



# CRACKING THE CODE ON STEM

A People Strategy  
for Nevada's Economy

## Create a Regional STEM Workforce Challenge Grant Program

### Problem

Nevada's growing STEM industries represent an important source of high-value economic activity and quality jobs for Nevadans. However, at present the state suffers not only from a critical skills gap in its workforce but also the lack of a strong pipeline system capable of preparing individuals for careers in these emergent fields. The connection between regional employers and Nevada's postsecondary education and skills training programs needs to be enhanced. Although some important efforts have been made to improve coordination across state entities such as the Governor's Office of Economic Development (GOED); the Department of Employment, Training, and Rehabilitation (DETR); and the Nevada System of Higher Education (NSHE), greater collaboration and alignment continues to be critically important to the state's economic diversification efforts and requires the focused effort and active involvement of all stakeholders. Without strong program offerings that provide clear pathways into existing and expected careers in the state, Nevada's struggle to cultivate an appropriately skilled workforce for its STEM industries will only worsen in the coming years.

### Recommendation

To help meet the workforce needs of Nevada's STEM economy, the state should establish a competitive grant program that works through the regional development authorities (RDAs) to fund regional consortia working to align postsecondary education and skills training with the workforce demands of the regional economy. By encouraging and funding active collaboration among key stakeholders—including state colleges and universities as well as the RDAs and DETR's industry sector councils—as well as a one-to-one cash and/or in-kind match by the private and/or philanthropic sectors, this program would allow the state to maximize its return on public investment while at the same time providing a strong incentive for education and skills training that closely map regional labor markets. In addition, having RDAs make final determinations on grant awards for their regions will serve to strengthen these authorities, which are key actors in Nevada's economic diversification efforts.

## Implementation Specifics

The STEM Regional Workforce Challenge grant program would provide one-time grants of up to \$150,000 per year for two years, with a required one-to-one cash and/or in-kind match from the private sector and/or philanthropic organizations, to support the development and implementation of programming that seeks to meet the skill and competency needs of regional STEM industries.

Successful applications will draw from data, market analysis, and industry intelligence to identify current and projected workforce training challenges facing the region's STEM-intensive firms, and will explain how implementation of the plan will bring about sustained and active collaboration among consortia members in order to surmount these challenges. Consortia members may include industry sector councils, firms, trade organizations, chambers of commerce, universities, colleges, workforce development organizations, and economic development organizations. Whenever possible, plans should incorporate industry-recognized national skills certifications that meet a specific regional skills shortage. Plans must also include clear metrics and mechanisms for measuring performance at regular intervals, with particular emphasis on the number of individuals placed in full-time positions in the target industry / industries as a result of grant-funded activities.

Applicants would also be eligible to apply for additional funds to facilitate capital investment in equipment critical to the proposed programs. This one-time award would range in value up to \$2 million and would require at least a one-to-one cash and/or in-kind match from the private sector and/or philanthropic organizations.

Decisions on grant awards will be made by the RDA of the region in which the consortium is located. Funds will be provided by the state to the RDAs on a basis proportional with each region's population.

Successful proposals will include:

- A designated lead entity that will head up grant-related activities. While any relevant organization may serve as lead entity, regardless of sector affiliation (public, private, educational, nonprofit, philanthropic), preference will be given to those applications that select as lead an industry-based organization working in concert with an area education provider
- Strong regional industry sector focus, engagement, and leadership, rooted in quantitative data on economic conditions and labor market realities (including state- and/or RDA-provided skills gap and demand-planning analysis) and informed by the active involvement of the relevant industry sector council(s) as well as interviews or focus groups held with area employers
- Cross-sector collaboration that brings together educational institutions, industry sector council(s), area firms, regional economic development organizations, chambers of commerce, nonprofit social service organizations, and Workforce Investment Boards (WIBs), as appropriate

- Evidence of active industry participation and leadership as well as current or planned collaboration among companies
- Emphasis on use of occupational task analyses, which specify what a worker must be able to do in order to carry out a given job, to develop and/or revise curricula and establish clear career pathways that include acquisition of nationally recognized industry credentials where possible
- Smart leveraging of existing or additional state and federal funding
- Replicable model(s), so as to allow possible transfer to other regions
- Well-defined metrics and performance management mechanisms to ensure evidence-based, market-oriented decisionmaking and clear lines of accountability. Applicants should include target goals for the number of individuals who will be placed in full-time positions in the target industry / industries as a result of grant-funded activities, as well as mechanisms for tracking progress toward these goals. Successful applicants should be able to show positive economic impact within the two-year timeframe of the grant

For its part, in addition to providing funds to RDAs for award to successful applicants, the state will:

- Provide the RDAs with a modest administrative stipend
- Work with regions to align relevant state-level programs to support the efforts of successful applicants
- Facilitate the sharing of best practices developed by grantees
- Improve access to data necessary for economic and labor market analyses and offer technical assistance in the use and interpretation of such data, particularly with regard to workforce demand planning efforts
- Set out required and recommended performance metrics to inform regional efforts to track progress on program development and implementation
- Provide technical assistance to applicants during the proposal process
- Connect grant recipients to technical assistance throughout the grant period

## Budget Implications

Funding the STEM Regional Workforce Challenge program at \$10 million (which would be divided proportionally among the RDAs over a two-year time period) would provide a clear signal of the state's desire to support regionally aligned postsecondary education, skills training, and workforce development in Nevada's STEM-intensive industry sectors. Funding levels could be reassessed in subsequent years based on demand.

## References

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## For More Information

Mark Muro

Washington Director

Brookings Mountain West

Senior Fellow and Policy Director

Brookings Metropolitan Policy Program

202.797.6315

[mmuro@brookings.edu](mailto:mmuro@brookings.edu)