GOED

NEVADA GOVERNOR'S OFFICE OF ECONOMIC DEVELOPMENT

THE NEW ERA OF MINING IN NEVADA

Nevada Business
THE DECISION MAKER'S magazine

SPECIAL REPORT

NEVADA MINING RUNS ON MORE THAN MINES.

From engineering and environmental services to logistics, banking, and hospitality, Nevada mining depends on businesses across the state every day.

Joining the Nevada Mining Association can help connect your company to the $16 billion industry supply chain.

NETWORK
Build relationships across Nevada mining

LEARN
Stay informed on the latest industry trends

GROW
Discover new business opportunities

NVMA
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EST. 1913

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www.nevadamining.org

Workforce Connections

Inaugural Recipient of the Robert Knight Workforce Board of Distinction Award

Southern Nevada is entering a defining moment as more emerging industries like manufacturing, technology, sports, and others continue to invest in the region. Economic diversification is no longer a future goal. It is happening now.

That is why a recent national recognition is more relevant than ever.

Workforce Connections, Southern Nevada's local workforce development board, was named the inaugural recipient of the Robert Knight Workforce Board of Distinction Award by the National Association of Workforce Boards (NAWB) at The Forum 2026 conference, held in March in Las Vegas.

This new award recognizes innovation, collaboration, and leadership in workforce development at a critical time for Nevada's economy. While Nevada leads the nation in job growth, employers across industries are facing challenges finding skilled workers to meet the growing demand.

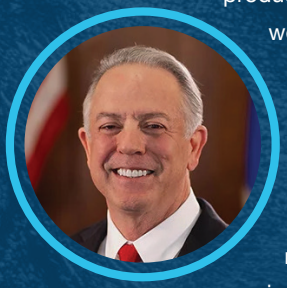
This national honor did not happen overnight. It reflects years of planning and collaboration with state agencies such as the Nevada Department of Employment, Training and Rehabilitation and the Governor's Office of Economic Development.

The award recognizes impact that transcends the region, as the model is now being replicated across the nation. The model is based on strong partnerships with public libraries, cities, counties, the Vegas Chamber, the Las Vegas Global Economic Alliance, regional chambers of commerce, K-12 and post-secondary education partners, and other business and community organizations. Together the partnerships have established a growing network of EmployNV Hubs staffed with subject matter experts, bringing workforce development services directly into the neighborhoods and places where people live and work. Access to resources is now closer to where the need is.

Southern Nevada is a national leader in workforce development because the partners work together with purpose and vision. That is why the stage was filled with partners as the award was presented. As the region continues to grow and diversify, strong workforce development efforts will help ensure a thriving economy, one where every Southern Nevadan can benefit from the future we are building together. Because...Workforce Development is Economic Development!

***Robert Knight; Jaime Cruz**, Workforce Connections Executive Director; and **Andrew Bercich**, NAWB Chief Executive Officer.*

FRIENDS AND COLLEAGUES



Nevada has always been defined by its pioneer spirit and the rich resources beneath our soil. From our legacy as the “Silver State” to our current standing as a global leader in gold production, our mining industry has long served as the backbone of our economy. Today, we are witnessing the next great chapter in that story. Nevada is no longer just a mining state; we are the epicenter of the global energy transition.

As Governor, I am proud to lead a state that is uniquely positioned to secure America’s energy future. We are home to the only producing lithium mine in the United States, and with projects like Thacker Pass and Rhyolite Ridge making historic progress, we are solidifying our role as the "Lithium State". These aren't just mining sites; they are the foundation of what we call the Lithium Loop – a comprehensive, in-state supply chain that encompasses everything from extraction and processing to battery manufacturing and recycling.

The economic impact of this industry is staggering. In March 2026, I toured the Thacker Pass project in Humboldt County, where more than 15 cranes are currently operating and peak construction is expected to reach 1,800 workers this year. This project alone represents a $3 billion investment that will create high-paying jobs and strengthen our rural economies for generations. Beyond lithium, Nevada continues to lead the nation by producing over 70% of U.S. gold and significant quantities of silver, barite, and copper.

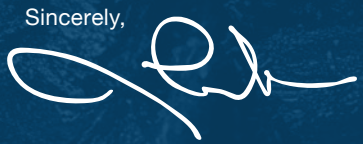
At the heart of this growth is the Nevada Governor’s Office of Economic Development (GOED). Under the leadership of Executive Director Tom Burns, GOED is the strategic engine driving our state’s diversification. GOED’s role is multi-faceted:

- **Strategic Recruitment:** Identifying and attracting innovative firms like Tesla, Panasonic, and Redwood Materials that complete our "cradle-to-cradle" materials loop.
- **Innovation:** Applying and promoting an innovation-based economic approach through GOED.
- **Global Positioning:** Promoting Nevada as a premier destination for international investment through initiatives like the SelectUSA Summit.

A thriving critical minerals industry does more than just power our cars and smartphones; it provides a safe, prosperous future for Nevadans. It links our state to national security and global innovation while creating a resilient economic base that benefits every resident, from our urban centers to our most remote counties.

I invite you to explore this special report to learn how Nevada and GOED are together building a sustainable, secure, and prosperous future for our state and our nation.

Sincerely,



Joe Lombardo
Governor of Nevada

Make IT PARKS&REC POSSIBLE

OUR PARKS. OUR ECONOMY.

Henderson's parks, trails, centers, and programs are more than just amenities; they are essential infrastructure that shape our community's shared identity and protect the quality of life of all Henderson residents by increasing public health and safety, generating economic impact, and building community. **Parks & Rec is an economic engine.**

Did you know that in 1997, Henderson voters approved a $0.12 property tax dedicated to Parks & Rec?

This funding source has generated over **$155+ million** in the last decade alone, and many of Henderson's Parks & Rec achievements would not have been possible without it. This funding source **will expire in 2027** unless Henderson residents vote to renew it on June 9, 2026.

What happens if voters choose to NOT renew the existing $0.12 property tax for Parks & Rec?

Approximately **40%** of Henderson's annual operating budget for Parks & Rec comes from this funding source. If voters choose not to renew it on **June 9, 2026**, every City department will be affected, and major changes will be required to make up for the lost revenue—potentially including closing indoor centers and aquatic facilities, reducing/eliminating programs, and cutting staff.

Will my tax rate increase if this property tax is renewed?

No; this is not a new tax—it will maintain the existing Parks & Rec funding that's been in place since 1997.

What is "Parks & Rec Make It Possible?"

"*Parks & Rec Make IT Possible*" serves as the theme for the 2026 update of the **Henderson Parks & Recreation Master Plan**, which strategically directs both short-term and long-term decisions affecting the City's parks and recreation system — including parks, natural areas, trails, recreation programs, social services, and community events.

EARLY VOTING BEGINS MAY 23, 2026. VOTE BY JUNE 9, 2026!

DID YOU KNOW?

- ☑ Over the past 30 years, Henderson has partnered with the private development community to build over **$100M+** in new parks with minimal costs to Henderson's taxpayers?
- ☑ Henderson's parks system serves as a major **economic driver** by increasing **property values** and **deterring crime**. The City boasts the highest median property values in Southern Nevada, and data shows that homes fronting parks command up to a **20% premium** over similar properties only a couple of blocks further away?
- ☑ Parks & Rec **attracts tourists** and generates **retail spending;** in the past two years alone, Henderson's parks welcomed 4,944 sports tournament teams to the City, generating an estimated **$108 million** in local economic impact?
- ☑ Parks and Rec **creates jobs**, from frontline staff to managers, with entry-level roles serving as a crucial first step into the workforce, especially for **young people**. Its capital projects also create additional jobs in construction and related industries?

WeMakeItPossible.org

HENDERSON

LEARN MORE!

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THE NEW OF MINING IN NEVADA

The Governor's Office of Economic Development & Critical Minerals

Nevada Business
THE DECISION MAKER'S magazine
SPECIAL REPORT JUNE 2026

ERA

By JACQUELINE MUMFORD

From its earliest days, Nevada has been known for mining. Dubbed the “Silver State”, mining is a legacy industry that has kept the state prosperous over the past century and longer. The discovery of the Comstock Lode in Nevada’s Virginia Range in 1859 set the course for statehood while fueling innovation and economic development.

Today, mining in Nevada is at the precipice of a similiar moment as critical minerals are becoming, well, critical, to society from cell phones to car batteries. The modern age of technology requires critical minerals and Nevada is a vast resource for these materials.

The Governor’s Office of Economic Development (GOED) is at the forefront of this industry working with state agencies, regional development authorities (RDAs) and Nevada stakeholders to ensure the Silver State’s legacy industry is supported in producing the minerals needed to fuel economic development for the entire country.

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TOM BURNS
Governor's Office of Economic Development

STEPHEN WOOD
Governor's Office of Economic Development

Critical Minerals

Minerals are critical based on three factors: net import reliance, supply chain risk, and current or known deposits within the United States. In Nevada, over 30 are present.

"We have more critical minerals as defined by the Department of the Interior than most other states," Tom Burns, executive director of GOED, said. "That's an advantage we want to advertise."

Nevada is currently the only producer of lithium in the United States and holds possibly the largest deposit in the world. In addition to lithium, Nevada is a leading producer of barite and antimony and tungsten mines have historically operated in the state, among many others.

"Nevada's critical minerals were key for the federal government in the 1860s," said Stephen Wood, director of strategy and public policy for GOED. "We are in that place again, where Nevada can step up and support the nation."

Keeping it Local

"Nevada has both a breadth and depth of commercial-grade critical elements – so many of them in such a quantity that justify a commercial-scale response," said Fred Steinmann, director of the University Center for Economic Development at the University of Nevada, Reno.

The expertise predates Nevada's statehood. "The first time we had a big critical minerals discovery was the Comstock Lode in Virginia City," Burns said. "Almost all the wealth created from those mines went to California. Not enough of it stayed in Nevada."

Now, nearing two centuries later, he said Nevada "knows better." The very first effort of GOED was the Tesla Panasonic Gigawatt Factory, Steinmann said. "To a degree it was viewed as a Hail Mary to diversify the economic base, but because of that gamble, we have a head start on the rest of the country."

Following an initial $6.2 billion investment that created over 10,000 jobs, Tesla is now completing two facilities in Northern Nevada: one of the largest semi-truck manufacturing plants in the world and one of the nation's largest lithium iron phosphate battery factories.

Now, Steinmann said, the state is in the unique position of building out "loops."

The One and Only Lithium Loop

Mining, processing, manufacturing, and reuse of a critical material is a full "loop," and closing it means centering all four stages within state lines. Opening in 2025, Redwood Materials' recycling facility was the end of the "Lithium Loop" – and the first time that any state had achieved full control of a cycle.

This Lithium Loop makes Nevada the only state in the nation building a fully circular lithium economy within its borders. Recyclers like Redwood Materials have made plans to invest over a billion dollars into the area.

"Traditionally, mining happens in Nevada, and wealth generation happens somewhere else," Wood said.

It's not only other states, but other nations that finish the job. "We've been sending materials to China and just hoping they come back," Burns said.

Less than 1% of global lithium comes from the United States making the country overly dependent on foreign countries.

3

6.941

Li

Lithium

There are over **10,000 ABANDONED MINES** that could be recycled.

CRITICAL MINERALS
FOUND IN NEVADA

Nevada is often referred to as one of the most mining-friendly jurisdictions in the world and contains a significant portion of the critical minerals needed for modern technology and renewable energy.

Lithium Iron Caesium Magnesium Copper

MAJOR DEPOSITS & OCCURRENCES:

ANTIMONY & TUNGSTEN
Historically mined in Nevada, there are multiple advanced stage exploration projects for both Tungsten and Antimony.

VANADIUM
Significant deposits exist, notably the Gibellini project, which is positioned to be a primary source for grid-scale batteries.

BORON, RUBIDIUM, AND CESIUM
Recently identified in significant concentrations alongside lithium deposits.

BARITE
Nevada is a leading producer of barite, primarily used in the oil and gas industry.

LITHIUM
Nevada is home to the only active lithium mine in the U.S. (Silver Peak) and massive upcoming projects like Thacker Pass and Bonnie Claire.

COPPER & SILVER
Both were added to the 2025 list. Nevada has substantial production of these, often as primary products or byproducts of gold mining.

MAGNESIUM & MANGANESE
Existing producer and known occurrences exist in several mineralized districts.

RARE EARTH ELEMENTS (REEs)
A group of 17 minerals (including Cerium, Neodymium, and Dysprosium) found in various geological formations across the state.

OTHER NOTABLE NEVADA CRITICAL MINERALS
Beryllium
Fluorspar
Lead
Molybdenum
Zinc

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FRED STEINMANN
University of Nevada, Reno

This dependence is costly – every year, the mining economy passes up nearly $3 billion in value. Consumers are a large part of this loss: many day-to-day items use electronic components containing lithium, like laptops, cell phones, and electric cars.

However, it was national security risks that made lithium the focus. Battle tanks, planes, and other major pieces of military equipment need lithium composites. "We have seen both China and India manipulate international commodities by restricting or flooding the market," Steinmann said.

Until now, the U.S. has been constantly at the mercy of foreign nations' production, processing, or pricing, and that impacts consumers.

Thacker Pass

Lithium Americas is in phase one of an open pit mine and processing facility in Humboldt County: Thacker Pass. The project is on a large ore body with a high concentration of lithium. Lithium Americas plans to turn it into lithium carbonate for commercial-grade batteries.

"We're helping to secure our country's future energy supply," said Tim Crowley, senior vice president of government and external affairs at Lithium Americas.

The lithium mine is a multi-billion dollar mining and processing facility backed by General Motors and a $2.26 billion loan from the U.S. Department of Energy. Once fully operational, the mine will produce enough battery-grade lithium carbonate annually to establish a domestic supply chain for the electric vehicle and energy storage markets.

Thacker Pass is also a major economic development driver for Humboldt County both during construction of the mine and with permanent workers after it's complete.

Steinmann explained that right now, "there is only one commercial-grade active lithium mine operating in the United States, Silver Peak mine in Esmeralda County."

It's producing 40 tons of lithium per year, "a fraction of what Nevada is blessed

"WE'RE HELPING TO SECURE OUR COUNTRY'S FUTURE ENERGY SUPPLY."

–Tim Crowley, Senior Vice President of Government and External Affairs Lithium Americas

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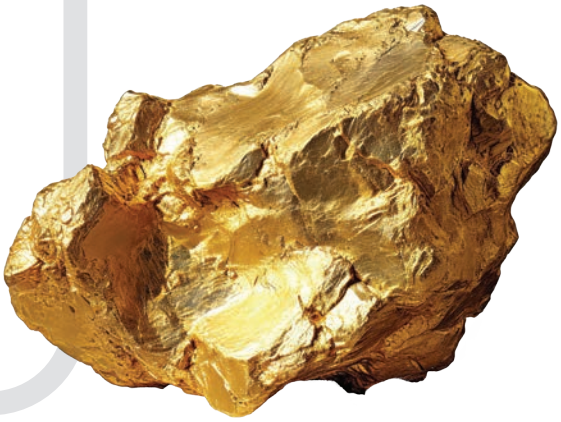
Au

Gold



Nevada produces 100% of all the U.S.'s lithium and holds 85% of all known lithium reserves.

NEVADA GOLD MINES

MINING WORKS FOR NEVADA

In 2025, Nevada Gold Mines contributed

$3.07 Billion

to Nevada's economy.

www.nevadagoldmines.com

TIM CROWLEY
Lithium Americas

with," he said. Thacker Pass is set to easily surpass that.

"Phase 5 will be 160,000 metric tons of lithium – what the entire world produced in 2023," said Robert Ghiglieri, administrator of the Nevada Division of Minerals.

There are 1,000 temporary workers with plans to double in the coming months. Permanent jobs are also coming. "Our long-term workforce will be about 350 people," Crowley said.

Hopefully, 350 Nevadans. "We want to hire locally – not only because it's good for the state, but it's good for us," he said

Thacker Pass is home to high concentrations of lithium. The mine itself will only encompass 1,000 acres but will increase U.S. domestic output by 10 times. This small section is estimated to take 45 years. "We won't see the end for several generations," Crowley said. "And we want people who will stay here for it."

That means keeping Nevadans here. "We weren't just losing dollars," he said. "Students graduating with chemical engineering degrees were going in droves to Texas to work in oil. Now, we don't have to export our talent."

Getting to Work

One of the barriers to development of the Lithium Loop has, historically, been labor according to Steinmann. He explained, "Companies were eager to create new operations or expand, but were limited by trained, skilled, and experienced employees."

For Nevada's rural communities, these jobs were (and are) everything. "Mining is the largest employer," Ghiglieri said. In some rural communities, mining constitutes over 50% of the local workforce.

It's also one of the highest paying, with an average salary of $120,000. "Roughly 80% more than the state average [...] across the

AMANDA HILTON
Nevada Mining Association

supply chain," Amanda Hilton, president of the Nevada Mining Association, said.

Nevada has nearly 15,000 direct mining jobs and over 2,000 additional vendors operating across 16 of the state's 17 counties according to the Nevada Division of Minerals.

Of course, mining looks a little different than it used to. "You might think of miners as people with shovels going underground, but that is the farthest thing from the truth," Ghiglieri said.

Each component of the profession, from construction to analysis, is incredibly sophisticated. "Entry-level positions require some level of training and understanding in geology, heavy equipment operation, and manufacturing," Steinmann said.

Many miners are engineers, particularly chemical. "We're building a lithium mine, but at our core, we're a chemical company," Crowley added.

Students prepare for the mining industry by taking difficult, comprehensive coursework. They spend their careers expanding their knowledge and becoming experts in advanced technologies. It's a rewarding but demanding career and more workers are always needed.

The issue is exacerbated by the retirement cliff. "Half of our workforce is expected to reach retirement age by 2030," said Hilton. "Attracting new talent to the industry [is] a critical issue."

Colleges like Great Basin, Western Nevada, Truckee Meadows Community, and other rural colleges are a lifeline. GOED's WINN Fund has active workforce training programs in these colleges to upskill and reskill Nevadans to fill the gaps in workforce for companies who need specific skill sets.

The Tech Hub – a coalition of stakeholders invested in the lithium economy – was an

The Department of the Interior's

CRITICAL MINERAL LIST IDENTIFIES 36 OUT OF THE 60 MINERALS ARE PRESENT IN NEVADA.

Ovation

OvationCo.com

We live for Las Vegas

FIND YOUR HOME AT OVATION

No matter where you find an Ovation property, you'll discover a sense of sanctuary and community that elevates our residents' lives. Las Vegas is a city that never sleeps, where the neon lights paint the sky, but amid the Strip's excitement, Ovation provides tranquility to residents who are looking for a peaceful retreat to call home. Whether you're a transplant captivated by Nevada's culture and natural beauty or a long-time resident looking for a fresh perspective, our communities are tailored to you. We're not just building apartment projects; we're building communities that we will own and operate, and where residents will thrive for decades to come.

Your sanctuary awaits, perfectly positioned for you to write your own Las Vegas story.

EQUAL HOUSING OPPORTUNITY

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"aggressive" approach to expand training programs as well, Steinmann said. UNR's Tech Hub initiative is a consortium of government, industry, education and nonprofit organizations that have aligned to leverage critical mineral resources. The initiative receives $21 million from the U.S. Economic Development Administration (EDA) as well as state, private and local matching funds.

Great Basin has relied on Tech Hub and GOED WINN Fund dollars for its innovation. "We developed programs to fit the mining industry and lithium specifically," Amber Donnelli, president of Great Basin College, said.

The Great Basin College - NORCAT Mine Skills Training facility (another WINN Fund project) in Elko is a prime example of these prioritized workforce initiatives.

It added an industrial building and relocated its diesel, industrial, electrical, and instrumentation maintenance programs to a 10,000-square-foot building in Winnemucca. "We could really use 20,000," Donnelli said.

The coursework continues to expand. Great Basin is in the process of standing up another commercial driver's license course for lithium transportation.

"If you're looking for opportunity, come to rural Nevada," Donnelli said. "You can receive a fantastic education and get right to work."

Nevada lithium jobs are currently growing at twice the national average.

Graduates from Great Basin really do get jobs quickly, thanks in part to industry partnerships. Cohorts from mining companies come to Great Basin specifically for these classes.

"Twelve mining partners came together to give out scholarships, $6,100 per kid, along with a paid apprenticeship program," Donnelli said.

"WE WANT TO BE THE PLACE WHERE EVERYTHING HAPPENS."

–Stephen Wood, Director of Strategy and Public Policy, GOED

It's a Process

With a larger workforce, the next step is replication. Nevada's ability to deliver a domestic loop across elements is an asset that Steinmann said is relatively unique.

Right now, for Nevada, the buck stops at the sifting stage for a variety of minerals. "If we stop mining copper here, it doesn't mean we can't process copper from Arizona," Wood said. "We want to be the place where everything happens."

29 63.546

Cu

Copper

The industry's total economic output is

$16.7 BILLION.

LIFE CYCLE OF A MINERAL

The lifecycle of a critical mineral is a complex, multi-stage journey that moves from geological discovery to industrial application and, ideally, back into the supply chain through recycling. Unlike common commodities, the "critical" designation often stems from the technical difficulty of these stages or the geographic concentration of the steps.

1. EXPLORATION AND DISCOVERY

The process begins with geologists identifying viable deposits. This stage is high-risk and capital-intensive, often taking 10 to 15 years before a mine becomes operational.

- **Geochemical Mapping:** Analyzing soil and rock samples to find "anomalies" or high concentrations of specific elements.
- **Geophysical Surveys:** Using seismic, magnetic, or gravity sensors (often via aircraft) to "see" underground structures.
- **Exploratory Drilling:** Core samples are extracted to determine the grade (concentration) and tonnage (volume) of the mineral.

2. EXTRACTION (MINING)

Once a deposit is proven, permitting begins. Mining operations spend years obtaining permits to ensure they comply with dozens of state and federal law designed to provide the strongest environmental protects. After permitting the mineral is physically removed from the earth. The method depends on the depth and type of ore.

- **Open-Pit Mining:** Used for minerals near the surface (e.g., copper, lithium from hard rock).
- **Underground Mining:** Used for deeper, high-grade veins (e.g., cobalt, nickel).

3. BENEFICIATION AND CONCENTRATION

Raw ore is mostly "gangue" (worthless rock). Beneficiation is the mechanical process of separating the valuable mineral from the waste.

- **Crushing & Grinding:** Reducing the ore to a fine powder.
- **Froth Flotation:** Using chemicals and air bubbles to "float" the mineral to the surface while the waste sinks.
- **Magnetic Separation:** Utilizing the magnetic properties of minerals (common in rare earth elements)

4. PROCESSING AND REFINING

This is the most technically demanding stage. Concentration yields a "concentrate," but it is not yet a pure metal or chemical.

Pyrometallurgy (Smelting): Using high heat to melt the concentrate and separate impurities.

- **Hydrometallurgy:** Using chemical leaching (often with acids) to dissolve the mineral into a solution, followed by precipitation or electrowinning to recover the pure metal.
- **Separation:** For rare earths, this involves hundreds of chemical "stages" to separate 15+ nearly identical elements.

5. COMPONENT FABRICATION

The refined mineral is converted into high-purity chemicals or metal alloys for specific industries.

- **Precursor Production:** Converting lithium carbonate into battery-grade lithium hydroxide.
- **Alloying:** Mixing minerals (like rhenium and nickel) to create superalloys for jet engines.
- **Magnet Production:** Transforming (a process called sintering) neodymium, iron, and boron into permanent magnets.

6. MANUFACTURING AND END-USE

The components are integrated into final products, such as electric vehicles, fighter jets, or smartphone screens. At this stage, the mineral is "embedded" in the technology.

7. END-OF-LIFE AND CIRCULARITY

Once the product reaches the end of its useful life (e.g., a spent EV battery), the lifecycle enters its final, and increasingly critical, phase.

- **Collection:** Gathering used electronics or batteries.
- **Urban Mining:** The process of reclaiming minerals from scrap rather than the earth.
- **Recycling:** Breaking down products to recover the minerals. While technically possible for most metals, recycling rates for some rare earths remain below 1% due to the high cost and complexity of extraction from complex consumer devices.
- **Reclamation:** After mining operations cease, all operations within Nevada are required to be reclaimed to a post mining use.

THE "BOTTLENECK" REALITY

In a standard lifecycle, any stage can become a bottleneck. Currently, the world has a significant bottleneck at Stage 4 (Refining), where a single country often controls most of the world's processing capacity, even if mining (Stage 2) happens elsewhere.

AMBER DONNELLI
Great Basin College

ROBERT GHIGLIERI
Nevada Department of Minerals

There are two boron deposits in North America: one in Death Valley and another in Rhyolite Ridge. The Nevada site, once up and running, plans to produce 20% of the world's boron for an estimated 50-year lifespan.

Boron has many applications. For example, it can make steel ten times stronger than before it was treated and can make glass "spider" rather than shatter. "While we have the product (boron), we've lacked in processing – both on the state and national level," explained Burns.

Diversification

Regardless of if its extraction, processing or recycling, people are dependent on it.

Hospitality and tourism need construction, which in turn is beholden to minerals. Nothing is as dependent, however, as defense. "From being a subcontractor for a military base to working with drone manufacturers and autonomous flying vehicles, the defense industry is a natural partnership for mining," Burns said.

GOED has engaged with the Departments of Energy, Defense, and Commerce for funding and resources, and remains in "constant communication."

It's not just the mining industry itself, but what it does for Nevada overall. "Minerals tax is up to 5% of the net proceeds with half going to the county that produced the product," Ghiglieri said.

That 2.5% in Winnemucca, Esmeralda, and other primarily rural counties goes a long way. In 2024, mining counties earned nearly $100 million in tax revenue. "We anticipate the 2025 numbers to be higher," Ghiglieri said.

This hasn't meant only an influx of cash for these areas, but fuller communities. "Don't overlook the economic impact," Burns said. "The people that work in [mines], they also buy breakfast at the diner, send kids to schools, and go to the doctor. The secondary jobs are the ripple effect that create economic prosperity."

The more employees, the more customers local barbershops and real estate agents and grocery stores have – which, for small towns, is often make or break.

The tax dollars go further still. "The other half of that 5% tax goes into the state education fund," Ghiglieri said. He added that mining taxes fund education in all counties of Nevada.

Innovation

While existing communities grow, Karsten Heise, senior director of strategic programs and innovation for GOED said, "This momentum in critical minerals is bringing new players to the field. Innovation often originates and is driven within start-ups. In building out the supply chain, early-stage, high-growth, deep-tech companies are generating the technologies we need to build out a complete supply chain."

From extraction efficiency to water-saving processing, to characterization and development of new materials, Heise said young companies are leaders in providing new solutions. "We can attract national and global entrepreneurs to build their companies in Nevada and become suppliers to original equipment manufacturers (OEM)," he explained.

Critical and new materials are often used in defense technologies. "Nevada has major air force bases, is one of nine FAA test sites for drones, and defense platforms require components containing critical materials such as motors, magnets, and lithium-based batteries," Heise said.

Nevada mining
EMPLOYS 30,000 NEVADANS
across the supply chain, with an
AVERAGE SALARY OF $120,000,
which is roughly 80% above the state average.

CONTINUES ON PAGE SR 20 ►

NATURAL GAS

A Backbone of Regional Growth

As cities across the Southwest continue to grow, the conversation around energy often centers on electricity and water. Yet another critical resource operates largely behind the scenes—natural gas.

Across fast-growing regions like Southern Nevada and Arizona, communities are competing to attract new businesses, expand infrastructure, and support population growth. In this environment, access to reliable, scalable energy is not just an advantage—it is a necessity. While electric systems are essential, they often require years of planning and investment to expand. Natural gas infrastructure, by contrast, is frequently already in place, providing an immediate, dependable energy solution that helps communities move forward with confidence.

This readiness plays a key role in economic development. Companies evaluating new locations look for regions that can deliver energy reliably and efficiently from day one. Communities with existing natural gas infrastructure are better positioned to meet that need—supporting job creation, enabling new development, and strengthening local economies. As Southwest Gas has demonstrated across its service territory, access to natural gas can help attract diverse industries and sustain long-term economic momentum.

Supporting the Energy Ecosystem

Natural gas does not compete with electricity—it complements it. As demand grows, the broader energy systems must work together to ensure stability and reliability. Natural gas plays a vital role in that balance in several ways:

- **Reliability:** Natural gas provides consistent, on-demand energy that supports both daily operations and long-term planning.
- **Resilience:** It serves as a dependable backup when other systems are strained, helping maintain continuity for businesses and residents.
- **Flexibility:** It can be deployed quickly to meet immediate energy needs while longer-term infrastructure is developed.

This integrated approach helps communities avoid development delays and ensures that growth does not come at the expense of reliability. In many cases, natural gas supports energy needs today while broader systems continue to evolve.

Planning for Responsible Growth

As regions expand, energy planning must be thoughtful and forward-looking. It is not just about attracting new development—it is also about protecting existing residents and businesses. Rapid growth can put pressure on infrastructure, potentially leading to higher costs or service disruptions if not carefully managed.

That is why collaboration is essential. Utilities, municipalities, regulators, and economic development organizations must work together early in the planning process to align infrastructure, capacity, and long-term goals. This coordinated approach helps ensure balanced growth—supporting new investment while maintaining affordability and reliability for current customers.

Southwest Gas has taken this approach by working closely with local partners and planning proactively for increased demand. Internally, cross-functional coordination—from operations to regulatory and customer teams—helps ensure that expanding service does not compromise the reliability that communities depend on.

Efficiency and Sustainability

In addition to reliability, natural gas infrastructure offers efficiency advantages many may not be aware of. Pipeline delivery systems transport energy with significantly lower emissions than alternatives such as trucking or rail. This built-in efficiency reduces the overall environmental footprint before the energy is even used.

At the same time, new technologies are expanding the role natural gas can play in a lower-carbon future. Renewable natural gas (RNG) and compressed natural gas (CNG) are increasingly being adopted by municipalities, transit agencies, and businesses seeking to reduce emissions while maintaining dependable service. These innovations allow communities to pursue sustainability goals without sacrificing reliability or affordability.

Fueling Communities, Not Just Projects

Perhaps the most important impact of natural gas is not tied to any single project—it is the foundation it provides for entire communities. Growth is not just measured in new facilities, but in the homes, schools, hospitals, restaurants, and small businesses that develop alongside them.

Natural gas supports this full ecosystem. It fuels everyday needs, from heating homes to powering commercial kitchens, while also enabling the broader infrastructure that keeps communities running smoothly. This balance is what allows regions to grow sustainably and maintain a high quality of life.

As Southern Nevada and other parts of the Southwest continue to expand, energy will remain central to that progress. Natural gas, often operating out of sight, will continue to play a critical role—supporting the grid, enabling economic development, and helping communities grow with confidence.

Southwest Gas remains committed to working alongside its partners to ensure that energy infrastructure keeps pace with growth, fueling not just development, but long-term opportunity for the communities it serves.

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GOED
NEVADA GOVERNOR'S OFFICE OF ECONOMIC DEVELOPMENT

WHAT CAN GOED DO FOR BUSINESS?

The Nevada Governor's Office of Economic Development (GOED) serves as the state's primary engine for business growth and economic diversification. From incentives to workforce solutions, GOED connects businesses with the tools and support they need to succeed. Working alongside Nevada's Regional Development Authorities (RDA), that commitment reaches every corner of state.

WHAT GOED OFFERS BUSINESSES

Business Development Incentives

Nevada is one of the most business-friendly states in the country, and currently offers five abatement packages that encourages economic development in Nevada. GOED makes it even more competitive. Businesses that meet job creation, wage and capital investment requirements may qualify for:

- **Standard Tax Abatements**
- **Aviation Tax Abatements**
- **Data Center Tax Abatements**
- **Real Property Recycling Tax Abatements**
- **$1 Billion and $3.5 Billion Investment Abatements**

Workforce Development

A strong business needs a strong workforce. GOED works with partners to invest in building the skilled talent pipeline that employers depend on.

- **Workforce Innovations for a New Nevada (WINN):** Provides funding to customize or expand job training programs, ensuring new and existing businesses can recruit and retain a highly skilled Nevada workforce.
- **Individual Career Mapping (ICM) Program:** Connects job seekers, especially those who are unemployed or underserved, to in demand careers through modern tools like virtual reality and the Nevada Career Explorer.

Small Business & Startup Support

GOED doesn't just focus on "big firms"; it has several initiatives for startups and smaller enterprises.

- **Battle Born Growth, Nevada's SSBCI (State Small Business Credit Initiative) Program:** Provides access to capital through improving access to loans and providing venture capital funding. Go to NVSmallBiz.org to learn more.
- **Nevada APEX Accelerator:** Helps small businesses navigate the complexities of securing government contracts.
- **Emerging Small Business (ESB) Certification:** A program that helps small firms get noticed for state and local government work.
- **Office of Entrepreneurship:** Connects people, ideas and resources across Nevada. This office was the first of its kind to be signed into law in 2023.

Rural Economic Development

Economic opportunity doesn't just stop at city limits. For businesses outside Las Vegas and Reno, GOED offers targeted community programs that invest in rural Nevada's future.

- **Nevada Main Street:** Focuses on downtown revitalization and historic preservation to drive local commerce.
- **Community Development Block Grants (CDBG):** Helps fund infrastructure and community projects that make rural areas more attractive for business expansion.

A NEW KIND OF NEVADA MINING TAKES SHAPE

How Comstock Metals Is Redefining Resource Recovery in Nevada

Nevada has long been defined by innovative mining. From the historic Comstock Lode to today's world-class gold and silver operations, the state has built its identity on discovering, extracting, and processing value from the earth. But a new chapter is emerging, one that doesn't rely on what lies beneath our feet. Instead, it looks to what's already been manufactured, deployed, and ultimately retired. This is the rise of urban mining, and it may become one of the most important evolutions in the industry's history.

A NEW RESOURCE STREAM EMERGES

At the center of this shift is Comstock Metals, a Nevada-based company focused on the responsible processing of end-of-life solar panels. While solar energy has grown rapidly over the past two decades, the industry is now confronting a more urgent reality: what happens when millions of panels reach the end of their useful life.

Over the next decade, the volume of retired solar panels will increase exponentially, creating a waste stream that cannot be safely managed through traditional disposal methods. These panels are complex, multi-material products that, when landfilled, will degrade over time and release contained metals into surrounding soil and groundwater. This is not a hypothetical risk. It is an inevitable outcome of improper disposal at scale.

For years, much of this material has been sent to landfills or exported with little visibility into its final destination. While these approaches may offer short-term convenience, they ultimately shift environmental consequences downstream. As volumes grow, so does the impact, making responsible recycling not just an option, but a necessity.

FROM WASTE TO CIRCULAR SUPPLY CHAINS

Comstock Metals is taking a radically different approach. At its first-of-a-kind industrial-scale facility in Silver Springs, Nevada, the company has proven and built a certified zero-landfill solution. Panels are processed in a controlled environment, enabling safe separation of component materials while eliminating landfill impact.

The focus is not simply on disposal, but on enabling a truly circular supply chain. By ensuring materials are properly processed and reintroduced into appropriate downstream uses, Comstock Metals helps reduce the need for new raw material extraction and supports a more sustainable lifecycle for solar infrastructure.

This level of traceability is becoming a key factor for organizations facing growing ESG expectations. It is no longer enough to say materials were "recycled." Increasingly, stakeholders expect documentation and verification of true circularity.

Comstock Metals meets this need by providing detailed reporting and certification for every shipment, including certificates of receipt and documented recycling and destruction. Its operations are supported by industry-recognized standards, including R2v3 and RIOS certifications.

Urban mining is not about extracting quick value from discarded materials. It is about managing complex chemistries and waste materials responsibly while reducing the environmental footprint of both disposal and traditional mining. Ensuring panels are handled properly at end of life helps prevent landfill use and reduces the need for new resource extraction.

This is particularly relevant in Nevada, where mining is pervasive and expertise runs deep. Urban mining extends that legacy into a future where responsible resource management is as important as resource extraction.

For Comstock Metals, this is already an operational reality. The company is scaling its capabilities to meet growing demand with the addition of multiple logistics facilities across the country, while positioning Nevada as a hub for solar panel recycling in North America.

As the energy transition continues, the importance of responsible end-of-life solutions will only grow. Nevada has always been at the forefront of mining innovation, and companies like Comstock Metals are helping define what comes next.

Comstock Metals' Demonstration Facility (foreground) in Silver Springs, Nevada, with its new 3+ million panel-per-year industrial-scale recycling facility in the background—marking the company's transition from demonstration scale operations to high-speed, industrial-scale urban mining.

LEARN MORE:
WWW.COMSTOCKMETALS.COM

◀ CONTINUED FROM PAGE SR 16

Nevada's universities have also played a key role in supporting innovation. One example of this is the role of the Knowledge Fund, a state-backed grant program managed by the Governor's Office of Economic Development (GOED). The fund is specifically designed to translate university use-inspired research conducted at UNR, UNLV, and DRI into new cutting-edge products and is serving as Nevada's primary mechanism for fostering a technology-driven, diversified "innovation economy." The fund focuses on turning discoveries into viable commercial end products, spinning new companies out of Nevada universities, and all this is generating high-paying tech jobs which in turn creates other jobs at a multitude of five to one. "The Knowledge Fund supports translating research from lab to market,

KARSTEN HEISE
Governor's Office of Economic Development

and ties what's going on at UNLV and UNR to the private sector," Heise said.

The SAGE (Sierra Accelerator for Growth & Entrepreneurship) program is another Knowledge Fund supported initiative which directly serves Nevada's small technology-based small businesses at the university level to help them in with obtaining competitive grants or contracts from the U.S. Small Business Innovation Research (SBIR) and the Small Business Technology Transfer Research (STTR) programs.

GOED also applies innovation principles in developing solutions for workforce development such as the Individual Career Mapping (ICM) program. The ICM is an initiative within which participants use immersive virtual reality (VR) "field trips" to simulate real-world, in-demand jobs, including those in the mining industry for career exploration. This lets potential workers "try on" a career virtually which breaks down misconceptions and sparks curiosity about the field and Nevada's high demand industries. To this other components such as the national career readiness credential (NCRC) are added.

In 2025, the state was responsible for

11.26%

of U.S. mineral production.

INDUSTRIES IMPACTED

Critical minerals have moved from being niche commodities to the "new oil" of the 21st century. Their impact across targeted industries is profound, primarily because they possess unique physical and chemical properties—such as extreme heat resistance, magnetic strength, and high conductivity—that have no viable substitutes.

The following industries are impacted by critical minerals.

ENERGY

Modern energy generation is becoming increasingly mineral-intensive. The renewable energy structure depends on a complex cocktail of factors.

- **Wind and Solar:** Rare Earth Elements (REEs) such as **neodymium** and **dysprosium** are essential for permanent magnets in wind turbine generators. Solar panels rely on **silicon**, **tellurium** and **indium** for photovoltaic efficiency.
- **Grid Infrastructure:** The massive expansion of electricity networks to support "electrification of everything" requires unprecedented amounts of **copper** and **aluminum** for high-voltage transmission lines.

BATTERY

This industry is the primary driver of the current "lithium rush". The transition to electric vehicles (EVs) and grid-scale energy storage systems (ESS) has made these minerals critical.

- **Core Components:** The big three core components for lithium-ion batteries are lithium, cobalt and nickel. **Nickel** and **cobalt** provide energy density and stability, while **lithium** acts as the charge carrier.
- **Anodes: Graphite** remains the dominant material for battery anodes, with the industry currently racing to secure synthetic and natural supplies to avoid bottlenecks.

Battery storage demand is projected to grow 40 times by 2040.

AEROSPACE & DEFENSE

In these sectors, critical minerals are non-negotiable for national security. High-performance aircraft and precision weaponry cannot function without them.

- **Superalloys: Cobalt** and **rhenium** allow jet engines and missile components to operate at extreme temperatures without melting or deforming.
- **Stealth & Optics: Titanium** is used for its strength-to-weight ratio in airframes, while **germanium** and **lanthanum** are vital for night-vision goggles, satellite optics and infrared sensors.
- **Guided Munitions:** A single sophisticated missile can require up to 18 different critical minerals for its guidance systems and electronic "brain."

China controls approximately 90% of the refined production of rare earths.

SEMICONDUCTORS & DATA CENTERS

While technology and data may bring to mind the region known as "Silicon Valley," the modern chip and data industry has outgrown silicon alone.

- **Advanced Chips: Gallium** and **germanium** are increasingly used in high-frequency, high-power semiconductors. **Indium** is essential for the transparent conductive layers in displays.
- **Data Storage: Platinum** and REEs are used in high-capacity hard disk drives (HDDs) to increase data storage density.

Gallium is critical for both 5G and radar, and, as such, there is a high supply risk.

- **Cooling & Power:** Data centers consume massive amounts of copper for power distribution and tellurium for thermoelectric cooling components to manage the heat of AI-driven workloads.

HEALTHCARE

Medical technology relies on critical minerals for both diagnostics and treatment.

- **Imaging: Gadolinium** is used as a contrast agent in MRIs, while **helium** (a critical gas) is used to cool the superconducting magnets within those machines.
- **Surgical Tools: Titanium** and **tantalum** are favored for implants and surgical instruments because they are biocompatible and do not corrode inside the human body.

LOGISTICS & ADVANCED MANUFACTURING

These sectors act as the "connective tissue" that is being automated by these minerals.

- **Robotics:** The high-torque, lightweight motors used in industrial robots and automated warehouses (logistics) depend on **neodymium** magnets.
- **Automation: Nickel** and **manganese** are critical for the stainless steel and specialized alloys used in heavy machinery and 3D printing (advanced manufacturing).
- **Sensors:** The Internet of Things (IoT) sensors that track global shipping containers rely on lithium for long-life batteries and **gallium** for wireless communication chips.

GOED
NEVADA GOVERNOR'S OFFICE OF ECONOMIC DEVELOPMENT

Where's the Money?

Why isn't every loop completely operable? The tax and regulatory structures are in place, the public land, and the employment pipelines are set. "What's keeping projects from penciling now is cash," Wood said. "I can't understate how expensive every point in this process is. Without federal investment, it doesn't work."

It's the same in education. "We're looking to the federal government to help us with seed money," Donnelli said.

Hopes to implement more manufacturing and autonomous training and move into bigger buildings hinge on this money, she said. It's an "all hands" situation – the state has initiated tax incentives and private firms continue to contribute to the efforts – but the federal government has the deeper pockets.

Of course, there's risk. "We have no revenue," Crowley said. "We don't have another project in the world where we're generating cash and applying it here – we've had to borrow everything."

Colleges are seeing that cash strain, too. "Right now, there's no lithium coming out," Donnelli said. "When there's lithium, there's money."

Funding delays are also born of timing concerns. "We have deposits of several critical minerals that are vital to our domestic needs, but that doesn't mean we can start mining those tomorrow," Hilton said. "On average, it takes three decades to fully permit a mine."

The Long Road

The solution to questions of funding and timing is the same to those of workforce and technology: innovation and cooperation – what Nevada is primed for.

"We're working with regional development authorities, counties, cities, the private sector, and governments in the mineral space to diversify our economy," Steinmann said. "The data shows Nevada's strength of consistency of collaboration amongst various partners, whereas in other states, there's intense competition. There's an understanding across the public, private, and nonprofit sectors that if we want a diverse, strong economy, we must work quickly and together."

Nevada's work in the critical minerals space is accelerating, and capitalizing on this once-in-a-generation opportunity is essential to the state's future. No other state in the U.S. has this level of coordinated governmental support, industry experience, ease of business operations, and technical and research expertise of a public R1 research university.

Just as Nevada once built entire communities around mining, the critical minerals ecosystem is forming the future, cementing it as both an economic engine and a career pathway for generations to come.

But there's more work to do. To continue as a leader in driving domestic critical mineral independence, Nevadans must embrace both the opportunities and overcome the challenges that go with it. This is at the heart of what Nevada, the Battle Born State, has always done.

Nevada is the

NUMBER ONE NON-FUEL MINERAL PRODUCING STATE

in the country.

Governor's Office of
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MELANIE SHELDON
Senior Director of
Business Development

(702) 486-2700
msheldon@goed.nv.gov

GOED.NV.GOV

@DiversifyNevada

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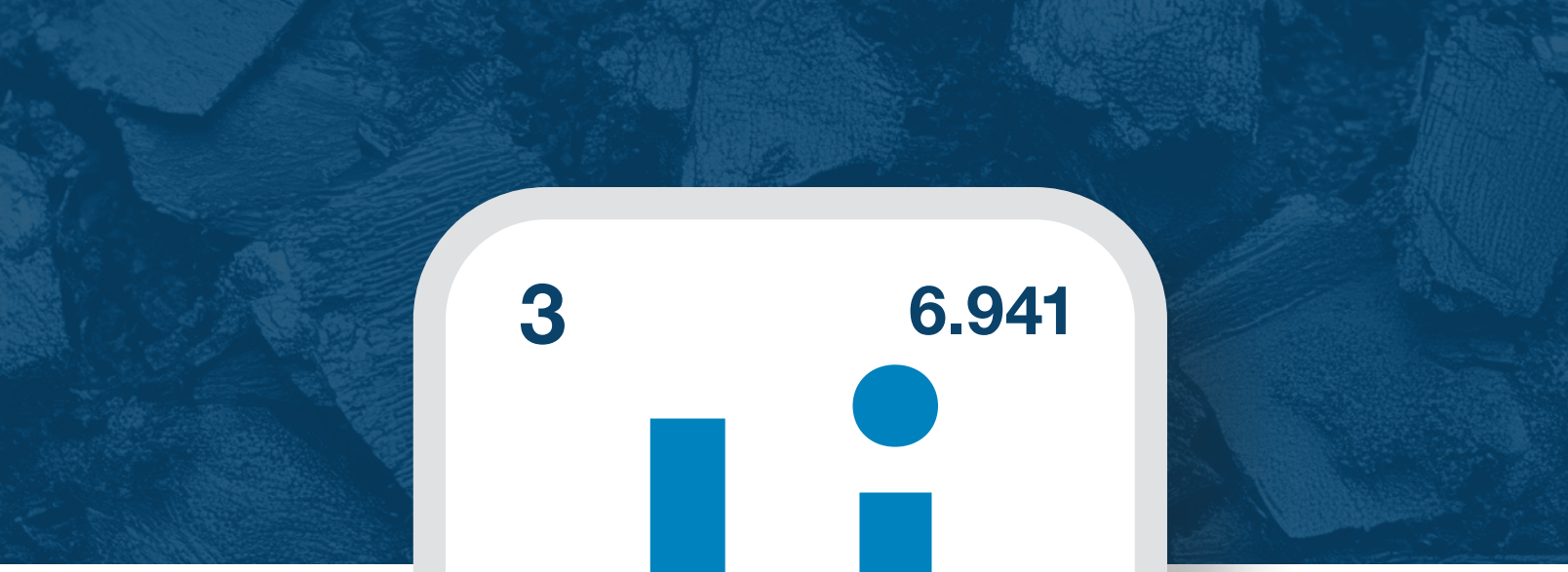

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Lithium

THINK LITHIUM BATTERIES, THINK NEVADA!

We are home to world-leaders in EV battery development, recycling, and America's only operating lithium mine. As U.S. EDA Tech Hubs Designee and proud recipients of an NSF Engines Development Award, Nevada is ***powering*** innovation and driving the ***electric*** future.

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For more information on available business incentives in Nevada visit **GOED.NV.GOV**