

Financial Advisory  
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# EXECUTIVE SUMMARY

## SOUTHERN NEVADA INFRASTRUCTURE DEVELOPMENT GROUP

PREPARED FOR:

*Nevada Governor's Office of*  
**ECONOMIC DEVELOPMENT**  
*Empowering Success*

SEPTEMBER 2021

Prepared  
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September 27, 2021

Mr. Michael Brown  
Executive Director  
Governor's Office of Economic Development  
State of Nevada  
808 W. Nye Lane  
Carson City, Nevada 89703

Re: *Report of the Southern Nevada Infrastructure Working Group ("the Report")*

Dear Mr. Brown:

RCG Economics LLC ("RCG") is pleased to submit the referenced report to the Governor's Office of Economic Development ("GOED") regarding the subject report.

The Report focuses on documenting the results of six monthly Zoom meetings of the Southern Nevada Infrastructure Working Group ("the WG") established by GOED. The meetings were held between February 25, 2021 and July 29, 2021. The WG was comprised of 31 thought leaders from Nevada's private and public sectors. They represented a broad range of organizations and economic sectors. RCG, with assistance of GOED, also conducted 24 two-on-one individual and confidential Zoom meetings with members of the WG and third-party subject matter experts from around the state and the U.S. The WG meetings also included presentations by some the WG members and the subject matter experts.

The Report is in the form of a narrative document along with any relevant figures (exhibits). There is also a companion slide deck that was produced. It should be noted that RCG is not responsible for the statements or interpretations made by GOED, members of the WG or other third parties regarding the contents of the Report.

Finally, it should be noted that RCG does not necessarily share the views and opinions expressed by GOED staff, WG members and other third parties expressed during the course of the WG meetings and the private interviews with WG members and others as reflected in the Report.

If you have any questions, please do not hesitate to contact us at your convenience by phone at 702-967-3188 ext. 101 or by email.

Regards,

*RCG Economics LLC*  
RCG Economics LLC



REGIONAL & URBAN ECONOMICS  
PUBLIC POLICY RESEARCH  
GAMING & HOSPITALITY  
REAL ESTATE ADVISORY  
FINANCIAL ADVISORY

## ACKNOWLEDGEMENTS

**R**CG would like to acknowledge the following staff of the Nevada Governor's Office of Economic ("GOED") for their assistance and help during the course of our work:

- Michael Brown, Executive Director-GOED
- Kris Sanchez, Deputy Director-Southern Nevada-GOED
- Jeanette Holguin, Business Development Coordinator-GOED
- Susan Skaggs, Executive Assistant to Deputy Director-GOED

GOED's Las Vegas office furnished RCG with meeting transcripts, scheduled and conducted meetings with WG members, and provided copies of presenters' slideshows, without which RCG could not have completed this Report.

We would also like to acknowledge all of the members of the Southern Nevada Infrastructure Working Group for the valuable insights, observations, advice and opinions they shared with us during the course of this project, not only in the Infrastructure Working Group meetings, but also in the individual two-on-one interviews. Finally, we would like to acknowledge all of the third-party subject experts we interviewed who provided their valuable insights through presentations and discussions.

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See Figure ES-8 for a complete list of the Working Group members.

## INTRODUCTION

RCG Economics ("RCG") was retained by the Governor's Office of Economic Development ("GOED") to document six months of public meetings of the Southern Nevada Strategic Infrastructure Development Working Group ("the WG"), which was established by GOED in early-2021. The WG was assembled to evaluate Southern Nevada's infrastructure assets and deficiencies, to identify its opportunities in the Southwest macro region, and to envision a niche for Southern Nevada that would add significant value to the state's overall economic ecosystem. Thirty-two thought leaders from the private and public sectors largely from Southern Nevada participated in monthly meetings held from February through July 2021. RCG also conducted a series of two-on-one Zoom interviews with a variety of WG members and with subject matter experts. These two-on-one interviews were conducted in conjunction with the Deputy Director of GOED-Las Vegas, Kris Sanchez (the WG's Chairman).

Other priorities in the WG's mission included:

- Ensuring that infrastructure enhancement will benefit Southern Nevada's most at-risk communities,
- Ensuring that it will benefit small businesses,
- Avoiding incremental and siloed approaches to infrastructure development, and
- Planning beyond and across jurisdictional boundaries.

The overarching goal of GOED in this endeavor is to position Southern Nevada as a highly attractive destination for private sector investment focused on 21<sup>st</sup>-century-relevant growth. The state of Southern Nevada's infrastructure is key to this goal. Since it defines the parameters of the discussion included herein, the definition of "infrastructure" has been crucial to the conversations that form the basis on RCG's report.

This Executive Summary and the associated Narrative Report is descriptive of those conversations rather than prescriptive, with the exception of Section IV (Next Steps), which presents RCG's reflections on possible "next steps."

The WG focused on traditional core infrastructure topics such as energy, water, road and rail networks and digital information technology. Members also explored sustainability/conservation, education, health, childcare and other themes, especially in their private interviews.

Informal definitions of infrastructure used by WG members in the private interviews ranged from, “the built environment, everything it takes to support that built environment, and the social infrastructure” to “infrastructure connects people—to places, to opportunities, and, most importantly, to a job.”

For this Report, the definition of infrastructure was not directed by GOED but, rather, emerged organically through the conversations. The WG Chairman allowed the members of the WG (and presenters to that group) to talk about infrastructure as they understood it and as it related to their unique fields of expertise.

In their two-on-one interviews with Chairman Sanchez and RCG (Section III of RCG's full report), many WG members stressed the need for a regional approach to infrastructure planning in Southern Nevada that moves beyond jurisdictional boundaries, as opposed to incremental and siloed approaches to development. Some members even expressed a need for Southern Nevada to look at infrastructure, in a broad sense, as a macro-level challenge facing Nevada and its neighboring states, rather than geographic silos with state boundaries.

Members suggested various ways to have these regional conversations about important decisions, including establishing a bipartisan, independent commission that has the responsibility and the political weight behind it to make some hard choices.

Some members expressed a belief that existing silos are unlikely to be overcome without such a body, supported by the state, to make decisions from a regional perspective.

What follows are the highlights and salient comments and observations of the WG members during the six monthly public Zoom meetings as well as the comments and observations made by those members who were willing or able to express their thoughts during the two-on-one Zoom meetings. Included herein are also the comments of the subject matter experts that were asked by GOED to make presentations during the public meetings.

In the case of the views expressed by the WG members and subject matter experts during the public meetings, they are organized by meeting and theme/topic discussed. In the case of the two-on-one interviews, the comments and observations are organized by theme/topic.

Finally, recommendations developed by RCG as “next steps” are included and summarized at the end of this Executive Summary along with several of the more impactful visuals used by the subject matter experts and WG members during their presentations.



## MEETING 1 - FEBRUARY 25, 2021 POSITIONING SOUTHERN NEVADA AND THE REGION FOR THE FUTURE

**A**s noted previously, the WG brought a broad range of Nevada organizations, subject matter experts and stakeholders together to identify infrastructure projects and enhance the growth of new industries, support long-term sustainable job growth as well as growth across sectors throughout the region. In this regard, SRI international produced a report for GOED titled “*Nevada's Plan for Recovery & Resilience*” in January 2021.

The report had a number of recommendations, including developing new approaches to cluster identification and development and another involving integrating Nevada into regional and global value chains.

Considering these recommendations, the WG was assembled to address the following questions:

- What are Southern Nevada's infrastructure assets and deficiencies?
- What are the region's opportunities in the Southwest macro region and how does Southern Nevada create a niche that adds value to the ecosystem while benefiting industry?
- How can the region spur the growth of industry 4.0 high technology manufacturing, given land constraints and water scarcity?
- How does the region eliminate incremental and siloed approaches to infrastructure development in the region and move beyond jurisdictional boundaries?

### **Nevada's Plan for Recovery & Resilience**

- Nevada is not expected to have recovered fully from the pandemic, in terms of GDP growth, until 2022, but then the recovery should begin accelerating more quickly.
- what are the visionary policies that need to be enacted—not in the next month or two—but in the next year or two to set Nevada up for the future, especially for resilience and diversification?
- Infrastructure is a critical part of the answer. The following are specific infrastructure components that were in the SRI report along with the capabilities needed to realize the strategies.

- In the case of advanced manufacturing, Nevada has the potential to become “a world-class, zero carbon economy. Electrification is coming.”
- Second, Nevada should become a remote work hub. People already want to live here; people already want to visit the region as tourists and conventioners but the core attributes that matter for remote work are needed.
- As for logistics, there a number of issues that must be addressed, including but not limited to:
  - When trucks leave the gate at the Port of Long Beach, what are they going to do?
  - What will these trucks look like in the future?
  - Where will they stop?
  - How will they be serviced?
  - What will be the factories and other kinds of activities that they will be connected to?
  - What role can Southern Nevada play in that tremendous opportunity?
- Expanded passenger and cargo capabilities and facilities, and employment land uses being considered in the Ivanpah area of Clark County, along the I-15 toward Los Angeles, are absolutely critical.
- Building I-11 between Southern Nevada and the Phoenix MSA is also important, as is increasing rail and truck connectivity between Southern and Northern Nevada.
- Regarding broadband, complete grid interconnectivity needs to be constructed. Greater interconnectivity would “allow Nevada to take advantage of more renewable energy sources, perhaps geothermal in the North, perhaps bring in wind power from elsewhere” (Wyoming, etc.).
- It is essential for Southern Nevada’s economic and social future that U.S. Senator Catherine Cortez-Masto’s “Southern Nevada Economic Development and Conservation Act” (“the Act”) be passed because of the region’s looming developable land supply (See Figures ES-1 and ES-4).

### **Digital Infrastructure**

- Not just the Nevada economy, but the economy of the entire country, is now moving into the “fourth industrial revolution”—a decade of disruption similar to what happened in the early 1900s with the advent of the internal combustion engine.

- The forces of digitization and 5G technology will dramatically influence the regional economy going forward.
- They are creating, not only machine-to-machine learning capability (Artificial Intelligence), but also an end-to-end logistics system nationwide, and Southern Nevada sits at an ideal location between the port of Long Beach and the rest of the country.
- State infrastructure banks that identify priority projects, conduct feasibility studies and then bring resources to those projects, especially in a state like Nevada, will be key to the fourth industrial revolution—creating a network between states and manufacturing centers across the country.
- To make Southern Nevada's infrastructure goals happen, individual investors and firms are being asked to make large investments in the future of the state, and "the people who are supposed to make those investments do not necessarily get along with the public sector."
- One possibility that is politically practical is to use traditional, public resources to fund traditional infrastructure projects and then attract private investment to do innovative infrastructure projects.

#### **The Land Scarcity Issue in Southern Nevada**

- Out of 19,000 acres that made the final parcel list, approximately 9,000 acres are better suited to development for the purposes of this study, approximately 45 percent of the total.
- RCG focused on parcels 20+ acres that were not federally-owned and near freeways or near rail and that have a slope no greater than seven percent, because those are the conditions necessary to build large-scale logistics, manufacturing and other kinds of warehousing distribution buildings and projects.
- These parcels comprised about 6,400 acres of local/state government land (1,194 acres) and private sector land (5,222 acres).
- Additionally, not all of the 9,000 acres RCG found to be most conducive to commercial development will accommodate larger-scale projects.
- Six percent of these parcels have 80 acres or more, and larger parcels will be required for certain types of uses, like, logistic centers as well as industrial/business parks. (See Figure ES-1)

- These parcels contain approximately 1,600 acres.
- RCG's model estimates that the jobs in Southern Nevada would be reduced by 11 to 18 percent, or roughly 200,000 (three-percent cost disadvantage) to 330,000 (five-percent cost disadvantage) fewer jobs in 2035 versus the base-case unconstrained land scenario due to the expected land shortage-

**MEETING 2 - MARCH 18, 2021**  
**SMART PORTS, INLAND PORTS, INTERMODAL FACILITIES AND MAXIMIZING SOUTHERN NEVADA'S  
GEOGRAPHIC LOCATION**

**D**uring the WG's second meeting., Michael Brown, Executive Director of GOED kicked-off Meet 2 with and discussion of the competitive advantages of the Southern Nevada's geographic location with the Western U.S.' supply chain network. Meeting 2 also covered wide range of topics dealing with inland ports and intermodal facilities, and the roles they play in these supply chain networks.

**GOED's Role in Nevada's Future Economic Development**

- Estimates from *The Economist*, McKinsey & Company and others project that the U.S. has experienced roughly 10 years of growth in e-commerce in the span of just a year.
- In that light, there is a new lens for understanding Southern Nevada's role in the conveyance of freight and how intermodal or inland port facilities could benefit the region.
- GOED uses a metric called the Hachman Index, which measures the economic diversification of states and counties. On a scale of 100, Nevada ranked 67, whereas Utah ranked 98 and Arizona ranked 96.
- Although many companies are interested in relocating to the Pacific Time zone, Nevada finds itself in competition with Arizona and Utah, both of which have higher levels, as noted above, of economic diversity than Nevada.
- While Washoe County receives a score of 84 on this scale—an excellent score that puts it above many states in the country—Clark County scores only 45.
- Very serious manufacturers that are trying to sort out their logistics, supply chains and e-commerce delivery chains and they are very interested in Nevada.
- These firms also need Nevada to identify and address its strengths and weaknesses so that the state can be a competitor for the billions of dollars of investment that is available now, which will create the jobs that are going to be needed to help diversify the Southern Nevada economy.

### **The 2021 Southern Nevada Economic Development and Conservation Act**

- As previously noted, a key component of taking advantage of Southern Nevada's location in the Southwest U.S. regarding distribution channels and logistics, especially in the context of its proximity to Southern California's approximately 25 million consumers, is developable land.
- The Southern Nevada Economic Development and Conservation Act being sponsored by U.S. senator Katherine-Cortez-Masto of Nevada, also known as the Clark County Lands Bill, is an important element in addressing the looming and severe shortage of developable land in Southern Nevada. Broadly, the bill contains a comprehensive set of goals:
  - It contains a robust commitment to conservation, providing permanent conservation designations to over 2 million acres in Southern Nevada, including 41,000 acres to be held in trust for the Moapa Band of Paiutes and a 51,000-acre expansion for Red Rock.
  - At the request of the Clark County, 350,000 acres are specifically set aside for desert species habitat conservation
  - 120,000 acres for new "off-highway vehicle" recreation areas
  - Almost 340,000 acres of new wilderness in Clark County
  - Another 1.3 million acres of wilderness designated specifically within the Desert National Wildlife Refuge.
- Ultimately, this legislation alters Southern Nevada Public Land Management Act (SNPLMA) in three ways:
  - The current SNPLMA boundary will be expanded by another 42,000 acres, with the bulk of that expansion on the southern edge of the Valley along and east of I-15 toward Jean. This acreage is currently administered separate from the SNPLMA program and subject to the Federal Land Policy Management Act of 1976 ("FLPMA") and are not subject to the joint BLM-Clark County disposal nomination process.
  - Overall, with the larger expansion of the SNPLMA boundary in the Las Vegas Valley and those modifications to the outer areas, the bill would provide a net increase of over 30,000 acres for future potential residential or commercial development in the County."

- The bill creates a new funding category to support the changing environmental needs in the region and to help further preserve existing conservation advancements.

### **Building Regional Networks**

- “70 percent of every truck moving anywhere in the state [of Nevada] is in the process of driving to and from California, which means that all of the industrial development that has occurred and that is about to occur without us interceding is going to continue as truck-centric growth.”
- “In fact, of all the freight moving in Nevada by truck or by rail, only four percent of it moves by rail to or from a Nevada business.”
- Of 188 warehouses that have been built in Nevada alongside rail lines, only part of one uses rail.”
- “Presently, Nevada has relatively few trains in transit and Southern Nevada does not have intermodal service to and from California— only to Chicago.”
- “The nature of supply chain and freight-based economic development should call all of us to let go of the idea of competing with our neighboring states. Those states are where our supply chains originate and terminate,”
- Southern Nevada should not necessarily lock into what it thinks it needs today—it needs to look at examples in other locations.
- Understanding the different interests of a railroad versus a seaport and a seaport versus its owner (which might be a municipal entity) is important.

### MEETING 3 - APRIL 29, 2021

## TRENDS IN ELECTRIFICATION AND AUTONOMOUS SYSTEMS AND HOW SOUTHERN NEVADA CAN LEAD IN THE ADOPTION AND DEPLOYMENT OF SUCH TECHNOLOGIES

**W**ith an eye toward growth and diversification of the economy, GOED is focused on the supply-chain side of lithium mining and battery production since Nevada has an advantage over other states to advance those industries. The state does have some work to do to ensure it has the infrastructure in place to support 5g, “internet of things” and the ability for devices and vehicles to communicate with one another.

On the electrification side, Nevada must make sure that it has the proper infrastructure in place for the adoption and deployment of those vehicles. McKinsey & Company released a mobility study on April 6, 2021, which predicts that electrification mobility and automotive software are going to grow a staggering 250 percent by 2030.

### Autonomous Vehicles

- When it comes to the road infrastructure, a customer “pain point” that some autonomous vehicle companies are paying a great deal of attention is pickup and drop off, or PUDO; and this is not a pain point unique to autonomous vehicles.
- Airports and casinos are already leaders when it comes to managing rideshare traffic.
- The U.S. will begin seeing fleet-owned autonomous vehicles much sooner than personally owned ones.
- Over the course of the 2020s, it is expected that rideshare networks deploying fleets of autonomous vehicles to transport individuals, beginning in lower speed, higher density demand areas.
- Electric vehicles have three major types of charging:
  - Level-1 charging is on a 120-volt outlet like those that power household appliances; it can take anywhere from 24 hours to 36 hours to fully charge a vehicle.
  - Level-2 charging is on a 240-volt outlet, like that used by a dryer. This type requires five to eight hours to completely charge your electric vehicle, i.e., closer to overnight.
  - With level-3 charging, also called “direct current fast charging” or “DC fast charging,” the vehicle receives 480 volts of power, reducing the charging time to between 30 minutes and one hour.



- Level-2 is typically ideal for charging at home or at work since it takes five to eight hours. It also has the least impact on the electricity grid and is typically cheaper. `
- For road trips and for drivers who do not have charging at home (e.g., people who live in multifamily housing), fast charging at Level-3 is really essential.
- There are four key steps to establishing charging infrastructure, many of which are already happening in Nevada.
  - The first is to establish firm targets for electric vehicles and electric vehicles charging stations, and action plans to meet those targets.
  - The second is to streamline permitting to accelerate implementation timelines; Southern Nevada has much faster permitting timelines than most states and that has been helpful.
  - The third is determining if there are locations where the city or jurisdiction can either build its own charging infrastructure or partner with third-party developers to build out the infrastructure network.
  - The fourth relates to building codes. Across the country, cities and states have been establishing electric vehicle parking requirements for new buildings, i.e., a certain percentage of parking stalls that are electric-vehicle ready.

#### **Greenlink Nevada (Nevada Energy)**

- The most relevant development of the Greenlink project for Southern Nevada is the Greenlink West segment, a 525 KV transmission line that will span approximately 350 miles between Yerington, Nevada and Las Vegas.
- The project will provide a transmission loop between these regions.
- NV Energy expects the project to generate approximately \$690 million in economic activity and create nearly 4,000 jobs, including near-term hiring to enable permitting and project routing.
- The Public Utilities Commission of Nevada has approved the project to move forward and NV Energy will begin preliminary design and permitting on segments of both Greenlink West and Greenlink North. Construction will start on Greenlink West, likely in 2024, with completion estimated by 2026.

## MEETING 4 - MAY 27, 2021

### INFRASTRUCTURE FINANCE—NEW APPROACHES AND THE NEVADA STATE INFRASTRUCTURE BANK (“SIB”)

There are two legislative actions related to the Nevada State Infrastructure Bank (“SIB”). The biennial Capital Improvement Projects (“CIP”) budget was passed in late-May, 2021, “The CIP bill contains \$413 million in projects funded primarily by General Obligation Bonds. It also contains \$75 million for the Infrastructure bank along with funding for the Resource Conservation Fund.”<sup>1</sup>

Secondly, Governor Steve Sisolak signed Senate Bill 430—the State Infrastructure Bank (“SIB”) bill—on June 10, 2021. The bill went in effect on July 1, 2021. This bill modernizes the infrastructure bank conceived of in 2017 to match the current needs and also the White House's expectations of infrastructure investments. Some of the main features of the bill are:

- The bill also adds a few members to the board of the SIB, specifically the Director of the Governor's Office of Energy as well as two governor appointees.
- The intention is to ensure that it is a board of experts, including the Director of the Department of Business and Industry, the Director of GOED, the Director of NDOT, the State Treasurer and Governor's two appointees.
- An infrastructure bank, in its ideal form, does two things: it plans and coordinates between stakeholders (including cities and communities) and it leverages capital.
- Thus, in addition to the \$75 million of general obligation bonds, the bank is going to raise capital from pension funds, etc. to combine with the millions of dollars from the American Rescue Plan (“ARP”) and potentially billions of dollars from the American Jobs Plan.
- The goal is to coordinate at the state level to ensure that capital projects, as they are being paid for, are complimentary and create as many quality jobs as humanly possible.

#### Infrastructure Funding

Because land values near transit stops and stations tend to appreciate, there is an opportunity to raise substantial sums of money by installing new infrastructure, particularly transit infrastructure.

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<sup>1</sup> <https://www.recordcourier.com/news/2021/jun/01/81st-session-nevada-legislature-adjourns-after-flu/>

- There are three broad types of land value capture: taxation-based, which is used widely in the U.S.; municipal land value capture, where the municipality owns the land to be developed; and contributory land value capture.
- The taxation-based method requires an upfront payment by the landowners and it occurs at a point in the process where they are fairly certain that the project is going to go ahead.
- Understandably, landowners are resistant to paying a great deal in taxes, since the tax benefits are usually limited, often constraining development as a result.
- Municipal land value capture works where the land is publicly owned along the proposed route and can be sold to developers to fund infrastructure projects.
- In the third method, contributory land value capture, a municipality, city or state, sometimes with the help of consultant, negotiates with a landowners to contribute a part of the windfall they expect to receive to enable the project to go forward.
  - Stage 1 involves calculating the value appreciation to the landowners as well as identifying the route for optimal financial return to the municipality.
  - After that route is determined, the Stage 2 involves negotiating with the landowners near the stops along that route.
  - A contribution agreement—normally with a 20-year duration—stipulates that once a landowner has sold property to the developer, the landowner will contribute a percentage of its gain to the infrastructure fund held in trust by the government entity.
- The risks for contributory land value capture are minimal given the potentially large upside.
- This method can secure on the order of 30 percent of the capital cost of a project; since light rail projects can range from \$300 million to \$1.5 billion, 30 percent is a non-trivial amount.

### **Water Infrastructure**

- Only 10 percent of the water in the Valley comes from the aquifer beneath the surface; the majority comes from the Colorado River, which Southern Nevada shares with six other “basin states.”

- Unfortunately, all of the desert Southwest, and much of the West as well, is either in a persistent drought or a drought that is likely to develop (see Figures ES-3 and ES-4).
- As climate change causes warmer temperatures and lower precipitation, soil conditions are much drier than what they have been historically in the Colorado River basin, and so—together with aging infrastructure, which results in water leakage—any drop of water that leaks into the ground is one fewer that can be provided to customers.
- Considering, the deepening concerns about the operating conditions for Lake Powell and Lake Mead<sup>2</sup>, it is imperative the SNWA be more formally involved in providing feedback during the economic development by reviewing what types of companies are receiving tax incentives from the State Nevada.
- SNWA has built a third intake (See Figure ES-4 below) and pumping station and that gives the agency quite a bit of surety—more surety, in fact, than any other of the basin states on the Colorado River—of being able to access the water resources that are available to it.
- The \$1.3 billion of infrastructure to create the additional intake and pumping station was critically important to mitigate the risk of low lake-level scenarios in the short term, and also to shore the region up for the future.
- Due to that infrastructure investment, even if the lake level were to reach a point where water could no longer be released through Hoover Dam—to Southern California, Mexico and Arizona—the SNWA would still be able to pump water into the Las Vegas Valley.
- The SNWA is also working on an agreement with the Metropolitan Water District of Southern California. The agreement will be a regional recycling project whereby Southern California will use treated wastewater and then reinject that water into various areas in the region as shown in Figure ES-5 below.
- SNWA will effectively purchase some of Southern California's Colorado River allocation through its financial participation in this project, which would increase its overall water portfolio by approximately 10 percent.

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<sup>2</sup> <https://www.usbr.gov/newsroom/#/news-release/3950>

- The SNWA also has water banking arrangements in Lake Mead and, currently, approximately eight years' worth of water at current consumption levels banked in the lake.
- Since 2002, The Valley's population has increased by 52 percent while, concurrently, per-capita (per-person) water use has declined 47 percent and the overall Colorado River consumption during that same period has declined 23 percent.
- The newly enacted AB356 will eliminate non-functional turf over time. SNWA is also working to implement smart irrigation controllers for homes and commercial properties that will adapt to weather conditions.
- As for commercial customers, a "Large Water-User" policy is being discussed. Evaporative cooling, employed by a significant number of industrial customers, uses quite a bit of water.
- Going forward, the SNWA is going to consider water usage when it evaluates business applicants that wish to operate in Southern Nevada.
- When development outside the Valley is discussed, any of the water from the Colorado River that is transported outside the Valley must be handled the same way that water in the Valley is handled.
- For the future development in Ivanpah, the wastewater will be returned to the Valley in order to get the full use of that water.

**MEETING 5 - JUNE 24, 2021**  
**INTERMODAL FACILITIES, PUBLIC TRANSIT AND LAND DEVELOPMENT**

**Southern Nevada Supplemental Airport ("SNSA")**

- In the early 2000s, the Clark County Department of Aviation and the FAA, began the planning efforts for a second commercial service airport located in the Ivanpah Valley, just south of Jean on the east side of the I-15 corridor. As such, the SNSA site is close to the Nevada-California border in Clark County.
- Due to the Great Recession in late-2007, the project was put on hold and suspended; it was not cancelled. As the economy recovered over the last decade, the need for the second airport became apparent again.
- McCarran has a finite capacity, and, as it stands today, will be unable to meet the projected commercial aviation demands of the future, which the Department of Aviation knows is a key to the economic viability of the entire region.
- 50 percent of the visitors to Southern Nevada come through McCarran, because it is a key component of the tourism industry and tourism dollars in the local economy.
- The proposed airport is not a replacement for McCarran. McCarran will continue to operate as the primary commercial service airport for the region.
- Planning for the SNSA has been underway for nearly 20 years, following a series of congressional acts and studies which confirmed that the Ivanpah Valley is the best location for a supplemental airport.
- Besides the 6,000 acres conveyed to Clark County by the Federal Government, other congressional acts have reserved 17,000 surrounding acres for the development of compatible land uses, along with areas needed for stormwater retention facilities (see Figure ES-6).
- Today, 20-year planning process needs to be updated in order to bring the SNSA up to current FAA design standards as result of changes that have happened in the airline industry, including changes in aircraft types.
- Many of the airlines have been retiring smaller regional aircraft and have been upgrading to larger, narrow aisle passenger aircraft. This affects the facilities that are required and affects the separation standards needed for FAA approval.

- Since the building of the St. George Regional Airport in Southern Utah, SNSA will be the first new airport in the U.S. in many years.
- The DOA has approximately two more years of the planning to get through all the information that FAA has requested. Once that is completed, the environmental effort would begin, which the DOA for another two to three years and then there will be a five to six-year construction period.
- Currently, it is roughly expected that SNSA will open around 2035.

#### **Southern Nevada's Surface Transportation Infrastructure**

- The current population of the Valley is about 2.3 million and it is expected to rise to approximately 3 million by 2050; with the growth seen in the past year, surprisingly, it could be sooner than that.
- The RTC is tasked with providing the infrastructure to access goods and services, both within the region as well as coming through interstate travel.
- There are nearly 7,500 miles of roadway in the Las Vegas metro area and the pre-pandemic ridership on public transit was about 65 million people; even with the Covid-19 pandemic and 2020's shutdowns RTC still transported 56 million people on the bus system.
- Approximately 39 million tons of freight move through Southern Nevada each year, whether by rail, air, truck or pipeline.
- Public transportation is critical to serving the needs of Southern Nevada.
- Prior to the Covid-19-induced shutdown, the region was at approximately at 95 percent of average traffic levels. It then precipitously dropped down to a low of 44 percent.
- As the economy started to reopen, the RTC did not see transit traffic recover quickly. Instead, it hovered around 85-90 percent for most of 2020 before starting to turn upward in December.
- This last Memorial Day weekend (2021), traffic was at 118 percent of pre-pandemic levels.
- Every four years RTC provides a regional transportation plan, and the RTC board just adopted the newest plan in January 2021.

- Currently the plan anticipates close to \$30 billion in transportation revenue coming in over the next 30 years.
- The RTC's onboard mobility plan focuses on eight large initiatives.
  - Two examples: 1) The expansion and enhancement of the region's public transportation system must ensure that it reaches a majority of local residents to connect where people live to where they work.
  - 2) High-capacity transit is needed, including rapid bus transit lines and possibly light rail, moving forward.
- A move away from the single occupant vehicle trips is critical as is a move towards combined trips. Transit is similar to a "horizontal elevator" that connects the floors of the community together.
- The RTC is also introducing what it calls "micro transit". It will use what it learns from this and bringing in a new micro transit model for the Southwest and Southern parts of the Valley.
- This will allow riders to hail a transit vehicle to reach the closest transit line in order to get them to their destination.
- The RTC is also transitioning its bus fleet away from diesel to cleaner, natural gas buses. In fact, 100 percent of the agency's paratransit fleet and the majority of its fixed route fleet are already converted.
- The RTC is expecting, that over the next 15 years., the agency will move to a 100 percent zero emission vehicle fleet.
- When it comes to roadways, the community supported ballot measures that have given the RTC the roadway funding that it needed.
- The RTC board just approved the agency's 10-year Capital Improvement Program, which represents approximately \$2.2 billion in projects over the next 10 years.



## MEETING 6 - JULY 29, 2021 INDUSTRIAL DEVELOPMENT, COUNTY INFRASTRUCTURE AND LAND SCARCITY

A key to Southern Nevada's future is to work with California and Utah to establish a tri-state supply chain commission that advises on supply-chain-related infrastructure needs and investments at a "macro-level". The three states are inalterably connected economically and natural resource-wise.

The importance of looking forward in an integrated way is key to the Southern Nevada's future, especially considering the long-term changes in supply chains and economic structures wrought the by the Covid-19 pandemic.

### **Industrial Development and Infrastructure in North Las Vegas**

- The City of North Las Vegas has two priority areas for development: the Speedway Industrial Area and the Apex Industrial Area (See Figure ES-7).
- The City and the State of Nevada have made \$156M in infrastructure improvements since 2016, comprised of \$46M in sewer connections installed by the City and the \$110M Tropical Connector, built by the NDOT, from the Las Vegas Motor Speedway to the I-15.
- There are currently 2.3M square feet of development under construction and another 3.8M that is planned. After completion, these developments will have created an estimated 10,000+ new jobs in the Valley.
- There are approximately 7,000 developable acres in Apex that are industrially zoned. There is direct freeway access from both I-15 and U.S. Highway 93.
- Water and sewer improvements are underway to serve Apex and there is currently access to electrical transmission and natural gas. Fiber connectivity will move at the speed of development.
- In July 2018 a \$59M, 11-mile water pipeline project began as a public-private partnership. Phase 1, the first five miles, has been completed.
- The remaining six miles will be completed in 18-24 months depending on permits from the BLM. In Northern Apex, a \$5M elevated water tank has been planned that will hold 1.25M gallons.

- The SNWA is currently designing and constructing a three-mile, 16-inch water distribution line that will be completed in two years.
- Further, there is a \$250M SNWA capital project to construct 18 miles of water pipeline and 43 total miles of wastewater pipeline. The timeline for that project is about seven years,

#### **Clark County's Economic Development Strategy**

- To accelerate the diversification of the economy, the region needs to improve the I-15 corridor, complete the Southern Nevada Supplemental Airport in the Ivanpah Valley and designate non-residential employment hubs, among other things.
- To support small businesses and entrepreneurs and integrate the workforce ecosystem, the region also needs a centralized small business network, an incubators and accelerators network, strong skills assessment and training, expanded community financial resources, a venture capital network and expanded mentor and technical assistance programs.

#### **The City of Las Vegas' Economic Development Strategy**

- The City of Las Vegas has been having conversations with the Las Vegas Paiute Tribe.
- Those conversation culminated in an intergovernmental agreement with the tribe that the Las Vegas City Council approved on April 7, covering three sets of lands.
- The first is a section of land, north of the Mountain Reservation golf course and bisected by the U.S.-95 corridor, that comprises 633 acres.
- Instead of the City doing it on its own thing or with a land development partner, it plans to develop these lands in conjunction with the tribe itself.
- The concept is to exchange the land that it holds a land patent for from the BLM, essentially giving the 633 acres back to the tribe, in exchange for jointly developing a 1,000-acre parcel south of the Snow Mountain Reservation golf course and resort.
- The City does not anticipate that it would be heavy industrial or heavy manufacturing, as seen at Apex or even in the South Valley.

- What the City of Las Vegas would like to see is light industrial development that complements what it is already doing with its Smart City and Smart Mobility strategy, as well as some of the advanced technology that is happening at Creech AFB.

#### **LVGEA's Economic Development Strategy**

- The LVGEA board recently approved a new set of target industries for Southern Nevada that offer the most opportunity—the highest return on investment—over the next five years for the region. The sectors include:
  - General and advanced manufacturing.
  - Creative industries: professional services, media production, media broadcasting and distribution.
  - Information and communication technologies: professional services, cybersecurity.
  - Transportation and logistics technologies: distribution and warehousing, transportation support, passenger services, production of unmanned autonomous systems.
  - Business and financial services: management and professional services, business administration, financial services.
  - Healthcare services: general and specialized, hospitals, care facilities, healthcare research and technology
  - Clean technologies: clean energy generation, distribution and wholesale, engineering and supporting services, HVAC and plumbing contractors.
- The region is well-located, having access to many markets in the Southwestern U.S., and it has the transportation infrastructure to move goods easily to those markets.
- Logistics is part of a larger strategy to get into integrated manufacturing and logistics operations and then move higher up the ladder of opportunity to be an attractive location for company headquarters.
- In other markets, large, development-ready sites with infrastructure are often in place.

- The WG should focus resources and effort—creating more of those developable sites by extending infrastructure and building an industrial park that can meet the needs of those companies.

## NEXT STEPS

### Background

Experts generally agree that greater integration and coordination across governmental siloes is “desirable and necessary to deal with the complexity of many policy challenges... Since commissions tend to promote integration and coordination, they will remain appealing vehicles for advancing these goals.”<sup>3</sup>

Section IV of this Report presents RCG’s recommendations regarding “next steps”. As discussed below, the include the results of the firm’s research on the best practices in establishing public-private commissions/committees as well as what is permissible within the parameters of Senate Bill 430 (“SB430”), entitled “Committee on Growth and Infrastructure,” and the Nevada Revised Statutes. The bill is related to creating an Infrastructure Bank in Nevada. As noted previously, it was established during the 2021 Nevada legislative session via SB430 and was enacted on July 1, 2021.

According to the bill’s final language, it is an act:

*“...relating to infrastructure; revising provisions governing the establishment of the Nevada Infrastructure Bank; revising provisions governing eligibility to receive loans and other financial assistance from the Bank; expanding the types of projects for which financial assistance from the Bank is available; revising provisions governing the membership, duties and powers of the Board of Directors of the Bank; authorizing certain governmental agencies to provide technical advice, support and assistance to the Bank; and providing other matters properly relating thereto.”*

We believe that such a committee would be instrumental in achieving GOED’s and the WG’s mission priorities listed above.

### Senate Bill 430-Nevada State Infrastructure Bank: Working Committee

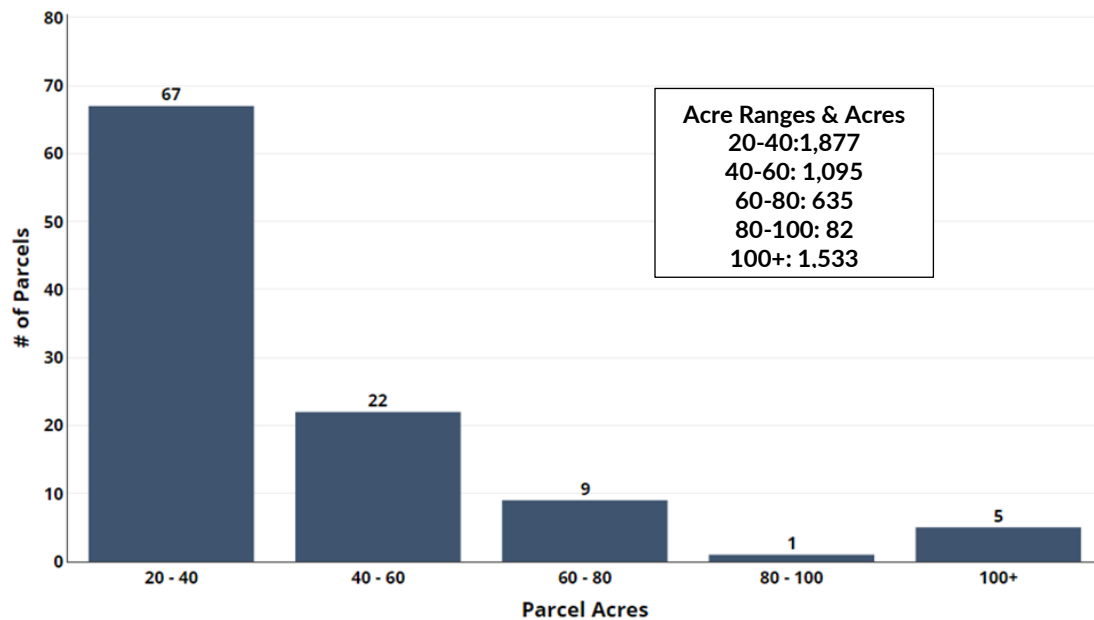
- RCG’s research for this report combined with the insights provided by WG members has led us to the conclusion that establishing an Infrastructure Working Committee (“the Committee”) under the auspices of the Nevada State Infrastructure Bank Board as described by SB430, “Committee on Growth and Infrastructure,”<sup>4</sup> would be worth considering. SB430 went into law on July 1, 2021.

<sup>3</sup> Jordan Tama, “Crises, commissions, and reform: the impact of blue-ribbon panels,” *Political Research Quarterly* 67, no. 1 (2014): 152-164.

<sup>4</sup> <https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/8161/Text>

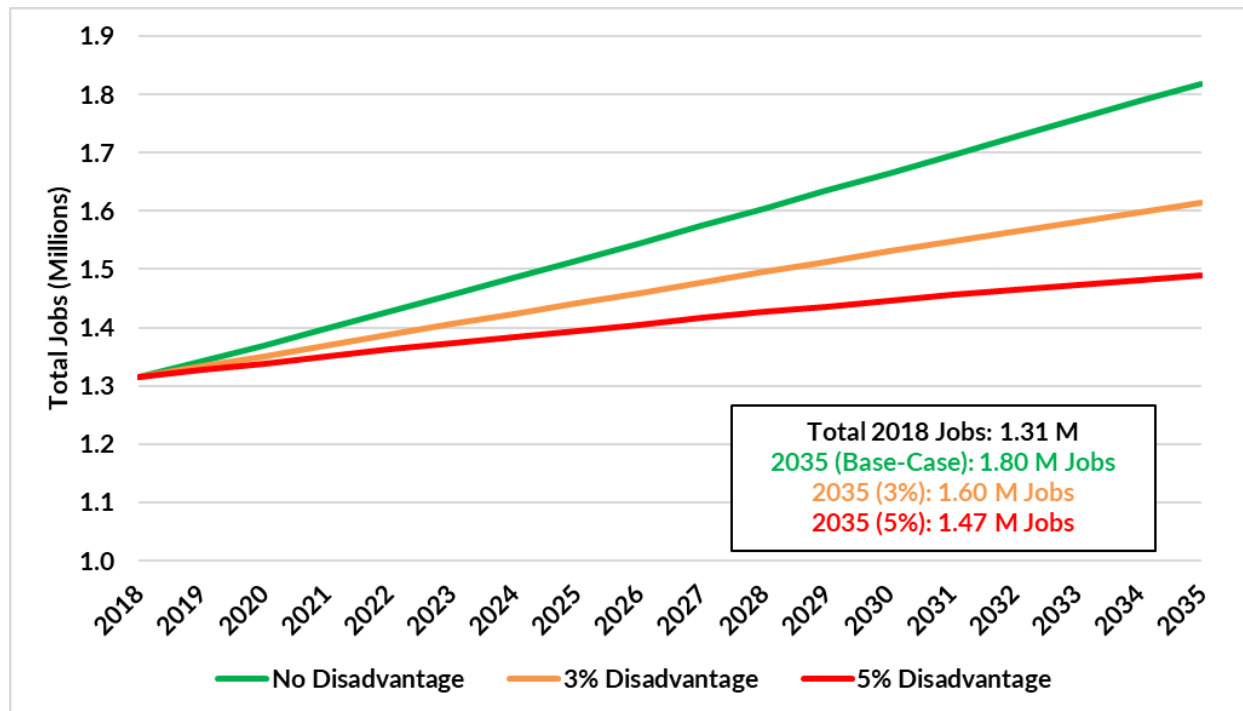
- The Committee's charge would be to evaluate and prioritize Southern Nevada's infrastructure needs and opportunities and to independently choose what infrastructure projects and investments would be optimal for the region in the context of Southern Nevada's resources, priorities, and needs.
- Once the Committee developed its priorities and investment strategy, it would be the role of the SIB Board, through the appropriate state staff, along with the Governor's office and the Nevada Legislature to fund the investments from the SIB.
- In conclusion, it is RCG's opinion that establishing an Infrastructure Working Committee under SB430 would be an effective option to encourage a regional approach to infrastructure investments in Southern Nevada (and in the state, generally).
- RCG recommends that the Committee report to the Board of Directors of the SIB.
- The Committee could have between nine and 15 members comprised of experts in Urban Planning, Transportation, Public Works, Real Estate Development, Conservation, Construction, Civil Engineering, Economic Development, etc., as well as representatives from GOED and the Nevada Legislature.

**Figure ES-1: Privately Owned Employment Lands Parcels in the Las Vegas Valley, by Size, 2019**

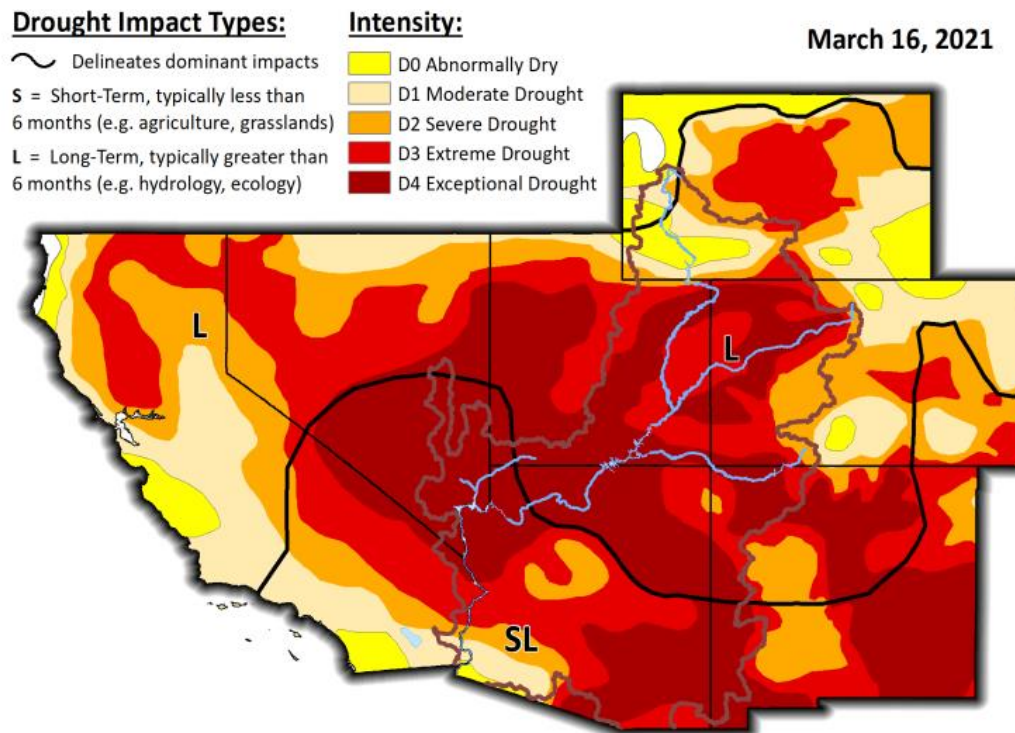


Source: Southern Nevada Water Authority, RCG Economics

**Figure ES-2: Effects of Land Shortage-Related Cost Disadvantage on Southern Nevada Employment: 2018 - 2035**

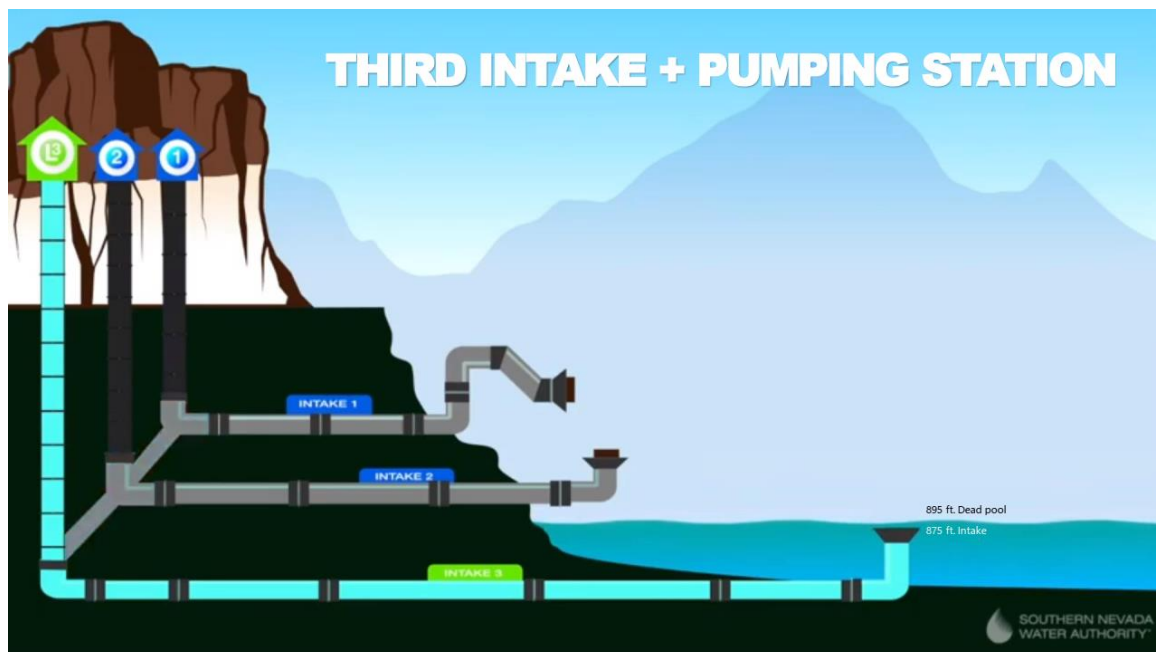


**Figure ES-3: Seven Basin States Drought Monitor**



Source: Southern Nevada Water Authority

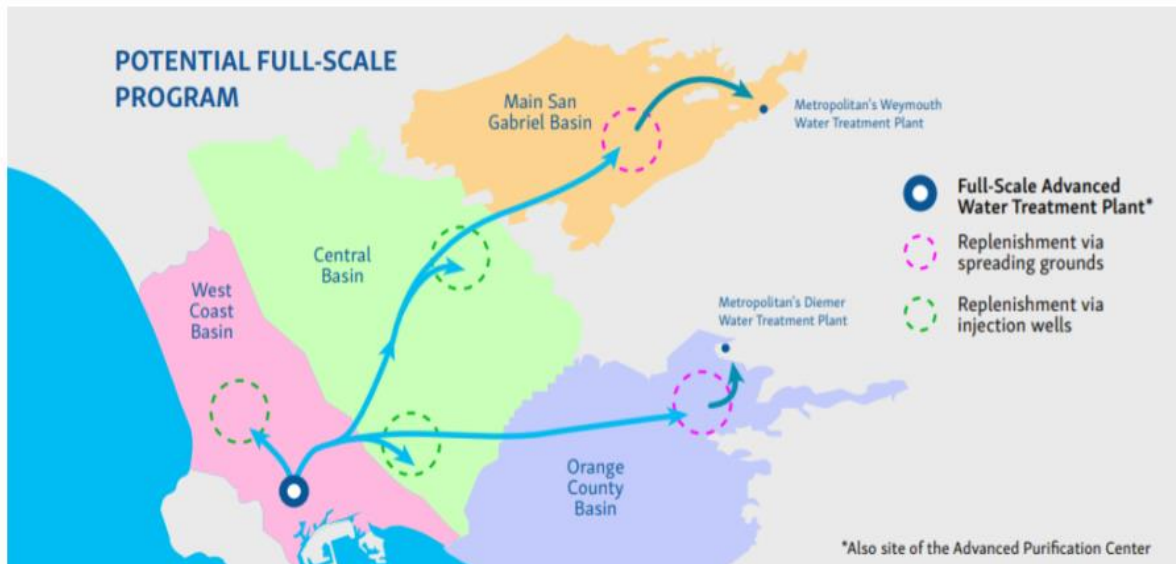
**Figure ES-4: Third Intake and Pumping Station**



Source: Southern Nevada Water Authority

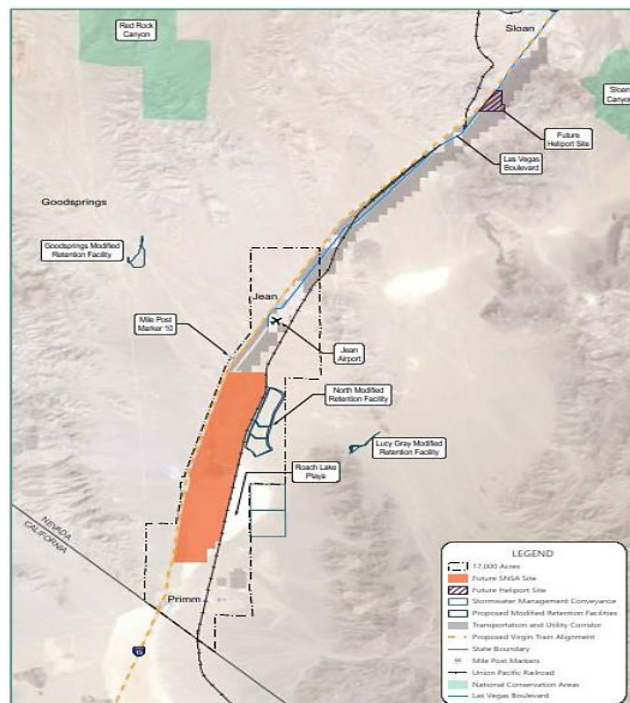


**Figure ES-5: Water Recycling Project**



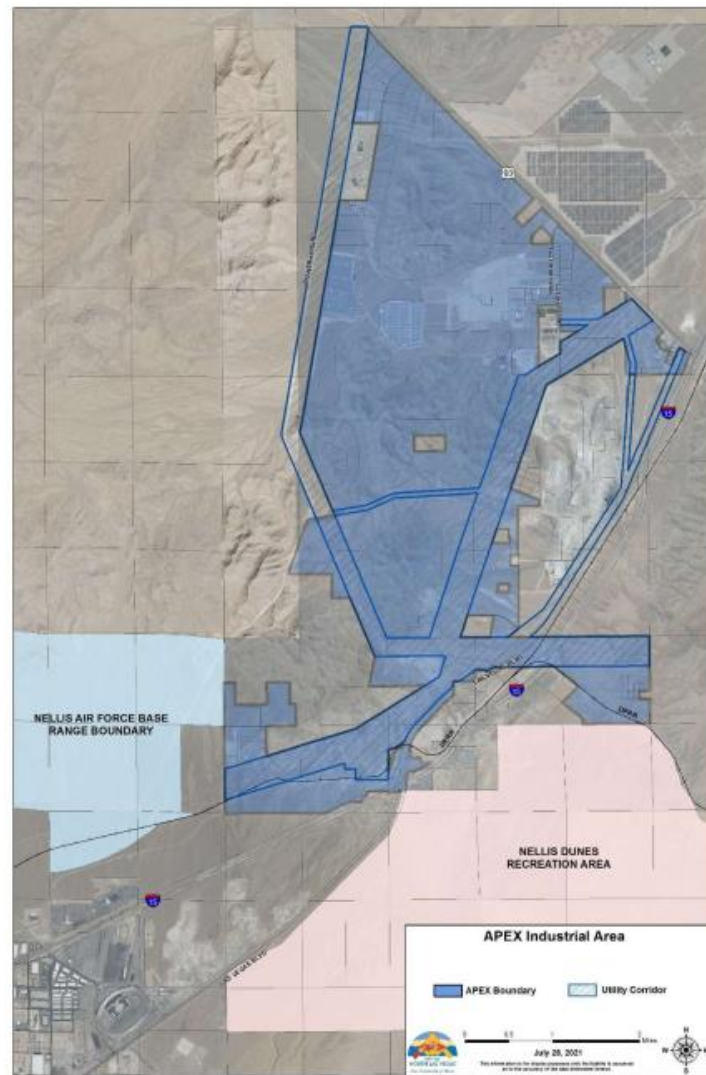
Source: Southern Nevada Water Authority

**Figure ES-6: Southern Nevada Supplemental Airport Land Allocation**



Source: Ricondo & Associates

**Figure ES-7: Apex Industrial Area**



Source: City of North Las Vegas

### Figure ES-8: Working Group Members

1. Kristopher Sanchez, Deputy Director-GOED and Chairman of the WG
2. Dave Johnson, Deputy General Manager of Operations-Las Vegas Valley Water District
3. Doa Ross, Deputy General Manager of Engineering-Las Vegas Valley Water District
4. Jeff Brigger, Director, Business Development-NV Energy
5. Justin Brown, Senior VP/General Counsel-Southwest Gas
6. Teri Sheridan, Economic Development Specialist-City of North Las Vegas
7. Derek Armstrong, Director of Economic Development and Tourism-City of Henderson
8. Bill Arent, Economic and Urban Development Director-City of Las Vegas
9. Raffi Festekjian, Economic Development Coordinator-City of Boulder City
10. Myisha Williams, Vice Chair and Legislative Subcommittee Chair-NV Commission on Minority Affairs
11. Maryland Kirkpatrick, County Commissioner-Clark County
12. Shani Coleman, Directory of Community and Economic Development-Clark County
13. Betsy Fretwell, SVP of Switch, Chairwoman-Las Vegas Global Economic Alliance
14. James Chrisley, Deputy Director of Operations-McCarran Airport
15. Bo Bernhard, Interim Vice President of Economic Development-University of Nevada Las Vegas
16. Victor Wei, Senior Advisor to the President for Strategy & Partnerships-University of Nevada Las Vegas  
Derrick Hill, Vice President-Cox Communications
17. MJ Maynard, Chief Executive Officer-Regional Transit Commission (RTC)
18. David Swallow, Deputy Chief Executive Officer-Regional Transit Commission (RTC)
19. Dr. Melody Rose, Chancellor-Nevada System of Higher Education (NSHE)
20. David Bobzien, Director-Nevada Office of Energy
21. Jennifer Taylor, Deputy Director of Intergovernmental Relations-Nevada Office of Energy
22. Dr. Federico Zaragoza, President/ CEO-College of Southern Nevada (CSN)
23. Kristina Swallow, Kristina Swallow-Nevada Department of Transportation (NDOT)
24. Sondra Rosenberg, Assistant Director of Planning-Nevada Department of Transportation (NDOT)
25. Bradley Crowell, Director-Nevada Department of Conservation & Natural Resources
26. Jim Lawrence, Deputy Director-Nevada Department of Conservation & Natural Resources
27. Sean Sever, Deputy Administrator-Department of Motor Vehicles (DMV)
28. Kristin Averyt, Climate Policy Coordinator-Nevada Department of Conservation & Natural Resources
29. Constance Brooks, Vice President-Las Vegas Convention and Visitors Authority (LVCVA)
30. Dr. Kumud Acharya, President -Desert Research Institute
31. Bart Patterson, President-Nevada State College (NSC)



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