

Financial Advisory  
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# SOUTHERN NEVADA EMPLOYMENT LAND POLICY ANALYSIS

February 2015

Prepared by:

**RCG**  
**ECONOMICS**

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February 27, 2015

Ms. Lisa Corrado, Project Manager  
Southern Nevada Strong  
240 Water Street, 4<sup>th</sup> Floor  
Henderson, NV 89009

*Re: Southern Nevada Employment Land Policy Analysis ("the Study")*

Dear Ms. Corrado:

RCG Economics LLC ("RCG") is pleased to submit the referenced study to Southern Nevada Strong ("SNS") to provide regional economic and fiscal advisory services relative to the referenced Study.

RCG's Study is based on a set of generally acceptable regional economic and commercial/industrial real estate technical analyses and data. The Study is comprised of the following components:

Section I: Introduction

Section II: Southern Nevada Current Employment & Economic Trends

Section III: Commercial Real Estate Market Trends

Section IV: Emerging Employment Land Areas

Section V: Employment Land Analysis: Employment Growth Forecasts

Section VI: Employment Land Analysis: Commercial & Industrial Land Allocation

Section VII: Employment Land Analysis: Demand Forecast

Section VIII: Employment Land Analysis: Supply Forecast

Section IX: The SNS Regional Plan & Economic Competitiveness

Section X: Employment Land Analysis: Key Land Quality Factors

Section XI: SNS Regional Plan Implementation: Strategies & Recommendations for Employment Lands

***Standard Assumptions***

This work scope was performed according to the "*Standard Assumptions & Limiting Conditions*" detailed in the attachment to this letter.

***Use & Nature of Report & Methodologies***

The distribution of the Study is limited to SNS. If SNS intends to reproduce and distribute the Study and report, it must be reproduced in its entirety. All ideas, developments, computer models, methodologies, innovations, inventions and copyrightable work, which RCG conceived and were used during the period of the Study, and which either (a) are within the scope of RCG's businesses or investigations, or (b) are supported by the use of materials, facilities or information paid for or provided by RCG are the exclusive property of RCG. In this regard, SNS agrees to credit RCG for its work.

The results of RCG's services under this engagement are the property of SNS. Copies of all documents including writings and computer or machine-readable data, which describe or relate to the services performed pursuant to this consulting assignment, or the results thereof, are the property of SNS and will be provided upon request. However, SNS will not provide RCG's Inventions and Works to any third party or use the same for the benefit of any third party, except with the prior written consent of RCG.

The Study is in the form of a narrative presentation, along with any appropriate tables, graphs and maps. RCG is not responsible for statements or interpretations made by SNS relating to the Study.

If you have any questions, please do not hesitate to contact us at your convenience by phone at 702-967-3188 ext. 401 or by email at [jrestrepo@rcg1.com](mailto:jrestrepo@rcg1.com).

Regards,

*RCG Economics LLC*

RCG Economics LLC

Attachment

**ATTACHMENT**  
**STANDARD ASSUMPTIONS & LIMITING CONDITIONS**

1. RCG prepared the Study, from third-party information collected by RCG, as well as its internal computer models, databases and sources.
2. SNS is responsible for representations about its plans and expectations and for disclosure of significant information that might affect the ultimate realization of the analyses results.
3. The results of RCG's analyses apply only to the effective date of the Study. The success of SNS's plans will be affected by many related and unrelated economic conditions within a local, regional, national and/or world context. RCG's assume no liability for an unforeseen change in the local, regional or national economies. Accordingly, RCG has no responsibility to update its report for events and circumstances occurring after the date of its Study.
4. RCG's Study is based on historical economic and real estate benchmark information. Thus, variations in the future could be material and have an impact on our Study conclusions. Even if our Study's hypothetical assumptions were to occur, there will usually be differences between the estimated and actual results, because events and circumstances frequently do not occur as expected, and those differences may be material. These could include major changes in economic and market conditions; and/or terms or availability of financing altogether; and/or major revisions in current state and/or federal tax or regulatory laws.
5. RCG's Study is based on land supply data provided to it the Regional Transportation Commission of Southern Nevada. Accordingly, RCG did not attempt to estimate the actual amount of developable acres in the geographic areas that are the subject of the Study. These areas include all of Clark County and its urban component commonly known as the Las Vegas Valley.
6. As defined herein, developable land is land that is vacant or underused, without acute physical limitations that is planned or zoned for more intense uses, and has access to the urban services and infrastructure required to allow development.
7. If RCG's Study is reproduced by SNS, it must be reproduced in its entirety.
8. RCG makes no representation or warranty as to the accuracy or completeness of the third party information contained in our Study, and shall have no liability for any representations (expressed or implied) contained in, or for any omissions from, our materials.
9. The working papers for this consulting assignment will be retained in RCG's files and will be made available for your reference. We will be available to support the analyses, as required.
10. Unless otherwise stated in the report, no effort has been made to determine the possible effect, if any, of future Federal, State or local legislation, including any environmental or ecological matters or interpretations thereof.
11. RCG did not perform an audit, review or examination or any other attest function (as defined by the AICPA) regarding any of the third-party historical market, industry and economic benchmarks or demographic information used or included in the report; therefore, RCG will not express any opinion or any other form of assurance with regard to the same, in the context of our Study.

# SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

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# SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

## I. INTRODUCTION

As part of the Southern Nevada Strong Initiative (“SNS”), RCG Economics (“RCG”) has been commissioned to prepare an *Employment Land Use Policy Analysis* (“the Analysis”) that estimates the amount of land potentially necessary to support the future demand of seven (7) target industries in Clark County, Nevada.

This report has been written with the following Southern Nevada audiences in mind: members of SNS, the Las Vegas Global Economic Alliance (“LVGEA”), the Governor’s Office of Economic Development (“GOED”), municipal economic development agencies and comprehensive planning departments and the private sector, especially the lenders and the commercial real estate industry since they will be responsible for financing and constructing any needed buildings and projects.

The target industries are identified in two recent comprehensive studies:

- Comprehensive Economic Development Strategy for Southern Nevada, July 2013
- Unify Regionalize Diversify: An Economic Development Agenda for Nevada, November 14, 2011

The combined industries that RCG developed from these two studies and that are used in the Analysis are:

1. Healthcare
2. IT
3. Finance
4. Industrial & Manufacturing
5. Logistics & Operations
6. Clean Energy
7. Defense & Unmanned Aerial Systems

Before presenting the Analysis, this report begins with several summary sections. First, RCG discusses current Southern Nevada economic trends including employment, tourism, taxable sales and other economic indicators. The next section discusses the office and industrial markets using information from RCG’s Quarterly Commercial Market Survey, produced in cooperation with UNLV’s Lied Institute for Real Estate Studies.

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

The Analysis identifies the main occupations for each of the target industries, as well as the current (2014) and projected future (2034) number of jobs in these industries. Three future job scenarios have been developed, representing low, mid and high growth rates. RCG has also projected the amount of land potentially needed to support these jobs, and whether there is enough suitably zoned land in the Las Vegas Valley to satisfy the job forecasts. We then prepared a list of characteristics affecting the desirability of Employment Land<sup>1</sup>. Finally, we outline a set of strategies aimed at preserving current Employment Lands zoning in order to ensure that future Employment Land shortages do not exist.

RCG's report is based on land supply data provided to it the Regional Transportation Commission of Southern Nevada. Accordingly, RCG did not attempt to estimate the actual amount of developable acres in the geographic areas that are the subject of this report. These areas include all of Clark County and its urban component commonly known as the Las Vegas Valley.

RCG would like to acknowledge the Governor's Office of Economic Development ("GOED") for its assistance with the employment data used herein, and the City of Henderson for providing the future land use and zoning data.

RCG has also prepared a glossary of terms that are used throughout this report.

### ***Glossary***

**Developable Land:** Land that is vacant or underused, without acute physical limitations that is planned or zoned for more intense uses, and has access to the urban services and infrastructure required for development.

**Employment Lands:** Urban and rural industrial, office and business park land that is zoned either office or industrial and/or is planned as such in Southern Nevada's jurisdictional general land use plans.

**The Las Vegas Valley or Valley:** The urbanized portion of Clark County. The Las Vegas Valley includes the jurisdictions Clark County, the Cities of Henderson, Las Vegas and North Las Vegas.

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<sup>1</sup> *In this analysis Employment land refers to both Industrial and Commercial (office, not retail) zoned land.*

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

Primary Jobs/Employment: Jobs/employment that support local residents (i.e., population serving).

Southern Nevada: Synonymous with the boundaries of Clark County, Nevada.

Urbanized Area ("built-up urban area"): A continuously built-up area of urban-style development within a metropolitan area. An urbanized area contains undeveloped land but not necessarily rural land. It includes residential and non-residential development as well as open space, such as parks.

# SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

## SECTION II: SOUTHERN NEVADA CURRENT EMPLOYMENT & ECONOMIC TRENDS

Before proceeding with the Employment Land analysis, we have outlined recent trends in the Southern Nevada economy. This includes employment and other economic trends and metrics, such as taxable sales, the commercial real estate markets and tourism. The following text and charts are from RCG's Quarterly Las Vegas Economic/Commercial Real Estate Market Report prepared for Bank of Nevada for Q3, 2014.

### *Employment Trends*

September 2014 figures released by the Nevada Department of Employment, Training and Rehabilitation ("DETR") show Nevada's "headline" unemployment rate decreased to a seasonally adjusted 7.3 percent. This is 2.2 percentage points lower than the 9.9 percent rate in September 2013. So far, 2014 has shown an average unemployment rate of 8.0 percent.

**Chart II-1: Clark County "Headline" Unemployment Rate: Sep 2009 – Sep 2014**



In Clark County, the non-seasonally adjusted unemployment rate held at 7.1 percent in September 2014, 0.6 points lower than in August 2014. This is 2.3 percentage points below September 2013's 9.4 percent rate.

In comparison, Nevada's headline unemployment rate dropped to 7.3 percent in September, down from 7.5 percent in August, the sixth highest in the United States after

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

Georgia, Mississippi, the District of Columbia, Rhode Island and Tennessee. The U-6 rate, which includes forced part-time and discouraged workers, remains stubbornly high at 15.9 percent in Q3, 2014. This means that Nevada had the highest U-6 rate in the country, 0.1 point ahead of California, at the end of September.

The Clark County economy added 23,900 jobs over the past 12 months, with total establishment-based employment growing from 855,200 to 879,100 in September 2014. Thus far in 2014, Clark County has averaged 870,411 jobs on a monthly basis, up from 2013's average of 848,892 jobs.

Positive employment growth was up in nine of the 11 major private industry groups relative to September 2013. The largest amount of growth came from Trade, Transportation & Utilities (+7,600 jobs), Professional & Business Services (+6,500 jobs), Education & Health Care (+5,500 jobs), Financial Activities (+1,300 jobs) and Construction (+1,200 jobs). Minor growth came from Manufacturing (+900 jobs), Government (+600 jobs), Other Services (+500 jobs) and Information (+300 jobs). There was no growth in Natural Resources employment. The Leisure & Hospitality sector lost 500 jobs.

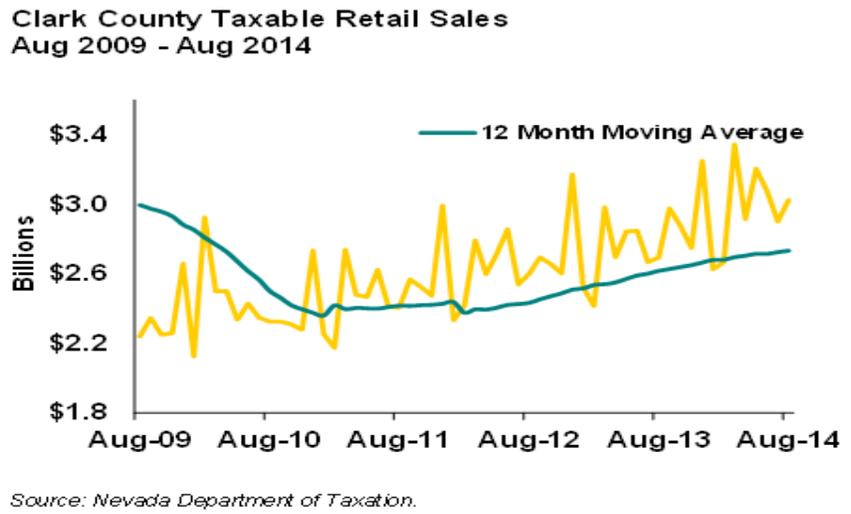
### *Economic Trends*

Statewide taxable sales for August 2014 (\$4.09 billion) represent a 7.5 percent increase from August 2013, as reported by the Nevada Department of Taxation. Total sales were up in just eight of Nevada's 17 counties compared to a year ago, but strong growth in Clark County buoyed the state figures.

Clark County posted a 12.2 percent rise in taxable sales on a year-over-year basis. Taxable sales in Clark County increased by \$329.1 million over last year and accounted for 74 percent of the state's total taxable sales for the month.

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

Chart II-2: Clark County Taxable Retail Sales: Aug 2009 – Aug 2014



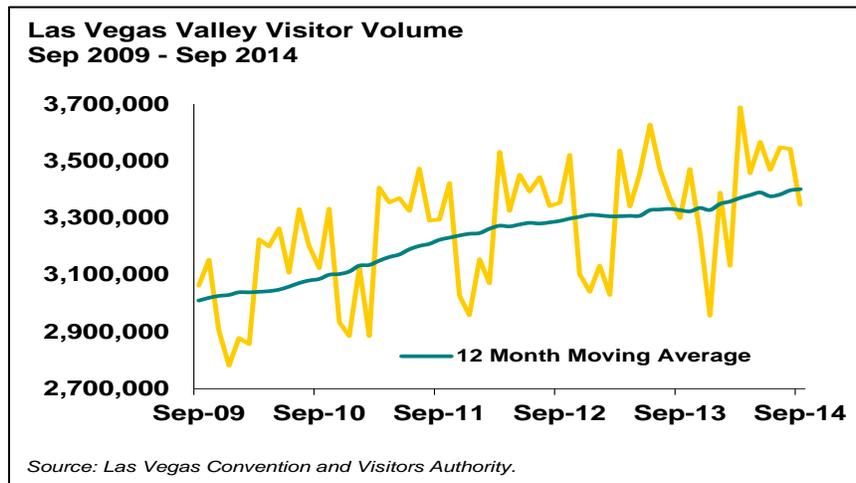
There was strong retail sales growth in Clark County for construction (+138.8 percent), natural resources (+86.8 percent), transportation and warehousing (+82.8 percent), professional and business services (+17.1 percent), financial services (+14.4 percent), health care and social assistance (+13.5 percent), information (+12.6 percent), other services (+11.9 percent), wholesale (+11.6 percent), manufacturing (+11.1 percent), agriculture and forestry (+10.9 percent), retail (+10.3 percent), leisure and hospitality (+10.2 percent) and education services (+4.7 percent) over the past 12 months. Sales dropped in government (-11.2 percent) and utilities (-53.1 percent).

The Las Vegas Convention and Visitors Authority reported that visitor volume decreased in September 2014 with 3.3 million visitors for the month, down 5.6 percent from August. Visitation was up by 1.4 percent over September 2013. In the first nine months of 2014, visitor volume totaled 31.1 million, up 3.8 percent over the first nine months of 2013.<sup>2</sup>

<sup>2</sup> Las Vegas Conventions and Visitors Authority. LVCVA Executive Summary – September 2014.

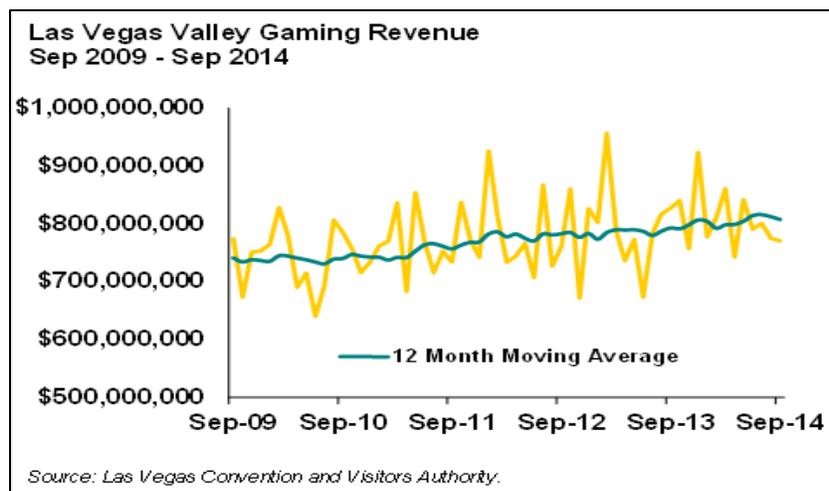
## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

**Chart II-3: Las Vegas Valley Visitor Volume: Sep 2009 – Sep 2014**



Totalling \$770.5 million for September 2014, gaming revenue for Clark County was down 6.8 percent over September 2013 and down 0.5 percent from August 2014.<sup>3</sup> September's 12-month average for gaming revenue in Clark County shows gaming revenue up (+1.8 percent) over the 12 months ending in September of 2013. Recovery in gaming revenue continues to lag behind visitor volume, but it appears to be catching up (though catching up to September 2014's anemic performance is not saying much). Over the past few years of recovery, visitors have increased their spending on non-gaming activities even when they were not increasing their spending on gaming, and resort operators have responded by adding new entertainment and retail venues to their properties.

**Chart II-4: Las Vegas Valley Gaming Revenue: Sep 2009 – Sep 2014**

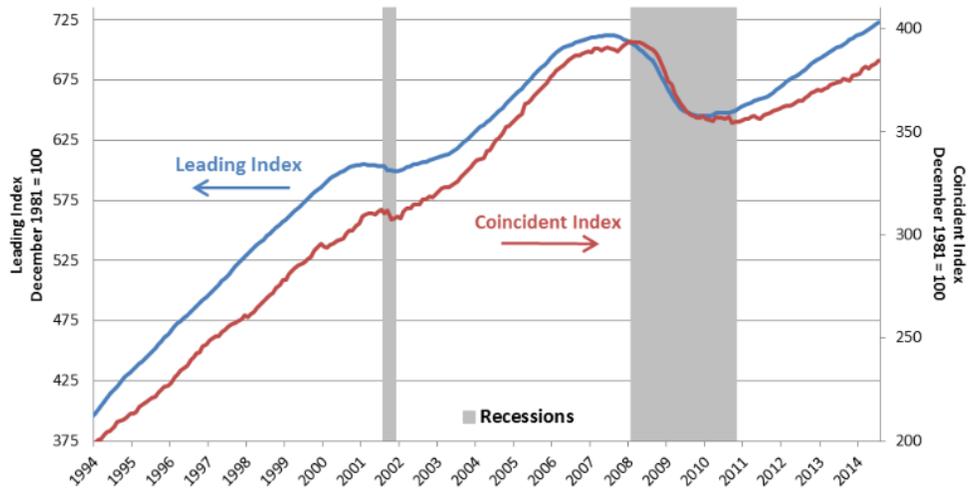


<sup>3</sup> Las Vegas Conventions and Visitors Authority. LVCVA Executive Summary – September 2014

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

The UNLV Center for Business and Economic Research's ("CBER") Southern Nevada Coincident Index—representing the current state of the Southern Nevada economy—increased by 0.43 percent on a month-over-month basis and increased by 2.74 percent on a year-over-year basis in July 2014. The Leading Index—which looks four to six months in advance—increased by 0.25 percent in July 2014 over last month and by 2.74 percent over July 2013.

**Chart II-5: CBER Southern Nevada Economic Indicators  
Coincident & Leading Indices: 1994 - 2014**



# SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

## SECTION III: COMMERCIAL REAL ESTATE MARKET TRENDS

The following section outlines current Employment Land trends in Southern Nevada. This information has been obtained from the Quarterly Commercial Surveys RCG produces in cooperation with the UNLV Lied Institute for Real Studies, as well as from discussions with members of Southern Nevada's commercial real estate community (see Appendix 5 for RCG/UNLV's office and industrial market matrices for Q3, 2014).

One of the biggest challenges facing employment land development in Southern Nevada is the lack of available buildings above a certain size. For Commercial buildings, that size is 40,000 sf. At the end of Q3, 2014, there were only 15 available units of this size. Industrial buildings typically require even more space, and there is a shortage of Industrial buildings above 100,000 sf. RCG estimates that at the end of Q3, 2014, there were only four available spaces in the Las Vegas Valley with more than 100,000 sf. This is less than half of what was available at the end of the previous quarter.

Currently, many real estate lenders in Southern Nevada are reluctant to provide financing to developers at terms that make constructing large development projects financially feasible. Even so, large-scale commercial development is and will be instrumental in attracting new firms to Southern Nevada. It is imperative that development be matched to the attributes for which firms are looking, such as location, access, shape, size and infrastructure. For example, four office spaces of 10,000 sf each scattered around the east side of the Las Vegas Valley will be of no use to a financial services firm demanding a contiguous space of 40,000 sf on the west side of the Valley.

### *Office Market Overview*

Of the Las Vegas Valley's three commercial markets (Industrial, Office and Retail) RCG tracks, the multi-tenant, speculative office market is the most directly dependent on job growth. Southern Nevada office-using jobs have seen 37 months of YOY employment increases with at least 2 percent monthly growth (+11,600 jobs, +5.0% for September)<sup>4</sup>. This growth has started to whittle down the 20 percent+ vacancy rate that has ruled the Valley's Office market during the past five years. Like the Industrial market, a potential economic development and growth challenge continues to face the region in the form of a

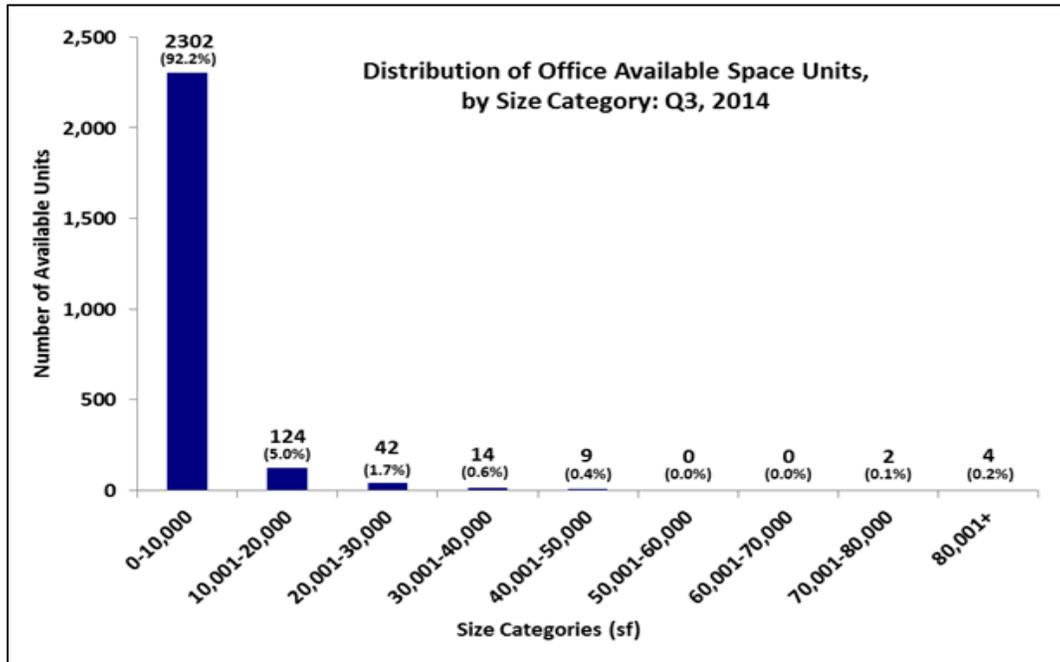
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<sup>4</sup> Includes the following industries: Information, Financial Activities, Professional & Business and Health Care & Social Assistance from the Nevada Department of Employment, Training and Rehabilitation's latest employment statistics.

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

lack of available contiguous office space of 40,001 sf or more. At the end of Q3, there were only 15 units of space in this size range (see Chart III-1).

**Chart III-1: Distribution of Office Available Space Units, by Size Category: Q3, 2014**

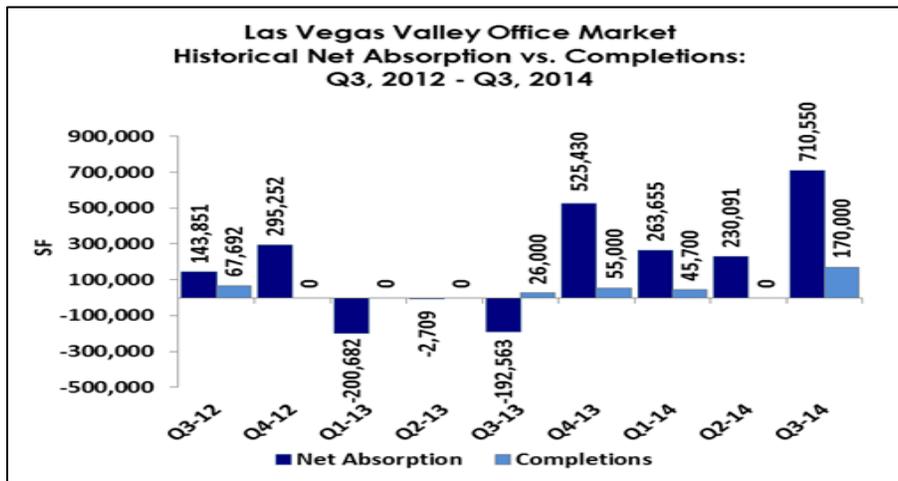


Source: RCG.

Valley-wide net absorption in Q3 was positive for the 4th straight quarter at 710,600 sf. On a year-over-year basis, net absorption totaled 1,627,600 sf compared to Q3, 2013, when a minus 100,700 sf were absorbed. This is a good indication that the Office market is recovering. Chart III-2 below shows total net absorptions and completions over the past eight quarters. Chart III-3 illustrates rent trends for the same period.

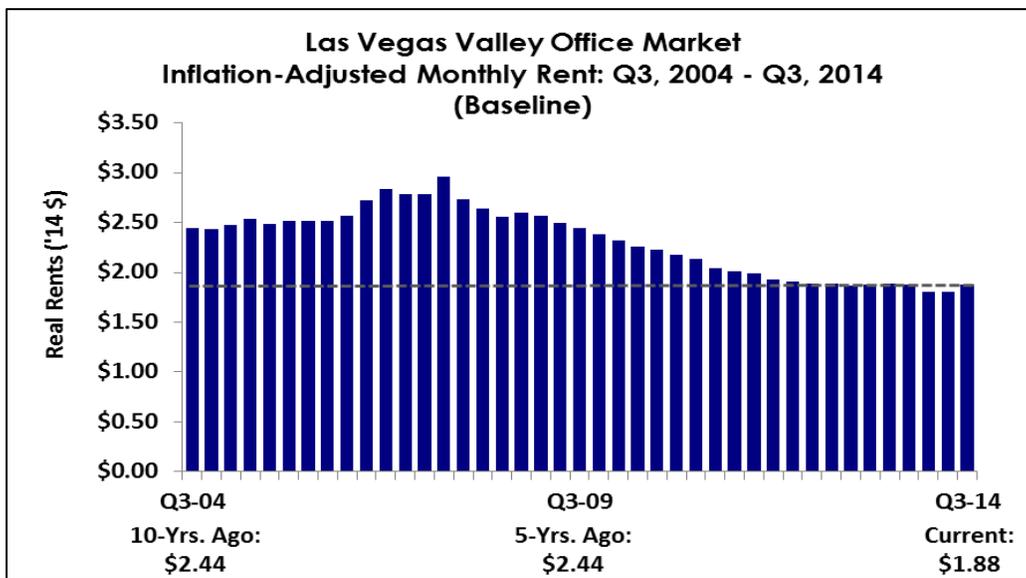
## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

**Chart III-2: Net Absorption vs. Completions: Q3, 2012 – Q3, 2014**



Source: RCG.

**Chart III-3: Inflation-Adjusted Rent: Q3, 2004 – Q3, 2014**



Source: RCG.

The reluctance of many commercial lenders to provide financing at terms that make sense to many developers continues in the aftermath of the Great Recession. This has been driven by stubbornly high Valley-wide vacancy rates and low rents because office-using job growth has recovered only weakly since the end of 2007.

As with the Industrial market, RCG remains concerned that Southern Nevada's municipalities will continue to be pressured to convert Employment Land to residential uses.

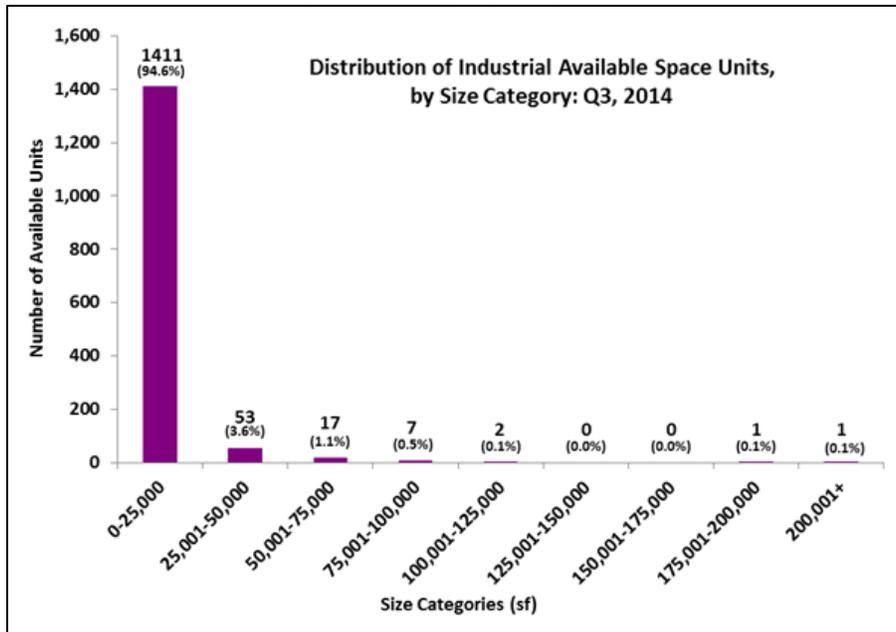
## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

Short-term demand for a certain type of development — i.e. single family and multi-family residential — due to unusual market and lending conditions should not trump long-term economic considerations. Nevada needs a healthy jobs-housing balance to support continued economic growth and development.

### *Industrial Market Summary*

As an important indicator of the steadily improving Southern Nevada economy, the Industrial market has finally reached a healthy supply-demand balance with a vacancy rate of 8.6 percent. The last time Southern Nevada had an industrial vacancy rate this low was in Q2, 2008. Local businesses continue to expand, and attention from out-of-state firms on the Las Vegas area continues to grow. The result: the Valley's industrial market saw net absorption of 1,184,000 sf in the third quarter and 3,700,000 sf year-to-date for 2014.

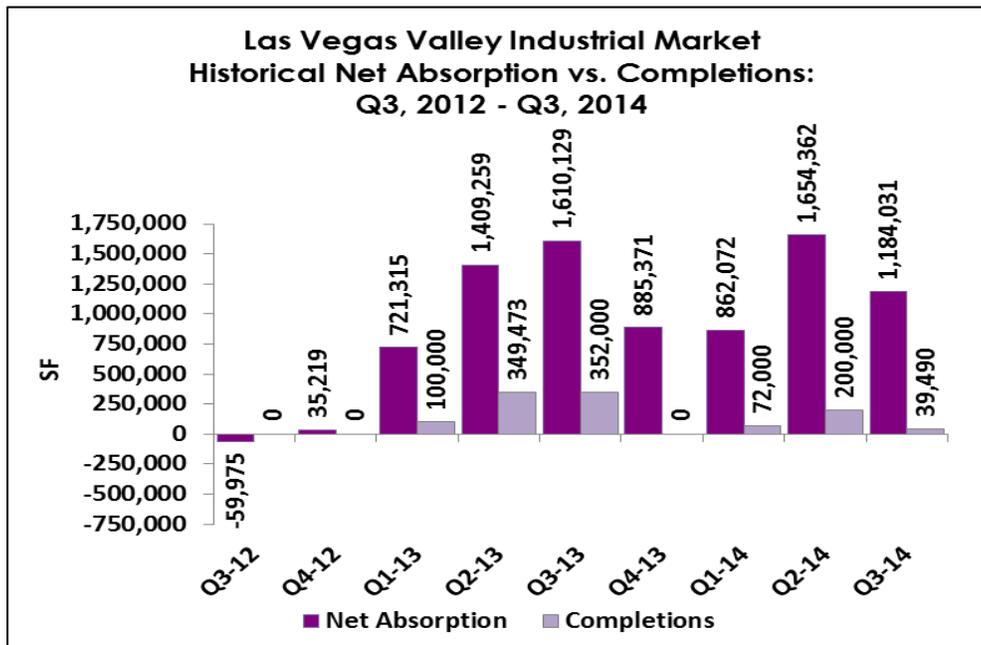
**Chart III-4: Distribution of Industrial Available Space Units, by Size Category: Q3, 2014**



Source: RCG.

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

Chart III-5: Net Absorption vs. Completions: Q3, 2012 – Q3, 2014

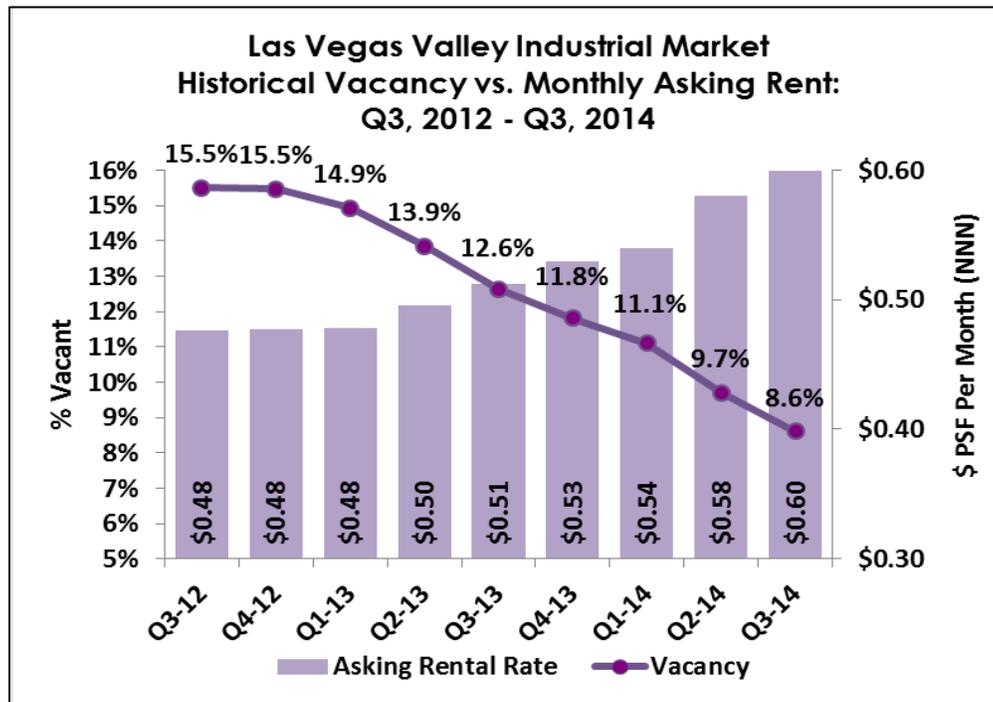


Source: RCG.

The Valley's Industrial market has seen a remarkable turnaround considering the depth and breadth of the Great Recession. This turnaround speaks to the region's locational attributes, which are fundamentally healthy, as well as to the hard work of the various parties promoting and developing Southern Nevada. However, the region is now starting to face some of the same challenges it weathered during the boom period just prior to the advent of the Great Recession, i.e. an Industrial space shortage. This shortage is sure to pose potentially significant economic development and growth challenges. As shown in Chart III-4 above, at the end of Q3 there were only four available contiguous spaces above 100,000 sf in the Valley, less than half of what was available last quarter. How and when Southern Nevada's public policy makers and the development community address this shortage is a critical issue.

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Chart III-6: Historical Vacancy vs. Monthly Asking Rent: Q3, 2012 – Q3, 2014



Source: RCG.

We would like to, again refer readers of this Analysis to a survey and market study RCG conducted (see <http://www.rcg1.com/wp-content/uploads/2014/04/2014-4-10-LVGEA-Industrial-Land-Survey.pdf>) for the Las Vegas Global Economic Alliance (<http://www.nevadadevelopment.org/>) on the shortage issue and its effects on Southern Nevada’s economic development efforts.

RCG continues to encourage local government officials to think long-term and not convert employment land, especially office and industrial acreage, to residential uses. Short-term demand for a certain type of development — i.e. homebuilding — due to unusual market and lending conditions should not trump long-term planning. Nevada needs a healthy office and industrial jobs-housing balance to support continued economic growth and economic development.

# SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

## SECTION IV: EMERGING EMPLOYMENT LAND AREAS

### Overview

There are several large Employment Land areas or districts in Southern Nevada with significant potential to attract and serve companies in this report's seven target industries. In this section, we present a sample set of these areas. This is NOT an all-inclusive list. These areas represent potentially important Commercial and Industrial "land banks" for the region. They could end up playing important roles in growing and developing the Southern Nevada economy. These major development areas are illustrated in Figures IV-1 and IV-2 and include:

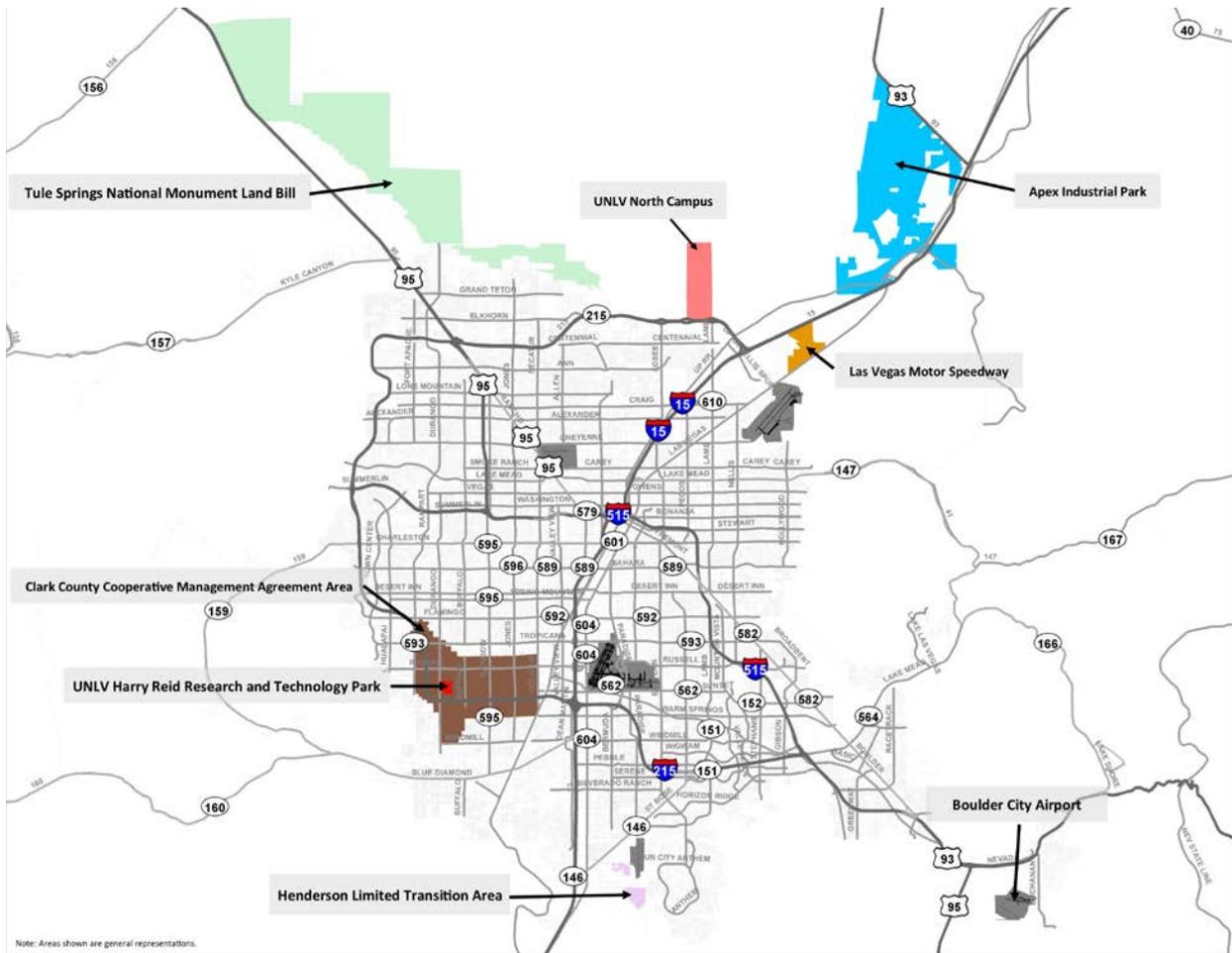
- Apex Industrial Park in North Las Vegas
- Las Vegas Speedway area in North Las Vegas
- Tule Springs National Monument Land Bill
- UNLV North Campus in North Las Vegas
- UNLV Harry Reid Research and Technology Park
- Boulder City Airport and Desert Rock Drone Testing
- the Ivanpah area near Primm, Nevada
- the Fort Mohave "Southland" site, south of Laughlin
- Clark County Cooperative Management Agreement Area
- Henderson Limited Transition Area

In addition to the areas noted above, SNS has identified existing districts and corridors in the Las Vegas Valley, which have the potential to be redeveloped and repositioned to support additional employment density and potentially attract businesses within the target industries. These areas include four "Opportunity Sites" and other areas in the Las Vegas Valley. The four Opportunity Sites are:

- Boulder Highway
- Las Vegas Medical District
- Downtown North Las Vegas
- Maryland Parkway Corridor

# SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

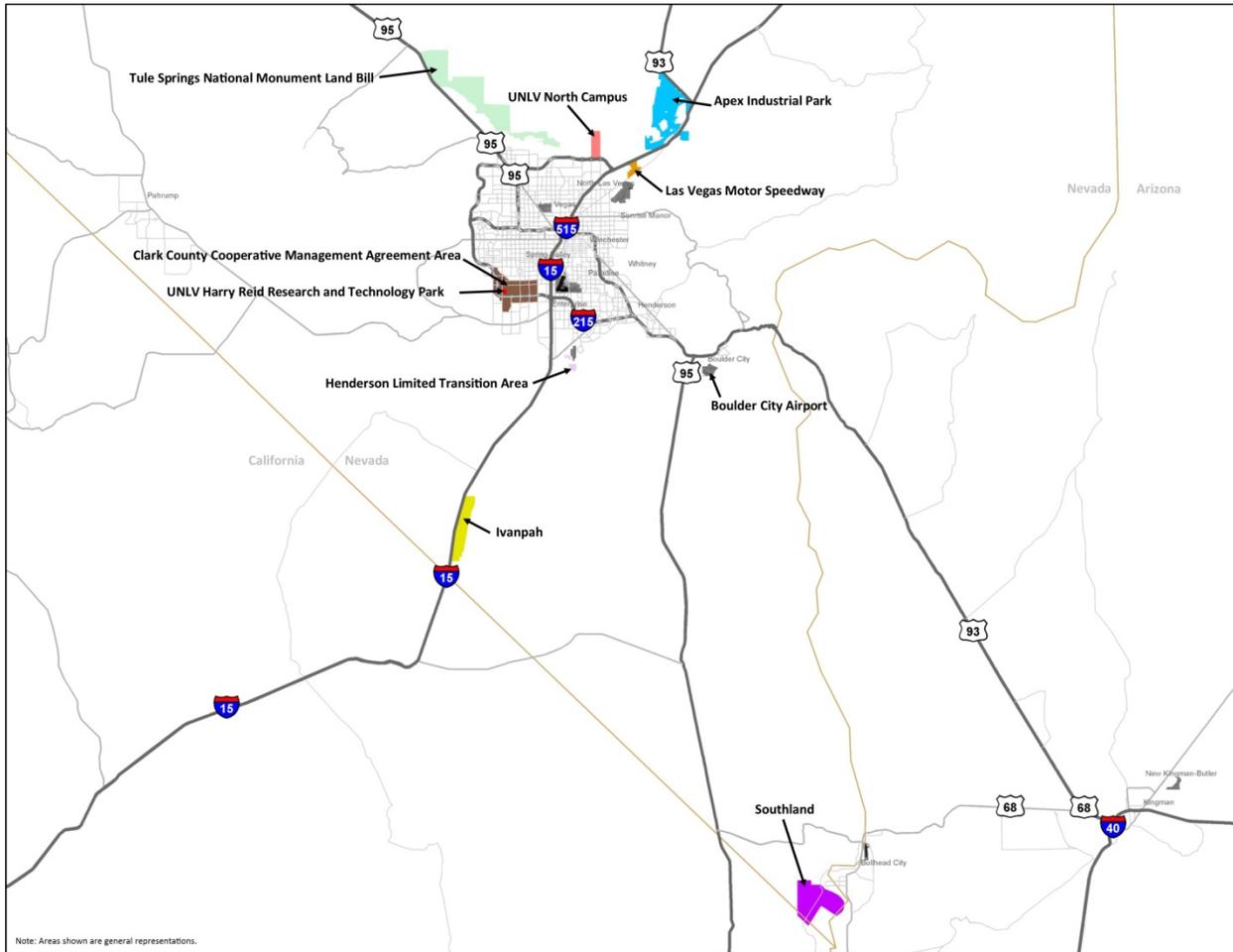
## Figure IV-1: Emerging Land Areas: Las Vegas Valley & Environs



Source: RCG Economics.

# SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

## Figure IV-2: Emerging Land Areas: Southern Nevada



Source: RCG Economics.

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In addition to these Opportunity Sites, other areas in the Las Vegas Valley that have been targeted for future redevelopment and growth have been highlighted in the SNS Vision Map.<sup>5</sup> This map not only targets future employment centers, but urban neighborhoods, town centers, downtowns, transit corridors and areas of interest.

### ***Apex Industrial Park***

<http://www.apexindustrialpark.com/>

One area that has the potential to become a major Industrial cluster in Southern Nevada is The Apex Industrial Park in North Las Vegas. This industrial park comprises 7,000 acres located on the West side of the I-15 in North Las Vegas. Currently, only 2,000 acres are ready for development, and most of the site is still vacant. However, a recent announcement making 700 acres of the Apex Industrial Park an “Economic Diversification District” may help generate \$150 million in improvements to utilities such as power, water and gas, as well as new road work that will encourage more businesses to locate there. However, as of the date of this report no official plans have been finalized, and it will take years before the infrastructure is in place for complete development of the site.

Due to its size and once fully developed, Apex can accommodate a large cluster allied with other industries. Most of the businesses currently operating at Apex are in the Logistics industry, with plans to also support Manufacturing, including aircraft manufacturing, and other Warehouse and IT service firms. While no official announcements have been made regarding what firms are interested in setting up operations at Apex, the City of North Las Vegas is in negotiations with three companies to locate in the new Economic Diversification District. At the time of this Analysis (November, 2014), the names of these companies have not been released, but reports indicate that their operations could create thousands of jobs. There is talk in the local Commercial development industry that Apex may end-up being the home of several marijuana greenhouses or grow facilities due the recent approval and licensing of medicinal marijuana dispensaries and grow facilities. This type of user will become even more prominent if the Nevada Legislature and/or voters approve marijuana for recreational uses during the next few years.

According to a recent report published by Brookings Mountain West, once the Apex Industrial Park is fully developed it has the potential to create nearly 58,000 direct jobs.

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<sup>5</sup> <http://www.southernnevadastrong.org/files/managed/Document/321/At-A-Glance%20for%20website.pdf>

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

This number is higher than RCG's Industrial job forecast for the seven (7) industries discussed herein, but the Apex Industrial Park will support jobs in more than just those industries. That said, it could take decades before Apex is built out.

### ***City View Business Park and the Las Vegas Speedway Area***

[www.cityviewbusinesspark.com/](http://www.cityviewbusinesspark.com/)

<https://www.cityofnorthlasvegas.com/Departments/CommunityDevelopment/PlanningLandUseMasterPlanMap.shtm>

Just south of the Apex Industrial Park, along the I-15, is the City View Business Park. This is a 365-acre Industrial park that is designated as a Foreign Trade Zone ("FTZ"). A FTZ is a site that provides savings on duties, fees and excise taxes. This zoning allows international importers to bring in foreign goods and raw materials for manufacturing without formal customs entry or payment of customs duties and taxes until such time as products leave the zone for domestic distribution. In addition to the City View Business Park, the surrounding area holds an additional 4,000-5,000 acres of vacant land. However, not all of the land is currently available for development. Much of it is owned by the Bureau of Land Management ("BLM"). However, as the Apex Industrial Park sees more development, the City View Business Park will potentially become a viable Employment Land option in Southern Nevada.

Additionally, the Speedway area is a potentially important location for development, but has been hampered by the lack of a comprehensive and collaborative solution to infrastructure issues in the area. Because the area includes lands in both Clark County and City of North Las Vegas, infrastructure is often provided by separate systems owned by two different municipalities. The area is relatively flat, and near a major highway interchange, and is therefore conducive to significant development. Once direct access from the interchange at 215-N and I-15-north connecting to the east at Tropical Way is installed and sewer lines are extended, this area should see increased development activity for employment uses.

### ***Tule Springs National Monument Land Bill***

<https://www.cbo.gov/publication/45167>

A land use and land transfer agreement reached in early December on Capitol Hill will open thousands of acres in Nevada to economic development. The legislation will also establish a Tule Springs Fossil Bed National Monument in the northern outskirts of the Las Vegas Valley. On the economic development front, the measure will:

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

- Convey 660 acres of federal land to the city of Las Vegas and 645 acres to North Las Vegas to establish "job creation zones"
- Grant 1,329 acres to the city of Carlin, in Elko County, for development while giving 1,745 acres to Storey County, and 9,114 acres to Fernley in Lyon County
- Allow the sale of 11,500 acres of land in Lyon County to the city of Yerington to support development of the Pumpkin Hollow Copper Mine, likely to be a major jobs generator
- Release 10,240 acres along the edge of Sunrise Mountain for multiple uses.

As of December, 2014, this deal has not yet passed the House. However, it is expected to do so and once that occurs a timeframe for the land auction for this employment land will be finalized. In addition, the University of Nevada, Las Vegas received 1,886 acres of land for its North Las Vegas campus, discussed below.

### ***UNLV North Campus in North Las Vegas*** <http://www.unlv.edu/northcampus>

UNLV's future plans for expansion include a new campus located in the north central Las Vegas Valley. The campus will be located on 2,000 acres of land located north of the 215 between Lamb Boulevard and Pecos Road. It will be the focus of graduate programs and various research facilities. Specifically, the College of Engineering is developing plans for research in Transportation, energy generation, aerospace science and other fields that require large facilities. These plans will include public-private partnerships which may potentially accommodate private sector jobs in several of this report's target industries.

### ***UNLV Harry Reid Research and Technology Park*** <http://www.unlvresearchpark.com/>

The UNLV Harry Reid Research and Technology Park is a business park located in the Southwest part of the Valley. It comprises 122 acres and is zoned for both Commercial and certain Industrial uses. The stated goal of this project is to attract research and technology oriented businesses, with a particular focus on solar energy. Businesses operating at the park will have opportunities to work with UNLV faculty and graduate students, as well as use UNLV's lab facilities as resources.

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In February, 2015, It was announced that two tenants signed long-term leases and construction has begun on the two sites housing those tenants. One tenant, Catamaran LLC, a pharmacy management company based in Illinois, is building a 100,000 sf building. This fits the current trend of firms looking for larger buildings with 100,000 sf or more space. The second tenant is American Preparatory Academy, a K-12 charter school building an expanded campus. Additional details have not yet been released but other firms are reportedly showing interest in expanding in this area.

### ***Boulder City Airport and Desert Rock Drone Testing***

[www.diversifynevada.com/key-industries/aerospace-defense/uav](http://www.diversifynevada.com/key-industries/aerospace-defense/uav)

In late 2013, Nevada was chosen by the federal government to be one of six states authorized for research and development of unmanned aerial vehicles (“UAVs”), commonly known as drones. Other states chosen for this opportunity are Alaska, New York, North Dakota, Texas and Virginia. Within Nevada, four sites have been chosen for FAA testing of drones in Nevada: the Fallon Naval Air Station, The Stead Airport north of Reno, the Boulder City Airport, and Desert Rock near the Nevada National Security Site (formerly known as the Nevada Test Site). Of those sites, the two that have the most potential to impact Southern Nevada are Boulder City Airport and Desert Rock. However, currently the only company confirmed to open a facility in Nevada is Ashima Devices, which will move its headquarters to the facility near Reno.

According to GOED, this industry has the potential to generate \$100 billion in economic activity per year in Nevada within a decade. State officials estimate that this industry can create up to 15,000 jobs. However, there is no guarantee that UAV firms will set up operations at the Southern Nevada sites. Therefore, it is imperative that the local agencies work with the state of Nevada to capitalize on this opportunity.

### ***Ivanpah Area***

[www.snvairporteis.com/](http://www.snvairporteis.com/)

Located near Primm, Nevada, the Ivanpah area was originally planned to be the location of the Ivanpah Valley Airport as a way of handling the excess capacity of McCarran International Airport, which has limited land for expansion. This project was placed on hold in June, 2010, and there are currently no official plans to resume the project. However, the airport may well resume as planned, or possibly be built out as a cargo airport as part of a

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distribution hub for the Western U.S.. The land may also be made available for other industrial uses. While not immediately available to accommodate this report's target industries, this land can be seen as a potential and major Employment Land district for the region in the future.

### *Fort Mohave "Southland" Site-Laughlin*

[http://www.clarkcountynv.gov/Depts/admin\\_services/laughlindev/Pages/9,000AcresofLand.aspx](http://www.clarkcountynv.gov/Depts/admin_services/laughlindev/Pages/9,000AcresofLand.aspx)

South of Laughlin is a site also known as Southland comprising 9,000 acres. The Southland site was federal land that has been turned over to Clark County and the City of Laughlin for development. Although no specific plans have been finalized for this site, RCG recently prepared a highest and best use analysis for Southland<sup>6</sup>. This analysis determined that the area should include a mix of residential, Commercial and Industrial uses with development occurring over a series of phases spread across multiple years. Recently, RCG also prepared a report on Southland for the Clark County Department of Real Property. Our report identified several target industries that would be suitable for operating at this location. These industries include: Transportation and Warehousing (Logistics), Manufacturing, Renewable Energy and Healthcare.

According to RCG's study, development on this site has several strengths and weaknesses. The strengths include:

1. The site's size: At nearly 9,000 acres, this area can be subdivided into parcels that can satisfy both the immediate and long-term needs of Southern Nevada. However, a full engineering analysis must be performed to determine the exact amount of land that is developable.
2. Proximity to Las Vegas, Phoenix, and Southern California: Laughlin is centrally located in the Tri-State area and is in close proximity to the US 93, US 95 and I-40.
3. Low-Tax Climate: Nevada is currently one of the best states in which to do business, ranking third in the Tax Foundation's 2014 ranking of State Business Tax Climates.

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<sup>6</sup> [http://www.clarkcountynv.gov/Depts/admin\\_services/laughlindev/Documents/LaughlinAmendedPlan0907.pdf](http://www.clarkcountynv.gov/Depts/admin_services/laughlindev/Documents/LaughlinAmendedPlan0907.pdf)

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Weaknesses include:

1. Limited Supply of Labor: The semi-rural area would need a significant investment in time and resources to train a workforce for a large-scale economic activity such as Manufacturing and Logistics.
2. Limited Higher Education in Laughlin: There is currently no college campus in Laughlin. There are, however, community colleges in Bullhead City, AZ, and Needles, CA, as well as a Northern Arizona University satellite campus in Bullhead City, AZ. These campuses offer limited programs, though, so development plans would need to include opening a nearby College of Southern Nevada campus with industry-specific programs.
3. Transportation and Utility Improvements Needed: There is currently only one bridge crossing the Colorado River that connects Laughlin and Bullhead City. A second bridge has been in the planning phase for quite some time but until construction actually begins, transportation between the two cities will be limited. In addition, the Needles Highway is in drastic need of renovations and repair. Rail access to the site is non-existent, and major investments in utilities such as water, power, gas, phone, internet and cable will be needed to support any major development.

### *Henderson Limited Transition Area*

<http://www.gpo.gov/fdsys/pkg/CRPT-110srpt294/html/CRPT-110srpt294.htm>

<http://www.colliersparish.com/attachment.aspx?articleid=114217>

In 2010, the City of Henderson (“COH”) entered into an agreement with the BLM to develop a vacant land parcel of 502 acres for employment land uses. The parcel was named “Limited Transitional Area” (“LTA”). It is located at the south end of the Las Vegas Valley and south of the Henderson Executive Airport. According to the COH:

“The Limited Transition Area (LTA) is 502 acres of land established through the Omnibus Public Land Management Act of 2009, which was signed by President Obama on March 30, 2009. The Act directs the U.S. Secretary of the Interior to convey the land from the Bureau of Land Management (BLM) to the City of Henderson (herein referred to as “the City”). The Act stipulates that the City may sell, lease, or otherwise convey any portion of the LTA for non-residential development.”

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The COH foresees that the LTA will become a business and employment center. The first phase of the LTA (170 acres) was sold to a group led by Panattoni Development Company approximately two years ago to develop as master planned Industrial park. The anchor tenant is Federal Express. The proposed development program is 14 buildings with nearly two million square feet, including a 300,000-sf distribution center for Federal Express. The project is named "South15 Airport Center".

### ***Southern Nevada Strong Opportunity Sites***

In addition to the areas noted above, SNS has identified four "Opportunity Sites" for which detailed market analysis, including opportunities and barriers to development, conceptual land use plans and regulatory recommendations were developed. The strategies developed showcase the benefits of the Regional Plan and are replicable for similar sites and corridors in the Las Vegas Valley. These sites have the potential to be redeveloped and repositioned to support additional employment density and potentially attract businesses within the target industries. For more information on the Opportunity Site works see the following documents:

#### ***Boulder Highway***

<http://www.southernnevadastrong.org/files/managed/Document/364/SNS%20Boulder%20Highway%20Final.pdf>

#### ***LV Medical District***

<http://www.southernnevadastrong.org/files/managed/Document/363/Tina%20SNS%20Medical%20District%20Final.pdf>

#### ***Downtown North Las Vegas***

[http://www.southernnevadastrong.org/files/managed/Document/376/NorthLasVegas\\_Implementation\\_Strategies\\_Report\\_120314.pdf](http://www.southernnevadastrong.org/files/managed/Document/376/NorthLasVegas_Implementation_Strategies_Report_120314.pdf)

#### ***Maryland Parkway Corridor***

[http://www.southernnevadastrong.org/files/managed/Document/377/SNS\\_Maryland%20Parkway%20Implementation%20Strategy\\_Low%20Res\\_1.13.15.pdf](http://www.southernnevadastrong.org/files/managed/Document/377/SNS_Maryland%20Parkway%20Implementation%20Strategy_Low%20Res_1.13.15.pdf)

### **The Question of Water Availability**

As part of its research for this report, RCG requested and obtained information from the Southern Nevada Water Authority on the question of water availability to service the group of large Employment Land areas discussed above. Below is the Authority's response to RCG's information request:

"The issue of water in Clark County is a complex one. The majority (97 percent) of the county's residents and businesses are served by municipal water providers who rely

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upon Nevada's share of Colorado River resources within Lake Mead. The municipal water providers include the Las Vegas Valley Water District, Big Bend Water District and the cities of Henderson, North Las Vegas and Boulder City. These purveyors, along with two local wastewater agencies, are members of the Southern Nevada Water Authority, the regional organization that manages Southern Nevada's water resources and plans for the community's current and long-term water demands.

Drought in the desert Southwest has become an issue of national concern. Increasing demands and dwindling supplies have fueled discussion and have resulted in extraordinary conservation efforts, technologies and partnerships to modernize how water is utilized and shared. Southern Nevada is no exception: the community has decreased consumptive water use by one-third since 2002 despite a population increase of 480,000 people during that time. Per capita water consumption decreased by nearly 40 percent during that period. Despite recent successes, Southern Nevada will continue to see returns on its conservation efforts, which will produce further reductions in water use.

Nevada can consumptively use 300,000 acre-feet of Colorado River water in a single year (one acre-foot can sustain 3.4 Southern Nevada single-family homes annually). Last year, the community consumed approximately 220,000 acre-feet. Assuming development remains sustainable and efficient, the Las Vegas Valley metropolitan area can accommodate a multitude of new industries.

The Nevada State Engineer is responsible for issuing groundwater permits within Nevada. Those residents and businesses that are not served by a local water purveyor maintain a groundwater permit and pump local groundwater supplies to meet demands. The majority of hydrographic basins within Clark County are fully appropriated; it is not anticipated that the Nevada State Engineer would issue new groundwater permits to access groundwater resources. Therefore, water availability in areas outside the Las Vegas metropolitan area is limited to their proximity to the regional water system or conversion of existing water uses. Specific details are included below.

### **Apex Industrial Park in North Las Vegas**

The Apex Industrial Park remains largely undeveloped and is governed by a water system master plan, which identifies a method of service to this area from the City of North Las Vegas distribution system. Infrastructure including transmission lines and pumping stations would be required to serve the area.

Groundwater supplies are near full appropriation; it's unlikely that groundwater is a viable alternative to meet future water demands in the area.

### **Las Vegas Speedway area in North Las Vegas**

The City of North Las Vegas serves the Las Vegas Speedway area, water transmission and distribution pipelines exist in the area. Water is available for any proposed developments with moderate water infrastructure improvements.

### **UNLV North Campus in North Las Vegas**

The UNLV North Campus can be separated into three segments. The area north of Lamb Boulevard is near existing water transmission and distribution pipelines maintained by the City of North Las Vegas. The remaining segments, both located south of Lamb Boulevard, require infrastructure improvements to provide water service for

## **SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS**

development projects. Once connected to the municipal system, a local water purveyor would provide water service.

### **UNLV Harry Reid Research and Technology Park**

This area located near I-215 and Durango Drive is in the southwest area of the LVVWD water system. Water transmission and distribution pipelines exist in this area. Water is available for any proposed developments with minimal water infrastructure improvements.

### **Boulder City Airport and Desert Rock Drone Testing**

The City of Boulder City provides water service to the Boulder City Airport. Water transmission and distribution pipelines exist and sufficient water supplies are available for most development proposals, including light industrial use.

The Desert Rock area is near a U.S. Department of Energy (DOE) private-use airfield adjacent to the government installation known as Mercury, which is associated with the Nevada National Security Site. Mercury is managed by the DOE and water service is provided by groundwater wells operated by the federal government. Water availability in the area would be subject to federal approval.

### **Ivanpah area near Primm, Nevada**

Service to this area would require extending facilities from the southernmost portion of the Las Vegas Valley Water District's water system. When connected, a sufficient water supply would be available for most proposed developments. Groundwater supplies are fully appropriated; it's unlikely that groundwater is a viable alternative to meet new water demands in the area.

### **The Fort Mohave "Southland" site, south of Laughlin**

Water service to this area would require new infrastructure and connection to the Big Bend Water District. Depending on the method of service, water treatment may be required along with a water transmission pipeline. Once constructed, Colorado River supplies would meet demands and would be able to support most commercial and industrial operations.

### **1998 Southern Nevada Public Land Management Act ("SNPLMA")**

The Clark County Cooperative Management Area is located within the LVVWD distribution system. Water transmission and distribution pipelines exist, and sufficient water supplies are available for most proposed development in this area with minimal water infrastructure improvements.

### **Henderson Limited Transition Area**

Water service would be available from the City of Henderson for the Henderson Limited Transition Area, located south of the Henderson Executive Airport and west of the master-planned community of Sun City Anthem. While sufficient water supplies are available for most proposed development in this area, major infrastructure improvements may be necessary to accommodate long-term demands including a new lateral.

### **Tule Springs National Monument Land Bill**

The Tule Springs bill includes a right of way for a future transmission lateral to serve the northwest portion of the valley and the economic development areas created by the

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bill. There are sufficient water resources available for these areas but significant new capital infrastructure would be required to extend water service to those areas.”

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### SECTION V: EMPLOYMENT LAND ANALYSIS-EMPLOYMENT GROWTH FORECASTS

Using the selected target industries provided by GOED, RCG has identified all occupations employed in these industries (see Appendix 3). These occupations can either be specific to an industry, such as aerospace engineers who are generally hired by the Defense & Unmanned Aerial Systems industry, or those that can be hired across all industries, such as accountants and managers. RCG also identified the total number of jobs across “All Industries” in Southern Nevada to estimate what percentage of total job growth the target industries represent.

The data RCG has assembled and used herein has been provided by GOED from data the agency obtains from Economic Modeling Specialists Intl. (“EMSI”). EMSI specializes in labor market forecasts at a detailed occupational level. Its proprietary forecast is prepared by using more than 90 data sources and is widely used and accepted in both the private and public sectors.

Because of the manner in which businesses report their labor data, we are not including any occupation in this report in which there are less than either 50 or 100 persons currently employed in the entire industry. RCG has determined that for these minor occupations, the error in reporting is often greater than the value of including them in our forecast. The 50 or 100 job cutoff standard changes depending on the industry. For example, the Clean Energy and Defense & Unmanned Aerial Systems industries employ fewer people, but those positions are more integral to their fields, such as electrical engineers, so our cutoff for that industry is all jobs with 50 or more people employed in each occupation. The Healthcare industry, on the other hand, employs such a large number of persons that the statistical errors created from misrepresenting the number of jobs for those minor occupations outweigh any benefit to including them. They are therefore omitted from the list; we included only Healthcare-specific occupations with 100 or more people employed.

For the total employment estimates across all industries in Clark County, data for specific occupations were not available. Instead, an estimate of each individual industry, with total employees in each industry was reported. These total estimates include the seven (7) target industries. Therefore, they represent a complete estimate of all of the projected job growth in Clark County. When working with this dataset, RCG omitted small industries with 100 or fewer employees. These industries represented only about one percent of the total

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employment in Clark County, and as mentioned above for the occupational data, the margin of error for these smaller industries is greater than the value of including them.

The EMSI data reports the employment estimates for 2014, and then forecasts these estimates out to 2024. In order to bring our forecast more in line with the SNS timeline of 2035, RCG applied the projected 10-year growth rate (12.3 %) between 2014 and 2024 through 2034. Additionally, RCG applied the industry-specific forecasts developed by EMSI for the 2014-2024 period to the 2024-2034 period. For example, between 2014 and 2024, EMSI projects the total number of jobs in the Healthcare industry to grow by 20.92%. Therefore, RCG applied this growth rate to 2024-2034 period for the Healthcare Industry.

From this data set, RCG has developed three (3) job growth scenarios: low, mid and high. The EMSI forecast has been used as the mid growth scenario. The low growth scenario reduces the EMSI forecast by 25 percent, while the high growth scenario increases the EMSI forecast by 25 percent. The results of our employment growth scenarios are illustrated in Table V-1 below.

**Table V-1: Target & All Industries Employment Growth Scenarios  
2014-2034 Employment Change (# of Employees)**

<b>Target Industry</b>	<b>Low Growth (25% Reduction)</b>	<b>Mid Growth (EMSI Forecast)</b>	<b>High Growth (25% Increase)</b>
1. Healthcare	24,206	32,274	40,343
2. IT	12,867	17,157	21,446
3. Finance	22,759	30,346	37,932
4. Industrial & Manufacturing	2,926	3,901	4,876
5. Logistics & Operations	8,788	11,718	14,647
6. Clean Energy	1,257	1,676	2,095
7. Defense & Unmanned Aerial Systems	897	1,196	1,495
<b>Target Industry Emp. Change</b>	<b>73,701</b>	<b>98,268</b>	<b>122,834</b>
<b>All Industries Total Employment Change</b>	<b>172,286</b>	<b>229,714</b>	<b>287,143</b>

*Source: EMSI.*

It is important to understand that even a sophisticated forecasting model, such as EMSI's, is subject to error. This is especially true when trying to predict occupations 10 or more years into the future. A host of variables can impact the local, national and even global economies and significantly alter actual employment growth. In addition, certain current and possible future events in Nevada have the potential to significantly impact certain industries.

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For example, as previously noted, Nevada has been recently named one of six states authorized to conduct testing in the Defense & Unmanned Aerial Systems industry. Nevada state officials project that this can potentially grow the industry by up to 15,000 additional jobs. However, until more detailed plans are released, it is not appropriate to include them in an Employment Land analysis.

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### SECTION VI: EMPLOYMENT LAND ANALYSIS:-COMMERCIAL & INDUSTRIAL LAND ALLOCATION

RCG has calculated the share of jobs for each target Industry that will potentially occur on land zoned for Commercial (i.e. office, non-retail) use, as well as what share of new jobs will potentially occur on land zoned for Industrial use. RCG has achieved this by analyzing which sub-industries make up each of the seven (7) target industries and determining how much Commercial and Industrial land each these sub-industries will potentially need. For example, the Industrial & Manufacturing target industry will primarily require Industrial land, while the Logistics & Operations may be split between Commercial and Industrial land.

RCG first identified all sub-industries that fall within this report's target industries. For example, the Industrial & Manufacturing target industry includes sub-industries such as heavy and light manufacturing. The Clean Energy target industry includes electric generating plants, as well as recycling collection centers. For the purposes of this report, any business related to the target industry is included in the Analysis. See Appendixes 1 and 2 for a sample list of some of the sub-industries below. (For purposes of providing an example, these appendix Figures show only a portion of the information provided by the Cities of Las Vegas and Henderson. For the purposes of this report, however, multiple municipalities in Southern Nevada across all target Industries all been examined.)

RCG also reviewed the various municipal zoning codes to determine what kind of land these target industries will require - either Commercial or Industrial. Certain sub-industries can operate on both types of land. For example, within the Industrial & Manufacturing target industry, the Light Assembly & Fabrication sub-industry can operate on Industrial land as well as certain Commercial land. If a sub-industry can operate under Commercial and Industrial zoning, it is counted in the Analysis as two separate sub-industries. RCG has assumed that some of these companies will only want to operate on Commercial land, while others will prefer Industrial land. Therefore, we split this sub-industry between Commercial land and Industrial land.

The percentage allocation that RCG assigned to Industrial land and Commercial land has been accomplished by giving each sub-industry the same weight within the target Industry. By weighing the data in this manner, we ensure that no one sub-industry artificially demands more land than the others. For example, if there are nine (9) different sub-industries in a target Industry and all of them can operate on Industrial land, and if one of

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these sub-industries can *also* operate on Commercial land, it is herein assumed that there is a total of 10 sub-industries (nine Industrial-using and one Commercial-using). Stated another way, within those 10 sub-industries, it would herein be assumed that 90 percent of the land demand is for Industrial and 10 percent of the land demand is for Commercial.

Further statistical adjustments have been made in order to ensure a realistic understanding of the potential distribution between Commercial and Industrial land uses. For example, following the methodology outlined above, the Finance industry would theoretically have 40 percent of its land use allocated towards Industrial land. RCG has determined that this allocation is not realistic, and that the vast majority of the Finance industry will likely operate on Commercial land. Therefore, we carefully reviewed and adjusted each sub-industry in order to ensure that allocations were reasonably applied.

It is important to note that the local jurisdictions do not have the same zoning districts/categories. For example, in the Las Vegas Zoning Code, there are six (6) commercial zoning districts, while in North Las Vegas there are only three (3), and in the City of Henderson there are thirteen (13). However, for purposes of this report, RCG is generally allocating jobs to Commercial land or Industrial land, making our approach appropriate across municipalities.

After creating a list of sub-industries for each target Industry and determining which ones can be accommodated under Commercial zoning, Industrial zoning, or both types of zoning, RCG calculated what share of the seven (7) target industries will potentially operate on Industrial land and what share will potentially operate on Commercial land 20 years in the future (2034). This allocation is then used to determine how many jobs will occur on Industrial and Commercial land for each target Industry, using the employment growth scenarios described below.

For reference purposes, RCG estimated the amount of land projected to be needed by All Industries in Clark County through 2034. We estimated the percentage of employees for the total employment in Clark County working on commercial and industrial land by applying the weighted average shares of the seven (7) target industries. The allocation and demand totals are shown in the figures below.

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Table VI-1 below shows the estimated zoning allocations of Commercial and Industrial space needed for each target Industry. For example, RCG estimated that in the Industrial & Manufacturing industry, 85 percent of the jobs will be located on Industrial land while only 15 percent of the jobs will be located on Commercial land.

**Table VI-1: Commercial & Industrial Zoning Allocation, by Target Industry**

<b>Target Industry</b>	<b>Commercial</b>	<b>Industrial</b>
1. Healthcare	40%	60%
2. IT	50%	50%
3. Finance	90%	10%
4. Industrial & Manufacturing	15%	85%
5. Logistics & Operations	45%	55%
6. Clean Energy	35%	65%
7. Defense & Unmanned Aerial Systems	40%	60%
<b>All Industries Total Allocation</b>	<b>57%</b>	<b>43%</b>

*Source: RCG Economics.*

When applying the Commercial and Industrial zoning allocations to the occupational forecasts discussed previously, RCG obtained the following results under each scenario.

**Table VI-2: Office & Industrial Employee Allocation: Low-Growth Scenario, 2014-2034**

<b>Target Industry</b>	<b>Office Employees</b>	<b>Industrial Employees</b>
1. Healthcare	9,682	14,524
2. IT	6,434	6,434
3. Finance	20,484	2,276
4. Industrial & Manufacturing	439	2,487
5. Logistics & Operations	3,955	4,834
6. Clean Energy	440	817
7. Defense & Unmanned Aerial Systems	359	538
<b>Target Industries Total</b>	<b>41,792</b>	<b>31,909</b>
<b>All Industries Total</b>	<b>97,694</b>	<b>74,591</b>

*Source: RCG Economics.*

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**Table VI-3: Office & Industrial Employee Allocation: Mid Growth Scenario, 2014-2034**

<b>Target Industry</b>	<b>Office Employees</b>	<b>Industrial Employees</b>
1. Healthcare	12,910	19,365
2. IT	8,578	8,578
3. Finance	27,311	3,035
4. Industrial & Manufacturing	585	3,316
5. Logistics & Operations	5,273	6,445
6. Clean Energy	586	1,089
7. Defense & Unmanned Aerial Systems	478	717
<b>Target Industries Total</b>	<b>55,723</b>	<b>42,545</b>
<b>All Industries Total</b>	<b>130,259</b>	<b>99,455</b>

*Source: RCG Economics.*

**Table VI-4: Office & Industrial Employee Allocation: High Growth Scenario, 2014-2034**

<b>Target Industry</b>	<b>Office Employees</b>	<b>Industrial Employees</b>
1. Healthcare	16,137	24,206
2. IT	10,723	10,723
3. Finance	34,139	3,793
4. Industrial & Manufacturing	731	4,145
5. Logistics & Operations	6,591	8,056
6. Clean Energy	733	1,361
7. Defense & Unmanned Aerial Systems	598	897
<b>Target Industries Total</b>	<b>69,653</b>	<b>53,181</b>
<b>All Industries Total</b>	<b>162,824</b>	<b>124,319</b>

*Source: RCG Economics.*

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## Section VII: Employment Land Analysis: Demand Forecast

RCG's next task in the Analysis is to estimate what the potential future demand trends will be in 2034 in Clark County. In order to calculate how much developable Employment Land is necessary to accommodate the targeted industries, RCG has conducted a literature review for the two types of Employment Land that are the subject of our report, Commercial and Industrial. A summary of our results is shown below, followed by a more detailed description of our methodology and sources.

We have first estimated employment densities (i.e., square feet of building space per employee), shown below. These estimates have been developed, based on information discussed in next section, *Commercial Land*.

- # Commercial (i.e. office): 260 sf/employee
- # Industrial: 1,033 sf/employee

RCG has also estimated the amount of land needed to accommodate the forecasted employees, by target Industry and growth scenario, using overall floor area ratios ("FAR") (see *Commercial Land* section) for the two land use categories. We have used the following two FARs:

- # Commercial: 0.42
- # Industrial: 0.41

A FAR is defined herein as the total square feet of a building divided by the total square feet of the parcel the building is sitting on. This accounts for things like landscaping and parking requirements; therefore, the higher the FAR, the more dense a project or development. These FARs, in combination with the square feet of building per employee, determine the amount of acreage that will be potentially required to accommodate the employment forecasts, which are also calculated in this task.

After applying the building sf per employee ratio to the FAR, as well as applying additional adjustments to account for roads and utilities and a standard market vacancy rate adjustment, RCG came up with a total land per employee ratio, measured in acres:

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- # Commercial: 0.0188 acres/employee
- # Industrial: 0.0777 acres/employee

This ratio can also be expressed as acres per employee (rounded):

- # Commercial: 53 employees/acre
- # Industrial: 13 employees/acre

### ***Commercial Land***

As noted above, RCG has conducted a literature review to estimate a reasonable ratio of sf of building area per worker. Although we reviewed a variety of sources, the estimates used herein for the Commercial (i.e. Office) land have been obtained primarily from the academic paper, *"Estimating Office Space per Worker"* by Norm Miller, Ph.D., of the Burnham-Moores Center for Real Estate at the University of San Diego, dated March 20, 2012. This paper estimates the amount of space used by office workers in the U.S. and a variety of markets, including Las Vegas. It should be noted that the paper does not address the issue of industrial operations and related employees working in office buildings.

While a small portion of industrial operations may occur on Commercial land, for the purposes of this land analysis RCG is assuming that only general office buildings/uses will be developed on the Commercial land. Therefore, we have assumed that the target industries likely to be located on Commercial land will adhere to the same building sf per worker ratio of 260 sf (a detailed explanation of our reasoning follows below).

Dr. Miller finds that many models assume 200 to 250 sf per worker without supporting those assumptions with underlying evidence. In fact, his research shows that actual sf per worker ratios are higher than these estimates. There are two primary reasons why estimates are higher than what is generally being modeled and reported. First, corporate real estate managers usually report a target of 185 sf (or less) per worker, but these targets are based on full capacity plans that maximize the efficiency of the building and which rarely occurs.

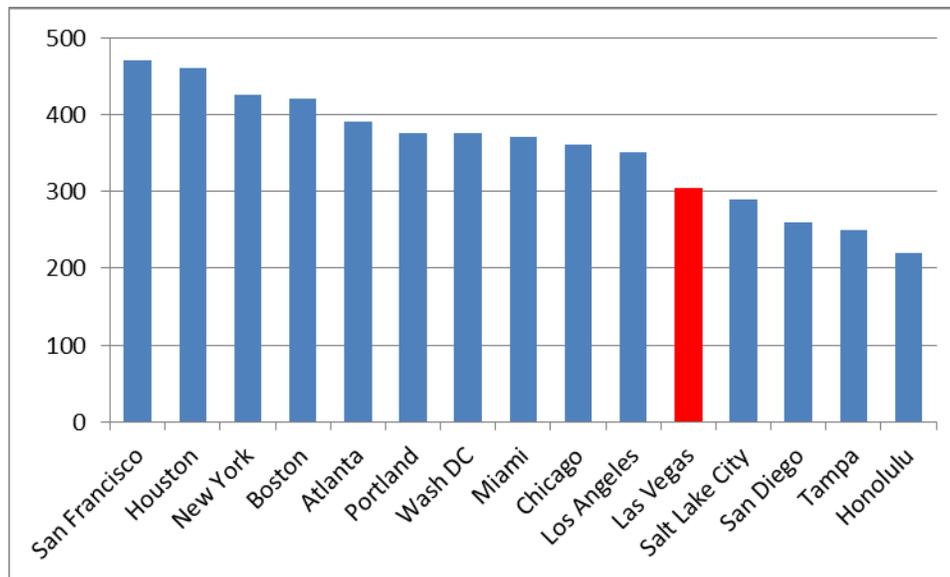
Also, tenants may calculate a sf per worker ratio using only their useable space, which does not include areas of an Office building such as common area restrooms, supply closets and hallways, and building support structures like load-bearing columns. The landlord of that building may well calculate the sf per worker by using the total rentable sf, which includes

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the above building characteristics and considerations and thus artificially increases the sf per worker ratio.

The Miller paper includes a chart (Chart 12 below) that shows sf per worker estimates in 2010 for 15 major U.S. cities, including Las Vegas. We have replicated this chart below. As illustrated, the average sf per employee in Las Vegas is slightly higher than 300 sf. This estimate is the fifth lowest on the list of 15 major U.S. cities surveyed. Four (4) of the 15 cities have a sf per worker ratio above 400, and none of the cities are less than 200 sf per worker. Again, this is for Office space only; Industrial space is not included.

**Chart VII-1: Square Feet per Employee by U.S. Market**



*Source: Burnham-Moore Center for Real Estate at the University of San Diego, 2012.*

During 2010, many urban office markets, especially Las Vegas, were still feeling the effects of the Great Recession. For example, in 2010 Las Vegas had an average monthly “headline” unemployment rate above 14 percent (per the Nevada Dept. of Employment, Training and Rehabilitation). Dr. Miller’s research shows that many firms are locked into long-term leases, so – while they can easily reduce staff – they are still stuck in the same building, causing their sf per worker ratio to rise during periods of economic downturn.

The Miller paper concludes that today and moving forward, gross building sf per employee ratios should fall within the 260 to 280-square-foot range. This is an average for all office workers across the U.S. Because the Las Vegas region has one of the lower sf per worker

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ratios listed in the chart, RCG is herein using the 260 sf per worker estimate. While this estimate may seem high to some in the Southern Nevada commercial development and brokerage community, it is important to note that this estimate uses rentable square feet, which as noted above includes more space than the usable square feet ratio.

RCG is using FARs calculated by Graphing Parking (<http://graphingparking.com/>). This website publishes information about parking requirements across the United States According to Graphing Parking, Las Vegas office space typically requires 136,500 sf of parking lot space, including aisles and other land, for every 100,000 sf of office building space. Therefore, a total parcel size of 236,500 sf would support a building with 100,000 sf of space. This represents a FAR of 0.42 resulting in land requirement of 0.0142 acres per office employee.

For example, the following calculation shows that 1,000 Commercial (Office) employees will require the following amount of building space before adjusting upward for offsite improvements:

*1,000 office workers X 260 rentable sf per employee = 260,000 occupied sf  
÷ .90 occupancy factor = 288,889 sf of total building  
÷ an FAR of 0.42 and then ÷ by 43,560 (sf feet in an acre)  
= 15.8 total acres of land required onsite.*

*This estimate then has to be adjusted upward to account for off-site improvements. Our research indicated a 20 percent adjustment. Therefore, 15.8 acres X 1.20 = 18.9 acres needed to support 1,000 workers (or 823 square feet of land per worker).*

RCG's experience in the field of real estate research and economics and our research for this Analysis suggests that further adjustments should be made in developing reasonable land supply estimates. This includes adjustments for offsite roads, open space, and utility systems. Additionally, buildings are rarely at/over 100 percent occupied; therefore, an occupancy rate factor has been included. In conducting our research, RCG determined that a general adjustment of 20 percent and a generally accepted rate of 90 percent occupancy are reasonable.

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Using the above methodologies, RCG has calculated the amount of land potentially demanded in Clark County in 2034, using the employee forecast from Task 2.

Using the data in Tables VI-2, VI-3 and VI-4 above, we created Table VII-1 below. This Table illustrates the calculations developed by RCG to estimate land demand for the totality of the seven (7) target industries. Applying the same methodology, RCG also calculated the total land potentially needed by All Industries in Clark County. While the steps in the All Industries calculations are not displayed, the grand totals are shown at the bottom of the tables below.

**Table VII-1: Cumulative Commercial (Office) Land Demand Forecast: 2034 (# of Additional Acres), Target & All Industries**

<b>Metric/Factor</b>	<b>Low Growth Scenario</b>	<b>Mid Growth Scenario</b>	<b>High Growth Scenario</b>
# of Workers for Target Industries	41,792	55,723	69,653
Times Space per Worker (Sf)	260	260	260
Equals Total Occupied Space (Sf)	10,865,889	14,487,851	18,109,814
Occupancy Adjustment (90%) (Sf)	12,073,210	16,097,613	20,122,016
Divided a FAR (rounded)	0.42	0.42	0.42
Total developed land (Sf)	28,745,737	38,327,649	47,909,562
Equivalent Acres	660	880	1,100
Offsite adjustment	20%	20%	20%
<b>Target Industries Total (Acres)</b>	<b>792</b>	<b>1,056</b>	<b>1,320</b>
<b>All Industries Total (Acres)</b>	<b>1,851</b>	<b>2,468</b>	<b>3,085</b>

*Source: RCG Economics.*

According to Table VII-2, below, if Southern Nevada achieves the Mid Growth employment scenario, the seven (7) target Industries will potentially need approximately 1,056 acres, or 53 acres of land per year, by 2034.

RCG also prepared a similar table showing the amount of land each of the seven (7) target Industries will potentially need over the next 20 years (see Table VII-2 below).

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**Table VII-2: Cumulative Commercial (Office) Demand Forecast: 2034 (# of Additional Acres)  
Target & All Industries**

<b>Target Industry</b>	<b>Low Growth Scenario</b>	<b>Mid Growth Scenario</b>	<b>High Growth Scenario</b>
1. Healthcare	183.5	244.6	305.8
2. IT	121.9	162.5	203.2
3. Finance	388.1	517.5	646.9
4. Industrial & Manufacturing	8.3	11.1	13.9
5. Logistics & Operations	74.9	99.9	124.9
6. Clean Energy	8.3	11.1	13.9
7. Defense & Unmanned Aerial Systems	6.8	9.1	11.3
<b>Target Industries Total</b>	<b>792</b>	<b>1,056</b>	<b>1,320</b>
<b>All Industries Total (Acres)</b>	<b>1,851</b>	<b>2,468</b>	<b>3,085</b>

*Source: RCG Economics.*

### ***Industrial Land***

Information used herein by RCG for sf of space per employee ratio for Industrial land primarily has primarily come from two research papers published by the National Association of Industrial and Office Parks (“NAIOP”). The first paper (2013), *“Stabilization of the U.S. Manufacturing Sector and Its Impact on Industrial Space”*, reported sf per worker ratios for a wide range of manufacturing industries, such as electrical equipment, transportation equipment, petroleum and coal, and other manufacturing sectors, all of which operate on Industrial land. The second research paper (2010), *“Logistics Trends and Specific Industries that Will Drive Warehouse and Distribution Growth and Demand for Space”* focused on the Logistics & Operations Industry.

While NAIOP’s manufacturing paper was published in 2013, its sf per worker estimates were prepared in 2006. Although Industrial & Manufacturing is one of the target industries in the Analysis, the range of manufacturing industries included in this NAIOP paper touched on other target industries as well. These industries relate to IT, Industrial & Manufacturing, Clean Energy and Defense & Unmanned Aerial Systems.

For the purposes of this report, RCG has used an average sf per employee across all of these Industries. This results in an estimated 957 sf of gross building space per manufacturing worker on Industrial land. A table showing NAIOP’s sf per worker estimates is shown below. The weighted average gross building sf per employee assumes that five (5) of the targeted industries – Healthcare, IT, Industrial & Manufacturing, Clean Energy and Defense & Unmanned Aerial Systems – will use the manufacturing-related 957 sf per worker ratio.

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NAIOP's 2010 logistics paper uses 2003 data to estimate the sf of space per worker. This paper includes data on wholesalers and warehousing & storage companies. Although these data are older than what have been reported in the manufacturing paper, the paper does have a breakdown of sf per worker estimates for four (4) regions in the U.S., including a West region, which is what RCG used for its Southern Nevada estimates. NAIOP estimated that the West region has a sf per worker ratio of 1,598 sf of gross building sf for each worker in the Logistics & Operations industry.

For the Finance industry, there will primarily be two types of operations occurring on Industrial land: warehouses, for the purposes of storing statutorily-required historical financial records, and call centers. RCG calculations for purposes of this report show warehouse facilities using the 1,598 sf ratio while the call centers will use a 100 sf per worker Commercial ratio (Miller, pg. 22). An average of the two results in an 849 sf per worker estimate. A weighted average of all the target Industries results in a 1,033 gross building sf per employee.

Additionally, according to research available at the City of Mountain View, California, website, as well as an *Employment Density Study* prepared for the Southern California Association of Governments in 2001, the average Industrial FAR is different than the Commercial FAR. We have used information in the latter study for our Industrial land FARs. Although there are fewer employees and customers parking at industrial-related buildings, parking lots of this type typically require enough space to accommodate large trucks.

For the purposes of the Analysis, RCG is assuming a FAR of .35 for the five (5) manufacturing-related industries mentioned above, and a FAR of .55 for the Logistics & Operations and Finance industries. The weighted average of these two FAR's is 0.407.

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For example, 1,000 Industrial employees will require the following amount of land:

*1,000 industrial workers X 1,033 rentable sf per employee = 1,033,000 occupied sf  
 ÷ .90 occupancy factor = 1,147,778 sf of total building  
 ÷ a FAR of 0.407 and then ÷ by 43,560 (sf feet in an acre)  
 = 64.7 total acres of onsite land required.*

*This estimate has to be adjusted upward to account for off-site improvements. Our research indicated a 20 percent adjustment. Therefore, 64.7 acres X 1.20 = 77.7 acres needed to support 1,000 workers.*

With an Industrial land requirement of 0.0777 acres per industrial-related employee, RCG has projected the amount of Industrial land that will be potentially demanded in the Las Vegas Valley in 2024, using the forecasted number of employees from Section 4. Table 8 below shows the results from our model.

**Table VII-3: Cumulative Industrial Demand Forecast: 2034 (# of Additional Acres)  
 Target & All Industries**

<b>Metric/Factor</b>	<b>Low Growth Scenario</b>	<b>Mid Growth Scenario</b>	<b>High Growth Scenario</b>
# of Workers for Target Industries	31,909	42,545	53,181
Times Space per Worker (Sf)	1,033	1,033	1,033
Equals Total Occupied Space (Sf)	32,966,369	43,955,158	54,943,948
Occupancy Adjustment (90%) (Sf)	36,629,299	48,839,065	61,048,831
Divided a FAR (rounded)	0.407	0.407	0.407
Total developed land (Sf)	89,966,698	119,955,598	149,944,497
Equivalent Acres	2,065	2,754	3,442
Offsite adjustment	20%	20%	20%
<b>Target Industries Total Acres</b>	<b>2,478</b>	<b>3,305</b>	<b>4,131</b>
<b>All Industries Total (Acres)</b>	<b>5,794</b>	<b>7,725</b>	<b>9,656</b>

*Source: RCG Economics.*

According to Table VII-3, if Southern Nevada achieves the Mid Growth employment scenario, the seven (7) target Industries will potentially need approximately 3,300 acres, or about 165 acres of land per year, by 2034.

RCG also prepared a similar table showing the amount of land each target Industry will potentially need over the next 20 years (see VII-4 below).

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**Table VII-4: Cumulative Industrial Demand Forecast: 2034 (# of Additional Acres)  
Target & All Industries**

Target Industry	Low Growth Scenario	Mid Growth Scenario	High Growth Scenario
1. Healthcare	1,128.1	1,504.1	1,880.1
2. IT	499.7	666.3	832.9
3. Finance	176.8	235.7	294.6
4. Industrial & Manufacturing	193.2	257.6	321.9
5. Logistics & Operations	375.4	500.6	625.7
6. Clean Energy	63.4	84.6	105.7
7. Defense & Unmanned Aerial Systems	41.8	55.7	69.7
<b>Target Industries Total</b>	<b>2,478</b>	<b>3,305</b>	<b>4,131</b>
All Industries Total (Acres)	5,794	7,725	9,656

Source: RCG Economics.

While RCG has been retained only to identify future Employment Land requirements of the selected targeted Industries in Southern Nevada, and whether there is enough developable land to meet these needs, not all of the Valley’s employment growth will occur on vacant land. Many of the region’s existing businesses, as well as some new businesses, especially in the Office sector, may expand and hire workers using the existing inventory of space. These expansions will therefore not necessarily require the construction of new office space, at least for the foreseeable future.

RCG’s research shows that based on the last 10 years’ worth of quarterly absorption there is just less than seven (7) years of vacant office space available in the Las Vegas Valley. before the market reaches a stabilized vacancy rate of 10 percent. In addition, a share of second and third generation individual office buildings and projects will likely be renovated and adapted to support additional workers.

The state of Oregon’s *Industrial and Other Employment Lands Analysis Vision Guidebook* shows that a good general rule is that 10 percent to 15 percent of forecasted job growth will occur in existing developments. However, as noted above, our data omitted all occupations with fewer than 50 or 100 people (depending on the industry), and we are analyzing all office and industrial-related sectors. For this reason, we believe that any job growth occurring in existing buildings and projects will be offset by the additional jobs that have been excluded from our data set. Therefore, RCG is assuming that all of the employment estimates discussed above will be requiring vacant land.

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### Section VIII: Employment Land Analysis: Supply Forecast

RCG has compared the Employment Land demand estimates calculated above to the estimated amount of suitably zoned Commercial and Industrial vacant land available in the future. The land supply data used herein is for the Las Vegas Valley and has been provided by the Regional Trade Commission of Southern Nevada ("RTC")<sup>7</sup>. *As such, RCG did not attempt to estimate the actual amount of developable acres in the geographic areas that are the subject of this report - Clark County and its urban component commonly known as the Las Vegas Valley.* The estimated future inventory estimates were prepared via a collaborative effort known as the Southern Nevada Regional Planning Coalition Land Use Workgroup ("the Workgroup"). Members include representatives of the Cities of Las Vegas, North Las Vegas, Henderson, Clark County and the RTC.

*Note: The RTC defines vacant lands as those that are coded "0" or that fall under one of the "700" codes in the Clark County Assessor's Land Use Data File. The method by which the RTC approached the process in 2010 was to apply adopted land use planning data to the Assessor's vacant land data. Areas of steep slope, forests, wildlife habitat areas, etc. were planned for an extremely low land use density/intensity. The population outcome of the process was then measured against the UNLV-CBER/REMI socio-economic forecasts as a control mechanism. According to RCG's research, the process came to within five percent of the 2030 REMI population forecast.*

The Workgroup prepared its forecast using the following methodology via a two-step process. First, it identified and estimated current and future land use development patterns in the Las Vegas Valley. Next, the Workgroup converted these patterns into "planning variables" that were used as inputs in a forecast model. While specific details of the model have not made public, the Workgroup started with the inventory of available vacant land as of 2010, which data came from the Clark County Department of Comprehensive Planning's 2010 Geographically Integrated Land Use Information System ("GILIS"). The Workgroup also used 2010 U.S. Census data, along with land use classifications, employment and population data from various sources such as the DETR and CBER.

The RTC data has been broken out in five-year periods, beginning with 2015-19, then 2020-24, 2025-29, 2030-34 and 2035-39. Each time period shows the amount of vacant land in

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<sup>7</sup> <http://www.rtcnv.com/mpo/plansstudies/rtp0930/docs/Appendix3%20-%20Regional%20Forecasts.pdf>

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the Las Vegas Valley that is forecasted to be developed. RCG has used data from the 2015-2019, 2020-2024, 2025-2029, and 2030-2034 time periods. This represents the supply of land that is potentially available to satisfy employment demand during the next 20 years.

*Note: While this supply analysis is confined to the Las Vegas Valley, our demand analysis covers employment growth throughout Clark County. The RTC does not maintain land supply data for the rural and exurban areas of Clark County, such as Boulder City, Mesquite, Primm or Laughlin. These areas also have the potential to attract companies and economic activity within the target Industries (see Section 8 below). Therefore, RCG's employment land supply analysis is a conservative estimate of the actual amount of vacant land that is potentially available for development in Southern Nevada over the long-term. Obviously, there exist current logistical challenges regarding the installation of wet and dry utility services, transportation access, and water availability in/to these areas. However, it is our assumption that as the economy continues to grow and development spreads to the more exurban and rural portions of Clark County, these outer areas will be part of the region's vacant land asset-base.*

**Table VIII-1: Inventory of Employment Land Projected to be Developed,  
Las Vegas Valley: 2015 - 2034 (# of Acres)**

Land Use	Commercial	Industrial
Time Period 1 (2015-2019)	378	2,988
Time Period 2 (2020-2024)	819	6,397
Time Period 3 (2025-2029)	516	2,647
Time Period 2 (2030-2034)	349	7,165
<b>Total (2015-2034)</b>	<b>2,063</b>	<b>19,197</b>

*Source: Regional Transportation Commission of Southern Nevada.*

### **Commercial Land**

Table VIII-1 above shows that by 2034, the RTC forecasts that there will be 2,063 acres of currently vacant land that will potentially be developed for Commercial (Office) uses. Table VIII-2 below shows the demand for land that was projected in Table VIII-1. RCG's Mid Growth employment scenario for the target industries calls for a demand of 1,056 acres of Commercial land by 2034, resulting in a "surplus" of 1,007 acres of commercial to accommodate other uses like retail, lodging and hospitality development:

*2,063 acres of supply – 1,056 acres of demand = an 1,007-acre surplus of land.*

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**Table VIII-2: Surplus/Shortage of Commercial (Office) Land, by Job Growth Scenario  
Amount Projected by end of 2034 (# of Acres)**

Target Industry	Low Growth Scenario (Acres)	Mid Growth Scenario (Acres)	High Growth Scenario (Acres)
Supply of Land - Las Vegas Valley (Table 10)	2,063	2,063	2,063
Target Industries' Demand of Land (Table 6)	792	1,056	1,320
<b>Target Industries Surplus/(Shortage) of Land</b>	<b>1,271</b>	<b>1,007</b>	<b>743</b>
Total Industries' Demand of Land (Table 6)	1,851	2,468	3,085
<b>Total Industries Surplus/(Shortage) of Land</b>	<b>211</b>	<b>(406)</b>	<b>(1,023)</b>

*Source: RCG Economics.*

*Note: As Table VIII-2 shows, the RTC data indicate there potentially is sufficient land in the Las Vegas Valley to accommodate the jobs projected in the seven (7) target industries in all three scenarios. However, RCG's projections show a potential shortage of land to accommodate **all** of the commercial employment growth under the definition used in this report. Again, this total also includes the seven (7) target industries. The land supply projections also assume that it will be legally, physically and financial feasible to provide an adequate level of utilities and transportation infrastructure to the 2,063 acres projected to be developed over the next 20 years.*

While RCG's analysis shows that there is potentially and hypothetically enough vacant land to support the three commercial growth scenarios, there are several points to keep in mind that can further increase the supply:

- First, the demand analysis herein applies to all of Clark County, while RCG was only able to obtain vacant land estimates for the Las Vegas Valley. As mentioned above, there are other several other exurban and rural areas in Southern Nevada that can potentially support the growth of the target and other Industries (see Section IV).
- Also, the Commercial land RCG was directed to assess covers only Office land, not retail, lodging-hospitality or any other kind of commercial land. There will be some number of office-related businesses within the target Industries that will opt to locate on retail land. For example, the Finance industry includes branches (and the employees) of banks and other types of lenders that are located in retail centers.

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- Finally, and as discussed above, the current vacancy rate for multi-tenant, speculative office space in the Las Vegas Valley (see Section 2) is above 21 percent, which is more than 9.2 million sf. A potentially significant share of new private sector office employment growth during the next 6.5 years will not need to occur exclusively on vacant land. Such growth can be accommodated in existing office buildings and projects, some of which will be torn down and rebuilt and some of which will be redeveloped for more intense office uses.
- However, as noted above, RCG omitted smaller industries with 100 employees or less. This was done due to the margin of error associated with the data collection and share of total jobs these industries represent. However, it may be possible that these industries can contribute to an even greater demand of employment land than we have projected. Again, It is important to note that the EMSI data is widely used, and the data omitted represented only a small fraction of the total employment estimates.

### *Industrial Land*

Table VIII-3 below shows RCG's analysis results after matching the projected demand for Industrial land during the next 20 years with the supply of Industrial land in the Las Vegas Valley (see also Table VIII-1). In this instance, the RTC data indicate that there will potentially be a sufficient inventory of developable Industrial land in the Valley to, not only support the expected growth of the seven (7) target Industries, but all other industries as well. Again, it is assumed herein that it will be legally, physically and financially feasible to provide an adequate level of utilities and transportation infrastructure to allow all of this land to developed.

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**Table VIII-3: Surplus of Industrial Land, By Scenario: 2034 (# of Additional Acres)**

Target Industries	Low Growth Scenario (Acres)	Mid Growth Scenario (Acres)	High Growth Scenario (Acres)
Supply of Land - Las Vegas Valley (Table 10)	19,197	19,197	19,197
Target Industries' Demand of Land (Table 8)	2,478	3,305	4,131
<b>Target Industries Surplus/(Shortage) of Land</b>	<b>16,718</b>	<b>15,892</b>	<b>15,066</b>
Total Industries' Demand of Land (Table 8)	5,794	7,725	9,656
<b>Total Industries Surplus/(Shortage) of Land</b>	<b>13,403</b>	<b>11,472</b>	<b>9,541</b>

*Source: RCG Economics.*

### Further Thoughts & Considerations

Not all developable land is “created equal” when it comes to topography, price, utility availability and transportation access. Furthermore, other factors can affect vacant land’s desirability as firms look to operate in certain areas of the Valley for a variety of reasons specific to their needs. All of this taken together may cause one or more situations in which a specific parcel of land necessary to attract a certain type of business is not available despite the appearance of Employment Land surplus in Southern Nevada. Section 8 below offers a further description of the factors that affect Employment Land’s desirability and development potential.

Other metro areas, such as Portland, Oregon, have conducted comprehensive land supply studies in an attempt to identify the legal, physical, and logistical particulars that may affect supply and demand across various Industries. These studies typically begin by taking an inventory of the total amount of Employment Land in the respective region and then analyzing the potential for the development of each parcel.

Considering the multitude of factors that can limit development, a comprehensive land supply analysis for Southern Nevada will at some point be necessary. For example, RCG briefly discussed the developable land in Apex in Section 3 of this report. Because this land is in close proximity to Nellis Air Force Base, the military may prevent certain areas of that land from being developed. Also, the cost of providing utilities such as water (estimated at \$100 million for that site) and sewer to that area may make some types of development too cost prohibitive. Only after a deeper, more specific analysis of this and all other developable

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land in the region will it be possible to more accurately determine how much Employment Land is realistically developable. Furthermore, the question of what truly is the inventory of developable land in Southern Nevada will also have to be assessed by time period, e.g., short, medium and long-term.

Although the focus of this Analysis is on the vacant land in the region, it has been noted and should not be forgotten that there are existing developed Employment Lands that can be redeveloped to accommodate additional workers. Some types of businesses may prefer to tear down and rebuild on existing developed land rather than relocate to vacant, greenfield areas. For example, the Las Vegas Strip is continually seeing redevelopment, such as the former Boardwalk Casino and other facilities that were demolished to make room for MGM Resort's Project City Center. The same can be said for Bellagio, the Wynn and the Venetian. If a comprehensive land analysis is undertaken (at the parcel level) and determines that there is a shortage of vacant employment land relative to the projected Commercial and Industrial job growth, then redevelopment and adaptive reuse will play a larger role in Southern Nevada's ongoing evolution as a major urban center in the Southwest U.S.

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### SECTION IX: THE SNS REGIONAL PLAN & ECONOMIC COMPETITIVENESS

During the SNS Regional Planning initiative and outreach process, the Project Team learned that the top two priorities for the region included a wide range of quality jobs and a quality public school education. The Regional Plan was then organized around these priorities and worked to determine the needs of the target sectors outlined in LVGEA's Comprehensive Economic Development Strategy ("CEDS") to respond to the public's desire for a wide range of quality jobs and align with regional economic development policy. In order to better understand the place-based priorities of the target sectors themselves, and the talent-base they rely on, the Project Team commissioned a target industry study.

The analysis focused on those industries the region is currently not highly competitive in (location quotient of less than 1) to identify the specific land use and talent base needs of the target industries and align the Regional Plan recommendations accordingly. The target industry analysis recommended a focus on healthcare, tech and finance as these were among the sectors the region is currently least competitive in, and that require a different development pattern than what primarily exists in the Las Vegas valley.

The following is excerpted and modified from the SNS Target Industry Memo, 2013:

Currently, the region's concentration of employment in most of these target industries is lower than would be expected, based on national averages. The University of Nevada Las Vegas projects a total of about 550,000 new jobs by 2035. If the CEDS implementation process is successful in increasing the concentration of employment so that it is equal to national averages, the region would need to employ about 100,000 new employees in the target industries, or 20% of all new employment (with the remaining employment coming from the broader base of all industries in the region). This provides some sense of the scale of transition that the successful implementation of the CEDS may require. What might those 100,000 workers demand from their community environments?

Based on the analysis (discussed in the full Industry Analysis report), overall, target industry workers in healthcare, tech and finance, earn more, are more highly educated and are (on average) slightly older. They are the kind of workers who can make choices about where they live. If the CEDS is to be successful in attracting these industries, it must

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include actions that support a future composition of employees in the Las Vegas region who will be different from the current composition.

There are many reasons why a place might have employment concentrations in these target industries that are not directly related to development patterns. High concentrations of employment in health care, for example, are often correlated with strong research hospitals at universities. Business IT ecosystems firms might be attracted to low energy costs or the presence of a particularly skilled workforce. Competing successfully for new industries will require the full range of actions that are described in the CEDS document, and strong regional partnerships that are focused on implementation.

For the target industry analysis, however, SNS was most interested in understanding the place--based characteristics that improve competitiveness for new workers, so that land use plans can support the economic development activities that are outlined in the CEDS. To help to understand what place-based characteristics made these regions successful in attracting new employment, ECONorthwest conducted interviews with economic development and human resources ("HR") professionals. They described the type of amenities that new employees are typically looking for in their neighborhoods and their urban environments when making choices about where to live. The results of these interviews are combined with the results of the other analysis in the key findings section below, and are detailed in the full body of the report.

Key findings specific to target industries are as follow:

### *Healthcare*

- **An increased demand in housing clustered within easy commute distance of hospitals and other major medical service providers.** The Southern Nevada region is forecast to have an additional 88,600 healthcare employees, which is 16% of all new workers by 2035,9 without implementing a specific strategy to recruit them. Many of these new workers will come from different parts of the country and bring their families (if they have them). They are likely to prefer to maximize their housing investment and choose communities with housing types and neighborhood amenities that are located as close to their places of employment.

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- ‡ **Many healthcare leaders promote wellness, and have become partners with municipalities to build “healthy communities” like those championed by the Centers for Disease Control.** Health care organizations and partner organizations, like the Centers for Disease Control, the National Association of County and City Health Officials, and the American Planning Association have expressed an increasing interest in the role planning has on community health. By designing healthy communities, Southern Nevada can become a partner with Healthcare workers in making residents healthier.
- ‡ **Healthcare employees may desire more parks, trails, bicycle paths and other infrastructure for active transportation, for themselves and their patients.** While healthcare employees' health generally mirrors that of the public, they do tend to exercise more, which may have implications for designing communities with multiple active transportation options. In addition, healthcare providers often promote active transportation to their patients to try to encourage them to exercise more.

### *Business IT Ecosystems*

- ‡ **Increased demand for high-quality multi-family (condominium) housing in downtown and mixed-use commercial areas.** Interviews suggest that high tech workers across the country are generally younger and may have a higher interest in living in vibrant downtowns and commercial areas with a mix of great food, entertainment, art, and other amenities. Certainly, the Downtown Project, a \$350 million effort by Zappos and its CEO, Tony Hsieh, to attract tech startups to Downtown Las Vegas illustrates this point. To become truly sustainable, these areas would need to include not only restaurants and bars, entertainment, and events, but also grocery stores, pharmacies, dry cleaners, and other services that people use on a day-to-day basis.

### *Global Banking and Finance*

- ‡ **Demand for communities with high amenities.** There was little research on the specific amenities that those working in banking and finance desire. Indeed, there is no evidence that bankers have desires that are unique, and instead will likely want the most amenity they can afford. If they have children, then this may mean locating in a community with good school districts. If they are young and childless, then it

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may mean they will choose to live closer to cultural and recreational attractions, work, and shopping. Some in the global finance and banking arena may prefer suburban lifestyles, but in closer proximity to office space.

- ✦ **Employment likely to be clustered in downtown high rises.**

### *Entrepreneurs and Small Businesses*

While not part of the CEDS study, this research considers the needs of small businesses and entrepreneurs, which make up a large part of any economy's base employment and can be an engine for job growth. Findings:

- ✦ **Communities with "third places" and meeting spaces for easy networking of entrepreneurs and small business owners.** One study<sup>8</sup> found that entrepreneurs value trusted sources for key information and often don't have the time to do detailed research, even if good information is readily available. Building and encouraging the development of "third places," locations outside of work and home for people to meet and exchange ideas could help foster entrepreneurs and small business owners.
- ✦ **Reducing the concentration of big box retail may help support small businesses.** While there are conflicting findings regarding the impact of big box retail on small business, small businesses that compete directly with big box retailers may be more likely to close when a new big box retailer locates in close proximity (up to four miles). 12
- ✦ **Strip malls may provide good locations for small businesses.** 13 Strip malls in aging suburban locations often have lower rents, good exposure and access, and plenty of parking, making it more affordable for small entrepreneurial businesses, especially immigrant business owners that want to cluster close to immigrant neighborhoods.

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<sup>8</sup> 11 *Energizing an Ecosystem: Brewing 1 Million Cups* by Jared Konczal and Yasuyuki Motoyama, Kauffman Foundation, March 2013. P 4---5. *Clark County Housing Market Analysis ECONorthwest August 2013* 16.

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While many actions will be necessary to increase the concentration of employment in the CEDS target industries that are not place-based, a more intentional approach to developing the kind of places that workers want in the future can improve the region's chances of success. This means:

- A focus on a vibrant downtown
- Neighborhoods with walkable centers
- Successful schools located proximate to the neighborhoods that need them
- Suburban development that's well located relative to major employment centers
- Access to high quality health care options for all residents, and a focus on "healthy lifestyle" amenities, such as open space and trails that connect neighborhood.
- A focus on commercial development types that can support and perhaps cluster medical services

A series of goals, objectives and strategies to align the desired land use pattern and transportation improvements with economic competitiveness goals are outlined in the Southern Nevada Strong Regional Plan, available via [www.southernnevadastrong.org](http://www.southernnevadastrong.org).

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## SECTION X: EMPLOYMENT LAND ANALYSIS: KEY LAND QUALITY FACTORS

The previous section provides background on the importance of land use and transportation plans to align with regional economic development strategy in order to diversify the workforce. This section emphasizes the specific physical needs of these companies and sectors for successful business operations. While RCG's report has thus far discussed the amount of developable vacant land in the Las Vegas Valley that is potentially available for Office and Industrial development, not all vacant land, as herein noted, is created equal in terms of desirability. Based on its extensive experience as a regional and real estate economics consulting firm, as well as a review of employment land analyses and literature prepared for other metro areas, RCG has created a list of characteristics that can affect the ability of land to be developed with employment land uses. These factors include:

- Proximity to Transportation
- Proximity to Industry Clusters
- Cost Feasibility
- Regional Competitiveness
- Parcel Size and Ownership
- Infrastructure Development

### *Proximity to Transportation*

One of the key determinants of vacant land's desirability for Commercial and Industrial development is location, which is nearly always largely evaluated in terms of transportation logistics. Different types of employment land may have very different transportation needs. For example, businesses operating on Industrial land often rely on efficient goods movement systems. Therefore, close proximity to highways, rail and other transportation infrastructure is a necessity. Commercial land, on the other hand, places more emphasis on the transportation needs of onsite workers. Its location relative to specific residential areas, local freeways and public transportation all play an important role in Commercial employees' daily commutes.

### *Proximity to Industry Clusters*

In addition to transportation access, a parcel's or parcels' location(s) relative to specific industry clusters also affects its desirability. Industry "clusters" are defined as geographic areas in which businesses, suppliers and other associated firms of a particular field group,

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or cluster, together. These groupings are known to create competitive advantages, such as increases in productivity, which, in turn, allow firms within the cluster to better compete on a national and global level.

The most prominent industry cluster in Southern Nevada is the Las Vegas Strip. The Strip is internationally recognized as a preeminent tourism attraction for gaming and other forms of entertainment. Not only does the Strip include dozens of large-scale resort-hotel properties, the surrounding area also includes clusters of a wide variety of vendors, suppliers and other supporting firms. Because the buildings on the Industrial land in and near the Las Vegas Strip corridor are older than many of those in the suburban parts of the region, they are subject either to adaptive reuse or demolition in order to support future higher density employment uses.

### ***Development Feasibility***

Once determining a set of ideal locations for Commercial or Industrial development, firms must also consider the capital and operating costs associated with such development. Typical up-front capital costs include the cost of land, construction and other fees paid to developers and municipal agencies, such as permits. Ongoing operating costs can include taxes, utilities, transportation, labor and other business expenses. Certain parcels may have higher initial development costs, but the long-term savings from lower operating costs may offset those costs and make for a better location in the long run.

### ***Regional Competitiveness***

Not only should the cost of a particular site be considered when determining the best location for a business operation, but the overall competitiveness of the region is also an important consideration. Certain regions may have higher costs, such as taxes, utilities and labor, but if operating in those regions will lead to more sales because of size of the population, quality of the labor force or the transportation network, than relatively high operating costs might be mitigated. In other words, proximity to markets is key.

### ***Parcel Size & Ownership***

The best areas for development may go untouched if the land is not available for sale, or if has been divided into smaller parcels and only certain ones can be purchased. In addition, certain parcels may be large enough to support a Commercial or Industrial development, but the land also needs to support a potential development project in terms of topography,

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as well as access to utilities, rail services and freeways. It is also important not to underestimate the importance of environmental concerns. For any or all these reasons, a company may be forced to look for the best alternative outside the region, even if parcel size fits their search criteria.

### *Utility Services*

As noted above, the quantity and quality of utility availability is an important matter. Local municipalities and regional infrastructure agencies need to prioritize which Employment Lands should receive utilities such as power, water, gas, and high speed internet/phone service based on locational desirability in the context of some kind of formal employment land policy. However, servicing certain Southern Nevada lands with utilities may not be easy when considering the budget constraints of the local governments versus the high costs of providing utilities, especially water. Because Southern Nevada is still recovering from the Great Recession, the lack of funds available for utility expansion may be an issue. However, as we will discuss below, North Las Vegas recently announced plans for \$150 million in utility improvements to the Apex Industrial Park. (There are presently no specifics as to where this money will come from, what services this will include, or when the servicing will begin have been announced.) The utility limitation issue also applies to some of the other exurban and rural areas discussed in this report.

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### SECTION XI: SNS REGIONAL PLAN IMPLEMENTATION: STRATEGIES & RECOMMENDATIONS FOR EMPLOYMENT LANDS

RCG's final task in this Analysis is the preparation of a set of strategies and recommendations to help the region safeguard sufficient employment land in Southern Nevada in order to accommodate forecasted job growth in the target Industries. Many of these recommendations are implementation strategies of the SNS Regional Plan and are emphasized here to ensure a variety of audiences have access to the information and are working collectively to align implementation efforts.

These strategies include preserving the developable, vacant land, as well as fully utilizing existing buildings and projects to optimize economic growth in Southern Nevada. Our research has shown that these strategies and recommendations have been used by other metro areas around the U.S. They include the following:

1. Connecting with Employment Land Owners
2. Encouraging Redevelopment & Intensification of Existing Supply
3. Educating the Public of Employment Land Benefits
4. Inventorying, Categorizing and Ranking Employment Land
5. Servicing Vacant Land with Road and Utility Infrastructure
6. Infrastructure Maintenance and Repair Planning
7. Creating an Employment Land Preservation Policy
8. Limiting Uses on Employment Lands
9. Establishing Employment Land Districts
10. Developing a Broad Urban Design Plan

#### ***Connecting with Employment Land Owners***

One strategy for preserving employment land is to connect with local businesses, as well as with commercial lenders, developers, real estate brokerage firms and land owners in a proactive and systematic way. Not only do these parties understand the current market conditions, but they can also be a powerful voice in the community. SNS's member entities should rely on information provided by these private sector groups through interviews, surveys and other forms of communication to help understand how rezoning impacts the supply of employment land and, therefore, impacts the local economy.

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### *Encouraging Redevelopment & Intensification of Existing Vacant Land*

The amount of developable vacant land can be purposefully reduced or increased. In addition to preserving some amount of vacant land for future development, it is also important to consider existing Employment Land that is in need of redevelopment and intensification. These improvements will allow for greater numbers of employees to work at the existing supply of Employment Land. See Appendix 4 for discussion of higher density development opportunities.

In addition to intensification, a clear priority for downtown redevelopment and urban infill is a key theme in the SNS Regional Plan, and will be an important employment lands protection policy. Many larger vacant sites that are currently available are uniquely aligned with the needs of larger, less employment-dense users. Anytime that an office or commercial use can be accommodated in an existing employment center, town center or downtown, it should be directed through land use, incentives and other public policies so that pressure to develop on large vacant sites is reduced for commercial uses and reserved for specific uses that cannot be accommodated in a more urban setting. As stated in the SNS Regional Plan:

**“Goal 2: Ensure that Southern Nevada offers a range of place types to attract and retain future workers, visitors, businesses and entrepreneurs.  
Objective 2.1: Develop strategies and make targeted investments to encourage infill redevelopment and property rehabilitation.”**

### *Educating Leadership and the Public on Employment Land Benefits*

Our research suggests that the term “industrial land” can have a negative connotation in the public mind because it is often associated with loud and environmentally challenged manufacturing operations. . An alternative may be to refer to these areas as ‘employment lands,’ because everyone understands the importance of employment opportunities. The negative connotation of industrial land may cause citizens to favor the rezoning of Industrial land for other uses. By educating the public about the many uses and importance of Industrial land, zoning can be protected. San Francisco is beginning to refer to Industrial land as “Production, Distribution, and Repair” land (“PDR”). Other cities, such as San Jose, have used the term “employment land” in a manner similar to terminology in this report. In the context of incentives for generating infrastructure funds, the Nevada Legislature has used the term “Economic Diversification District”. Using terms other than “industrial” can

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help educate the public and public policy makers on the importance of this kind of land to the vitality and sustainability of the Southern Nevada economy. Accordingly, we recommend the use of the term “Employment Land” in printed materials as well as oral communications.

Local leaders and the general public should also be educated on how firms operating on Industrial land are necessary to the support of other existing businesses. For example, the Logistics & Operations industry is necessary to the support of the region’s Lodging, Hospitality and Retail Industries. Additionally, relatively high-paying jobs are often tied to businesses operating on Industrial or Commercial land. The Manufacturing and Healthcare sectors are sources of some of the highest paying occupations. As citizens understand what occurs on Industrial lands, they will recognize the importance of preserving them.

### *Inventorying, Categorizing and Ranking Employment Land*

Over time, the zoning needs of Southern Nevada will change. Determining how land will be rezoned in the future is critical. Once local agencies understand that some amount of rezoning is inevitable, the question becomes: What employment land needs to be protected the most? A method of estimating and ranking the “bank” of developable, vacant land in Southern Nevada should be considered in order to develop an effective Employment Land preservation strategy.

This item is a direct implementation action from the SNS Regional Plan. The Southern Nevada Strong Regional Plan identifies in Goal 1:

**“Goal 1: Match land use and transportation plans with regional economic development plans. Objective 1.2: Determine future needs for employment lands, including: Conduct and publicize a regional inventory of available commercial and industrial land and facilities.”**

One such method of ranking Employment Land is to group the land into different categories, or levels of priority. Section 6 above discussed multiple factors that can be used when developing this ranking system. The input of the private sector for the latest trends in the market should also be considered. Again, the land characteristics described in Section 6 above are:

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- # Proximity to Transportation
- # Proximity to Industry Clusters
- # Development Feasibility
- # Regional Competitiveness
- # Parcel Size & Ownership
- # Utility Services

As an example, a five-level system for employment land may look like this:

- a. EL-1 Land: This is the most desirable Employment Land; it is already developed and currently being used as such. The vacancy rates for buildings/projects on this type of land are lower than the overall market office and industrial averages. There is no reason to demolish existing buildings in order to rezone this land since it would likely be attractive to other similar users. Therefore, EL-1 land represents the land least likely to be rezoned.
- b. EL-2 Land: This land includes the most desirable developable, vacant land projected to be developed in the near future. For example, this could include office areas in Summerlin, the Southwest Valley, Green Valley and Northwest Valley. In the case of industrial development, prime locations are the Speedway areas in North Las Vegas east of I-15 North, the areas south of McCarran International Airport, and the South 215 Beltway area west of the I-15. This land should be preserved from rezoning as much as possible.
- c. EL-3 Land: This Employment Land includes land that has been developed but where the vacancy rate is above average. The market is currently trending away from either Commercial or Industrial development. However, it would be more practical to upgrade buildings and projects to newer, higher intensity uses rather than rezone the land. On the other hand, rezoning may in some cases be a viable option depending on what the new development would entail. The more established office corridors in the center of the Las Vegas Valley can be considered EL-3 candidates. They include Rainbow Boulevard, Jones Road, East Flamingo Road, Paradise Road (near Hughes Center) and Eastern Avenue, Sunset Road east of I-15, Dean Martin Drive between Sahara Avenue and Russel Road, and Eastern Avenue between Sunset and the 215 Freeway-South.

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- d. EL-4 Land: This is potentially developable, vacant Employment Land that will have some level of interest from private developers, but only as alternatives to the EL-2 land. Rezoning this land should be considered a viable option; however, each situation should and would be considered on a case-by-case basis. The Apex Industrial Park and the Southland site in Laughlin fall in this category.
  
- e. EL-5 Land: Although this is vacant land zoned for non-residential uses, Commercial and Industrial development may be unfeasible. For example, topographic characteristics may limit the development of large-scale distribution centers. Land parcels may be of a certain unusable size, or may be owned by entities that might prevent most industrial uses. This is the land most likely to be rezoned to some type residential use. This kind of land typically is located in the more rural portions of Clark County away from population centers and near federally protected areas.

RCG has prepared the matrix below, which can be used or modified to help the local jurisdictions categorize and rank their employment lands.

**Table XI-1: Employment Land Categorization Matrix**

<b>Factor</b>	<b>EL-1 Land</b>	<b>EL-2 Land</b>	<b>EL-3 Land</b>	<b>EL-4 Land</b>	<b>EL-5 Land</b>
<b>Overall Demand</b>	High	High	Medium	Low-Medium	Low
<b>Developed or Not</b>	Developed	Not	Developed	Not	Not
<b>Development Feasibility</b>	Already Developed	High Feasibility	Already Developed	Low-Medium Feasibility	Not Feasible
<b>Vacancy Rate</b>	Low Vacancy	N/A	High Vacancy	N/A	N/A
<b>Rents</b>	Average to Above Average	N/A		N/A	N/A
<b>Location Desirability</b>	High	High	Medium	Medium	Low
<b>Infrastructure and Utilities</b>	Existing	Existing or Short-term Plans	Existing	Short and Long-Term Plans	None

Other methods for categorizing Employment Land may be implemented, but it is important to have a clear idea of which land is available for rezoning and which land should be reserved specifically for its intended use.

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### ***Servicing Vacant Land with Road & Utility Infrastructure***

The ultimate goal is not to preserve vacant Employment Land for as long as possible, but instead to ensure that this land gets developed. Vacant land cannot be developed until it has the necessary infrastructure in place. Southern Nevada's utility providers should service lands as quickly as possible to ensure enough "shovel-ready" land is available for development. This includes constructing and installing roads and other transportation access, as well as all necessary wet and dry utilities. Due to budget constraints, it may not be feasible to put the entire cost on the local agencies. Working with the State of Nevada, as well as with public-private partnerships, to explore all options is preferred in order to service certain Employment Lands.

A new example of how the public and private sector are coming together in Nevada is the ability for a city or county to classify certain land as an "Economic Diversification District" ("EDD"). This gives companies within the district certain tax breaks, but only if a company or group of companies agree to collectively invest \$3.5 billion in Nevada within 10 years. Currently, this development tool is being used for servicing the Tesla Giga-factory in Northern Nevada. Although there is not yet any finalized plan, an EDD designation is also being discussed for the Apex Industrial Park in North Las Vegas. For additional details, visit <http://diversifynevada.com/>.

### ***Infrastructure Maintenance & Repair Planning***

The maintenance and upgrades of existing infrastructure is necessary to support current Employment Land areas. These areas, especially Industrial zones, put heavy use on roads and other infrastructure systems. Budget constraints will always limit the amount of maintenance that can occur. However, the economic and fiscal benefits generated by Employment Land should give these areas higher priority for budget allocations. A proper maintenance plan may increase annual operating expenses but will significantly reduce the amount of major repair and replacements, saving money in the long-term.

### ***Creating an Employment Land Preservation Policy***

Not only should Southern Nevada's local jurisdictions prioritize which Employment Lands should be preserved, but they should also establish a clear set of criteria for rezoning approvals that are focused on the economic development potential of certain types of zoning. The key concept here is using land use policy to support economic sustainability and security. Without this focus, the health of the region from a job creation and tax revenue

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standpoint can be weakened over time. This effort justifies the need for a published set of criteria, which includes the areas allowable for zone changes and the conditions necessary for approval.

There are many ways these policies can be developed. For example, San Jose, California, utilized GIS software to develop fiscal analysis scenarios depending on the amount of, and location of employment land. Since San Jose is located in close proximity other cities, these efforts were combined with those neighboring cities to maximize the goals for all jurisdictions.

Baltimore, Maryland developed a land preservation policy with the intent of ensuring traffic was not congested between employment and residential areas. Patterns of density and transit times can be estimated to ensure the strategic placement of employment lands.

Also, Prince George County, Maryland developed a market-based preservation strategy by working with local business owners and developers to understand how to serve the needs of the private sector.

### *Limit Uses on Employment Lands*

In addition to creating a policy to preserve Employment Land, additional policies should be created to limit what types of businesses can operate on them. Although local governments in Southern Nevada already have various zoning codes, it is important that they also adopt common strategies that limit the potential uses of certain employment land. For example, most Industrial land will allow for retail businesses operations. However, there are specific zoning designations dedicated to retail development. Limiting the amount of retail and other types of uses that do not specifically require being on Commercial (i.e., Office) and Industrial land needed to accommodate the seven (7) target industries will preserve more space for the companies that truly need it.

### *Establish Employment Land Districts/Employment Overlay Districts*

The Southern Nevada Strong Regional Plan identifies in Goal 1:

**“Goal 1: Match land use and transportation plans with regional economic development plans Objective 1.2: Determine future needs for employment lands, including: Work with local governments to bolster longer-term**

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**economic growth and development by designating employment lands for future industries, while mitigating the pressure to respond to short-term development demand for residential development.”**

One method of implementing an Employment Land strategy is to create planned Commercial or Industrial districts. As noted in this report, the market for Industrial land, in particular, is showing heavy demand for buildings above 100,000 sf, yet there is a shortage of these size buildings. It is therefore very important to protect these types of buildings and areas from rezoning. It would also be appropriate to find the vacant lands or districts in Southern Nevada that can support such large buildings and make sure those do not get rezoned.

It is also critical to establish certain criteria to protect land from rezoning that is not located in Commercial or Industrial districts. For example, Santa Clara, California, has developed a strict scoring system for determining whether or not a parcel of land should be rezoned. Other cities have developed sets of guidelines for analyzing cases individually. While this allows for greater flexibility of each rezoning proposal, it can also create some confusion as to how and why certain land is rezoned instead of others. Due care should be used any time land is approved for rezoning.

As mentioned above, Prince George County, Maryland worked with the private sector to develop clear criteria for protecting land districts that local business and land owners were able to understand and follow. It should be noted that these districts and guidelines should fit the scarcity of the employment lands.

For example, Vancouver, British Columbia is faced with a significant shortage of developable land. Therefore they developed a very strict set of guidelines for preserving their employment land areas. As the Las Vegas Valley takes inventory of its available supply, it can develop land districts and other preservation policies accordingly.

### ***Implement the Southern Nevada Strong Regional Plan***

All local governments in Southern Nevada have recently come together and created a single unified vision of the future of Southern Nevada focusing on three key themes: Improving Economic Competitiveness & Education, Investing in Complete Communities and Increasing Transportation Choice.

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The vision is also demonstrated by a preferred land use scenario, which highlights the best areas for Employment Land preservation, medical development, infill and redevelopment and intensification of existing employment centers. The preferred vision paired with a more detailed employment land inventory and the recommendations in this report will allow local governments with sound justification to preserve existing, change or expand employment land designations.

Given the careful integration of the SNS Regional Plan with the CEDS target sectors that the region is least competitive in, transportation, land use and economic development strategies are now aligned and simply require understanding and follow-through among all parties with a role in implementation.

This paired with implementation of other SNS principles, such as investing in complete communities that are safe, offer access to healthy food, amenities and transportation options will also be important to ensuring the attractiveness of the region to target employers and their workforce. In other words, urban planning, infrastructure investments and economic development strategies must all be implemented for a successful economic growth and diversification that benefits current and future residents. 🏡

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## Appendix 1: Sub-Industries for Each Target Industry & Respective Zoning Requirements Las Vegas Zoning Code, Chapter 19

Target Industry	Sub-Industry	Commercial						Industrial		
		P-R	N-S	O	C-D	C-1	C-2	C-PB	C-M	M
Industrial & Manufacturing	Asphalt or Concrete Batch Plant									P
Industrial & Manufacturing	Environmentally Hazardous Materials									P
Industrial & Manufacturing	Light Assembly & Fabrication					C	C	P	P	P
Industrial & Manufacturing	Manufacturing, Heavy								S	P
Industrial & Manufacturing	Manufacturing, Light							P	P	P
Industrial & Manufacturing	Mining, Sand & Gravel Excavation								S	S
Industrial & Manufacturing	Printing & Publishing							P	P	P
Industrial & Manufacturing	Salvage or Reclamation of Products (Indoor)							S	P	P
Industrial & Manufacturing	Salvage or Reclamation of Products (Outdoor)									C
Industrial & Manufacturing	Slaughtering and Processing of Live Poultry					S	S		S	P
Industrial & Manufacturing	Welding Repair								P	P
Logistics & Operations	Office, Other than Listed	P	P	P	P	P	P	P	P	P
Logistics & Operations	Rental Store (with Outside Storage)						S		P	P
Logistics & Operations	Rental Store (without Outside Storage)		S			P	P		P	P
Logistics & Operations	Commercial, Other than Listed					S	P	S	P	P
Logistics & Operations	Daily Labor Service					S	S		S	S
Logistics & Operations	Employment Agency	P	P	P	P	P	P	P	P	P
Logistics & Operations	Heavy Machinery and Equipment (Rental, Sales & Service)								P	P
Logistics & Operations	Delivery and Service Vehicle Storage						S	S	P	P
Logistics & Operations	Truck Rental						S		P	P
Logistics & Operations	Warehouse/Distribution Center							S	P	P
Logistics & Operations	Trucking Company						S		P	P
Clean Energy	Recycling Collection Center								C	C
Clean Energy	Electric Generating Plant						S	S	S	S
Clean Energy	Electric Utility Substation			S	S	P	P	P	P	P
Clean Energy	Utility Installation, Other Than Listed						P	P	P	P
Defense & Unmanned Aerial Systems	Airport, Heliport or Landing Field								P	P
Defense & Unmanned Aerial Systems	Helipad			S		S	S	S	P	P

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## Appendix 2: Sub-Industries for Each Target Industry & Respective Zoning Requirements City of Henderson Development Code, Chapter 19

Target Industry	Sub-Industry	Commercial											Industrial				
		CN	CO	CC	CH	CT	CA	DCC	DHC	MC	MN	MR	PS	PC	IL	IG	IP
Industrial & Manufacturing	Concrete Product Production																C
Industrial & Manufacturing	Industry																S S S
Logistics & Operations	Communication Facilities																P P P
Logistics & Operations	Research & Development			C	C	S											S S S
Logistics & Operations	Warehousing And/Or Storage Yard																C S S
Logistics & Operations	Wholesaling, Distribution, and Storage																S S S
Logistics & Operations	Daily Labor Service				C	C			C		C						C
Clean Energy	Cogeneration Facility														C		C
Clean Energy	Recycling				S	S								S			S S S
Defense & Unmanned Aerial Systems	Research & Development			C	C	S											S S S

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## Appendix 3: Occupations Employed in the Seven (7) Target Industries

<b>SOC</b>	<b>Occupation</b>
11-2021	Marketing Managers
11-2022	Sales Managers
11-3021	Computer and Information Systems Managers
11-3031	Financial Managers
11-3051	Industrial Production Managers
11-3071	Transportation, Storage, and Distribution Managers
11-9021	Construction Managers
11-9041	Architectural and Engineering Managers
11-9111	Medical and Health Services Managers
11-9141	Property, Real Estate, and Community Association Managers
11-9151	Social and Community Service Managers
11-9199	Managers, All Other
11-1011	Chief Executives
11-1021	General and Operations Managers
13-1022	Wholesale and Retail Buyers, Except Farm Products
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products
13-1031	Claims Adjusters, Examiners, and Investigators
13-1041	Compliance Officers
13-1051	Cost Estimators
13-1071	Human Resources Specialists
13-1111	Management Analysts
13-1121	Meeting, Convention, and Event Planners
13-1151	Training and Development Specialists
13-1161	Market Research Analysts and Marketing Specialists
13-1199	Business Operations Specialists, All Other
13-2011	Accountants and Auditors
13-2041	Credit Analysts
13-2051	Financial Analysts
13-2052	Personal Financial Advisors
13-2053	Insurance Underwriters
13-2072	Loan Officers
13-2099	Financial Specialists, All Other
15-1121	Computer Systems Analysts
15-1131	Computer Programmers
15-1132	Software Developers, Applications
15-1133	Software Developers, Systems Software
15-1134	Web Developers
15-1141	Database Administrators
15-1142	Network and Computer Systems Administrators
15-1143	Computer Network Architects
15-1151	Computer User Support Specialists
15-1152	Computer Network Support Specialists
15-1199	Computer Occupations, All Other
17-1011	Architects, Except Landscape and Naval
17-1022	Surveyors
17-2011	Aerospace Engineers
17-2051	Civil Engineers

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17-2071	Electrical Engineers
17-2072	Electronics Engineers, Except Computer
17-2081	Environmental Engineers
17-2112	Industrial Engineers
17-2141	Mechanical Engineers
17-2199	Engineers, All Other
17-3011	Architectural and Civil Drafters
17-3012	Electrical and Electronics Drafters
17-3013	Mechanical Drafters
17-3022	Civil Engineering Technicians
17-3023	Electrical and Electronics Engineering Technicians
17-3031	Surveying and Mapping Technicians
19-2041	Environmental Scientists and Specialists, Including Health
19-2042	Geoscientists, Except Hydrologists and Geographers
19-3031	Clinical, Counseling, and School Psychologists
19-3039	Psychologists, All Other
21-1011	Substance Abuse and Behavioral Disorder Counselors
21-1014	Mental Health Counselors
21-1015	Rehabilitation Counselors
21-1021	Child, Family, and School Social Workers
21-1022	Healthcare Social Workers
21-1023	Mental Health and Substance Abuse Social Workers
21-1093	Social and Human Service Assistants
23-1011	Lawyers
23-2091	Court Reporters
23-2093	Title Examiners, Abstractors, and Searchers
25-1099	Postsecondary Teachers
25-3098	Substitute Teachers
27-1024	Graphic Designers
27-1026	Merchandise Displayers and Window Trimmers
27-3041	Editors
27-3043	Writers and Authors
29-1011	Chiropractors
29-1021	Dentists, General
29-1031	Dietitians and Nutritionists
29-1041	Optometrists
29-1051	Pharmacists
29-1061	Anesthesiologists
29-1062	Family and General Practitioners
29-1063	Internists, General
29-1064	Obstetricians and Gynecologists
29-1065	Pediatricians, General
29-1067	Surgeons
29-1069	Physicians and Surgeons, All Other
29-1071	Physician Assistants
29-1122	Occupational Therapists
29-1123	Physical Therapists
29-1126	Respiratory Therapists
29-1127	Speech-Language Pathologists
29-1129	Therapists, All Other

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29-1141	Registered Nurses
29-1171	Nurse Practitioners
29-1199	Health Diagnosing and Treating Practitioners, All Other
29-2011	Medical and Clinical Laboratory Technologists
29-2012	Medical and Clinical Laboratory Technicians
29-2021	Dental Hygienists
29-2031	Cardiovascular Technologists and Technicians
29-2032	Diagnostic Medical Sonographers
29-2033	Nuclear Medicine Technologists
29-2034	Radiologic Technologists
29-2035	Magnetic Resonance Imaging Technologists
29-2041	Emergency Medical Technicians and Paramedics
29-2052	Pharmacy Technicians
29-2055	Surgical Technologists
29-2061	Licensed Practical and Licensed Vocational Nurses
29-2071	Medical Records and Health Information Technicians
29-2081	Opticians, Dispensing
29-2099	Health Technologists and Technicians, All Other
29-9099	Healthcare Practitioners and Technical Workers, All Other
31-1011	Home Health Aides
31-1013	Psychiatric Aides
31-1014	Nursing Assistants
31-1015	Orderlies
31-2011	Occupational Therapy Assistants
31-2021	Physical Therapist Assistants
31-2022	Physical Therapist Aides
31-9011	Massage Therapists
31-9091	Dental Assistants
31-9092	Medical Assistants
31-9093	Medical Equipment Preparers
31-9094	Medical Transcriptionists
31-9097	Phlebotomists
31-9099	Healthcare Support Workers, All Other
33-9021	Private Detectives and Investigators
33-9032	Security Guards
35-2012	Cooks, Institution and Cafeteria
35-2021	Food Preparation Workers
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food
35-3041	Food Servers, Non-restaurant
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners
37-2012	Maids and Housekeeping Cleaners
39-1021	First-Line Supervisors of Personal Service Workers
39-6011	Baggage Porters and Bellhops
39-9011	Childcare Workers
39-9021	Personal Care Aides
39-9032	Recreation Workers
41-1011	First-Line Supervisors of Retail Sales Workers
41-1012	First-Line Supervisors of Non-Retail Sales Workers
41-2022	Parts Salespersons
41-2031	Retail Salespersons

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41-3021	Insurance Sales Agents
41-3031	Securities, Commodities, and Financial Services Sales Agents
41-3099	Sales Representatives, Services, All Other
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products
41-9011	Demonstrators and Product Promoters
41-9041	Telemarketers
41-9099	Sales and Related Workers, All Other
43-1011	First-Line Supervisors of Office and Administrative Support Workers
43-2011	Switchboard Operators, Including Answering Service
43-3011	Bill and Account Collectors
43-3021	Billing and Posting Clerks
43-3031	Bookkeeping, Accounting, and Auditing Clerks
43-3071	Tellers
43-4051	Customer Service Representatives
43-4071	File Clerks
43-4111	Interviewers, Except Eligibility and Loan
43-4131	Loan Interviewers and Clerks
43-4151	Order Clerks
43-4171	Receptionists and Information Clerks
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks
43-5011	Cargo and Freight Agents
43-5021	Couriers and Messengers
43-5032	Dispatchers, Except Police, Fire, and Ambulance
43-5041	Meter Readers, Utilities
43-5061	Production, Planning, and Expediting Clerks
43-5071	Shipping, Receiving, and Traffic Clerks
43-5081	Stock Clerks and Order Fillers
43-6011	Executive Secretaries and Executive Administrative Assistants
43-6013	Medical Secretaries
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive
43-9011	Computer Operators
43-9021	Data Entry Keyers
43-9022	Word Processors and Typists
43-9041	Insurance Claims and Policy Processing Clerks
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service
43-9061	Office Clerks, General
43-9071	Office Machine Operators, Except Computer
43-9111	Statistical Assistants
43-9199	Office and Administrative Support Workers, All Other
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers
47-2031	Carpenters
47-2051	Cement Masons and Concrete Finishers
47-2061	Construction Laborers
47-2071	Paving, Surfacing, and Tamping Equipment Operators
47-2073	Operating Engineers and Other Construction Equipment Operators
47-2111	Electricians
47-2141	Painters, Construction and Maintenance

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47-2151	Pipelayers
47-2152	Plumbers, Pipefitters, and Steamfitters
47-2161	Plasterers and Stucco Masons
47-2181	Roofers
47-2211	Sheet Metal Workers
47-2221	Structural Iron and Steel Workers
47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters
47-4011	Construction and Building Inspectors
47-5021	Earth Drillers, Except Oil and Gas
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers
49-2011	Computer, Automated Teller, and Office Machine Repairers
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers
49-3011	Aircraft Mechanics and Service Technicians
49-3023	Automotive Service Technicians and Mechanics
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists
49-3042	Mobile Heavy Equipment Mechanics, Except Engines
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers
49-9041	Industrial Machinery Mechanics
49-9051	Electrical Power-Line Installers and Repairers
49-9052	Telecommunications Line Installers and Repairers
49-9071	Maintenance and Repair Workers, General
49-9098	Helpers--Installation, Maintenance, and Repair Workers
49-9099	Installation, Maintenance, and Repair Workers, All Other
51-1011	First-Line Supervisors of Production and Operating Workers
51-2022	Electrical and Electronic Equipment Assemblers
51-2092	Team Assemblers
51-2099	Assemblers and Fabricators, All Other
51-3011	Bakers
51-3092	Food Batchmakers
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
51-4041	Machinists
51-4121	Welders, Cutters, Solderers, and Brazers
51-5112	Printing Press Operators
51-5113	Print Binding and Finishing Workers
51-6011	Laundry and Dry-Cleaning Workers
51-6031	Sewing Machine Operators
51-7011	Cabinetmakers and Bench Carpenters
51-8013	Power Plant Operators
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers
51-9081	Dental Laboratory Technicians
51-9111	Packaging and Filling Machine Operators and Tenders
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic

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51-9196	Paper Goods Machine Setters, Operators, and Tenders
51-9198	Helpers--Production Workers
51-9199	Production Workers, All Other
53-1021	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand
53-1031	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators
53-2011	Airline Pilots, Copilots, and Flight Engineers
53-2012	Commercial Pilots
53-2031	Flight Attendants
53-3011	Ambulance Drivers and Attendants, Except Emergency Medical Technicians
53-3031	Driver/Sales Workers
53-3032	Heavy and Tractor-Trailer Truck Drivers
53-3033	Light Truck or Delivery Services Drivers
53-3041	Taxi Drivers and Chauffeurs
53-3099	Motor Vehicle Operators, All Other
53-6099	Transportation Workers, All Other
53-7051	Industrial Truck and Tractor Operators
53-7061	Cleaners of Vehicles and Equipment
53-7062	Laborers and Freight, Stock, and Material Movers, Hand
53-7063	Machine Feeders and Offbearers
53-7064	Packers and Packagers, Hand
99-9999	Unclassified Occupation

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## Appendix 4: Higher-Density Development Prospects

The following section discusses opportunities to intensify the Valley's different subareas/submarkets. It also advises how general and locale-specific policy-related density goals can help make certain that the region's future evolution supports the larger economic and community development objectives being espoused. The analysis supports RCG's market analysis in Sections 2 and 3.

Increasing the density of development on the region's Employment Lands through infill and redevelopment initiatives will likely play a critical role in SNS's employment lands strategy. Higher density commercial and industrial development will generate opportunities to augment the limited land supply in the Las Vegas Valley's urban core. It will also optimize the use of land, infrastructure and water resources by making certain that development of vacant land in the region's urbanized areas is built in dense and sustainable way. Higher density development of Employment Land can take place in various ways:

- Existing employment uses are redeveloped at a higher density - such as office buildings replacing lower-density uses.
- Existing commercial and industrial operations on a site are enlarged. For example, a manufacturing operation gets bigger and hires more employees.
- Low-employment density land uses are replaced with higher-employment density uses in the same building. For example, the conversion of big box retail uses to call center uses.
- Long-term vacant employment-oriented land and parcels are finally developed.

Essentially what happens over time is that development ensues and intensifies as the economy grows and demand for employment land rises, causing its value to rise. In those cases where demand has driven land prices up (causing rents to rise), the type and density of development adjusts to reflect rising costs. For example, development on and around the Las Vegas Strip intensified on a massive scale in the last 20 years. This has driven up commercial and industrial land prices in adjacent areas like the Paradise

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Road corridor, for example. Additionally, parcels along the 215 Beltway, especially in the Southwest and West portions of the Valley, saw their values rise more rapidly than many other parts of the Valley prior to the Great Recession because their of “strategic” location between Green Valley and Summerlin and their visibility, making them highly demanded for office and retail uses. While these values plummeted for the five years (2008-2012) following the start of the Great Recession, they are on the rise again.

By and large, density rises gradually on existing Employment Lands as parcels that have been vacant for a long time are finally developed and as current buildings become more densely used. Even higher density types of development happen where a locale or corridor becomes attractive as a result of some kind of catalyst, like a freeway interchange, a transit station<sup>9</sup> or an “anchor”. We can expect this to happen with the completion of the Union Village mixed use project in Henderson, for example. The other way this occurs is through “clustering” (as has happened in the Las Vegas Downtown area with government buildings).

The next section comprises a high-level overview of a set of representative Employment Land groups demonstrating the types of higher densities that could be expected for Southern Nevada’s Employment Lands. It also includes a high-level assessment of the potential for future employment to be accommodated through intensification.

### ***Infill and Redevelopment***

Based on how development patterns and trends have been evolving during the last 25 years in Southern Nevada, combined with the fact that the Las Vegas Valley is largely surrounded by Federal land ownership, we expect infill and redevelopment to encompass much of Southern Nevada’s employment-base, especially in the core of the Valley where the Lodging and Hospitality industry and many of its vendor companies are located.

We would also like to note that while a redevelopment project can lead to significantly higher densities for a specific parcel, it can also supplant existing facilities with workers who then are then dislocated because of the project. In order to fully and accurately assess the amount of new building space generated by redevelopment, it would be ideal to subtract the number of jobs dislocated from the amount created by redevelopment.

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<sup>9</sup> Developing policies that integrate higher employment density and public transit investment is one of the most critical factors of an effective employment land strategy.

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Unfortunately, such an analysis was beyond the scope of this assignment because of potential data availability issues. Because this type of analysis was not conducted by RCG, care should be taken in viewing the findings herein.

### ***Analysis of Employment Land Types/Markets***

RCG looked at two Employment Land “typologies” that are illustrative of fundamental categories of all employment lands:

Suburban employment lands:

- # Individual office buildings and office parks
- # Individual industrial buildings and industrial/business parks

Urban employment lands:

- # Individual office buildings and office parks
- # Individual industrial buildings and business/industrial parks

### **Suburban Employment Lands - Individual Office Buildings**

Suburban office buildings in Southern Nevada are typically low to mid-rise, have relatively moderate employment density, and are located in balanced density job zones/districts. These buildings and locales play a pivotal part in the local economy since they permit companies that don't need be located in a highly urban setting (or need urban services) to operate in relatively lower-cost locations that have greater parking availability. Large-scale conversions to higher density uses happen less frequently here than in urban areas in the case of redevelopment or adaptive reuse. The Green Valley, Summerlin and Southwest Valley portions of the Las Vegas Valley are the suburban office markets in the region.

### **Suburban Employment Lands - Office Parks**

Office parks are located in both suburban and urban settings. From a development density viewpoint, suburban office parks in Southern Nevada have significant capacity for intensification. The large amount of area that parking lots cover provides an opportunity for developing additional buildings and moving toward parking structures as the economy continues to evolve. This is especially true in the context of a relatively land (developable) constrained region. Because of Southern Nevada's relatively land constraints compared to competing cities like Phoenix and Salt Lake City, the key greater densities will be higher land values. Additionally, we expect higher densities to occur in the Valley's office parks via

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existing tenants who expand and hire additional employees. This would encourage developers to increase the number of buildings in their parks, which could also include providing structured parking where financially and physically feasible. With the exception of Hughes Center, which is currently the top office park in Southern Nevada, most of the upscale office parks are located in Green Valley (e.g., Green Valley Corporate Center), Summerlin and the Southwest Valley (along the 215 freeway). The remainder are scattered throughout the Valley in some of the Valley's traditional and newer office suburban and urban corridors alike, including Flamingo Road, Sahara Avenue, Jones Boulevard, Eastern Avenue, Rainbow Boulevard and Charleston Boulevard.

And now there is Downtown Summerlin, which is essentially a brand new large scale, relatively high-density suburban mixed-use development located adjacent to and east of the 215 freeway in the western part of the Las Vegas Valley between Sahara Avenue on the South, Charleston Boulevard on the North, and Town Center Drive on the East.

In many other suburban-oriented, Sunbelt metro areas, having suburban office parks become more densely developed is not priority because their relatively plentiful land resources permits extensive sprawl. And the distances involved tend to discourage the use of higher density transit oriented development. Southern Nevada's situation is different because the Las Vegas Valley is relatively small and is largely surrounded by Federal lands, making it a reasonable candidate for increased density in its office projects and office parks.

The opportunity to increase density in the region's suburban office parks is directly tied to several factors including the entrance of a large-scale economic "anchor" company or tenant and/or the evolution of a healthy economic cluster. The concept of firm agglomeration by economically and operationally-related companies in proximity to skilled labor force will also act as a catalyst to higher-density office uses and higher employment densities.

Typical office rents during Q3, 2014 ranged from \$1.33 to \$2.12.

### **Suburban Employment Lands - Individual Industrial Buildings**

Suburban industrial buildings in Southern Nevada, like many of their office counterparts, are also characteristically low-rise and have relatively low employment density because many

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are warehouse/distribution centers. They are also located in low density job zones/districts. These districts include North Las Vegas along the I-15 as well as Cheyenne Avenue. There is also a large number of industrial buildings and parks along the 215 Beltway west of South I-15. These buildings are critical players in the Southern Nevada economy. They enable companies that don't need to be located in a highly urban setting (or need urban services) to operate in relatively lower-cost locations that have substantial surface parking. Large-scale conversions to higher density uses happen less in the Valley's suburban locations than in the urban areas in the context of redevelopment or adaptive reuse.

### **Suburban Employment Lands - Industrial/Business Parks**

Southern Nevada's industrial/business parks are also situated in both suburban and urban settings. From a development density viewpoint, local suburban industrial/business parks have substantial capacity for intensifying their use. The significant land resources that parking lots cover is an opportunity for developing added buildings and selectively building parking structures as the local economy recovers and moves forward, especially, as noted above, in the context of a relatively land (developable) constrained region. As in the case of suburban office development, RCG anticipates increased densities to occur in the region's industrial/business parks from current tenants who expand and that hire additional employees, thereby, encouraging developers to increase the number of buildings in their parks.

Some of the major suburban industrial parks in Southern Nevada are: McCarran Center, Beltway Business Park, Prologis, and the Speedway City View Business Park.

### **Urban Employment Lands - Individual Office Buildings**

Urban office buildings in Southern Nevada are not very different from those located in suburban locations, with the exception of Hughes Center located at the Northwest corner of Flamingo and Paradise Roads. They are generally low to mid-rise and are located in moderate density job zones/districts like the Rainbow corridor between Charleston Boulevard and Flamingo Road, Sahara Avenue west of Interstate 15, and East Flamingo Road between Pecos Road on the East and Paradise Road on the West. These buildings and locales play a pivotal part in the Southern Nevada economy because they permit companies that are rent-sensitive and don't need to be located in a high cost development to operate with relatively lower costs and generally adequate surface parking. Large-scale

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conversions to higher density uses happen less frequently than other projects in higher land cost urban locales, in the case of redevelopment or adaptive reuse.

### **Urban Employment Lands - Office Parks**

Southern Nevada has few Class A (upscale) office parks that are located on traditional urban lands. In fact, the only one is Hughes Center. Most of the other office parks in the region's urban employment land zones are built to suburban centers in terms of height and the lack of structured parking. As the Valley's economy evolves and the office supply overhang caused by the Great Recession fades away, these projects and locales offer a reasonable opportunity for additional employment density.

### **Urban Employment Lands - Individual Industrial Buildings**

Many of Southern Nevada's urban industrial/business parks, projects and zones (those near the Las Vegas Strip, especially west of the I-15) have limited prospects for higher employment densities without a significant amount of redevelopment or adaptive reuse. As unexpected as it sounds, this is because many of the building have been constructed for relatively low employment density uses from an employees per acre standpoint. However, many of the industrial zones in the Valley's urban core have relatively high FARs, causing the enlarging of existing structures to be infeasible. Additionally, these zones seldom see rents rise over time to the extent that causes higher density development to be financially feasible. Finally, and linked to this is the typology of non-residential development in industrial zones (e.g., manufacturing and warehouse uses), these parks restrain land values in close proximity because of air and noise pollution, as well as the large volume of truck traffic.

Nevertheless, there is the potential to increase density via additional development on some of these types of parcels if they can incorporate it, and on underdeveloped or vacant sites. In the event that the character of existing land uses is compatible with office redevelopment, and if there is public transit and/or there is a freeway, industrial buildings, projects and districts can become points of higher-density employment development.

### **Urban Employment Lands - Industrial/Parks Buildings**

Like individual industrial buildings in the Valley's urbanized core, older, lower density industrial/business parks represent similar opportunities for redevelopment.

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Opportunities for higher industrial densities in the core will most likely and chiefly be achieved via the substitution of older, lower and/or medium density buildings and projects with other types of commercial uses likely non-gaming lodging facilities, mid-rise office buildings, and new development on existing surface parking lots.

### *The Transportation-Development Issue*

As previously noted, the opportunity for achieving higher employment densities in Southern Nevada, especially in the Las Vegas Valley, is heavily influenced by rising land values, which are, in turn influenced by the presence of infrastructure, economic and market drivers. These drivers can exist where key transportation infrastructure (bus stops, roads, arterials roads and freeways) are sited, along with economic influences like the creation of logistics relationships and the appearance of economic/industry clusters. Achieving higher employment densities in the Region necessitates further transportation investment to increase capacity because economic and population growth will potentially put large pressures on the existing road network and public transit services.

### *Evolving Density Policies*

Assuming that the more efficient use (higher density) of developable employment land resources is a priority, the use of redevelopment is critical because it allows for a more efficient use of infrastructure in the region's urbanized area. Additionally, promoting higher density Commercial development in the Valley's urbanized area (urban and suburban) also supports the more efficient use of the infrastructure network, especially transportation.

SNS should view the Valley's core as the focal point for mid (4 to 9 stories) to high-rise (10+ stories) office uses and thus, higher job density. Transit usage is relatively robust in the core and will support greater development intensification. The region's employment zones well-served by transit ought to be considered the priority areas for higher job densities. By and large, wide-spread higher job densities are not probable or suitable in Southern Nevada's more rural and exurban areas. Neither are the region's urban and suburban medium and heavy industry industrial employment zones. The same can be said for employment areas with infrequent transit service. They also are not candidates for higher density Commercial and Industrial development.

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Accordingly, establishing specific targeted densities, by area, potentially can direct Commercial development by letting potential developers know the preference of public policy makers for where Commercial and Industrial development should go.

One area of consideration for SNS is the creation of an ordering of Commercial and Industrial sites and places. For example:

- Urban Core - the Las Vegas Downtown area and the Resort Corridor could be the highest priority area for mid to high-rise office development.
- Commercial Center - These are suburban points having high levels of transit service and/or major arterial access. Garage parking and densities of 350+ jobs per acre would be the focus.
- Industrial/Business Park - As referred to herein, this type of employment land use is comprised of light industrial, warehouse and office uses, but is not provided the most frequent level of transit service currently being offered by the RTC. Mid to high density office buildings would not be allowed this type of development but low (under four stories) rise buildings industrial and office uses with surface parking would be allowed.
- Limited Office and Industrial - Users/businesses servicing adjacent or nearby needs of residents or other small businesses.

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### Appendix 5a: RCG & UNLV Lied Institute for Real Studies Las Vegas Speculative Office Market Matrix, Q3, 2014

SUBMARKETS									
TOTAL OFFICE MARKET	Airport	Downtown	East Las Vegas	Henderson	North Las Vegas	Northwest	Southwest	West Central	Totals
Number of Properties	307	119	183	330	94	388	388	275	2,084
Total Rentable SF	5,094,766	3,835,861	6,134,382	6,017,268	783,529	8,735,919	6,763,103	5,406,541	42,771,369
Total Vacant SF	888,841	586,715	1,536,255	1,350,147	117,132	2,011,328	1,494,454	1,256,600	9,241,472
Total Occupied SF	4,205,925	3,249,146	4,598,127	4,667,121	666,397	6,724,591	5,268,649	4,149,941	33,529,897
Total Vacant (%)	17.4%	15.3%	25.0%	22.4%	14.9%	23.0%	22.1%	23.2%	21.6%
Completions QTD	0	0	0	0	0	0	170,000	0	170,000
Completions YOY	0	55,000	0	42,700	0	0	170,000	0	267,700
Total Net Absorption QTD	117,961	-30,913	292,637	48,071	37,221	-56,997	54,534	138,409	600,923
Total Net Absorption YOY	309,436	124,788	481,725	125,502	48,922	200,008	207,770	19,788	1,517,939
Asking Rents (\$ PSF)	\$1.82	\$1.77	\$1.74	\$2.12	\$1.95	\$2.04	\$2.07	\$1.33	\$1.88
Under Construction SF	15,788	0	0	10,000	0	265,080	0	0	290,868
Planned SF	0	0	0	192,000	0	0	80,000	0	272,000
PROFESSIONAL CLASS A									
PROFESSIONAL CLASS A	Airport	Downtown	East Las Vegas	Henderson	North Las Vegas	Northwest	Southwest	West Central	Totals
Number of Properties	6	5	10	12	0	21	4	2	60
Total Rentable SF	665,904	795,116	1,472,466	828,068	0	1,616,232	567,112	227,624	6,172,522
Total Vacant SF	115,252	171,982	345,915	374,739	0	672,825	222,004	74,843	1,977,560
Total Occupied SF	550,652	623,134	1,126,551	453,329	0	943,407	345,108	152,781	4,194,962
Total Vacant (%)	17.3%	21.6%	23.5%	45.3%	0.0%	41.6%	39.1%	32.9%	32.0%
Completions QTD	0	0	0	0	0	0	170,000	0	170,000
Completions YOY	0	0	0	0	0	0	170,000	0	170,000
Total Net Absorption QTD	38,582	14,886	-3,258	-22,905	0	-24,504	107,777	-9,437	101,141
Total Net Absorption YOY	79,967	33,759	38,638	86,065	0	9,348	92,131	-7,271	332,637
Asking Rents (\$ PSF)	\$2.61	\$2.49	\$2.86	\$2.45	\$0.00	\$2.07	\$2.60	\$1.95	\$2.38
Under Construction SF	0	0	0	10,000	0	265,080	0	0	275,080
Planned SF	0	0	0	0	0	0	0	0	0

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

<b>PROFESSIONAL CLASS B</b>	<b>Airport</b>	<b>Downtown</b>	<b>East Las Vegas</b>	<b>Henderson</b>	<b>North Las Vegas</b>	<b>Northwest</b>	<b>Southwest</b>	<b>West Central</b>	<b>Totals</b>
Number of Properties	42	27	18	68	8	73	71	46	<b>353</b>
Total Rentable SF	1,936,021	1,775,096	1,066,557	2,189,754	200,796	2,737,551	2,405,132	1,666,046	<b>13,976,953</b>
Total Vacant SF	302,724	206,495	345,191	381,408	66,282	550,451	690,492	439,923	<b>2,982,966</b>
Total Occupied SF	1,633,297	1,568,601	721,366	1,808,346	134,514	2,187,100	1,714,640	1,226,123	<b>10,993,987</b>
Total Vacant (%)	15.6%	11.6%	32.4%	17.4%	33.0%	20.1%	28.7%	26.4%	<b>21.3%</b>
Completions QTD	0	0	0	0	0	0	0	0	<b>0</b>
Completions YOY	0	55,000	0	42,700	0	0	0	0	<b>97,700</b>
Total Net Absorption QTD	94,449	-21,922	184,510	10,528	33,334	4,034	-31,969	-1,528	<b>271,436</b>
Total Net Absorption YOY	202,030	116,628	122,119	66,658	40,331	-24,332	-109,235	-34,123	<b>380,076</b>
Asking Rents (\$ PSF)	\$1.80	\$1.41	\$1.36	\$1.90	\$1.71	\$2.09	\$2.27	\$1.07	<b>\$1.80</b>
Under Construction SF	0	0	0	0	0	0	0	0	<b>0</b>
Planned SF	0	0	0	42,000	0	0	0	0	<b>42,000</b>
<b>PROFESSIONAL CLASS C</b>									
<b>PROFESSIONAL CLASS C</b>	<b>Airport</b>	<b>Downtown</b>	<b>East Las Vegas</b>	<b>Henderson</b>	<b>North Las Vegas</b>	<b>Northwest</b>	<b>Southwest</b>	<b>West Central</b>	<b>Totals</b>
Number of Properties	253	66	110	144	76	210	272	187	<b>1,318</b>
Total Rentable SF	2,364,311	877,606	2,051,408	1,618,430	482,290	2,234,002	3,058,831	2,761,393	<b>15,448,271</b>
Total Vacant SF	453,388	154,080	358,381	277,028	19,670	325,355	395,137	533,458	<b>2,516,497</b>
Total Occupied SF	1,910,923	723,526	1,693,027	1,341,402	462,620	1,908,647	2,663,694	2,227,935	<b>12,931,774</b>
Total Vacant (%)	19.2%	17.6%	17.5%	17.1%	4.1%	14.6%	12.9%	19.3%	<b>16.3%</b>
Completions QTD	0	0	0	0	0	0	0	0	<b>0</b>
Completions YOY	0	0	0	0	0	0	0	0	<b>0</b>
Total Net Absorption QTD	-17,355	-15,231	99,757	51,232	14,467	31,939	48,508	141,413	<b>354,730</b>
Total Net Absorption YOY	34,540	-50,172	280,217	48,398	15,631	161,649	158,613	180,037	<b>828,913</b>
Asking Rents (\$ PSF)	\$1.65	\$1.41	\$1.34	\$1.78	\$2.36	\$1.79	\$1.76	\$1.32	<b>\$1.58</b>
Under Construction SF	15,788	0	0	0	0	0	0	0	<b>15,788</b>
Planned SF	0	0	0	0	0	0	80,000	0	<b>80,000</b>

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<b>MEDICAL OFFICE</b>	<b>Airport</b>	<b>Downtown</b>	<b>East Las Vegas</b>	<b>Henderson</b>	<b>North Las Vegas</b>	<b>Northwest</b>	<b>Southwest</b>	<b>West Central</b>	<b>Totals</b>
Number of Properties	6	21	45	106	10	84	41	40	<b>353</b>
Total Rentable SF	128,530	388,043	1,543,951	1,381,016	100,443	2,148,134	732,028	751,478	<b>7,173,623</b>
Total Vacant SF	17,477	54,158	486,768	316,972	31,180	462,697	186,821	208,376	<b>1,764,449</b>
Total Occupied SF	111,053	333,885	1,057,183	1,064,044	69,263	1,685,437	545,207	543,102	<b>5,409,174</b>
Total Vacant (%)	13.6%	14.0%	31.5%	23.0%	31.0%	21.5%	25.5%	27.7%	<b>24.6%</b>
Completions QTD	0	0	0	0	0	0	0	0	<b>0</b>
Completions YOY	0	0	0	0	0	0	0	0	<b>0</b>
Total Net Absorption QTD	2,285	-8,646	11,628	9,216	-10,580	-68,466	-69,782	7,961	<b>-126,384</b>
Total Net Absorption YOY	-7,101	24,573	40,751	-75,619	-7,040	53,343	66,261	-118,855	<b>-23,687</b>
Asking Rents (\$ PSF)	\$1.70	\$2.07	\$1.70	\$2.30	\$2.31	\$2.14	\$1.39	\$1.80	<b>\$1.93</b>
Under Construction SF	0	0	0	0	0	0	0	0	<b>0</b>
Planned SF	0	0	0	150,000	0	0	0	0	<b>150,000</b>

*Source: RCG Economics and UNLV-Lied Real Estate Institute.*

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

### Appendix 5b: RCG & UNLV Lied Institute for Real Studies Las Vegas Speculative Industrial Market Matrix, Q3, 2014

SUBMARKETS								
TOTAL INDUSTRIAL MARKET	Airport	East Las Vegas	Henderson	North Las Vegas	Northwest	Southwest	West Central	Totals
Number of Properties	501	149	533	1,015	81	1,279	648	<b>4,206</b>
Total Rentable SF	14,127,625	2,823,817	12,770,916	31,691,519	1,336,299	33,137,033	12,016,433	<b>107,903,642</b>
Total Vacant SF	1,828,680	287,354	770,114	2,355,870	174,865	3,033,281	853,808	<b>9,303,972</b>
Total Occupied SF	12,298,945	2,536,463	12,000,802	29,335,649	1,161,434	30,103,752	11,162,625	<b>98,599,670</b>
Total Vacant (%)	12.9%	10.2%	6.0%	7.4%	13.1%	9.2%	7.1%	<b>8.6%</b>
Completions QTD	0	0	0	39,490	0	0	0	<b>39,490</b>
Completions YOY	0	0	72,000	239,490	0	0	0	<b>311,490</b>
Total Net Absorption QTD	420,569	-109,318	-79,199	305,783	26,485	616,706	3,005	<b>1,184,031</b>
Total Net Absorption YOY	407,605	7,192	217,108	2,154,735	147,492	1,608,622	43,082	<b>4,585,836</b>
Asking Rents (\$ PSF)	\$0.81	\$0.40	\$0.60	\$0.41	\$1.08	\$0.59	\$0.74	<b>\$0.60</b>
Under Construction SF	193,000	0	296,000	1,314,203	0	45,500	0	<b>1,848,703</b>
Planned SF	0	1,168,760	0	163,790	0	241,500	0	<b>1,574,050</b>
WAREHOUSE/DISTRIBUTION								
WAREHOUSE/DISTRIBUTION	Airport	East Las Vegas	Henderson	North Las Vegas	Northwest	Southwest	West Central	Totals
Number of Properties	78	18	77	177	5	140	52	<b>547</b>
Total Rentable SF	4,844,394	907,075	6,459,019	18,745,949	223,661	13,066,312	1,939,836	<b>46,186,246</b>
Total Vacant SF	398,334	150,874	124,450	1,361,133	13,367	1,206,458	73,282	<b>3,327,898</b>
Total Occupied SF	4,446,060	756,201	6,334,569	17,384,816	210,294	11,859,854	1,866,554	<b>42,858,348</b>
Total Vacant (%)	8.2%	16.6%	1.9%	7.3%	6.0%	9.2%	3.8%	<b>7.2%</b>
Completions QTD	0	0	0	39,490	0	0	0	<b>39,490</b>
Completions YOY	0	0	0	239,490	0	0	0	<b>239,490</b>
Total Net Absorption QTD	98,352	-141,174	15,716	216,335	0	292,636	0	<b>481,865</b>
Total Net Absorption YOY	168,036	-138,081	111,254	1,646,110	37,000	999,618	-282	<b>2,823,655</b>
Asking Rents (\$ PSF)	\$0.54	\$0.35	\$0.66	\$0.35	\$0.49	\$0.48	\$0.51	<b>\$0.43</b>
Under Construction SF	193,000	0	296,000	1,314,203	0	45,500	0	<b>1,848,703</b>
Planned SF	0	1,168,760	0	163,790	0	0	0	<b>1,332,550</b>

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

<b>LIGHT DISTRIBUTION</b>	<b>Airport</b>	<b>East Las Vegas</b>	<b>Henderson</b>	<b>North Las Vegas</b>	<b>Northwest</b>	<b>Southwest</b>	<b>West Central</b>	<b>Totals</b>
Number of Properties	68	19	37	167	1	181	40	<b>513</b>
Total Rentable SF	3,169,129	340,675	1,571,703	4,848,934	51,000	6,930,636	775,747	<b>17,687,824</b>
Total Vacant SF	401,204	0	284,322	425,098	3,800	817,102	119,784	<b>2,051,310</b>
Total Occupied SF	2,767,925	340,675	1,287,381	4,423,836	47,200	6,113,534	655,963	<b>15,636,514</b>
Total Vacant (%)	12.7%	0.0%	18.1%	8.8%	7.5%	11.8%	15.4%	<b>11.6%</b>
Completions QTD	0	0	0	0	0	0	0	<b>0</b>
Completions YOY	0	0	0	0	0	0	0	<b>0</b>
Total Net Absorption QTD	221,897	20,300	-110,137	98,328	13,413	140,398	-29,100	<b>355,099</b>
Total Net Absorption YOY	146,953	30,676	-93,755	377,907	20,891	215,512	19,224	<b>717,408</b>
Asking Rents (\$ PSF)	\$0.66	\$0.00	\$0.48	\$0.35	\$0.65	\$0.59	\$0.46	<b>\$0.52</b>
Under Construction SF	0	0	0	0	0	0	0	<b>0</b>
Planned SF	0	0	0	0	0	0	0	<b>0</b>
<b>LIGHT INDUSTRIAL</b>	<b>Airport</b>	<b>East Las Vegas</b>	<b>Henderson</b>	<b>North Las Vegas</b>	<b>Northwest</b>	<b>Southwest</b>	<b>West Central</b>	<b>Totals</b>
Number of Properties	199	91	313	594	16	740	482	<b>2,435</b>
Total Rentable SF	3,076,809	1,135,150	3,057,009	6,755,260	290,111	9,121,042	6,622,403	<b>30,057,784</b>
Total Vacant SF	378,816	65,383	206,480	380,813	4,920	570,374	416,921	<b>2,023,707</b>
Total Occupied SF	2,697,993	1,069,767	2,850,529	6,374,447	285,191	8,550,668	6,205,482	<b>28,034,077</b>
Total Vacant (%)	12.3%	5.8%	6.8%	5.6%	1.7%	6.3%	6.3%	<b>6.7%</b>
Completions QTD	0	0	0	0	0	0	0	<b>0</b>
Completions YOY	0	0	72,000	0	0	0	0	<b>72,000</b>
Total Net Absorption QTD	-16,769	3,500	-22,039	-12,112	2,092	61,791	72,128	<b>88,591</b>
Total Net Absorption YOY	44,897	76,927	103,153	103,115	22,391	211,026	130,685	<b>692,194</b>
Asking Rents (\$ PSF)	\$1.11	\$0.56	\$0.69	\$0.42	\$0.39	\$0.63	\$0.80	<b>\$0.70</b>
Under Construction SF	0	0	0	0	0	0	0	<b>0</b>
Planned SF	0	0	0	0	0	241,500	0	<b>241,500</b>

## SOUTHERN NEVADA STRONG: EMPLOYMENT LAND POLICY ANALYSIS

<b>INCUBATOR</b>	<b>Airport</b>	<b>East Las Vegas</b>	<b>Henderson</b>	<b>North Las Vegas</b>	<b>Northwest</b>	<b>Southwest</b>	<b>West Central</b>	<b>Totals</b>
Number of Properties	89	13	29	31	4	120	62	<b>348</b>
Total Rentable SF	1,714,621	298,623	456,906	561,552	99,325	2,496,381	2,458,615	<b>8,086,023</b>
Total Vacant SF	294,388	51,698	24,706	72,407	1,922	170,119	206,407	<b>821,647</b>
Total Occupied SF	1,420,233	246,925	432,200	489,145	97,403	2,326,262	2,252,208	<b>7,264,376</b>
Total Vacant (%)	17.2%	17.3%	5.4%	12.9%	1.9%	6.8%	8.4%	<b>10.2%</b>
Completions QTD	0	0	0	0	0	0	0	<b>0</b>
Completions YOY	0	0	0	0	0	0	0	<b>0</b>
Total Net Absorption QTD	59,834	5,056	11,543	3,232	13,282	62,427	-26,509	<b>128,865</b>
Total Net Absorption YOY	-28,324	52,824	40,097	-21,329	9,839	87,561	-74,538	<b>66,130</b>
Asking Rents (\$ PSF)	\$0.80	\$0.45	\$0.55	\$0.56	\$0.65	\$0.77	\$0.82	<b>\$0.75</b>
Under Construction SF	0	0	0	0	0	0	0	<b>0</b>
Planned SF	0	0	0	0	0	0	0	<b>0</b>
<b>R&amp;D / FLEX</b>	<b>Airport</b>	<b>East Las Vegas</b>	<b>Henderson</b>	<b>North Las Vegas</b>	<b>Northwest</b>	<b>Southwest</b>	<b>West Central</b>	<b>Totals</b>
Number of Properties	67	8	77	46	55	98	12	<b>363</b>
Total Rentable SF	1,322,672	142,294	1,226,279	779,824	672,202	1,522,662	219,832	<b>5,885,765</b>
Total Vacant SF	355,938	19,399	130,156	116,419	150,856	269,228	37,414	<b>1,079,410</b>
Total Occupied SF	966,734	122,895	1,096,123	663,405	521,346	1,253,434	182,418	<b>4,806,355</b>
Total Vacant (%)	26.9%	13.6%	10.6%	14.9%	22.4%	17.7%	17.0%	<b>18.3%</b>
Completions QTD	0	0	0	0	0	0	0	<b>0</b>
Completions YOY	0	0	0	0	0	0	0	<b>0</b>
Total Net Absorption QTD	57,255	3,000	25,718	0	-2,302	59,454	-13,514	<b>129,611</b>
Total Net Absorption YOY	76,043	-15,154	56,359	48,932	57,371	94,905	-32,007	<b>286,449</b>
Asking Rents (\$ PSF)	\$0.86	\$0.51	\$0.78	\$0.75	\$1.12	\$0.87	\$0.68	<b>\$0.89</b>
Under Construction SF	0	0	0	0	0	0	0	<b>0</b>
Planned SF	0	0	0	0	0	0	0	<b>0</b>

*Source: RCG Economics and UNLV-Lied Real Estate Institute.*

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