High Speed Nevada Initiative

Broadband Workforce Development Blueprint

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Executive Summary

The High Speed Nevada Initiative is led by the Nevada Governor's Office of Science, Innovation and Technology (OSIT), and seeks to ensure that all Nevadans have access to high-speed internet that is affordable, reliable, and scalable. In the next six years, thousands of miles of fiber will be built to connect tens of thousands of homes, businesses, and community anchor institutions to broadband. In total, the next decade will see a total public-private investment of billion-dollars in telecommunications and connectivity infrastructure in all corners of the state. To realize our ambitious connectivity goals, Nevada will need a highly skilled and capable broadband workforce. Much of this workforce already exists but it must grow to meet greater demands. Growing this workforce will require strong partnerships and collaborations between the State, industry, and the workforce and education systems.

This workforce development effort, led by OSIT, seeks to address a broad range of training needs, from essential safety and construction skills to advanced expertise in the latest broadband technologies. OSIT engaged in thorough discussions with over 70 stakeholders during the inaugural Workforce Sector Council Meeting on December 5, 2023, and additionally, has held one-on-one consultations with industry, education, and worker stakeholders. These interactions have provided valuable insights and perspectives from industry leaders, further enriching OSIT's understanding of the sector's requirements. The input from these diverse groups has been instrumental in shaping a strategic plan designed to cultivate talent in this rapidly expanding job market. This white paper outlines OSIT's strategy to augment its highly skilled and capable broadband workforce to meet the demands of industry, encompassing an extensive suite of strategic recruitment initiatives, innovative training programs, and essential wrap-around support services.

Strategies to Grow Nevada's Telecommunications Workforce

It should come as no surprise that no single workforce development program will meet the needs of all stakeholders. Indeed, conversations with stakeholders reinforced the diversity of hiring and internal company training programs and strategies. This diversity, as we have heard and acknowledged in prior meetings, underscores the why of our mission: the need for tailored, responsive solutions in the face of varied industry demands. It is incumbent upon the State and its education and workforce partners to design customizable approaches that can meet a variety of needs. The strategies we propose are not just responses to what we have heard but are the embodiment of our commitment to addressing these diverse needs. The following strategies were derived from the advice and counsel of broadband stakeholders, encapsulating the essence of our discussions and the importance of this work:

1. **Strategic Recruitment and Awareness Campaign**
2. **Training and Development Options**
3. **Soft Skills Development**
4. **Wrap-around Services for Comprehensive Support with Strategic Partnerships**

1. Strategic Recruitment and Awareness Campaign

At the core of this initiative is a well-orchestrated recruitment strategy designed to showcase the diverse career possibilities within the telecommunications sector.

The campaign involves:

Outreach and Marketing Initiatives: Initiating a targeted campaign aimed not only at demystifying career prospects in telecommunications but also at educating and creating awareness about the telecommunications field itself. The campaign will detail available training programs and spotlight various roles within the industry, aiming to both enlighten and excite the audience about the multifaceted opportunities and the significance of the telecommunications sector.

Target Audience:

1. **Students (High school and college level):** To introduce them to the telecommunications field early in their career planning.
2. **Job Seekers:** Individuals actively seeking employment or career transition opportunities.
3. **Industry Professionals:** Current professionals in the telecommunications or related sectors looking for advancement or new opportunities within the industry.

Medium:

1. **Digital Platforms**: Social media campaigns, webinars, update OSIT website with career resources, and online workshops.
2. **Traditional Media**: Radio spots, TV commercials, and print media in strategic locations such as colleges, career centers, and industry conferences.

3. **Direct Engagement**: Career fairs, industry conferences, and seminars where participants can interact directly with industry representatives and career counselors.

Timeframe: The campaign is envisioned as a sustained effort with the following phases:

1. **Initial Launch (0-3 months)**: Introduce the campaign through a high-impact launch event, utilizing all chosen media channels to create buzz and awareness.
2. **Momentum Building (4-12 months)**: Continue the outreach with regular updates, success stories, and interactive sessions. Focus on community engagement and feedback to refine the approach.
3. **Sustained Engagement (1 year onwards)**: Establish the campaign as a reliable resource for telecommunications career information. Incorporate feedback, adapt to industry changes, and introduce new, innovative ways to engage the audience. This campaign is not just about immediate recruitment; it's about building a long-term interest in telecommunications careers, creating an informed talent pool, and positioning the sector as a dynamic and rewarding field of work. work.

- **Telecommunications Career Series with Industry Collaboration**: A dynamic and ongoing series of events integrated into general college and career fairs, designed to continually engage students, educators, counselors, and the wider community in the world of telecommunications careers. These events, enriched by the active participation of industry employers, will feature a variety of formats including panels of telecommunication experts, interactive discussions, and hands-on experiences. Each event in the series will focus on different aspects of the telecommunications industry, offering insights into various job roles and personal career journeys shared by professionals. There will also be pathway discussions organized to clearly outline the steps and qualifications necessary for entering and advancing within telecommunications careers. A key component of these events will be the involvement of educators and counselors, providing them with resources and knowledge to guide students effectively. This series is not just a one-time opportunity but an ongoing effort to embed a deep, practical understanding of the telecommunications sector within the educational community. The aim is to continually illuminate the industry's dynamics, potential career trajectories, and the evolving nature of telecommunications work, thereby fostering long-term interest and engagement among all attendees.

- **Enhanced Engagement with Diverse Talent Pools:** Emphasizing the critical importance of inclusivity, OSIT is committed to fostering connections with a wide array of underrepresented and often overlooked groups. This initiative goes beyond engaging veterans, women, and individuals with transferable skills from related industries. It extends to actively reaching out to minority communities, individuals with disabilities, the economically disadvantaged, and those from rural areas who historically may not have had access or awareness of opportunities that could significantly alter their life trajectories. Engaging with these diverse talent pools is not just about filling the talent pipeline; it's about enriching it with a multitude of cultures, voices, and perspectives. This diversity brings a wealth of creativity, innovation, and resilience to the

telecommunications sector, ensuring that the workforce is not only skilled but also reflective of the vibrant and diverse society it serves. It's about building a workforce that is not only capable but also culturally competent and understanding of the diverse clientele it will interact with, thereby enhancing service delivery and fostering an inclusive work culture.

● **K-12 Partnership for Early Engagement and Work-Based Opportunities:** Actively collaborating with Nevada's educational institutions to not only integrate telecommunications awareness into the curriculum but also to establish work-based opportunities. This initiative aims to provide students with job exposure, internships, and teacher externships, leveraging the existing base of over 1,881 students currently enrolled in IT networking and construction programs within the Career and Technology Education (CTE) framework. By doing so, students will gain practical experience and a more profound understanding of the telecommunications industry, complementing their academic knowledge and preparing them for future career opportunities.

2. Training and Development Options

As part of a pioneering approach, OSIT proposes a series of tailored training and development options, each targeting specific stages and skills within the telecommunications sector. OSIT expects the modules below would be utilized by individuals new to the industry and seeking an entry-level job in the industry as well as employers sending motivated and capable employees needing upskilling in a specific skillset in order to further their careers (also known as incumbent worker training).

● **Basic candidate recruitment and screening:** Partners will advertise and recruit no-to-low-skill candidates for employment, perform basic screening for employment readiness (drugs, attendance and punctuality, etc.) rather than screening for skills, and either enroll the candidates in one of the modules below or facilitate interviews by employers. All candidates that participate in the program below would be eligible for subsidized wages with participating providers for an initial period of time, subject to federal and State rules and availability of funds.

● **Safety and Basic Construction Training Module:** A foundational module emphasizing OSHA standards, hazard recognition, and an overview of what happens on a construction site, delivered over 1-2 weeks through a hybrid model of in-person and online sessions. Note- the goal of this module is not to provide construction skills training, knowing employers provide this training in-house, but rather give job candidates a head start on what to expect while on the job.

● **Pre-Construction Engineering and Design (EPCM) Training Module:** This advanced module prepares EPCM contractors in pre-construction principles, safety protocols, project planning, and procurement strategies, delivered through a mix of in-person workshops, virtual classroom sessions, and a hybrid approach.

● **Network Post-Construction Training Module:** Specialized training focusing on post-construction network operations and maintenance, covering areas such as fiber splicing, technical support, and equipment deployment, with a blend of hands-on workshops, simulation-based training, and field training.

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- **Short-term Certification and Credential Training:** Intensive 6 to 8-week programs designed to provide industry-recognized certifications in fiber optic cabling, telecommunications technician skills, tower climbing, and network cabling, combining classroom learning, practical workshops, and mentorship.

- **Commercial Driver's License (CDL) Training Module:** A comprehensive program designed to equip participants with the necessary skills and knowledge to obtain a CDL, essential for certain roles in the telecommunications sector involving the transportation of equipment and materials. The module includes theoretical instruction, practical driving experience, and understanding of safety regulations, delivered through a structured curriculum that meets state and federal guidelines.

3. Soft Skills Development

Recognizing that technical proficiency alone does not guarantee career success, the program will integrate soft skills development into the curriculum:

- **Communication and Collaboration**: Train participants in effective communication techniques, teamwork, and collaborative problem-solving to prepare them for the dynamics of the modern workplace.

- **Adaptability and Critical Thinking**: Foster an environment that encourages adaptability, innovation, and critical thinking, enabling trainees to navigate complex challenges and evolve with the industry.

- **Leadership and Project Management**: Offer modules on leadership development and project management to prepare candidates for advanced roles and responsibilities within the telecommunications sector

4. Wrap-around Services for Comprehensive Support with Strategic Partnerships

Acknowledging the critical role of comprehensive support, OSIT integrates a suite of wrap-around services, further fortified through strategic partnerships with other state agencies, workforce boards, non-profits, and community-based organizations. These collaborations are pivotal in connecting valuable resources, funding, and ongoing support, thereby addressing potential barriers and ensuring trainees' success:

- **Career Counseling and Job Placement Assistance:** Offering personalized career guidance, resume building, interview preparation, and establishing industry connections for post-training job placements.

- **Transportation and Childcare Support:** Providing essential support services to ensure uninterrupted participation in training programs.

- **Continued Support Post-Training:** A unique 12-month support framework to address life challenges and provide consistent encouragement, ensuring sustained success in the trainees' new careers.

This is complemented by the support and resources available through our collaboration with various agencies and organizations, ensuring a robust safety net and a wealth of resources for our trainees.

Measuring Success and Continual Feedback:

1. **Program Implementation and Strategic Partnerships within Nevada's Workforce Ecosystem**

The successful implementation of this pilot training program is fundamentally anchored in the establishment of strategic partnerships across a comprehensive workforce ecosystem in Nevada. By forging alliances with K-12 educational institutions, higher education entities, workforce boards, community-based organizations, non-profits, industry stakeholders, and local businesses, OSIT is dedicated to creating a robust support framework. These multifaceted collaborations are not only poised to integrate the training programs seamlessly into the existing educational infrastructure but also to enhance accessibility, ensure industry alignment, and effectively bridge the gap between training and practical application. The collective strength and support of these diverse entities within Nevada's workforce ecosystem are instrumental in fostering the success of this pilot program, enabling a holistic approach to workforce development and empowerment.

2. **Metrics for Success and Evaluation**

To ensure the effectiveness of the training program and its alignment with industry needs, OSIT will implement a framework for monitoring and evaluating success:

- **Performance Metrics**: Establish key performance indicators (KPIs) for each training module, including completion rates, assessment scores, and practical skills demonstrations.

- **Job Placement and Retention Rates**: Track the success of the program by monitoring the rate of job placements, retention in the industry, and career progression of participants.

- **Feedback Loops**: Regularly collect and analyze feedback from trainees, instructors, and industry partners to identify areas for improvement and adapt the program accordingly.

- **Continuous Improvement Process**: Implement a structured process for updating training content, teaching methodologies, and support services based on evaluation outcomes and industry trends.

3. **Technology Integration and Digital Literacy**

In recognition of the critical role of technology in the telecommunications sector, the program will prioritize the integration of advanced digital tools and the development of digital literacy:

- **State-of-the-Art Technology**: Incorporate the latest telecommunications technologies and software into the training modules to ensure trainees are adept at using current and emerging tools.

- **Digital Literacy Curriculum**: Embed a digital literacy component within the training program, covering essential skills such as cybersecurity awareness, data analysis, and digital communication tools.

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- **Online Learning Platforms**: Utilize online learning management systems to provide accessible, flexible, and interactive learning experiences, ensuring trainees are comfortable with digital learning environments.

4. **Stakeholder Engagement and Feedback**

OSIT commits to maintaining an open, collaborative relationship with all stakeholders to ensure the program remains responsive and relevant:

- **Broadband Sector Council**: Form advisory panels consisting of industry experts, employers, and academic professionals to regularly review and update the training curriculum.

- **Trainee Feedback Sessions**: Conduct regular feedback sessions with current and former trainees to gain insights into their learning experience, challenges faced, and the applicability of the skills acquired in the workplace.

- **Community Engagement Events**: Organize forums, workshops, and public meetings to keep the community informed, gather public input, and ensure the program aligns with local needs and expectations.

Conclusion

High Speed Nevada Initiative – Broadband Workforce Development Blueprint presents a comprehensive and multifaceted approach to address the growing needs of Nevada's rapidly expanding broadband sector. OSIT, through its innovative initiatives and strategic partnerships, has laid the groundwork for a robust telecommunications workforce development program. This white paper has outlined a holistic strategy, ranging from targeted recruitment campaigns and innovative training to the integration of soft skills, comprehensive support services, and a strong emphasis on technology and digital literacy. The program's success hinges on the synergistic collaboration with a diverse range of stakeholders, including state agencies, educational institutions, industry leaders, workforce boards, and community organizations. By establishing a dynamic ecosystem of support and continuous feedback mechanisms, OSIT is poised to not only meet the immediate training needs of the telecommunications sector but also to adapt and evolve with its future demands. This visionary approach sets a precedent for workforce development, promising to empower individuals with the skills and opportunities needed to thrive in this vital industry, thereby driving Nevada's economic growth and technological advancement.