



# Wired for success

Preparing a workforce for tomorrow's technology



The rapid advancement of technology and the deployment of smart, connected infrastructure are fundamentally reshaping our world. As we see the rollout of 5G networks, the expansion of fiber broadband, and the integration of smart cities and intelligent transportation systems, the digital transformation is not just a trend—it's a critical necessity. However, this transformation also presents a significant challenge: the need for a skilled and adaptable workforce.

The National Telecommunications and Information Administration has established rigorous standards for creating equitable and skilled jobs, placing state, regional, and municipal entities under growing pressure to comply. As the digital divide continues to close and new economic opportunities emerge, the importance of a well-trained workforce becomes increasingly evident. What are the essential strategies and considerations for agencies to build and sustain a skilled workforce in the age of smart and connected infrastructure?

The deployment of broadband and connected infrastructure isn't just a technological hurdle; it's a significant human resource challenge. Through initiatives like the Broadband Equity, Access, and Deployment program, alongside other federal and state funding efforts, the role of workforce planning has come into sharp focus. As states across the US develop their strategies for workforce enhancement, it is imperative that these plans are both comprehensive and actionable.



33%

of the current broadband workforce is anticipated to retire over the next decade, leading to a substantial labor gap.



23%

reduction in the telecom industry's workforce since 2013, which has only intensified the existing labor shortage.

Source:

How states are tackling the broadband worker shortage - Route Fifty  
The U.S. needs 58k more workers to deploy broadband

## Addressing the skills gap in smart and connected infrastructure

We are witnessing firsthand how the incredible speed of technological progress is leaving the current workforce behind. From the rollout of Internet of Things smart city solutions to the expansion of 5G networks and the advent of autonomous vehicles, the skill sets required are changing at an unprecedented rate. This disparity is especially evident in infrastructure sectors that move at a slower pace, where the necessary educational and retraining initiatives are either insufficient or completely absent.

To address this gap, agencies can:

### 1 Training & upskilling

Implement training and upskilling programs in collaboration with higher education institutions and community organizations. This approach helps ensure that we not only enhance the skills of our workforce but also foster a pipeline of talent that is well-prepared for the demands of our industry.

### 2 Career Awareness

Promote career awareness by showcasing the dynamic and innovative nature of our sector. By highlighting the industry's leading advancements, we can attract a wide range of talented individuals to join our workforce. This approach not only bolsters our competitive edge but also reflects the core values of opportunity, innovation, and excellence.

### 3 Partnerships

Leverage public-private partnerships to merge resources and expertise, ensuring a steady stream of skilled workers. This collaborative approach will help create a resilient talent pipeline, drive economic growth, and maintain our competitive advantage in a rapidly evolving marketplace.

# Realigning organizational ecosystems for the future

As we see connected infrastructure merging with cutting-edge technology, the responsibilities of commerce, information technology, and broadband departments are transforming. This shift calls for a strategic realignment of our organizational ecosystem, encompassing business, personnel, processes, and technology. The journey to this new alignment involves several essential steps:



**Diagnostic assesment:** gain a clear understanding of the organization's current state.



**Benchmarks:** pinpoint best practices and highlight areas for enhancement



**Operating model:** support strategic planning and enhance design, ensuring your model aligns with long-term goals.

## Ensuring workforce longevity from construction to asset management

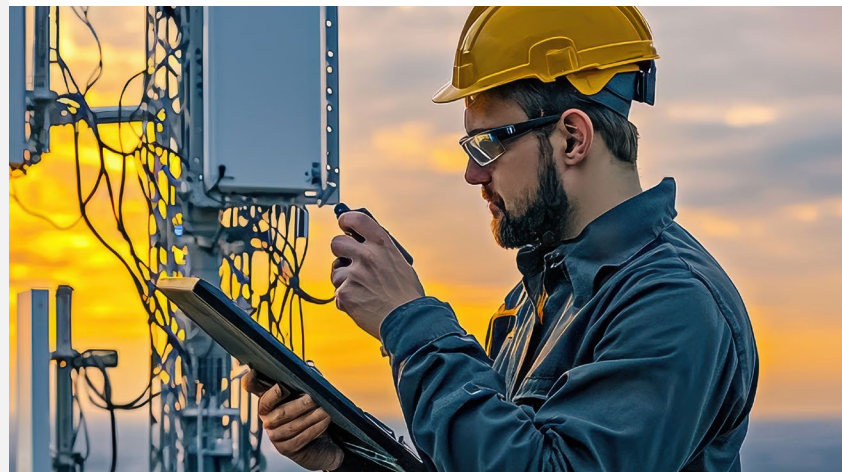
The lifecycle of digital infrastructure projects goes well beyond the initial construction phase. To guarantee longevity, it's crucial to plan for a consistent labor supply during the asset management phase. This means crafting opportunities for continuous employment and career advancement, while also tackling the concerns of younger workers who might view infrastructure roles as less stable.

Entities need to anticipate future workforce needs in accordance with tech advancements, industry growth, and asset lifecycles. To achieve this, agencies can:

- 1 Develop strategies for roles in asset management
- 2 Tap into various funding sources, including federal grants and private investments
- 3 Implement talent retention strategies that emphasize work-life balance, career stability, and recognition for innovation and excellence.

## Next steps: Building a resilient and skilled workforce

Investing in your workforce is not just about filling positions; it's about building a future where our employees see a clear path forward in their careers. By rolling out robust training and upskilling initiatives, enhancing career awareness and diversity, forming strategic public-private alliances, and crafting effective talent retention plans, you can be confident that your agency will maintain the longevity and efficiency of their digital infrastructure endeavors. The success of our smart and connected infrastructure hinges on cultivating a workforce that is both skilled and adaptable.



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