

## MISSION

To build a safe, productive, and sustainable workforce of craft professionals.



# NCCER OVERVIEW PHMSA 2016 PIPELINE PUBLIC AWARENESS WORKSHOP

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JULY 13, 2016

*Chicago, IL*



THE STANDARD FOR DEVELOPING CRAFT PROFESSIONALS



# NCCER OVERVIEW

- *Who We Are – Background, Mission & Vision*
- *Scope and Scale*
- *NCCER and Pipeline*
- *PHMSA and NCCER Partnership*
- *Why Train?*
- *Conclusion*



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# ***Background, Mission, Vision***

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# WHO WE ARE



- Not-for-profit education foundation
- Created in 1996 as *The National Center for Construction Education and Research*
- Support of more than 125 construction CEOs, associations and academic leaders
- Revolutionized training for the construction industry



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# OUR MISSION AND VISION



**Mission:** Build a safe, productive and sustainable workforce of craft professionals

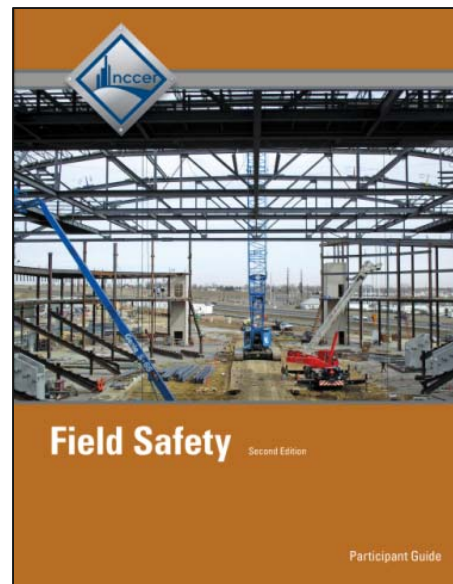
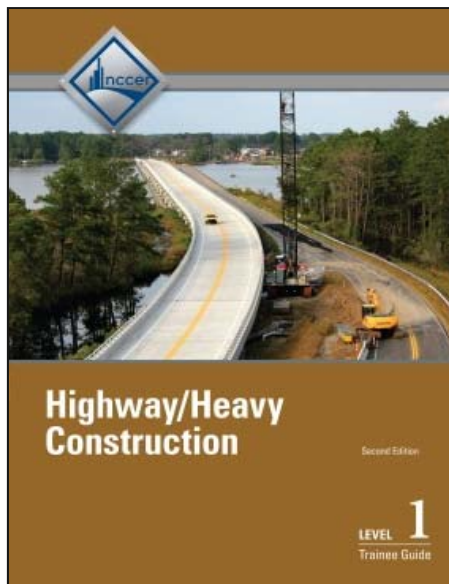
**Vision:** Be universally recognized by industry and government as the training, assessment, certification and career development standard for construction and maintenance craft professionals



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# FOR INDUSTRY

- 35 Construction and Maintenance Craft Areas
- 8 Power Areas
- 6 Sustainable Titles
- 8 Pipeline and Pipeline Maintenance Craft Areas
- 6 Safety and Management Titles
- 3 Maritime Titles

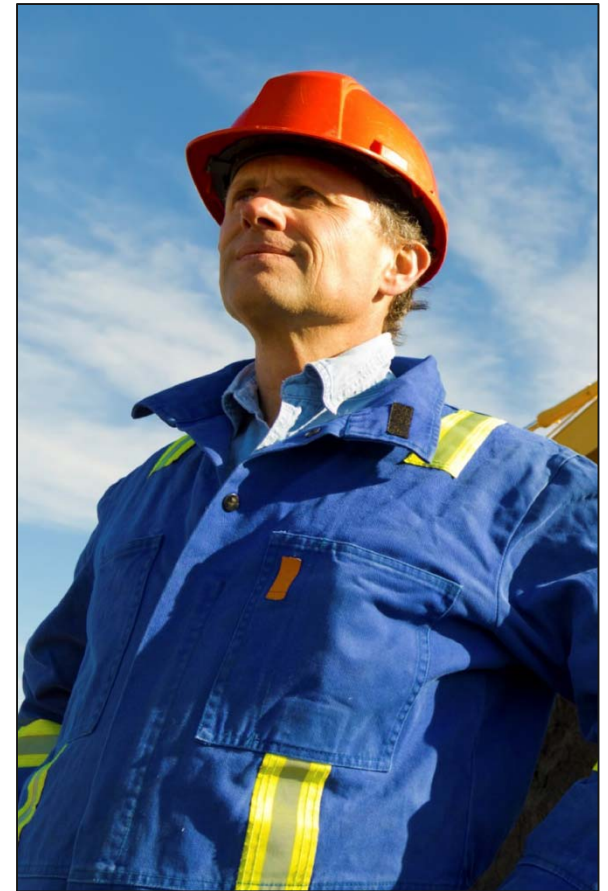


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## ...BY INDUSTRY - *SUBJECT MATTER EXPERTS*



NCCER authoring teams comprised of those who perform the jobs with min 8 years field experience and experience teaching the craft to others



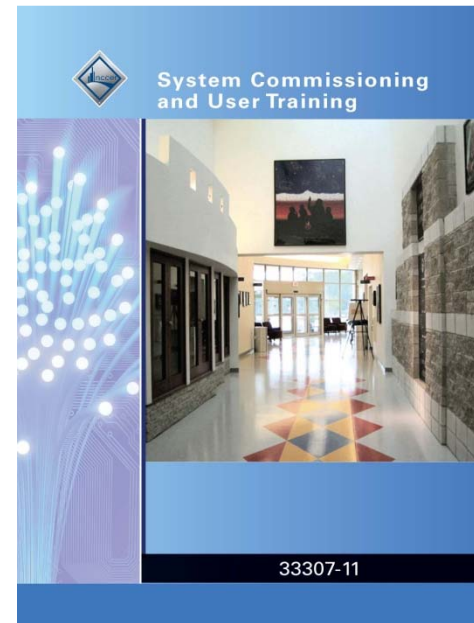
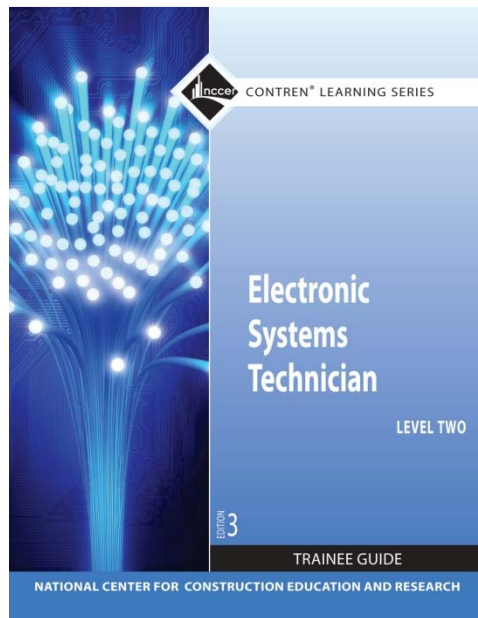
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# STANDARDIZED FORMAT



## Modular

- Discrete task training unit
- Must pass written & performance tests for each



## Level

- Modules sequenced in a logical instructional order for overall course study
- Curricula meets DOL requirements for apprenticeship time-based training



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# SUCCESSFUL COMPLETIONS TRACKED AND RECORDS STORED IN NCCER'S REGISTRY



- Certificate provided after completion of a level in NCCER's curriculum
- Achieved by passing every module's written & performance tests





# ***Scope and Scale***

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# OUR SCOPE



## GOVERNMENT

- Job Corps
- YouthBuild
- Corrections
- State & Local Workforce Agencies
- Military
- State Licensing Agencies

## WORKFORCE

- Owners
- Contractors
- Associations
- Organized Labor
- Leased Labor

## INDUSTRY

- Construction
- Pipeline
- Mining
- Manufacturing
- Shipbuilding
- Petrochemical
- Energy

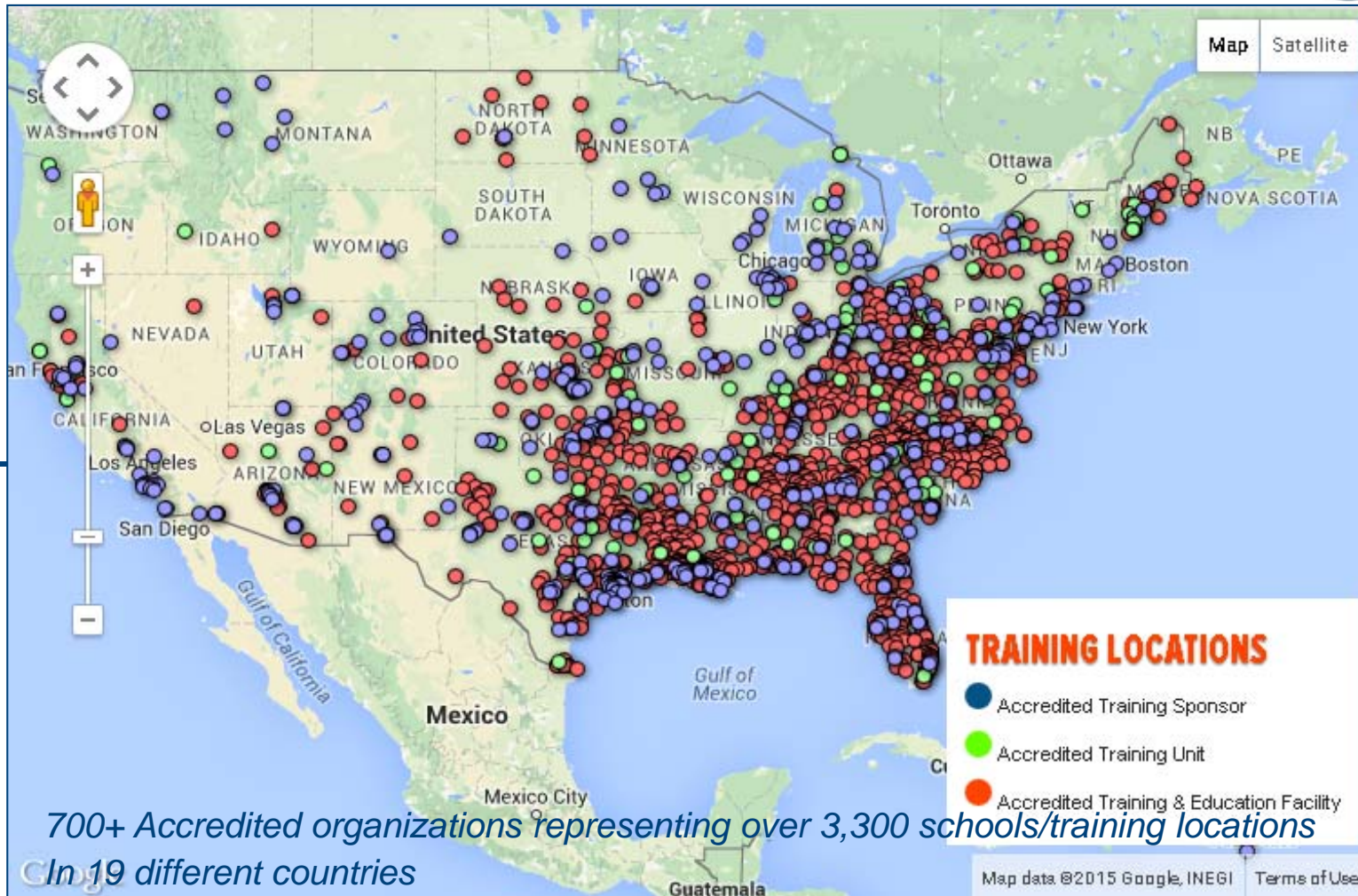
## EDUCATION

- Secondary
- Community Colleges
- Career Colleges
- Propriety Schools
- Training Academies
- Employment Based



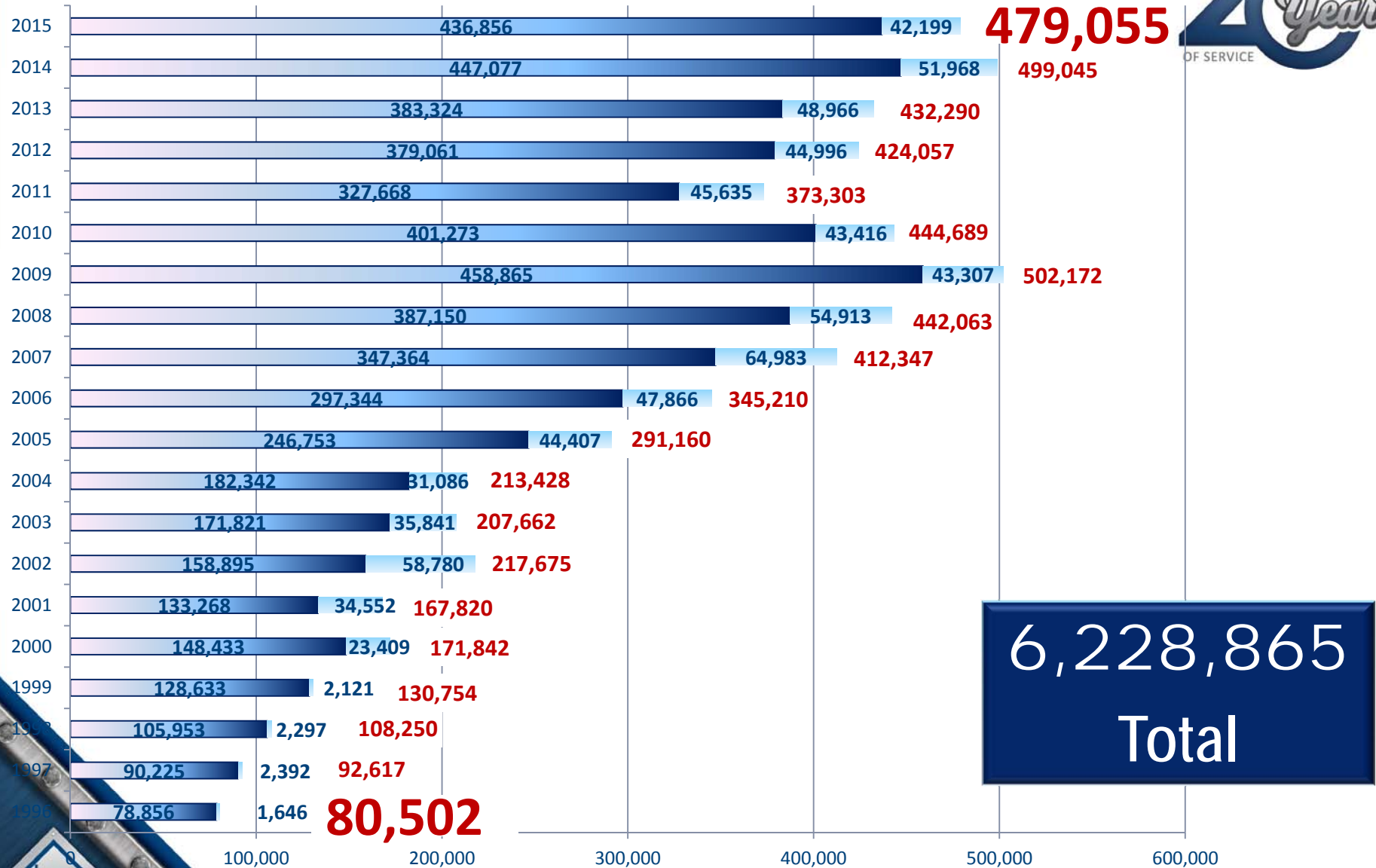
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# OUR SCALE: 50 STATES & 19 DIFFERENT COUNTRIES



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# STUDENTS, INSTRUCTORS & CRAFT PROFESSIONALS

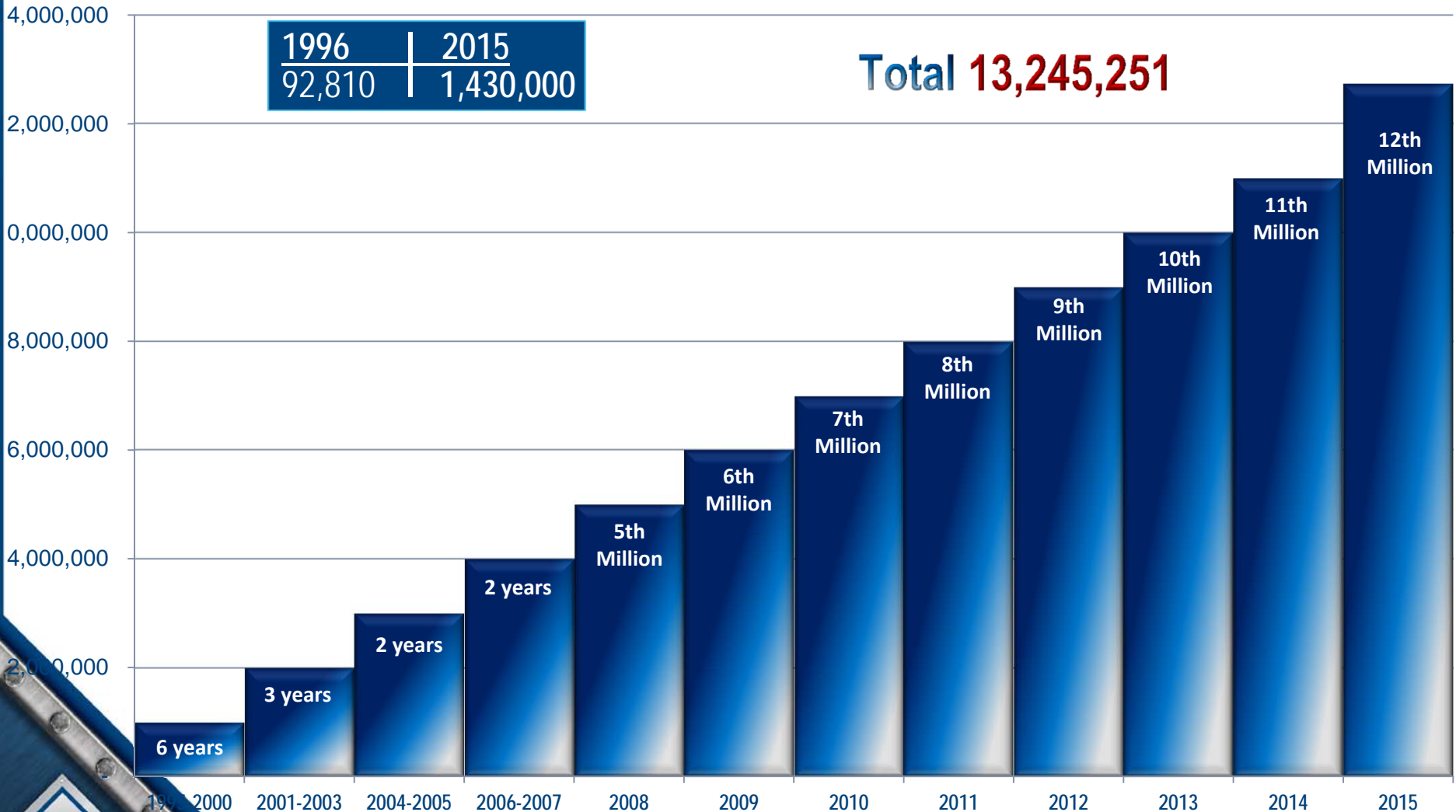


**6,228,865**  
**Total**



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# TOTAL TRAINING COMPLETIONS



**Total 13,245,251**

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# ***NCCER and the Pipeline Industry***

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# OPERATOR QUALIFICATION (OQ) RULE



The purpose of the OQ Rule is to reduce accidents related to human error

Individuals performing covered tasks must be:

- Qualified
- Able to recognize and react to abnormal operating conditions



Life is Simple 

*...either you're qualified or you're not!*

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# KEY POINTS OF REGULATION



1999 Final rule published – Operators must develop a written qualification program

2000 **API (American Petroleum Association)** publishes document which provides covered task list recommendations (API Publication 1161)

2001 Operators must have written qualification program complete

2002 Operators must complete the qualification of individuals performing covered tasks

2003– **NCCER partners with API and uses 1161 to publish curriculum, assessments and PVs to support OQ rule**

2004 Observation on the job is no longer acceptable as the sole method of evaluation and training should be provided to pipeliners

2004 DOT establishes **PHMSA (Pipeline Hazardous Materials and Safety Administration)** to enforce regulations on *safety, reliability and environmentally sound operations*



# PIPELINE USERS COUNCIL



Comprised of Operators, Contractors, Government,  
Service Providers

*Goals are to establish career paths for pipeline personnel, to promote training, safety, and align with prevailing standards and regulations*

Government Member: PHMSA

Operators: Shell, Enbridge, Oneok, Kindermorgan, Colonial, BP, Phillips 66, Flint Hills Resources, Sunoco, Koch, NuStar, Enterprise

Contractors: Praxair Services, Mastec, Jomax, Henkels and McCoy, Enhance Co., L.E. Bell, Thorco, EMS, Snelson Companies, Construction Craft Academy, Quality Integrated Services

Service Providers: ISN, Southland Safety, Safety Advantage





# ***PHMSA & NCCER Partnership***

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# EXCAVATOR ENFORCEMENT RULE



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# TRAINING ON 811



**NCCER incorporating safe digging practices into its Heavy Equipment Operator and Field Safety training – these crafts have trained more than 23,000 people in the last five years**



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# NCCER Supporting NSDM



- “What’s New with NCCER” Section of Home page
- Promoting 811 through social media

## WHAT'S NEW WITH NCCER?



### New Registry System Coming This Summer

We are excited to announce that the first phase of NCCER's new Registry System will be launching this summer. [Read more](#)



### Salaries Remain High in the Construction Industry

Skilled craft professionals continue to earn top dollar, according to NCCER's 2015 Construction Craft Salary Survey. [Read more](#)



### April is National Safe Digging Month!

This month, recognized by CGA stakeholders, reminds diggers the importance of calling 811 before all outdoor digging projects, large or small. [Read more](#)



### NCCER Awards the 2016 ABC Craft Instructor of the Year

NCCER is pleased to recognize John Lupacchino of Gaylor Electric, Inc. in Noblesville, Indiana as the Associated Builders and Contractors (ABC) 2016 Craft Instructor of the Year. [Read more](#)



### BYF Expands to Indiana to Help Close the Construction Skills Gap

With construction companies expected to hire more than 61,000 workers in Indiana through 2017, a new partnership between Build Your Future (BYF) and the Indiana

- News & Publications
- Instructor Resources
- CWDA
- Construction Career Pathways
- Join the Mailing List

## LATEST TWEETS

#LongBeach, #California proves that craft professionals aren't just skilled in a trade, but they are also #artists!  
[pic.twitter.com/lF9sYQG9Et](http://pic.twitter.com/lF9sYQG9Et)  
about 17 hours ago

@educationadfly study shows students in #Arkansas w. greater exposure to #CTE are more likely to graduate [ow.ly/10xuq](http://ow.ly/10xuq)  
about a day ago

Instead of Raising Wage, Focus on Workforce - read the blog here: [ow.ly/10xu4g](http://ow.ly/10xu4g)  
[pic.twitter.com/5Lvp6qF7x6](http://pic.twitter.com/5Lvp6qF7x6)  
about 2 days ago

What sort of digging projects do you have planned for this weekend? #call811  
[ow.ly/10sKjy](http://ow.ly/10sKjy)  
about 5 days ago

RT @DixonDaniele PHMSA Administrator Marie Therese Dominguez speaking at API Pipeline Conference @Omni La Costa...





# PHMSA'S Operator Qualification Enforcement Guidance Document

December 7, 2015

## **Subparts listed: § 192.805(h), § 195.505(h)**

Each operator shall have and follow a written qualification program.

The program *shall* include provisions to:

- (h) After December 16, 2004, provide *training*, as appropriate, to ensure that individuals performing covered tasks have the necessary *knowledge and skills* to perform the tasks in a manner that ensures the safe operation of pipeline facilities;





# ***Why Train?***

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# AS OF THE 'NEW RULE', THERE WILL BE MORE PEOPLE TO TRAIN

- PHMSA: estimates 150,000 based on Dun & Bradstreet Study
- API: estimates actual number to be closer to half a million
- **Exacerbating these statistics: skilled worker shortage**



# CHANGING DEMOGRAPHICS



**CLMA**  
CONSTRUCTION LABOR MARKET ANALYSIS

**20/20 Foresight Report**  
Eliminate the guesswork. Eliminate the doubt.

### The REALITY (Aging Workforce – Construction)

**Age Distribution Of Employed Construction Workers 2000 & 2011 (Annual Average)**

Age Group	% of Employed Construction Workers	
	2000	2011
Total, 16 and older	100.00%	100.00%
16-19	3.50%	1.40%
20-24	10.40%	7.20%
25-34	25.20%	25.00%
35-44	29.90%	24.90%
45-54	20.50%	24.00%
55-64	8.50%	13.70%
65 years and older	1.90%	3.10%

Source: Bureau of Labor Statistics, Current Population Survey


An estimated **17%** of the construction workforce will retire in the next 5 years



# WHY TRAIN?



The Construction Industry Institute (CII) study assumes an investment of 1.0% of the total project budget for wages / labor

 <b>CII RT 231 SUMMARY</b>	<b>AVERAGE IMPROVEMENT</b>			
		<b>CAPITAL PROJECT</b>		<b>MAINTENANCE PROJECT</b>
Productivity	↑	<b>11 %</b>	↑	<b>10 %</b>
Turnover Cost	↓	<b>14 %</b>	↓	<b>14 %</b>
Absenteeism	↓	<b>15 %</b>	↓	<b>15 %</b>
Injury	↓	<b>26 %</b>	↓	<b>27 %</b>
Rework	↓	<b>23 %</b>	↓	<b>26 %</b>

SOURCE: Construction Industry Institute (CII). RT231-1 "Construction Industry Craft Training in the United States & Canada" (Aug 2007)

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# Workforce Trends – skills crisis



### HARDEST JOBS TO FILL

For the fourth consecutive year, **SKILLED TRADES** vacancies are the hardest jobs to fill globally. **SALES REPRESENTATIVES** are in second place, followed by **ENGINEERS, TECHNICIANS AND DRIVERS**.

- 1 Skilled Trade Workers (especially chefs/bakers/butchers, mechanics and electricians)
- 2 Sales Representative
- 3 Engineers (especially mechanical, electrical and civil engineers)
- 4 Technicians
- 5 Drivers (especially truck/lorry/heavy goods drivers, delivery/courier drivers, heavy equipment/construction drivers)
- 6 Management/Executives
- 7 Accounting & Finance Staff (especially book keepers, certified accountants and financial analysts)
- 8 Office Support Staff
- 9 IT Staff (especially developers and programmers, database administrators, and IT leaders and managers)
- 10 Production/Machine Operations




### TOP 10 JOBS EMPLOYERS ARE HAVING DIFFICULTY FILLING

- 1 Skilled Trade Workers
- 2 Engineers
- 3 Technicians
- 4 Sales Representatives
- 5 Accounting & Finance Staff
- 6 Management /Executives
- 7 Sales Managers
- 8 IT Staff
- 9 Office Support Staff
- 10 Drivers





For the **FOURTH** consecutive year, skilled trades are the hardest jobs to fill.

- 1 ▶  **Skilled Trade Workers** (especially chefs/bakers/butchers, mechanics and electricians)
- 2 ▲  **Sales Representative**
- 3 ▼  **Engineers** (especially mechanical, electrical and civil engineers)
- 4 ▼  **Technicians**
- 5 ▲  **Drivers** (especially truck/lorry/heavy goods drivers, delivery/courier drivers, heavy equipment/construction drivers)
- 6 ▶  **Management/Executives**
- 7 ▼  **Accounting & Finance Staff** (especially book keepers, certified accountants and financial analysts)
- 8 ▲  **Office Support Staff**
- 9 ▼  **IT Staff** (especially developers and programmers, database administrators, and IT leaders and managers)
- 10 ▲  **Production/Machine Operations**



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# ***Conclusion***

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# PLANNING FOR THE FUTURE



“Recruiting craft labor and project management has challenged the industry for some time. Our response has been to work with trade schools and community colleges, secure government grants and develop worker training programs”.

*Mike McMahon, President  
Day & Zimmerman, Inc.  
Philadelphia, PA*



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# NCCER TRAINING = RESULTS





**Join Our Team Today**  
To Help Power Tomorrow



CBI is a leading provider of EPC services to the power industry with exciting projects under way. We are committed to providing safe workplaces and career opportunities for training and advancement. Help us power tomorrow—contact us today for opportunities in the following crafts:

- Carpenters
- Concrete Finishers
- Rodbusters
- Ironworkers
- Boilermakers
- Structural Welders
- Millwrights
- Pipe Fitters
- Instrument Fitters
- Instrument Technicians
- Combination Pipe Welders
- Tube Welders
- Electricians
- Experienced Craft Helpers
- Heavy Equipment Operators

**Immediate Opportunities:**  
**V.C. Summer Nuclear Station, SC** – Tel: 803.407.1579  
 Structural Stick, Mig Pulse, and Flux Core Welders, Carpenters, Concrete Finishers, Rodbusters, Ironworkers, Putzmeister Concrete Pump Truck Operator

**Ninemile Point Project, LA** – Tel: 225.744.6370  
 Carpenters, Rodbusters, Concrete Finishers, Ironworkers, Scaffold Builders, Structural Welders, NCCCO Certified Heavy Equipment Operators-Hook, Dirt Equipment Operators, Pipe Fitters, and Electricians

**Craft Hotline** – Tel: 866.460.4550

**Hiring for Winter 2014**  
in locations across the United States:

- Combo Welders
- Boiler Tube Welders
- Structural Welders
- Boilermakers
- Pipefitters
- Iron Workers/Riggers
- Turbine Millwrights
- Millwrights
- Journeymen Electricians
- Pipefitter Helpers
- Millwright Helpers
- Helpers/Laborers

**FREE NCCER ASSESSMENTS** at our Corporate Headquarters in Sedalia, Missouri and Houston, Texas.

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**ProEnergy** For more information, visit our career center at [proenergyservices.com](http://proenergyservices.com)

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PCL Industrial Construction Co. is a diversified, full service heavy industrial contractor based in Atlanta, Georgia and Houston, Texas doing business throughout North America. PCL Industrial Construction Co. is a member of a family of companies with over a century of construction excellence, leadership, and unsurpassed value.

**Seeking Experienced, Skilled Crafts for the Following Projects:**

<p><b>PROGRESS ENERGY</b> Roxboro, North Carolina</p> <p>Journeyman &amp; Helper Level: Pipe Fitters</p> <p>Combo Welders • Structural Welders Millwrights • Iron Workers Riggers • Electricians</p>	<p><b>SAMSUNG</b> Freeport, Texas</p> <p>Journeyman &amp; Helper Level: Pipe Fitters</p> <p>Combo Welders Structural Welders</p>
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 Mandatory Pre-Hire Screening and Assessments Required

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 Call PCL Toll Free: 877-442-2884  
 Equal Opportunity Employer • M/F/D/V



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THANK YOU

**Daniele Dixon**

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**NCCER**

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