

TRAINING CENTER TIMES

The Quarterly Update of Northwest Carpenters Institute

The Next Step; Another Generation of Carpenters



Piledrivers training with a diesel 'hammer' at Canby, WA.

"I think we're going to the moon because it's in the nature of the human being to face challenges. We're required to do these things just as salmon swim upstream." Neil Armstrong

Armstrong's mission experience was a tribute to his hard work and faith that space was something humanity was destined to pursue. He was affirming that going to space was just

another step for humanity. Carpenters are trained to work efficiently, using the least possible amount of time, energy, and resources to complete their work, and they're faced with challenges every day that have the potential to compromise that efficiency. The vast majority are resolved without disrupting the

Continued on page 4

IN THIS ISSUE...

NWCI's All About New



The digital transformation of the construction industry has happened. It's done. Either get trained now or go the way of the dinosaur. Start with Bluebeam. **2**



If a 59" screw is fake news to you, hang your tools up, or sign up for Introduction to CLT 8 hour training. The Mass Timber movement is underway. It's here. It's in project work scope today. **2**



Apprentice attendance rates are consistently over 90% and directly related to the effort and teamwork of coordinators, program specialists, and instructors. **2**



Pre-Apprenticeship and Outreach are delivering the NWCI brand to underserved populations and are taking the next step in stride. **6**

Developing the Leadership Pipeline

Bob Susee, NWCI's director, knows a thing or two about acquiring and developing talent to fill the all-important linchpin positions. Drawing on decades of industry experience gives him the advantage of knowing the optimal time and talent for critical resource decisions in response to a continued increase in industry demand. So his announcement that Aaron Combs was being

promoted to assistant director came as no surprise. Combs was called up from his coordinator position in the education/technology department to play a supporting role in the executive branch of the organization, assisting the director with operations while working to implement long-term goals. Bob

Continued on page 5



The Construction Technology Standard

You're on the construction site, outfitted in your Terminator-like robot suit that gives you exponential strength, letting you effortlessly lift hundreds of pounds as integrated sensors send your vitals and atmospheric data to the cloud. Meanwhile, your augmented-reality glasses superimpose 3D models over your work while your colleagues back at the office guide your movements, tracking your

exact location through your GPS-enabled boots. Sound like sci-fi? This scenario is not far off. From wearable tech and roads made out of recycled plastic to connected construction and blockchain, technology for the construction industry has arrived. Construction projects are now designed, managed, and delivered exclusively using digital tools. One such tool is Bluebeam.

Bluebeam is a design and construction management software that creates multi-dimensional PDF's, allowing mark-ups and hyperlinks, and uses extensions to support 2D and 3D documents. It's become an industry standard, so NWCI developed a continuing education class specifically to provide training in Bluebeam. The

Continued on page 3

By the Numbers...

Fourth Quarter NWCI Program Statistics- Overview (October - December 2019)	
Program Totals	
Participants	2245 (4th Quarter Average)
Admitted	118
Cancelled	80
Completed	41
Based on Admissions	
Minority	52 (64%)
Female	14 (12%)
Veterans	13 (11%)

Above: Fourth Quarter Statistics

Month of December 2019 Overall Program	12/01/19 thru 12/31/19	2019 YTD
Admissions	36	948
Completions	17	306
Cancelations	35	418
Total Minority/Total Female December	19/4	393/73
Total Minority/Total Female In Program	888/183	
Total Veterans in Program / Entry YTD	201	80
Current Total Number in Program	2243	

The monthly enrollment for December 2019 shows significant gains in minority and female participants, continuing a yearly trend upward as a proportion of total enrollment. The six-month period ending 12/31 shows a net gain of 50 participants, or 1% overall, despite a drop in project starts over the same reporting period.

Fourth quarter program statistics show a net gain in total participants, consistent with data in the December report, indicating numbers of minority and female applicants remain strong. Class participation is a marker of top-notch performance by coordinators and their instructors. Getting apprentices engaged and through the program on schedule is no easy task, taking consistent effort over the long-term. Seeing numbers like 90% attendance by apprentices is an indicator of how dedicated and determined the staff at NWCI are, and the difference they make in peoples lives and in the industry they serve.

A&D Report Student Statistics as of 01/14/20

Statistics	Total	%
All Apprentices	2243	
Female	183	8
Male	2060	92
Minorities	889	40
Veterans	182	8
Reservists	18	<1
By Ethnicity		
Native American	98	4
Asian	56	3
African American	172	8
Hispanic	497	22
Pacific Islander	63	3
White	1357	60



Subcommittee	Total	Female	%	Minority	Native Amer.	Asian	African Amer.	Hispanic	Pac. Isl.	White
LADS	558	14	2.5%	300	16	12	57	198	17	258
Piledrivers	82	8	9.8%	24	3	1	7	10	3	58
Renton	971	108	11.1%	354	41	37	90	150	33	620
North Puget Sound	293	21	7.2%	93	17	6	11	50	9	200
Columbia Basin Carp	156	12	7.7%	79	6	0	1	72	0	77
Millwrights	76	12	15.8%	17	5	0	2	10	0	59
E. WA/N Idaho	107	8	7.5%	22	10	0	4	7	1	85
Total	2243	183	8.2%	889	98	56	172	497	63	1357

Left – Statistics by subcommittee provide additional supporting evidence of the effort to address inclusion and diversity in total program participants across the geographic regions served by NWCI training programs.

A detailed analysis of the gains provides a better understanding of what’s actually behind the numbers. Looking at the Female enrollment is a good place to start. Total Female participants posted an impressive 14% increase in the six-month period July 1 thru December 31. In the same time period, Asian participants lead the gains by ethnicity rolling up nearly 23% and Hispanics also strengthened their position in a big way, adding 10% to their ranks. The fluctuation in project starts has

been less of a factor for minority and female participants, primarily because of the timing of entry into the program that matches an industry wide trend of inclusion and diversity in the workforce. Increased awareness of implicit bias and the effort by awarding bodies to address it in the contracts they issue is also a major contributing factor. The double-digit gains are evidence that the groundwork NWCI laid three years ago to promote the participation of underrepresented groups is paying

big dividends. And that means signatory contractors are finding the labor supply that fits the current market demand. As expected, the number of white participants remained flat, but represented less of the entire program, dropping from 62% to 60% of total participants (as a portion of total enrollment), and male participants ticked up barely 1%, but also dropped from 93% to 92% of total participants. ☹

Standard (continued)

class is conducted by the Education Technology Departments’ Addison Combs at the Kent Training Center. Contractor requested trainings have been well-attended and received positive reviews from attendees. It’s not an option to ignore the tools that industry has embraced as a standard to maximize their earning potential; it’s what they do. NWCI is focused on providing the training, regardless of the nature of the standard. Another example is elements of the Mass Timber movement. Fastener technology used in solid wood construction is now available to the general public at home improvement centers. Special screws called ‘construction fasteners’ use the same design modifications as those used for their larger cousins in commercial applications for CLT, GluLam, and Mass Plywood connections. The variations in design make smaller wood project joints, that

were previously prone to split or hard to control, much easier to handle. The larger commercial versions have the same affect. The process of putting large buildings up is less prone to rework because assembly is a matter of

following a script created in Blubeam, using new connection hardware that’s included in a new CLT class offered by NWCI. No, a 59” screw is not fake news, it’s the new standard. ☹



Above: Addison Combs conducts a contractor requested training in Blubeam, January 25th at the Kent Training Center. Trainings are well attended and receive high marks from participants.



Next Step (Continued)

work flow. The challenges that are the rarest require the carpenter to adapt their skillset, or become obsolete.

In the early 1900's, house foundations were installed by stone masons. A crew of 11 masons could install a foundation in about a week. (Houses were smaller) When concrete arrived, the same foundation was installed in a couple days by a crew of three. The new 'technology' put the masons on notice; adapt your skillset if you want to continue installing house foundations. NWCI recognizes the challenges facing carpenters today. The skillset is being challenged by technology. The carpenter that wants to continue building has to know at least something about Procore, Bluebeam, robotic total station and pointclouds, FieldGenius, hyperlinks, design changes to fasteners and hardware, new uses and configurations of wood buildings, high efficiency battery operated tools, and all controlled by mobile devices using virtual reality integrated headsets that load work flow in real time. So NWCI has accepted the challenge of delivering the training to the carpenters that want to continue building by offering training in all of these technologies that have become the industry standard. Contractor requested trainings in Bluebeam and Cross Laminated Timber have already begun. The instructors and staff have new laptops, students have revised textbooks, and the technology that matches the jobsite is visible throughout

the training facilities. In addition to adapting the content to meet the latest methods, NWCI is also making capital investment in facilities throughout its network of training centers. Once finished, it will be a highly functional support system for carpenters and their employers that want to meet the challenge of the next step in building construction. Finally, taking the next step successfully means finding and placing the right talent to support the mission of the organization. The leadership at NWCI knows that time is of the essence. The construction industry has adopted a new technology standard and the time to address it is now. Fortunately for NWCI, the director was planning for

today's needs two years ago. Since then NWCI has seen new leadership positions filled, critical financial expertise hired in-house, coordinator positions created and filled, and last but not least, technology staff who's performance is literally transformative for NWCI in a number of ways. Neil Armstrong knew addressing challenges is in our DNA. He'd likely agree that NWCI is living proof. Taking that next step continues the legacy of the trade, and passes the torch to the next generation, opening a new world of opportunity for those served by NWCI.



Above: Millwrights interpreting pump data. They're preparing to expand their training facilities. Upper Right: Contractors and NWCI instructors getting an introduction to CLT in the recent class at the Kent TC. Right: A contractor requested training in Bluebeam being conducted by NWCI's Education Technology Dept.



CLT PM Workshop (Continued)

knows the value of integration and is making Combs a member of the team as quickly and smoothly as possible. Indeed, according to *Harvard Business Review*, data clearly shows well-integrated executives can build momentum early on rather than struggle up learning curves. Studies show that the average amount of time to reach full performance, that is, making critical decisions with the right information in hand and having the right people in place to help execute, can be reduced by a third, from six months to four. Combs brings a lot to build on, as

NWCI’s director, Bob Susee, expressed in a recent email, “His (Combs’) wealth of knowledge and deep understanding of the trades will be an asset to me as my assistant, and to the NWCI organization.” Prior to joining NWCI, Combs was a coordinator with the Alaska Carpenters Apprenticeship, and, since 2012, an instructor at the Carpenters International training center in Las Vegas, where he continues to serve as a technology instructor, facilitating classes in Instructional Technologies for Trainers, iPad Basics, and Sketchup. Combs’ engaging and

direct style has increased employees’ confidence in NWCI’s ability to plan succession moves for long-term stability and growth. ☺



*Aaron Combs
Assistant Director*

Mr. Combs will perform the duties of the position from his main floor office at the Kent Training Center

Financial Leadership Takes a Seat at NWCI

Carpenters create a lot of things that are functional, useful, and of course, beautiful. Each thing is an asset in a number of ways. To Steve Reed, NWCI’s new controller, they all have a quality and value that can be assessed and presented in terms of dollars. As a certified public accountant, (CPA) he uses professional knowledge and expertise to categorize, assimilate, and assign values to assets, liabilities, and equity that, combined, are commonly known as NWCI.

Bob Susee, who created the position out of necessity, knew Steve was a good fit to fill the position as soon as he learned of his approach to understanding the assets of an organization, especially brand equity. “When I first met Steve I was impressed by the fact that he was employed by Weyerhaeuser beginning in

1997 and was involved with the startup of a \$300M wood products manufacturing facility” said Susee. Pleased with his style, he continued, “(Steve’s) first order of business was to get to know the construction and maintenance crews, who were Union Millwrights. He got his hands dirty and actually worked on the project with the millwrights. He was not directed to do this but he believed that he could be a better Senior Asset Manager if he knew the business and the team from top to bottom”, Susee explained in a recent email.

Brand equity is created over time by the blood, sweat, and tears of people working together. Steve knows the value of NWCI is its number one asset; and we’re lucky he’s onboard! ☺

NWCI professionals operating at the Kennewick training center have also been included succession plan adjustments. Chad Canoy, an instructor has been promoted to take over the coordinator position for the Millwright training program in Kennewick. Canoy will transition with the support of Justin McClendon who will be committing more time to technical training enhancements and implementing them into the Millwrights program, which is “recognized throughout the UBC/ITC as the premier training program in the USA”, said program director Bob Susee. “ McClendon will also assist instructor Robert Howard in his new role as coordinator for the Piledriver program, while continuing to work as an instructor at the Kent training center. Susee continued, “These changes are a significant adjustment and it’s important that we support and mentor all three in their new roles.” Effective integration happens when your leader is clear about the path ahead. NWCI’s leadership team clearly models that truth. ☺



The Next Step: Pre-Apprenticeship & Outreach

Pre-Apprenticeship is the new standard for filling the future carpenter pipeline for NWCI. Momentum is right in stride with NWCI's long-term mission for contractors and carpenters. NWCI is getting to host it's first **Pile Driver** Pre-Apprenticeship class starting March 9th at our Kent Training Center, a **Carpenter** Pre-Apprenticeship class starting March 16th at our DuPont Training Center, and it's first **Interior Systems** Pre-Apprenticeship class April 6th at our DuPont Training Center. NWCI hosted an **all-women** pre-apprentice orientation with over 37 attendees consisting of contractors, awarding bodies, council staff, local union staff, and over 30 women who are interested in joining the crafts of the carpentry trade. In the Outreach department it's a series of events that's used to

steer underserved populations into the carpentry trade. NWCI teamed up with the Girls Scouts for a Kids' Build where women carpenters helped them build over 40 toolboxes for the upcoming Women Empowerment Conference in March. The toolboxes will be placed on the tables as centerpieces and raffled off at the event to fund the next Women Empowerment conference. RAP (Regional Apprenticeship Pathways) is a construction and architecture program prepping high school students for preferred entry into Apprenticeship programs. Lisa Marx with NWCI and NPS Council staff have been heavily involved with the development of this

program and recently attended the ribbon cutting ceremony held on January 7th. Ms. Marx also recruited folks from various trades and apprenticeship programs to help volunteer for a high school girls build to assemble over 30 toolboxes that'll also be used as centerpieces for the Empower Women's Conference. She has also been working with the men's prisons to help with their new CTAP (Construction Trades Apprenticeship Pathways) program that offers inmates the chance to get construction trade training and preferred entry into the apprenticeship. Ms. Marx has also teamed up with Council staff to continue promoting Career Connections curriculum and now have 50 entities, including school districts, using this resource produced by the UBC International Training Fund.

For Pre-Apprenticeship info contact Marianna Talbott, mtalbott@nwci.org (206-531-5803)

Training Center Times is a publication of NWCI, 20474 72nd Ave. S., Kent, WA. 98032. www.nwci.org For informational purposes only. The opinions expressed are those of contributing writers and not NWCI or its affiliates. All rights reserved. © 2/10/2020

TRAINING CENTER TIMES

20474 72nd Ave. S
Kent, WA 98372

Online Edition