



City College Pizza, Pop, and Power Tools CTE Event

Prepared by City College
for Montana University System, Office of the Commissioner of Higher Education 2022-2023 Perkins Nontraditional
Occupations Sub-Grant

Submitted by Kaili Payne

Submitted on 08/03/2022 1:38 PM Mountain Standard Time



Opportunity Details

Opportunity Information

Title

2022-2023 Perkins Nontraditional Occupations Sub-Grant

Description

Perkins Nontraditional funds are made available to Perkins Eligible secondary and post-secondary schools to create career awareness, recruit, and retain students within a career and technical education (CTE) program of study (secondary + post-secondary) that leads to a high skill, high wage, or in demand occupation that is nontraditional by gender. The term “nontraditional occupations” means occupations or fields of work for which individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation or field of work. This one-time award is available to support CTE initiatives with a clear impact on students pursuing nontraditional programs.

Awarding Agency Name

OCHE

Agency Contact Name

Ciera Franks-Ongoy

Agency Contact Email

cfranksongoy@montana.edu

Fund Activity Category

Education

Opportunity Manager

Ciera Franks-Ongoy

Public Link

<https://www.gotomygrants.com/Public/Opportunities/Details/9389a629-8df3-4fdb-8726-cd24e44ba240>

Funding Information

Funding Sources

Federal Or Federal Pass Through

Award Information

Award Range

\$500.00 - \$20,000.00

Award Period

07/01/2022 - 06/30/2023

Award Type

Competitive

Submission Information

Submission Window

Opens 04/01/2022 12:00 AM

Submission Timeline Type

Rolling

Allow Multiple Applications

Yes

Eligibility Information

Additional Eligibility Information

Only Perkins Eligible entities (school districts, two-year programs, tribal colleges, community colleges or consortia) in good standing are eligible to apply.

Applicants and project contacts are not restricted to Perkins coordinators – CTE faculty and staff in related roles are encouraged to apply.

Additional Information

Additional Information URL

<https://www.mus.edu/Perkins/nontrad.html>

Award Administration Information

Administrative and National Policy Requirements

Proposed projects MUST "create career awareness, recruit, and retain students within a career and technical education (CTE) program of study (secondary + post-secondary) that leads to a high skill, high wage, or in demand occupation that is nontraditional by gender. "

Montana utilizes data from the Perkins Collaborative Resource Network Nontraditional Crosswalk for determining program eligible for nontraditional funding. You can visit the complete list here: <https://cte.ed.gov/accountability/linking-data>

The following are priority nontraditional occupations for the purpose of this RFP*:

Males:

Nursing/Allied Health

Early Childhood Education/Teaching K-3

Females:

Science, Technology Engineering, Math

Manufacturing & Trades

Construction and Architecture

Culinary

*Please note, this list is not exclusive, you may apply for funds to support any specific career fields identified as nontraditional in the Nontraditional Crosswalk or with other substantial supporting data.

Reporting

Full participation includes providing a written quarterly report for each quarter that spending takes places and a final report that documents project activities, populations served, and outcomes achieved, as well as a final expenditure sheet at year end.

- Final Narrative Report deadline: June 15, 2023
- Final Fiscal Closeout Report Due: August 15, 2023

Other Information

Collaboration between secondary and postsecondary institutions or between two or more postsecondary institutions is highly encouraged. Applications demonstrating intrastate partnerships will be given preference.



Project Information

Application Information

Application Name

City College Pizza, Pop, and Power Tools CTE Event

Award Requested

\$17,027.50

Total Award Budget

\$17,027.50

Primary Contact Information

Name

Kaili Payne

Email Address

kaili.payne@msubillings.edu

Address

3803 Central Ave.
Billings, MT 59102

Phone Number

(406) 247-3015

Project Description

Project Description

Directions: To increase the likelihood of receiving funding for your projects, please submit a separate application for each distinct, nontraditional occupations project proposed.

Defining "nontraditional occupations": The term "nontraditional occupations" means occupations or fields of work for which individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation or field of work.

The following are priority nontraditional occupations for the purpose of this RFP*:

Males:

- Nursing/Allied Health
- Early Childhood Education/Teaching K-3

Females:

- Science, Technology Engineering, Math
- Manufacturing & Trades
- Construction and Architecture
- Culinary

*Please note, this list is not exclusive, you may apply for funds to support any specific career fields identified as nontraditional in the Nontraditional Crosswalk or with other substantial supporting data.

Project Title

Pizza, Pop, and Power Tools

How does this project encourage the successful recruitment and retention of males or females within a CTE Program of Study that leads to an occupation that is nontraditional by gender?

According to the National Fire Association, only 7% of firefighters are female. City College and the Fire Science instructor are looking to address this severe gender gap by changing the recruitment and retention strategies regarding women. While City College has addressed one of the major obstacles, ill-fitting uniforms, we have found that the lack of experience with live structural firefighting conditions, and the stressors that come with it, plays a significant role in recruiting and retaining female Fire Science students. The ATTACK Digital Fire Training System will be used specifically a retention tool for female students in the Fire Science program and a recruiting tool for female students interested in pursuing a career in firefighting.

While students do get some experience in fighting wildland fires, they do not have the opportunity to practice structural firefighting conditions without the threat of unsafe temperatures. Used in concert with City College's smoke machine, the ATTACK Digital Fire Training System allows students to crawl through dark environments and navigate unknown spaces without visual aids, simulates the look and sound of fire/flames, and most importantly, will allow female students to practice safe, and if necessary, methods of victim rescue adapted to their size and strength in conditions that emulate a real fire. Giving our female students the opportunity to become familiar with adapted techniques follows with industry standards. In regards to female firefighters, the FEMA handbook states that, "Firefighters should be encouraged to perform a task in the way that is most efficient for them and gets the job done safely. Physical techniques for smaller, shorter firefighters should be incorporated wherever possible into physical skills and evolutions." Providing an opportunity for women to experience the most demanding aspect of firefighting in a safe environment, to allow them the opportunity to try and succeed, is key to promoting firefighting as a viable career opportunity for women.

City College is looking to further improve recruitment by highlighting our Fire Science program during our "Pizza, Pop, and Power Tools" event to be held in the spring of 2023. The "Pizza, Pop, and Power Tools" event, hosted by City College, will invite middle-school aged

girls, teachers, and counselors from our six local middle schools. The event will focus specifically on Automotive and Diesel, Autobody Collision Repair and Refinishing, Construction Management, Welding, and Fire Science. These six City College programs have historically low female enrollment when compared to their male counterparts. As such, City College is creating recruitment and retention strategies to address this. "Pizza, Pop, and Power Tools" is one such strategy. The event is designed to educate girls in non-traditional career fields in a fun and exciting way with the intent of guiding girls interested in CTE onto that educational pathway.

In addition to the City College faculty, we will be bringing in women from these industries to speak to the students about the significance of these programs and the career opportunities for women in transportation, construction, welding, and firefighting. The activities and demonstrations to be held during "Pizza, Pop, and Power Tools" are designed to be hands on and engaging, using some of the newest virtual technology available including Zspace and the ATTACK Digital Fire Training System.

What are the major activities or strategies that will be carried out and by whom?

Activity #1

Purchase of the ATTACK Digital Fire Training Panel. The Fire Science instructor will employ the ATTACK Digital Fire Training System in his Fire Fighter Foundations I and II classes, as well as his Fire Apparatus and Hydraulics class. Not only will the ATTACK Digital Fire Training System strengthen the academic and CTE skills of female students, but it will also provide them the necessary skills to pursue high-skill, high-wage occupations by exposing them to the stressors of structural firefighting in a simulated environment. Female students will be able to safely train, and if necessary, adapt their victim rescue techniques to their body size and strength.

The ATTACK Digital Fire Training Panel will also be used during our "Pizza, Pop, and Power Tools" event. City College's Fire Science instructor has invited female colleagues to show firefighting techniques and search and victim rescue using the ATTACK Digital Panel coupled with the department's smoke machine. This simulated fire environment will give females interested in pursuing Fire Science the opportunity to experience the most challenging aspects of firefighting. The local fire departments will bring their fire trucks and ambulances for demonstrations.

Activity #2

City College's Autobody Collision Repair and Refinishing instructor has invited Nichole Knight from Advantage Signs and Graphics to demonstrate pin striping on a car hood. Nichole and her skills are very much in demand as she is one of the few pin strippers in the Billings area. As such, she will be able to speak with the students about the high-paying career opportunities available to women in the auto body field. Students will also get to practice painting a vehicle virtually using the program's Simulated Sprayer and will learn how to airbrush from the auto body instructor.

Activity #3

City College's female automotive instructor will use the ZSpace Learning Station to demonstrate the assembly and disassembly of an electric vehicle engine. Local middle/high schools do not have the funds to purchase electric vehicles for their labs, nor are their teachers trained in repairing electric vehicles. Students will be exposed to new a vehicle type and process unknown to them, exciting students about the newer technology that is being used in automotive training.

Activity #4

City College's Construction Management instructor will offer lessons on hand and power tool safety, a vital skill that is very important in the programs offered at City College. In addition, he and a female construction student will demonstrate how to build a section of a wall. Students will also get to explore the sheds completed last year by the Construction Management program and the projects currently under construction.

Activity #5

City College's Welding instructors will demonstrate plasma cutting, aluminum TIG, and submerged arc welding. Welding has become an increasingly popular class with female high school students, and City College aims to encourage that interest by bringing in a local female welder to speak to the middle-school students about the many career opportunities in welding and the educational pathways that will lead to those occupations.

Do proposed activities include a secondary/postsecondary partnership component?

- Yes
 No

Describe the secondary/postsecondary partnership that will take place:

The Fire Science Advisory Board Committee has requested more collaboration between City College and the Billings CTE high school, the Career Center. Local industry partners have also informed us that they want their firefighters to also be paramedics. While City College's Fire Science and Paramedic programs work closely together, we are in the process of creating a stronger connection between



City College’s Fire Science program and the dual credit EMT course at the Career Center. As the ATTACK Digital Fire Training System is lightweight and portable, Alan and a female Fire Science student will take it to the Career Center and demonstrate proper firefighting techniques in the Career Center’s EMT course. More than 50% of the students who take the EMT course at the Career Center are female. Thus, these demonstrations will further expose female students who have already shown an interest in public safety to firefighting as a career option.

City College will invite the female students from our six local middle schools to attend our “Pizza, Pop, and Power Tools” event. We estimate that between 75 and 100 students will attend.

What is the timeline for this project? Please provide a brief summary of key dates for the proposed project.

October-February

- Plan event
- Purchase supplies

March

- Host event
- Send surveys

Please provide the contact information for any other significant parties relating to this grant:

Name	Title	Phone	Email
Kat Pfau	Department Chair	406-247-3044	kpfau@msubillings.edu
Vicki Trier	Dean of City College	406-147-3009	vicki.trier@msubillings.edu

Project Outcomes & Evaluation

Project Outcomes

How many students does the project intend to reach? Males? Females?

100-150 female students

Describe the project's goals to be measured in detail and how these relate to the project's activities:

The main goals of the purchase of the ATTACK Digital Fire Training System to address the gender gap in Fire Science and some of the barriers that female students in the program face. The gender gap will be addressed by exposing upwards of 150 female students to careers in firefighting and City College as an entrance point into this high-paying occupation. As the panel is a high-tech, safe, and portable tool, it will be used during CTE events at City College and demonstrations at high schools. In addition, it will allow current female students to practice victim rescue techniques adapted to their size and strength in a safe, but simulated fire environment. As our female students will be better trained and more prepared, they will be more desirable candidates for employment.

City College looks to continue improving recruitment by highlighting our Fire Science program during our "Pizza, Pop, and Power Tools" event to be held in the spring of 2023. The "Pizza, Pop, and Power Tools" event will expose upwards of 100 middle-school aged girls to high-paying, in-demand CTE career fields which they may not have been previously aware of by introducing them to female industry professionals and current female City College students. The middle schoolers will be able to see that City College is an entrance point into these non-traditional occupations. This event will also grant City College the ability to educate the local middle-school counselors and teachers on the many CTE options offered at City College, allowing them to further support their female students interested in trades and/or fire science.

Evaluation Activities

Describe the evaluation plan for determining your progress or success in meeting the proposed goals and outcomes:

We will survey female Fire Science graduates regarding improvements we have implemented to address the barriers for female firefighters. This survey will inform faculty and staff on whether City College is addressing the needs of our female Fire Science students and how we can improve for future female students. City College will also collect graduation data and employment rates from our female graduates. This data, along with the surveys, will allow the Dean of City College and the program director to determine if the improvements City College has made to the program for female students has enhanced retention and employment rates for this population.

City College will survey all "Pizza, Pop, and Power Tools" students and school administrators to gain feedback on their experience attending the event, their interest in future engagement in CTE programs, and ways that City College faculty and staff can support their educational and/or career goals. As City College would like to hold this event annually, these surveys will inform faculty and staff on the success of the event and the benefits of offering additional events in the future.

List the responsible parties for completing the evaluation of the proposed activities::

Kaili Payne, Perkins Coordinator and Kat Pfau, Transportation Department Chair will collect surveys and perform final evaluation of the event. Alan Lohof, Fire Science Instructor, will evaluate female Fire Science graduates.

Budget Narrative

In less than ~500 words, please provide a narrative explanation of the budget—with the focus on the expenditure of these Perkins funds.

Each line item in the final budget, and its purpose, should be accounted for in the budget narrative.

Budget Narrative

\$92 will be allocated for indirect costs per City College's Indirect Costs agreement

Contracted Services

- \$300 will be paid to Nichole Knight from Advantage Signs and Graphics for pin striping demo

Promotional Materials

- \$100 will be allocated for posters promoting event
- \$100 will be allocated for boosted social media posts
- \$200 will be allocated for postcards
- \$200 will be allocated for postage

Consumable Supplies

- Airbrush stencils 3 pieces @ \$3.50 each = \$10.50
- Airbrush paint 2 sets @ \$35 each = \$70
- 7/16" OSB 2 pieces @ \$22.75 each = \$45.50
- 2x4-12" wood 3 pieces @ \$11.50 each = \$34.50

Minor Equipment

- Airbrush 2 @ \$60 each = \$120
- Welding helmets 5 @ \$125 each = \$625
- Safety plates 20 @ \$1.50 each = \$30

Major Equipment

ATTACK Digital Fire Training Panel @ \$15,100

PLEASE REVIEW: NOTICE REGARDING EDUCATIONAL MARKETING MATERIALS

Please keep a couple things in mind with the educational marketing materials. When using federal funds, videos and any other marketing materials can't promote your college specifically in any way. Here are a few examples of what you can and can't do:

You can...	You can't...
Interview students or faculty wearing Gallatin College clothing	Have students or faculty identify as being "from Gallatin College" unless you are including other Montana schools in video as well.
Interview students or faculty with a Great Falls College sign in the background	Show a standalone shot/view of the front of Great Falls College (unless showing other Montana schools in video as well)
List/Show <u>all</u> schools in Montana where students can enroll in the highlighted programs	State that students are enrolled in highlighted programs at Helena College (without mentioning other schools)

A good rule of thumb is to remember that these videos will need to be made available for any Perkins schools in Montana to use to promote nontraditional careers if they want to, so the videos should be general enough that a college in Havre or a high school in Libby could also use it.

OCHE will need to review videos before we can reimburse for any video related expenses. If you have any questions about content don't hesitate to give me a call and we can run through it.

Budget

Proposed Budget Summary

Expense Budget

	Grant Funded	Total Budgeted
00 - Administrative/Indirect Costs		
Indirect Costs	\$92.00	\$92.00
Subtotal	\$92.00	\$92.00
04 - Contracted Services - Operating Expenditures		
Pin Striper	\$300.00	\$300.00
Subtotal	\$300.00	\$300.00
05 - Printing - Operating Expenditures		
Posters and Postcards	\$300.00	\$300.00
Subtotal	\$300.00	\$300.00
06 - Consumable Supplies		
Airbrush Paint & Stencils	\$80.50	\$80.50
Construction Supplies	\$80.00	\$80.00
Subtotal	\$160.50	\$160.50
07 - Minor Equipment		
Dual Action Airbrush	\$120.00	\$120.00
Safety Plates	\$30.00	\$30.00
Welding Helmets	\$625.00	\$625.00
Subtotal	\$775.00	\$775.00
08 - Communications		
Boosted Social Media Posts	\$100.00	\$100.00
Mailings	\$200.00	\$200.00
Subtotal	\$300.00	\$300.00
12 - Major Equipment		
ATTACK Digital Fire Training Panel	\$15,100.00	\$15,100.00
Subtotal	\$15,100.00	\$15,100.00
Total Proposed Cost	\$17,027.50	\$17,027.50

Revenue Budget

	Grant Funded	Total Budgeted
Grant Funding		
Award Requested	\$17,027.50	\$17,027.50
Subtotal	\$17,027.50	\$17,027.50
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Total Proposed Revenue	\$17,027.50	\$17,027.50

Proposed Budget Detail

See attached spreadsheet.

Proposed Budget Narrative

00 - Administrative/Indirect Costs

5% maximum of total award requested

Indirect Costs

\$92 for indirect costs as outlined in our Indirect Costs agreement.

04 - Contracted Services - Operating Expenditures

Create a line item for each contracted service including the rate and duration of service.

Pin Striper

\$300 per day, Nichole Knight, the pin striper from Advantage Signs and Graphics

05 - Printing - Operating Expenditures

Each line item should list the print rate, # of copies, and use.

Posters and Postcards

\$300 for printing of posters and postcards promoting event.

06 - Consumable Supplies

Includes basic office supplies, books and reference materials, CTE classroom supplies and software. Basic office supplies will be capped at \$150 per application unless a justification is presented and approved by OCHE prior to application.

Airbrush Paint & Stencils

3 stencils @ \$3.50 each = 10.50 2 sets of airbrush paint @ \$35.00 each = \$70.00

Construction Supplies

2 7/16" OSB @ 22.75 each = \$45.50 3 2x4-12' wood @ \$11.50 each = \$34.50

07 - Minor Equipment

Include a line item for each program-specific equipment under \$5,000.

Dual Action Airbrush

2 dual action airbrushes @ \$60.00 each = \$120.00

Welding Helmets

5 Weldcote Digital Ultraview Welding Helmets @ \$125.00 each = \$625.00

Safety Plates

20 4x5 Anchor Polycarbonate Safety Plates @ \$1.50 each = \$30.00

08 - Communications

Create a line item for each communications expense (eg. cellphone, mailings)

Boosted Social Media Posts

2 boosted social media posts @ \$50.00 each = \$100

Mailings

\$200 for postcard postage

12 - Major Equipment

Include a line item for each major equipment over \$5,000.

ATTACK Digital Fire Training Panel

\$15,000 Lion Bullex ATTACK Digital Fire Training Panel Base Package. \$100.00 for shipping.