



REQUEST FOR APPLICATION (RFA)

Regional STEM Network Centers

3/12/2020

REQUEST FOR APPLICATION TO BE REGIONAL STEM NETWORK CENTER
LaSTEM Advisory Council

Preamble

We believe every citizen of Louisiana should have access to Science, Technology, Engineering, and Mathematics (STEM) resources through a Regional STEM Center Network

- to build strong foundations for STEM literacy;
- to increase diversity, equity, and inclusion in STEM; and
- to prepare the STEM workforce for the future.

Overview

The LaSTEM Advisory Council is seeking nine entities to host “Regional STEM Network Centers” in the regionally designated areas of Louisiana, as generally set forth in this document (see Addendum II).

IMPORTANT INFORMATION:

- A. The plans of the LaSTEM Advisory Council for Regional STEM Network Centers may be subject to funding requests before the Louisiana Board of Regents and Louisiana Legislature as well as non-public funding opportunities and business partnerships. This Request for Application is being released at this time to allow all entities adequate time to consider participation. It is anticipated that Regional STEM Network Centers will be identified and begin implementation discussion plans as early as July 1, 2020.
- B. Applications will be evaluated and selected by an impartial Review and Selection Committee comprised of persons in-state who will not be submitting or participating in any Regional STEM Network Center or application.
- C. The Review and Selection Committee, subject to oversight by the LaSTEM Program Administrator, will retain total discretion in the selection of each Regional STEM Network Center and may consider, but not be limited to, the following elements: commitment, creativity, the variety of models proposed across the State, and expertise of the implementation team. They may also choose to reject all applications.

Application Criteria

Entities interested in hosting a Regional STEM Network Center should respond to the following uploading file at <https://lastem.regents.la.gov/lastem-rsnc-application-submission/>. These entities can be existing or a newly formed collaborative group from within the region. A collaborative group must identify one entity to serve as the lead entity and primary point of contact for any regional collaborative group. References to additional sources of information as web links are permitted throughout.

A. Name:

- Name of requesting entity.

B. Primary Contact Information:

- Provide the name and contact information of the primary contact person for the entity.

C. Location:

- Identify the primary location of the Regional STEM Network Center and description of facility and office location.

D. Mission and Goals:

- Identify the mission of the entity and how being a host of a Regional STEM Network Center is consistent with or will further its mission and goals.

E. LaSTEM Alignment:

- Demonstrate how the entity will align with LaSTEM Goals if it is selected as the Regional STEM Network Center. See Addendum IV for the listing of LaSTEM Goals.

F. Support and Resources:

- Identify the support the entity will provide and any fees or expenses it will either charge or waive in order to be a Regional STEM Network Center. This may include office space, administrative fees, support staff, furniture, computers, internet, email access, motor vehicle access or mileage, etc.

G. Regional Advisory Committee:

- Describe the organizations in the region the entity will serve that are vital and should participate in the Regional Advisory Committee, submitting entity's role in creating, hosting, and staffing such an Advisory Committee, and the submitting entity's current relationship with identified participants.

H. STEM Education Leadership Experience

- Describe the STEM initiatives and relevant experience deemed important for the LaSTEM Advisory Council to consider in making a decision on the applicant's proposal.

I. Resource Development:

- Outline assistance the submitting entity could provide in any resource development that may be needed to fund and sustain a Regional STEM Network Center hosted by the submitting entity. Focus on resources needed to engage local communities and other stakeholders to purposely build and/or strengthen regional STEM programs and regional capacity. Would resource development for the Regional STEM Network Center conflict with the entity's regular activities?

J. Reporting and Communication:

- The Regional STEM Director position is required for each of the approved LaSTEM Regional STEM Network Centers. Supervision of the Regional STEM Director will primarily be shared by someone from the submitting entity and the LaSTEM Program Administrator. Also, the LaSTEM Advisory Council may provide oversight and feedback as needed. Is this acceptable to the submitting entity? Does the submitting entity have experience in such shared supervision?

K. Subject Matter Expertise:

- Describe any particular or unique knowledge that the submitting entity possesses that could or should be utilized as "subject-matter expertise" by all Networks across the State. For example, an entity may have personnel with a strong understanding and expertise using STEM best practices to target and address specific areas of need for their region.

L. Additional Information:

- Provide any additional data or materials the submitting entity would like the Review and Selection Committee to consider as they evaluate the application.

Interested entities may be required to participate in preliminary discussions with representatives of the LaSTEM Executive Leadership Committee to fully explore the resources of the LaSTEM Advisory Council and the requirements and expectations of Regional STEM Network Centers.

Additional Assistance

Any questions should be written and emailed to the LaSTEM Program Administrator, Dr. David Lafargue, at lastem@laregents.edu with subject line “LaSTEM RFA Inquiry”. Webinars will be provided during the application preparation period to provide clarity and answer questions as needed. Responses to all questions will be in writing and communicated to all known parties interested in hosting a Regional STEM Network Center.

Submission Requirements

Application submission requirements can be found at <https://lastem.regents.la.gov/lastem-rsnc-application-submission/>.

Application Due Date: June 30, 2020

Electronic submission of this application is required by **5:00 pm, June 30, 2020**

Thank you for your interest in this important initiative.

Addendum I

REGIONAL STEM NETWORK CENTER PURPOSE AND GOALS

LaSTEM Advisory Council

PURPOSE OF LOUISIANA REGIONAL STEM NETWORKS: The Louisiana Regional STEM Network is envisioned to be a system of STEM leadership entities strategically positioned across Louisiana, similar to the Regional Labor Market Areas (RLMAs) identified by the Louisiana Workforce Commission, whereby communities, parishes, multi-parish regions and the State can achieve improved STEM education, opportunity, and advancement. It is expected and hoped that some current and developing STEM activities will span one or more STEM Regions. Regions will share information, work together, and be interconnected by coordination of resources which can also provide a gateway to other networks and initiatives. The Regional STEM Networks and Centers are connected with and serve the statewide LaSTEM Advisory Council.

REGIONAL STEM NETWORK CENTER GOALS:

- A. Develop, implement, maintain and promote a seamless and collaborative communication system with other Louisiana STEM Regions so that there is open and continuous sharing and development of resources, opportunities and promising practices, particularly those that span Regions.
- B. Create and maintain a comprehensive catalog and asset map of STEM activities and resources within each Region that is shared and promoted.
- C. Be the “voice” of and for STEM in all meetings and venues within each Region and convene region-wide dialogues to build awareness of, interest in and shared beliefs about STEM-related activities and opportunities.
- D. Foster the involvement of businesses in the Region to help advance STEM education and work experiences, in addition to teacher development.
- E. Work with the LaSTEM Program Administrator to identify, inventory, and lead discussions of regional workforce gaps and needs and convene key groups and individuals to explore and develop initiatives to address those needs.
- F. Develop and address Regional STEM Goals in alignment with statewide LaSTEM Advisory Council Goals through comprehensive Statements of Work and Action Plans [Strategic Plan] based on data and deliverables.
- G. Measure and refine all STEM initiatives and goals regionally and contribute to a statewide STEM expansion process.
- H. Collaborate and provide oversight, as needed, for existing and new STEM related programs at community and regional levels under direction from the LaSTEM Advisory Council and give accounts to the Council according to established guidelines.
- I. Lead collaborative efforts to identify and leverage funding and other resources to support regional initiatives.

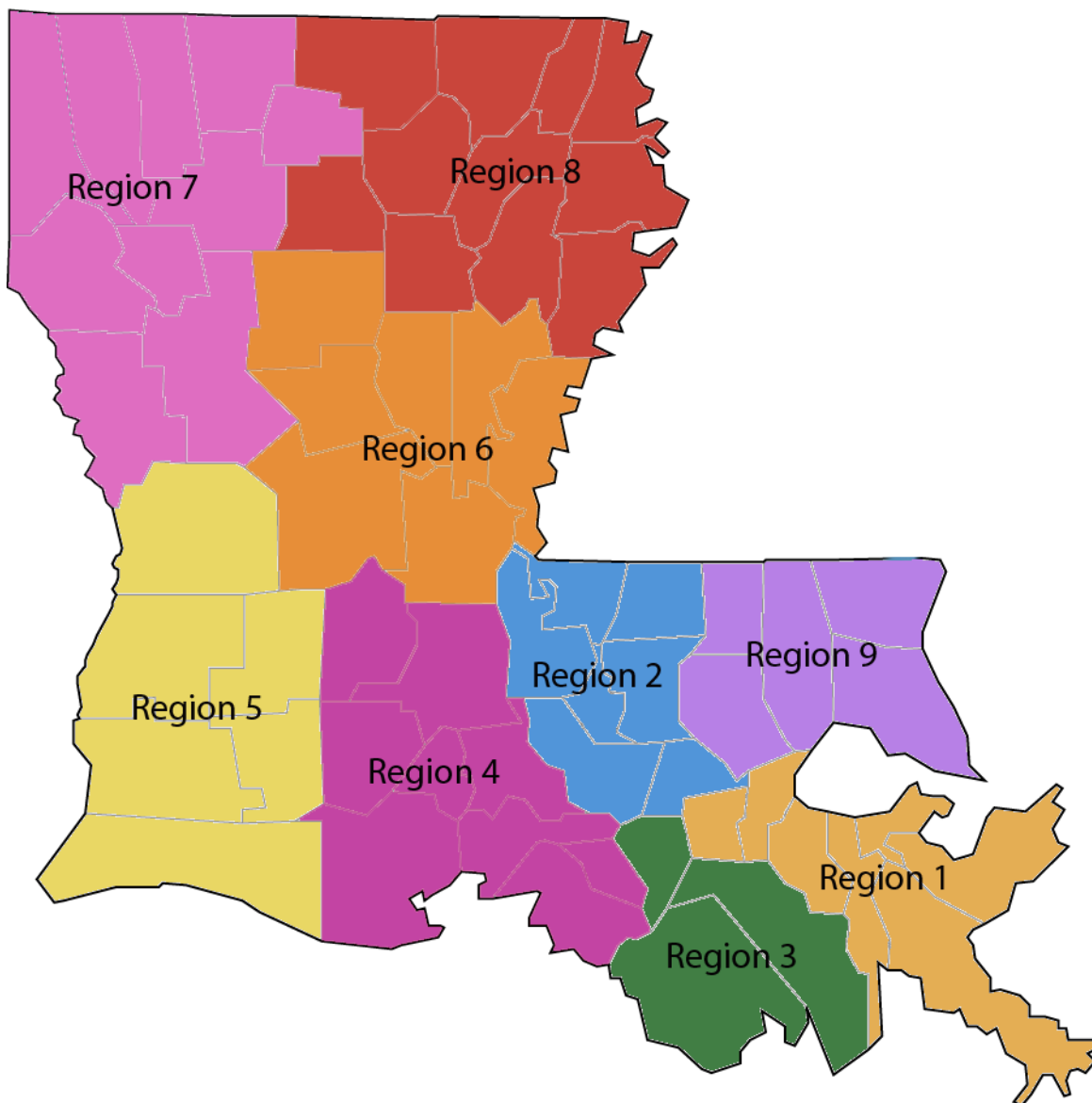
Addendum II

REGIONAL STEM NETWORK CENTER FOCUS AREAS

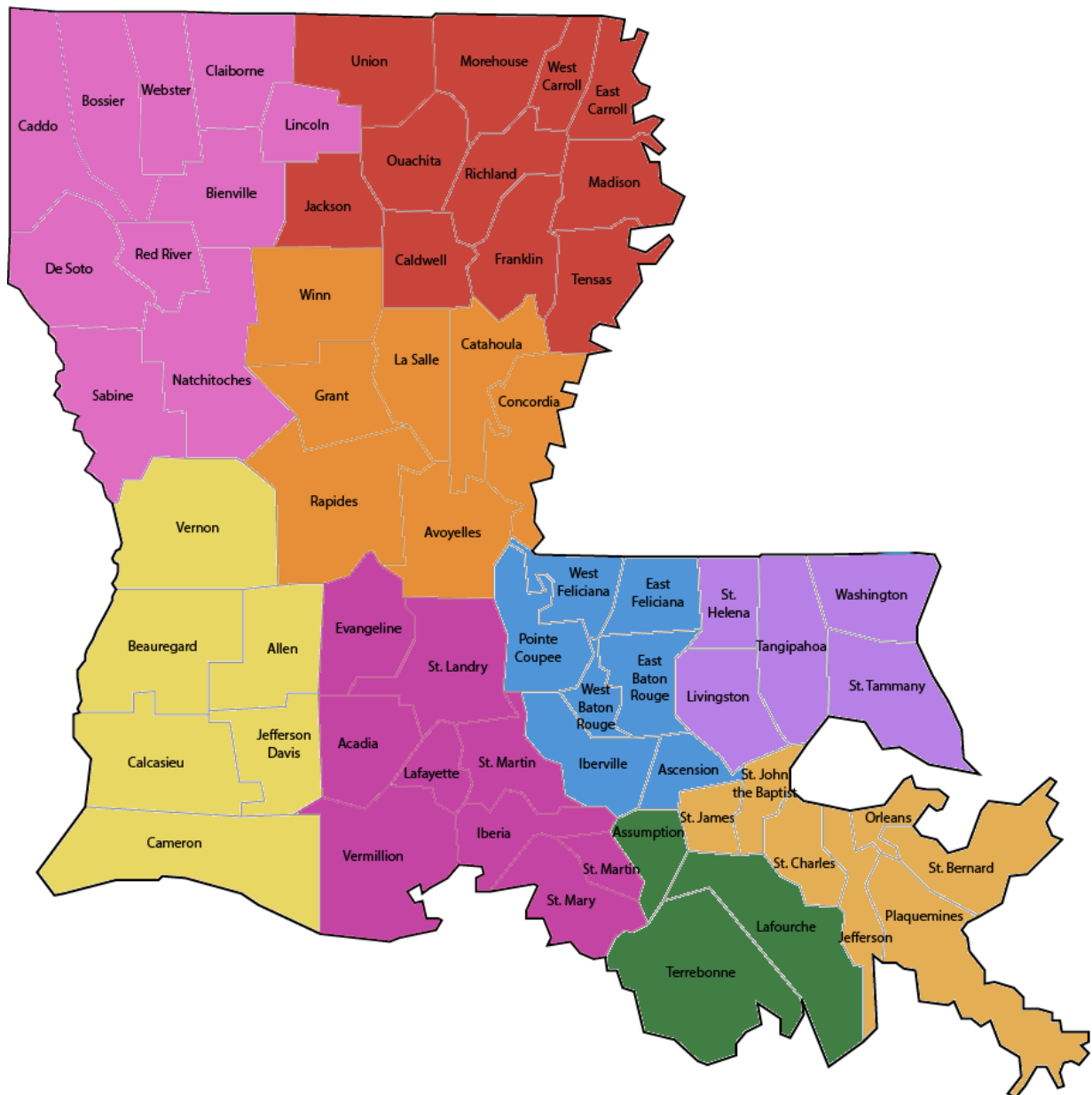
LaSTEM Advisory Council

Regional Network boundaries honor extant partnerships and infrastructures while complementing them with a statewide coordinated fabric of zones. The Regions are best envisioned as fluid and virtual rather than rigid and bounded – there will be much cross-over among sectors, including community colleges, economic zones, universities and private colleges, etc.

Below is a map of the nine STEM regions, similar to the RLMA regions previously mentioned.



Regional Map by Parish:



The Louisiana Regional STEM Network is envisioned to operate as a system of nine geographic areas strategically positioned across Louisiana through which communities, parishes, multi-parish regions and the State can achieve improved STEM education, opportunity, and advancement. The region outlines are not intended to function as barriers between each region, but rather as areas of focus for the Regional STEM Network Centers. It is expected and hoped that current and developing STEM activities will span one or more Louisiana STEM Regions. Regions are encouraged to share information, collaborate, and interconnect through coordination of resources, which can also provide a gateway to other centers and initiatives. The expectations of the Regional STEM Network Center will align closely to the anticipated responsibilities of the Regional STEM Director (see Addendum III.C).

Addendum III

REGIONAL STEM NETWORK CENTER FRAMEWORK PARAMETERS

LaSTEM Advisory Council

A. Term and Performance Period:

- The performance and reporting period will take place from July 1 through June 30 of each year and will identify detailed expectations and requirements confirmed by written agreement of the parties, which will be the Louisiana Board of Regents and the selected entity. The Regional STEM Network Center designation will be awarded for a three-year term beginning July 1, 2020 and subject to renewal based on satisfactory performance and available funding.

B. Facilities and Equipment:

- The selected entity will provide space, furnishings and other standard office resources for the Regional STEM Director. If these are not available within the entity's facilities, the entity must provide office space and office resources, quantities and costs of which shall be mutually agreed to by the parties. All equipment purchased through this agreement must be specifically identified, and deemed allowable, and its purchase mutually agreed with the LaSTEM Program Administrator. Ownership of purchased equipment will be specified in the contract.

C. Regional STEM Director:

- The Regional STEM Director will be a full-time employee of the Regional STEM Network Center entity. The following responsibilities are anticipated to be charged to the Regional STEM Director:
 1. Participate in the development, implementation, maintenance, and promotion of a seamless and collaborative communication system with other Louisiana STEM Regions so that there is open and continuous sharing and development of resources, opportunities and promising practices, particularly those that span Regions.
 2. Create and maintain a comprehensive catalog and asset map of STEM activities and resources within the Region that can be shared and promoted.
 3. Be the "voice" of and for STEM in meetings and venues within the Region and convene region-wide dialogues to build awareness, interest and shared beliefs in STEM-related activities and opportunities.
 4. Foster the involvement of businesses in the Region to help advance STEM education.

5. Inventory and lead discussions of regional gaps and needs and convene key groups and individuals to explore and develop initiatives to address those needs.
6. Communicate frequently with the LaSTEM Program Administrator to help strategize and access resources and support to further regional STEM efforts.
7. Develop and assess Regional STEM Goals through comprehensive Statements of Work and Action Plans [Strategic Plan] based on data and deliverables.
8. Measure and refine all STEM initiatives and goals regionally and contribute to a statewide STEM expansion process.
9. Collaborate and provide oversight, as needed, for existing and new STEM-related programs at community and regional levels under direction of the LaSTEM STEM Advisory Council and report to that Council according to established guidelines.
10. Help to identify a Regional Advisory Committee made up of private and public representatives, with guidance from the LaSTEM Advisory Council, to guide and promote the activities within the Region. Regional Advisory Committees are expected to meet bimonthly, and are required to retain copies of agendas, sign-in sheets, and minutes to document those meetings for compliance and program monitoring purposes. The Regional Advisory Committee should include representatives from the following: secondary, postsecondary, and corrections instructors; economic development offices/chambers of commerce; community colleges; private colleges/universities; public universities; business/industry (chamber leaders, workforce board or industry sector representatives or union representatives); local government (e.g., elected officials); libraries; STEM teachers or similar; school board member; regional STEM network center entity representatives; regional workforce development entities; other education members (administrators, program directors, counselors, educators), and other community representatives (parents and current/former students).
11. Provide leadership and oversight of resource development to meet Regional STEM Advisory Committee goals for the Region, including sustainability of the activities of the Regional Director and lead collaborative efforts to identify and leverage funding and other resources to support regional initiatives.

D. Meetings:

- Typically, the LaSTEM Network Team, which will include the LaSTEM Program Administrator and the Regional STEM Directors will convene remotely on a weekly basis with one face-to-face meeting bimonthly and as needed. The Regional STEM Directors' entity supervisors shall be convened bimonthly to meet with the LaSTEM Program Administrator as well.

E. Due Dates and Minimum Reporting Requirements:

- Quarterly reports of STEM financial summaries: September 15, December 15, and March 15
- Annual mid-year performance report: December 15
- Annual Regional STEM support funds report identifying remaining funds to be expended by June 30 of each year: May 15
- Annual performance report including regional accomplishments, financial statements, and metrics identified using template provided: July 31

F. Discontinuation:

- The LaSTEM Advisory Council may determine to discontinue funding for a Regional STEM Network Center entity for any reason including, but not limited to, failure to provide a qualified Regional STEM Director, unacceptable performance of the Regional STEM Director, failure of the Regional STEM Network Center entity to adequately fund and support the LaSTEM Advisory Council programming, etc.

Addendum IV

LaSTEM VISION, GOALS, AND SMART OBJECTIVES

LaSTEM Advisory Council

Vision

To create a STEM culture in Louisiana where every citizen is prepared to be successful in their daily lives and Louisiana is positioned as the go-to state for STEM talent.

Goals

LaSTEM Goal 1 - Promote STEM Culture and STEM Literacy

Create a culture that advances STEM excellence; promotes the value of STEM education; advances the perspective that STEM principles are woven into every aspect of daily life and increases the STEM literacy of the population such that Louisianans have the ability to compete and excel in the global economy.

LaSTEM Goal 2 - Promote Experiential Learning

Promote STEM-oriented integrative and experiential learning activities starting in early childhood and extending through adulthood.

LaSTEM Goal 3 - Prepare the STEM Workforce for the Future and Increase Diversity, Equity, and Inclusion in STEM

Improve the size, alignment, level of mastery, and diversity of the pipeline of workers well-qualified for specific high-priority STEM jobs, particularly expanding access to high-quality STEM education and employment opportunities for women, rural populations, people with special needs, underrepresented communities and other targeted populations.

LaSTEM Goal 4 - Remove Barriers to STEM Access

Remove barriers that prevent education systems from recognizing STEM coursework for diploma requirements and postsecondary opportunities and responding to emerging STEM needs.

LaSTEM Goal 5 - Operate with Accountability and Sustainability Measures

Create a clear set of metrics, accountability framework, and a funding and sustainability protocol to ensure the success of the Council's work. Metrics such as:

- Programs - new and ongoing regional STEM programs
- Enrollment - regional enrollment of Jumpstart STEM Pathways

- Follow through - evidence of regional advisory committee feedback and follow through on action items
- Awards - awards such as Jumpstart STEM silver and gold diploma seals, postsecondary STEM diplomas, certificates, and degrees to underrepresented, minority, and female populations
- Partnerships - provide a database of new and recurrent business and industry contacts and their contributions to STEM
- Financial allocations - financial and in-kind contributions to regional STEM efforts
- Professional development - professional development for primary and secondary teachers in STEM
- Marketing - marketing and promotional tactics, social media, newsletter, speaking engagements, and other communication to ensure a strong regional applicant pool
- Community impact - evidence reaching families where they live, work, and play such as location, attendance, partners, programs, budget, effects of knowledge or attitudes to family/community STEM events
- Evaluation - describe efforts to support data gathering and evaluation in aid and assistance to the evaluators
- Reporting - detailed financial status report of expenditures and justifications

LaSTEM Smart Objectives

Workforce Focus

- 1.1: Business partners will implement strategies that can be replicated by business partners in regions across the state to demystify the STEM field for PreK-8 students and their teachers.
- 1.2: Identify successful individuals in STEM fields with personal and inspirational stories and create 60-second vignettes that will help demystify the STEM fields
- 1.3: Identify businesses in STEM fields that are interested in developing and implementing one-week professional programs for elementary teachers at a workplace to help demystify the STEM area and help elementary teachers connect what they are doing in the classroom to the STEM area.

Workforce Focus

- 2.8: Create instructional resources and hands-on experiences for students and educators that build and enhance the cognitive abilities and behaviors associated with STEM literacy while providing an understanding of the regional economic landscape and future career opportunities.
- 2.9: Create and publish a Military-Civilian crosswalk that will provide the Louisiana Higher Education and Military Communities with information regarding the alignment of military

jobs/training and education courses to award credit for the variety of experiences that veterans bring to college.

2.10: Establish a network to advance Work-Based Learning (WBL) in LA.

2.11: Work with the Louisiana Department of Education to assemble a team of staff and STEM educators and professionals to evaluate tools, such as STEM career awareness systems to determine if statewide implementation would move the needle on STEM learning for middle school students.

Higher Education Focus

2.1. Collaborate with postsecondary institutions in the creation of high-quality STEM pathways programs such as the Environmental Protection and Sustainability Graduation Pathway, Pre-Engineering Certification Pathway programs, and other programs aligned to the needs of Louisiana's future economy.

2.2. Increase collaboration and support with postsecondary institutions to build on existing intensive instructional summer programs for students and teachers in STEM foundational courses. These include boot camps for engineering, biology, and physics, etc., which would take place prior to the start of the student's enrollment at the postsecondary institution. These boot camp programs will provide concentrated exposure to foundational courses at the postsecondary level. These programs can, in the future, be expanded to include opportunities for students at the secondary level who are interested in STEM fields.

PreK-12 Focus

2.1: Build and field test an open-source curriculum that contains integrative and experiential learning activities for grades 6-8 that will be aligned to the new Louisiana science content standards.

2.2: Provide initial and ongoing professional development to grades 6-8 teachers, teacher leaders, principals, and Teacher Preparation Programs (TPP) faculty to use the new science curriculum aligned to the LSSS.

2.3: Provide 6-8 science teachers with the materials required to successfully implement the integrative and experiential learning activities within the science curriculum aligned to the new Louisiana Students Standards for Science and adopted by local school districts.

Workforce Focus

3.4: Retain and reward certified math/science teachers by creating a minimum of one business-education partnership in each region of the state with paid summer fellowships for the teachers to shadow business partners and transfer new work-based knowledge back to the classroom.

3.5: Business partners will offer incentives to increase the number of individuals who complete teacher preparation programs and teach computer science from 2 to 10 or more

completers per year and complete programs and teach physics from 4 to 10 or more completers per year.

- 3.6: Using existing sector partnerships and developing new ones where needed, including workforce development boards, local and regional economic development entities, and education and industry stakeholders, focused around the LaSTEM Regional Network Centers, develop comprehensive regional workforce development production targets and strategies to meet them for undersupplied fields in regional economic driver industries including manufacturing and technology. The targets will be established with annual production goals assigned to regional partners and institutions, and structured across regions to meet statewide targets. These targets include: increasing degree and certificate production in high- demand STEM-intensive, undersupplied fields by 5% each year at all levels; tripling the number of associate and baccalaureate degree graduates in computer and information sciences and related fields of economic importance; and tripling the number of industry credentials and other certifications in key STEM-intensive, undersupplied fields each year, working with industry partners to quantify regional goals.
- 3.7: Increase the numbers of underserved, underrepresented, and other various populations enrolled in and completing in STEM and STEM-related fields by predetermined percentage increases each year
- 3.8: Working with the LaSTEM Council PR Subcommittee, engage all stakeholders to join together to develop a statewide recruitment program to bring adults to/back to college in under-supplied STEM fields.
- 3.9: Work with, endorse and advance the work of the CIP-SOC Crosswalk Workgroup to create a Louisiana-specific CIP-SOC Crosswalk to aid in addressing the state's workforce gap.
- 3.10: Benchmark Louisiana against other states on measures of workforce quality related to STEM and workforce supply, producing a report with recommendations for improvement.

PreK-12 Focus

- 3.1: Increase the percentage of highly qualified and certified STEM educators teaching mathematics and science classes statewide.

Workforce Focus

- 4.3: Work with the Louisiana Department of Education to establish a committee to develop processes that allow business professionals with STEM expertise to team-teach STEM-related K-12 and college courses even outside traditional BESE credentials/ teacher certifications.

Higher Education Focus

- 4.1. Collaborate with the Louisiana Board of Regents and Louisiana Department of Education in the development of the STEM diploma endorsement to recognize those students who take additional STEM courses beyond those required for secondary graduation. This initiative includes identifying existing and potential courses to be classified as STEM and

considered for meeting diploma graduation requirements, BoR core, TOPS, and additional weight (similar to AP, Honors and Dual Enrollment).

- 4.2. Identify Regional STEM partners who can create impactful, meaningful, and portable programming that can be delivered directly in communities, enabling cultural stakeholders to be exposed to STEM where they live, work, and play."