



**SIXTH ANNUAL NCCCO FOUNDATION Industry Forum**

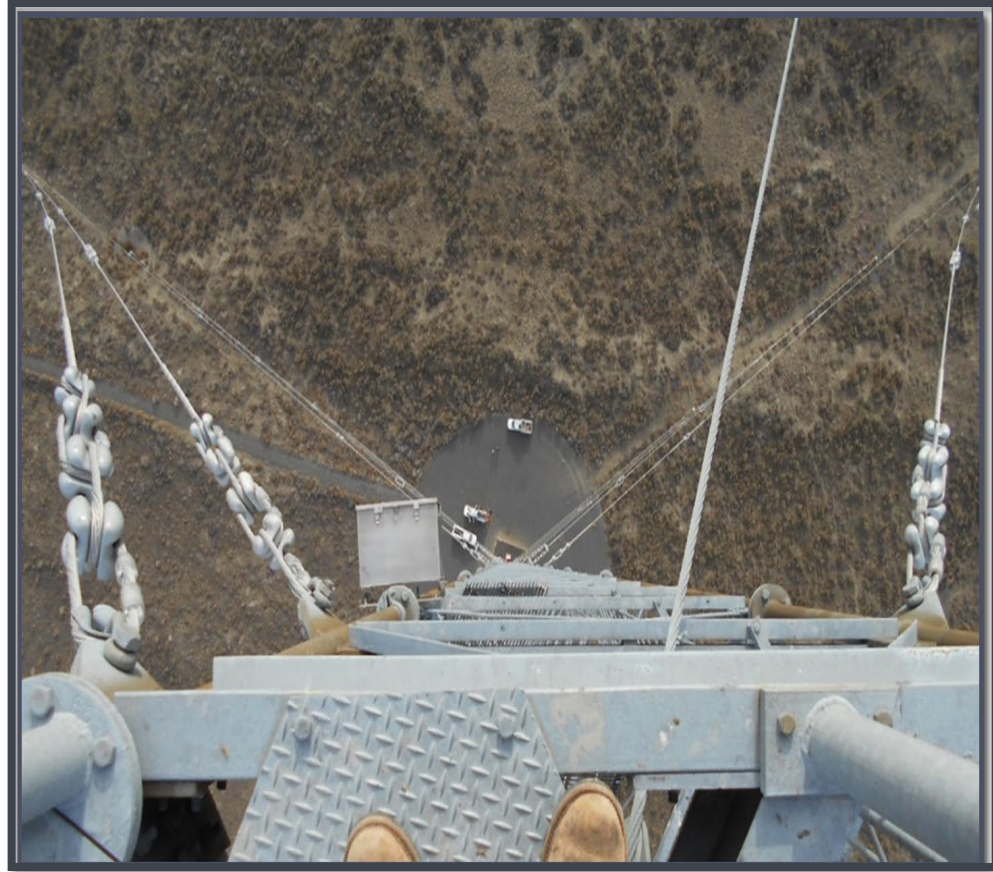
**Elevate Wireless**  
**Certifying the Tower Technician Workforce**

**Todd Schlekeway, President & CEO,**  
**NATE: The Communications Infrastructure Contractors Association**

**Duane MacEntee, Executive Director,**  
**NWSA: National Wireless Safety Alliance**

*November 11, 2021*

# VIEW FROM THE TOP: A WORKFORCE PERSPECTIVE





# STATE OF THE INDUSTRY

- U.S. Wireless Industry Leads the World in **Capex Investment** (18% of World's Capex in U.S.)
- **417,215 Cell Sites** (Includes Small Cell Sites) in United States at end of 2020 (a 35% increase since 2016)
- U.S. Wireless Industry has Invested over **\$200 Billion in Licensed Spectrum Auctions**
- 5G Networks now Cover over **300 Million Americans**
- Mobile Wireless Data Traffic Recently Topped **42 Trillion MBs** (represents a 207% increase since 2016)

# WORKFORCE STRATEGIC PLAN

## 4 Core Pillars

- Leverage Workforce Survey Data
- Telecom Tower Technician (TTTI) Turnkey Curriculum Development
- Community College/Technical Institute Collaboration
- Career Awareness (Promotion and Outreach)

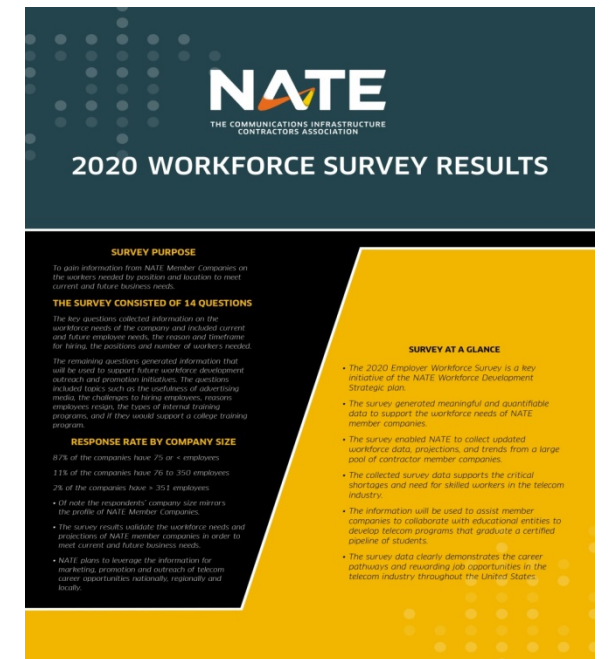


# EMPLOYER WORKFORCE SURVEY

## Key Takeaways

14,693 needed employees by  
NATE Member companies over the  
next three years!

Survey Identified Tower  
Technicians, Tower Construction  
and Antenna & Line workers are  
the most needed.



# TTT1 TURNKEY CURRICULUM COURSES



Introduction Telecommunications Industry



Telecom Safety and Safe Practices (Part 1)



Wireless Industry Best Practices (Part II)



Telecom Installation & Maintenance



Telecom Antennas and Lines



Telecom Structure, Construction, Modification, and Maintenance



NWSA TTT 1 Exam Preparation

# EMBEDDED CERTIFICATIONS

First Aid/CPR

OSHA 10

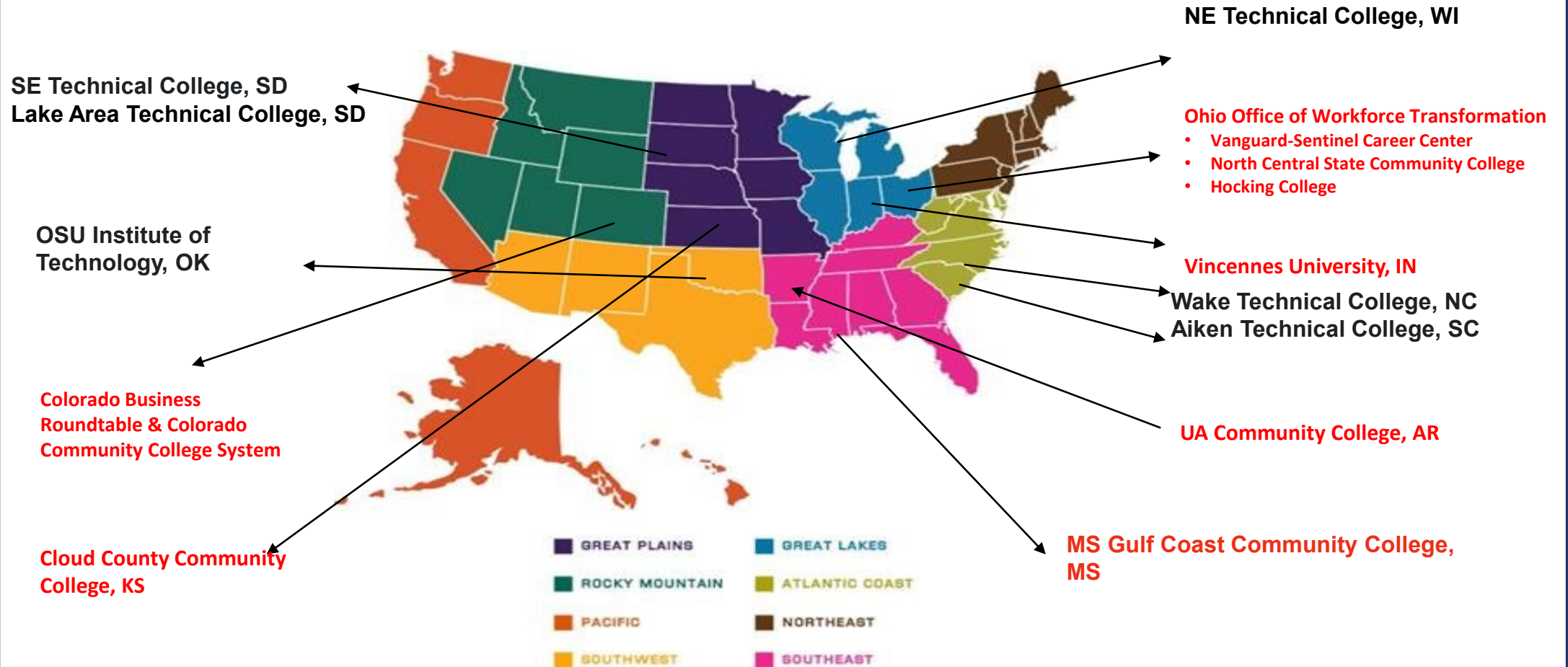
RF/EME

Fall Protection

NCCCO Telecom Rigging

Defensive Driving

# NATE Wireless Industry Network



Red = Proposed or Under Consideration  
 Black = Developed





# VERTICAL FREEDOM: THE MOVIE COMING TO A SCREEN NEAR YOU IN 2022!



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# NATIONAL WIRELESS SAFETY ALLIANCE

It is the mission of the National Wireless Safety Alliance (NWSA) to enable a qualified workforce of sufficient size that meets the needs of the telecommunications industry by providing thorough, independent assessments of knowledge and skills and independently verified worker trade certifications in order to enhance safety, reduce workplace risk, improve quality and productivity, encourage proper training, and recognize the skilled professionals who work on towers and other types of communication infrastructure.



# WORKFORCE DEVELOPMENT



<u>PROCESS ELEMENT</u>	<u>RESPONSIBLE GROUP</u>					
	USDOL/ETA O-Net	TIRAP	NATE	Training Community (Various Pathways)	NWSA	Project Owners
Occupational Titles*	✓	✓				
Curricula Development*		✓	✓			
Education and Training				✓		
Trade Certifications*					✓	
Qualification Verification (Contractors/Crews/Workers)					✓	✓

\*Broad collaboration and cross utilization of industry SMEs ensures consistency.



# WORKFORCE DEVELOPMENT

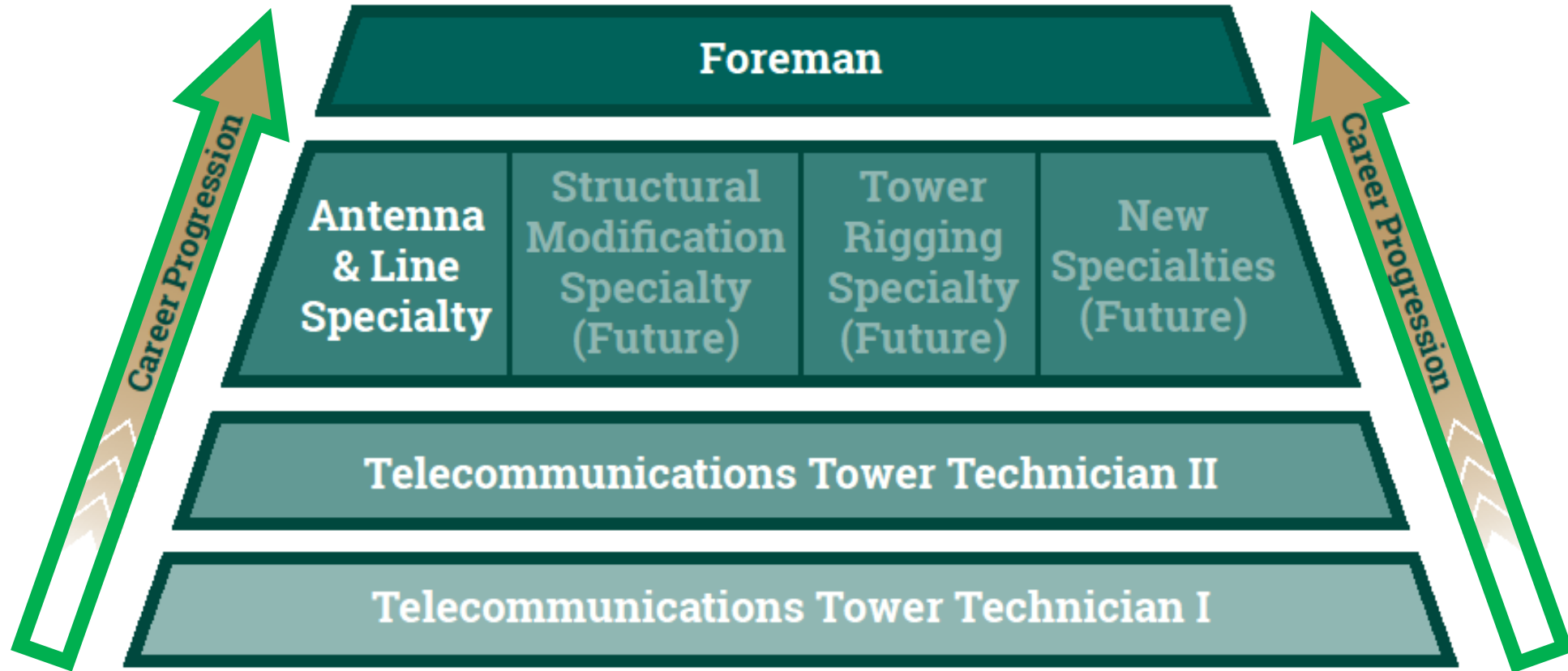


<u>PROCESS ELEMENT</u>	<u>RESPONSIBLE GROUP</u>					
	USDOL/ETA O-Net	TIRAP	NATE	Training Community (Various Pathways)	NWSA	Project Owners
<b>Definition of Occupational Titles*</b>	✓	✓				
<b>Curricula Development*</b>		✓	✓			
<b>Education and Training</b>			✓	✓		
<b>Independent Assessments &amp; Trade Certifications*</b>					✓	
<b>Qualification Verification (Contractors/Crews/Workers)</b>					✓	✓

\*Broad collaboration and cross utilization of industry SMEs ensures consistency.



# NWSA Hierarchy of Certifications



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# NATIONAL WIRELESS SAFETY ALLIANCE



**NWSA CERTIFIED**  
Telecommunications Technician  
Certification #: 123456789  
Certification Designations:  
TTT-1, TTT-2  
Specialty Endorsements:  
S-AL



Issued to: **JOSEPH A. TECHNICIAN**  
Issued: 05/31/2017 Expires: 01/31/2024



Donald T. Doby, President, NWSA Board of Directors  
For identification purposes only. Subject to provisions of suspension or revocation.

**National Wireless Safety Alliance**



**NWSA CERTIFIED**  
Foreman  
Certification #: 123456789  
Certification Designations:  
TTT-1, TTT-2, FOR  
Specialty Endorsements:  
S-AL



Issued to: **JANE B. FOREMAN**  
Issued: 05/31/2017 Expires: 01/31/2024



Donald T. Doby, President, NWSA Board of Directors  
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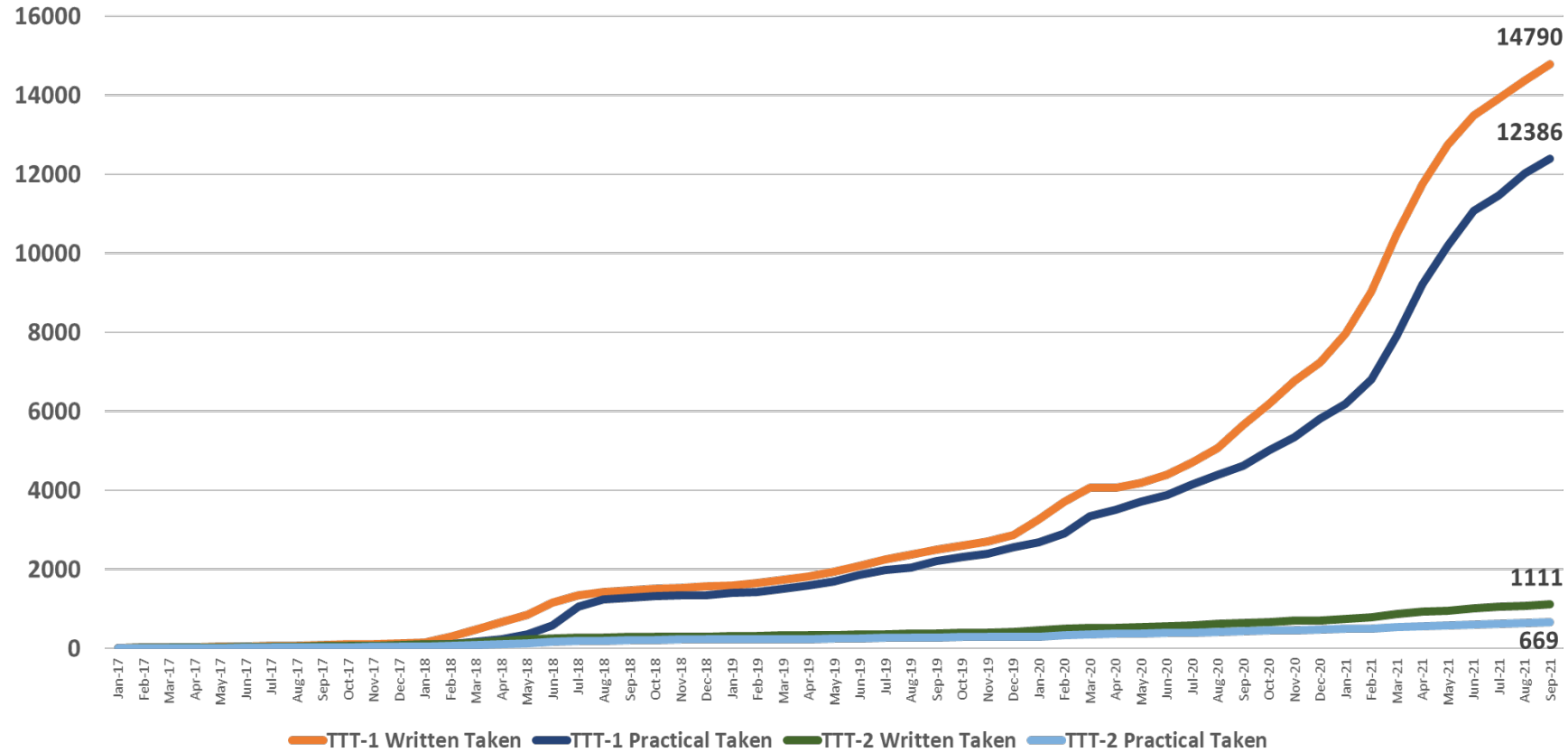
**National Wireless Safety Alliance**



# NATIONAL WIRELESS SAFETY ALLIANCE

NWSA Cumulative TTT Exam Volume

Jan. 2017 - Sept. 2021





# NATIONAL WIRELESS SAFETY ALLIANCE

## NWSA Pipeline – All Programs (as of 9/30/2021)

	<u>2021</u> (as of 9/30/21)	<u>All Time</u>
<b>Total Applications</b>	15,958	33,166
<b>Total Tests Administered</b>	14,732	29,550
<b>Total Tests Passed</b>	10,205	21,476
<b>Total Certifications Issued</b>	3,925	7,413





# WHAT'S NEXT

Program	Development Cycle	Target Launch Date
Signalperson	Complete	November 2015
Tower Rigger Level I ( <i>NCCCO Adaptation</i> )	Complete	January 2020
Rigger Level II ( <i>NCCCO</i> )	Complete	November 2015
Telecommunications Tower Technician I	Complete	December 2016
Spanish Translation	Complete	December 2020
Telecommunications Tower Technician II	Complete	December 2016
Spanish Translation	Complete	December 2020
Telecommunications Tower Foreman (Foreman Core + A&L Specialty)	Complete	February 2019
Advanced Tower Rigging Specialty	TBD	TBD
Tower Construction (Stacking)	TBD	TBD
Structural Modification Specialty	TBD	TBD
Small Cell & DAS Systems Technician	TBD	TBD
Fiber Optic Technician	TBD	TBD
Civil Technician	TBD	TBD
Others as needed per industry direction.	TBD	TBD

# NATE

THE COMMUNICATIONS INFRASTRUCTURE  
CONTRACTORS ASSOCIATION

# THANK YOU!



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