

FAAST *Financial Assistance Application Submitta*

Print Application

Pin No: 29456 - San Francisco CCPT Consortium - ASSIGNED

Application Overview

RFP/Survey Title: California Career Pathways Trust (Round 2)

Submitting Organization: City College of San Francisco

Submitting Organization

Submitting Organization

Submitting Organization

Division:

Project Title: San Francisco CCPT Consortium

Project Description: City College of San Francisco (CCSF), San Francisco Unified School District (SFUSD), the San Francisco Office of Economic and Workforce Development (SF OEWD), and BayBio Institute comprise the San Francisco Consortium applying for the California Career Pathways Trust (CCPT) proposal. Our overarching goal is to strengthen pathways in ICT and biotech by addressing specific needs in each area as well as addressing systemic needs that support all CTE pathways. Specific objectives aligned with the intended program outcomes include: (1) increasing the number of students enrolled in ICT and biotech pathways particularly from underrepresented populations; (2) creating and sustaining more work-based learning experiences for students; and (3) ensuring that high school students have the opportunity to enroll in one or more credit-bearing courses, whether while still enrolled in high school or by entering CCSF upon graduation from high school.

APPLICANT DETAILS

Applicant Organization: City College of San Francisco

Applicant Organization

Applicant Organization

Applicant Organization

Division:

Applicant Address: 50 Phelan Avenue, C-30 , San Francisco , CA - 94112

Applicant Address:

PROJECT LOCATION

Latitude : 37.725820

Longitude: -122.450670

Watershed:

County: San Francisco

Responsible Regional Water Board: 2 San Francisco Bay Regional Water Board

Responsible Regional Water Board:

Responsible Regional Water Board:

PROJECT BUDGET

Funds Requested(\$): 5,999,342.00

Local Cost Match(\$): 0.00**Total Budget(\$):** 5,999,342.00

Funding Program	Applied	Amount Recommended by State Water Board
A. Regional Consortium Grants (\$15 million)	No	\$0.00
B. Regional Consortium Grants (\$6 million)	No	\$0.00
C. Local Consortium Grant (\$6 million)	Yes	\$0.00
D. Local Consortium Grants (\$600 thousand)	No	\$0.00

Project Management Role	First Name	Last Name	Phone	Fax	Email
Project Director: Authorized Representative	Michelle	Simotas	415-239-3380	415-239-3010	mtroen@ccsf.edu
Project Manager: Day to day contact	Michelle	Simotas	415-239-3380	415-239-3010	mtroen@ccsf.edu

Applicant Information

Name: City College of San Francisco
Division:
Address: 50 Phelan Avenue, C-30 San Francisco, CA , 94112
Federal Tax ID: 94172192 **DUNS Number:** 074645284

Person Submitting Information

Submitter Name: Kristin Charles
Submitter Phone: 415-239-3677
Submitter Phone: 415-239-3010
Submitter Fax: kcharles@ccsf.edu
Submitter Email:

Legislative Information	Primary	Additional District(s)
Senate District	11	11,
Assembly District	19	19,
US Congressional District	99	12,14,

Cooperating Entities	Role	Name	Phone	Email
San Francisco Unified School District	K-12 partner	Linda Wells	415-379-7751	WellsL@sfusd.edu
BayBio Institute	Workforce intermediary/business partner	Lori Lindburg	650-871-3250	lori@baybio.org
San Francisco Office of Economic and Workforce Development	Workforce intermediary/business partner/WIB administrator	Emylene Aspilla	415-554-6969	emylene.aspilla@sfgov.org

Pre Submission Attachment Title	Phase	Submission Period	Date & Time
Section II.1 Form B	PHASE1	PRE SUBMISSION	2/6/2015 8:06:58 PM
Section III.3 Form C	PHASE1	PRE SUBMISSION	2/6/2015 8:15:22 PM
Section IV.2 Form D 1 of 11	PHASE1	PRE SUBMISSION	2/6/2015 8:19:41 PM
Section IV.2 Form D 10 of 11	PHASE1	PRE SUBMISSION	2/6/2015 8:22:26 PM
Section IV.2 Form D 11 of 11	PHASE1	PRE SUBMISSION	2/6/2015 8:22:40 PM
Section IV.2 Form D 2 of 11	PHASE1	PRE SUBMISSION	2/6/2015 8:20:02 PM
Section IV.2 Form D 3 of 11	PHASE1	PRE SUBMISSION	2/6/2015 8:20:17 PM
Section IV.2 Form D 4 of 11	PHASE1	PRE SUBMISSION	2/6/2015 8:20:47 PM
Section IV.2 Form D 5 of 11	PHASE1	PRE SUBMISSION	2/6/2015 8:21:03 PM
Section IV.2 Form D 6 of 11	PHASE1	PRE SUBMISSION	2/6/2015 8:21:19 PM
Section IV.2 Form D 7 of 11	PHASE1	PRE SUBMISSION	2/6/2015 8:21:34 PM
Section IV.2 Form D 8 of 11	PHASE1	PRE SUBMISSION	2/6/2015 8:21:47 PM
Section IV.2 Form D 9 of 11	PHASE1	PRE SUBMISSION	2/6/2015 8:22:00 PM
Section IV.2 Formal Agreement 1 of 4	PHASE1	PRE SUBMISSION	2/6/2015 8:38:52 PM
Section IV.2 Formal Agreement 2 of 4	PHASE1	PRE SUBMISSION	2/6/2015 8:39:09 PM
Section IV.2 Formal Agreement 3 of 4	PHASE1	PRE SUBMISSION	2/6/2015 8:39:28 PM
Section IV.2 Formal Agreement 4 of 4	PHASE1	PRE SUBMISSION	2/6/2015 8:40:08 PM
Section V.2 Form E-CC	PHASE1	PRE SUBMISSION	2/6/2015 8:46:44 PM
Section V.2 Form E-Business	PHASE1	PRE SUBMISSION	2/6/2015 8:41:22 PM
Section V.2 Form E-LEA 1 of 3	PHASE1	PRE SUBMISSION	2/6/2015 8:48:19 PM
Section V.2 Form E-LEA 2 of 3	PHASE1	PRE SUBMISSION	2/6/2015 8:48:45 PM
Section V.2 Form E-LEA 3 of 3	PHASE1	PRE SUBMISSION	2/6/2015 8:49:37 PM
Section V.3 Agreement 1 of 5	PHASE1	PRE SUBMISSION	2/6/2015 9:09:41 PM
		PRE	2/6/2015 9:10:01

Section V.3 Agreement 2 of 5	PHASE1	SUBMISSION	PM
Section V.3 Agreement 3 of 5	PHASE1	PRE SUBMISSION	2/6/2015 9:10:58 PM
Section V.3 Agreement 4 of 5	PHASE1	PRE SUBMISSION	2/6/2015 9:11:22 PM
Section V.3 Agreement 5 of 5	PHASE1	PRE SUBMISSION	2/6/2015 9:12:04 PM
Section V.3 Agreement 6	PHASE1	PRE SUBMISSION	2/6/2015 9:21:19 PM
Section V.4 LOC BIO 1 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:45:05 PM
Section V.4 LOC BIO 10 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:51:27 PM
Section V.4 LOC BIO 11 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:52:14 PM
Section V.4 LOC BIO 12 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:52:47 PM
Section V.4 LOC BIO 13 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:53:13 PM
Section V.4 LOC BIO 14 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:53:42 PM
Section V.4 LOC BIO 2 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:45:29 PM
Section V.4 LOC BIO 3 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:46:14 PM
Section V.4 LOC BIO 4 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:46:47 PM
Section V.4 LOC BIO 5 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:47:15 PM
Section V.4 LOC BIO 6 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:47:40 PM
Section V.4 LOC BIO 7 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:48:48 PM
Section V.4 LOC BIO 8 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:50:24 PM
Section V.4 LOC BIO 9 of 14	PHASE1	PRE SUBMISSION	2/6/2015 9:50:51 PM
Section V.4 LOC ICT 1 of 10	PHASE1	PRE SUBMISSION	2/6/2015 9:37:28 PM
Section V.4 LOC ICT 10 of 10	PHASE1	PRE SUBMISSION	2/6/2015 9:44:29 PM
Section V.4 LOC ICT 2 of 10	PHASE1	PRE SUBMISSION	2/6/2015 9:38:14 PM
Section V.4 LOC ICT 3 of 10	PHASE1	PRE SUBMISSION	2/6/2015 9:39:38 PM
Section V.4 LOC ICT 4 of 10	PHASE1	PRE SUBMISSION	2/6/2015 9:40:11 PM
Section V.4 LOC ICT 5 of 10	PHASE1	PRE	2/6/2015 9:40:57

		SUBMISSION	PM
Section V.4 LOC ICT 6 of 10	PHASE1	PRE SUBMISSION	2/6/2015 9:41:37 PM
Section V.4 LOC ICT 7 of 10	PHASE1	PRE SUBMISSION	2/6/2015 9:42:15 PM
Section V.4 LOC ICT 8 of 10	PHASE1	PRE SUBMISSION	2/6/2015 9:43:04 PM
Section V.4 LOC ICT 9 of 10	PHASE1	PRE SUBMISSION	2/6/2015 9:44:01 PM
Section V.4 LOC ICTBIO 1 of 3	PHASE1	PRE SUBMISSION	2/6/2015 9:54:32 PM
Section V.4 LOC ICTBIO 2 of 3	PHASE1	PRE SUBMISSION	2/6/2015 9:56:47 PM
Section V.4 LOC ICTBIO 3 of 3	PHASE1	PRE SUBMISSION	2/6/2015 9:57:25 PM
Section VII.2 Resumé	PHASE1	PRE SUBMISSION	2/6/2015 10:11:25 PM
Section VIII.1 Form F	PHASE1	PRE SUBMISSION	2/6/2015 10:11:48 PM
Section VIII.1 Form G	PHASE1	PRE SUBMISSION	2/6/2015 10:12:59 PM
Section VIII.2 Form H	PHASE1	PRE SUBMISSION	2/6/2015 10:13:16 PM
Section VIII.2 Form I	PHASE1	PRE SUBMISSION	2/6/2015 10:13:28 PM
Section VIII.3 Form J	PHASE1	PRE SUBMISSION	2/6/2015 10:13:39 PM
Section VIII.3 Form K	PHASE1	PRE SUBMISSION	2/6/2015 10:13:51 PM
Section VIII.4 Form L	PHASE1	PRE SUBMISSION	2/6/2015 10:14:24 PM
Section VIII.4 Form M	PHASE1	PRE SUBMISSION	2/6/2015 10:14:42 PM

Download all Pre Submission Attachments 

Questionnaire - Phase1

Section I: Background Information (10 points)

- I.1 Describe briefly the existing local and regional structures and resources currently in place, if any, on which your consortium proposes to either establish new or expand existing pathways.**

Answer: San Francisco's workforce system comprises sector academies, training programs for unemployed or underemployed San Francisco residents who meet local Workforce Investment Board-defined criteria. The sector academies provide job preparation, vocational training, and other services to develop a pipeline of skilled and prepared workers for industries facing staffing shortages and/or identified as having short- or long-term job growth.

OEWD administers the sector academies, focusing on the following industries: information and communication technologies ("TechSF"), construction trades ("CityBuild"), healthcare,

and hospitality. CCSF is the primary sector academy training provider along with 50 community-based organizations that provide an array of training and support services to adults. Although biotech is not a current SF sector academy, biotech companies have received incentives to locate in SF through a payroll tax exemption initiated in 2004.

San Francisco's sectors align with those of the California Community Colleges Chancellor's Office (CCCCO) Doing What Matters framework. CCSF hosts two Deputy Sector Navigators funded through CCCCCO, one that focuses on Information and Communications Technology (ICT), a focus of this proposal. It is also home to the SF Bay Center of Excellence, which produces numerous reports on local and regional workforce needs that inform CTE program development and refinement.

CCSF also hosts two National Science Foundation (NSF)-funded Advanced Technological Education initiatives: the Mid-Pacific Information and Communications Technology Regional Center (MPICT) and Bio-Link, a National Advanced Technology Education Center of Excellence focused on biotech and life sciences. These Centers bring a number of resources we can leverage, including annual conferences that offer professional development to high school and community college faculty, curricula, expert networks, and services such as pathway mapping.

Question I.1 continued:

Answer: ICT training primarily takes place within 3 CCSF departments: Computer Networking and Information Design (CNIT), Computer Science, and Visual and Media Design. CNIT offers 9 certificates. Computer Science offers 6 certificates. Visual Media Design offers 9 certificates that cluster under graphic design, visual media production, digital illustration, digital animation, web front-end production, and game development. All offer an Associate degree.

CCSF's Biotech Program resides within the Engineering and Technology Department and offers 6 certificates and an Associate of Science degree.

SFUSD operates 24 career academies at 11 high schools. These academies cover 11 sectors including ICT and biotech.

SFUSD-CTE works closely with CCSF, and most high school academies offer dual enrollment. An online system supports the articulation process. SFUSD and CCSF collaboratively administer Bridge to Success, which aims to double the number of underrepresented youth who achieve college credentials by 2020 by increasing access.

SFUSD and CCSF utilize industry advisory boards to guide their programs, and both work directly with SF OEWD, local businesses, and community-based organizations to prepare students for competitive employment.

SF OEWD and the BayBio Institute (the 501c3 arm of BayBio, the regional life science industry association) will serve as the workforce intermediaries for the Consortium, helping to broker relationships with local industry to ensure curriculum alignment and that students have access to a variety of work-based learning opportunities.

Collaborators include the San Francisco Chamber of Commerce, Mayor's Educational Leadership Council, STEM Talent Pathways Working Group, MPICT, Bio-Link, Bay Area Biotechnology Education Consortium (BABEC), Career Ladders Project/California

Community Colleges Linked Learning Initiative, ConnectEd, and a host of local ICT and biotech employers and other initiatives.

I.2 Describe how long your consortium has been in operation. List any additional career pathways that have been developed that are not targeted in this application.

Answer: CCSF was founded in 1935 within SFUSD. In 1970, CCSF separated from SFUSD, resulting in a new entity, the San Francisco Community College District, which included many neighborhood programs offered through SFUSD's Adult and Occupational Education Division.

Approximately half of SFUSD graduates begin their post-secondary education at CCSF. CCSF has maintained direct relationships with individuals at SFUSD for well over 20 years. The partnership was further strengthened in 2009, when CCSF and SFUSD applied for and later received Gates Foundation funding to develop the Bridge to Success initiative that aims to double the number of underrepresented youth who achieve college credentials.

CCSF and SFUSD have solid relationships with SF OEWD, with representatives from each serving on the local WIB administered by OEWD. CCSF has served as the primary training provider for the OEWD-administered sector academies since inception in 2006 (construction trades). All three entities partnered in applying for AB86 Adult Basic Education funding in 2014 and continue to work closely on that planning initiative.

OEWD has been a core partner in applying for this CCPT funding and will serve as the workforce intermediary responsible for ICT and overall coordination. To support the focus on biotech, the BayBio Institute will serve as the biotech workforce intermediary. CCSF has partnered with the BayBio Institute for 25 years.

SFUSD-CTE offers 24 academies at 11 high schools. In addition to biotech and ICT, two-year high school pathway programs include Agriculture and Natural Resources; Business and Finance; Building and Construction Trades*; Energy and Utilities; Engineering and Architecture*; Health Science and Medical Technology*; Hospitality, Travel and Tourism*; Marketing, Sales and Service; and Transportation*. CCSF offers 199 CTE certificates/degrees through 28 departments. (* = articulates to CCSF)

I.3 Provide evidence if your consortium meets one or more of the following competitive priorities to be taken into consideration during the scoring process:

- **Regions with higher-than-state-average rates of high school dropouts as measured by the California Longitudinal Pupil Achievement Data System.**
- **Applications seeking to establish or strengthen legal career pathways and promote a better understanding of the role and operations of state and federal courts and their relationship to the other branches of government.**
- **Applications seeking to establish or strengthen career pathways that include both high school opportunities and a postsecondary pathway leading to a community college baccalaureate degree, as authorized by the Board of Governors of the California Community Colleges pursuant to Chapter 747, Statutes of 2014 (Senate Bill 850).**

These competitive priorities are subject to an application meeting all requirements outlined in the CCPT Request for Applications, and competitively responding to all questions in the application narrative and completing all required forms.

Answer: Our Consortium does not meet these competitive criteria.

Section II: Statement of Need (40 points)

II.1 Complete and upload [Form B](#), California Career Pathways Trust Overall Summary. Describe each targeted pathway and major partnerships.

II.2 Describe each proposed career pathway and the selection process used. Demonstrate the regional economic need using valid data sources and analysis. Include the projected number of high-skill, high-wage, and high-growth job openings available in each career pathway.

Answer: We first examined several potentially high-growth, high-demand, high-wage areas (ICT, biotech, engineering, and energy/utilities) and considered the extent to which labor market information supported a focus on these areas. The selected sectors (ICT and biotech) demonstrated that they were sufficiently high growth, high demand, and high wage.

In ICT, median hourly wage is \$36.24 and annual net demand for workers is 3,933 (looking at SOC codes 15-1131: Computer Programmers; 15-1132: Software Developers, Applications; 15-1134: Web Developers; 27-1014: Multimedia Artists and Animators; and 27-1024: Graphic Designers).

In biotech, median hourly wage is \$26.26 and annual net demand for workers is 710 (looking only at SOC code 19-4021: Biological Technicians).

From large, established tech firms to innovative startups, San Francisco is home to a broad range of tech companies. In its 2014 report, the San Francisco Center for Economic Development found that San Francisco-based firms received \$1.3 billion in venture capital (VC) investment in Q4 of 2013, representing 15% of all VC technology funding in the U.S. during this time period. San Francisco tech industry growth in social media, gaming, mobile, cloud, and software is driving demand for commercial office space and creating more jobs in San Francisco. The technology industry has surpassed the banking and finance industry as the number one generator of office jobs in San Francisco and as of Q1 2013 represented 21.5% of office jobs in San Francisco. The following firms have all signed leases to expand in San Francisco in the last year: Amazon, AppDynamics, Cisco/Meraki, Eventbrite, Fitbit, Github, LinkedIn, Lumosity, Neustar, Obvious Corp, Practice Fusion, Salesforce, Twitter, Uber, Weebly, Xoom, Yahoo, and Zendesk.

Since 2004, San Francisco has been home to another industry with deep roots in the region: biotech.

Question II.2 continued:

Answer: Today San Francisco has more than 140 biotech and life sciences companies, including FibroGen, Nektar, Celgene, Bayer, and Pfizer. Of those, 42 companies are located in Mission Bay—a 303-acre science and innovation cluster that includes 4.4 million square feet of office, research, and development space, 6,000 units of housing (28% of which are affordable), 500,000 square feet of retail, a 500-room hotel, and 49 acres of new public open space. Mission Bay is anchored by a number of leading research institutions including a 57-acre UCSF Campus, the California Institute for Quantitative Biosciences (QB3), the Gladstone Institutes, and the California Institute for Regenerative Medicine (CIRM). Mission Bay features one of the highest concentrations of incubators anywhere, including four life sciences incubators. The UCSF Medical Center at Mission Bay is under construction and will include a 289-bed complex featuring 3 separate buildings specializing in children, women's health, and cancer patients. The center is expected to open to the public in February 2015. In the coming years, growth will continue to expand to the greater Mission Bay area, including Pier 70, and the Central Waterfront.

The presence of an ICT sector academy in San Francisco (TechSF) along with incentives for biotech companies to locate in San Francisco through a payroll tax exemption further influenced the decision to focus on these areas given that they serve as clear evidence of the city's economic and workforce development interests. Both of these areas are included in the statewide and regional sectors supported by the California Community Colleges Chancellor's Office Doing What Matters framework.

In addition, we considered other factors such as student interest, institutional capacity, the extent to which the pathways support underrepresented populations, and whether or not the sectors are in need of strengthening but have a solid base on which to build.

II.3 Describe current pathway(s) and the consortium's efforts, and then describe how this proposal enhances, improves, or expands upon current, local, and regional efforts in the development of career pathways. Include specific information on current efforts to integrate, leverage, and build on other local and regional investments.

Answer: Our goal is to enhance ICT and biotech pathways by addressing specific needs of each and systemic needs that support all CTE pathways. Specific objectives: (1) increase the number of students enrolled in these pathways particularly from underrepresented populations; (2) create and sustain more work-based learning experiences for students; and (3) ensure that high school (HS) students can enroll in one or more credit-bearing courses.

Students entering CCSF from SFUSD ICT pathways mainly pursue Computer Networking and Information Technology (CNIT), Computer Science (CS), and Digital Media.

In CNIT, 3 HSs host Academies of Information Technology (AoIT) that may articulate to CCSF certificates in network analysis, security, or tech support and web development certificates. However, we need to map Student Learning Outcomes (SLOs) from the AoITs to the relevant CCSF CNIT programs to assess the extent to which this is true and to identify how best to accelerate students who enter CCSF from the AoITs (e.g., credit by exam, waiving prerequisites). CCSF once offered dual enrollment CNIT courses but has ceased mainly due to school-year capacity limitations. We will thus resurrect CNIT dual enrollment in a 3-unit summer course for HS students with work-based learning (e.g., hackathons).

The Consortium's best-defined ICT pathway is CS. Students who enroll in AP computer science at 5 HSs are eligible for the CS Transfer Model Curriculum at CCSF which guarantees transfer to UCs and CSUs. Yet few students take advantage of this pathway and bypass CCSF. Many students in HS Digital/Media Arts programs, especially game design, would likely find computer programming of interest, but need direction to arrive at that conclusion. To assess this, we will examine SLOs of course offerings at the HSs and map them to CCSF programs.

Most HSs (15 of 21) offer one or more Media Arts/Digital Media courses and 5 schools have Arts, Entertainment and Media Academies. The course content

Question II.3 continued:

Answer: varies, and one task we will undertake is to examine the course SLOs and map them to those of comparable CCSF courses. This will allow us to determine how best to direct students, whether to Computer Science (see above) or to Visual Media Design's Digital Media Skills course or to Broadcast Electronic Media Arts' Audio and Video for the Web

certificate. MPICT and the Career Ladders Project will assist in this mapping and will also work with Mission Bit, a local CBO, to identify the pathways its after-school coding class students are pursuing.

Two pathways exist in biotech. One, the Bridge to Bioscience (B2B), replicates three CCSF courses in HSs to prepare students for the CCSF lab assistant certificate program. B2B courses cover language, math, and laboratory skills and are contextualized and interdisciplinary, each reinforcing the content of the other two through regular faculty communication. CCSF and SFUSD have an articulation agreement that allows students who complete the HS version of these courses to immediately enter the next stage of B2B (waiving prerequisites), which is an internship preparation class that leads to internships in local industry. Few HS students are aware of the advantage in taking the HS courses, and either do not enroll at CCSF or, when they do, rarely enroll in the internship prep class (only 2 of the 16 current students who entered from SFUSD enrolled in the internship class). We will focus on outreach and communications to assist students in understanding the gains they've made so that they can benefit from them.

The other biotech pathway is an NSF-funded "Stem Cell Pipeline" through which CCSF offers dual enrollment courses to prepare HS students for CCSF's stem cell certificate. NSF funding is ending and CCSF has capacity limitations during the academic year. CCSF will convert the stem cell pipeline to an Introduction to Stem Cells summer dual enrollment course at CCSF for HS students along with 2 other 2-week lab courses.

II.4 Define any skill gaps between industry needs and the skill level of the students in each career pathway.

Answer: ICT. Though hard technical skills remain one of the most important criteria for new hires, employers also place a premium on soft business skills. Bay Area ICT employers prefer applicants who demonstrate adaptability and entrepreneurial drive over applicants with more experience but without the same soft workplace skills, underscoring the interconnectedness of hard and soft skills in ICT project-based teamwork. A recent survey of San Francisco and Silicon Valley IT firms shows the majority have difficulty recruiting qualified candidates. While the IT skills gap will, in part, always be driven by the rapidly evolving nature of technology, it is currently exacerbated by: (1) non-optimal alignment between education/training curricula and industry needs; (2) a critical shift in the types and combinations of skills employers require; and (3) a shortage of local jobseekers with the minimum skills and qualifications required to enter or advance in the industry, including recognized-credentials and IT-related experience. (Silicon Valley Workforce Investment Boards. (2011). Silicon Valley in Transition: Economic and Workforce Implications in the age of iPads, Android Apps, and the Social Web. Sunnyvale: Author)

Biotech. The BayBio Institute and its partners identified the following skills gaps throughout California: (1) a lack of: up-to-date information in a quickly changing industry, breadth, application of industry standards to curricula, and incorporation of project management, business acumen, and finance for scientific disciplines; (2) the need to: introduce action learning into curricula, foster team-based project-oriented learning, increase practical exposure to key components of R&D; and (3) the need to: incorporate creativity and curiosity-based learning to engage students in scientific inquiry and increase the development of basic skills, such as report writing and presentation. (2014 Talent Report: California Workforce Trends in the Life Science Industry)

Section III: Target Group (10 points)

III.1 Describe the characteristics of the targeted population of students that will be served in the proposed career pathway program(s). Include any barriers, support services, and academic and occupational skill assistance needs (e.g. females in science, technology, engineering, and mathematics (STEM) and other non-traditional occupations) that will be provided to ensure that all student subgroups are able to fully participate in the pathway.

Answer: While SFUSD pathways currently reflect school demographics, CTE would like to increase the number of English Learners and students in Special Education in all programs and female, African American, and Latino students in computer science.

In 2008, the SFUSD Board of Education adopted new graduation requirements that included a-g for all. Students with high failure rates; currently this includes our African American and Latino students; are often pulled from a senior year elective to repeat a failed course, meaning they may start but do not complete the pathway program.

English learners and students enrolled in special education face specific barriers. Both are required to complete additional support courses and both have higher failure rates than general education peers. The District's Lau Consent Decree plan specifically targets improvements in instruction for English Language Learners, with rubrics, evaluation and support recommendations that map to the Common Core, College-and-Career-Readiness and our pathways. Counselors and teachers will receive professional development to help support these students in pathway completion. Alternative scheduling options are currently under review. Beginning in Summer 2014, CTE offered summer CTE courses for both program participants and those who could not take advantage of this opportunity because of scheduling conflicts. The program created a schedule so students who needed credit recovery or extended school year activities could participate. Through this proposal, this summer opportunity will be expanded to students who are unable to participate in the pathway.

Recruitment focused on female, African American, and Latino students will be developed and implemented. Courses will be evaluated to find engagement strategies for these subgroups, and SFUSD will continue to develop contextualized, integrated CTE courses to help meet the need of failure and credit recovery.

Approximately 20% of all SFUSD high school

Question III.1 continued:

Answer: students participate in a CTE academy. SFUSD is currently evaluating ways to include elements from Linked Learning in both CTE and general education pathways, in order to expand and meet the college and career readiness benchmarks for all students. This proposal will provide for professional development directly from ConnectEd to increase capacity for both central office and site leadership with a goal of integrating best practices from Linked Learning. As part of this, we plan to identify ways to identify academic and other support services that lead to full program participation for any student.

One of the greatest barriers for SFUSD is the lack of knowledge of students, parents, teachers and counselors about the transition to CCSF. Students are often unaware that dual enrollment courses allow them to bypass courses at CCSF while they work toward certification and many do not even know of the pathway opportunity at CCSF. A primary goal of this plan is to resolve this issue. SFUSD has committed to a 0.5 FTE Dual Enrollment Administrator to support communications and subgroup recruitment.

CCSF will engage in recruitment activities at SFUSD that go beyond written materials such as hands-on open houses that help all students see that these fields are accessible to them. Training for faculty and counselors at CCSF will also help with transition support.

An ideal learning model would be a cohort, but this is challenging at the community college level because of varied schedules and since seats cannot be reserved for SFUSD CTE students. CCSF will explore creating "fauxcohorts" a required college success course that provides the support of a cohort for students continuing into CCSF. The course will address common college entry obstacles, such as reading a college level text, and students will be referred for other supports if necessary. This course would be independent of the specific pathways and open to all CTE pathway students.

III.2 Identify the outreach and recruitment activities that will be used to reach and recruit students for each career pathway. Demonstrate how these methods will enable you to reach the targeted population and is representative of the entire student population (e.g. females in science, technology, engineering, and mathematics (STEM) and other non-traditional occupations) and includes all student subgroups. Highlight the level of participation in and leverage of any regional or multi-region efforts.

Answer: In examining the existing ICT and biotech pathways, the SF CCPT Consortium recognized a need to increase awareness and interest among students and their families of the CTE pathways that exist and articulate from SFUSD schools to CCSF. At times, even students enrolled in those pathways aren't aware of the gains they are making toward a college certificate or degree and either enter CCSF without taking advantage of those gains (e.g., prerequisite waivers) or don't enter CCSF at all, in both cases missing out on opportunities for relatively immediate career development, even if they plan to pursue a four-year degree. We also believe that a significant number of students who could benefit greatly from the pathways and the support they provide are not aware of the opportunities available to them or believe that the pathways are beyond their reach academically, particularly those that are STEM-focused.

Increasing awareness and access will involve a variety of activities, including providing professional development for SFUSD and CCSF counselors and faculty about the pathways; developing or modifying existing materials and hosting events such as hands-on open houses to ignite interest in the pathways; developing a web app accessible on any device that clearly defines the pathways and assists students, their families, and counselors in navigating the pathways; and finding creative ways to promote the pathways within the instructional setting in classrooms that are not part of the pathways but are related in some way. (An example: BABEC develops and distributes kits that can be used in standard life science classrooms that don't normally include a focus on biotech; by including them in non-biotech classrooms, biotech becomes accessible to students who may not be aware of biotech careers and/or who assume that biotech is beyond their reach. In addition, CCSF students will work as teaching assistants in the classrooms utilizing the BABEC kits to serve as role

Question III.2 continued:

Answer: models and reinforce the accessibility of biotech while at the same time engaging in work experiences themselves.)

In addition, SFUSD will develop push-in lessons on CTE opportunities for an SFUSD-required freshman College and Career course. The CTE industry boards and Chamber of

Commerce-coordinated STEM Talent Pathway will provide guest speakers for the College and Career course to encourage enrollment in a pathway, with a focus on providing guest speakers who represent targeted subgroups.

Materials and communications will emphasize that current pathway work accelerates students' progress at the post-secondary level and that students may earn an Associates degree and/or certificate, gain employment, and/or continue toward a Bachelor's degree, if desired. Materials will be available at major SFUSD events, such as the enrollment fair and annual summit and on each school's website.

SFUSD has hired a Dual Enrollment Administrator to increase dual enrollment, especially for targeted populations, and to work closely with CCSF to more clearly map the sequence of courses and identify ways to break down barriers. The Career Ladders Project is currently helping with this effort.

The Program Specialist overseeing the work of the SF CCPT Consortium will work closely with CCSF's CTE/Perkins Coordinator, who serves on the Joint Special Populations Advisory Committee of the California Community Colleges and California Department of Education, to tap into resources and expertise that will support the Consortium's efforts to recruit historically underserved and underrepresented populations.

Current enrollment in the ICT/Computer Science pathway is 272, in ICT/Arts, Media & Entertainment it is 463, and in Biotech it is 131. We estimate these activities to result in a 5% increase in 2015-16 (286 in CS, 486 in AME, 151 in Biotech), and a 10% increase in 2016-17 (314 in CS, 535 in AME, 151 in Biotech) and again in 2017-18 (346 in CS, 588 in AME, 166 in Biotech).

III.3 Complete and upload [Form C](#), California Career Pathways Trust Target Group. Identify the number of students to be served in each targeted career pathway.

Section IV: Career Pathways Program Planned Approach (45 points)

IV.1 For each career pathway listed on [Form C](#), California Career Pathways Trust Target Group, describe how you will integrate standards-based academics with a career relevant, sequenced curriculum to develop industry-themed pathways that are aligned to high-skill, high-wage, and high-growth jobs.

Answer: SFUSD provides a rigorous high school academic program for all students including the subject matter requirements needed for UC/CSU eligibility (a-g). To receive a diploma, students complete 3 years of social science, 4 years of English, 3 years of math, biology and chemistry or physics, 2 years of world language, 1 year of visual and performing arts, 1 college-prep elective, a college and career course, health, 1 year of physical education, and 40 elective credits.

SFUSD ICT pathways include 2- or 3-year Computer Science (IT) and Arts, Media & Entertainment (AME) CTE academies. CTE ICT academies teach "a-g" approved standards-based curriculum aligned to CTE Common Core Anchor Standards and CTE Pathway Standards. SFUSD CTE academies are mapped to the CCSF departments of Computer Science (CS), Computer Networking (CNIT), and Broadcast Electronic Media Arts (BEMA). Each CCSF pathway offers certificate and transfer options. For students continuing on to a 4-year university, SFUSD and CCSF curriculum are mapped to SF State and UC Berkeley CS programs.

In addition to the CTE academies, there are additional points of entry for CS, including courses like CS Principles and AP CS; exploratory events like Hour of Code or hackathons; student clubs like robotics, game design, and computer repair; coding classes offered by Girls Who Code, Black Girls Code, and Mission Bit; and employment training and internship placement offered through Genesys Works, United Way, and others.

First-year SFUSD CTE students focus on trial and error, debugging, problem solving and Quality Assurance. Students are introduced to languages (Scratch/Snap!), problem solving, mobile app development, human/computer interaction, artificial intelligence and image and sound software for game design. First year courses have Algebra applications such as mean, median, exponents, data sets, data mapping, informatics, with variables, functions and loops. Projects include participation

Question IV.1 continued:

Answer: in a national mobile app contest, creating a Beta game, publishing a user manual, and creating characters/sprites in relation to a narrative. Curriculum is based on UC Berkeley's "The Beauty and Joy of Computing." CCSF Dual Enrollment course offerings include: Computer Hardware, Network Security, Intro to Computers Using PCs and Careers in Computer Networking.

Second year SFUSD CTE students deepen their understanding of CS programs and languages (Python, Javascript, Unity3D), programming and abstraction, logic statements, algorithms, syntax, user accessibility, design and interface. Advanced math applications include logic statements, algorithms, functions, variables, outputs, parabolas/trajectories, data, probability and statistics. Third year is AP Computer Science which prepares students to take the AP CS A Exam.

The Computer Science pathway is the Consortium's most well-defined ICT pathway. The articulation agreement indicates students who complete 1 year of high school AP Computer Science A with a grade of "C" or higher will have the CS 111A Intro to Programming: Java course requirement waived for the Computer Science degree and certificate programs at CCSF. Certificate programs include specialization in the areas such as Computer Programming, Web Application Programming, Mobile App Development, QA Build and Release Automation or Linux Administration. In the rapidly changing field of Computer Science, CCSF CS constantly updates curriculum; changes are informed by faculty experience and research, industry contacts, the CCSF annual Industry Advisory Committee meetings, changes to curriculum standards and industry-standard certifications. All courses apply to the AS degree and are transferable.

Each CTE academy has a unique AME concentration; SFUSD offers 1 Web/Broadcasting Academy, 1 Animation Academy, 2 Video Production Academy and 1 Graphic Design Academy. All AME courses are "f" VAPA approved. First year SFUSD CTE students focus on

Question IV.1 continued:

Answer: developing fluency in the software (Photoshop, 3DStudio Max, Final Cut Pro) and technology (cameras, boom mics, switchboards) required by their CTE academy focus as well as deepening their mastery of VAPA standards. In the first year, AME students learn design thinking, apply the elements and principles of design to digital media projects, learn about target markets/communicating ideas to a specific audience, creating visual narratives and begin to create print media/marketing materials, school-wide broadcasts, 2D

animations and websites using html/Javascript. Second- and third-year CTE students learn more advanced software, expand their project portfolio and all students participate in Adobe Youth Voices and have strong partnerships with local organizations like BAVC, SFMOMA, LinkedIn, Pandora and the Walt Disney Museum.

Most high schools offer 1 or more courses in Media Arts/Digital Media and 5 have Arts, Entertainment and Media Academies. The content of these courses varies widely, however, and one task is to examine the student learning outcomes of courses and map them to those of comparable CCSF courses. This will determine the most appropriate ways to direct students, whether to Computer Science, or to Visual Media Design's Digital Media Skills certificate or to Broadcast Electronic Media Arts' Audio and Video for the Web certificate. MPICT, Mission Bit, and the Career Ladders Project will assist in this mapping to identify the pathways students participating in its after-school coding classes are pursuing. This ICT pathway will require the greatest amount of work within the CCPT grant.

For those who enter CCSF's Media Visual Design certificate program, there are 5 areas of emphasis: Graphic Design, Visual Media Production, Digital Illustration, Digital Animation, Web Front-End Production and Game Development. The program begins with core courses providing a broad, multidisciplinary foundation. Throughout the program, students balance

Question IV.1 continued:

Answer: practical skills development with conceptual thinking and creativity. Elective courses allow students to customize the program. All students finish with the Design Studio Practicum which provides a real-world production environment. Courses are applicable to the AA degree and certification prepares students for entry-level positions in the industry.

Additional certificates are available through CCSF's Broadcast Electronic Media Arts Department (BEMA). All courses are credit and degree applicable and transfer to the CSU and/or UC systems. Graduates are prepared for entry-level positions in facilities specializing in video and film production, television, radio production, advertising, and theatre. BEMA offers 13 certificates with an emphasis in Digital Media, Sound Recording Arts, Video Production and Editing, or Radio. Courses explore the design and creation of content for the electronic media with focus on writing, media analysis, storytelling, teamwork, leadership, production craft skills, and emerging technologies.

CNIT offers 9 certificates in areas including tech support, networking, security, and web development, many are aligned with industry exams. Three (3) SFUSD schools host Academies of Information Technology (AoIT). Students in these academies are gaining skills that may articulate to the network analysis, security, and/or tech support and web development certificates within CCSF's CNIT Department. However, we need to undertake mapping at the Student Learning Outcome level from the AoITs to the relevant CCSF CNIT programs to identify the most appropriate way to help accelerate students who enter CCSF from the AoITs (e.g., credit by exam, waiving prerequisites). CCSF offered dual enrollment introductory CNIT courses but discontinued these due to capacity limitations during the school year. A 3-unit CNIT dual enrollment course will be resurrected and offered to graduating seniors or students between their junior and senior years enhanced by

Question IV.1 continued:

Answer: engaging, hands-on, work-based learning activities such as a computer summer camp or a hackathon.

SFUSD's program emphasizes applications, implications, and limitations of current biotechnology. Students learn industry standard laboratory techniques. Year 2 expands upon the concepts taught in the first year course; it is project based and involves lab-work at the graduate school level of difficulty. Assessment involves experimentation and meeting an identified list of competencies. Student projects include sub-cloning genes, purifying proteins, and sequencing their own DNA.

Students completing 1 year of high school biology and one year of Principles of Biotechnology with a grade of "B" or higher will have BTEC 10, 107 and 108A (Bridge to Biotech) requirement waived for the Biotechnology Lab Assistant certificate and/or the Biotechnology major. High school students concurrently enroll in BTEC 5-Briefings in Biotechnology and/or BTEC 6-Basics of Cell Culture during their junior or senior year. Students completing the high school pathway advance toward the CCSF biotech internship and program completion. Students who complete the CCSF Biotech curriculum satisfactorily are qualified for positions as quality control, research and development, and bio-manufacturing technicians in hundreds of pharmaceutical and biotechnology companies in the Bay Area. Students can also transfer to universities to pursue a BS degree, most likely in industrial technology with a focus on biotechnology.

CCSF also offers a Stem Cell Technology Certificate to prepare students to work at a biotech company or academic research lab as mammalian cell culture and/or adult and embryonic stem cell culture technician. Students will be proficient in aseptic technique, passaging and maintenance of mammalian cell lines, basic cell growth assays, fluorescent staining and microscopy, embryonic stem cell differentiation, adult stem cell isolation, FACS analysis, and related cell biology techniques.

IV.2 Complete and upload [Form D](#), California Career Pathways Trust Program of Study Worksheet. Completely and clearly define the sequence of courses for each career pathway being proposed in this RFA. Attach any formal agreements made between consortium partners.

IV.3 Describe how the activities listed below play a role in your proposed career pathway program(s) and how your consortium will leverage existing structures and resources to engage students in integrated instructional activities. Applicant may include a description of additional activities not listed below.

- **Work-based learning**
- **Support services**
- **Transition services**
- **Integrated academic and career-based courses**
- **Career exploration and planning**
- **Industry sector skills analysis**
- **Industry-valued skills credentials**
- **Soft skills contextualized in CTE**
- **Dual enrollment and/or early admission into aligned postsecondary career programs**

Answer: SFUSD offers work-based learning opportunities ranging from job shadows and extended job shadows to internships. To date, United Way of the Bay Area and Genesys Works have provided internship coordination services to SFUSD, particularly for low-income students, and we will build on this vital work. CCSF engages industry speakers and lecturers, offers integrated instruction that incorporates soft skills, and also connects students to internship opportunities (particularly through the Bridge to Bioscience, B2B).

OEWD is piloting txt2wrk, an app connecting individuals seeking internships or employment to opportunities. An online profile of skills, experience, and contact information is stored in a txt2wrk database. Employers enter job opportunities; txt2wrk matches them to job seekers in the database and sends a text message containing clear instructions to the job seeker's mobile phone. We will expand the pilot to the SFUSD-CCSF pathways.

B2B also hosts poster sessions each semester in which students present what they've learned from conducting informational interviews with industry professionals; local industry participates in this event as mentors and judges.

CCSF also offers simulated work experience through innovative programs such as TechSpot, an NSF-funded project in which students provide "pop-up" technical support to the community, reinforcing the skills gained in class. With this grant, CCSF will also offer a summer work-based learning event (e.g., a hackathon) to complement the CNIT dual enrollment course in which TechSpot students will have the opportunity to participate as staff. In biotech, students engage in "in-house" internships at CCSF to prepare mobile labs that the Bay Area Biotechnology Education Consortium (BABEC) distributes to high schools. CCSF students will also serve as BABEC lab assistants in classrooms to gain work experience while serving as role models. Over time, more of the students participating in these

Question IV.3 continued:

Answer: opportunities will be graduates of SFUSD academies/pathways.

Only Microsoft Office Specialist certification has been offered at SFUSD, but the District continues to explore industry certification, and this grant will help bolster that exploration. CCSF offers coursework leading to the following industry certifications: Cisco, CompTIA (A+, Security+, Network+), Microsoft (Certified Technology, Certified IT, Hyper V), Ethical Hacking, Certified Information Systems Security, Hurricane Electric, VMware, EMC Information Storage and Management.

Dual enrollment is included in most CTE pathways, but only 30% of participants take advantage of it. The SFUSD Dual Enrollment Administrator will investigate the barriers to dual enrollment completion and this plan will address those needs and the transition from high school to CCSF. The SFUSD program coordinator and counselor will provide transition services and develop recruitment materials to support dual enrollment and pathway participation more generally. SFUSD, CCSF, and the Career Ladders Project have begun and will continue to address alignment issues and to remove systemic barriers.

SFUSD has worked closely with the UC Curriculum Integration Program (UCCI) to develop integrated academic and career courses; over 20 teachers have attended UCCI conferences and a UCCI training is scheduled Spring 2015 exclusively for SFUSD staff.

Professional development from ConnectEd will help integrate Linked Learning components into high school programs; the California Community College Linked Learning Initiative will provide parallel professional development to CCSF faculty in doing the same. SFUSD will continue to strengthen the rigor/relevance in all CTE courses, and continue to partner with the Technology Education And Literacy in Schools Program (TEALS), MPICT and Mission Bit to offer professional development to core academic

teachers interested in incorporating computer science.

IV.4 Describe how the consortium will provide for the development of student leadership skills through an established career technical student organization (CTSO) such as California Health Occupations Students of America (Cal-HOSA), Distributive Education Clubs of America (DECA), Future Homemakers of America Home Economics Related Occupations (FHA-HERO), Future Business Leaders of America (FBLA), Future Farmers of America (FFA), and SkillsUSA California or an alternate strategy that incorporates this instruction in all the courses and curriculum that make up the Program of Study.

Answer: Acknowledging the value of student leadership groups, SFUSD has participated minimally in the past, primarily through competitions including ProStart, FIRST Robotics and iGEM. CTE teachers seem most interested in SkillsUSA. To ensure the success of this component of our CTE program, we will provide funding to launch this programs in schools that show interest in the first year of funding. We hope to expand these organizations the following year, and those who have participated can provide best practices.

Question IV.4 continued:

Answer:

IV.5 Describe how the consortium and its partners will provide students with opportunities or activities such as those listed below.

- **Paid or unpaid internships**
- **Employment opportunities and/or state-approved apprenticeships**
- **On-the-job training**
- **Mentoring**
- **Classes offered at alternative sites**
- **Professional development for CTE teachers including externships**
- **Advisory group participation by students**
- **Field trips and guest speakers**
- **Job shadowing opportunities**
- **Volunteer opportunities**

Answer: The ICT and biotech workforce intermediaries for the SF CCPT Consortium, SF OEWD and BayBio Institute, will work in partnership with the San Francisco Chamber of Commerce, sfcti, and other industry partners to recruit and coordinate local industry to offer a variety of work-based learning opportunities to SFUSD and CCSF students. A number of local companies in both industry sectors have already pledged their support by agreeing to provide:

-Paid or unpaid internships (at least 12 companies)

-Employment opportunities and/or state-approved apprenticeships (at least 12 companies)

-Mentoring (at least 9 companies)

-Professional development for CTE teachers including externships (at least 4 companies/partners)

-Field trips and guest speakers (at least 20 companies)

-Job shadowing opportunities (at least 10 companies)
Other work-based learning opportunities (at least 21 companies)

ICT companies that have pledged their support for the SF CCPT Consortium include: CBS Interactive, First Person, Jawbone, KQED, LinkedIn, Pinterest, Safeway, Salesforce, and Zynga.

Biotech companies that have pledged their support for the SF CCPT Consortium include: Amgen, AvidBiotics, Bayer, Bell Biosystems, Boehringer Ingelheim, Cel Analytical, CymaBay, Gladstone Institutes, Omnix, Oncomed, Prosetta, SutroBiopharma, and Target Discovery.

The Consortium will also build on the work of Genesys Works and United Way of the Bay Area to place high school students in ICT and biotech internships.

Please see letters of support from the companies and organizations listed above.

Question IV.5 continued:

Answer:

Question IV.5 continued:

Answer:

Section V: Partnerships (40 points)

V.1 Describe the regional collaborative partnerships with business entities representing the targeted industry sectors, community organizations, local workforce investment boards, LEAs, and postsecondary education.

Answer: The SF CCPT Consortium workforce intermediaries (OEWD and the BayBio Institute) have had long-standing K-14 partnerships.

OEWD administers the Workforce Investment Board ("Workforce Investment San Francisco" or WISF) and the sector academies that make up San Francisco's workforce system and provide job preparation, vocational training, and other services to develop a pipeline of skilled and prepared workers in high-growth industries. CCSF is the primary sector academy training provider along with 50 community-based organizations that provide an array of training and support services to adults.

The BayBio Institute is the 501(c)(3) arm of BayBio, Northern California's life science industry association with over 500 members in the San Francisco Bay Area. It helps to maintain Northern California's leadership in life science discovery through support of science education, workforce development, and entrepreneurship, connecting life science professionals with students and educators in Bay Area high schools and community college science programs.

OEWD and the BayBio Institute will work with another key partner in this initiative, the SF Chamber of Commerce, which is engaged in a number of initiatives supporting education and training that the project can leverage. For example, the Chamber has served as a leading partner in the STEM Tech Talent Pathway Working Group. Membership includes SFUSD, higher education institutions, private for-profit, and non-profit partners. This group is developing a comprehensive plan to connect multiple public and private organizations

interested in creating a local diverse workforce for the technology sector and develop a clear vision and action plan for how to strengthen this pipeline from Pre-K to post-secondary to careers. The Chamber is also launching UNITE SF, which will support work-based learning from K-12 through higher education.

Circle the Schools is a joint project of the San Francisco Citizens Initiative for

Question V.1 continued:

Answer: Technology and Innovation (sf.citi) and the San Francisco Education Fund. sf.citi's charge includes leveraging the collective power of the tech sector as a force for civic action. Circle the Schools partners San Francisco-based technology companies with a local public school. Over the course of a school year each company organizes 3 to 5 activities at their adopted school tailored to meet each school's individual needs.

The Mayor convenes an Educational Leadership Council of leading K-16 education institutions to address the quality of school-to-career-or-college pathways, and, importantly, to address access and equity.

The Mayor also launched Summer Jobs+. SF Summer Jobs+ is a citywide summer program to help young adults (ages 16-24) find summer employment. This initiative is a partnership between the City of San Francisco, United Way of the Bay Area, the Department of Children, Youth & Their Families, OEWD, SFUSD, youth-serving nonprofits, and the business community.

Local employers, working closely with SFUSD and Mayor Lee, are funding initiatives to prepare the future workforce. For example, SFUSD received \$7.5M from salesforce.com to launch the Mayor's Middle School Leadership Initiative, a first of its kind public-private partnership to improve STEM education. Funding supported the purchase of tablets equipped with middle school science and math applications and digital content and teacher professional development. Salesforce Foundation supports an integrated fundraising strategy that includes volunteers, technology and resources. By focusing STEM resources in the 12 middle schools, SFUSD hopes to develop a pipeline to the high school CTE academies.

Zynga has supported SFUSD's Game Design Academy through funding a game design teacher and new computer labs at Balboa and Thurgood Marshall High Schools (approximately \$130K). Zynga staff serve as mentors, volunteer, and sponsor "Game Design Night" where students work directly with Zynga employees.

V.2 Complete and upload [Forms](#) E-LEA, E-CC, E-Business, California Career Pathways Trust Partner Roles, Responsibility, and Resource Charts for the LEAs, Community Colleges, and Businesses. Please refer to the essential responsibilities of partners listed on pages 10-12 of this RFA when completing the form.

V.3 Upload copies of any agreements that demonstrate high levels of cooperation, commitment, coordination, and formalized linkages among partners. Letters mailed or electronically mailed to the CDE will not be considered; all letters must be uploaded and submitted with the application.

Answer: Please see attachments.

Question V.3 continued:

Answer:

V.4 Describe how matching resources and/or in-kind contributions from public, private, and

philanthropic sources will be used to leverage and build the proposed career pathway program(s). Upload any letters of commitment describing the match and/or in-kind, specifying the amount of match or in-kind, identifying a contact person and phone number, and signed by an authorized agency representative. Letters mailed or electronically mailed to the CDE will not be considered; all letters must be uploaded and submitted with the application.

Answer: Over 20 industry partners have pledged their support of the SF CCPT Consortium (see letters of support). In addition to a number of ways in which they will support work-based learning, they have all indicated that they are willing to help review and align curriculum to industry need. These pledges represent a significant level of matching funds given that they will require the investment of staff members' time, whether for overseeing interns, hosting field trips, providing guest speakers, offering job shadowing opportunities, or for curriculum input.

Entities such as Salesforce Foundation and Zynga have both invested in the development of ICT pathways, totaling over \$7.5M. The SF CCPT Consortium will be able to leverage these investments as it builds pipelines that draw on those resources.

CCSF has identified a total of \$765,504 in in-kind matching funds for a four-year period; SFUSD has identified a total of \$7,164,000 in in-kind matching funds. CCSF's matching funds include those of Bio-Link, which hosts and annual Summer Fellows Forum that provides professional development and networking opportunities to both high school and community college faculty. Bio-Link also coordinates an equipment depot through which local industry donates equipment and laboratory supplies to Bay Area high schools and colleges, representing a significant infusion of in-kind donations. The Mid-Pacific Information and Communications Technology Regional Center (MPICT) housed at CCSF has provided a number of services to SFUSD related to identifying and mapping pathways and professional development which has made it possible to focus the efforts of the SF CCPT Consortium on ICT.

Question V.4 continued:

Answer: Circle the Schools, co-sponsored by sfciti and the San Francisco Education Fund, represents another way in which local industry supports K-12 pathways to college and careers by matching industry with schools that they adopt and for which they provide volunteers and activities aimed at engaging students and supporting teachers. This work will continue to bolster career pathways.

The Consortium will also be able to leverage resources such as Bio-Community, a project of the BayBio Institute, that connects life science volunteers to K-14 classrooms. Optimized for life science professionals, the portal provides a menu of remote and in-person volunteer activities aimed at increasing exposure to science and science role models by under-resourced classrooms and students of diverse socio-economic backgrounds. The engine of Bio-Community is a website portal where life science employees and companies can identify and volunteer for STEM education activities. The SF CCPT Consortium will not only be able to utilize this portal for its biotech pathways, but it will also be able to leverage the portal as a starting point for developing a similar system for ICT industry volunteers.

Section VI: Program Outcome Measures (20 points)

VI.1 Identify at least three measurable outcomes, in terms of benefits to students, on which the consortium will focus and be held accountable for during the 2015-16 program year. Refer to Program Outcome Measures on pages 15-17.

Answer: The SF CCPT Consortium selected the following program outcome measures:

1. Number of students enrolled in the career pathway program (LEA Goal 7, Postsecondary Goal 10)
2. Number of students participating in work experience opportunities aligned with the career pathway program in which they are participating at both the high school and community college levels (LEA Goal 1, Postsecondary Goal 1)
3. Number of students who completed one credit-bearing course aligned with the career pathway program in which they are participating at the college level (this would include dual enrollment, where applicable) (Postsecondary Goal 4)

As noted, an opportunity for improvement that the SF CCPT Consortium identified is in helping students, their families, and counselors understand the pathways. Activities include providing professional development for SFUSD and CCSF counselors and faculty; developing or utilizing existing materials and events such as hands-on open houses to ignite interest in the pathways; developing a web app accessible on any device that clearly defines the pathways and assists students, their families, and counselors in navigating the pathways; and finding creative ways to promote the pathways within the instructional setting in classrooms that are not part of the pathways but are related in some way. These proposed activities should yield a significant increase in student enrollment.

In addition, making sure that the pathways are seamless is another way to boost enrollment. For example, SFUSD conducts a two-year biotech pathway that is offered as both a CTE academy and a general education pathway. While the curriculum exists for both years, many schools only offer Year 1 because the teachers have not been trained to deliver the second year of curriculum and supply costs for the second year are exorbitant. This proposal would provide professional development to train biotech teachers and provide supplies while a new funding model is developed.

Question VI.1 continued

Answer: Those who complete both years of the SFUSD pathway are eligible to skip the Bridge to Bioscience courses at CCSF and directly enter the internship prep course. By adding the second year of Biotech, SFUSD anticipates an increase in pathway enrollment, especially for targeted subgroups.

The project will provide a variety of work experience opportunities, ranging from those that are less-intensive, yet meaningful, such as class speakers, to those that simulate work experiences, such as participation in "pop-up" technical support centers or biotech mobile lab prep to those in an actual industry setting such as internships. Most work experience opportunities will require the involvement of industry representatives. Existing structures such as BayBio Institute's Bio-Community that connects life science volunteers to K-14 classrooms or Circle the Schools that matches companies with schools will support the recruitment of industry, as will entities such as the Chamber of Commerce and others.

The Consortium will also utilize the services of ConnectEd and California Community College Linked Learning Initiative (CCLLI) to identify and implement contextualized approaches to instruction to immerse students in learning that mirrors the real world, particularly industry.

Many students enter CCSF with the goal of simply gaining or upgrading technical skills rather than completing a certificate or degree. In fact, completion of one or more courses may lead them to employment (or employment upgrades) without a certificate or degree. We have selected this program outcome because we believe that this is a valid entry point into a career pathway or to advance if already working in the field. Enrollment in a credit-bearing course would include students currently in high school who enroll through existing dual enrollment course or through concurrent enrollment as well as SFUSD graduates who enter CCSF to pursue the pathway at that level.

VI.2 VI.2. Explain the decision making process that determined these outcomes and how the consortium will continue to establish annual goals.

Answer: Consortium members discussed possible outcomes and determined that the three program outcome measures selected best served student need in San Francisco and best reflected the initial goals of the plan.

Our overarching goal is to strengthen pathways in ICT and biotech by addressing specific needs in each area as well as addressing systemic needs that support all CTE pathways. Specific objectives aligned with the intended program outcomes include: (1) increasing the number of students enrolled in ICT and biotech pathways particularly from underrepresented populations; (2) creating and sustaining more work-based learning experiences for students; and (3) ensuring that high school students have the opportunity to enroll in one or more credit-bearing courses, whether while still enrolled in high school or by entering CCSF upon graduation from high school.

These measures justify our investment; we need and want to increase knowledge of the pathways to increase enrollment of all students, particularly underserved and underrepresented populations who have participated in the pathways at lower rates than the population overall. Increasing work-based learning experiences and breaking down barriers to dual enrollment surfaced as key areas on which to focus during discussions among SFUSD and CCSF faculty, administrators, and partners such as MRICT, Bio-Link, and the Career Ladders Project. Thus, the program outcomes we selected reflect our areas of greatest need within the ICT and biotech pathways as well as for CTE pathways as a whole.

Question VI.2 continued:

Answer: At the outset of the grant, we will establish specific targets for program outcomes based on current baseline data. Through the communities of practice, we will hold an annual meeting during which we reflect on achievements and needs to identify the next annual goals. Multiple data sources will allow us to evaluate the extent to which we have met the outcomes and establish realistic targets for the coming year. Data sources include LaunchBoard, CalPASS+, SFUSD SIS, web app useage, txt2wrk, and, ultimately, once fully developed, the customer relationship management system.

VI.3 Describe the consortium's ability to collect, track and analyze student level data used to measure the program outcomes listed on pages 15-17 of this RFA. Highlight how the consortium will leverage statewide, regional, or multi-region systems for data collection and data exchange.

Answer: SFUSD will extract information from its student information system, Synergy. Much of the required data is already reported to Perkins E-1. The following information can be extracted through Synergy: number of participants, academic performance, program completers, and graduation rates.

SFUSD will create new course codes that clearly identify job shadow, work-based

learning, and internship opportunities (all are currently reported as work based learning). New fields will be created in the SIS to track mentoring opportunities and to track industry certification. There are no apprenticeship opportunities for ICT or Biotech.

All community college CTE programs are required to use LaunchBoard, the statewide data system that provides data to California community colleges and their feeder K-12 school districts on the effectiveness of CTE programs. The Consortium will comply with this requirement. At the same time, we need to identify a way to flag and track students entering CCSF from SFUSD schools. The Program Specialist will consult the appropriate entities within the College (e.g., Matriculation Office, Information Technology Office, and/or Research and Planning Office) to determine a way to easily flag and identify students entering CCSF from SFUSD CTE academies and pathways within Banner, the College's institutional database.

One of 5 work groups of the regional SB1070 Collaborative focuses on data alignment across K-12 and community college systems. Several representatives of the SF CCPT Consortium participate in SB1070 Collaborative meetings and a CCSF representative co-chairs the data work group meetings. Any developments in the improvement of aligning data across systems will be shared with the SF CCPT Consortium.

With respect to tracking internship participation as well as job placement, OEWD is currently piloting "txt2wrk," an app that connects individuals seeking internships or employment to those opportunities. Job seekers create an online

Question VI.3 continued:

Answer: profile of skills, experience, and contact information that is stored in the txt2wrk database. Job opportunities added by employers or career counselors are matched with job seekers in the database, and a text message containing clear instructions is sent to the job seeker's mobile phone.

To apply for the job or internship, the job seeker can text back a response, or dial a phone number contained within the text message. After verifying their identity, the job seeker can listen to text-to-speech translations of the detailed job descriptions and apply to jobs using the numeric keypad on their phone. In both cases, their profile information is forwarded to the employer, no internet connection required. When employers or case workers log in, they can see all of the applicants for a specific job, review qualifications, and call the job seekers directly.

Because this system utilizes a back-end database, it not only connects individuals to work opportunities but also stores information that will allow us to track the number of individuals that apply for and engage in work-based learning beyond what the SFUSD and CCSF programs offer directly. OEWD's current pilot focuses on the CityBuild sector academy. With this grant, we will expand the pilot of txt2wrk to include the ICT and biotech pathways.

Analysis of all data related to the program outcomes is relatively straightforward given that it is largely based on counting student engaging in particular features of the programs. That said, we will pay close attention to differences in participation and success rates to detect whether we need to modify our approaches with respect to ensuring the access success of all students.

VI.4 Describe the innovative services and strategies that will be used to ensure positive student outcomes for all students within the career pathway program that will promote student transitions

into employment, training, and/or postsecondary education. Include an explanation of how credit-by-exam, e-transcripts, technical certification or degree, and dual enrollment courses might be included.

Answer: The Consortium will develop materials to inform all middle and HS students, parents, teachers, and administrators of the requirements and outcomes of the career pathways and dual enrollment.

SFUSD freshmen complete a required college and career course (Plan Ahead) in which they complete a plan for post-secondary training. CTE teachers emphasize this plan and include soft skills in their curriculum. This year, SFUSD will implement an annual revision of this Individual Career Plan that will reinforce CCSF pathway programs as an option.

The Consortium will develop a web app accessible on any device that defines the pathways and helps students, families, and counselors navigate the pathways. At first, this may be as simple as an interactive brochure. Over time, the app will become a portal through which students receive personalized guidance. Ultimately, this could connect to a planned OEWD portal that will connect individuals (including HS students/graduates) to job opportunities and also training and other resources to support their career entry or advancement.

SFUSD counselors and CCSF instructors will receive professional development to identify when high school students in dual enrollment classes are struggling and learn how to help these students recover before they drop out or fail. Professional development will also integrate Linked Learning into the curriculum, which a recent SRI study found to promote retention.

Credit by exam has been particularly challenging as it is time-intensive. We will pilot a centralized system for offering credit by exam, including scheduling, administering, announcing, and recordkeeping (inputting information into Banner, the College's student record database) to reduce faculty burdens. Faculty will still grade exams, but the pilot will allow us to test whether other associated duties can be centralized to produce economies of scale while also gauging the demand for credit by exam.

CCSF will explore creating

Question VI.4 continued:

Answer: "fauxhorts"--simulated cohorts in the form of a required college success course once HS students enter CCSF. The course will address common college entry obstacles, such as reading college-level texts, and students will be referred for other supports if needed. This course would be independent of the specific pathways and open to all CTE pathway students.

SFUSD will continue to use high tech professionals from TEALS as volunteer teachers in a team teaching model to increase teacher CS expertise and hopes to expand this model to AME teachers. Mission Bit and BAVC offer technical skill courses for teachers and students to participate in the same class. Mobile labs and support from BABEC will allow HS teachers to have biotech resources in their classrooms, including CCSF students as teaching assistants.

The implementation of communities of practice will sustain program advancements.

The plan to expand the current pilot of the txt2wrk system represents another innovation that supports student placement in internships and jobs. This system uses push technology to match job/internship seekers with job opportunities that employers enter into the system, but only requires that individuals have a basic phone capable of texting (a smartphone is not required).

The workforce intermediaries will work with the Chamber of Commerce and local initiatives to expand upon and streamline industry engagement. An existing tool for this purpose is Bio-Community, a project of the BayBio Institute, that connects life science volunteers to K-14 classrooms. After a user analysis, OEWD will create a customer relationship management system for ICT, based on Bio-Community.

SFUSD and CCSF will share CTE advisory boards, strengthening the support from the ICT and Biotech sectors. This will help industry partners focus their advocacy for local talent with a collective emphasis on pathway support from HS to CCSF and serve as venues for industry coordination by the intermermediaries.

Section VII: Capability and Sustainability (20 points)

VII.1 Describe your agency's capabilities and knowledge in conducting and administering state-funded projects, partnerships, and contracts. Describe your agency's ability to collect and report financial and student performance data as required.

Answer: City College of San Francisco has a long history of successfully applying for grant funding from local, state, and federal agencies and achieving the intended outcomes of each grant. Most grant-funded projects are housed within the Division of Academic Affairs, and many of those focus on workforce development.

In particular, the College has successfully managed a variety of California Community Colleges Chancellor's Office (CCCCO) workforce grants over the course of many years. These include Initiative Centers for Biotech, Health, Manufacturing, Advanced Transportation, Small Business, and Workplace Learning, as well as the Bay Region's Center of Excellence (COE), which provides regional labor market research. CCSF has also successfully managed and completed many short-term Responsive Training Fund (RTF) and Industry-Driven Regional Collaborative (IDRC) grants in a variety of areas. With the implementation of the Doing What Matters for Jobs and the Economy Framework, CCSF now hosts the Bay Area Deputy Sector Navigators (DSNs) for Advanced Transportation and Renewables (ATR) and Information Communications Technology (ICT) and continues to host the Center of Excellence.

Last year, CCSF received funding from the state for a variety of planning grants, including Basic Skills, Student Equity, Student Services and Success Programs, and AB 86 Adult Education Consortium.

In each case, grants management utilizes a team model with a project lead and staff who works in concert with the District Business Office. The Office of Research and Planning provides support in the form of research and data. Project leads submit reports on data regarding student and other outcomes as required by the funder. Project leads are also responsible for filing quarterly and annual fiscal reports of activities and expenditures to the State.

Question VII.1 continued:

Answer: Workforce projects rely on building authentic partnerships with employers and industry associations. Although much of the work of EWD grants is externally focused, it is part of CCSF's culture to share partnerships and resources with faculty and departments within the College, and, within the workforce realm, this leverage focuses primarily on CTE departments and the students they serve.

CCSF has 26 CTE departments with close to 200 programs leading to awards. CTE programs have built strong relationships with industry partners who serve as advisors on curriculum and program content and provide work-based learning and employment opportunities to the students. CCSF's Biotech and ICT Programs have been especially successful at cultivating and maintaining productive partnerships with local and regional employers. Information on student performance is collected and reported by the College, which also participates annually in the CTE Employment Outcomes Survey.

The Office of Career and Technical Education at CCSF manages over \$1 million annually in Carl D. Perkins CTEA funds. The staff consists of a full-time Perkins Coordinator and 1.5 FTE administrative support staff. The Coordinator oversees the internal allocation of funds and is responsible for all student data reported to the State annually as part of the Perkins accountability requirements. The Coordinator submits all quarterly and annual fiscal reports, and the team works closely with the District Business Office, which executes contracts and handles disbursements, payroll, purchasing, and integration of grant financial information into the overall financial systems of the college. The Office of Career and Technical Education is also managing the recent allocation of \$752,000 in CTE Enhancement Funds (60% allocation) for the College.

VII.2 How will a Program Specialist(s) convene, connect, measure, or broker efforts to establish or enhance a locally defined career pathway program that connects school districts, county superintendents of schools, charter schools, workforce boards, and community colleges with business entities in the targeted industry sectors. Attach a resumé or a job description/duties for the Program Specialist(s) that demonstrates their skills, education, and work experience. In addition, highlight your agency's approach to leveraging capacity and expertise developed in an existing regional collaboration.

Answer: The project will invest in a full-time Program Specialist who will direct the project and serve as a CTE Pathways Coordinator at CCSF with a counterpart at SFUSD whose collective responsibility, first and foremost, will be to focus on the two identified sectors but who ultimately will have responsibility for ensuring smooth transitions from SFUSD to CCSF in all CTE pathways as appropriate. These individuals will work across sectors and with individuals representing areas within SFUSD and CCSF that are not sector-specific but relate to the overall infrastructure (e.g., dual enrollment). A Program Assistant will provide administrative support to the Program Specialist, and Points of Contact for each program area will serve as the primary conduits for engaging additional faculty and carrying out the specific work of strengthening each pathway.

Through conversations among the SF CCPT Consortium members, what is clear is that we need regular and sustained conversations about the CTE pathways as well as about larger infrastructure issues. We will achieve this through developing "communities of practice," coordinated by the Program Specialist, that will allow faculty and administrators from SFUSD and CCSF to learn from and with each other about a particular topic, use each other's experience of practice as a learning resource, and join forces in making sense of and addressing challenges they face individually or collectively.

One avenue for holding regular conversations is through the CTE programs' respective advisory boards. To date, these conversations take place within SFUSD or within CCSF, but not across both institutions, even though some advisory board members may serve on the advisory boards of each. To reduce duplication and maximize our industry partnerships, the Program Specialist will assist in convening the advisory boards for each area from each institution together rather than separately.

Question VII.2 continued:

Answer: Organizations such as ConnectEd, the Career Ladders Project/CCCLLI, MPICT, and Bio-Link will provide formal opportunities for collaboration and communication through professional development that focuses on a variety of topics, including Linked Learning, mapping of career pathways, articulation, innovations within the respective industries, and dual enrollment. The Program Specialist will broker those relationships that are not sector-specific and will be tasked with implementing new approaches or refinements to the Consortium's delivery of CTE pathways, largely in the areas noted above, that result from the communities of practice and professional development activities.

Effectively, then, the Program Specialist is responsible for addressing cross-cutting concerns in CTE pathways. In addition to those responsibilities noted above, this would include cultivating a better tracking system that allows us to flag students who enter CCSF's CTE programs from SFUSD academies and pathways in CCSF's institutional database (Banner).

Michelle Simotas will serve as the CCSF Program Specialist. She has extensive expertise and experience in the following areas: building on-ramps to CTE programs that incorporate contextualized basic skills and college success; establishing relationships with CBOs, faith-based institutions, unemployment offices, and the K-12 system to recruit students; planning and facilitating faculty training days and retreats; developing curriculum that is contextualized to a specific industry; facilitating collaborative curriculum design meetings; planning, running, and marketing CTE bridge programs; and planning, running, and marketing student orientation sessions. Please see attached resume.

VII.3 Explain your long-term sustainability plan for the proposed career pathway(s). Include types of programs, partnerships, resources, and funding that will help sustain the career pathway program after the grant period has ended.

Answer: SFUSD hopes to create staff and program capacity to sustain program changes, CCSF will continue to fund positions, while OEWD will put structures in place to maintain new supports. Through the professional development delivered by ConnectEd, SFUSD staff will grow both central office and site-based capacity to enhance program delivery and support. With this capacity building, systems will be put in place to ensure ongoing central office delivery of targeted support, and site leadership will develop protocols that can be transitioned to additional staff, so no program becomes dependent on one teacher. Expanding the industry support in the classroom will be sustained at little or no cost. The coordinator will create materials and establish systems that can be sustained after the grant so that students continue to experience facilitated supporting the transition into postsecondary. The community of learners should continue using existing professional development funds

As SFUSD has found supply costs prohibitive for Year 2 of Biotechnology, a program goal will be to develop partnerships with local biotech companies to sponsor these costs as part of future employee development. This goal will be conducted using leverage from

existing industry partnerships.

Using the community of learners, and the combined industry councils, a system, based on the current Curriculum Review Nights will be put in place to maintain industry standard curriculum. A deeper review will be conducted every three years, using professional development funds from existing programs.

Question VII.3 continued:

Answer: CCSF will continue to fund the Program Specialist/CTE Pathways Coordinator through alternative funding sources including, but not limited to, Perkins and Student Equity funding. If funded, this grant will allow us to provide proof of concept for this position. The CTE Pathways Coordinator will work closely with CCSF's CTE/Perkins Coordinator and, where feasible, share staff who provide administrative assistance.

Collectively, the SF CCPT Consortium will also identify fundraising strategies to support summer activities and other costs (e.g., lab supply costs as noted above) that are difficult to sustain with general funds. The communities of practice will serve as one venue through which Consortium personnel can identify the greatest funding needs and identify appropriate strategies for raising (or advocating internally) for those funds.

Section VIII: Budget and Budget Narrative (15 points)

- VIII.1 **An annual budget is required for each program year and the program expenses that will be identified using grant funds in the 2015-16 school year. Matching amounts from partners and set aside funds from the district should also be displayed in the proposed budgets. Provide a detailed budget narrative for the 2015-16 school year justifying each line item cost contained in the Grant Budget Page. The narrative should include how the proposed costs are necessary and reasonable in terms of benefits to students within the career pathway program. Upload [Forms F and G](#).**
- VIII.2 **An annual budget is required for each program year and the program expenses that will be identified using grant funds in the 2016-17 school year. Matching amounts from partners and set aside funds from the district should also be displayed in the proposed budgets. Provide a detailed budget narrative for the 2016-17 school year justifying each line item cost contained in the Grant Budget Page. The narrative should include how the proposed costs are necessary and reasonable in terms of benefits to students within the career pathway program. Upload [Forms H and I](#).**
- VIII.3 **Applicants will have to demonstrate how they will financially sustain the proposed career pathway program during the 2017-18 school year. Matching amounts from partners and set aside funds from the district should be identified in the proposed budgets. Provide a detailed budget narrative for the 2017-18 school year justifying each line item cost contained in the Grant Budget Page. The narrative should include how the proposed costs are necessary and reasonable in terms of benefits to students within the career pathway program. Upload [Forms J and K](#).**
- VIII.4 **Applicants will have to demonstrate how they will financially sustain the proposed career pathway program during the 2018-19 school year. Matching amounts from partners and set aside funds from the district should be identified in the proposed budgets. Provide a detailed budget narrative for the 2018-19 school year justifying each line item cost contained in the Grant Budget Page. The narrative should include how the proposed costs are necessary and reasonable in terms of benefits to students within the career pathway program. Upload [Forms L and M](#).**

Certification And Submission Statement

Please read before signing and submitting application.

I - certify under penalty of perjury:

- The information entered on behalf of Applicant Organization is true and complete to the best of my knowledge;
- I am an employee of or a consultant for the Applicant Organization authorized to submit the application on behalf of the Applicant Organization; and
- I understand that any false, incomplete or incorrect statements may result in the disqualification of this application.

By signing this application, I waive any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent provided in this RFP.

Submission By: kcharles

Submitter Initials: khc
10:26:16 PM

Submission Date: 2/6/2015