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 Mill Valley Public Library 798742529 **3. Legal Business Name** (must match name registered with Federal Employer Identification Number (FEIN)) City of Mill Valley 4. **Project Coordinator Name Project Coordinator Title** Cate Mayfield History Room Librarian **Email Address Business Phone Number** 6. cmayfield@cityofmillvalley.org 415-389-4292, ext. 4738 8. **Mailing Address** City State Zip 375 Throckmorton Ave. Mill Valley CA 94941 **Project Information** 9. **Project Title** Building History in 3D 10. **LSTA Funds Requested** \$22,393 11. Cash Match & In-Kind \$20,067 **12. Total Project Cost** \$42,460 13. California's LSTA Goals (Check one goal that best describes the project) Literate California **Bridging the Digital Divide** 21st Century Skills **Information Connections** 22nd Century Tools **Community Connections Content Creation/Preservation Ensuring Library Access for All Primary Audience for project** (Select all that apply.) 14. **Adults Pre-School Children 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 2015, the Library became aware that a startup developer and former History Room docent was building "TimeWalk," a historical virtual world of Mill Valley, featuring 3D models of buildings, objects, and people. Seeing this project as an exciting vehicle for exploring local history, the Library started collaborating with the developer by researching photos and information needed to design 3D models of local buildings. Inspired by a YALSA prompt for innovative teen digital literacy programming, we conceived of the idea for "Building History in 3D".

Through a combination of instruction and workshop time, and using research from our History Room, young adults will learn 3D modeling skills to create buildings for TimeWalk. They will also receive an introduction to Unity, the game development platform where the 3D models live. Through this project, young adults will learn new technology skills while actively contributing to a model that will be used to share local history.

In surveying local offerings, and in discussions with teens, parents, and teachers, we determined that though there is very high interest, there are limited opportunities locally for teens to advance their technological skills. Through our program experience and working with a Teen Advisory Board, we also learned that teens want meaningful opportunities to give back to the community. Building History in 3D supports both the interest in advanced technology and the desire for meaningful opportunities to give back. Tech skills are in high demand by employers. An American Association of Colleges and Universities survey indicated only 37 percent of employers surveyed consider recent college graduates well prepared to stay on top of new technologies [1]. According to data from Change the Equation, a nonprofit advocating for K-12 STEM literacy, STEM jobs in California are poised to see 15% growth between 2017 and 2027, compared to 11% growth for all other jobs [2]. Building History in 3D offers teens innovative ways to learn more about emerging technologies and applications. 3D modeling skills can serve as a jumping-off point to explore an interest and possible careers in video game design, architecture, engineering, film, and other industries.

To bring "Building History in 3D" into action, a Unity project manager/instructor will prepare the TimeWalk template, and together with a 3D modeling instructor we will design an instructional plan that will be implemented over two cycles. A fall cycle will include a set of three classes held at the local high school (Tamalpais High) in collaboration with the school's Applied Technology department. Another set of three classes will be held at the Mill Valley Public Library and will be open more broadly to the young adult public. In addition to the classes, 12 drop-in workshop sessions will be open to all students. We will evaluate the program at the end of the fall cycle and determine if additional classes will take place at the high school in the spring. At this time we will plan for the spring cycle to include a set of three classes and 12 drop-ins held at our library.

The project aligns with three goals in the Library's 2015-2020 Strategic Plan: the Library will be a place where "people can find intellectual and personal fulfillment," where "programs, services, and materials address the changing needs of the community" and where "local history is preserved, showcased, and celebrated through the Lucretia Little History Room" [3]. Program outputs such as having the TimeWalk virtual world populated with 20-30 3D models, and the creation of physical 3D printed models of students' digital creations, would be true showcases of local history. Seeing the attainment of these goals, by hosting an exhibition event, for example, and making TimeWalk available for exploring in the Library and viewing online, would be indications of program success. Assessment of our outputs and outcomes at the end of each cycle, and during the cycles in some cases, will be crucial to determining whether or not our program has been successful. If implemented, the project will have offered a truly unique learning experience for local young adults. Students will learn new technology skills and actively contribute to a growing model of historical Mill Valley, bettering the community's understanding of their town's past and strengthening their own connection to the local community. We plan to create innovative ways of sharing the project locally, and in addition, sharing the concept more broadly will be a key component of this program. By creating a template and toolkit, we will help other libraries replicate this program and serve as content creators in their own communities.

- [1] Association of American Colleges and Universities (2015). "Falling Short? College Learning and Career Success." https://www.aacu.org/leap/public-opinion-research/2015-survey-results
- [2] Change the Equation (2017). "Stem Demand." http://vitalsigns.changetheequation.org/state/California/demand
- [3] Mill Valley Public Library (2015-2020). Five Year Strategic Plan.

http://www.cityofmillvalley.org/civicax/filebank/blobdload.aspx?BlobID=23456

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)
Mill Valley Historical Society	Historical Society	Non-Profit	Provide research support; help promote the project to increase broad participation; help showcase completed projects and bring greater awareness to TimeWalk/Building History in 3D	Will contribute Historical Society board member staffing/time to provide the roles listed at left.
Tamalpais High School	School	School District	Host series of fall classes at Tamalpais High School in conjunction with one course from school's Applied Technology department; provide funding for classes held at Tam; help increase student participation by promoting an additional set of classes held at the Library	Will contribute class time and computer lab; staff time helping to promote project; \$750 in in-kind funding for fall classes to be held at Tam

ELEMENT 4: PLANNING AND EVALUATION

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

Α.	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
	Improve the library's physical and technology infrastructure
	☐ Improve library's operations
	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

B. Project Purpose – Short statement which answers the questions: we will do what, for whom, for what expected benefit(s).

The Mill Valley Public Library's "Building History in 3D" program will teach young adults new technology skills and invite them learn about and contribute to the sharing of local history. Through a combination of instruction and workshop time, students will learn 3D modeling skills to create buildings within a growing virtual model of Mill Valley as it was in the past. Students will also gain an introduction to Unity, the game development engine where the models will live. We expect students will see an increase in their technology skills and feel a deeper connection to local history and their town by having actively contributed to a model that will be shared with the Mill Valley community and beyond.

C. Anticipated Project Outputs – Measures of services and/or products to be created/provided.

- 40-60 young adult participants
- 20-30 3D models of historical structures created by participants
- 20-30 3D printed versions of the 3D models
- 20-30 brief annotations or blog posts about the history of each 3D model, to be featured online and in the virtual world
- 1 Unity-based 3D virtual world of historical Mill Valley with all 3D models imported and available for viewing and exploring by participants and the public. The Unity program will run on a dedicated computer in the History Room at the Library, with an Oculus Rift virtual reality headset allowing users to explore TimeWalk in a more immersive way. A video of the virtual world will also be made available online.
- 1 free toolkit and template for other libraries and historical organizations will be created and made available online
- 500 percent increase in young adult visits to the History Room over the total duration of the grant period as compared to the same period the previous year
- 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)

- 75 percent of participants will improve their technology skills
- 75 percent of participants will feel more comfortable using 3D modeling software
- 60 percent of participants will increase their knowledge of Unity gaming software
- 60 percent of participants will increase their knowledge of industries and career paths that incorporate 3D modeling
- 70 percent of participants will become more aware of local history resources
- 60 percent of participants will be more comfortable visiting the History Room
- 70 percent of participants will feel they've both benefited from their participation in the program and see their participation as being meaningful to the community
- 50 percent of History Room staff will increase their knowledge about 3D printing, 3D modeling and virtual reality
- Library staff will become more proactive in seeking other opportunities to partner with the local high school, other high schools, or young adult organizations, by reaching out to at least three teachers or contacts during the grant period
- After seeing and learning about the 3D printed models created in Cycle 1 of the program, at least 80 third grade visitors touring the History Room will express interest in coming back, either alone or with their families Outcomes will be measured through surveys, questionnaires, self-reporting, and observation.
- E. Briefly describe how this project will be financially supported in the future.

digital, or both)

If the project is successful, the Library would plan to integrate "Building History in 3D" into our regular programming, continue building TimeWalk, and commit staff time to managing the program and conducting outreach to share the program toolkit and template with other libraries. The Mill Valley Public Library has very active, involved support groups. The Mill Valley Library Foundation provides support for teen programming, and both the Foundation and Friends of the Library support technology-related programming.

F. Activity Information. Activities are action(s) through which the intent or objective of a project are accomplished. Four activity types have been identified, each with select methods to help you describe how you will carry out this project. Indicate activity types that require a significant commitment of resources to the project (representing 10% or more of total project resources).

Instruction - Involves an interaction for knowledge or skill transfer and how learning is delivered or

_		rienced. (Check all that apply and provide a description including whether the format will be <u>in-</u> on, virtual, or both
	\boxtimes	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
developn	nent in	ogram will be in person and will include instruction from: a 3D modeling instructor; Unity game structor. History Room Librarian and History Room staff/docents will also provide instruction on earch in the History Room.
_		
$2.$ \times	Cont	ent - 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,

		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.				
		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 informatio standardized format to items or groups of items in a collection for purposes of intellection organization, and retrieval.						
	Lending - Provision of a library's resources and collections through the circulation of materia (general circulation, reserves). May also refer to the physical or electronic delivery of docume 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				
virtual real printed and to accompa	lity w d exhi any e	formation will be made available both physically and digitally. In addition to the digital TimeWalk forld that will be shared and made available in the Library and online, physical 3D models will be libited. Annotations or written posts about each building will also be made available online and printed whibited physical models.				
	y. Wi	3D models of local historical buildings will be created and imported into a virtual reality world of ll create a template and toolkit so that other libraries/communities can launch similar projects and history.				
models of	build	reating 3D models of local structures is a means of preservation. Students will in many cases create ings that have been greatly changed over the years. Further into the future, some of these buildings altogether, but the students' models will serve as a reminder of what existed.				
a	and w	Aing & Evaluation - Involves design, development, or assessment of operations, services, or resources then information is collected, analyzed, and/or disseminated. (<i>Check all that apply and provide a iption 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.				
used to infe	orm a	idents will be surveyed at the end of each cycle. Evaluation of survey results by a librarian will be any modifications to future cycles. Instructors and any consultants involved in the project will be owing each cycle to improve the design of the program and instruction.				
f	acilit genera	arement – May only be used for projects with an Institutional Capacity Intent. Acquiring or leasing ies; purchasing equipment/supplies, hardware/software, or other materials (not content) that support al library infrastructure. (<i>Provide a description</i>)				
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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 each pertaining month.														
Activity	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
Contract with a Unity project manager/instructor and 3D modeling instructor	X	X												
Plan schedule of instruction and workshop time	X	X												
Prepare infrastructure for project - prep TimeWalk template, design instruction	X	X												
Create recruitment plan and marketing materials	X	X												
Create pre- and post-surveys for program evaluation		X												
Begin outreach and register participants for Cycle 1		X	X											
Cycle 1 (Tam and Library instructional sessions, drop ins)			X	X	X	X								
Begin outreach and register participants for Cycle 2						X	X	X						
Share Cycle 1 virtual town and printed 3D models with community								X	X	X	X	X	X	X
Compile and review evaluation results, and adjust plan for Cycle 2 as necessary						X	X							
Cycle 2 (Library instructional sessions, drop ins; Tam sessions if Cycle 1 successful								X	X	X	X			
Add Cycle 2 buildings to virtual town, share that plus printed models with community												X	X	X
Create template and toolkit for other libraries									X	X	X	X		
Evaluate Cycle 2 and program as a whole												X	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			
Program development - 80 hours	\$1,345	\$1,339	\$2,684
Project Management - 80 hours	\$1,345	\$1,339	\$2,684
Outreach - 40 hours	\$336	\$1,004	\$1,340
Toolkit creation - 30 hours	\$336	\$670	\$1,006
Branding creation and publicity work - 40 hours	\$0	\$965	\$965
Lab set up and assistance - 90 hours	\$2,172	\$0	\$2,172
	\$0	\$0	\$0
	\$0	\$0	\$0
Subtotal	\$5,534	\$5,317	\$10,851

Description:

Program development - 40 in-kind hours (.022 FTE) History Room Libriarian @ \$33.48/hr and 40 backfill hours (.022 FTE) Librarian @ \$33.63/hr

Project management - 40 in-kind hours (.022 FTE) History Room Librarian @ \$33.48/hr and 40 backfill hours (.022 FTE) Librarian @ \$33.63/hr

Outreach - 30 in-kind hours (.017 FTE) History Room Librarian @ \$33.48/hr and 10 backfill hours (.006 FTE) Librarian @ \$33.63/hr

Toolkit Creation - 20 in-kind hours (.011 FTE) History Room Librarian @ \$33.48/hr and 10 backfill hours (.006 FTE) Librarian @ \$33.63/hr

Branding & publicity work - 40 in-kind hours (.022 FTE) Library Assistant @ \$24.13/hr

Lab set up and assistance - 90 hours (.05 FTE) (Library Assistant @ \$24.13/hr (6 classes and 24 drop-ins, 3 hours to set up and tear down per class and drop-in)

Consultant Fees				
TimeWalk developer consultant		\$0	\$3,000	\$3,000
Technical consultant		\$0	\$6,000	\$6,000
Unity instruction		\$4,200	\$300	\$4,500
Unity project management and template creation		\$3,000	\$0	\$3,000
3D modeling instruction		\$4,500	\$450	\$4,950
		\$0	\$0	\$0
		\$0	\$0	\$0
	Subtotal	\$11,700	\$9,750	\$21,450

Description:

TimeWalk developer consultant - 20 hours @ \$150/hour

Technical consultant (pre-project consulting, recruitment assistance, toolkit creation and promotion) - 40 hours @ \$150/hour

Unity instruction - 4 classes and 24 drop-ins @ \$150/session; 2 in-kind Tam High classes @ \$150/session Unity project management and template creation - 40 hours @ \$75/hour

3D modeling instruction - 6 classes and 24 drop-ins @ \$150/session; 3 in-kind Tam High classes @ \$150/session

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:

		1	
Supplies/Materials			
Unity software	\$1,000	\$0	\$1,000
General supplies	\$859	\$0	\$859
PC laptops	\$0	\$5,000	\$5,000
Graphics card	\$200	\$0	\$200
Oculus Rift	\$600	\$0	\$600
3D printer	\$2,500	\$0	\$2,500
	\$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	\$5,159	\$5,000	\$10,159

Description: Unity Pro account for 8 months @ \$125/month

General supplies - publicity materials, signage, etc. @ \$500

2 PC laptops @ \$2,500 each (one donated, one purchased by library)

Oculus Rift virtual reality headset @ \$600

3D printer and supplies @ \$2,500 total

Budget Category	LSTA	Cash Match & In-Kind	Total
Equipment (\$5,000 or more per unit)			
1			\$0
			\$0
	\$0	\$0	\$0
	\$0	\$0 \$0	\$0 \$0
Subtotal Description:	\$0	\$0	\$0
Services		Φ0	фО
	\$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	\$0	\$0
Subtotal	\$0	\$0	\$0
Project Total	\$22,393	\$20,067	\$42,460
Indirect Cost Rate Applied 0.0 % Indirect Cost	\$0	\$0	\$0
Check one:	***	40	ΨΥ
☐ No Indirect ☐ Federally negotiated indirect cost r	ate *	Indirect propose	d cost rate *
* please attach supporting documentation if required			
Description:			
Grand Total	\$22,393	\$20,067	\$42,460

ELEMENT 7: ATTACHMENTS

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

		NET CERTIFICATIO Library Type)N					
Nubl	ic Library	☐ Academic	☐ K-12	☐ Multi-Type	☐ Special/Other			
	-		_	public elementary school lil brary is (<i>check only one of t</i>				
A. 🗆	An individua	al applicant that is CIF	A compliant.					
	The applicant	t library, as a public libr	ary, a public element	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 r	equirements have			
	application had Act. The libra who are subject	ave complied with the reary submitting this appli	equirements of Section cation has collected as. The library will ke	on 9134(f)(1) of the Library Internet Safety Certification sep these certifications on fi	s from all other applicants			
С. 🖂	The CIPA red		because no funds ma	nde available under this LST to pay for direct costs assoc				
SIGNAT	URE							
		rt this LSTA Grant Ap	plication.					
Mill Vall	ey Public Libra	nry	Bui	Building History in 3D				
	Organization			oject Name				
Anji Brer	nner		Cit	y Librarian				
	Director Name	2	Tit					
				5/30/2017				
Library	Director Signa	ture		Date				

Lucretia Little History Room Mill Valley Public Library 375 Throckmorton Ave. Mill Valley, CA 94941



May 22, 2017

The Mill Valley Public Library is happy to count the Mill Valley Historical Society as a project partner on the "Building History in 3D" program for the 2017-2018 LSTA grant period.

The Mill Valley Historical Society will partner with the Library to:

- Provide research support to students in the History Room
- Help promote the project to increase broad participation
- Help showcase completed projects and bring greater awareness to TimeWalk/Building History in 3D

Signed,

Eric Macris President

Mill Valley Historical Society

Cate Mayfield

History Room Librarian

Mill Valley Public Library

Lucretia Little History Room Mill Valley Public Library 375 Throckmorton Ave. Mill Valley, CA 94941



May 24, 2017

The Mill Valley Public Library is happy to count Tamalpais High School as a project partner on the "Building Triangle School as a project partner on the "Building History in 3D" program for the 2017-2018 LSTA grant period.

Tamalpais High School will partner with the Library to:

- Host a fall 2017 set of "Building History in 3D" classes at Tamalpais High School
 in conjugation with in conjunction with one course from the school's Applied Technology department
- If successful, replicate a spring set of classes at Tam
- Help seek funding to cover the cost of the classes held at Tam
- Help increase student participation by promoting an additional set of classes held at the Library

Cate try History Room Librarian