESCRIPTION	EFFECTIVE DATES	AGENCY	GOVERNMENT ENTITY (U.S./State/Hawaii/ Honolulu/ Kauai/	CONTRACT VALUE
1	Maui County Health Sector Mentoring Partners	1/1/23-12/31/23	County of Maui	Maui County	60,000
2	Economic Diversification	7/1/22-6/30/23	County of Maui	Maui County	925,000
3	Maui County High Schools' Automotive Progra	1/1/23-12/31/23	County of Maui	Maui County	60,000
4	Maui Film Festival	1/1/23-12/31/23	County of Maui	Maui County	95,000
5	Ka Ipu Kukui Fellows	7/1/22-6/30/23	County of Maui	Maui County	34,000
6	STEMworks AFTERSchool	7/1/22-6/30/23	County of Maui	Maui County	225,000
7	Business Assistance (ARPA)	2/1/22-1/31/23	County of Maui	U.S.	100,000
8	CEDS Update	2/1/22-1/31/23	EDAH - Economic Dev	U.S.	50,000
9	STEM Outreach and Engagement	7/1/22-6/30/27	New Mexico Technolog	U.S.	600,000
10	STEM Outreach and Engagement	4/1/22-3/31/27	Office of Naval Researc	U.S.	2,900,000
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Maui Economic Development Board, Inc.
ATTACHEMENT I - Organizational Chart



MEDB_FY23 GIA Application

Final Audit Report

2022-01-22

Created:	2022-01-22
By:	Michelle Cocca (michelle@medb.org)
Status:	Signed
Transaction ID:	CBJCHBCAABAABkRYRbXpViRQphRM2AntHrof2bvfxdZb

"MEDB_FY23 GIA Application" History

-  Document created by Michelle Cocca (michelle@medb.org)
2022-01-22 - 2:53:05 AM GMT
-  Document emailed to Leslie Wilkins (leslie@medb.org) for signature
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-  Email viewed by Leslie Wilkins (leslie@medb.org)
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-  Document e-signed by Leslie Wilkins (leslie@medb.org)
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