

SAFETY AND HEALTH INVESTMENT PROJECTS FINAL REPORT

Green Building Safety Awareness Training
Assigned SHIP grant #2011XH00168
January 6, 2013

Shana Peschek
speschek@rtc.edu

Construction Center of Excellence/ Sellen Sustainability

7/8/13

Shana Peschek



Funding and support for this project has been provided by the State of Washington, Department of Labor & Industries, Safety & Health Investment Projects.

Renton Technical College/CCE is solely responsible for the content of and views expressed in this report and related materials unless they have been formally endorsed by the Washington State Department of Labor and Industries.

PART I

Narrative Report

Organization Profile:

For awarded organizations, to include partners and collaborators, provide a brief description of each organization. Mission, vision, and purpose for each of the organizations who applied (this includes partners and collaborators) for the grant.

Construction Center of Excellence - Managing Partner**Brief history of organization(s)**

The Construction Center of Excellence was created in 2004 by the State Board for Community and Technical Colleges. Washington is recognized nationally for creating the Center model as a sector strategy to serve as an economic development driver for industries that help the state's economy grow, construction being one of these industries.

Brief Statement of organization's vision/mission

Vision: Our vision is to be a model in developing partnerships among business, industry and education for the purpose of enhancing economic and workforce development initiatives to meet the current and future needs of the industries critical to the state's economic vitality. For Washington State to be vital economically and competitive globally it is essential to provide a skilled workforce to keep and attract the most successful businesses. By connecting educators at every level (K-12, college, apprenticeship) and incumbent workers with industry partners and subject matter experts, our current and future workforce will be ready to meet the industry needs.

Mission: The Construction Center of Excellence shall serve as the statewide liaison to business, industry, labor, and the state's educational systems for the purpose of creating a highly skilled and readily available construction workforce by:

- Serving as a point-of-contact and resource hub for industry trends, best practices, innovative curriculum, and professional development opportunities.
- Maximizing resources by bringing together workforce education and industry partners in order to develop highly-skilled employees, and providing substantial Return on Investment by leveraging resources to provide free or low cost training and resources to educators and industry.

Brief description of track record of achievement

The Construction Center of Excellence record of achievement includes providing products like the Construction Math Toolbox to K-20 educators across the state as an applied math curriculum, model curricula including green building available open source on our website; career information and navigation tools, including green building career bridge, and creating the "Green Building Jobs of the Future" DVD to showcase opportunities in green building. Events we have hosted include Pathways

to Apprenticeship events held around the state to educate counselors and veteran transition officers on apprenticeship; Industry Summits and Workshops including the Pacific Northwest Apprenticeship Education Conference, an event that brought education, industry, government and labor from the Pacific Northwest region together for a two day conference (the Center received a certificate of Commendation from Labor and Industries for this event); Annual Energy and Construction Best Practices Summit that raises over \$4000 each year to provide scholarships to students in these industries; supporting sustainability initiatives by providing professional development workshops to K-20 educators on industry best practices and trends; and providing 16 hour, in-depth industry based sustainability training in partnership with Sellen Sustainability. Through these initiatives the Center provides industry based training efforts to 1008 K-20 educators, apprenticeship trainers and industry workers each 2009-2010 and 726 in 2010-2011.

How does this project fit into the work of your organization?

The Construction Center of Excellence is dedicated to partnering with industry to advance the skill levels of the workforce, foster community based learning environment and support the needs of industry. The development and administration of curriculum to support the education of the workforce is a strategic goal of the Center. The Construction Center of Excellence is committed to the project management and administration of this grant and has been a fiscal agent for the Department of Labor and Industries on another grant with great success so there is an established relationship between the Center and L&I in this capacity. The CCE is located on the campus of Renton Technical College (RTC) and uses the business office of RTC to process payment, pay invoices and make purchases. The CCE has its own budget that it maintains and follows Washington State guidelines and rules in contracting, procurement, and budget related matters. RTC facilitates any contracting and interagency agreements the Center needs to complete its projects.

Sellen Sustainability – Subcontractor & Partner

Brief history of organization(s)

Sellen Construction Company is the largest locally-owned commercial construction firm in the Pacific Northwest. Sellen has been in continuous operations as a general contractor since our founding more than 67 years ago. Located in the South Lake Union neighborhood of Seattle since our inception, we have constructed many of the Puget Sound's most prominent structures and are proud to have played a major role in the growth of the region.

As an early practitioner of sustainable construction methods, in the mid-1990s Sellen developed Erosion Control protocols that became adopted by the EPA. In 1997 Sellen became one of the first general contractors to join the U.S. Green Building Council, and contributed to the development and implementation of the LEED Rating System. Sellen continues to evolve environmentally-responsible design and construction practices, and is recognized as the Pacific Northwest region's 2009

and 2010 Top Green Contractor by Northwest Construction Magazine, and we also place 25th in the nation based on the 2011 Top Green Contractors list published by Engineering News Record.

Launched in May 2010, from a heart-felt responsibility to help evolve and “green” the industry, Sellen Sustainability is a wholly-owned division of Sellen Construction Company. General contractors at heart, Sellen Sustainability has evolved into a team of sustainability experts with multi-disciplinary professional credentials as architects, contractors, commercial real estate and property investing advisors.

Brief Statement of organization’s vision/mission

Our business vision is “to advance the building industry through economically-viable solutions that support a strong, healthy and sustainable future”.

Our Sellen Construction Roadmap Mission is “to support our community through civic, social and environmental responsibility”

Brief description of track record of achievement

Sellen Sustainability is a leader in the green building industry with more than 58 million square feet of built sustainable projects under their belt, including the first and the largest LEED® projects. Sellen Sustainability has a proven track record for partnering with workforce development organizations to deliver industry-informed, grant funded training programs including three 16 hour “Green Building Skills for the Trades” workshops delivered through the King County Workforce Development Council; and a 16 hour “Green Building Skills” course developed in partnership with the Construction Center of Excellence to equip training directors from the construction trades with the tools that they need to incorporate green building into their existing curriculum. To date, Sellen Sustainability has trained over 300 industry professionals including Sellen Construction employees, subcontractors and suppliers, and to companies, agencies and trainers from a wide range of disciplines throughout the state.

How does this project fit into the work of your organization?

Sellen Construction has a fundamental focus on safety – with a stated goal of being the safest contractor in the US, which is also backed up by a comprehensive training program and detailed jobsite protocols that are regularly reviewed by the company’s dedicated Safety personnel. Sellen Sustainability is the company’s sustainability training and consulting division that brings in-depth understanding and jobsite-relevant knowledge of how green building trends and new technologies dovetail with and inform the safety standards that will be required in the future.

Abstract:

Present a short overview of the nature and scope of the project and major findings (less than half a page).

Project Scope: Collaborate with safety professionals to create a statewide example for

Green Building and Safety Curriculum linked to the following segments:

- a. Standard safety practices applied to new situations
- b. New safety protocols needed
- c. Practices linked to Green building that make construction safer

Train 150 diverse safety professionals from across the state that can share the content with others. This will be inclusive of small businesses that don't currently have safety directors but are in need of training. To measure the effectiveness of this program, participants will complete a short Safety and Sustainability pretest at the beginning of the training. Following the course, participants will be required to take the same assessment for comparative results and feedback for areas of improvement.

Capture through video the collaboration meetings and example green building projects under construction to summarize the key messages in a succinct video so 1,000's of safety professionals across the state and/or nation can gain access and awareness well after the grant is complete.

Purpose of Project:

Describe what the project was intended to accomplish.

To evolve the safety industry by building and sharing a curriculum that will provide detailed information about "Green Building and Safety" increasing an awareness about sustainable building and the potential risks involved in working with the new systems and regulations. In addition to raising awareness we want to help foster a collaborative safety community that is excited about the prospects of green building.

Statement and Evidence of the Results:

Provide a clear statement of the results of the project include major findings and outcomes and provide evidence of how well the results met or fulfilled the intended objectives of the project.

Hosted 5, 8-hour training sessions around the state, 133 attended, an additional 78 attended fast track 4-hour training.

Evaluations from Skagit/Whatcom County training rated training 91% presenting the information attendees hoped to learn, 94% effectively covered various aspects of the topic, 83% effectively explained connection safety and green building, 84% well- paced training, The speaker's overall expertise, knowledge and use of presentation materials scored 96%. Evaluations for the Pierce County training rated 92% for presenting the information attendees hoped to learn, 93% effectively covered various aspects of the topic, 95% effectively explained connection safety and green building, 92% well- paced training, The speaker's overall expertise, knowledge and use of presentation materials scored 96%. Evaluations from King County training rated training 91% presenting the information attendees hoped to learn, 94% effectively covered various aspects of the topic, 83% effectively explained connection safety and green building, 84% well- paced training, The speaker's overall expertise, knowledge and use of presentation materials scored 96%.

Evaluations for the Spokane training rated 92% for presenting the information attendees hoped to learn, 93% effectively covered various aspects of the topic, 95% effectively explained connection safety and green building, 92% well- paced training, The speaker's overall expertise, knowledge and use of presentation materials scored 96%. Pierce County Roofer specific training rated 84% presenting the information attendees hoped to learn, 83% effectively covered various aspects of the topic, 87% effectively explained connection safety and green building, 90% well- paced training, The speaker's overall expertise, knowledge and use of presentation materials scored 93%. At each train the trainer, Yancy Wright, Sellen Sustainability took input from attendees to make adjustments to training materials so that curriculum content continued to improve and final product was result of input at all trainings.

Measures to Judge Success:

If relevant, state what measures or procedures were taken to judge whether/ how well the objectives were met and whether the project or some other qualified outside specialist conducted an evaluation.

Curriculum was developed with participation from Safety Experts and project supporters including members of Pierce County Roofers Apprenticeship, Sellen Safety Manager, and more. Evaluations were given to training participants and curriculum/delivery was modified where applicable. Objective of training 150 was exceeded, 211 received training and were given certificates. Curriculum has been disseminated to Tacoma Local Employment and Apprenticeship Training Program, 10 individuals that attended 2013 Contractors Environmental Conference and curriculum link: <http://www.constructioncoejobs.com/small-business-incubator/sustainability-resources-and-trainings/green-building-safety-curriculum/> has been included in National AGC article, sent to training attendees and announced in CCE Newsletter.

Relevant Processes and Lessons Learned:

Specify all relevant processes, impact or other evaluation information which would be useful to others seeking to replicate, implement, or build on previous work
AND

Provide information on lessons learned through the implementation of your project. Include both positive and negative lessons. This may be helpful to other organizations interested in implementing a similar project.

Attendance at trainings was challenging. Lessons learned to improve attendance: flexibility in scheduling the trainings, best times that work for employed attendees...calling registered people in addition to email reminding them they are signed up for the training.

Evaluation: Training attendees were evaluated before and after trainings, this helped gauge the success of the training as well as identify any areas to modify or add to training materials.

Including major users and stakeholders in the development of the curriculum and gaining buy in from users such as the Roofers is a positive process and impact on the project.

Product Dissemination:

Outline of how the products of the project have been shared or made transferrable.

Binder and cd's have been delivered upon request, all materials are available online at <http://www.constructioncoejobs.com/small-business-incubator/sustainability-resources-and-trainings/green-building-safety-curriculum/>. Using Augmented Reality APP the video is included in the Construction Center of Excellence Program and Resource Guide, 400 copies printed for 2013-2014 for dissemination as well as available online. Link to curriculum is being shared on CCE Distribution list of over 3000 subscribers, to the Community and Technical College System and in National AGC article.

In addition, Yancy Wright presented on curriculum and training at the 2013 Contractors Environmental Conference and disseminated the link for access to curriculum to attendees as well as 9 hard copies of the curriculum workbook and dvd.

**Feedback:**

Provide feedback from relevant professionals, stakeholder groups, participants, and/ or independent evaluator on the project.

Overall feedback was extremely positive, most of suggestions were around length of training. Comments included "needing some activity break to get out of seats", "request more information on long term benefits of green building" and "the use of local and actual buildings to show systems and safety were appreciated", "the aspects of unique safety measures for green building were most informative". Additional suggestions were to invite an architect to speak, and provide a site visit.

Project's Promotion of Prevention:

Explain how the results or outcomes of this project promote the prevention of workplace injuries, illnesses, and fatalities?

As the green building industry expands, workers from every trade are being introduced to a wide range of new systems, products and regulations all of which have safety concerns/requirements to prevent falls, being struck by an object and the potential for overexertion. To prevent accidents, loss of life, and promote health & safety a collaborative, solution based, Green Building Safety Awareness training program was developed and given to the construction industry throughout the State of Washington.

Uses:

How might the products of your project be used within the target industry at the end of your project?

Is there potential for the product of the project to be used in other industries or with different target audiences?

The training curriculum is available and easy to access and use by any construction training program including those in the Community and Technical College System, the Apprenticeship Training Programs and any of the high school construction programs.

Other industries such as energy/electricians that work on solar installations and landscapers/landscape architects are other industries that could potentially benefit from this curriculum and training. Information about the materials and how to access them was sent out to the CCE Distribution list that includes over 4000 contacts representing a variety of government, education, industry and labor. The Center of Excellence for clean energy sent on their listserv that reaches the energy industry (electricians, etc) and it was sent out on Michael Thurman, Labor and Industries, Listserv that reaches over 2000 primarily trades and apprenticeship. The National Association of General Contractors is distributing the information in their newsletter and it was also reported on in The Renton Reporter, Puget Sound Business Journal, the edc Magazine, and BuildingGreen.com.

Additional Information

Project Type <input type="checkbox"/> Best Practice <input type="checkbox"/> Technical Innovation <input checked="" type="checkbox"/> Training and Education Development <input type="checkbox"/> Event <input type="checkbox"/> Intervention <input type="checkbox"/> Research <input type="checkbox"/> Other (Explain):	Industry Classification (check industry(s) this project reached directly) <input type="checkbox"/> 11 Agriculture, Forestry, Fishing and Hunting <input type="checkbox"/> 21 Mining <input checked="" type="checkbox"/> 22 Utilities <input checked="" type="checkbox"/> 23 Construction <input type="checkbox"/> 31-33 Manufacturing <input type="checkbox"/> 42 Wholesale Trade <input type="checkbox"/> 44-45 Retail Trade <input type="checkbox"/> 48-49 Transportation and Warehousing <input type="checkbox"/> 51 Information <input type="checkbox"/> 52 Finance and Insurance <input type="checkbox"/> 53 Real Estate and Rental and Leasing <input type="checkbox"/> 54 Professional, Scientific, and Technical Services <input type="checkbox"/> 55 Management of Companies and Enterprises <input type="checkbox"/> 56 Administrative and Support and Waste Management and Remediation Services <input type="checkbox"/> 61 Educational Services <input type="checkbox"/> 62 Health Care and Social Assistance <input type="checkbox"/> 71 Arts, Entertainment, and Recreation <input type="checkbox"/> 72 Accommodation and Food Services <input type="checkbox"/> 81 Other Services (except Public Administration) <input type="checkbox"/> 92 Public Administration
Target Audience: Construction Safety Professionals, trades people, apprenticeship trainers.	
Languages: English	
Please provide the following information - - <i>(information may not apply to all projects)</i>	
# classes/events:	5
# hours trained	44
# companies participating in project	29
# students under 18	0
# companies represented	29
# reached (if awareness activities)	
Total reached	211
List, by number above, industries that project products could potentially be applied to. 22,23	
Potential impact (in number of persons or companies) after life of project? Materials published open source on www.constructioncoejobs.com so it is available to any that visit the site on a global level. College faculty and apprenticeship trainers have already asked for the curriculum.	
Have there been requests for project products from external sources? Yes <i>If Yes, please indicate sources of requests:</i> National Association of General Contractors, Tacoma LEAP, Clover Park Technical College, Kitchell Environmental Services, National Asphalt Pavement Association, Headwaters Resources, PCL Construction Enterprises, NIOSH, Walbridge, Republic Services and Pacific Northwest National Laboratory.	

PART II

Financial Information Budget Summary

Project Title: Green Building Safety Training

Project #: 2011XH00168

Report Date: 8/1/13

Contact Person: Shana Peschek

Contact #: 425-235-2352x5582

Start Date: 2/15/12

Completion Date: 8/1/13

1.	Total budget for the project	\$ <u>234,920</u>
2.	Total SHIP Grant Award	\$ <u>234,920</u>
3.	Total of SHIP Funds Used	\$ 234,920
4.	Budget Modifications (if applicable)	\$ <u>0</u>
5.	Total In-kind contributions	\$ 35,525
6.	Total Expenditures (lines 3+4+5)	\$ 270,445

Instructions:

- Complete the Supplemental Schedule (Budget) form first (on the next page).
- The final report must include all expenditures from date of completion of interim report through termination date of grant.
- Indicate period covered by report by specifying the inclusive dates.
- Report and itemize all expenditures during specified reporting period per the attached supplemental schedule.
- Forms must be signed by authorized person (see last page).
- Forward one copy of the report to **Project Manager Name, SHIP Project Manager at PO Box 44612, Olympia, WA 98504-4612**

PART II
(Continued)

Financial Information
Supplemental Schedules (Budget)

Project Title: Green Building Safety Training

Project #: 2011XH00168

Report Date: 8/1/13

Contact Person: Shana Peschek

Contact #: 425-235-2352x5582

Total Awarded: \$234,920

ITEMIZED BUDGET: How were SHIP award funds used to achieve the purpose of your project?

	Budgeted for Project	Amount Paid Out	Difference
A. PERSONNEL	10,790	19,559.60	8,769.60
Explanation for Difference and other relevant information: Modification submitted to move the unspent in travel, supplies and publications to cover additional time and effort in personnel. Vicki Plemmons, CCE Project Coordinator and Shana Peschek, CCE Director spent more time than budgeted for in the project in coordinating catering, preparing reports for RTC business office, setting up room logistics and marketing the trainings. All time and effort have been recorded accounting for all time worked.			

	Budgeted for Project	Amount Paid Out	Difference
B. SUBCONTRACTOR	178,130	178,130	0
Explanation for Difference and other relevant information:			

	Budgeted for Project	Amount Paid Out	Difference
C. TRAVEL	3,114	708.98	2,405.02
Explanation for Difference and other relevant information: under spent travel moved to personnel. It was originally budgeted for travel for 3 personnel to attend the training in Bellingham, Spokane, Pierce and King County. In reality it was determined there was only need for one person to conduct the training, significantly reducing actual cost of travel budgeted for the project.			

	Budgeted for Project	Amount Paid Out	Difference
D. SUPPLIES	9,900	5,258.84	4,641.16
Explanation for Difference and other relevant information: under spent supplies moved to personnel. Actual costs of catering and room rental/equipment was significantly less than expected. CCE was able to use RTC Catering for several of the trainings at a competitive price and one partner was able to contribute to the costs of catering for one of the trainings. Also, CCE was able to get free room/equipment for trainings at RTC.			

PART II

	Budgeted for Project	Amount Paid Out	Difference
E. PUBLICATIONS	11,600	9,644.59	1,955.41
Explanation for Difference and other relevant information: under spent publications moved to personnel. The vendor for the dvd and workbook printings gave Sellen a considerable discount on cost due to the high number in the order.			

	Budgeted for Project	Amount Paid Out	Difference
TOTAL DIRECT COSTS	213,534	213,302.01	228.99
			Difference is reflected in indirect grand administration paid out, indirect was slightly higher than budgeted for, and still under 10% allowable.

	Budgeted for Project	Amount Paid Out	Difference
TOTAL INDIRECT COSTS	21,386	21,617.99	231.99

	Budgeted for Project	Amount Paid Out	Difference
TOTAL SHIP BUDGET	234,920	234,920	0

	Budgeted for Project	Amount Paid Out	Difference
F. IN-KIND	34,575	34,720.48	145.48
Explanation for Difference and other relevant information: Pierce County Construction Partnership covered cost of breakfast catering for Pierce County training.			

I hereby certify that the expenditures listed on this report were made with my approval:

7/30/13

Whana Peseh

Date

Signature of Project Manager

PART III

Attachments:

Provide resources such as written material, training packages, or video/ audio tapes, curriculum information, etc. produced under the grant.

Also include copies of publications, papers given at conferences, etc.

This information should also be provided on a **CD** or **DVD** for inclusion in the file.

REMINDER!!: All products produced, whether by the grantee or a subcontractor to the grantee, as a result of a SHIP grant are in the public domain and can not be copyrighted, patented, claimed as trade secrets, or otherwise restricted in any way.