

What If Owners Evaluate Training Like They Evaluate Safety?

Innovative Approaches to Building Tomorrow's Workforce

Presented by

Gerry Sprentall, Intel
Chairman of CURT's Workforce Development Committee

Don Whyte, President, NCCER

Steve Greene, Vice President, NCCER



The Owners Voice to the Construction Industry
CONSTRUCTION USERS ROUNDTABLE



March 22, 2011 Las Vegas, NV



Industry Commitment and Collaboration

The "Owner's Demand for Workforce Development"

Construction Users Roundtable

2004...WP-401 "Confronting the skilled construction workforce shortage" 2006...T-404 "Craft Employee training evaluation tool"

ENR

2006..."Solving the construction industry workforce crisis, Ideas for action" 2007..."Construction Business Forum" 2008..."Construction Business Forum"

Construction Industry Institute

1991...SP14-1 "Construction Workforce Recruitment Resources Guide" 1999... RS-135-11 "Attract and Maintain Skilled Workers" 2003... RS-182-1 "The shortage of skilled craft workers in the U.S." 2007...RT231-1 "Construction Industry Craft Training"

Contractors Demonstrated Commitment



INDUSTRY'S WORKFORCE CHALLENGE

Pre-2008
Recruit 180,000 to meet growth and Replace 95,000 each year

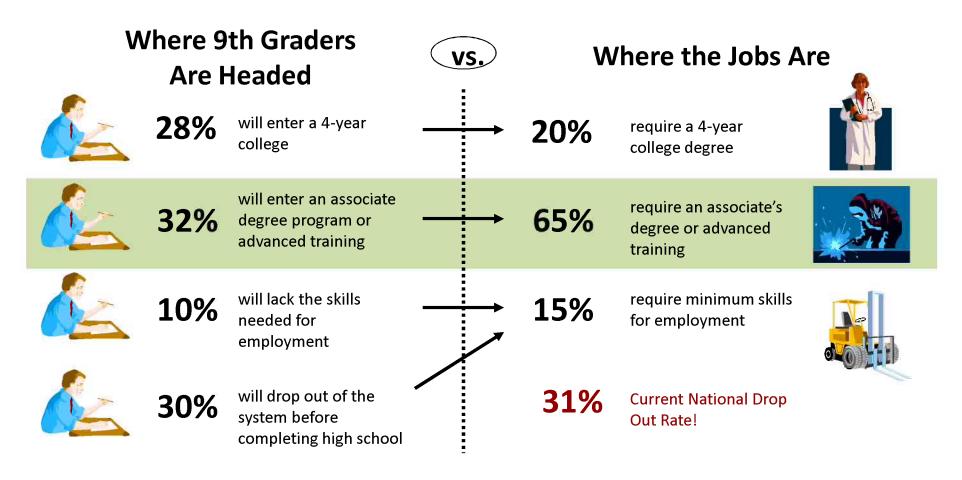


- FMI predicts 2014 need at 1,500,000 new workers
- Construction Labor Research Council (CLRC) says 185,000 needed annually for the next decade





THE WORKFORCE GAP Why Career and Technical Education is Important!



SOURCE: Carol D'Amico," Workforce 2020: Work & Workers in the 21st Century"



WHO WILL BUILD YOUR PROJECTS?

- ☐ **75 million** baby boomers approaching retirement age
- ☐ For the next 19 years, **10,000** baby boomers will reach age 65 each day
- **20%** of the construction workforce will retire in the next **2 4 years**
- □ 2010: More than ½ of the U.S. population is over 50

<18

Youth Demographic:

will shrink in comparison to adult population

will grow faster than total population



Has Industry Confronted the "Skilled Construction Workforce Shortage?"

- According to CareerBuilder's 2010 Mid-Year Job Forecast:
 - 22% of employers reported that despite an abundant labor pool, they still have positions for which they can't find qualified candidates.
 - 48% of HR managers reported that there was an area of their organization in which they lacked qualified workers.
- According to Manpower Inc, 2010 workforce survey results
 - Construction ranked #1 for demand of qualified workers
 - Construction skilled trade employment requests are the most difficult to fill
- ✓ Current recession has lessened the effects of the "Skilled Construction Workforce Shortage"
- ✓ Will displaced workers return or have career changes occurred?
- ✓ When will the aging workforce actually retire?

Is the Construction Industry Prepared?

Confronting the Skilled Construction Workforce Shortage (CURT-June 2004)

"Individual contractors must recognize the necessity and benefits of training their employees and be willing to invest in it . . . Owners should require contractors to invest in training and maintain the skills of their workforce as a condition of employment."

But how do owners know?



Innovative Solutions

The "Next Decade" of Workforce Development

Metric: Measure of Commitment and Quality to Workforce Development

Contractor Workforce Development Assessment

Don Whyte

President, NCCER

Recruitment: The Grass Roots Approach through the Choose Construction Initiative, (CCI)

Labor Supply/Demand Forecasting and Workforce Development

Steve Greene

Vice President, NCCER



Don Whyte, President, NCCER

Metrics Subcommittee Chairman, CURT Workforce Development Committee



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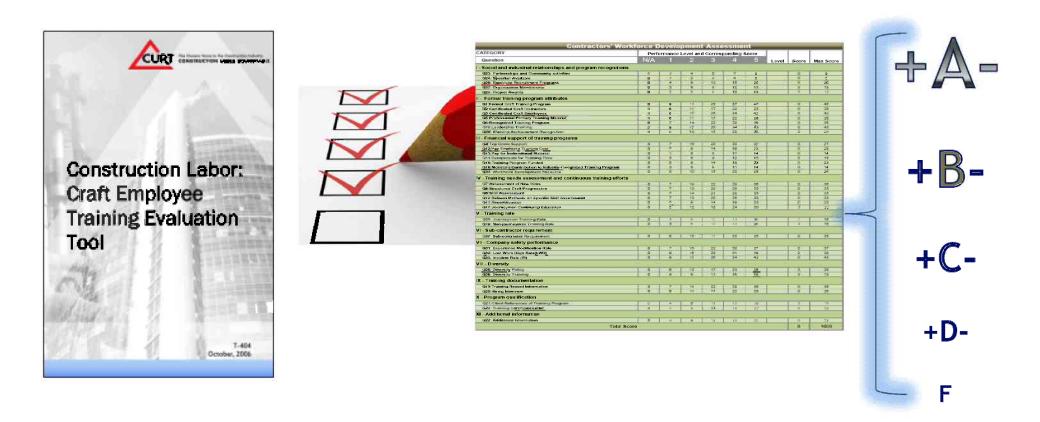
March 22, 2011 Las Vegas, NV



Prequalification through the

Contractor's Workforce Development Assessment

A Workforce Development commitment & quality Metric!







History and Evolution

Intent of the October 2006 Release

- "Craft employee training is a vital part of the success of any construction or maintenance program"....and "owners regard craft employee training as important to project success."
- "Owners should expect contractor craft workers to be well trained and have the necessary skills to perform contracted tasks efficiently, safely, and with the quality required."
- An aide to help owners differentiate contractor craft employee training programs and provide a set of objective measures to quantify <u>what traditionally has been a</u> <u>subjective analysis</u>.
- "The effectiveness of craft employee training programs should be a key criterion in both the
 <u>prequalification</u> and the final selection of contractors, just as contractor safety, quality, and
 <u>schedule</u> are key selection criteria."

A Workforce Development commitment & quality Metric!

- CURT's Workforce Development Committee formed the Metrics Sub-Committee
 in 2007
- **Goal**—to evaluate the potential to develop an evaluation and metric that would consistently reflect and communicate the level of commitment and quality of a contractor's workforce development effort
- Metrics Sub-Committee determined, as in T-404, that a comprehensive Workforce Development effort must include *Recruitment, Training*, *Assessment, and Retention for a successful program*
- Metric tentatively coined "Workforce Development Rate (WDR) or Index (WDI)
- Sub-committee included ABC, AGC, NCCER and Labor



A Workforce Development commitment & quality Metric!

Milestones:

- 2007-2008—Developed a draft list of questions for compiling information critical to evaluating a contractor's workforce development program
- 2008-2009—Draft questions vetted with ABC, AGC, NCCER and CURT constituents. A list of terms and definitions developed
- August 2009—CWDA survey questions, including Terms and Definitions, sent to over 1,000 ABC, AGC, NCCER and CURT constituents for feedback. Nearly 500 responses.
- Fall 2009—Analysis of survey results compiled, *Paul Goodrum*, University of Kentucky Researcher engaged to assist in the analysis and development of a pilot tool.
- Q3 of 2010—CWDA Pre-Pilot with small sample group
- December, 2010 to Current—CWDA Pilot with large sample group
- CII RT 252 Five Year Productivity Study—Reviewed CWDA and tentatively adopted into research

A Workforce Development commitment & quality Metric!

Key development points:

- Minimize subjectivity to the extent possible
- Weight questions by importance and impact
- Consider the impact of different types of contractors (i.e. Direct Hire, CM and Subcontractors)
- Make the tool labor posture neutral
- Validate to metrics determined in the CII RT 231 research project (turnover, absenteeism, OSHA IRs, rework, and productivity)
- Use third party to collect and audit information to achieve consistency
- Final metric should be **easy to communicate and understand** (i.e. A+, A, A-,B+,B, etc...)

A Workforce Development commitment & quality Metric!

Project Validation

- Absenteeism Rate
- Unexpected Turnover Rate
- Rework Rate
- Performance Factor
 - Actual WH / Estimated WH
- Safety Incident Rates



A Workforce Development commitment & quality Metric!

Scoring Mechanism

•	Initially	['] 38	questions now	24
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- Assessment scaled to a 1000 point total
- Final score communicated as A+ to F

Top 10 Important Questions	Average Importance
Q1: Formal Craft Training Program	4.4
Q18: Leadership Training	4.3
Q33: Incident Rating(IR)	4.3
Q3: Certificated Craft Employees	4.2
Q32: Lost Work Days Rating(LWD)	4.1
Q31: Experience Modification Rating	4.0
Q4: Top Down Support	4.0
Q6: Recognized Training Program	4.0
Q7: Assessment of New Hires	4.0
Q19: Training Record Information	3.9

Weighting verified through Survey and Pre-Pilot processes

CWDA Pilot Status

Org#	Status	Category	Type	Occupations	Est. Craft Employees	Curriculum	NCCER	Grade	ENR
1	In Process	Self-Performing GC	Industrial	Multiple Occupations	2500 - 5000	NCCER	ATS/AAC/Crane End.		Yes
2	In Process	Self-Performing GC	Industrial, Energy, Other	Multiple Occupations	< 1000	NCCER	ATS/AAC/Crane End.		Yes
3	Pre-Audit Complete	Self-Performing GC	Other	Multiple Occupations	< 1000	NCCER	ATS/AAC	A (90-100%)	
4	Audit Complete	Self-Performing GC	Commercial	HVAC	< 1000	JATC	N/A	B (80-89%)	
5	In Process	Self-Performing Sub-Contractor	Commercial	Electricians	< 1000	NCCER	N/A		
6	Pre-Pilot	Self-Performing GC	Industrial	Multiple Occupations	< 1000	NCCER	ATS/AAC	B (80-89%)	Yes
7	Submitted	Self-Performing Sub-Contractor	Industrial	Multiple Occupations	< 1000	JATC	N/A	C (70-79%)	
8	In Process	Self-Performing Sub-Contractor	Commercial	Carpenters	< 1000	Other	N/A		
9	In Process	Self-Performing Sub-Contractor	Commercial	Multiple Occupations	< 1000	Other	N/A	C (70-79%)	
10	Pre-Audit Complete	Self-Performing Sub-Contractor	Commercial	Sheet Metal Workers	< 1000	JATC	N/A	C (70-79%)	
11	In Process	Self-Performing Sub-Contractor	Commercial	Electricians	< 1000	JATC	N/A		
12	Pre-Pilot	Self-Performing Sub-Contractor	Industrial	Multiple Occupations	1000 - 2500	NCCER	ATS/AAC	B (80-89%)	
13	Pre-Audit Complete	Self-Performing GC	Industrial	Multiple Occupations	1000 - 2500	NCCER	N/A	B (80-89%)	Yes
14	In Process	Self-Performing GC	Industrial	Multiple Occupations	> 5000	NCCER	ATS/AAC/Crane End.		Yes
15	Pre-Audit Complete	Self-Performing GC	Industrial	Multiple Occupations	2500 - 5000	NCCER	ATS/AAC	A (90-100%)	Yes
16	In Process	Self-Performing Sub-Contractor	Commercial	Multiple Occupations	< 1000	NCCER	N/A		
17	Submitted	Self-Performing Sub-Contractor	Commercial	Drywall	1000 - 2500	NCCER	ATS/AAC	A (90-100%)	
18	In Process	Self-Performing GC	Industrial	Multiple Occupations	< 1000	NCCER	ATS		
19	In Process	Self-Performing Sub-Contractor	Energy	Multiple Occupations	2500 - 5000	NCCER	N/A		
20	Pre-Pilot	Self-Performing GC	Other	Multiple Occupations	1000 - 2500	NCCER	ATS/AAC	A (90-100%)	Yes
21	In Process	Self-Performing GC	Industrial	Multiple Occupations	2500 - 5000	NCCER	ATS/AAC		
22	Pre-Pilot	Self-Performing GC	Industrial	Multiple Occupations	2500 - 5000	NCCER	ATS/AAC	В (80-89%)	Yes



A Workforce Development commitment & quality Metric!

CWDA Pilot Status

- Nearly 50 Contractors contacted for the Pilot.
- 10 Contractors determining who will lead this project internally
- 10 In process of sending information to recent volunteers
- 6 Declined to Participate in the Process.



A Workforce Development commitment & quality Metric!

CWDA Pilot Summary

NCCER	#
ATS	3
ATS/AAC	14
ATS/AAC/Crane End.	3
N/A	14
Grand Total	34

Category	#
Owner	4
Self-Performing General Contractor	18
Self-Performing Sub-Contractor	12
Grand Total	34

Туре	#
Commercial	11
Industrial	14
Industrial, Energy, Other	6
Other	4
Grand Total	34





A Workforce Development commitment & quality Metric!

CWDA Pilot Summary

Curriculum	#
JATC	5
NCCER	25
Other	4
Grand Total	34

Labor	#
Both	4
Merit	25
Union	5
Grand Total	34

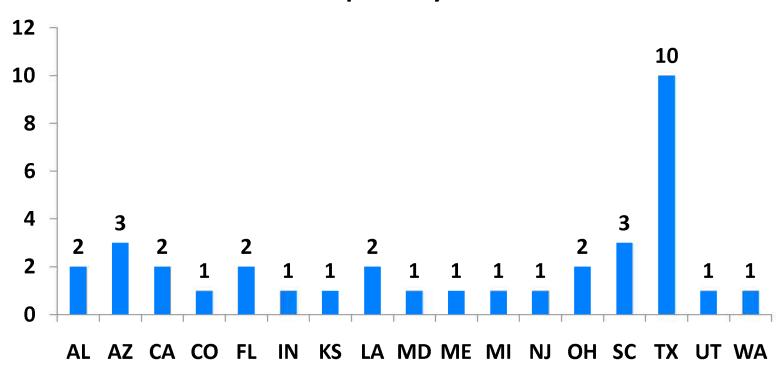
Grade	#
A (90-100%)	4
B (80-89%)	5
C (70-79%)	3
Grand Total	12



A Workforce Development commitment & quality Metric!

CWDA Pilot Summary—Geographic Spread

Participants by State







A Workforce Development commitment & quality Metric!

Handout with sample questions



CURT's Workforce Development Committee and its Metrics Subcommittee present the

Contractor's Workforce Development Assessment Handout for AGC of America TED Forum

As owners recognized the importance of safety and held their contractors to high standards of safety performance, industry-wide safety performance improved. Today, a strong safety program is essential for contractors. Similarly, owners and contractors understand that a qualified workforce is critically important to a safe, productive, on-time, and on-budget project. They also understand that the competence and quality of a contractor's workforce is the direct result of the contractor's commitment to workforce development.

Under the guidance of the CURT Workforce Development Committee, the Metric Subcommittee created the Contractor's Workforce Development Assessment to evaluate and provide a qualitative metric that would fairly and consistently represent a contractor's commitment to workforce development. This tool is intended for use by owners and contractors in the pre-qualification phase of the contractor and subcontractor selection process. The goal of the pilot is to ensure the assessment provides a metric that accurately portrays a contractor's commitment to workforce development.

To participate in the CWDA Pilot please contact: Rachel Rounsaville at 1.888.622.3720 or rrounsaville@nccer.org

Please Note: All information submitted during the Contractor Workforce Development Assessment (CWDA) pilot is considered confidential. Only essential personnel will have access to the identification information or performance data given in the assessment. Data collected throughout the Pilot process may be used in summary form in preventations and/or promotion(s) of the CWDA, however, identification of individual or company respondents will remain strictly confidential.

Note: This is a sample of the questions from the CWDA, not the actual assessment.



A Workforce Development commitment & quality Metric!

Progress Update/Path Forward

What We Learned from Pre-Pilot

- Process is effective, feedback was positive
- Desktop audit confirmed as best method for verification
- Project data difficult to collect, more time needed
- Some questions may be combined to shorten the assessment
- Clarification needed on some terms and numbers requested
- On average, Pre-Pilot participants scored the upper 80's to low 90s B+ to A

Pilot Plan—CWDA Pilot and Validation

- ➤ 30 to 50 contractors in process of completing Pilot
 - Process longer than anticipated
 - Helped them reevaluate their program and made them better
- ➤ Analyze results and Make adjustments to CWDA
- Prepare for implementation



CURT Recommendation

Confronting the Skilled Construction Workforce Shortage

"Owners should require contractors to invest in training and maintain the skills of their workforce as a condition of employment."

"Individual contractors must recognize the necessity and benefits of training their employees and be willing to invest in it . . ."

CWDA Value Proposition to the Industry

- > An "Owners" means of establishing performance expectations
- > The "Contractors " opportunity to demonstrate superiority
- > The "Individual's" ability to identify a preferred employment opportunity



Innovative Solutions

The "Next Decade" of Workforce Development

Recruitment: The Grass Roots Approach through the Choose Construction Initiative, (CCI)

Labor Supply/Demand Forecasting and Workforce Development

Steve Greene

Vice President, NCCER





They Will Be Recruited!

Aerospace

- 60% of workers are age 45 or older
- In 2008, 27% of workforce qualified for retirement

Healthcare & Medical

- 40% of workforce will be >50 yrs old in 2010
- Industry predicts:
 - 20% shortage of workers in 2015
 - 29% shortage of workers in 2020

Manufacturing

- Nearly 14 million employees
- More than 80 % of employers report an overall shortage of qualified employees
- 46 % of small and medium employers report that "finding qualified employees" is one of the most serious problems facing their company





CCI is a collaborative grassroots approach to construction workforce forecasting and development that will include recruitment, training, placement, retention and image enhancement strategies.

The ultimate goal of the initiative is to lead <u>new potential</u> construction industry candidates as well as <u>incumbent</u> <u>workers</u> to opportunities for job-placement, advanced education and training and ultimately long-term rewarding careers in the construction industry.

















A consortium lead by NCCER and the *Construction Workforce Development Center* (CWDC), a CURT affiliate organization. CCI is endorsed and supported by CURT, AGC, and ABC. Initiative components Include:

Supply/Demand Labor Forecasting

CWDC working with consortium partners, will develop and implement a reliable, secure online tracking system to assist with project planning, timely creation and execution of recruiting & training strategies and more effective deployment of training funds.

Workforce Development (Recruitment, Training, Placement, Retention and Image Enhancement)

NCCER working with consortium partners, will develop, implement and lead a grassroots recruitment/workforce development effort that enhances the image of the industry as we attract and train new workers.



Supply/Demand Forecasting Model

Web-Based Labor Market Information

Construction Workforce Development Center

In association with:









www.cwdcforecasting.com



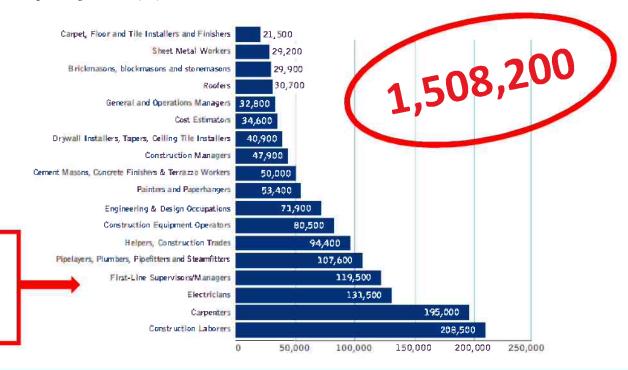


What is the challenge?

One of the biggest challenges facing owners, contractors and labor groups is whether there are a sufficient number of skilled construction workers in the <u>right place</u> at the <u>right time</u> to meet demand. This impacts the project(s):

- Costs
- Schedule
- Productivity
- Safety
- Training

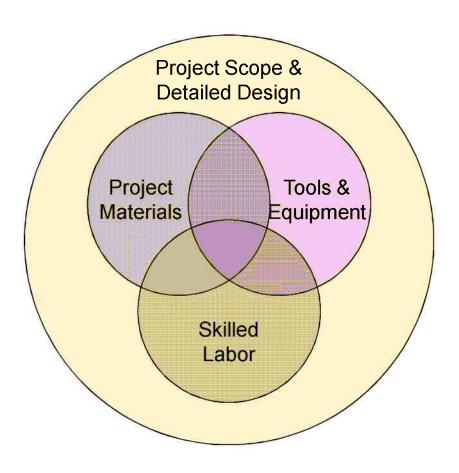
Forecast change in fulltime employment demand 2014 vs. 2010





Needed for Successful Project Execution...

- 1. Well-defined project scope
- 2. Materials required for construction
- 3. Equipment, tools and facilities
- 4. Skilled construction workers





Introducing the only

industry-driven,

project-based,

national forecast of

craft labor supply and demand

www.cwdcforecasting.com



The CWDC Forecasting Model is the ONLY tool that:

- ✓ Collects project demand data directly from Owners
- ✓ Collects labor supply data directly from Contractors
- ✓ Translates that data into headcount by craft
- Requires data validation/updating every 90 days
- Employs algorithms to forecast craft labor need
- Enables industry stakeholders to effectively plan

How does the industry benefit?

- > Reliable tracking system to assist with project planning
- Timely data for recruiting & training strategies and more effective deployment of training funds
- Detailed supply/demand information to improve profits and productivity
- > Easy online access to input data and generate reports
- > Secure interface & complete data confidentiality
- Common methodology...better data



- Join now
- Easy to Use
- Confidential
- ❖ Reliable
- ❖ Real-time

www.cwdcforecasting.com





CCI Workforce Development Objectives

- Leverage nationally developed themes, collateral, resources and programs at the State and local level to <u>promote and market the</u> <u>construction industry as a desirable and rewarding career of choice</u>.
 Recruitment targets include:
 - Entry-level
 - w/o Fundamental Skills
 - w/ National Career Readiness Certificate (NCRC)
 - w/ NCRC & some skills from High School
 - Incumbent and Non-Entry Level
 - Displaced & under-employed
 - Under-skilled and/or Uncertified
- Pilot CCI themes, collateral, resources and programs nationally so that proven implementation guidelines and best practices can be developed for use in state and local programs.



CCI Workforce Development Objectives

- Use recognized and approved training, assessment and certification programs with proven experience.
- Engage construction users to require, to the extent possible, that they:
 - Support CCI and supply workforce data to the forecasting service
 - Only hire contractors that actively engage in workforce development
- Engage contractors to require, to the extent possible, that they:
 - support CCI and supplying workforce data to the forecasting service
 - support the state and/or local recruitment and training entity
 - support the recruitment funding
 - hire construction training graduates
 - support career development training for newly hired and incumbent workers

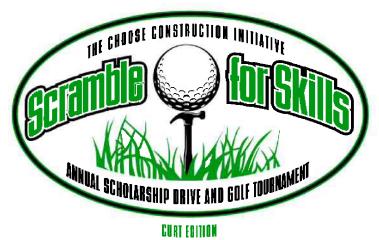




CCI FUNDING

Multiple Funding Sources:

- Contributions
 - Cents-Per-Hour
 - One-time, regionally-specific
- Fundraising & Career Recruitment Events
 - Scramble for Skills
 - Motorsports
 - Rodeo
- Association Dues Adder
- Sponsorships
- Grants
 - Government
 - Foundations
- All Tax Deductible







CCI Workforce Development General Guidelines

- All recruits pass a drug test and a WorkKeys assessment unless they already hold a National Career Readiness Certificate (NCRC)
- 2. Messages and resource packets targeted for each group (entry level, displaced, incumbent, etc)
- 3. Targeted recruitment guided by Supply/Demand Workforce Forecasting System
- 4. Leverage national CCI tag line of Go Build America.
 - State local programs will be encouraged to leverage the national program (Go Build Texas, etc. or Go Build Houston, Baton Rouge, etc.)



CCI Workforce Development General Guidelines

- 5. Recruitment resources will include
 - CCI Website
 - A national video customizable for state and local efforts
 - Partner links from the CCI site, such as AGC
 - NCCER Career Site and job board linked to CCI site
 - "One-stop shops" linked to CCI site
 - Radio, TV, bill board and print advertising customizable for the state and local market
 - Best practice guidance—rodeos, career events, NASCAR, fundraisers, etc.
- 6. Funding through multiple sources_including government grants, financial aid, private grants and scholarships, tax credits, contributions and fundraising activities.



- 7. Training will be provided by a CCI-recognized entity(s) Guidelines on qualified training entities will be provided. The programs should include:
 - Workkeys assessments

Education Session

- Drug Testing & Background check
- Entry-level craft training courses
- Skills upgrade training for displaced, under-employed and underskilled workers.
- Craft skills assessments that lead to certification
- 8. A "best practice" plan for the placement of newly qualified and trained workers be developed by the training entity with CCI:
 - Develop a web-based system for tracking new recruits
 - Evolve a national placement system that leverages current resources and industry human resources networks

Web Resources





Go Build America

Sample Billboard

BEPROUD



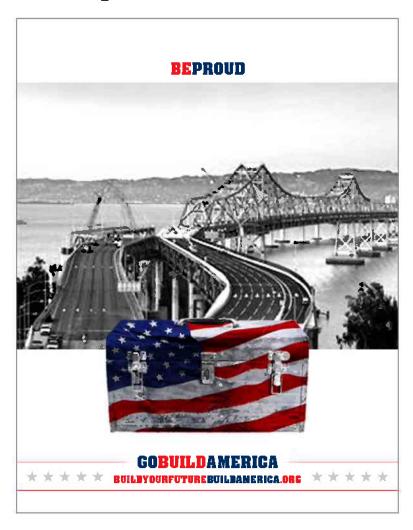
BUILDYOURFUTUREBUILDAMERICA.ORG

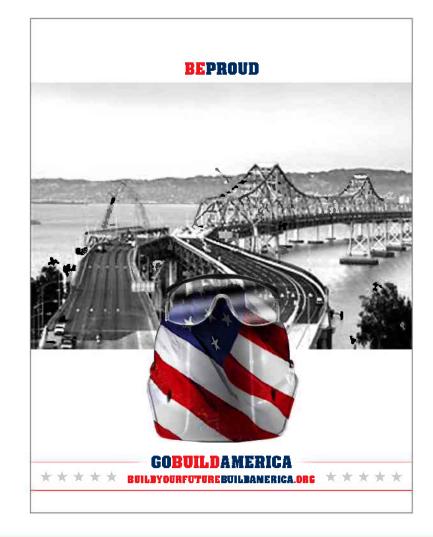


Education session



Sample National Print Advertisement







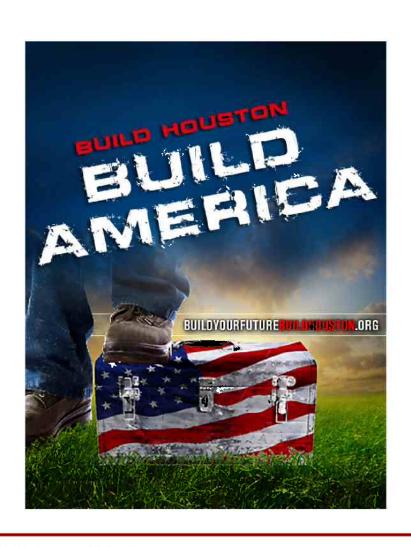
Sample Local Billboard

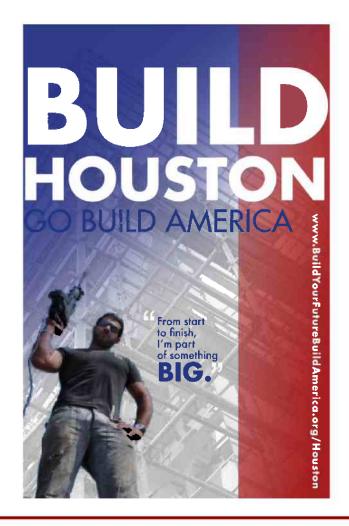


Education Session



Sample Print Ad for Local Campaign







Recent Activities

- Gained access to web site development files
- Held four focus group meetings
- Arranged meeting with key advertising supporter
- Finalizing details for CURT golf tournament (fundraiser) & career event with NASCAR
- Held meetings with Go Build Alabama group
- Working on partnering agreement to leverage IP developed for Alabama to include vendors and spokesperson, Mike Rowe

BE PREPARED FOR THE UPSWING - GET ON BOARD WITH CCI





The Value Proposition!

Short Term

- Input & Feedback
- Event Support
- Financial Assistance

Long Term

- "Sustainable" Support
- Ongoing Input & Feedback
 - What's Working?
 - What's Not Working?
 - Supportive Legislators
 - Grant Opportunities
- Community Outreach
- Ongoing Funding Support





THANK YOU YOUR TIME TODAY!

QUESTIONS?

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