



TIRAP

TELECOMMUNICATIONS INDUSTRY
REGISTERED APPRENTICESHIP PROGRAM
POWERED BY WA

Building A Telecommunications Talent Pipeline

Apprenticeship Guidebook

| [TIRAP.ORG](https://www.tirap.org)

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Introduction

Apprenticeship is a proven model for the development of a skilled workforce. However, employers are often unsure how to start the process of creating the program, require assistance with administration and paperwork, and how best to build a sustainable program that meets their workforce needs.

The Wireless Infrastructure Association (WIA) is recognized by the Department of Labor as a National Sponsor of Apprenticeship. We provide, at no cost to the employer, deep technical expertise, program support and program funding (when available) to accelerate and streamline the process for adopting registered apprenticeship.

About WIA, An Industry Intermediary

WIA is the National Sponsor of the Telecommunications Industry Registered Apprenticeship Program (TIRAP). Since 2017, WIA has administered National Standards of Apprenticeship along with the United States Department of Labor for approved occupations established under the program. Graduates receive national, industry-recognized credentials that certify occupation proficiency and provides opportunities for career advancement. WIA supports employers in promoting consistency and uniformity in training across occupations to improve the safety and quality of the wireless workforce.

As an industry intermediary, WIA is your advocate and partner. We provide industry and occupation specific expertise within the telecommunications industry, coordinate partner responsibilities, and help with program administration tasks. Our goal is to speed your adoption of apprenticeship, reduce your investment of time and resources, and ensure the training meets your needs for a qualified workforce.

Key Elements of All Registered Apprenticeship Programs

Industry Led - Programs are industry-vetted and approved to ensure alignment with industry standards and that apprentices are trained for highly skilled, high-demand occupations.

Paid Job - Apprentices earn progressive wage as their skills and productivity increase.

Structured On-the-Job Learning/Mentorship - Programs provide structured on-the-job training to prepare for a successful career, which includes instruction from an experienced mentor.

Supplemental Education - Apprentices are provided supplemental classroom education based on the employers unique training needs to ensure quality and success.

Diversity - Programs are designed to reflect the communities in which they operate through strong non-discrimination, anti-harassment, and recruitment practices to ensure access, equity, and inclusion.

Quality & Safety - Apprentices are afforded worker protections while receiving rigorous training to equip them with the skills they need and the proper training and supervision they need to be safe.

Credentials - Apprentices earn a portable, nationally-recognized credential within their industry.



Who Should Be Involved?

Your internal development team should include decision-makers at the leadership level, representatives from Human Resources, training staff, and the department targeted for the apprenticeship program implementation.

Partnering With WIA



When you join our apprenticeship program, you gain access to a program that leverages an existing framework created by WIA and other industry experts. Since its inception, WIA has rallied and convened respected subject matter experts who have been successful in:

- Defining career pathways in telecommunications
- Credentialing 16 occupations with accompanying curriculum
- Building a growing catalog of occupations, curriculum, and industry sectors

This provides you, the employer, the flexibility of getting started almost immediately without the need to develop your own apprenticeship standards, occupational outlines, or program registration with the Department of Labor.

The National Standards of Apprenticeship developed by WIA contain the Registered Apprenticeship Program framework approved by the Department of Labor. Each occupation is listed as an “Appendix” to the National Standards and contains two main sections:

1. Work Process Schedule (WPS) that defines on-the-job training
2. Related Instruction Outline which includes classroom, online, or other instruction



Value Of Apprenticeship Programming

Employers have reported the following indirect benefits for their apprenticeship programs:

- Improved company culture
- Improved pipeline of skilled workers
- Improved employee loyalty
- Improved co-worker productivity
- Reduced turnover
- Product or process innovation
- Future manager development
- More on-time delivery
- Reduced downtime

In Addition To:

Capturing critical knowledge and experiences of experienced workers, who act as mentors.

Customizable on-the-job training to meet your company's needs, ensuring that apprentices are proficient in the positions they will fill.

Lower recruiting costs for companies hiring graduates from a quality pre-apprenticeship training partner vetted by WIA.

WIA's Four Step Approach With Employers



WIA has developed a four-step approach for providing support to both prospective employers and participating employers. These four steps will be reviewed in detail throughout the remainder of this guide.

Step 1: Explore

First, WIA will help you understand the apprenticeship model and adapt your current programs into the program. Steps include:

- Understand registered apprenticeship and its value
- Meet with WIA on workforce challenges, in-demand occupations, and needed support
- Review core program documents
- Complete the "TIRAP Apprentice Registration Spreadsheet"
- Work with WIA on the employer training program
- Evaluate apprenticeship implementation across HR, training, payroll, and operations
- Execute Employer Acceptance Agreement

Identify Occupations

One of the first considerations is to determine which of the following, approved occupations you have a critical hiring or training need. Each occupation has different competencies and related training requirements. If you have a critical occupation not currently on the list, WIA may assist with developing the new occupation. Refer to the PROGRAM TOOLS section for a description of each occupation.

OCCUPATION	RTI HOURS
Wireless Technician	85
Telecommunications Tower Technician	160
Telecommunications Tower Antenna & Line Lead	212
Telecommunications Tower Antenna & Line Foreman	137
Telecommunications Tower Construction Lead	223
Telecommunications Tower Construction Foreman	138
Maintenance & Condition Assessment Lead	102
Maintenance & Condition Assessment Foreman	132
Fiber Optic Technician	170
Underground Utility Installer Technician	156
Overhead Utility Installer Technician	154
Small Cell Technician	144
Telecommunications Utility Foreman	151
In Building Wireless Installation Technician	148
Broadband Technician	148
Central Office Installer	176

Work Process Schedule

Once you have identified the occupations you are interested in, we will review the associated Work Process Schedule (WPS) for each occupation. The work process schedule is an outline of broad tasks that industry advisors and employers have determined are critical for apprentices to learn during their On-the-Job Learning (OJL). A portion of the WPS includes the occupation title, apprenticeship codes, and then a description of associated tasks.

As a participating employer, you have the flexibility to expand the task list, while maintaining the approved schedule of tasks. This is a competency-based apprenticeship, meaning that abilities are emphasized over memorized knowledge, and skills are more important than the number of hours spent working on tasks.

A sample of the WPS first page is shown below. The National Standard of Apprenticeship Appendix, which includes the Work Process Schedule and the Related Instruction Outline, is attached separately.

Appendix A-10

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

Description: The Underground Utility Installer Technician (UUIT) is a member of a crew with skills in the construction and maintenance of underground or buried telecom utility systems. The UUIT will use skills such as underground utility location, fiber optic technology, and industry regulations as part of their daily work routine. In addition, the UUIT may be required to operate underground equipment.

The UUIT typically performs their job duties in outdoor environments, in all weather conditions, and includes some travel. The UUIT must have the ability to lift and/or pull 50-75 pounds several times each day and can endure long periods of standing, sitting or walking. The ability to bend, twist, and reach overhead is required along with the continuous use of both hands to operate hand tools and perform other duties.

This schedule is attached to and a part of these Standards for the above identified occupation.

1. TYPE OF OCCUPATION

Time-based Competency-based Hybrid

2. TERM OF APPRENTICESHIP

RAPIDS CODE	OCCUPATION	TERM/HOURS	COMPLETION CERTIFICATE
XXXXCB	Underground Utility Installer Technician	Competency Based	Certificate of Completion

Upon completion of UUIT apprenticeship, the apprentice will receive a Certificate of Completion. His/her Certificate of Completion of Apprenticeship will reflect the completion of the UUIT occupation.

3. RATIO OF APPRENTICES TO JOURNEYPWORKERS

The apprentice to journeyworker ratio is: 1 apprentice(s) to be employed in each scope of work, and/or jobsite employing 1 journeyworker(s).

4. APPRENTICE WAGE SCHEDULE

Apprentices shall be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the current hourly journeyworker wage rate, which will range from \$12-\$18 an hour; this is regionally dependent.

1st Level hours = \$12 (6 months)
 2nd Level hours = \$15 (1 year)
 Final journeyworker wage = \$18

5. WORK PROCESS SCHEDULE (See attached Work Process Schedule)

The sponsor may modify the work processes to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.

6. RELATED INSTRUCTION OUTLINE (See attached Related Instruction Outline)

The sponsor may modify the related instruction outlines to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.

As a participating employer, you have the flexibility to expand the task list while maintaining the nationally approved schedule of tasks.

Related Technical Instruction (RTI)

Related instruction is an organized and systematic form of instruction designed to provide the apprentice with knowledge on both theoretical and technical subjects related to their occupation. Each TIRAP occupation has a pre-defined list of subject areas that industry advisors and employers have validated as important for apprentices employed within that occupation.

RTI 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. Ultimately you as the employer decides which provider or providers you would like to use for RTI delivery. If you do not have existing relationships with education and training providers, WIA will research and identify potential RTI providers for you to consider.

RTI providers can be:

- Employer-based trainers (in house)
- Community or technical colleges
- Equipment supplier trainers
- Outside/third party trainers
- Qualified training organizations

WIA has partnered with a variety of community colleges and career development training organizations. These training partners develop and provide related instruction that aligns with WIA's

WORK PROCESS SCHEDULE
Underground Utility Installer/Technician
O*NET SKILL CODE: 49-9022.00 RABBIT CODE: 309PCB

Description: Related instructional courses provide technical ability and a basic understanding of the telecommunications 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:

Core Skills	Approximate Hours
1.0 Inspection, Care & Use of Personal Protection Equipment	1 hour
2.0 OSHA 10	10 hours
3.0 First Aid, CPR, Blood Borne Pathogens	4 hours
4.0 Hazard Assessment & Communications	10 hours
5.0 RF Awareness & Safety	1 hour
6.0 Underground Utility Locates Process (One Call)	2 hours
7.0 CDL & Safe Driving Practices including successful operator of tractor and trailer	20 hours
8.0 OOT - Assessment of Equipment or Load	2 hours
9.0 Reading Blueprints/Construction Drawings	8 hours
10.0 Job Site Management	8 hours
11.0 Erection & Preparation	10 hours
12.0 Horizontal Directional Drilling (HDD) and Other Equipment Operation Best Practices	10 hours
13.0 Curb/In-Street Bank Installation	12 hours
14.0 Manhole/Hand Hole Installation	12 hours
15.0 Cable Handling, Installation, and Splicing	20 hours
16.0 Backfill, Compaction, Finish Grading	10 hours
17.0 Electrical Safety & Energy Leakage Detection	2 hours
18.0 Lock Out / Tag Out	2 hours
19.0 Material Handling & Storage	2 hours
20.0 Apprenticeship Program Overview	2 hours
TOTAL:	156 hours

Consider:

Who will provide the RTI for your program?

What education/ training providers do you currently use or have a relationship with?

How are training hours tracked now?


apprenticeable occupations. They also may be able to help build a pipeline of candidates for employment from the students who have successfully completed these programs. Employer involvement ensures that the curriculum developed matches the current needs of the employer.

Employer Acceptance Agreement

WIA is an approved national apprenticeship sponsor. We have already gone through the process of setting up and being approved by the United States Department of Labor. You come under our sponsorship by simply outlining your apprenticeship program – occupations, wage schedule, and program point of contact one-page Employer Acceptance Agreement document. The agreement also list’s occupations adopted at the onset of the program.

Once the Employer Acceptance Agreement is executed, WIA enters the information into the Department of Labor RAPIDS database. RAPIDS is the acronym for Registered Apprenticeship Partners Information Database System. This system tracks employer occupation and program information. Key demographic information about the apprentice population is reported.

There is no need for the employer to make a separate application with any State or Federal agency. You will receive your own program identification number issued by the United States Department Labor.

 **Appendix F**
EMPLOYER ACCEPTANCE AGREEMENT

The undersigned employer hereby subscribes to the provisions of the Apprenticeship Standards formulated and registered by the *Workless Infrastructure Association* and agree(s) to carry out the intent and purpose of said Standards for *Appendices A – Work Process Schedules and Related Instruction Outline (select occupation/s) below* and accompanying *Appendices* and to abide by the rules and decisions of the Sponsor established under these Apprenticeship Standards. The undersigned employer further agrees to allow the *WIA/Registration Agency* to access the employer’s records to confirm compliance with the terms of the Apprenticeship Standards and requirements of 29 CFR Part 29, subpart A, and Part 30. *Employer Name* have been furnished a copy of the Standards and have read and understood them, and request verification to train apprentices under the provisions of these Standards. On-the-job, the apprentice is hereby assured qualified training personnel and adequate supervision during the apprenticeship. The training should follow the approved Work Process Schedule and Related Instruction Outline including the rotation of tasks. The employer further agrees to follow the selection procedures per the approved Standards consistent with the requirements set forth in 29 CFR § 30.10(s). This employer acceptance agreement will remain in effect until canceled voluntarily or revoked by the Sponsor, Employer, or the Registration Agency.

(Print Name of Employer Representative) **Deb Bennett, Vice President of Apprenticeship**
(Print Name of Sponsor Representative)

Signed: _____ Signed: _____
(On Behalf of Employer) *(On Behalf of Sponsor)*

Date: _____ Date: _____

Employer Title: _____
Name of Company: _____
Address: _____
City/State/Zip Code: _____
Phone Number: _____
Fax: _____
Email: _____
NARCS Code (Optional): _____
Employer Identification Number (Optional): _____

cc: Registration Agency

Who will serve as the primary point of contact?

Who will support program implementation and administration?

How will you maintain the mentor to apprentice ratios?

What is your process for assessing competency?

Step 2:

Identify and Register Apprentices



TIRAP is a competency-based apprenticeship program where abilities are emphasized over memorized knowledge & skills are more important than the number of hours spent working on tasks.

Employers sometimes overlook a prime talent pool to fill high demand occupations—their current workforce. Some of these individuals are fully proficient in their current position and may make ideal mentor candidates. Others may not necessarily have the skills or related instruction to advance beyond their current position. These individuals are ideal candidates for apprenticeship.

The employer's program aligns to the needs of the individual apprentice while also meeting business needs. Apprentices gain knowledge and skills that lead to their advancement at a pace determined by the employer and the apprentice.

WIA works with employers to evaluate their incumbent workforce to identify candidates to serve as mentors and apprentices. WIA also reviews the process for new hires and makes recommendations on timing for entry into the apprenticeship program.

In this step, WIA will:

Review and evaluate how apprentices will be identified and onboarded

Generate Apprentice Agreements

Help you establish and implement your apprenticeship program

Identifying Mentors and Apprentices

With guidance from WIA, you will conduct a workforce analysis to determine which individuals are candidates for the apprenticeship program. WIA has developed a simple approach which includes gathering the requisite information to create the apprentice agreement. Topics discussed to support this step include:

- Job skills and competencies (existing/gaps)
- Level of experience required
- Training resources (existing/gaps)
- Career paths available
- Employer need for additional occupations
- Turnover rate

Registering Apprentices


Apprentices can be new hires or incumbent employees. Once employees have been selected for the apprenticeship program, either incumbent or new, WIA will create the Apprentice Agreement (also known as 671 Form). The 671 Form is an agreement between the Apprentice, the Employer, and the National Sponsor. The terms and conditions of the apprentice's training are contained in the Agreement including the start date of the apprenticeship.

Prior to gathering signatures on the Apprentice Agreement, employers are encouraged to set an appointment with the apprentices to review the program and share expectations of performance. They are encouraged to ask questions and buy into the apprenticeship as an important way for them to build their career.

At this stage, a portion of the on-the-job learning and/or required


related instruction can be credited to Apprentices based upon the individuals' previous experience and education.

Once the Apprentice Agreement is fully executed, WIA will update the employer's RAPIDS account. RAPIDS is the acronym for Registered Apprenticeship Partners Information Database System, a Department of Labor software program for tracking apprentices. This system tracks occupation and program information from the employer. In addition, key demographic information about the apprentice population is reported. WIA takes the primary lead on this administrative task so the employer may focus on other elements of the apprenticeship program such as classroom training and on-the-job work assignments.

Program Registration and Apprenticeship Agreement		U.S. Department of Labor Employment and Training Administration Office of Apprenticeship		
APPRENTICE AGREEMENT AND REGISTRATION - SECTION II OMB No. 1205-0223 Expiration Date: 06/30/2024				
PART A: APPRENTICE'S INFORMATION				
1. First Name Middle Name (Optional) Last Name Suffix (Optional) Address (No., Street, City, State, Zip Code) Telephone Number (Optional) E-mail Address (Optional) *Social Security Number		Answer Both 4a. and 4b. below 4. a. Ethnicity (Select One) <input type="checkbox"/> Hispanic or Latino <input type="checkbox"/> Not Hispanic or Latino <input type="checkbox"/> Participant Did Not Self-Identify b. Race (Select One or More) <input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Asian <input type="checkbox"/> Black or African American <input type="checkbox"/> Native Hawaiian or other Pacific Islander <input type="checkbox"/> White <input type="checkbox"/> Participant Did Not Self-Identify		5. Veteran Status (Select All That Apply) <input type="checkbox"/> Non Veteran <input type="checkbox"/> Veteran <input type="checkbox"/> Non Veteran, Other Eligible Individual <input type="checkbox"/> Veteran, Eligible <input type="checkbox"/> Participant Did Not Self-Identify
2. Date of Birth (Mo., Day, Yr.)		3. Sex (Select One) <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Participant Did Not Self-Identify		6. Education Level (Select One) <input type="checkbox"/> Not High School graduate <input type="checkbox"/> High School graduate (including equivalency) <input type="checkbox"/> Some College or Associate's degree <input type="checkbox"/> Bachelor's degree <input type="checkbox"/> Master's degree <input type="checkbox"/> Doctorate or professional degree
7. Employment Status of Apprentice (Select One) <input type="checkbox"/> New Employee <input type="checkbox"/> Current Employee				
8. Did the apprentice complete a pre-apprenticeship program prior to their registration in this apprenticeship program? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please provide the Pre-Apprenticeship Program Name and Address:				
PART B: PROGRAM SPONSOR'S INFORMATION				
1. Program Number Sponsor's Name and Address (No., Street, City, State, Zip Code, County) Telephone Number Cell Phone Number (Optional) E-mail Address		2. Occupation (The work processes listed in the standards are part of this agreement.) a. RAPIDS Code: b. O*NET Code: c. Interim Credentials Offered (i.e., Career Lattice Occupation)? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Page 1 of 5		ETA 671 - Section II		

Step 3:

Monitor and Report



Once your program is underway, you will work with WIA to monitor and report program progress. Much like any project, if the results are not matching expectations, changes to the process may be in order. These are the areas that are monitored and reported:

Provide a monthly update to WIA on all apprentices, incorporating:

- Status (termination/completion)
- Related instruction and OJT completions
- Wage adjustments and promotions
- Newly registered apprentices, their job titles, and wages

Document for WIA at program start and any changes:

- Apprentice selection and hiring processes
- Apprentice wage scale increase process
- How Related Training Instruction (RTI) is provided—through company training, with a college, etc.
- How OJT is delivered and mentors managed
- Apprentice performance review process
- Which Registered Apprenticeship programs you are part of

Contrary to popular belief, apprenticeship programming offers a great deal of flexibility to ensure the employer has a program that can be managed and maintained over the long term. This is also the time to celebrate individual and program successes and share best practices discovered with other employer partners.

Step 4:

Resources and Support

The National Sponsor will assist with connections to resources, such as state and local workforce agencies, education providers, and nonprofit organizations. They may have incentive funding, recruitment and case management support.



Responsibilities of WIA as National Sponsor

- Develop, register, and monitor the program and occupations to ensure conformity to regulations, standards, and policies.
- Assist apprentices and employers with questions or concerns.
- Provide technical assistance.
- Confer with third party providers of related instruction to assure quality classroom training.

Responsibilities of the Employer

- Provide a safe working and learning environment. Provide supervision and training by a mentor for OJT.
- Provide well rounded training so the apprentice can learn all aspects of the occupation by the completion of the training program as listed in the Work Process Schedule.
- Monitor and document the apprentice's on-the-job progress and provide feedback on performance.
- Comply with the provisions of the Program Standards and the Apprentice Registration Agreement.
- Support and nourish a culture that provides an environment for the development of the apprentice.

Responsibilities of the Apprentice

- Maintain employment status with the employer.
- Perform diligently and faithfully the work of the occupation and other pertinent duties assigned by the employer.
- Contribute to a safe working environment in such a manner to assure their personal safety and that of fellow workers.
- Attend and satisfactorily complete OJT tasks as outlined on the Work Process Schedule.
- Attend and satisfactorily complete required related technical instruction as outlined on the Work Process Schedule.
- Additional training may be required when the apprentice exhibits a lack of retention of skills related to the subject matter, safety issues, employer disciplinary policies or lack of proper application of the skills or knowledge areas.

Program Tools

Employer Acceptance Agreement



Appendix F EMPLOYER ACCEPTANCE AGREEMENT

The undersigned employer hereby subscribes to the provisions of the Apprenticeship Standards formulated and registered by the *Wireless Infrastructure Association* and agree(s) to carry out the intent and purpose of said Standards for *Appendices A – Work Process Schedules and Related Instruction Outlines (select occupation(s) below* and accompanying Appendices and to abide by the rules and decisions of the Sponsor established under these Apprenticeship Standards. The undersigned employer further agrees to allow the *Wireless Infrastructure Association* to access the employer's records to confirm compliance with the terms of the Apprenticeship Standards and requirements of 29 CFR Part 29, subpart A, and Part 30. **Employer Name** have been furnished a copy of the Standards and have read and understood them, and request certification to train apprentices under the provisions of these Standards. On-the-job, the apprentice is hereby assured qualified training personnel and adequate supervision during the apprenticeship. The training should follow the approved Work Process Schedule and Related Instruction Outline including the rotation of tasks. The employer further agrees to follow the selection procedures per the approved Standards consistent with the requirements set forth in 29 CFR § 30.10(b). This employer acceptance agreement will remain in effect until canceled voluntarily or revoked by the Sponsor, Employer, or the Registration Agency.

(Print Name of Employer Representative)

Deb Bennett, Vice President of Apprenticeship
(Print Name of Sponsor Representative)

Signed: _____
(On Behalf of Employer)

Signed: _____
(On Behalf of Sponsor)

Date: _____

Date: _____

Employer Title: _____
Name of Company: _____
Address: _____
City/State/Zip Code: _____
Phone Number: _____
Fax: _____
Email: _____
NAICS Code (Optional): _____
Employer Identification Number (Optional): _____

cc: Registration Agency

Occupation Descriptions

Appendix	Occupation	Description
A1	Telecommunications Tower Technician	Telecommunication Tower Apprentice is a supervised member of a crew performing general construction activities with an emphasis on tower system installation and maintenance and inspection of existing support structures used in the provision of essential Telecommunication systems, including personal wireless communications, public safety communications, utility networks, and broadcasting.
A2	Wireless Technician	The Wireless Technician is a supervised member of a team performing general installation, provisioning, maintenance, troubleshooting/fault isolation and restoration activities of essential wireless systems.
A3	Telecommunications Tower Antenna & Line Lead	Telecommunications Tower Antenna & Line Lead (TAL) is a supervised member of a crew performing antenna and line installation, maintenance and troubleshooting activities on structures in accordance with (IAW) installation design drawings and or written Scope of Work (SOW). Work performed must comply with all applicable industry standards and best practices. The TAL is authorized to supervise Telecommunication Tower Apprentice/ Telecommunication Tower Technician (TTA/TTT) level crew members during the On-Job Learning (OJL). The TAL may not act as a Competent Person for antenna and line install during this phase of education/training unless deemed competent by the employer for SOW. The TAL assists the Telecommunications Tower Antenna & Line Foreman (TAF) with successful completion of the SOW and may be assigned crew leadership duties.



Appendix	Occupation	Description
A4	Telecommunications Tower Antenna & Line Foreman	Telecommunications Tower Antenna & Line Foreman (TAF) is a supervisor of a crew performing antenna and line installation, maintenance and troubleshooting activities on elevated structures in accordance with (IAW) installation design drawings and or written scopes of work. Work performed must comply with all applicable industry standards and best practices. The TAF is authorized to supervise Telecommunications Tower Technician (TTT) and Telecommunications Tower Antenna & Line Lead (TAL) level crew members during the OJL portion of their training.
A5	Telecommunications Tower Construction Lead	Telecommunications Tower Construction Lead (TCL) is a supervised member of a crew performing installation/erection, dismantling and/or Telecommunications Industry Association (TIA) maintenance of Telecommunications support structures in accordance with (IAW) installation design drawings and/or written Scope of Work (SOW). Work performed must comply with all applicable industry standards and best practices. The TCL is authorized to supervise Telecommunication Tower Apprentice / Telecommunication Tower Technician (TTA/TTT) level crew members during the On-Job Learning (OJL). The TCL may not act as a Competent Person for structure erection or dismantling during this phase of education/training unless deemed competent by the employer for the SOW. The TCL assists the Telecommunications Tower Construction Foreman (TCF) with successful completion of the SOW and may be assigned crew leadership duties.
A6	Telecommunications Tower Construction Foreman	Telecommunications Tower Construction Foreman (TCF) is a supervisor of a crew performing installation, demolition, and/or maintenance on elevated structures in accordance with (IAW) installation design drawings and or written scopes of work. Work performed must comply with all applicable industry standards and best practices. The TCF is authorized to supervise Telecommunication Tower Apprentice/ Telecommunication Tower Technician (TTA/TTT) and Telecommunications Tower Construction Lead (TCL) level crew members during the on-job-learning portion of their training.

Appendix	Occupation	Description
A7	<p>Maintenance & Condition Assessment Lead</p>	<p>Maintenance & Condition Assessment Lead (MCL) is a supervised member of a crew performing maintenance and condition assessments on antenna supporting structures in accordance with (IAW) ANSI/TIA 222 and/or owners engineering representative. The MCL is intended to cover assessment activities only and does not include any construction activities. Work performed must comply with all applicable industry standards and best practices. The MCL is authorized to supervise Telecommunication Tower Apprentice/ Telecommunication Tower Technician (TTA/ TTT) level crew members during the on-job learning (OJL). The MCL may not act as a Competent Person for maintenance and condition assessments during this phase of education/ training unless deemed competent by the employer for the scope of work (SOW). The MCL assists the Maintenance and Condition Foreman (MCF) with successful completion of the SOW and may be assigned crew leadership duties.</p>
A8	<p>Maintenance & Condition Assessment Foreman</p>	<p>Maintenance & Condition Assessment Foreman (MCF) is a supervisor of a crew performing maintenance and condition assessments on antenna supporting structures in accordance with (IAW) ANSI/TIA 222 and/or owners engineering representative. The MCF is intended to cover assessment activities only and does not include any construction activities. Work performed must comply with all applicable industry standards and best practices. The MCF is authorized to supervise Telecommunication Tower Apprentice/ Telecommunication Tower Technician (TTA/TTT) and Maintenance & Condition Assessment Lead (MCL) level crew members during the on-job-learning portion of their training.</p>



Appendix	Occupation	Description
A9	Fiber Optic Technician	The Fiber Optic Technician (FOT) is a member of a crew performing installation, troubleshooting, termination, splicing, testing, maintenance and repair of fiber optic cables of essential telecommunication systems, including personal wireless communications, public safety communications, utility networks, and broadcasting. The FOT performs their job duties inside and outside of homes and buildings.
A10	Underground Utility Installer Technician	The Underground Utility Installer Technician (UUIT) is a member of a crew with skills in the construction and maintenance of underground or buried telecom utility systems. The UUIT will use skills such as underground utility location, fiber optic technology, and industry regulations as part of their daily work routine. In addition, the UUIT may be required to operate underground equipment.
A11	Overhead Utility Installer Technician	The Overhead Utility Installer Technician (OUIT) is a member of a crew with skills in the construction and maintenance of overhead telecom utility and broadband systems. Depending on the service provided, the OUIT will work with a wide variety of cabling, including fiber optic cable, as part of their daily work routine. In addition, the OUIT may be required to operate overhead equipment.
A12	Small Cell Technician	Small Cell Technicians are members of a wireless service deployment team responsible for the deployment and maintenance of small cells, which provide coverage and capacity solutions for the outdoor environment. The skill set includes installation, deployment, maintenance and support of small cells on a variety of structures (poles, buildings, street furniture etc.), and the preparation for power and fiber backhaul, for wireless operators.

Appendix	Occupation	Description
A13	Telecommunications Utilities Foreman	Telecommunications Utilities Foreman-Underground & Overhead (TUF) is a supervisor of a crew performing buried & aerial line installation, maintenance and troubleshooting activities in accordance with installation design drawings and or written scopes of work. Work performed must comply with all applicable industry standards and best practices. The TUF is authorized to supervise Underground Utility Installer Technician and Overhead Utility Installer Technician level crew members during the On-the- Job Learning (OJL) portion of their training.
A14	In Building Wireless Technician	An In-Building Wireless Installation Technician (IBWIT) is a principal member of a deployment team responsible for creating an environment that delivers indoor cellular services to the occupants of a building through a layer of dedicated infrastructure.
A15	Broadband Technician	The Broadband Technician is a member of a crew that installs, operates, inspects, maintains, and services digital, cable and/or fiber-based high speed data equipment. The Broadband Technician conducts safe and efficient operation and maintenance of various tools and equipment. At times, the Broadband Technician may need to troubleshoot and repair all cable and/or fiber related services and equipment as well as test equipment to adjust signal strength and ensure optimum reception. The technician may have direct, face-to-face contact with customers.
A16	Central Office Installer	The Central Office Installer is a member of a crew with the skills to install, set up, rearrange, or remove switching, distribution, routing, and dialing equipment used in central offices or headend. Additionally, they service or repair telephone, cable television, internet, and other communications equipment on customers' property. They may also install communications equipment or communications wiring in buildings.





Apprenticeship Terms

Appendix A – the appendix to the Apprenticeship Program Standards that defines the apprenticeship program’s work process, required RTI, and wage scale, among other things.

Apprentice – a person who is employed to learn an occupation or profession and is registered with a sponsor in an approved apprenticeship program.

Apprenticeable Occupation – apprenticeable occupations are: 1) customarily learned in a practical way through a structured, systematic program of on-the-job supervised training supplemented by related technical instruction; 2) clearly identified and commonly recognized throughout an industry; and 3) involve the acquisition of manual or technical skills and knowledge.

Apprenticeship Program – a plan for administering an apprenticeship agreement. The plan must contain all terms and conditions for the qualification, recruitment, selection, employment and training of apprentices, including the requirement for a written apprenticeship agreement.

Apprenticeship Program Standards – sometimes called simply “the standards” or “the National Standards”; the document that describes how the program will be managed and is officially signed by the DOL OA and the apprenticeship sponsor to register the program.

WIA Is the National Sponsor for National Standards for the Registered Apprenticeship Program we call TIRAP- the Telecommunications Industry, Registered Apprenticeship Program.

Certificate of Completion – An award, certificate or diploma showing the successful completion of the apprenticeship.

Competency-Based (CB) Apprenticeship – CB Apprenticeship – an apprenticeship where apprentice progress is measured by their attainment of competencies rather than time spent on the job; the required competencies are defined by the employer and approved by the DOL OA

DOL – Department of Labor

Journey-Level Mentor or Journey Person – a worker who has attained a level of skill, abilities and competencies recognized within an industry as having mastered the skills,



abilities, and competencies required for the occupation. Practical experience must be equal to or greater than the term of apprenticeship.

OA – Office of Apprenticeship

On-the-Job Training – hands-on training from an experienced journey-level mentor at the job site. On the job training focuses on the skills and knowledge an apprentice must learn during the program to be fully proficient on the job.

Related Technical Instruction – RTI – the classroom learning component of a registered apprenticeship; may occur at a college, internally at a company, private training provider, etc.

RTI Provider – an organization that delivers RTI in an apprenticeship program; there can be multiple RTI providers utilized in one apprenticeship program.

Sponsor – the sponsor of an apprenticeship program is the organization that is ultimately responsible for ensuring that the program is being run properly and according to the program standards and federal regulations.

Wage Scale – the minimum wage rates for apprentices at various points in their apprenticeship program; employers agree to at least meet the minimums identified.

Work Process - Skills and competencies an apprentice must be proficient in to become a fully-qualified employee for the occupation. When the apprentice reaches the level of skill specified by the work process, and has also completed the number of hours required, the apprentice will have reached the journey-level mentor skill level.

Term of Apprenticeship – The method by which an apprentice is judged to have completed the program and obtained the required competencies. For a Competency Based model, the Term may be measured through the attainment of competency as demonstrated via evaluation methods e.g. completion of an exam or actual demonstration of a skill. Programs must show how competency will be evaluated under the RTI/OJT section of the work process.

Frequently Asked Questions

What is an apprenticeship?

Apprenticeship is a form of structured on-the-job training that makes it very clear for workers, supervisors, and prospective employees how they will grow on the job and gain wage increases and promotions. TIRAP is a registered apprenticeship, which means we have formalized standards in partnership with the U.S. Department of Labor. This ensures a national credential and level of quality and can be a significant selling point for recruitment and retention.

Our wages are different from what is in the Employer Agreement.

What do I do?

This is a national apprenticeship designed to cover companies and workers all over the country. That's why TIRAP has established a minimum wage scale. By signing this agreement, you are certifying that:

- The wages of apprentices will be equal to or higher than the Wage Scale in the Appendix A for that occupation.
- Apprentices will receive at least one wage increase during their apprenticeship.

Apprentice wages can always exceed the levels defined in the Employer Acceptance Agreement, but they can never be below them.

What if our job titles are different from the occupations in the Employer Acceptance Agreement?

TIRAP worked with the U.S. Department of Labor to create occupations specific to our industry. This agreement won't change your job titles. You are free to use your existing job titles in position descriptions, job postings, and more.

What is a journeyworker? We don't use that term.

"Journeyworker" is a term that the U.S. Department of Labor uses to describe workers who have met the skill and knowledge requirements for their position. For the purposes of TIRAP, a journeyworker is someone who has completed an apprenticeship program or who has sufficient experience and training to serve as a mentor for other apprentices. Many employers in our industry don't use this term, so feel free to call them anything you like.

I signed the Employer Acceptance Agreement. What happens next?

We are excited to work with you toward success. WIA will work with you to review your position descriptions, walk through the apprenticeship standards, and help you to get started. The WIA team will provide continuous support as you get started, communicate the program to your



Acknowledgements

The Wireless Infrastructure Association (WIA) supports the diverse community of companies that make up the nation's wireless ecosystem by providing its members and the industry with dedicated resources, advocacy, expertise and networking through a variety of activities and events. WIA leads the industry in hosting national events and networking for new business development opportunities for wireless companies and the organizations that support them. Visit us at wia.org

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