# CALIFORNIA STATE LIBRARY LIBRARY SERVICES AND TECHNOLOGY ACT (LSTA) FISCAL YEAR 2017/2018 PITCH-AN-IDEA GRANT APPLICATION

**ELEMENT 1: BASIC INFORMATION (please see application instructions for additional information) Applicant Information** Library/Organization **Library's DUNS Number** Pasadena Public Library 0289 00439 **3. Legal Business Name** (must match name registered with Federal Employer Identification Number (FEIN)) Pasadena Pub lic Library 4. **Project Coordinator Name Project Coordinator Title** Tim McDonald Principal Librarian **Email Address Business Phone Number** 6. tmcdonald@cityofpasadena.net 626-744-2867 City 8. **Mailing Address** State Zip 285 East Walnut Street Pasadena CA 91101 **Project Information** 9. **Project Title** STEAM 18 10. **LSTA Funds Requested** \$100,000 11. Cash Match & In-Kind \$92,500 **12. Total Project Cost** \$192,500 **13.** California's LSTA Goals (Check one goal that best describes the project) Literate California **Bridging the Digital Divide** 21<sup>st</sup> Century Skills **Information Connections** 22<sup>nd</sup> Century Tools **Community Connections Content Creation/Preservation Ensuring Library Access for All** 14. **Primary Audience for project** (Select all that apply.) **Pre-School Children Adults Families Rural Populations** Immigrants/Refugees **School Age Children Intergenerational Groups (Excluding Families) Senior Citizens** Library Staff, Volunteers and/or Trustees **Statewide Public Low Income Suburban Populations Non/Limited English Speaking Persons** Unemployed **People with Disabilities Urban Populations People with Limited Functional Literacy Young Adults and Teens** 

#### **ELEMENT 2: PROJECT BACKGROUND AND SUMMARY**

Describe how this project was identified as a need, how it relates to your library's strategic plan, what will be accomplished if this project is implemented, and how you will know whether your project is successful. Summary should relate to activities in the timeline (Element 4) and include statistical information to support the project.

In 2018, COSPAR (Committee on Space Research of the International Council of Scientific Unions) International Conference will be held in Pasadena at the Pasadena Convention Center and hosted by Caltech. As a result, 2018 has been designated as the year of STEAM in Pasadena. A Citywide committee that includes almost every educational, cultural, and art institution has formed a partnership to create a year of STEAM programming for the Pasadena community. Community institutions and groups include, Pasadena Library, Pasadena Unified School District, Caltech, Art Center, Pasadena Museum of History, Collaborate PASadena, KidsSpace Children's Museum, Pasadena Convention Center, Pasadena Cultural Affairs, Carnegie Observatory, to name a few.

Pasadena Library proposes the STEAM 18 grant in order to play a lead role in the activities surrounding the STEAM 18 initiative in Pasadena. With this international conference coming into Pasadena, the opportunity for all the educational, cultural, and art related institutions to work together and take advantage of the press and coverage surrounding this conference is one not to be missed. It is also exciting to offer STEAM related programming for the community that is accessible and not just for those who attend the highly scientific conference. STEAM programming is a national priority (and was for the previous Washington administration) for young children, and especially for girls and lower income children. Pasadena is a very diverse community in terms of ethnicity and income. There is a definite spirit of collaboration and collective impact in Pasadena which is why the STEAM 18 project will be a success, which is evidenced by the dozen organizations coming together a year in advance to plan for this endeavor.

Pasadena Library will work with the aforementioned organizations to offer programs at each of the ten Pasadena Libraries and throughout the community. Programs will include - STEAM kits that will serve as a floating collection that can rotate throughout the Pasadena Libraries, to classrooms, and to outreach events (such as Rokenbok mobile STEM labs); a dedicated STEAM space at one of the libraries (either stationary at Central or mobile throughout the branches) for the duration of the STEAM 18 project (this will serve as a pilot to determine if this space should be made permanent at the Central Library or perhaps move into one of the branch libraries); science and art programs for youth and adults at each of the Pasadena Libraries and outreach events including some featuring experts from Caltech and Art Center College of Design; work with Caltech to provide outreach programming at their family events; and culminate in a Citywide Festival to celebrate STEAM 18 (i.e. a "Know it All Festival" or "DIY Day", etc.) STEM and art programs are already popular at the Pasadena Libraries, but they are one off programs. Creating a more regular lineup will benefit the youth in the community as a regular afterschool opportunity.

There are about 10 community supporters already on board for STEAM 18. Whereas all are on the Citywide committee to create a year of STEAM programming, only collaborations that have been fleshed out are mentioned below. The rest will be outlined in the upcoming months.

- 1. Caltech / JPL will work with library staff on lending experts to library programs as well as open up space on their campus to for library programs (for more family-oriented audience).
- 2. Pasadena Museum of History a library staff member is curating an exhibit for the Museum of History "Where Science Meets Science Fiction" (for example, the satellite was first imagined by Arthur C. Clarke in a novel, now we use them everyday).
- 3. Art Center work with Art Center students on programs at Art Center and at the Libraries to enahnce their events and Libraries.
- 4. Collaborate PASadena work with CP to identify additional partners and connect the dots to more science institutions.
- 5. Carnegie Laboratories work with observatory on programs for the community in conjunction with 100" telescope.

# **ELEMENT 3: PARTNERSHIPS**

Please list all formal partners for your project here. Please attach (under Element 7) a copy of your signed agreement with each partner, which outlines the role the partner will play and the resources the partner will contribute.

Partner Name	Organization Type (see instructions for valid entries)	Legal Type (see instructions for valid entries)	Role on Project	Resources That Partner Will Contribute (materials/funds/staff)

#### **ELEMENT 4: PLANNING AND EVALUATION**

Please answer each area concisely and completely. For section A-F limit responses to four pages.

A.	Project Intent (Check only one that best describes the project)
	Lifelong Learning
	☐ Improve users' formal education
	☐ Improve users' general knowledge and skills
	Information Access
	Improve users' ability to discover information
	Improve users' ability to obtain information resources
	Institutional Capacity
	Improve the library workforce
	<ul> <li>Improve the library's physical and technology infrastructure</li> <li>Improve library's operations</li> </ul>
	Economic & Employment Development
	Improve users' ability to use resources and apply information for employment support
	Improve users' ability to use and apply business resources
	Human Services
	Improve users' ability to apply information that furthers their personal, family, or household finances
	Improve users' ability to apply information that furthers their personal or family health & wellness
	Improve users' ability to apply information that furthers their parenting and family skills
	Civic engagement
	Improve users' ability to participate in their community Improve users' ability to participate in community conversation around topics of concern
	improve users ability to participate in community conversation around topics of concern
B.	Project Purpose – Short statement which answers the questions: we will do what, for whom, for what expected
	benefit(s).
	Pasadena Library has joined a citywide coalition to collaborate on STEAM programs for the Pasadena community in
	2018 to coincide with an international science conference that Pasadena, Caltech, and JPL will host in 2018.
	Pasadena Public Library and its community supporters will plan and present a year-long series of STEAM
	programming for the Pasadena community and surrounding areas. Programs will be for all ages and stages and will halp the community learn shout and feel more confident with STEAM related tonics.
~	help the community learn about and feel more confident with STEAM related topics.
C.	Anticipated Project Outputs – Measures of services and/or products to be created/provided.
	30 programs throughout the libraries during grant period. At least 15 -20 will attend each Library program (450-600) - smaller sizes for science and art programs.
	7 outreach visits - At least 30-50 will attend each outreach event (210-350).
	At least 400-500 people will attend the Finale event
	At least 20 flyers and 20 banners will be created
	At least 15 library staff will be trained to use STEAM equipment
D.	Anticipated Project Outcome(s) – What change is expected in the target audience's skills, knowledge, behavior, attitude, and/or status/life condition? How will you measure these outcomes? (for examples see

attachment B of the application instructions) At least 60% of participants in programs offerered at the Libraries will see an increased knowledge in STEAM related

subjects. This will be measured through pre/post surveys and by asking questions like "On a scale of 1-5, how much do you know about robotics / architecture / circuitry / 3-D / etc." Programs done for the youngest audiences will rely on data from parents and anecdotal observation.

At least 25% of the participants at programs conducted through outreach will show an increase in knowledge in STEAM related subjects. These programs will be measured through some surveying but mostly observation and anecdotal (depending on the structure of the event). Questions asked will be similar to above.

At least 40% of participants attending Library programs will show an increased confidence in understanding/participating in STEAM programs. This will be measured through surveys and observation. Questions for parents include "on a scale of 1-5, how confident are you with explaining / working with your child on STEAM

Briefly describe how this project will be financially supported in the future. E.

Once materials and equipment have been purchased and staff is trained on how to use them, programs will continue beyond the scope of the grant. Whereas the grant period ends in August, the Library will continue to provide programming for in support of STEAM 18 until December 2018. Library staff will be able to utilize the kits and equipment during their regular library programs throughout the years ahead. The Friends of the Pasadena Library have also been very supportive of continuing grant funded programs (i.e. The Friends have supported the Born to Read Program now for the 3rd year after the LSTA grant).

a w	ccon ill ca	ipli arry	Information. Activities are action(s) through which the intent or objective of a project are shed. Four activity types have been identified, each with select methods to help you describe how you out this project. Indicate activity types that require a significant commitment of resources to the representing 10% or more of total project resources).				
1.	. [		<b>ction</b> - Involves an interaction for knowledge or skill transfer and how learning is delivered or enced. ( <i>Check all that apply and provide a description including whether the format will be invivide, virtual, or both</i> )				
			Program - Formal interaction and active user engagement (e.g., a class on computer skills).				
			Presentation - Formal interaction and passive user engagement (e.g., an author's talk),				
			Consultation - Informal interaction with an individual or group of individuals (library staff or other professional) who provide expert advice or reference services to individuals, units, or organizations.				
			Other				
	r aut	hor	e and their work. There will also be some programs that bring both of these together - bringing in an expert and then a hands on skill building portion to the program.  Content - Involves the acquisition, development, or transfer of information and how information is made accessible. (Check all that apply and provide a description including whether the format will be physical, digital, or both)				
			<ul> <li>Acquisition - Selecting, ordering, and receiving materials for library or archival collections by purchase, exchange, or gift, which may include budgeting and negotiating with outside agencies (i.e. publishers, vendors) to obtain resources. May also include procuring software or hardware for the purposes of storing and/or retrieving information or enabling the act of experiencing, manipulating, or otherwise interacting with an information resource.</li> </ul>				
			Creation - Design or production of an information tool or resource (e.g., digital objects, curricula, manuals). Includes digitization or the process of converting data to digital format for processing by a computer.				
			Description - Apply standardized descriptive information and/or apply such information in a standardized format to items or groups of items in a collection for purposes of intellectual control, organization, and retrieval.				

Lending - Provision of a library's resources and collections through the circulation of materials (general circulation, reserves). May also refer to the physical or electronic delivery of documents from a library collection to the residence or place of business of a library user, upon request.

		Preservation - Effort that extends the life or use life of a living or non-living collection, the individual items or entities included in a collection, or a structure, building or site by reducing the likelihood or speed of deterioration.
		Other
Descrip	otion:	
	•	
3.	and	ning & Evaluation - Involves design, development, or assessment of operations, services, or resources when information is collected, analyzed, and/or disseminated. ( <i>Check all that apply and provide a ription including whether the format will be in-house or third-party</i> )
		Retrospective - Research effort that involves historical assessments of the condition of a project, program, service, operation, resource and/or user group.
		Prospective - Research effort that projects or forecasts a future condition of a project, program, service, operation, resource, and/or user group.
Descrip	otion:	
4.	facil	<b>curement</b> – May only be used for projects with an Institutional Capacity Intent. Acquiring or leasing ities; purchasing equipment/supplies, hardware/software, or other materials (not content) that support aral library infrastructure. ( <i>Provide a description</i> )
Descrip	otion:	

### **ELEMENT 5: GRANT TIMELINE/ACTIVITIES**

Show each major project activity and when it will be started and/or completed throughout the project. The timeline should correspond to the activities

described in Planning and Evaluation. Please put an X in each pertaining month.

described in Planning and Evaluation. Please put an X in ea	July		Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
Work with STEAM 18 team to plan year-long lineup of			•											
activities	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Begin developing marketing and promotional pieces	X	X	X	X	X	X								
Identify and purchase equipment and supplies for grant														
programs	X	X	X	X	X	X								<u> </u>
Finalize citywide programming lineup			X	X	X	X								
Finalize library programming lineup				X	X	X								
Finalize and begin to distribute marketing materials						X	X	X						
Pilot a couple of programs at libraries to test success and to arket STEAM 18						X								
Begin offering bimonthly programs at the libraries (30 programs)							X	X	X	X	X	X	X	
Begin offering outreach programs								X	X	X	X	X		
Begin planning finale								X	X	X	X	X		
Begin collecting data outcomes								X	X	X	X	X		
Finale													X	
Review outcomes and complete reporting													X	X

#### **ELEMENT6: BUDGET**

The budget should clearly identify the amounts requested and from what sources.

Budget Category	LSTA	Cash Match & In-Kind	Total
Salaries/Wages/Benefits			
Librarian - Backfill time	\$7,500	\$0	\$7,500
Librarian & Library Technican	\$0	\$37,500	\$37,500
	\$0	\$0	\$0
Community Supporters	\$0	\$20,000	\$20,000
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
Subtotal	\$7,500	\$57,500	\$65,000

### **Description:**

Librarian -  $\$30 \times 250 \text{ hrs} = \$7,500 \text{ - will be used to backfill librarian and library technician time on public service desks while they are planning and conducting programs / outreach.$ 

Librarian / Library Technician - \$50 x 750hrs - \$37,500 - staff time to procure, plan, and present programs.

Community Supporters - we are factoring approximately \$20,000 for community supporters that will support our programs. These are people from CalTech, Art Center, Carnegie Labs, Museum of History, etc. They will work with us on programs and will have their own programs that support this effort. Since some of these are salaried, some non-profit, it is difficult to come up with an accurate number. \*\*Throughout this project, we will document the meetings and collaborative programs/events that are part of STEAM 18. We will ask the community supporters to estimate their time spent on anything collaborative that is done with the library. This will be documented in the final report.

Consultant Fees			
Staff Training	\$3,000	\$0	\$3,000
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
Subtotal	\$3,000	\$0	\$3,000

#### **Description:**

Staff Training - Trainer(s) to be identified to instruct staff in use of new equipment and training to carry out STEAM related programs. We are anticipating three trainers at \$1,000 each for three sessions. Whereas we have not identified the trainers as yet, we will base the training on the equipment we purchase. We are hoping to find training for little to no cost through our community supporters, but if not, we will rely on paid trainers. If we are unable to find the exact training we need, we will also explore the possibility of training through something like Techshop.

Budget Category	LSTA	Cash Match & In-Kind	Total
Travel			
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0

#### **Description:**

Supplies/Materials			
Furniture for STEAM Lab	\$15,000	\$10,000	\$25,000
Materials	\$2,000	\$20,000	\$22,000
Programming Supplies	\$12,500	\$0	\$12,500
Equipment for Programs	\$50,000	\$0	\$50,000
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
	\$0	\$0	\$0
Subtotal	\$79,500	\$30,000	\$109,500

### **Description:**

Furniture - stationary and mobile furniture. Since some of these programs will be at the branches, we want some furniture that is mobile enough to move around as needed, and even to take to outreach visits. Furniture can include Robotics Workbench by Worthington (can be used for more than robotics, mobile) - \$1,650\*4 (+ tax/delivery)=\$8,000 | Mobile sewing machine carts - \$350\*4(+ tax/delivery)=\$2,000 | Maker Carts from TeacherGeek - \$6,500\*2 (+tax/delivery) = \$16,000 | 3-D printer carts \$608\*4(+tax/delivery)=\$3,500. This is over the budget, but we hope to bring price down.

Materials - books and media to support STEAM related materials.

Programming Supplies - art supplies, robotics, squishy circuits, LEGO, etc. TeacherGeek.com

Equipment for Programs - Rokenbok (\$1800\*2 per lib)=\$36,000 +tax/delivery=\$41,000 | vacuform machines (\$900\*2)+tax/delivery=\$2,200 | 3D printers (\$1,000\*5)+tax/delivery=\$6,000 | Sewing Machines (\$150\*12)+tax/delivery=\$2,500 | Art Easels or Benches (\$125\*12)+tax/delivery=\$2,000

Budget Category		LSTA	Cash Match & In-Kind	Total
Equipment (\$5,000 or more per unit)				
		\$0	\$0	\$0
		\$0	\$0	\$0
		\$0	\$0	\$0
		\$0	\$0	\$0
	Subtotal	\$0	\$0	\$0
Same and				
		\$10,000	\$5,000	\$15,000
		\$10,000	\$5,000	\$15,000
		\$0	\$0	\$0
		\$0 \$0	\$0 \$0	\$0 \$0
		\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0
		\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0
Services  Marketing / Promotional Materials		\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0

## **Description:**

Marketing & Promotion - graphic designer fees and printing. \$85p/h for graphic design. Estimate 2 hours per flyer \* 20 flyers = \$3,500. Design of logo and overall look for STEAM 18 -\$85p/h \* 40=\$3,400. Design of banners for each library and community supporter site - \$85p/h\*5=\$425. Flyer printing - \$250 p/1000\*20=\$5000 (this is an average - we will do more of the large events and fewer for the small events). Banner printing - \$200p/banner \* 20 (10 libraries+10 offsite)=\$4000

Subtotal

We are a little over here, but I am hoping volume will bring cost down a little. Also, we are limited to using the City's Print Shop for all this work (hence the cost).

	Project Total	\$100,000	\$92,500	\$192,500				
<b>Indirect Cost Rate Applied</b> (	0.0 % Indirect Cost	\$0	\$0	\$0				
Check one:								
* please attach supporting docume	entation if required							
Description:								
	Grand Total	\$100,000	\$92,500	\$192,500				

\$0

\$0

\$5,000

\$0

\$0

\$10,000

\$0

\$0

\$15,000

# **ELEMENT 7: ATTACHMENTS**

If you have additional resources that support your grant, please attach after this page

			NET CERTIFICATIO e Library Type	)N		
	Public	c Library	☐ Academic	☐ K-12	☐ Multi-Type	☐ Special/Other
		•			public elementary school lib orary is (check only one of to	5 1
A.		An individu	al applicant that is CIP	'A compliant.		
					ary school library or public of the Library Services and	
В.			g a group of applicants y are CIPA compliant.	s. Those applicants t	hat are subject to CIPA re	equirements have
		application had Act. The library who are subj	have complied with the reary submitting this appli	equirements of Section location has collected locations. The library will ke	I public secondary school li on 9134(f)(1) of the Library Internet Safety Certification ep these certifications on files.	Services and Technology s from all other applicants
C.		The CIPA re	1 11 1	because no funds ma	nde available under this LST to pay for direct costs assoc	
	SNATI		rt this LSTA Grant Ap	plication.		
Pasa	adena l	Public Library	1	STI	EAM 18	
		Organization			ject Name	
	helle I				ector of Libraries & Informa	ation Services
Lib	rary I	Director Nam	e	Tit	e	
					May 30,2018	
Lib	rary I	Director Sign	ature		Date	