

## Adult Career and Technical Education Equipment Grant Program Application

*The purpose of this grant is to support the purchase of equipment necessary for the delivery of occupational training for students enrolled in a postsecondary course offered at one of Vermont's Career and Technical Education Centers.*

*The Vermont Adult Career and Technical Education Association supports the development of programs in our career centers that respond to current employment deficits as outlined by Vermont Economic and Labor Market data, as well as the feedback that we receive from area employers and training partners. We have developed an equipment grant proposal that addresses a growing shortage of heavy equipment operators in Vermont. The headquarters for the program will be located at the River Bend Career and Technical Center in Bradford, VT.*

### Heavy Equipment Operations Program

#### Section 1. Basic Information

##### 1. Name and Address of the Career and Technical Education (CTE) Center Applicant

River Bend Career & Technical Center, 36 Oxbow Drive, Bradford, VT 05033

##### 2. Applicant DUNS #

184354066

##### 3. Application Contact Person (Name, Phone, E-mail)

Brian Emerson, 802.222.5212 x135 [bemerson@rbctc.org](mailto:bemerson@rbctc.org)

##### 4. Total Amount Requested

\$277,088.00

##### 5. Description of Equipment to be Purchased

Road Grader - Used	\$100,000
Heavy Equipment Simulators (3)	\$177,088
Total	\$277,088

\*see attachment for breakdown of each simulator and cost of added parts

We have determined that we can support training for road grading in our secondary and adult programs with the purchase of one used road grader. This will be a much-needed addition to our well-established

fleet of heavy equipment at River Bend Career and Technical Center (RBCTC) and we will transport this grader around the state for scheduled trainings. Our town partners are in strong support of this purchase.

To support training at RBCTC and around the state, we propose the purchase of three heavy equipment training simulators with modular control sets (please refer to attachments for specifics) to be used throughout all modules of training. These simulators will be scheduled to transport to other career centers to support training programs.

The need for simulators was recently reinforced at the Association for Career and Technical Education national conference in San Antonio, TX. Our colleagues who attended learned that heavy equipment simulators are economical and effective. Besides their strength of being low risk and all-weather accessibility, simulators save fuel costs and equipment wear and tear. They also learned that when students move from simulators to actual heavy equipment, they are ready to operate at a more advanced level.

#### **6. Name(s) of Training or Certificate Programs Supported by Equipment Use**

##### Heavy Equipment Operations

- Grader and Excavator Operations
- Loader, Backhoe, and Bulldozer Operations
- Skid Steers, Compaction Equipment, and Dump Truck
- Advanced Application on all machines
- OSHA 10
- Work-Zone Safety/Flagger Training
- National Center for Construction Education and Research (NCCER) certifications

\*Please see attachments for expanded course descriptions.

#### **7. Estimated number of students to be trained using this equipment**

##### Year 1:

- Expansion of Secondary Student Opportunities: Technical Centers are able to reserve simulators to accumulate program hours. (15 day students)
- Expansion of Adult Career & Technical Education Opportunities: (16-20 adults) structure of regional courses will vary upon needs of townships and industry partners, as well as the best season for training

##### Year 2:

- Expand to Western corridor of the Vermont by organizing a training at Hannaford Career Center - decision based on geography and existing heavy equipment program (15 day students and 16-20 adults)
- Develop post-secondary credits with Vermont Technical College

##### Year 3:

- Expand to Northern Vermont by organizing a training at the North Country Career Center (15 day students and 16-20 adults)
- Review program with VACTEA and determine if more could be done to expand and serve more regions.

## Section 2. Grant Requirements

Grants awarded under this program shall be used to purchase capital-eligible equipment. Grants shall not be used to support curriculum development, instruction, or program administration. Grantees shall have ownership over any share of equipment purchased with the use of these funds. Any equipment purchased from this program may also be used by secondary CTE programs.

### **A. Meets Occupational Demand. Please provide current labor market information that demonstrates how the training this equipment will be used for meets current occupational demand.**

The data below is sourced from Vermont Economic and Labor Market information and has been discussed with Mat Barewicz, Vermont's Labor Market Information Director. Below are the occupations most commonly associated with heavy equipment operation. Our training plan will target employee shortages in the listed occupations. By developing our program across the regions at multiple career centers, we will minimize barriers to training based on geography.

Job Title	Employment		Annual % change (compounded)	Annual job openings (due to change and separations)
	2016	2026		
Operating Engineers and Other Construction Equipment Operators	1,194	1,238	0.4%	135
Logging Equipment Operators	280	231	-1.9%	27
Industrial Truck and Tractor Operators	860	887	0.3%	98
Excavating and Loading Machine and Dragline Operators	209	208	-0.0%	23
Crane and Tower Operators	93	92	-0.1%	9
Earth Drillers, except oil and gas	73	75	0.3%	8
Heavy and Tractor- Trailer Truck Drivers	4,351	4,294	-0.1%	449
Paving, Surfacing, and Tamping Equipment Operators	No trend data at this time			

Source: [Employment Projections](#), Vermont Economic & Labor Market Information, in cooperation with [U.S. Bureau of Labor Statistics](#), statewide estimates released July 2018.

### **B. Aligns with a Career Pathway. Please identify the career pathway or set of stackable credentials involving a college or university accredited in Vermont that would include the training this equipment is being used to deliver.**

A career pathway in heavy equipment operations addresses some of the competencies from two of the career clusters identified by the Vermont Agency of Education, Construction and Transportation.

***Architecture and Construction***

*Careers in designing, planning, managing, building and maintaining the built environment.*

***Transportation Distribution and Logistics***

*Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.*

The credentials offered in our Heavy Equipment Program would prepare a student for job placement in a Vermont company for an average hourly wage of \$18.00 - \$20.00 or more dollars per hour according to Vermont Economic and Labor Market information.

We are seeking to engage in discussions with Vermont Technical College to develop a method for students to earn college credit toward a degree program.

**C. Multi-Region Use. Please name other CTE region(s) who plan to use this equipment in delivering a training program.**

Primary grant partners include Hartford Area Career & Technology Center, the Applied Technology Center at St. Johnsbury Academy, and River Valley Technical Center in Springfield, VT. In year two, Hannaford Career Center in Middlebury will seek to host this course, and in year three North Country Career Center, located in Newport, will host. Grant partners were chosen for their geographical location and their existing infrastructure to host a heavy equipment program.

All Career & Technical Education (CTE) centers will be invited to send students to this Heavy Equipment program when it is running in a region that is within a reasonable commute for their students.

All CTE centers will be able to schedule the simulators at their site, regardless of existing infrastructure to host heavy equipment.

**D. Industry Partnership. Please describe the business or industry partnerships involved in creating, delivering, or benefiting from the training this equipment supports.**

In the Upper Valley region, our career centers have a training partnership with John Deere/Nortrax, Pike Industries, Blacktop Inc., as well as municipalities in Vermont. Please see letters of support.

These industry partners are an integral part of curriculum development for our Heavy Equipment Program. Because we have equipment and space needed to deliver our program, these original partners will be part of advising and helping us connect with industry partners in other regions of Vermont.

In their letters of support, they all commonly share and understand that they will directly benefit from an increased number of qualified applicants. Next steps would include working on internship possibilities with our industry partners.

**E. Equipment Use. Please describe how the equipment will be maintained, insured, shared, and transported, if applicable.**

- RBCTC is responsible for maintenance costs, which will be covered, based on revenue.
- RBCTC currently has a Heavy Equipment Operations program. Equipment is insured through VSBIT.
- Equipment is shared among all centers through a "sending student" model in which any center can send a student and share in the revenue.
- Equipment can be transported to centers with the proper space to host the training by contract.

**F. Is this application supported by the Adult Career and Technical Education Association?**

Yes - see attached letter of support

**Section 3. Required Attachments**

Please attach the following documents, if applicable.

- List of Program Advisory Board Members
- Budget for Training Program and Equipment & Supply Purchases. Note other sources of funding or in-kind contributions.
- At Least Two Letters of Support from Employers or Industry Partners
- Letter of Support from the Vermont Adult Career and Technical Education Association
- Any other information that might be helpful in making an award determination

Please e-mail the completed application and relevant attachments to [sarah.buxton@vermont.gov](mailto:sarah.buxton@vermont.gov)

