

NIST Science & Technology Entrepreneurship Program (N-STEP) REQUEST FOR APPLICATIONS (RFA)

PURPOSE

The National Institute of Standards and Technology (NIST) developed the NIST Science & Technology Entrepreneurship Program (N-STEP) to support the growth of business based on promising NIST Intellectual Property (IP). N-STEP is a competitive program that provides one year of funding for departing NIST researchers to build upon their experience gained at NIST as they explore entrepreneurial careers. N-STEP funds eligible applicant companies to independently pursue further translational research and development of technologies specifically related to NIST's mission that will be developed into products or services that benefit the public.

N-STEP will make grants of up to \$112,000 to these companies enabling them to reach a critical milestone in their product or service development efforts that will move technologies further along the readiness pathway, increase the company's value, and lead to follow on investment and job creation. TEDCO will manage the review, selection, and award activities for competitive N-STEP proposals submitted by Eligible N-STEP Applicants (as defined below).

All companies receiving an N-STEP award will be provided with Portfolio Management Support. Portfolio Management Support includes general assistance and mentorship for the company, as needed and subject to the availability of resources, and connections to training, mentoring, networking, assistance, and other resources available in the ecosystem.

Of the total amount awarded, \$12,000 must be used toward developing business literacy for the applicant and team. Previous uses of business literacy funds have included hiring Subject Matter Expert (SME) mentors, attending training, and participating in other programs. N-STEP awardees may participate concurrently in an existing entrepreneurial training activity, such as, but not limited to, TEDCO's SBA-funded SBIR/STTR Proposal Lab, an I-Corp cohort, the Foundation for Advanced Education in Science (FAES at NIH), or the Rocky Mountain Innovation Center.

ELIGIBLE N-STEP APPLICANTS:

Eligible applicants for an N-STEP Award include NIST Associates, researchers previously employed by NIST, and current employees nearing the end of their term employment at NIST, including but not limited to NIST Post-Doctoral Fellows (collectively "Eligible N-STEP Applicants"). Eligible N-STEP Applicants must be able to form a for-profit company prior to accept the N-STEP award. N-STEP awards



will not be made to a company owned and/or managed by any person that is a federal employee at the time of the award.

For the company to be eligible to receive funds it must:

- Be less than five (5) years old
- Be a U.S. start-up company founded or managed by an “Eligible N-STEP Applicant”
- Have fewer than 16 Full Time Equivalent (FTE) employees with at least 50% in the U.S.
- Have revenue that is less than \$250K per year
- Have received less than \$500K in investment from Accredited Investors
- The ability to produce a legally agreement with NIST to support the proposed project’s goals (e.g., Patent License Agreement (PLA) or Cooperative Research and Development Agreement (CRADA)). Documentation due before award.

APPLICATION PROCESS:



E-Mail Inquiry

Individuals interested in applying for an N-STEP award begin the application process by sending an e-mail to kmozingo@tedco.md, using the subject line, “N-STEP Inquiry.” The email should include a basic description of the project and team including the technology area being explored, the applicant’s relationship to NIST, a proposed project start date, what the applicant hopes to accomplish with the funding, and other information the applicant deems noteworthy.

30-Minute Meeting

Once the e-mail is submitted, an online calendar link will be provided to set up a **30-minute meeting** with the N-STEP Program Manager so they learn more about the proposed project and team.

On-Line Application

Following the discussion with the N-STEP Program Manager, Eligible N-STEP Applicants will be invited to apply through the **online application** process. Applications are accepted at any time and are reviewed shortly after receipt. All applications must be submitted through TEDCO's online portal and include two components: (i) the General Application, and (ii) a Full Proposal. The General Application requests basic information such as contact information, company size, etc. The Full Proposal will be uploaded at the time the application is submitted and will adhere to the following guidelines:

- A 5-7-page proposal (guidelines provided below)
- A one-page budget (example provided below)
- A one-page project milestone chart

Proposals must be formatted with a font of not less than 11-points, pages must be one-sided, margins must be at least 1 inch, graphs and charts must be legible with fonts of not less than 9-points.

Proposal Review

The N-STEP Program Manager will manage the review of all proposals beginning with an initial compliance review followed by a more detailed Full Review.

Compliance Review: An initial compliance review will ensure that all required documents are included (proposal, budget, milestones) and that the proposal meets formatting requirements for readability (as set forth above).

Full Review: Next, a review committee will be convened comprising TEDCO staff, investment experts, technology commercialization experts, and/or Subject Matter Experts (SMEs), as needed. In some cases, Applicants may be assigned a mentor or encouraged (but not required) to participate in TEDCO's [Prelude Pitch](#) as time permits to help the applicant prepare for a pitch to the review committee.

Review Criteria: TEDCO recognizes that applicants may not have the business knowledge or skills to completely address each review criterion and might provide a mentor to support proposal development. Additionally, successful applicants will designate \$12,000 of their budget to acquiring business acumen, as previously described. Proposals will be considered based on the following:

- Completeness of consideration of relevant business and technical factors associated with commercialization of the described technology




- The strength of the commercialization plan in demonstrating an understanding of the milestones needed to commercialize the technology
- Degree to which an understanding of the market was attended to (i.e., completion of, or identification of the need for, I-Corps or similar)
- The coachability and willingness to learn from and engage with mentors
- The likelihood that the project will eventually result in revenue and job creation in the U. S.
- The overall business opportunity as well as the likelihood of third-party investment or revenue generation following completion of the proposed project

Invitation to Pitch

Eligible N-STEP Applicants with competitive proposals will be **invited to pitch** to the review committee. Note that the committee will be comprised of experts in diverse areas who may not all have expertise in the applicant's field. Sufficient background information should be included so the reviewers understand the relevance of the technology within its specific application and target markets. Conversely, any technical description should also be sufficient for someone substantially trained in the technology area to fully assess the merits of the technology relative to competing technologies. Applicants will be allotted **10 minutes to present followed by 20 minutes for Q&A**. Applicants should plan to use a standard investment pitch deck of not more than 10 content slides following the outline below. Applicants will not be penalized if a company has not yet been formed.

Decision and Closing

A **decision** will be made shortly after the pitch, and the applicant will be informed of the decision via a phone call and e-mail. Applicants receiving a notice of an award will then have up to ninety days to form the company, if one does not already exist, execute the project agreement, and effect a **Closing** on the award. The Closing will be managed by TEDCO's appointed counsel. The applicant will be asked to provide a list of documents for the Closing to include the following:

- A certificate of good standing from the Department of Taxation in whichever state the company will be operational, dated no more than 30 days prior to the Closing Date AND from the State in which the corporation is organized, if different from where the company will be operational
 - A copy of its Articles of Incorporation & Bylaws (for corporations) or Articles of Organization & Operating Agreement (for LLCs), as applicable
 - The Board of Directors Resolution authorizing execution of the Project Agreement (corporations only)
 - A copy of the company's most recent financial statements if in business for more than one year
 - A copy of a legally sufficient and binding agreement(s) that supports the proposed project's goals (e.g., Patent License Agreement (PLA) or Cooperative Research and Development Agreement (CRADA)). Documentation required before award.
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- An invoice for 50% of the award value that includes the company's bank wire information

The Closing will occur electronically within ninety days of the date of the award notification.

FUNDING PAYMENTS & REPORTING

Upon successful completion of the Closing, the applicant will receive funds wired to their bank for 50% of the total award. Subsequent distributions of funds will be made in two tranches during the project period as follows: 25% at Mid-Project (6 months) and 25% of the total award upon completion of a Final Report and close-out meeting, as further described below. Each tranche of funding will be subject to approval of the Mid-Project and Final Reports and the applicant's achievement of designated project milestones verified by the N-STEP Program Manager. All awards are subject to the availability of funds.

As a condition of accepting an N-STEP grant, the applicant will be required to submit periodic reports, as follows:

Mid-Project and Final Reports: The company will submit a Mid-Project Report when it has completed approximately half of its proposed project but not more than 6 months from the date of the Closing and a Final Report within 90 days of completion of the proposed project (but not more than 12 months from the date of the Closing). These reports shall be emailed to the N-STEP Program Manager. The reports will describe the company's accomplishments related to the proposed specific aims, the achievement of project milestones, any intellectual property created or improved during the project, any licensing or other commercialization activities related to the project, and the company's employment data (total employees, and employees in Maryland and Colorado). In addition to the written reports, N-STEP awardees will be asked to give a presentation to the N-STEP Program Manager and others at the Mid-Project point and at the end of the project. The N-STEP Program Manager may cancel the award at any time at their sole discretion if the project is not progressing sufficiently.

Financial Reports: For five years following the Closing, the company shall provide N-STEP with quarterly financial statements, which include an Income Statement, Balance Sheet, and Cash Flows Statement, or specific data from these financial statements, as specified by TEDCO in its sole discretion.

Annual Economic Development Reports: For five years following the date of the Closing, the company will provide to the N-STEP Program Manager economic impact information as requested by TEDCO. The requested information will include employment data; payroll information; follow-on funding – including investments, SBIR awards, and other funding; and such other information which TEDCO may reasonably request from time to time. All reports provided to N-STEP will be held in confidence to the extent reasonably permitted by law. Confidential reports shall be designated as "Business Proprietary".



PROPOSAL GUIDELINES


The Full Proposal may not be more than seven (one-sided) numbered pages. References, Pro Forma Financials, support letters, and other items may be submitted separately. Please note that historical financials and a resubmission summary (as applicable) are excluded from this 7-page limit. Also note that all materials that the applicant wants to be considered by the review committee must be submitted in the full proposal within the page limit. No other document will be considered. The proposal should have at least one-inch margins, no less than 11-point font, and each page must be numbered. A 9-point font requirement applies to figures, graphs, and charts, and they must be legible. Applications not meeting these requirements will be rejected and returned after an initial Compliance Review.

Applicants should understand that many proposal reviewers will have technical backgrounds but might not be well-versed in the applicant's specific technology application; therefore, sufficient background information should be included so the reviewers can understand the relevance of the technology within its specific application and target markets. Conversely, any technical description should also be sufficient for someone substantially trained in the area of the technology to fully assess the merits of the technology relative to competing technologies.

ADDITIONAL PORTFOLIO MANAGEMENT FOR N-STEP COMPANIES

TEDCO Support: TEDCO is the hub of entrepreneurial support for Maryland technology-focused companies. As such, all appropriate TEDCO resources, expertise, investment opportunities, and connection to other resources will be brought to bear for N-STEP companies. This may include invitations to special training and/or events, connection with existing TEDCO roundtables, introduction to mentors and advisors, and special training topics as needed or requested. A variety of funding and assistance programs exist to meet the needs of the entrepreneurial community. Assistance exists for manufacturing operations, product design, and business development to further develop and commercialize inventions. There is assistance available for preparing marketing plans and connecting companies to manufacturing resources, venture capital or other resources. The TEDCO Program Manager and N-STEP portfolio managers are the initial points of contact for identifying appropriate resources.

License Agreement: The NIST Technology Partnerships Office (TPO) can identify inventions that are available for licensing and that are most appropriate for commercialization, especially by start-up and early-stage firms. If required, NIST will provide for a no-cost, non-exclusive Research License to the awardee for the duration of the award. Before the sale of commercial products, a Commercial License Agreement must be negotiated in accordance with the conditions set forth in 35 USC 209 to the extent applicable. Any resulting License Agreement shall be negotiated between NIST and interested



businesses, and any such business arrangement shall be conducted in full accordance with all applicable Federal laws and regulations. TEDCO may help interested businesses during such discussions or negotiations.

NIST Resources: NIST’s research and development competencies, equipment, facilities, NIST’s User Facilities, materials and Inventions may be made available to businesses that need or desire access to such resources at NIST (“NIST Resources”). TEDCO will attempt to locate and advise such businesses of the availability and accessibility of NIST Resources. At NIST’s discretion, the company may be supported through agreements such as NIST Cooperative Research and Development Agreements (CRADA) and Patent License Agreements (PLA). Such agreements shall be negotiated between the Technology Partnerships Office (TPO) and an interested business’s representative.



PROPOSAL OUTLINE

Refer to the evaluation criteria and outline below. Keep the proposal between five and seven pages (not including the cover page). The project budget and milestones will be attached separately. Keep in mind that reviewers may not have technical expertise in the proposed technology area. Use charts and graphs as needed. Format the proposal with 1" margins and no less than 11-point font. Applicants should feel free to contact TEDCO for support or clarification. Email kmozingo@tedco.md.

- Cover page
 - Project title
 - Company name
 - Contact name, email, phone
 - Non-proprietary 300-word (max) abstract
- Introduction and background
 - History and current relationship at NIST
 - Relationship to proposed technology (i.e., inventor)
 - Business Opportunity / commercial problem
- Project description
 - Summary of technology (IP, TRL)
 - Proposed project milestones
- Current understanding of target market
 - Existing solutions / competitors
 - Market size
- Commercialization strategy
- Management / Project Team
- Facilities and Equipment
 - Existing / Owned / Access to NIST
 - F/E Needs



EXAMPLE PROJECT BUDGET:

The project budget should be formatted as below, with each line item classified into categories as shown. The Project Budget and justification do not count toward the 7-page maximum. Include a justification for each line item in the budget in a narrative form.

The N-STEP policy is that 80% of the grant must be directed to product development activities (i.e., direct costs). All subcontracted funds are considered direct costs regardless of the subcontractor's indirect costs. N-STEP will not accept hourly rates above \$60 per hour (\$125,000 per year) for company's staff and management time. Costs for external contractors and consultants are specifically excluded from this constraint. Equipment and materials related to the project may be included in the budget. Travel costs may not be included unless justified as critical to completion of the proposed project.

*Company match IS NOT required. This column may be removed if not used.

	TEDCO Funding	Company Match*	Total Costs
Personnel - Salaries			
B. Ross (\$100K/year; 20%)	15,000	15,000	30,000
G. Washington (\$80K/year; 10%)	8000	0	8,000
Total Personnel - Salaries	23,000	15,000	38,000
Personnel - Fringe Benefits			
B. Ross	4500	4500	9,000
G. Washington	2400		2,400
Total Personnel - Fringe Benefits	6900	4500	11400
Equipment			
Sewing Machine		5000	5,000
Scissors	1000		1,000
Total Equipment Costs	1000	5000	6,000
Materials & Supplies			
Red, White & Blue cloth	8000	3000	11,000
Thread	28,600	11000	39,600
Total Materials & Supplies	36600	14000	50600
Other Direct Costs			
Design Consultant	25000	10000	35,000
Total Other Direct Costs	25000	10000	35,000
Indirect Costs			
Room Rental (Ross Living Room)	7500	1500	9,000
Total Other Direct Costs	7500	1500	9,000
TOTAL PROJECT BUDGET	100,000	50,000	150,000

PITCH DECK OUTLINE

- Title slide
 - Company and/or technology name
 - Presentation date
- SLIDE 1: Problem
- SLIDE 2: Solution
 - Technology Readiness Level
 - Patent information
- SLIDE 3: Initial Target Market
 - Profile
 - I-Corps synopsis (if applicable)
- SLIDE 4: Manufacturing/product development plans
- SLIDE 5: Go to market strategy
- SLIDE 6: Financial model
- SLIDE 7: Management team
 - Founder(s) / Co-founder(s)
 - Advisors
 - Board of directors
- SLIDE 8: Facilities and/or equipment
- SLIDE 9: Business Literacy needs and plans
- SLIDE 10: Use as needed

