



Education Issues Roundtable

"Closing the Skills Gap" Grant Implementation

Power & Communication Contractors Association (PCCA)
Annual Meeting
Ft. Myers, FL
Mark Bridgers - Continuum Capital
March 9, 2021



Agenda

- Grant Implementation Status
- School Status Update
- Opportunity for Contractor Apprenticeship Participation
- Wireless Infrastructure Association (WIA) Leadership



Grant Implementation Partners



Telecommunications
Industry Registered
Apprenticeship Program









"Closing the Skills Gap" Grant

- ▶ 4 years in duration March 2020 to February 2024
- ► 5,500 new apprentices promised
- ► Initially 27 new employers proposing to adopt apprentices
- ► 5 community college partnerships
- ▶ 2 new occupations developed for PCCA members
- ▶ 13 contractors who have signed their Employer Acceptance Agreements and are registered with the DOL
- ▶ 8 contractors who have completed onboarding with TIRAP
- ► 6 contractor who have secured access to \$10,000 payment for the formation of at least 10 apprentices
- ▶ 30+ apprentices / mentors registered or planned to be registered to date



Agenda

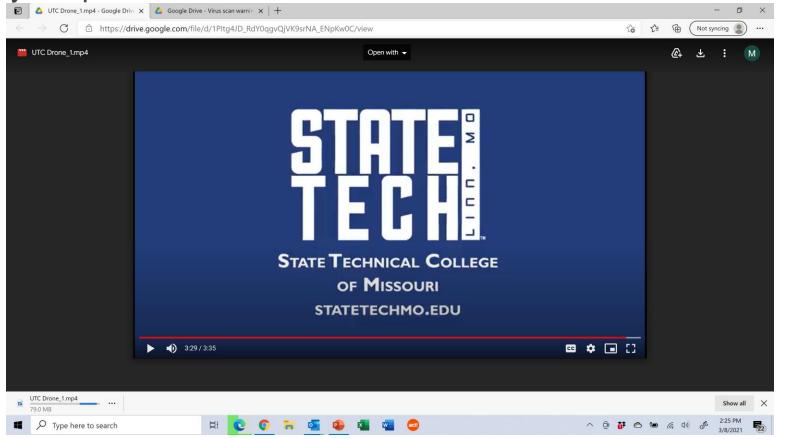
- Grant Implementation Status
- School Status Update
 - Missouri State Tech: Dr. Shawn Strong, Heath & Steve Sellenriek
 - Wisconsin Wisconsin Indianhead Technical College (WITC): Chase Lapcinski
 - Ohio Terra State Community College (TSCC): Todd Myers
 - Kentucky Somerset Community College (SCC): Billy Vincent
 - Michigan Monroe County Community College (MCCC): Brad Baumann
 - Pennsylvania Harrisburg Area Community College (HACC): Continuum
- Opportunity for Contractor Apprenticeship Participation
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State Tech

State Technical College of Missouri (www.statetechmo.edu)

► Employer Sponsor: Sellenriek Construction

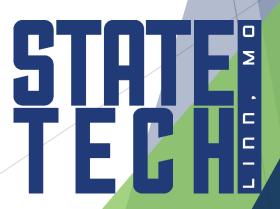




How did it begin?

Prior to the inaugural class of Fall 2018, Industry worked very closely with the College to:

- ▶ Develop the program's core curriculum
- ► Identify and establish equipment, material, and consumable needs
- ► Find a qualified Instructor



Fall 2018 to present day

What's worked:

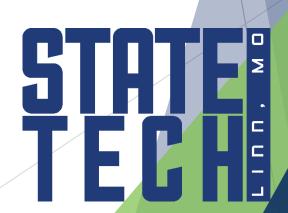
- Atmosphere for industry specific training
- Industry professionals to instruct and train the students

What's the result:

- Educated and trained workers
- Competent and capable workers day 1 on the job

What has changed:

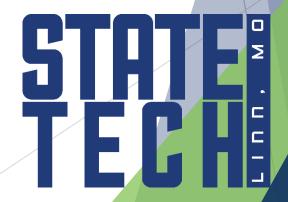
► Mostly curriculum changes, credit hour equalization, sequence



Student's Perspective

Why choose the UST program at State Tech?

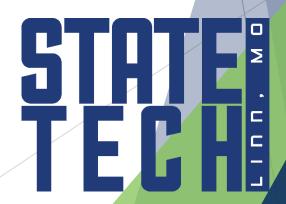
- Reputation
- Quality
- Opportunities
- The "hands" on training



Industry Partnerships

Why do our Industry Partner's prefer our graduates above others?

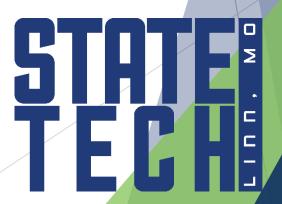
- Producing quality students
- Producing competent and capable students
- Up to date training, not antiquated



Vendor Partnerships

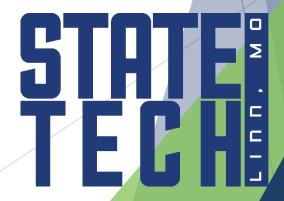
We have fantastic partnerships with several Equipment and Material Vendors

- Donations of equipment and material
- Allowed for us to increase our "fleet" at little to no cost
- Students gain more "seat" time and hands on training



The "Secret Sauce" Explained

- There is no "secret sauce"
- ► Mission: To prepare students for profitable employment and a life of learning.
- ► This is at our core in everything we do
- ▶ We are very proud to say: From the classroom to your career, we are the employer's choice, we are State Tech.





Wisconsin Indianhead Technical College (WITC)

- Wisconsin Indianhead Technical College (<u>www.witc.edu</u>)
- ► Employer Sponsor: Push Inc.
 - Collaboration Opportunity
 - Telecom Technician
 - Program Objectives
 - Train individuals to become underground and overhead fiber optic cable install technicians
 - Structure underground program for potential expansion to gas distribution and electric conduit install and overhead electric line install.
 - Program Status
 - 1st class currently in session





Terra State Community College (TSCC)

- Terra State Community College (<u>www.terra.edu</u>)
- Employer Sponsor: Kenneth G. Myers Construction Company
 - Collaboration Opportunity
 - Telecom Technician
 - Program Objectives
 - Train individuals to become underground and overhead fiber optic cable install technicians
 - Program Status
 - 1st year of program designed, originally targeted program start in fall of 2020, delayed due to COVID19







Somerset Community College (SCC)

Somerset Community College (www. somerset.kctcs.edu)





- ► Employer Sponsor: Electricom
 - Collaboration Opportunity
 - Telecom Technician
 - Program Objectives
 - Train individuals to become underground and overhead fiber optic cable install technicians
 - Program Status
 - Proposal accepted, Advisory Board formed, program development just beginning



Monroe County Community College (MCCC)

- ► Monroe County Community College (<u>www.monroeccc.edu</u>)
- ► Employer Sponsor: Gabe's Construction
 - Collaboration Opportunity
 - Telecom Wireless Technician
 - Program Objectives
 - Train individuals to become wireless telecommunication install technicians
 - Program Status
 - Awaiting final proposal







Harrisburg Area Community College (HACC)

- ► Harrisburg Area Community College (<u>www.hacc.edu</u>)
- ► Employer Sponsor: Henkels & McCoy, HMI Services
 - Collaboration Opportunity
 - Telecom Technician
 - Program Objectives
 - Train individuals to become underground and overhead fiber optic cable install technician
 - Program Status
 - Likely that Henkels & McCoy and HMI Services will select a different school in Pennsylvania with whom to collaborate







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Registered Apprenticeship

- Structured, on-the-job training program
- Apprentices have standardized on-the-job training and related technical instruction for their positions
- Defined wage increases and promotions based on competencies
- Leads to an industry credential
- Supervised by mentors

Occupation Standards Developed

- 1. Telecommunications Tower Technician
- 2. Wireless Technician
- 3. Telecommunications Tower Antenna & Line Lead
- 4. Telecommunications Tower Antenna & Line Foreman
- 5. Telecommunications Tower Construction Lead
- 6. Telecommunications Tower Construction Foreman
- 7. Maintenance & Condition Assessment Lead
- 8. Maintenance & Condition Assessment Foreman
- 9. Fiber Optic Technician
- 10. Underground Utility Installer Technician
- 11. Overhead Utility Installer Technician
- 12. Small Cell Technician (Still in Development)

Work Process Schedule

Defines on-the-job training for each occupation

On the Job Learning Competencies	Component 1	Component 2	Component3	Rating Scale			e.	Mentor/Supervisor Approval & Date
Determine by written and/or practical demonstration.	Baseline training	Intermediate training	Completion	4	3	2	1	
INSTALL BURIED UTILITIES								
Review job design sheets								
Gather job materials								
Locate existing underground utilities								
Pothole existing utilities by hand								
Excavate trenches by hand								
Perform soil type testing								
Bed trenches with select fill								
Install conduit / cable								
Pull or blow utility wire / cable through								
conduit				_				
Install utility hand hole / pedestals								
Install ground rods								
Backfill trenches				╙	<u> </u>			
Perform site restoration								

Related Technical Instruction

Defines technical training (online, instructor-led, community college, etc.)

WORK PROCESS SCHEDULE Underground Utility Installer Technician O*NET-SOC CODE: 49-9052.00 RAPIDS CODE: 3009CB

Description: Related instructional courses provide technical ability and a basic understanding of the telecommunication industry as well as the overall site development. Apprentices receive related instruction or classroom style training that complements the on-the-job learning. This instruction helps refine the technical and academic skills that apply to the job. Related instruction may be provided by a community college, technical school or college, an apprenticeship training school, or by the business itself. This instruction can be provided at the school, online, or at the work site.

The following are courses to be completed during the term of apprentice and under direct supervision of a Journeyworker.

C	ore Skills:	Approximate Hours
1.0 Ir	spection, Care & Use of Personal Protection Equipment	1 hour
2.0 0	SHA 10	10 hours
3.0 F	irst Aid/CPR/Blood Borne Pathogens	4 hours
4.0 H	azard Assessment & Communication	10 hours
5.0 R	F Awareness & Safety	1 hour
6.0 U	Inderground Utility Locate Process (One Call)	2 hours
7.0 C	DL & Safe Driving Practices including successful operate of tractor and trailer	20 hours
8.0 D	OT – Securement of Equipment or Load	2 hours
9.0 R	eading Blueprint/Construction Drawings	8 hours
10.0 Jo	ob Site Management	8 hours
11.0 E	xcavation & Restoration	16 hours
12.0 H	orizontal Directional Drilling (HDD) and Other Equipment Operation Best Practices	10 hours
13.0 C	onduit/Duct Bank Installation	12 hours
14.0 M	fanhole/Hand Hole Installation	12 hours
15.0 C	able Handling, Installation, and Splicing	20 hours
16.0 B	ackfill, Compaction, Finish Grading	10 hours
17.0 E	lectrical Safety & Stray Voltage Detection	5 hours
18.0 L	ock Out/Tag Out	2 hours
19.0 M	faterial Handling & Storage	2 hours
20.0 A	pprenticeship Program Overview	1 hour
	OTAL:	156 hours



Current & Future PCCA Participants

Current

































► Future ?

- Now is the opportunity for other PCCA non-union contractor members to join this effort and participate
- \$10,000 payment opportunity is limited to first 40 participants from both PCCA and WIA
- Join this effort now!



Appendix Contents

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Project Administrative Team

Brent Weil Vice President of Workforce Development

Deb Bennett Director of Apprenticeship

Rikin Thakker Chief Technology Officer

Rachael Hill Apprenticeship Coordinator

Gerry Ghazi Senior Subject Matter Expert

Lisa Tellstone Subject Matter Expert – Registered Apprenticeship

Your Primary Contacts

Brent Weil, Brent.Weil@wia.org, C 703.869.5355

Deb Bennett, Deb.Benett@wia.org, C 913.707.0528



Employer Apprenticeship Formation Progress



Company	Intro Call	Emp. Agr	Onboarding	\$10,000 Incentive	Apprentice/Mentor Submitted
Sellenriek	Yes	Yes	Yes	Yes	30 planned / ?
Amerine	Yes	Yes	Yes	Yes	5/2
Gabe's	Yes	Yes	Yes	Yes	2/7
Electricom	Yes	Yes	Yes	Yes	
K&W	Yes	Yes	Yes	Yes	
Push	Yes	Yes	Yes	Yes	
Equix	Yes	Yes	Yes		
Mears	Yes	Yes	Scheduled		
Anderson Underground	Yes	Yes			
C-Com	Yes	Yes			
Kenneth G. Myers	Yes	Yes			
MP NextLevel	Yes	Yes			
Tjader & Highstrom	Yes	Yes			
HMI Services	Yes				
Cable Services Co.					
Mastec					

⊹MasTec

Year 1 Matching Funds



\$711,066.20





"Closing the Skills Gap" Grant Implementation

Join this effort now!





MARK BRIDGERS

shipping: mailing: 405 Forsyth Street PO Box 31026 Raleigh, NC 27609 Raleigh, NC 27622 www.ContinuumCapital.net

919.345.0403

MBridgers@ContinuumCapital.net

Twitter: @MarkBridgers

Skype: mark.bridgers.continuum

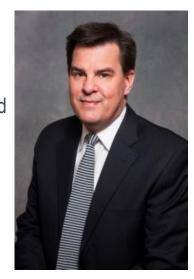
LinkedIn: www.linkedin.com/pub/mark-bridgers/12/9b4/81

Mark Bridgers



Mark founded and leads a Utility Vertical Market team team at Continuum Capital. He works with gas/electric utilities, power generators, pipeline companies, and energy companies. As a recognized expert in capital construction and operational challenges, Mark was recently honored with membership in the Society of Gas Operators (SOGO) and the Gild of Ancient Supplers.

Mark helps firms prepare for and successfully navigate "strategic transitions." His passion is helping organizations achieve breakthrough innovations through collaborative or integrated relationships. He is the architect of an approach for integrated service provider management referred to as the "Extended Enterprise" among construction industry participants.



Mark is an avid educator, trainer, and writer with more than 20 years of industry expertise including financial performance analysis; development and implementation of tools to reduce construction cost, life-cycle cost, and operational friction; restructuring of processes and procedures - often times using LEAN Construction techniques; and leader development.. He is a recognized expert in capital construction and operational challenges . Mark is also author of over 150 articles and research papers published internationally in industry journals, including ENR, PE – The Magazine for Professional Engineers, Pipeline & Gas Journal, Utility Contractor (NUCA), Underground Contractor, Electric Energy (RMEL) and Electric Perspectives (EEI).

Mark holds a master's degree in business administration from the University of Virginia's Darden school of Business and a bachelor's degree in financial management from Clemson University. In addition, he earned the designation of Chartered Property and Casualty Underwriter (CPCU) and Associate in Reinsurance (ARe).

About Continuum



Continuum Capital is a boutique management consulting, training, investment banking, and capital services firm providing services to the worldwide construction industry. We provide services in the areas of strategic market information, acquisition integration, ownership transition, private equity financing, project delivery improvement, management and field-level training, strategic planning, strategic sourcing, and productivity improvement.

Mission Statement	Transform capital asset construction worldwide.		
Founded	2011		
Office Locations	Raleigh, NC; Birmingham, AL; Denver, CO; Dallas, TX; Chicago, IL; Baltimore, MD		
Number of Employees	9		
Geographic Market	United States, Canada, Latin America, Europe, and Pacific Rim		
Continuum Capital's Clients	Contractors; engineers; architects; government agencies; utility companies; manufacturers and distributors of construction materials and construction equipment		
Consulting Clients	15 per year (90% of whom are repeat customers)		
International Speaking Locations	Brazil, Canada, France, Mexico, South Korea, United Arab Emirates		
Professional Lecture & Speaking	20 per year		
Knowledge & Database Access	Proprietary database tools for benefit of clients: a) Utility construction index from 2009 to present; b) Utility construction field productivity improvement techniques from 1700 surveys; c) Utility contractor financial performance comparison of 50+ publicly traded and privately held firms; d) National and regional utility construction spending history and forecast e) Gas utility "Best Practice" database and knowledge defining superior performance from 2000 to present d) 35,000 contact database to support acquisition, research, and industry knowledge		
Corporate Web Site	www.ContinuumCapital.net		
Energy & Utility Team Leader	Mark Bridgers – President & Founder Continuum Capital; Director Utility Vertical Market		

About Continuum



Founded in 2011, Continuum Capital provides boutique management consulting, capital services, and training, to the energy, utility, pipeline, and industrial markets supporting the successful and efficient planning, design, construction, and operations of capital asset.

Continuum utilizes a proprietary "SMART Advisory" methodology to deliver innovative and customized solutions to energy, utility, or pipeline owners/operators who want to transform their capital asset construction processes. Service providers to these firms, including underground and overhead contractors and engineers, are integrated into the transformation process, frequently forming what Continuum refers to as an "Extended Enterprise."

Continuum's experienced consultants can assist your business with Capital Construction/O&M Unit Effectiveness, Program Management Office Transformation, Risk Management/Mitigation for Capital Asset Construction, Project Management/Controls Installation, Process Analysis & Improvement, Management of RFI / RFQ / RFP / Procurement, Extended Enterprise/Alliance Formation, and Field Productivity Assessment & Improvement.

S – Strategic Relations

M – Measureable Objectives

A – Aligned Sourcing

R – Risk Controlled

T – Technology Enabled

Additional and specialized services include, M&A or Due Diligence Support, Market Strategy, Market Research, Cost Analysis & Savings, Cost to Complete Analysis, Cost to Convert to Best Purpose, and Cost to Restore Asset.

Let Continuum transform your business!