

## 2020-2021 Lone Star STEM Cycle 3 Year 1 Letter of Interest (LOI) Application Due 11:59 p.m. CT, September 7, 2020

Authorizing legislation	US Department of Ed Federal Grant P.L. 114–95 IV ESSA EDUCATIO 84.411B			
This LOI application must be	e submitted via email to loiapplications@tea.texas.gov.	Application stamp-in date and time		
The LOI application may be are acceptable.	signed with a digital ID or it may be signed by hand. Both forms of signature			
TEA must receive the application by <b>11:59 p.m. CT, September 7, 2020</b> .				
Grant period from	October 1, 2020 - August 31, 2021			
Pre-award costs permitte	ed from September 30, 2020			
<b>Required Attachmen</b>	IS			

1. Excel workbook with the grant's budget schedules (linked along with this form on the TEA Grants Opportunities page) 2. Applicants must submit the additional attachments as detailed in the Required Attachment section on p. 6 on the Program Guidelines found on <u>TEA's Grant Opportunities</u> page.

Amendment Number				
Amendment number (For amendments only; enter N/A when completing this form to apply for grant funds): N/A				
Applicant Information				
Organization Brooks County ISD	CDN 024-901 Can	npus Falfurrias H.S.	ESC 1 DUNS 030907828	
Address 200 E. Allen St.	City Falfurrias	ZIP 78355	Vendor ID 74-6000838	
Primary Contact Diana Sheeran	Email dsheeran@brook	scountyisd.net	Phone 361-325-8086	
Secondary Contact Connie Herrera	Email cherrera@brooks	countyisd.net	Phone 361-325-8137	
Certification and Incorporation				
binding agreement. I hereby certify that the information contained in this application is, to the best of my knowledge, correct and that the organization named above has authorized me as its representative to obligate this organization in a legally binding contractual agreement. I certify that any ensuing program and activity will be conducted in accordance and compliance with all applicable federal and state laws and regulations. I further certify my acceptance of the requirements conveyed in the following portions of the LOI application, as applicable, and that these documents are incorporated by reference as part of the LOI application and Notice of Grant Award (NOGA):				
X LOI application, guidelines, and instructions X Debarment and Suspension Certification				
Image: Seneral and application-specific Provisions and Assurances Image: Lobbying Certification				
Authorized Official Name Dr. Maria Rodriguez-C	asas	] Title Superintendent		
Email mrcasas@brookscountyisd.net		Phone 361-32	5-8000	
Signature Maine Rodrigg	Case	Date	08-18-2020	
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#### **Shared Services Arrangements**

Shared services arrangements (SSAs) are permitted for this grant. Check the box below if applying as fiscal agent.

The LEA or ESC submitting this application is the fiscal agent of a planned SSA. All participating agencies will enter into a written SSA agreement describing the fiscal agent and SSA member responsibilities. All participants

understand that the "Shared Services Arrangement Attachment" must be completed and signed by all SSA members, and submitted to TEA before the NOGA is issued.

#### Statutory/Program Assurances

The following assurances apply to this program. In order to meet the requirements of the program, the applicant must comply with these assurances.

Check each of the following boxes to indicate your compliance.

- I. The applicant provides assurance that program funds will supplement (increase the level of service), and not supplant (replace) state mandates, State Board of Education rules, and activities previously conducted with state or local funds. The applicant provides assurance that state or local funds may not be decreased or diverted for other purposes merely because of the availability of these funds. The applicant provides assurance that supplementary to existing services and activities and will not be used for any services or activities required by state law, State Board of Education rules, or local policy.
- 2. The applicant provides assurance that the application does not contain any information that would be protected by the Family Educational Rights and Privacy Act (FERPA) from general release to the public.
- ☑ 3. The applicant provides assurance to adhere to all the Statutory and TEA Program requirements as noted in the 2020-2021 Lone Star STEM Cycle 3 Year 1 Program Guidelines.
- Image: A. The applicant provides assurance to adhere to all the Performance Measures, as noted in the 2020-2021 Lone Star STEM Cycle 3 Year 1 Program Guidelines, and shall provide to TEA, upon request, any performance data necessary to assess the success of the program.
- S. The applicant provides assurance that they accept and will comply with <u>Every Student Succeeds Act Provisions and</u> <u>Assurances</u> requirements.
- ☑ 6. The applicant assures they understand that 2020-2021 Lone Star STEM Cycle 3 Year 1 applicants cannot request to be placed in the treatment or control group and should apply with the intent to complete the treatment requirements outlined in the LOI.
- 7. The applicant assures that the district plans to develop or expand a computer science or cybersecurity Program of Study.
- ☑ 8. The applicant assures the T-STEM blueprint components and artifacts as described in the Program Guidelines will be followed.

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CDN 024-901 Vendor ID 74-6000838

**Budget Narrative** 

# Describe how the proposed budget will meet the needs and goals of the program, including for staffing, supplies and materials, contracts, travel, etc. If applicable, include a high-level snapshot of funds currently allocated to similar programs. Include a short narrative describing how adjustments will be made in the future to meet needs.

The administrators of Brooks County ISD met to determine the resources necessary to successfully implement a Lone Star Academy that offers cybersecurity. The steering committee considered staffing, supplies/materials, contracts, travel, etc. to develop a budget that will increase the number of STEM education opportunities and outcomes for students in grades 6-12. The Lone Star Academy will develop pathway that will help students to embark on the high-demand STEM careers of cybersecurity.

Brooks County ISD is pursuing this field to help fill the projected increase of STEM jobs in Texas, particularly in cybersecurity. Females, Hispanics and the economically disadvantaged are underrepresented in the cybersecurity fields, and the district can increase the diversity of students pursuing these college degrees. Falfurrias Junior High (FJH) and Falfurrias High School (FHS) have a huge percentage of Hispanic students (FJH: 97.7%, FHS: 97.5%, State: 52.6%) and a significant percentage of economically disadvantaged students (FJH: 75.9%, FHS: 69.3%, State: 60.6%). (1 Priority Point) The district intends to target the female and economically challenged populations and give them the much-needed exposure for a possible career in cybersecurity. (How Budget Will Meet Needs/Goals)

To assist with meeting goals and objectives that are aligned with this grant, Brooks County ISD currently uses funds from: 1) P-TECH, 2) Title I, 3) CTE, 4) Instructional Materials Allotment (IMA), and 5) Compensatory Education to purchase various curriculum, resources, training, and equipment. It also receives funds from Texas Workforce Commission and Perkins Reserve for its welding occupational program. (Snapshot of Funds)

In order to make adjustments in the future, Brooks County ISD will tap into local funds, if needed, to continue staff development in the future and to pay for any additional fees needed for the cybersecurity program. The leadership team will also be tasked with the continuous monitoring, improvement and sustainability of the Lone Star Academy at the district. The team will be responsible for ensuring that the correct adjustments are made in the future. (Future Adjustments)

## **Statutory/Program Requirements**

1. What type of College Career Readiness School Model (CCRSM) is the campus currently? (T-STEM, P-TECH, ICIA, or ECHS) If not a CCRSM, what model do you plan to operate during the Implementation Year?

Falfurrias High School is currently classified as a P-TECH campus. During the grant program, Brooks County ISD plans to follow P-TECH blueprints. By doing so, the school will be able to align with the grant goals and objectives and follow all T-STEM Benchmarks of 1) School Design, 2) Target Population, 3) Strategic Alliances, 4) Curriculum/Instruction/Assessment, 5) Work-based Learning and 6) Student Support.

Falfurrias High School is considered a rural campus according to National Center for Education Statistics (NCES). (1 Priority Point) This classification limits the students' ability to obtain post-secondary experience. However, by being designated as a Lone Star Academy, the district will be able to develop partnerships with a local business and IHE to create a crosswalk that includes college credit, industry certifications, and real-world job experiences.

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## Statutory/Program Requirements, (cont.)

2. What CCRSM designation does your district plan to pursue through the Lone Star STEM grant?

During the implementation of this pathway, the campus will continue to pursue its P-TECH College Career Readiness School Model. By doing so, the district will be aligned with the grant goals and objectives, as well as, assist Brooks County ISD in meeting its mission to provide relevant and aligned curricula that enhances learning and improves achievement for all students.

3. What process and information was used to determine which pathway was selected for the 2020-2021 Lone Star STEM Cycle 3 Year 1 grant? Please include any relevant labor market data or documentation.

The process to determine the pathway involved school administrators meeting with STEM teachers to review local and state market data for the Lone Star STEM Cycle 3, Year 1 grant.

Part of this data included that provided by the Texas Comptroller, which demonstrated the demand for information security analysts. Texas's job count in this occupation are expected to grow by more than 39 percent from 2017-2027, which is considerably faster growth than the nation as a whole. This occupation has a near-zero unemployment rate. (https://comptroller.texas.gov/economy/fiscal-notes/2019/mar/cybersecurity.php)

Once this information was reviewed, school administrators then met with members of the Del Mar College Computer Science department to determine the best pathway to pursue. Based on this meeting, the data mentioned above, and the additional security needs caused by the COVID-19 pandemic, school administrators and key personnel chose the STEM pathway of cybersecurity.

#### Statutory/Program Requirements, (cont.)

4. Describe plans for creating strategic alliances with industry partners and IHEs. What is the anticipated role for each IHE, business, and/or community partnership?

The district plans to expand strategic alliances with an IHE, industry partner, informal STEM provider, and local workforce board. The district will be partnering with the following organizations: Del Mar College, CoreRecon, Texas Coastal Bend ISSA and Workforce Solutions of Coastal Bend.

Below is a list of the partnering organizations and their anticipated roles for the grant program:

• Del Mar College: Del Mar College will allow a student to combine high school courses and college-level courses towards credentials and certification as well as provide students the opportunity to earn an industry certification or credential in a STEM-focused field. Del Mar College will work with the district to develop a crosswalk detailing how students will progress towards this goal including alignment of high school and college-level courses.

• CoreRecon: CoreRecon will help provide more real-world experiences to students through project or problem-based learning challenges. Teachers will also visit with employers to gain insight on teaching strategies to be implemented in the classroom. Additionally, CoreRecon will provide documentation of entry-level knowledge, skills, and abilities of a student, as well as capture and monitor student growth throughout the grant program. Moreover, the district will work with each of the organizations above and include a list of each member's title and role on the district's website.

• Texas Coastal Bend ISSA (Information Systems Security Association): ISSA will help provide support and guidance to the district in guest presentations and workshops; career mentoring, work-based learning and industry networking.

• Workforce Solutions of Coastal Bend: The development board will identify, create, and maintain a list of in-demand STEM occupations and programs of study that lead to these occupations to be used as a resource in creating structured pathways for students and updated as local needs change.

5. Identify the type of advanced courses (dual credit/AP/IB) currently implemented on the campus. Has the district identified what postsecondary credit will be available to students through the computer science, cybersecurity, and engineering programs?

Falfurrias High School currently offers the following advanced courses through its partnerships with Texas A&M University-Kingsville, Coastal Bend College and Del Mar College:

- EDUC 1300: Dual Credit HS Teacher
- ENGL 2342: Dual Credit TAMUK Instructor
- MATH 1314: Dual Credit TAMUK Instructor
- ENGL 1300: Dual Credit TAMUK Instructor
- HIST 1301: Dual Credit TAMUK Instructor
- SOCIO 1300: Dual Credit CBC Instructor
- ART 1301: Dual Credit CBC Instructor
- COMM 1311: Dual Credit CBC Instructor
- WELD 1313 & 1428 (Fall): Dual Credit CBC Instructor
- WELD 1421 & 1428 (Spring): Dual Credit CBC Instructor/High School Instructor
- WLDG 1407, 1435, 1521 & 1557: Dual Credit DMC Instructor

Through its partnership with Del Mar College, students will be able to receive college credit for the cybersecurity courses they pass. Upon successful completion of all the courses, students will receive a certificate in Networking Technology-Cisco.

#### Statutory/Program Requirements, (cont.)

6. Describe any planned STEM-focused informal activities (field experiences, clubs, competitions, summer STEM camp, etc.) that will be offered to students, whether they are offered by the school or by a community partner.

Students who enroll in the Lone Star Academy will take part in STEM-focused informal activities to ensure they understand the connection between their work-based learning and academics.

These activities include but are not limited to:

• Tournaments conducted by Technology Student Association and CyberPatriot;

• Cybersecurity and information technology (IT) tours conducted by Del Mar College; and

• Trips (physical or virtual) to CoreRecon for career mentoring, job shadowing, and work-based learning experiences.

Additionally, a summer bridge program will also be offered through this program.

Lastly, to support academics as well as college and career readiness, the district will provide after-school and Saturday tutoring if necessary (on campus or remotely). During this time, college readiness and dedicated college application assistance to students will be provided.

7. Describe the Academy's plans for implementing an interdisciplinary approach to learning where academic concepts are coupled with real-world experiences through Project or Problem Based Learning (PBL) and/or Engineering Design Challenges that are offered regularly throughout the school year. Please include how the Academy will support and develop teachers in offering this, including considerations for scheduling, professional development, and structures for cross-disciplinary collaboration.

Brooks County ISD, with assistance by CoreRecon, will implement an interdisciplinary approach to learning that offers realworld experiences to students through project-based learning. This student-centered approach will allow students to learn about a subject by working in groups, teams, etc. to solve an open-ended problem.

Furthermore, to ensure that each individual student is ready to take on more rigorous classes, the district will biannually implement a structured data review process designed to identify student strengths and weaknesses and develop instructional support plans to ensure students are ready to succeed on TSI, SAT, ACT and other college-ready tests. These tests as well as the school's T-STEM benchmarks will be posted on the district's website (as required by TEA), and the students will be notified of when the test is scheduled.

The district will also implement an annual professional development plan for teachers and staff that focuses on researchbased instructional strategies that teach about rigor, building college and career readiness, and STEM skills. These strategies can come up in some of the following activities: an externship program, summer research experiences, regularly scheduled peer observations/collaborations with focus groups, industry partner, and IHE partner, etc. Teachers will also visit with employers to gain insight on teaching strategies to be implemented in the classroom.

8. Describe how the district plans to recruit, retain, and support historically underrepresented populations in STEM (e.g, females, economically disadvantaged, at-risk, etc...).

Brooks County ISD will make an intentional effort to reach the historically underrepresented STEM populations of females, economically disadvantaged, and at risk when it recruits students. If the Lone Star Academy has more applicants than available space, the district will hold a lottery that will give more weight to students who are female, economically disadvantaged, and/or at risk. All students and their guardians will need to sign a letter of commitment. Should students have difficulty with the program, the faculty will provide the necessary support services for success.

9. Does the applicant plan to develop or extend an engineering program as well as a computer science or cybersecurity program?

The district does not plan to extend its engineering program but will develop a cybersecurity program.

10. Does the applicant have at least one teacher certified to teach computer science?

Falfurrias Junior High and Falfurrias High School do not have a teacher certified to teach computer science.

11. Does the applicant have at least one teacher certified to teach cybersecurity?

Falfurrias Junior High and Falfurrias High School do not have a teacher certified to teach cybersecurity.

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Equitable Access and Participation	
Check the appropriate box below to indicate	whether any barriers exist to equitable access and participation for any groups
that receive services funded by this program	
The applicant assures that no barriers	exist to equitable access and participation for any groups receiving services
• funded by this program.	
	articipation for the following groups receiving services funded by this grant, as
described below.	

Group	Barrier
Group	Barrier
Group	Barrier
Group	Barrier

#### **PNP Equitable Services**

Are any private nonprofit schools located within the applicant's boundaries?

⊖Yes ⊖No

If you answered "No" to the preceding question, stop here. You have completed the section. Proceed to the next page.

 $\bigcirc$  Yes  $\bigcirc$  No

If you answered "No" to the preceding question, stop here. You have completed the section. Proceed to the next page.

5/	A: Assurances
	The LEA assures that it discussed all consultation requirements as listed in Section 1117(b)(1) and/or
	The LEA assures that it discussed all consultation requirements as listed in Section 1117(b)(1) and/or Section 8501(c)(1), as applicable, with all eligible private nonprofit schools located within the LEA's boundaries.
	The LEA assures the appropriate Affirmations of Consultation will be provided to TEA's PNP Ombudsman in the

 $\square$  manner and time requested.

### 5B: Equitable Services Calculation

1. LEA's student enrollment

2. Enrollment of all participating private schools

3. Total enrollment of LEA and all participating PNPs (line 1 plus line 2)

4. Total current-year program allocation

5. LEA reservation for direct administrative costs, not to exceed the program's defined limit

6. Total LEA amount for provision of ESSA PNP equitable services (line 4 minus line 5)

7. Per-pupil LEA amount for provision of ESSA PNP equitable services (line 6 divided by line 3)

LEA's total required ESSA PNP equitable services reservation (line 7 times line 2)

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#### Appendix I: Amendment Description and Purpose (leave this section blank when completing the initial application for funding)

An amendment must be submitted when the program plan or budget is altered for the reasons described in the "When to Amend the Application" document posted on the <u>Administering a Grant</u> page. The following are required to be submitted for an amendment: (1) Page 1 of the application with updated contact information and current authorized official's signature and date, (2) Appendix I with changes identified and described, (3) all updated sections of the application or budget affected by the changes identified below, and, if applicable, (4) Amended Budget Request. Amendment Instructions with more details can be found on the last tab of the budget template.

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