trainND
NORTHWEST

October 30, 2009

ND Industrial Commission
ATTN: Oil and Gas Research Program
State Capitol – Fourteenth Floor
600 East Boulevard
Bismarck, ND 58505

Dear Oil and Gas Research Council Members,

Attached you will find two copies of the Commercial Drivers License Program grant application. The application is being made by the TrainND Division at Williston State College. The application is for the Commercial Drivers License Program for the amount of $165,480.

As the Executive Director of the TrainND Division, I am authorized to contract with the commission if our application should receive funding. Feel free to contact me if you have any questions or need further information at 701-774-4246 or deanette.piesik@wsc.nodak.edu. Thank you very much for your consideration of this valuable proposal.

Sincerely,

Deanette Piesik

Deanette Piesik
Executive Director
TrainND Division
Williston State College

Commercial Drivers License

Training Program

TrainND ~ Northwest

Williston State College

Deanette Piesik

Executive Director

October 30, 2009

ND Oil and Gas Research Council Grant Application

Grant Request: $165,480

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Table of Contents

Abstract 1

Project Description 2

Standards of Success 4-5

Background 6

Qualifications 6

Management 7

Timetable 7

Budget 8

Budget Narrative 8

Tax Liability 9

Appendices

- Doran 550 Truck Simulator 10
- Air Brake Simulator 11

Abstract

TrainND provides training for ND business and industry enhancing their ability to compete globally. Currently we provide safety training to over 240 oil and gas companies in northwestern North Dakota.

TrainND has provided the CDL training in partnership with the Center for Transportation Safety since 2005. Recent economic developments resulted in the non-renewal of the training agreement. With the increase activity in the oil and gas industry, the area has seen an increase in the need for truck drivers.

In August of 2009, the TrainND division completed a feasibility study to determine the viability of continuing this program. Fifteen trucking companies and service rig companies were contacted. The findings indicated that this training program should be continued. The college has a hands-on training site (nine acres) located adjacent to the Petroleum Safety and Technology Center for the program. Students will have access to classroom instruction and behind the wheel experience. The grant dollars will be used to purchase two simulators, the driving simulator will provide students a safe environment to practice shifting and different driving conditions. The airbrake simulator will be used in the classroom to demonstrate how the brakes function. The request for a trailer is to allow the simulators to be used at multiple locations.

The CDL program is a three-week, 135 hour class. In fiscal year 2009, 120 individuals completed the CDL program and received their license. With two trucks and a longer program, 72 individuals will have the opportunity to attend and complete the program. The simulators will also be used for the CDL refresher training that area trucking companies require. The grant dollars will fund the costs of the simulators and the college will fund other costs. The total project is estimated to cost $373,980; the request from the Oil and Gas Research Council is for $165,480.

Project Description

Acquiring a CDL requires a skills test (pre-trip inspection and driving test), and knowledge test (written) covering the unique handling qualities of driving a large, heavily loaded 18-wheeler, and the mechanical systems required to operate such a vehicle, plus be declared fit by medical examination no less than every two years. A person must be at least 18 years of age to obtain a CDL. Drivers under age 21 are limited to operating within their state of licensing (intrastate operation).

In 2006, the U.S. trucking industry as a whole employed 3.4 million drivers. A major problem for the trucking industry is that a large percentage of drivers are aging, and are expected to retire. Very few new hires are expected in the near future, resulting in a driver shortage. Currently, within the trucking sector, there is an estimated shortage of 20,000 drivers. That shortage is expected to increase to 111,000 by 2014. Trucking is also facing an image crisis due to the long working hours, long periods of time away from home, and the dangerous nature of the work. Employee turnover within the trucking industry is notorious for being extremely high.

From 1992–1995, truck drivers had a higher total number of fatalities than any other occupation, accounting for 12% of all work related deaths. Truck drivers are five times more likely to die in a work related accident than the average worker. Highway accidents accounted for a majority of truck driver deaths, most of them caused by confused drivers in passenger vehicles who are unfamiliar with large trucks. The unsafe actions of automobile drivers are a contributing factor in about 70 percent of the fatal crashes involving trucks. More public awareness of how to share the road safely with large trucks is needed.

According to ND Job Service the largest percent increase in the number of businesses from 1998 to 2008 occurred in the Transportation industry which increased 47.06 % from 51 businesses in 1998

to 75 businesses in 2008 for Region I. From 1998 to 2008, Transportation increased the number of jobs by 142.59 %. Job Service of ND estimates that Truck Transportation in North Dakota is projected to grow by 14.5 percent between 2006 and 2016, faster than the 8.5 percent growth rate for all industries in the area. This amounts to 749 additional jobs over the period, or about 75 jobs added per year. In addition the largest private sector increase in the number of jobs for Region I from 1998 to 2008 was in Oil and Gas Extraction industry with an increase of 1,989 employees for a total of 3,106 employees in 2008. That is an increase of approximately 178.07 %. Many of these employees have a CDL as required by their business.

The Commercial Drivers License Program is a three-week, 135 hour course. The training includes: classroom instruction and behind the wheel driving. This program offers the best opportunity to learn by presenting information in hands on situations from behind the wheel and from experienced instructors in the classroom. Access to the simulators will provide an additional training environment. Students will be able to have hands-on driving experiences in the safety of a classroom, before they get behind the wheel of a semi-truck. The class includes all materials, training aids and preparation to take the state regulated CDL test. Students will receive a Certificate of Completion.

Classroom:

- General knowledge of state and federal requirements to drive a commercial vehicle
- Hazardous materials knowledge
- Log books, federal regulations and Hours of Service
- Rules of the road and how they apply
- Handling cargo and cargo documentation
- Accident reporting and documentation
- Roadside emergencies
- Driver impairment
- Load securing
- Map reading and trip planning
- Life as a driver
- Defensive driver training

Skills:

- Pre-trip inspections
- Air brakes
- Basic vehicle maintenance
- Beginning backing
- Straight line
- Parking
- Maneuvering tractor and trailer in limited areas
- Measured turns
- Advanced backing with combination tractor-trailer
- Use of spotters in backing
- Coupling and uncoupling
- Vehicle securing
- Driving simulator

Behind the Wheel: *Driver to instructor ratio: 3 to 1*

- Rural roadways driven in light traffic with tractor only
- Light industrial area with light traffic
- Interstate driving (if available) and/or off road driving

Standards of Success

The Doron simulator includes a library of dozens of pre-loaded scenarios designed to achieve specific training objectives; designed and evaluated by professional traffic safety and trucking industry training professionals. CDL training exercise scenarios are provided and drivers can practice on the skills course or driving range in the virtual world. The Doran training materials provided the framework for new or experience truck driver training, remedial training objectives or defensive driving needs. Results indicate that an integrated and focused curriculum of instructor-led, behind-the-wheel, and simulator based training reduces accidents by 12% to 43%, with increased driver retention and lower driver turnover or washout.

The simulator replicates the driving compartment of a truck and is equipped with a 10-speed transmission. It includes essential components found in late model trucks, including air brakes and trailer air supply. It meets the trucking industries' unique training requirements by being customizable, upgradeable, and modular. The high quality real-time visual system is specifically engineered to provide views from the driver's seat of truck. To complete the realistic visual display, remote controlled real-time rear-view mirror images are synchronized and imbedded in the appropriate simulated window images.

The project's success will be measured on the completion rate, as well as the pass rate of the students completing the program. Our goal is to have a 96 % pass rate for those who complete the program. For some students, testing is an anxious time, we will work with students who do not pass the initial driving test and allow them the opportunity to retest. Also, we have the ability to provide instruction for students who struggle with the written part of the Commercial Drivers License test. As needed or as requested by trucking companies or individuals this class will be offered. Another measure of success will be adding to our fleet of trucks. If requests for the class continues to grow, we will add additional trucks and instructors. Truck driver's salary for the state of ND averages over $70,000 per year. Training North Dakotans on driving conditions in the state of ND will save money, retain individuals in the state, and provide them with the driving experience for their work environment.

Background

TrainND has provided the CDL training in partnership with the Center for Transportation Safety based in Colorado. Recent economic developments resulted in the non-renewal of the training agreement. With the increase activity in the oil and gas industry, the area has seen an increase in the need for truck drivers. This need for individuals to have CDL's also affects the service companies, as many of their employees need a Class A CDL for their job requirements.

The college has a hands-on training site (nine acres) located adjacent to the Petroleum Safety and Technology Center. This site is where the truck course is set up and where students practice backing/driving. Students have access to classroom instruction and behind the wheel experience. The grant dollars will be used to purchase two simulators. The driving simulator will provide students a safe environment to practice shifting and different driving conditions. The airbrake simulator will be used in the classroom to demonstrate how the brakes work and as a visual aide.

Qualifications

The college has hired two individuals with extensive experience in teaching and in truck driving. David Hudson has had a CDL for the past 20 years and serves as the lead instructor. Mr. Hudson assisted with the development of the three-week training program. He has taught CDL classes for the past 3 years. Eric Theis was hired to instruct the class in the Minot area. Mr. Theis worked the past 5 years for Earthmovers and has a degree in Drivers Instruction from Dickinson State University.

Dennis Knudson serves as the program administrator and supervisor. Mr. Knudson has a Class A CDL, which he has maintained since 1992. He has worked at the college for the past 3 years, serving as the instructor for the Floorhand Training Program, SMART school, and Aerial Lift training program. Knudson is the Director of the Petroleum Safety and Technology Center.

Management

Deanette Piesik, Executive Director will manage and oversee the grant. Piesik will be responsible for all grant reporting and budget information. She has more than ten years of grant experience. Grant reports will be provided to the Oil and Gas Research Council by July 15, 2010 for October 2009 through June 2010 or as requested by the Council. The report will provide information about the number of individuals completing the program, the pass/fail rate, evaluation summary, and year to date budget report. If the grant is funded the simulators will be incorporated into the January classes. A schedule for classes and locations will be developed in November of 2009 for the next six months. TrainND has individuals evaluate each class, as well as those companies who send employees to the training program will complete a Client Evaluation form.

Timetable

TrainND offered the first class in October with three students completing the class. All three students passed the CDL test and plan to find jobs in the oil and gas industry. The next class is scheduled to begin in Minot on November 4th. A second instructor from Minot will be trained during the November class to deliver this program. The class will return to Williston in December where we have six individuals registered. Both instructors will be needed for the Williston class. Initially the schedule plans for a class in Minot and Williston on a monthly basis. This will allow for six individuals to complete the program per month.

Tentative plans call for the delivery of the CDL program to Bismarck and Dickinson on a rotating basis along with Minot and Williston. The TrainND ~ Northwest Division will provide this training for western and central ND. We have also been contacted by Devils Lake (Lake Region State College) and Belcourt (Turtle Mountain Community College) to assist with CDL training in their areas.

Budget Narrative

TrainND is requesting grant funds for the two simulators – Doron CDL driving and the Airbrake. In addition the grant request for a trailer for the simulators, this will allow for the training to be delivered at various locations. Descriptions of the two simulators are located in the appendix.

The match for the grant will be provided by TrainND and Williston State College Foundation. Williston State College Foundation purchased two Freightliner semi-trucks for the training program. The college will pay a monthly lease for the semi-trucks. TrainND purchased the two drive-van trailers for the program. TrainND will purchase the generator to operate the driving simulator in the trailer. Also, we will pay for all furniture needed to make the trailer a mobile classroom. Two instructor salaries and benefits are also included as a match. Training materials consisting of DVDs, log books, classroom handouts, etc are part of the match. Two sets of training materials are needed to provide the program at the multiple locations.

Budget

Commercial Drivers License Program Grant

	Grant Request	Match
CDL Simulator	$136,840	
Enclosed Cargo Trailer	$20,000	
Airbrake simulator	$8,640	
Generator		$4,000
Freightliner Trucks		$70,000
Van Trailers		$10,000
Instructor's Salary/Benefits		$120,000
Training Materials		$4,500
Total	**$165,480**	**$208,500**

Tax Liability

Williston State College operates as a two-year public community college in the ND University System. The college is one of eleven institutions under the jurisdiction of the ND State Board of Higher Education. Williston State College is considered a state agency and has no outstanding tax liability to the state of North Dakota. For further clarifications, contact Kasey Anderson in the Business Office at 774-4249.

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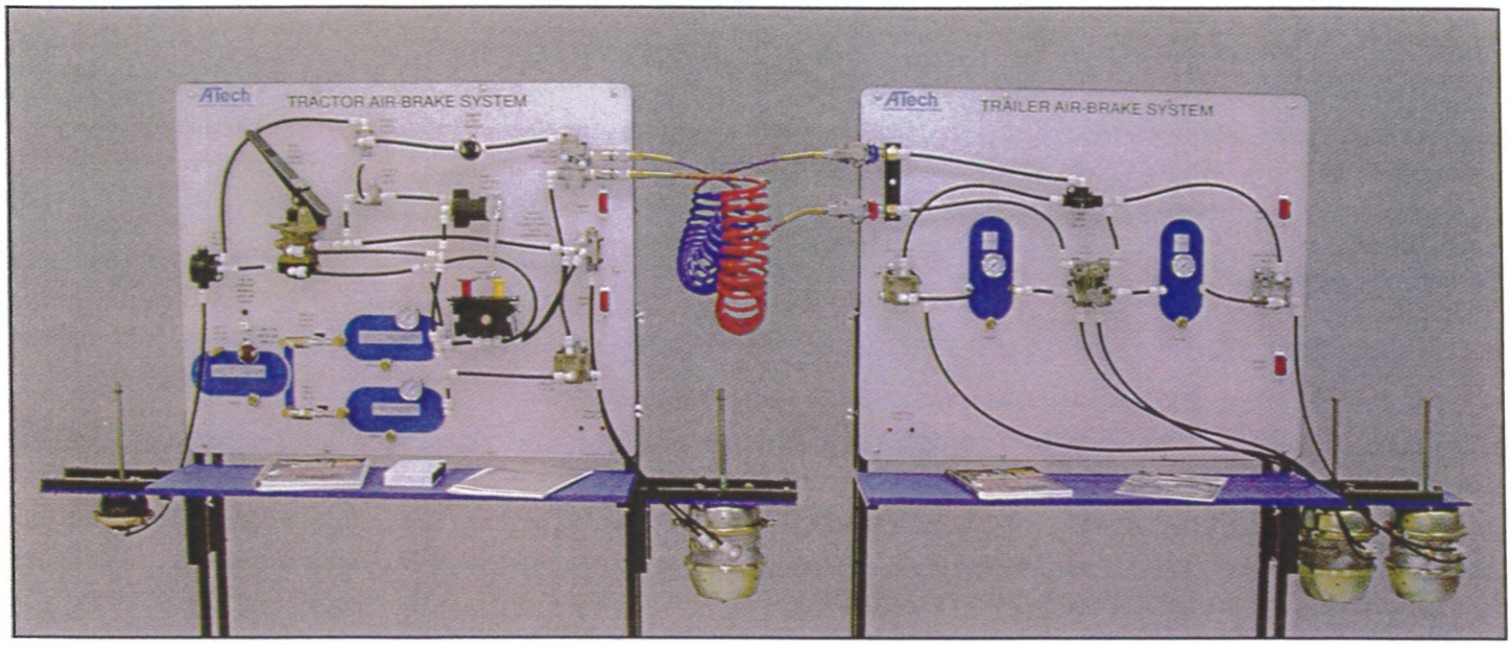

Tractor (Model 6410) and Trailer (Model 6420) Air Brake System Trainers

Air Brake Components Include:

- Low Pressure Warning Light and Buzzer
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- Safety Valve
- Drain Valves - Manual
- Single Check Valves
- Air Gauge
- Brake Light Switch
- Quick Release Valve
- Double Check Valve
- Dual System Foot Brake Valve
- Control Valve
- Spring Brake Valve
- Relay Valve
- Hand Control Valve
- Spring Brake
- Service Brake Chamber
- Tractor Protection Valve
- Manifold Dash Valve
- Service and Emergency Glad Hands
- RT4 Valve
- RG2 Valve
- D.O.T. Air Brake Lines
- Quick Release and Double Check Valve Combination

The ATech Air Brake Training System allows system demonstrations of:

- Compressor Failure
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- Normal Brake Operation
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