

Economic & Demographic Assessment

Prepared for the Las
Vegas Global Economic
Alliance | 2012

TIP
strategies



RCG
ECONOMICS



1. Economic Assessment

METHODOLOGY

The primary goal for the following assessment is to arrive at a common understanding of the Las Vegas region's unique economic strengths, weaknesses, opportunities and threats (the region is defined as Clark County). This analysis is expressed in the context of the national economy as a means for understanding the region's relative position and highlighting its latent and potential competitive advantages.

For this socioeconomic assessment, TIP included an analysis of the following:

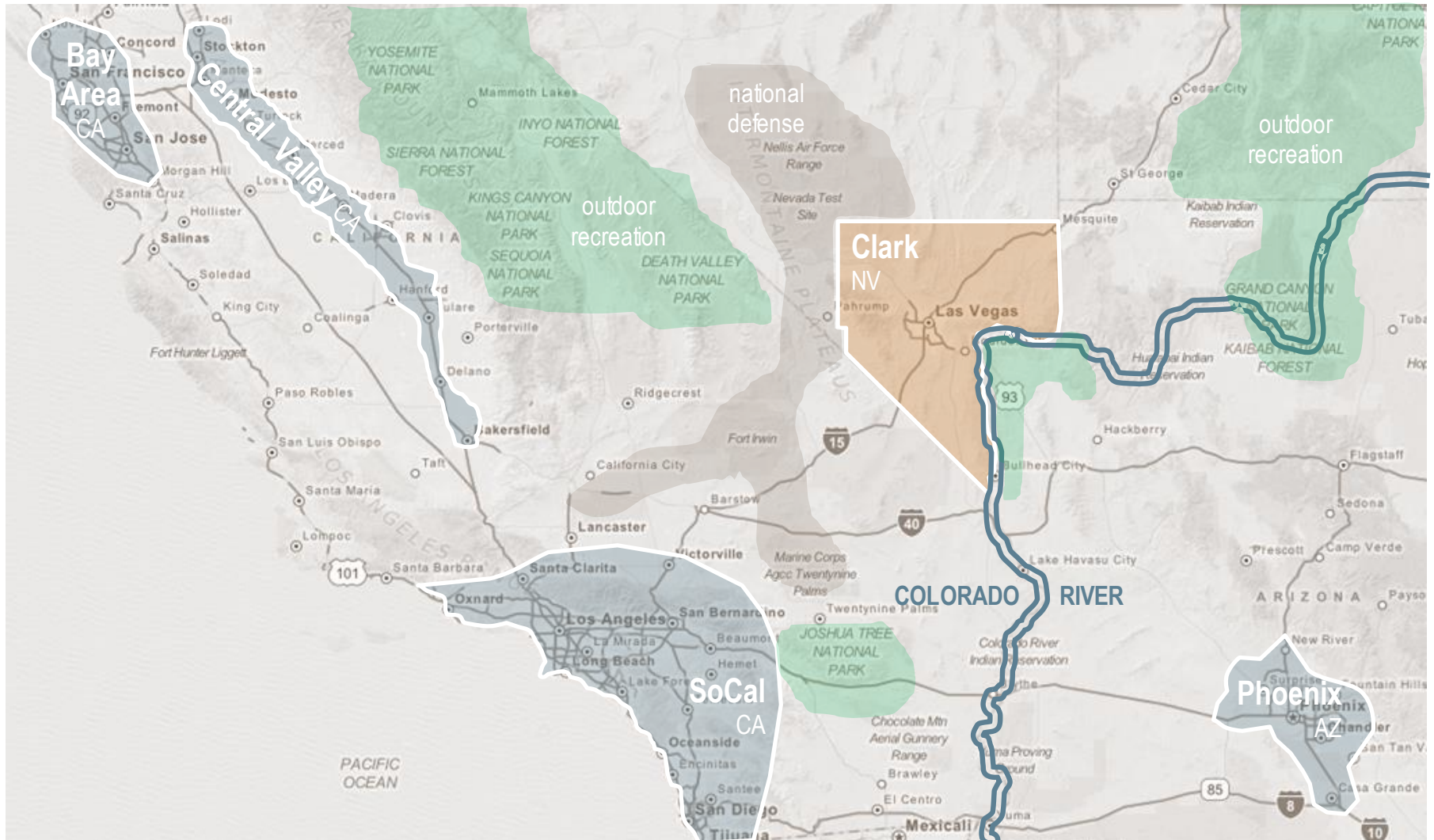
- Demographics
- Migration and mobility
- Income and housing
- Workforce
- Economy, infrastructure, and tax base

In addition to this data assessment, TIP has also reviewed a number of separate economic development studies performed for the state and region, including:

- *Unify, Regionalize, Diversify: An Economic Development Agenda for Nevada*, Brookings Institution, SRI International, UNLV
- *Moving Nevada Forward: A Plan for Excellence in Economic Development, 2012 – 2014*, Nevada GOED
- *City of Las Vegas Downtown Centennial Plan (2009 Update)*, City of Las Vegas
- *City of Las Vegas Master Plan 2020*, City of Las Vegas

CLARK COUNTY, NEVADA

In the context of major population centers and shared resources



SOURCE: Mapquest

WHAT ARE THE POPULATION GROWTH TRENDS IN THE VALLEY?

Demographics

■ According to the U.S. Census Bureau, Clark County's population reached 1.97 million at mid-2011. The county's internal estimates ran slightly ahead of the Census Bureau's through most of the decade, but by mid-2011 both sets of estimates converged at 1.97 million.

■ Southern Nevada's suburbs have become major cities in their own right. Henderson's population is now the same as Buffalo, New York. North Las Vegas is now larger than Birmingham, Alabama

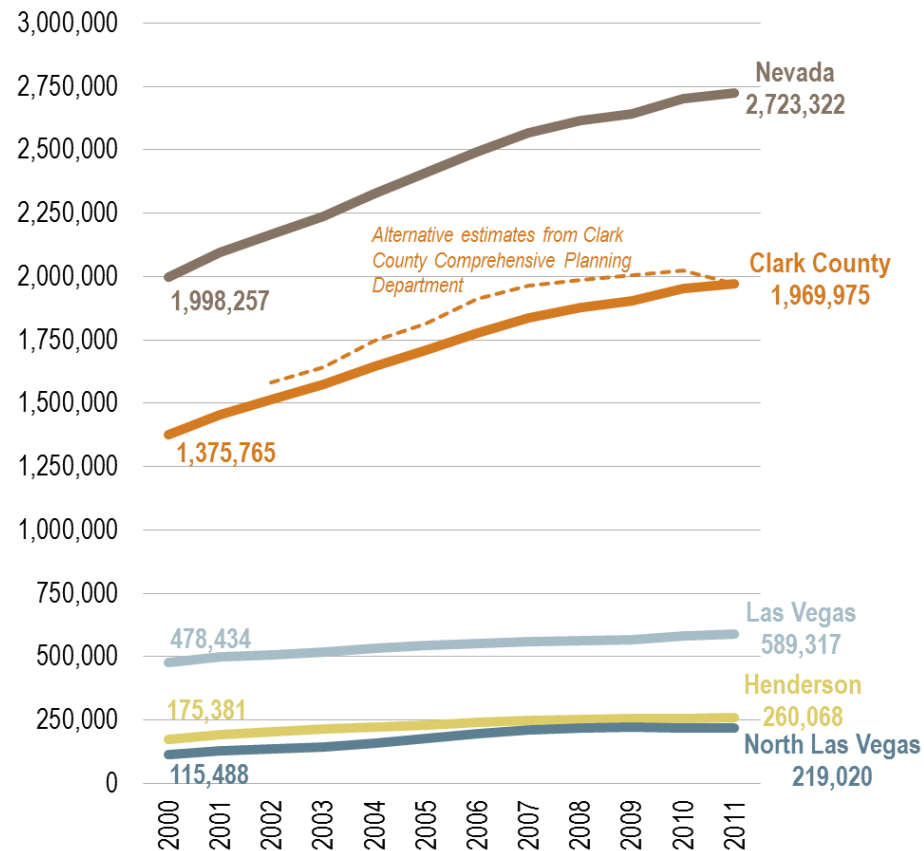
Perspective

Like many metro areas, the population of the county is growing at a faster rate than the central city. This argues for close regional cooperation and a clear understanding of where development can occur within the city itself.

For example, it should be noted that large scale master-planned communities like Summerlin, Green Valley Ranch, Anthem, Southern Highlands, and Aliante drive this growth.

Figure 1: Population changes since 2000

All estimates are US Census Bureau except where indicated below.



Source: US Census Bureau; Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

HOW DOES THE VALLEY SIZE UP NATIONALLY?

Demographics

■ Rapid population increases can bring daunting administrative challenges. Clark County has become the nation's 13th largest in population. It now exceeds the population of Manhattan Island (New York County, NY) and Silicon Valley (Santa Clara County, CA).

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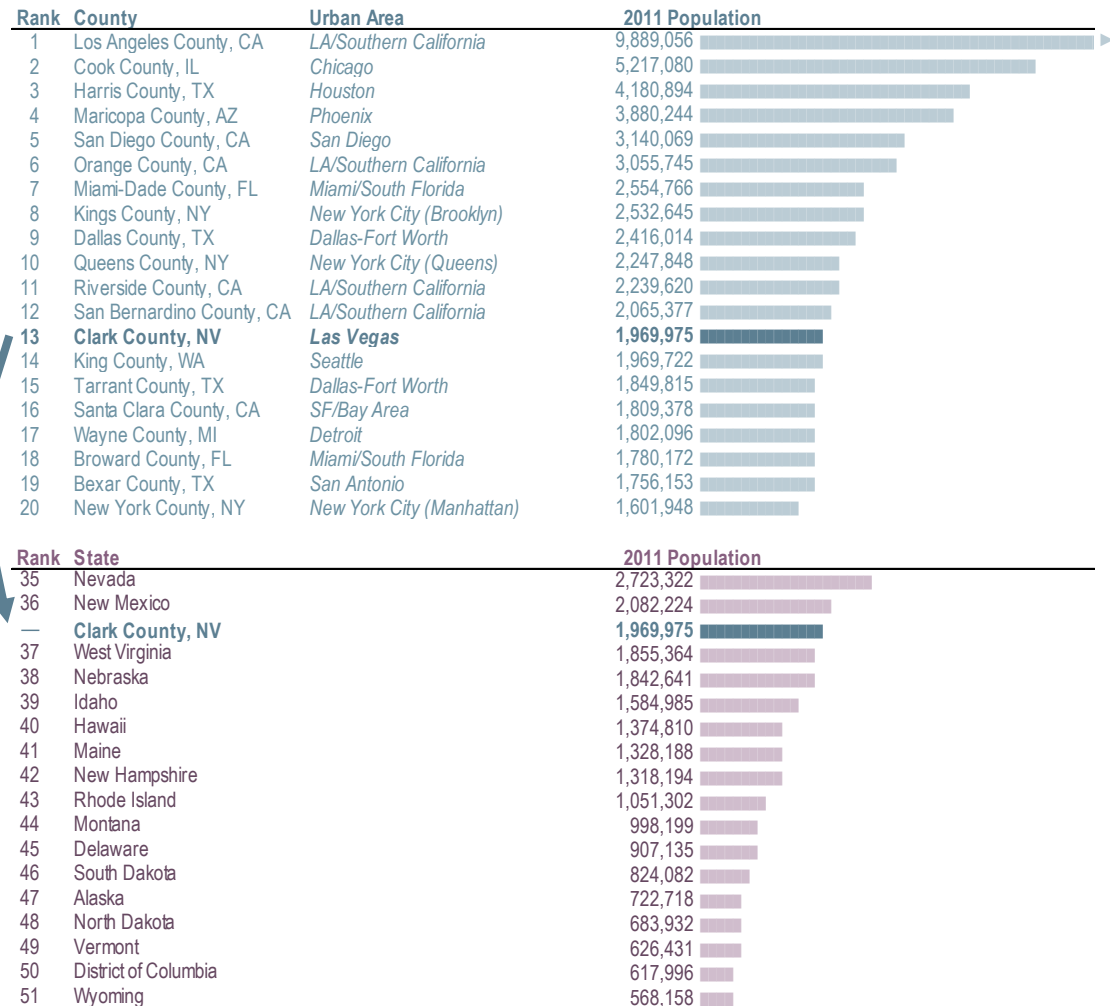
■ If Clark County were a state, it would rank 37th in size, placing it just ahead of West Virginia, Nebraska, Idaho, Hawaii, plus 10 more states and the District of Columbia.

Perspective

Seeing Las Vegas as a major population hub offers opportunities in logistics and distribution. It also calls for the organizational capacity to handle large economic development prospects. The RDA can think of itself as an entity on par with other large urban areas.

Figure 2: An urban administrative challenge

Now the nation's 13th largest county with more people than 14 states and the District of Columbia.



Source: US Census Bureau

HOW HAVE POPULATION GROWTH TRENDS CHANGED OVER THE LAST DECADE?

Demographics

■ The years of dramatic population growth have ended for now. In the early years of the decade, Clark County was adding 60,000-70,000 (gross) new residents annually. Since 2009, the annual average had been closer to 20,000.

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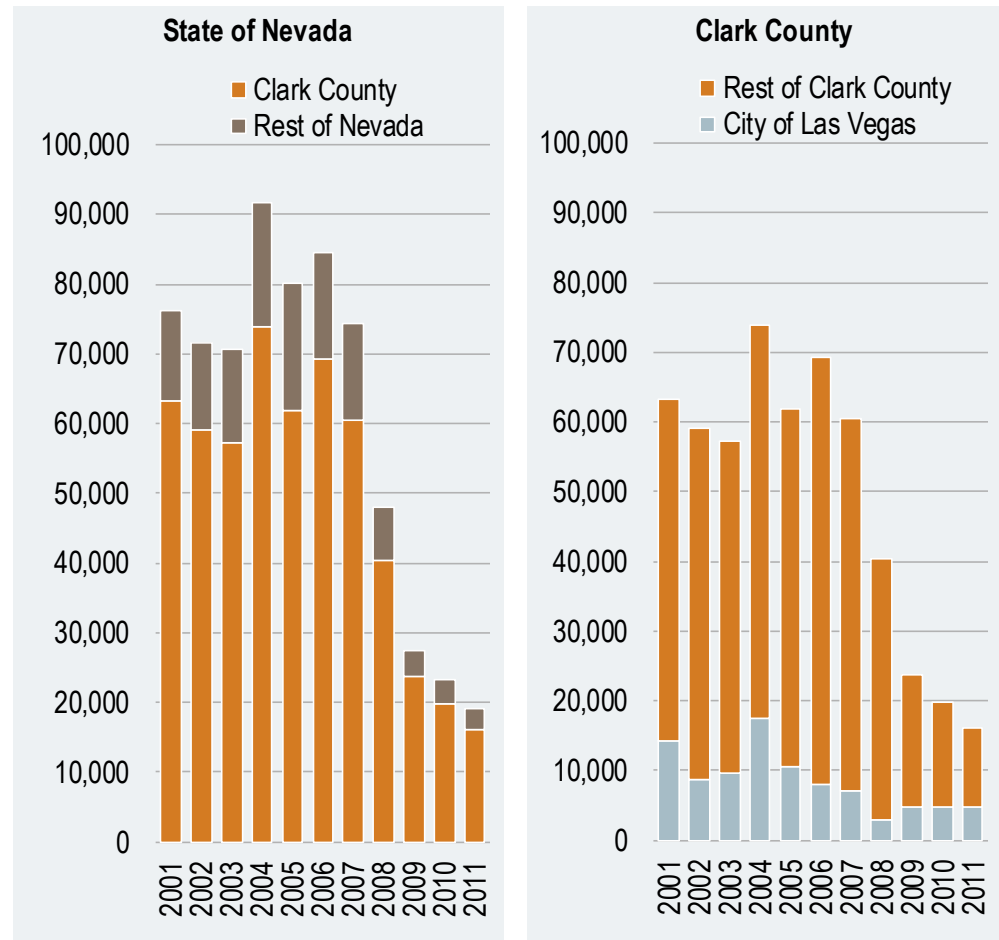
■ Population growth in the City of Las Vegas has tapered off as well, though less precipitously. Average annual growth of 10,000-15,000 in the early years of the decade now averages about 5,000 new residents per year.

Perspective

The Las Vegas economy was fueled by housing construction. Slower growth is, in many ways, a more desirable state of affairs. It can effectively pave the way for a restructured workforce and a more diverse economy.

Figure 3: Net annual population gains

Change between Census mid-year estimates, 2000-2011.



Note: Net gains in 2010 are shown as the mid-point between 2009 & 2011 because mid-year estimates immediately following the decennial Census are not directly comparable to previous estimates.

Source: US Census Bureau

HOW IS THE VALLEY EXPECTED TO GROW IN THE FUTURE?

Demographics

- The most recent population forecast from the state demographer's office shows continued growth in Clark County over the next two decades.

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- The county's population growth sped up between 1990 the 2007. In the coming post-recession environment, the forecast shows population growth falling back into the slower pace experienced before 1990.

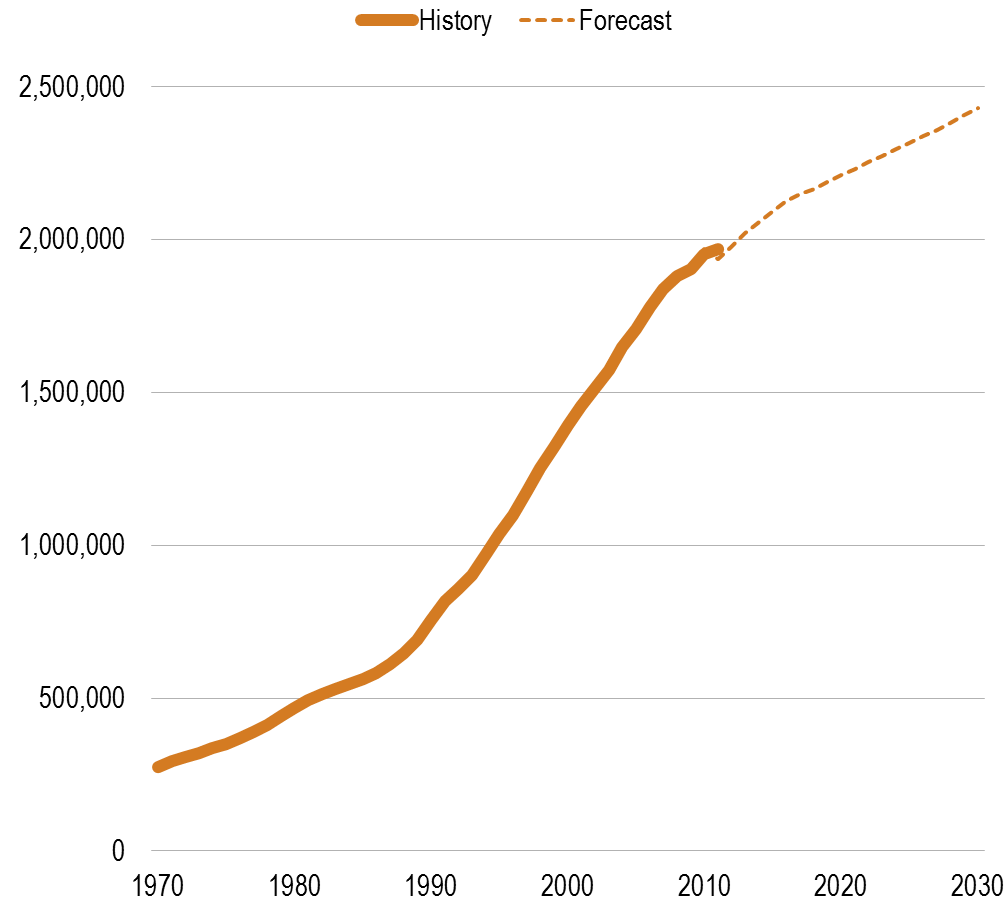
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- According to this forecast, the county would add nearly a half-million new residents over the next 20 years, putting the Clark County population just under 2.5 million by 2030.

Perspective

A certain skepticism is called for when looking at long term forecasts. More important than migration patterns is the question of what kind of workers the economy will attract.

Figure 4: Historical population and forecast



Source: US Census Bureau and Moody's Analytics (history) and Nevada State Demographer's Office (projections)

WHAT IS THE AGE DISTRIBUTION OF THE VALLEY?

Demographics

■ Even though Clark County's current age structure is in line with the U.S., it is not static. Demographic changes are underway nationwide that can also be detected locally.

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■ In 1970, there were 8 children in Clark County for every senior citizen. As baby boomers retire over the next two decades, the ratio will be something like 4 seniors for every 7 children.

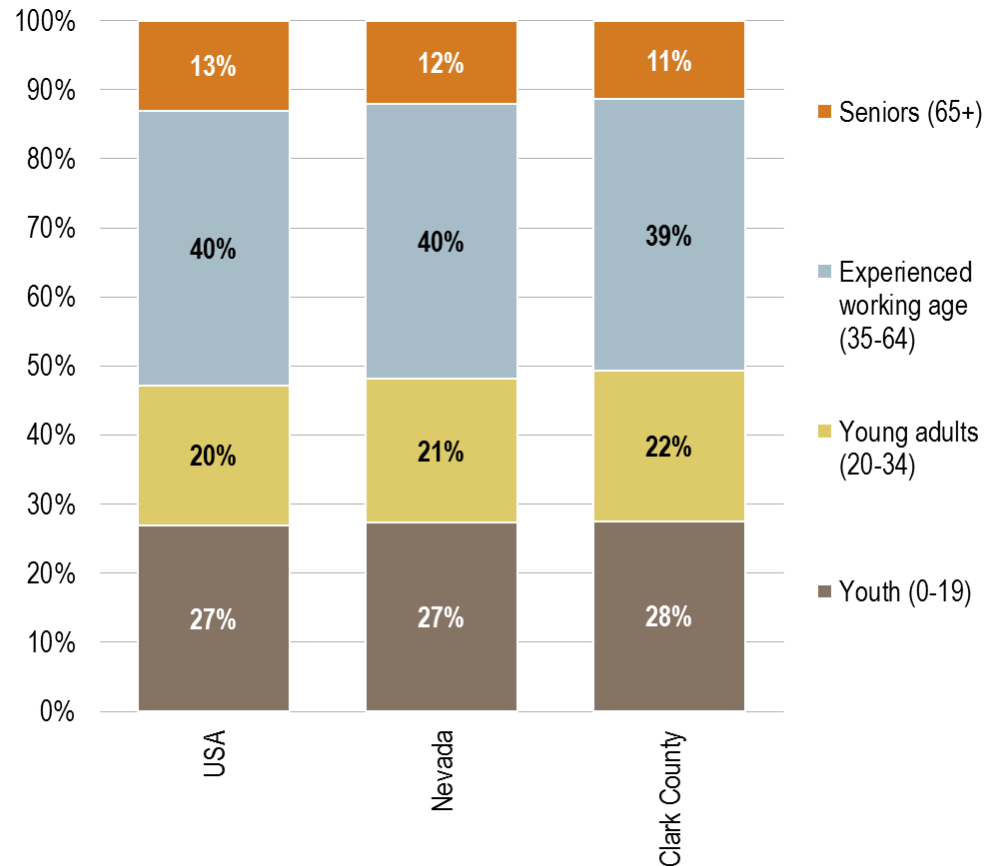
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■ Clark County's other residents—those of working age—will hold fairly constant in percentage terms. This age cohort represented about 56% of the population in 1970 and it will in 2030 as well. The differences will be more palpable at the younger and older ends of the age spectrum.

Perspective

As the nation continues to age, the regions that offer an abundance of skilled workers will be more attractive to growing companies.

Figure 5: Comparative population distribution by age



Source: U.S. Census Bureau (2010 American Community Survey, 1-Year Estimates)

WHAT IS THE ETHNIC AND RACIAL COMPOSITION OF THE REGION?

Demographics

■ Much like the rest of the nation, the ethnic and racial composition of Clark County is changing quickly. In 2000, the U.S. Census Bureau's decennial count of the population showed that 22 percent of Clark County was Hispanic or Latino. By 2010, that share had increase to 29 percent.

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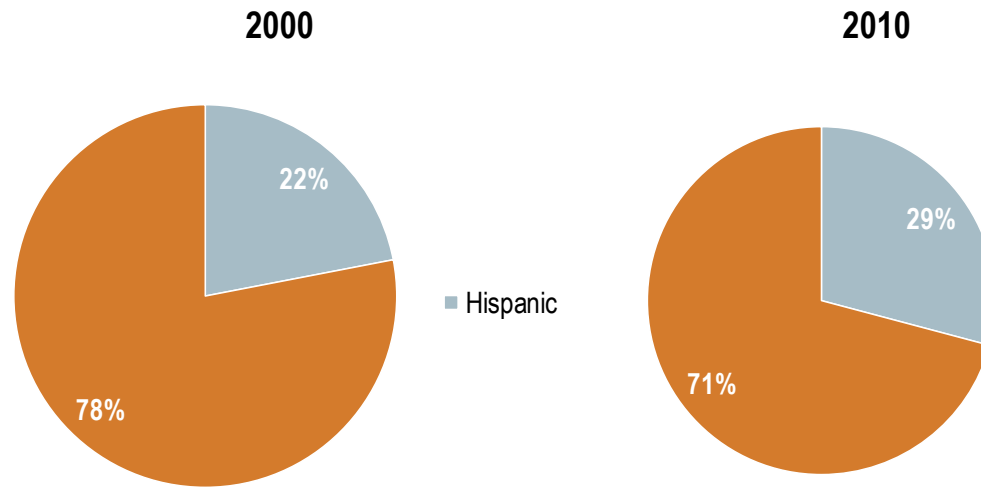
■ In comparison to the remainder of the state and the US as a whole, Clark County has a more ethnically and racially diverse population.

Perspective

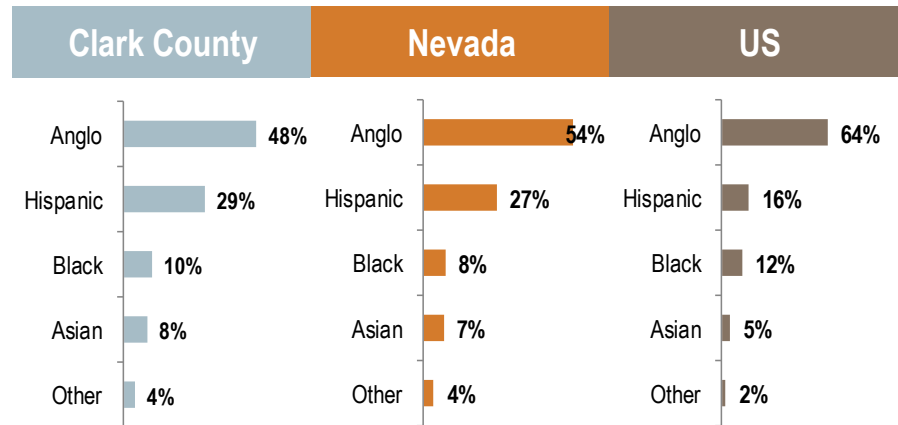
The rapid growth of the Hispanic population in the region puts it well ahead of the nation. This has implications for education and workforce that extend well beyond, but certainly include, economic issues.

Figure 6: The changing demographics of Clark County

Share of Clark County's Hispanic & non-Hispanic populations, 2000 & 2010



Percent of the Population by Race / Ethnicity 2010



Source: U.S. Census Bureau (decennial)

HOW MANY RESIDENTS ARE STUDENTS?

Demographics

■ Enrollment data for Clark County parallels the U.S. in most educational categories except higher education. A larger share of U.S. residents are enrolled in higher education programs (8%) than in either Nevada or Clark County (6% each).

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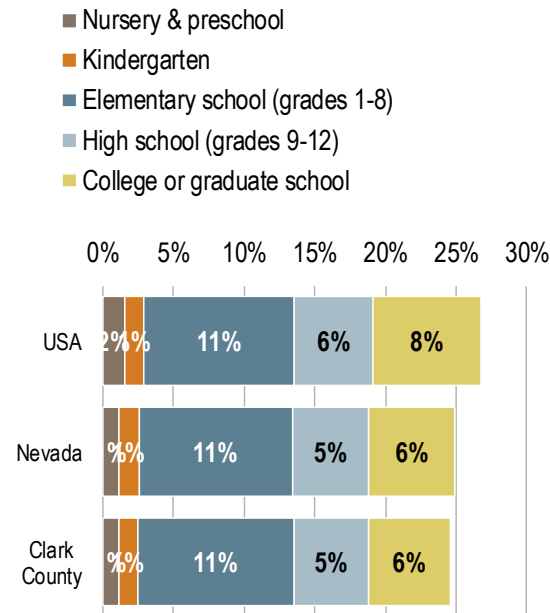
■ Public school enrollment in Clark County expanded briskly during the high population growth years. Since the recession began, enrollment in the county's public schools has leveled off near 310,000 after a slight decline from 2009 to 2010.

Perspective

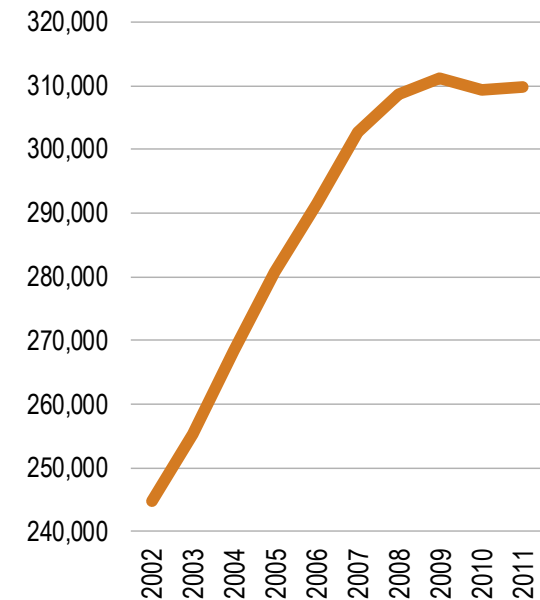
The two percentage point gap between Clark County and the nation in persons who are enrolled in college should be troubling. Employers continue to increase their educational and/or certification requirements for workers. If there is a perceived shortage of highly educated workers in the region, it will be considered at a competitive disadvantage.

Figure 7: Enrollment overview

Current enrollment status of the population



Public school enrollment counts in Clark County



Sources: U.S. Census Bureau (2010 American Community Survey, 1-Year Estimates); Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

HOW EDUCATED IS THE VALLEY?

Demographics

■ Educational attainment levels for Nevada's population echo the same trends seen in the current enrollment statistics. A smaller share of state and county residents (22%) have 4-year degrees as compared to the U.S. average (28%).

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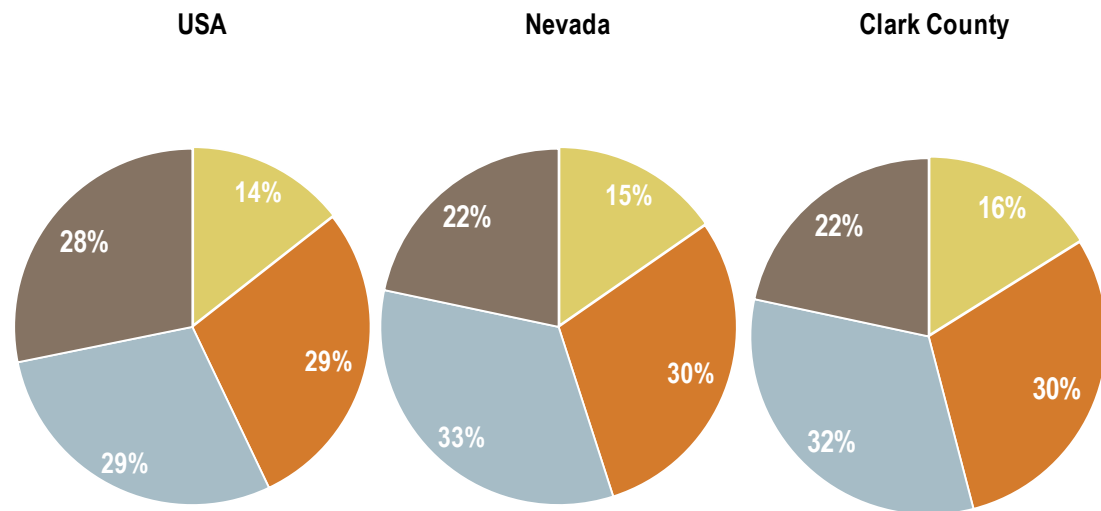
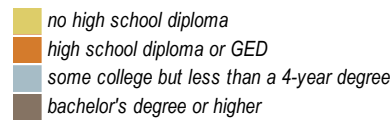
■ On the other hand, a notably higher share of residents at the state and county levels (32%-33%) have a lesser level of college experience, whether a completed vocational or 2-year degree or progress toward a 4-year degree. In the U.S. overall, this ratio is 29% of the population.

Perspective

Higher education has become a critical component for regions seeking a competitive advantage in economic development. This is true both for supplying a sufficient base of talent as well as for providing opportunities in research and innovation.

Figure 8: Educational attainment, 2010

Highest level of education achieved by the population age 25 or older.



Source: U.S. Census Bureau (2010 American Community Survey, 1-Year Estimates)

HOW DO DIFFERENT VARIABLES AFFECT THE VALLEY'S POPULATION GROWTH?

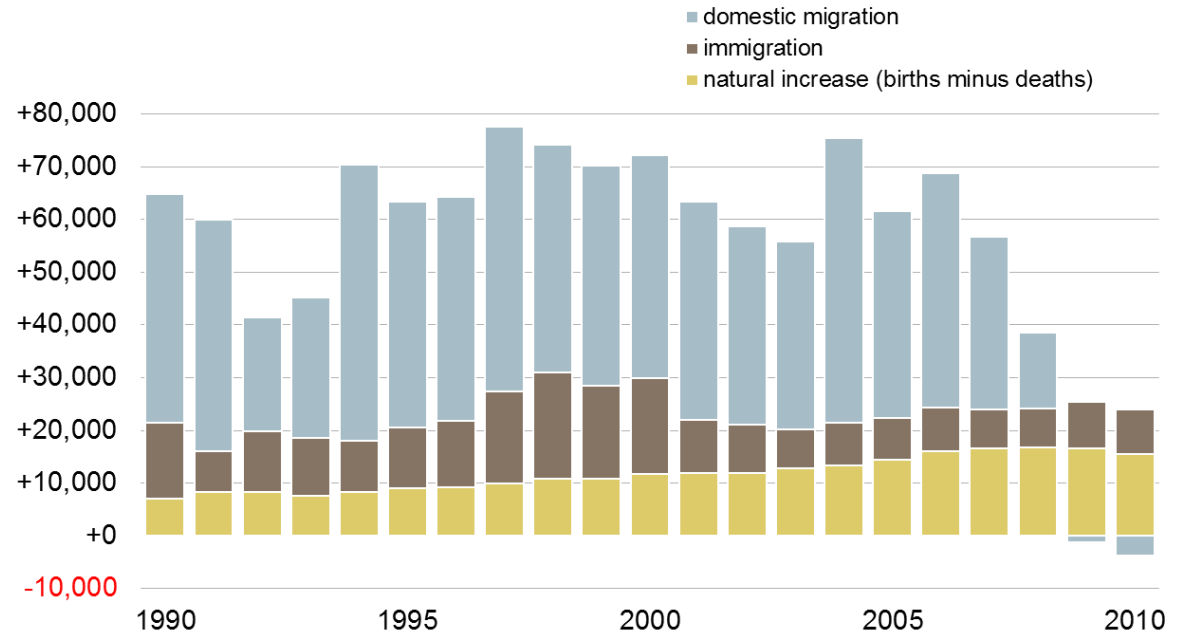
- Natural increase (the excess of births over deaths) has proven a stable and steady contributor to the county's population growth, but the more volatile component of net in-migration tends to be the biggest driver of population growth in most years.

- Immigration peaked in the 1990s, but the Census Bureau's annual estimates of net domestic in-migration didn't begin to fade until 2008. More recently domestic out-migrants have outnumbered in-migrants by modest amounts. For the next several years, natural increases in the population are likely to exceed in-migration.

Perspective

Demographic information matters most directly when defining the current and future workforce. Education is an imperfect proxy for skills, but is widely used to evaluate the competency of the workforce. Similarly, age reflects wages (also imperfectly) and is a good indication of where the overall workforce is trending. In- and out-migration help nuance this further.

Figure 9: Components of population growth



Sources: US Census Bureau; Moody's Analytics

ARE MORE PEOPLE MOVING INTO TO CLARK COUNTY THAN MOVING OUT?

- The US Internal Revenue Service tracks changes in the number and location of income tax exemptions. This administrative data set (a bi-product of filing an annual tax return) can be used to count the gross number of people moving into and out of a county over time.

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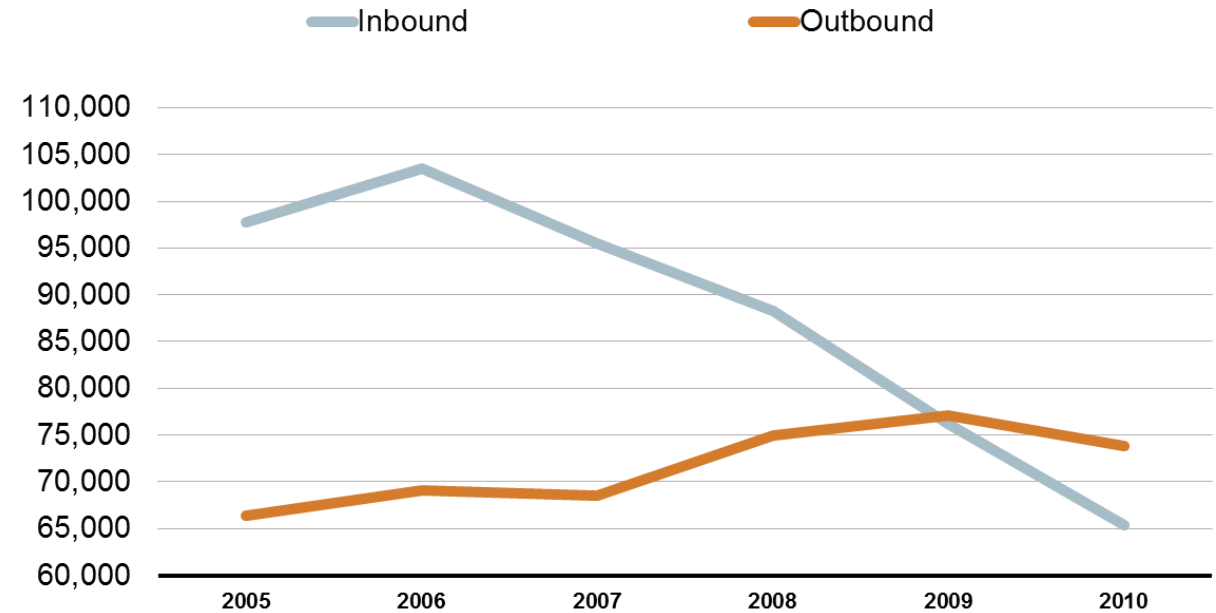
- In Clark County, the number of inbound movers peaked around 2006, and the outbound count began climbing in 2008. By 2009, the annual counts of inbound and outbound movers had flipped indicating a pivotal near-term reversal in one of the primary drivers of local population growth.

Perspective

Unfortunately, a significant lag exists in the releasing of this data set, and it remains too soon to tell if the region made a turnaround in 2011 or if the decline of inbound migrants continued. Other data, such as school enrollment figures and population estimates, suggest the region may now have reached a state of equilibrium.

Figure 10: Clark County migration patterns

Annual changes in county-of-residence tabulated to show inbound versus outbound movers.



Sources: US Internal Revenue Service, county-to-county migration flows; Moody's Analytics

WHERE IN CALIFORNIA HAVE PEOPLE MOVING TO CLARK COUNTY COME FROM?

■ The most dramatic shifts in inward migration to Clark County can be traced to Southern California, especially LA County, where net flows fell by nearly 90% between 2006 and 2010.

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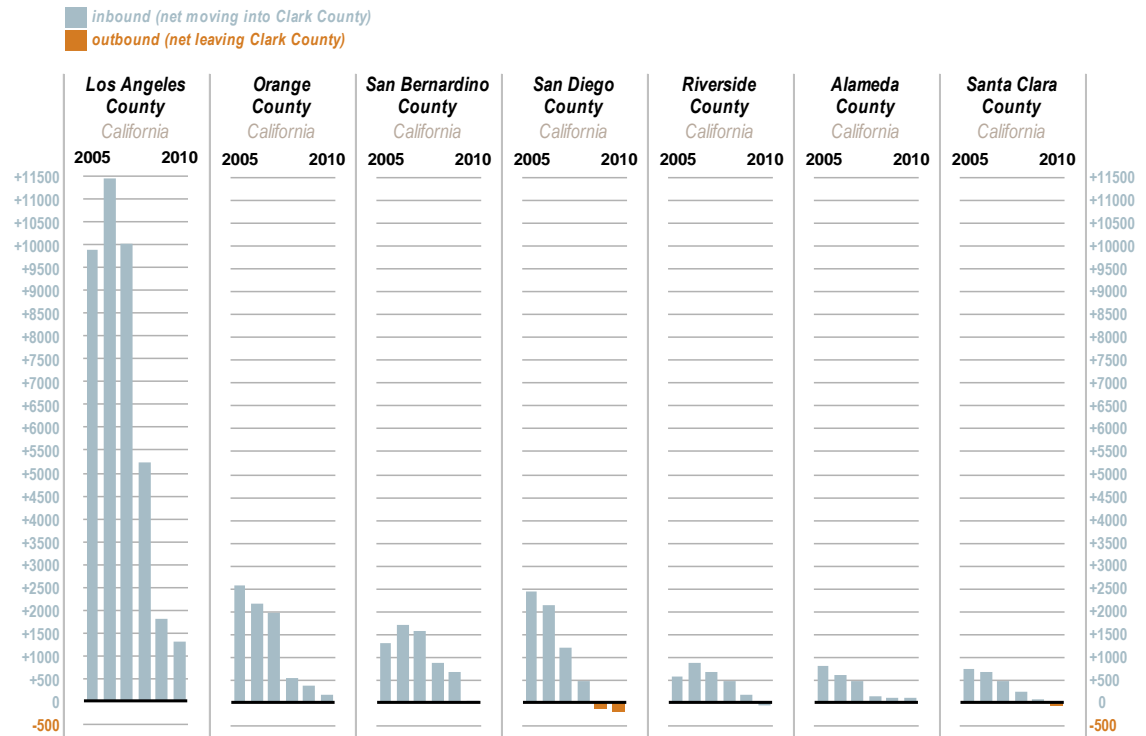
■ In both San Diego and Santa Clara counties, historical patterns of inbound migration to Clark County have reversed, with narrow net outflows from Clark to those California counties in the post-recession years.

Perspective

An important question for the Las Vegas region is whether it will be able to recover its status as a destination for Southern Californians. If it is unable to do so, the region will need to increase its focus on growing a skilled workforce from within.

Figure 11: California counties with historically high migration patterns INTO Clark County

Annual net migration into (out of) Clark County from the selected counties.



Sources: US Internal Revenue Service, county-to-county migration flows since 2005

WHERE ELSE HAVE PEOPLE MOVING TO CLARK COUNTY COME FROM?

■ Even during the high-growth years, there were still places drawing a net outflow of Clark County residents. Most of these locations were somewhere in the inland southwestern states.

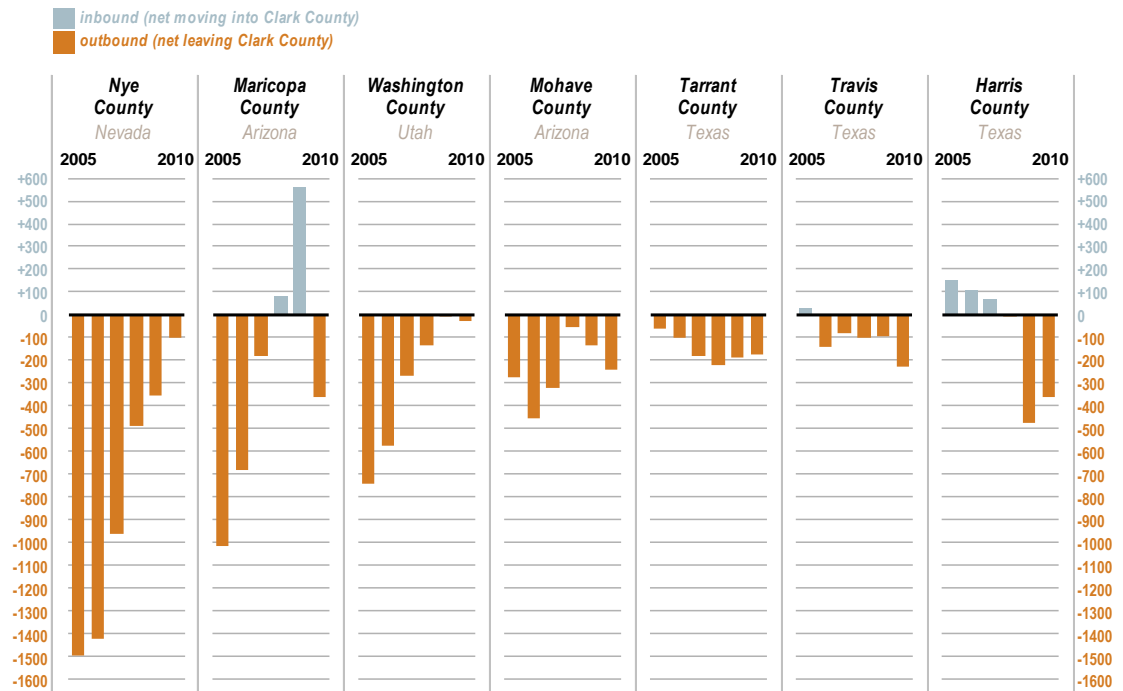
■ These destinations fall into two groups. First, there are the outlying ex-urban counties immediately surrounding Clark. These include Nye (Nevada), Mohave (Arizona), and Washington (Utah). The second group consists of fast-growing urban counties around the southwest, including Maricopa (Phoenix), Tarrant (Fort Worth), Travis (Austin), and Harris (Houston). These destination cities, particularly those in Texas, recovered more quickly from the recession. As a result, the migration toward these metro areas is likely a function of Clark County residents seeking employment opportunities elsewhere.

Perspective

While we cannot be certain of this, it is reasonable to assume that worker movement between Clark County and other high growth regions reflects the demands of the construction trade (notably urban areas in Texas and in Phoenix – Maricopa Co.).

Figure 12: Counties with historically high migration patterns OUT FROM Clark County

Annual net migration into (out of) Clark County from the selected counties.



Sources: US Internal Revenue Service, county-to-county migration flows since 2005

HOW DO HOUSEHOLDS IN THE VALLEY COMPARE TO THEIR NATIONAL PEERS?

■ As of 2010, median household incomes in Nevada and Clark County tended to be slightly above the national average, while median home values fell just below the national average. This implied that Nevadans had slightly better home affordability than the U.S. average.

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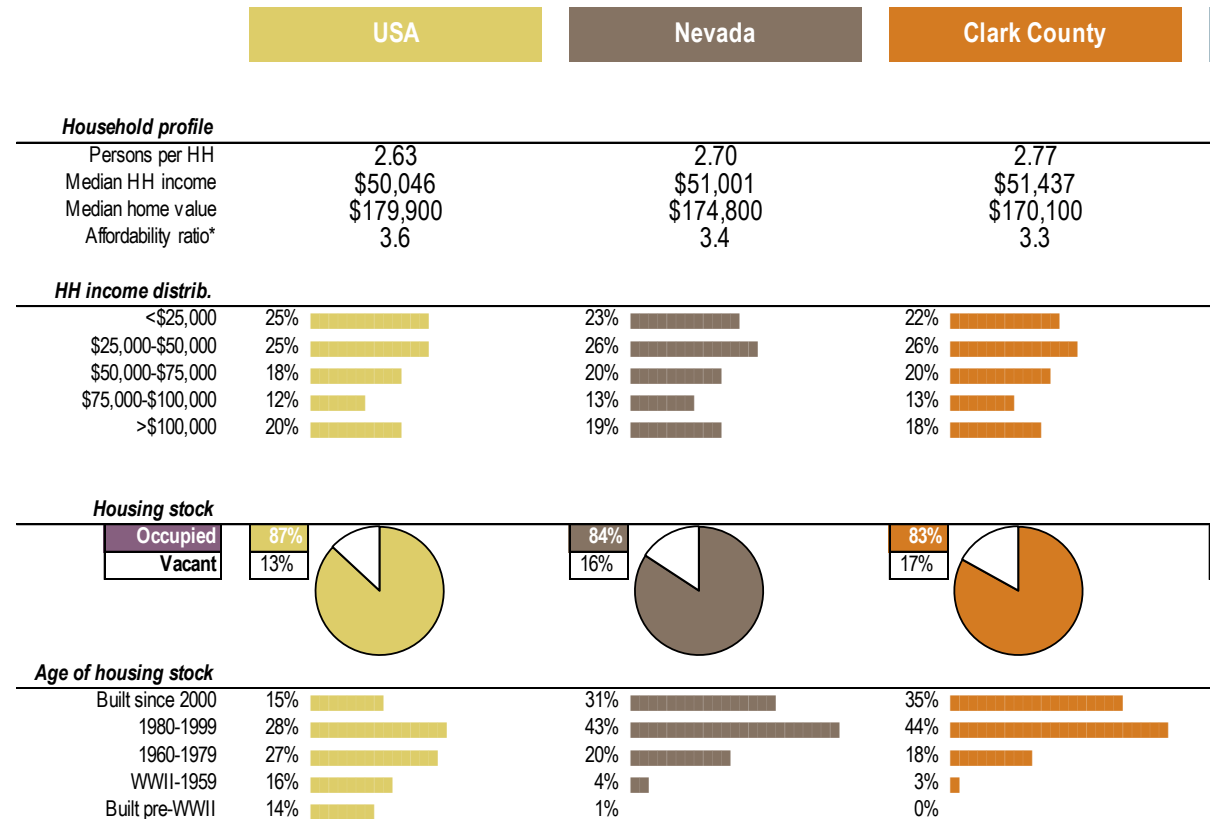
■ Amid the ongoing mortgage crisis, vacancy rates for housing stock in Nevada run several points higher than the national average.

Perspective

Given the fact that Clark County's vacancy rate remains elevated in comparison to the nation, the recovery in its housing market will likely be slower than the rest of the country. This notion is reinforced by the decrease in the number of migrants moving to the region.

Figure 13: Household comparison

Household size, income, and housing stock.



*NOTE: The affordability ratio is the median home value divided by the median household income. The "ratio" equates the home prices to raw earning potential (expressed in years of gross income needed to pay for the home). The lower the number, the more affordable the housing. Median household income for the 9-county region is an average of the counties weighted by the number of households. Median home prices in each county are weighted by the number of occupied housing units to estimate the 9-county median.

SOURCES: U.S. Census Bureau (2010 American Community Survey, 1-Year Estimates)

ARE COSTS OF CONSTRUCTION IN LINE WITH SALES PRICES?

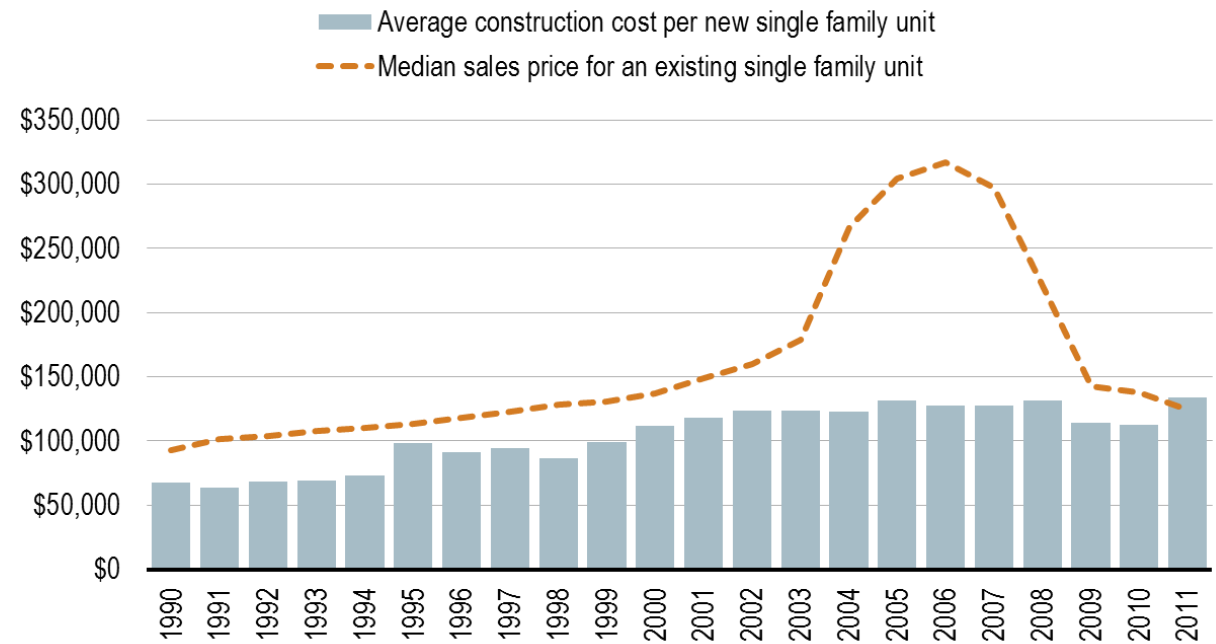
■ A crude indicator of single family home market equilibrium is a comparison of average per-unit construction values (a proxy for replacement cost) with current median sales prices for existing homes. In theory, the two should be close in value, with a reasonable profit margin expected for builders. In other words, the median sales price of existing single family homes should be expected to run moderately above new construction costs. Indeed, the Clark County single family market shows this pattern existed up until about 2002. After that point, things diverged widely during the bubble years. In the recovery period, median resale values have fallen so far that as of 2011, they were below the benchmark replacement costs.

Perspective

While the local bubble in home prices was part of a larger national frenzy in real estate speculation, the degree to which Las Vegas peaked indicates that the region was an attractive location for migrants (primarily from Los Angeles) who were willing to pay exorbitant prices.

Figure 14: Metro area single family home market still seeking perfect equilibrium

Differential between single family construction costs and sales prices since 1990.



* NOTE: The median sales price for 2011 is still preliminary, according to the National Association of Realtors.
 SOURCES: US Census Bureau; National Association of Realtors

HOW DO CONSTRUCTION COSTS COMPARE BETWEEN SINGLE FAMILY AND MULTI-FAMILY HOUSING?

■ While construction costs for single family units in Clark County have charted a steady and predictable path, multi-family construction costs have not.

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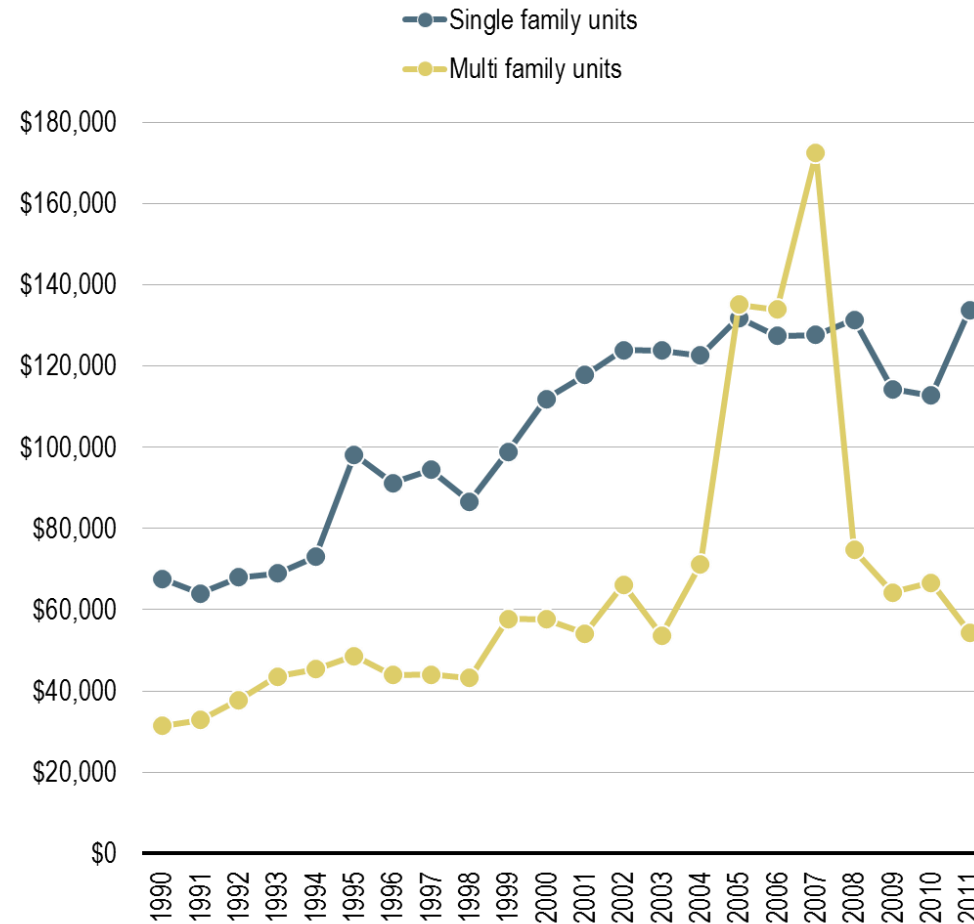
■ In 2005-2007, at the height of the housing bubble, average per-unit multi-family construction costs soared above single family unit costs, presumably due to permits being issued for luxury apartments.

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■ Since 2008, per-unit construction costs for multi-family properties have fallen back in line with historical averages.

Figure 15: A brief history of luxury condos

Average construction costs for multi-family units in Clark County return to normal levels.



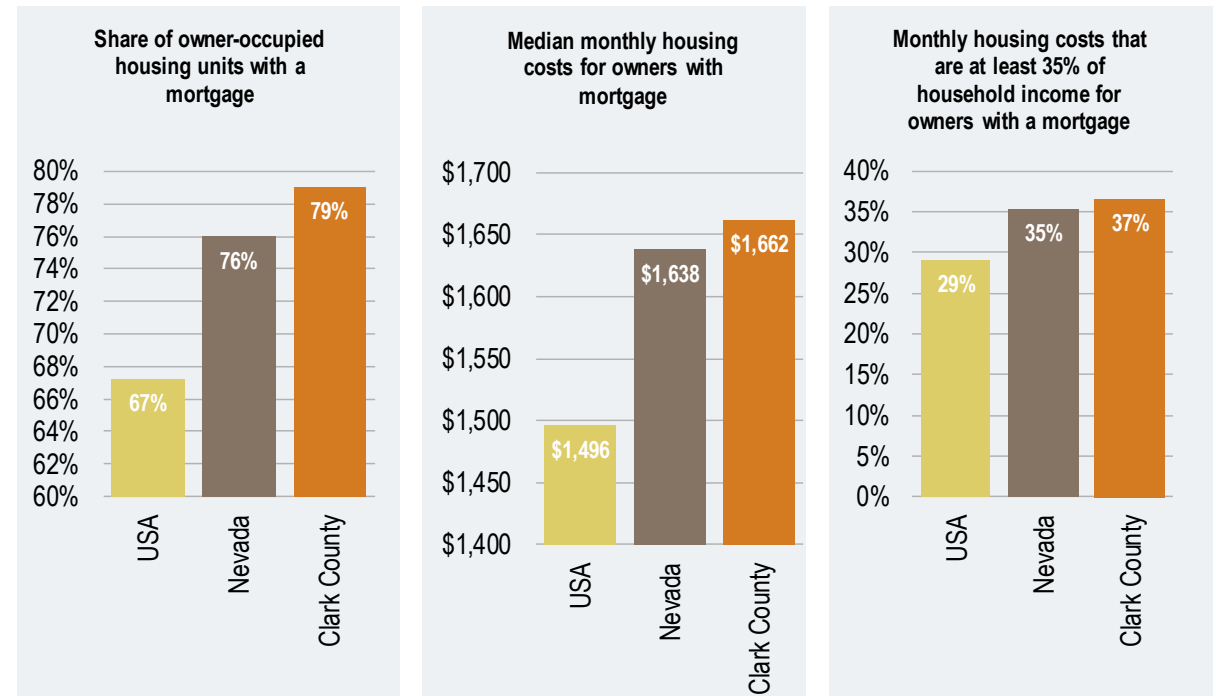
SOURCE: US Census Bureau

HOW MUCH DOES IT COST TO OWN A HOME IN THE VALLEY?

■ Nationwide, about two-thirds of homeowners carry a mortgage, but in Nevada, three of every four homeowners carries a mortgage. The ratio is slightly higher in Clark County.

■ For those who do carry a mortgage, the associated costs tend to be higher in Nevada as well—over \$1,600 per month compared to less than \$1,500 nationwide. This is notable since home values in Nevada tend to be a bit below the national median. Mortgaged Nevadans spending more of their household incomes (35-37%) on housing costs than do their peers nationwide who pay just 29%.

Figure 15: Comparative overview of owner-occupied units with mortgages



SOURCE: US Census Bureau (2010 American Community Survey, 1-Year Estimates)

IS HOME OWNERSHIP AFFORDABLE IN THE VALLEY?

■ The easy rule-of-thumb for measuring housing affordability is the ratio of median home price to median household income. This ratio crudely shows the number of years a typical household would need to pay for a median-priced housing unit if, in theory, 100% of income were applied to the principal until it was paid off. The lower the ratio, the quicker the house can be purchased outright, thus implying greater affordability.

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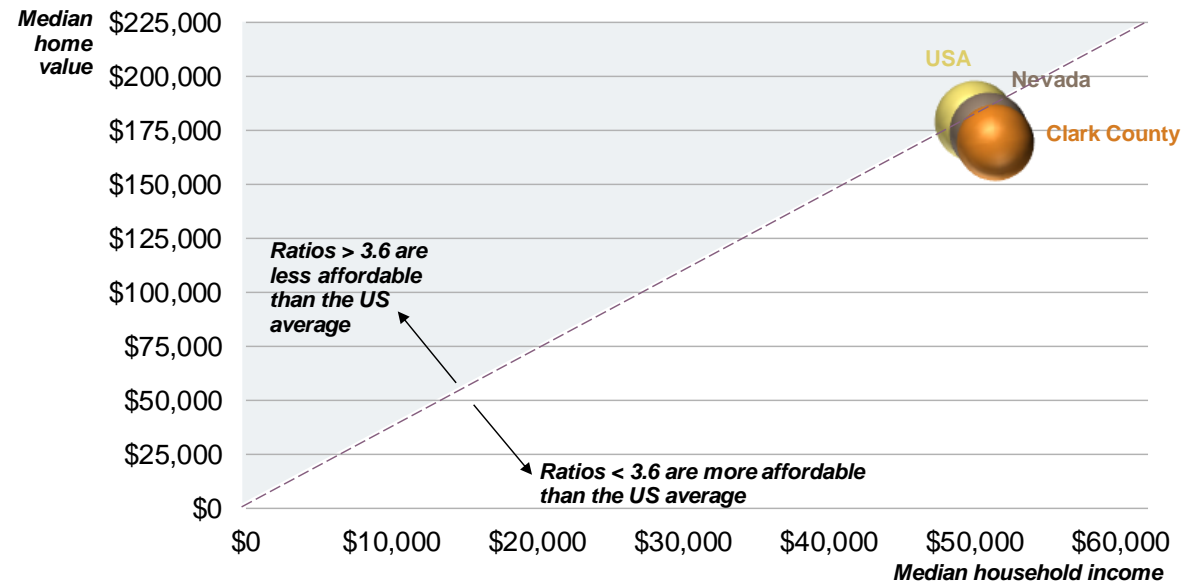
■ The affordability index in Clark County (3.3) is on par with the state average (3.4) and they fall slightly better than the index of 3.6 for the US overall.

Perspective

The relative affordability of homes in the region provides an attractive destination for potential new residents if employment options were available.

Figure 16: Housing affordability ratios

Self-reported owner-occupied home values as of 2010 compared with median household income.



NOTE: Bubble sizes reflect relative affordability: Clark County (3.3), Nevada (3.4), US average (3.6)
 SOURCE: U.S Census Bureau (2010 American Community Survey, 1-Year Estimates)

HOW DOES THE VALLEY'S HOUSEHOLD INCOME DISTRIBUTION COMPARE TO THE NATION?

■ Nevada's age structure is not the only socio-economic variable similar to the nation. Income distribution is also very similar in Clark County and Nevada to the national distribution. It is somewhat unusual to see a county and state all fall so closely in line with the national pattern. This is somewhat surprising given the fact that the Las Vegas region has a lower educational attainment rate than the U.S. (which is normally closely tied to income) and the fact that the area suffered so greatly in the recession.

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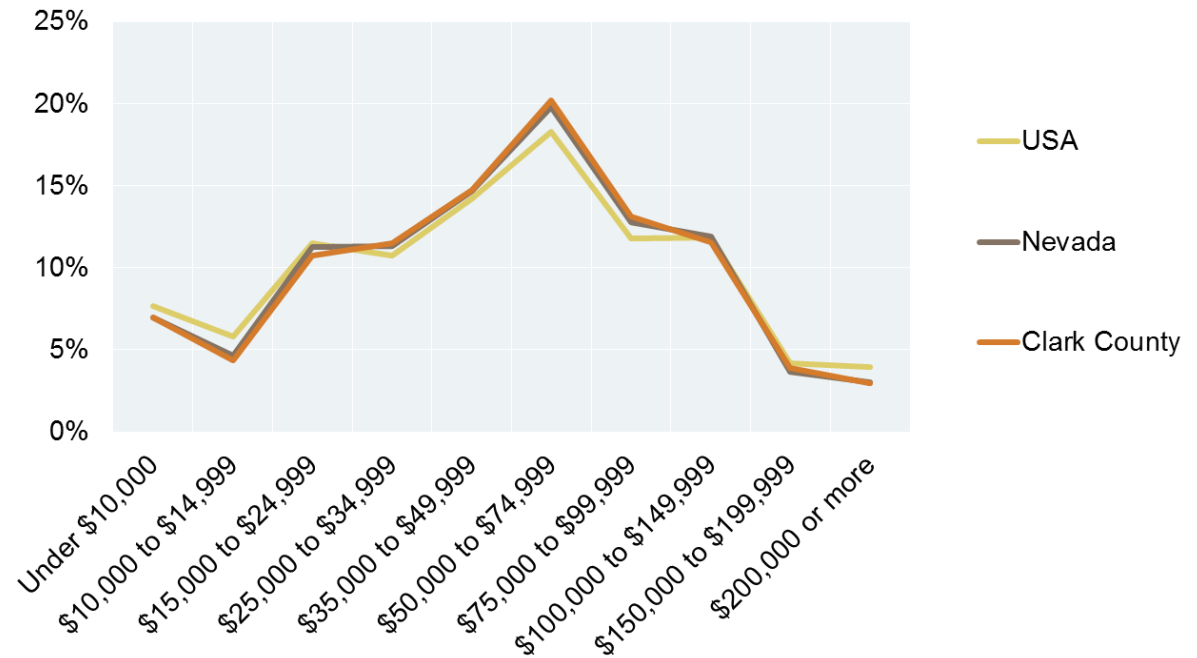
■ The largest variations between Clark County and the nation only appear on the extremes of the income scale, suggesting the region has a broader middle class than the nation.

Perspective

Wages for employees working in the gaming industry, tips included, are a likely factor in the region's ability to keep up with the national median household income.

Figure 17: Distribution of household income, 2010

Share of total households by income level.



SOURCE: US Census Bureau (2010 American Community Survey, 1-Year Estimates)

HOW HAS THE 'GREAT RECESSION' AFFECTED INCOME LEVELS?

Income & Housing

■ Twice in the past few decades, recessions have occurred that left lasting impacts on Nevada. In the late 1970s per capita income in Nevada and Clark County exceeded the US average by a wide margin. By the time the 1982-83 recession was over, Nevada's lead had diminished, putting the state and the county much more closely in line with the nation. The same outcome occurred in the recent Great Recession, which left local per capita income slipping well behind the US.

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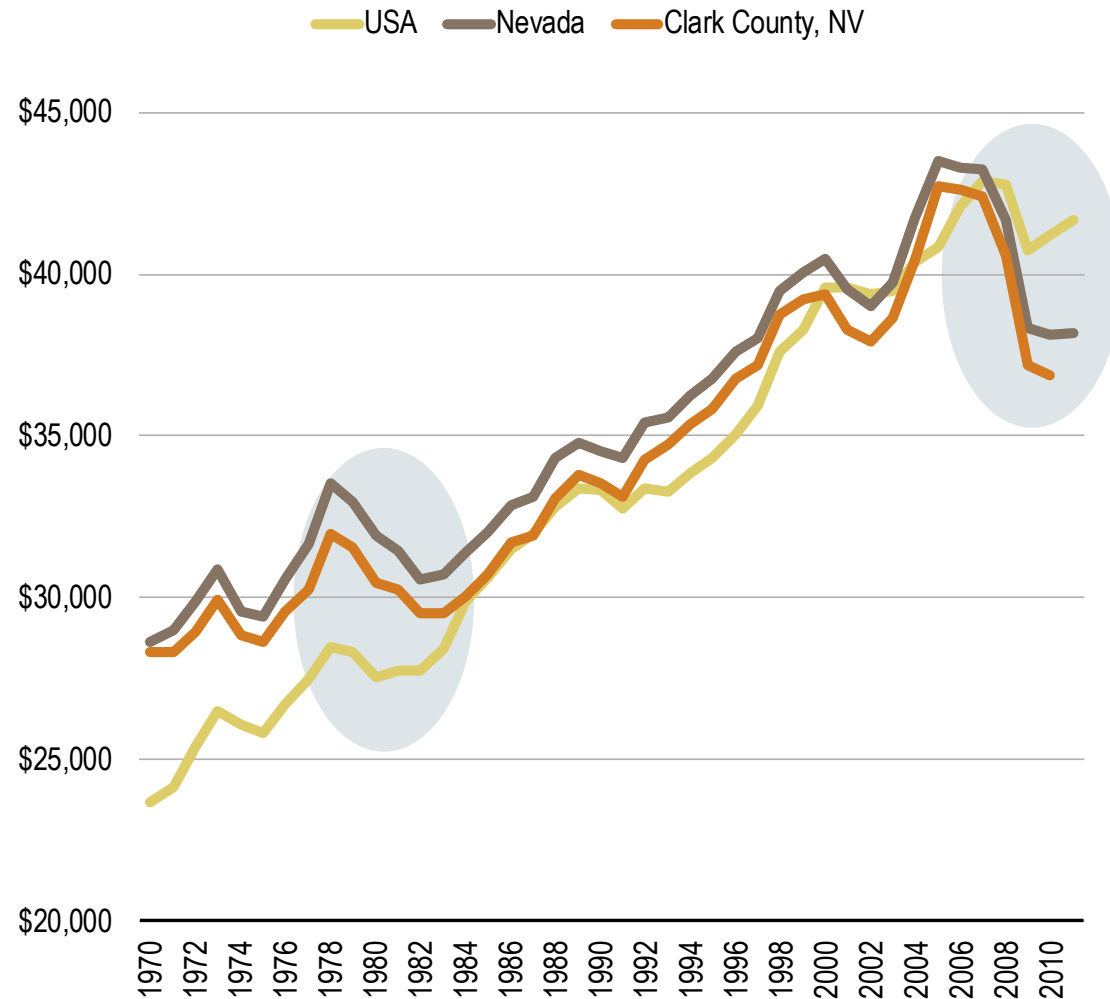
■ Note: Per capita income is an average per-person variable. This is different from median household income, where Nevada's numbers tend to be more in line with the US.

Perspective

We are inclined to think that per capita income more accurately reflects the economic viability of the region, and that the decline is an indicator of the loss of well-paying construction jobs and a resultant increase in unemployment.

Figure 18: Inflation-adjusted per capita personal income

Two US recessions that brought local structural change.



SOURCE: US Bureau of Economic Analysis

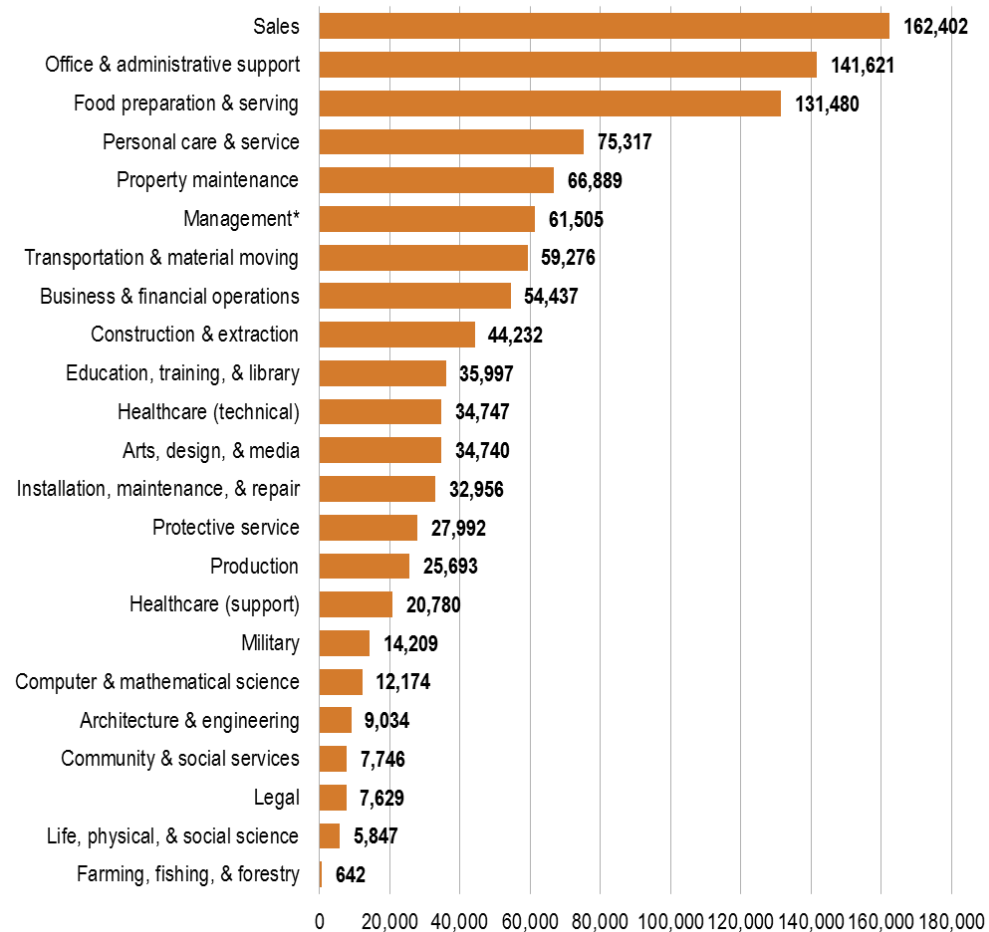
WHAT ARE THE MAJOR OCCUPATIONS IN CLARK COUNTY?

■ Clark County's service-oriented economy is reflected in its occupational structure. The three largest occupational groups—sales, admin support, and food services—each account for more than 100,000 jobs.

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■ At the other end of the spectrum, the three occupational groups that include computer technology, engineering, and the sciences each account for fewer than 20,000 jobs in the county.

Figure 19: 2011 job base by occupational group in Clark County



*NOTE: Management occupations include self-employed real estate agents and farmers & ranchers as well as construction managers and general managers.

SOURCE: EMSI Complete Employment - 2012.2

HOW HAVE DIFFERENT OCCUPATIONS FARED SINCE THE BEGINNING OF THE LAST RECESSION?

Workforce

■ The recent recession swept through some occupational groups far more heavily than others.

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■ Healthcare professions, both technical and support, eked out narrow job gains in each of the past four years. Sales and food services occupations, both of which suffered a swift contraction in 2009, have since rebounded and shown promising upward momentum.

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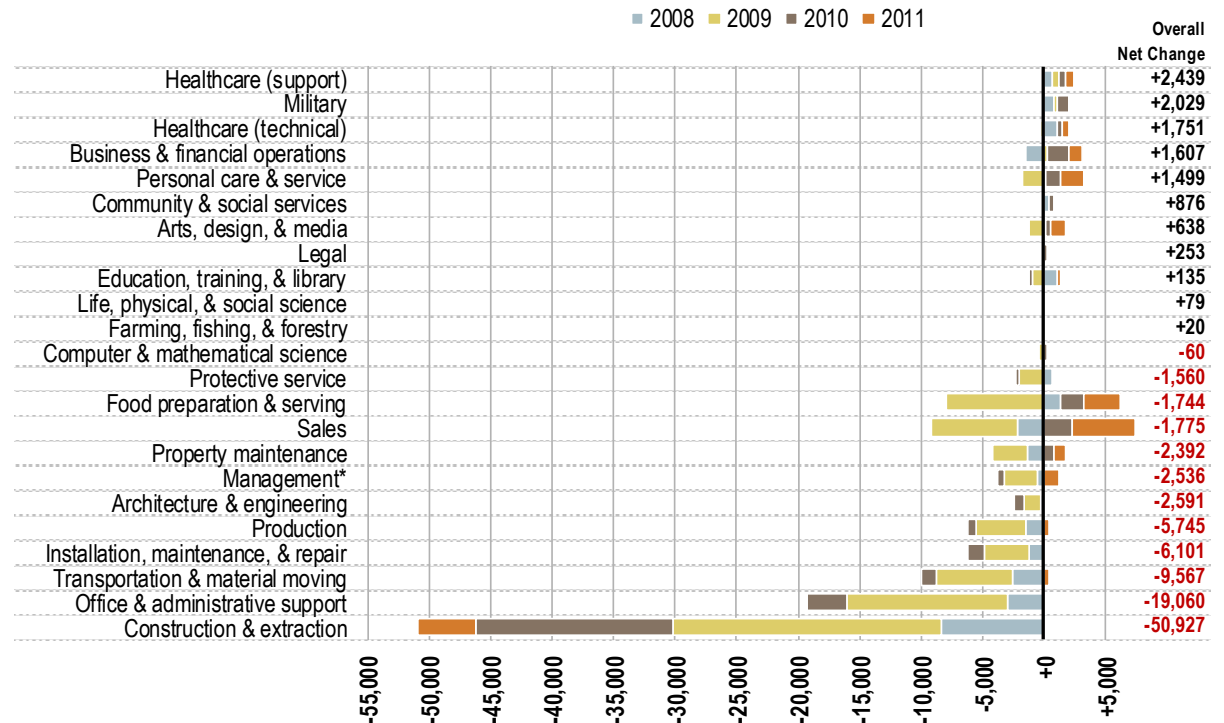
■ Construction workers have been hit by far the most of any occupational category. Construction was one of two occupational groups (architecture / engineering was the other) to lose employment in each of the past four consecutive years.

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■ Office and administrative support, which includes many public sector jobs, showed the second largest decrease in employment during the recession.

Figure 20: Occupational job trends in Clark County, 2008 through 2011

Wide differences in occupational volatility over the past four years.



*NOTE: Management occupations include self-employed real estate agents and farmers & ranchers as well as construction managers and general managers.

SOURCE: EMSI Complete Employment - 2012.2

WHAT ARE THE PREVAILING WAGES FOR EACH OCCUPATION?

Workforce

■ In most occupational categories, the median wage in Clark County falls near the middle of the national wage range.

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■ A glaring exception to the general trend can be found in sales occupations. The median wage for sales workers (just under \$14/hour in 2011) falls near the bottom of the national wage range, which is \$10/hour at the 10th percentile level and \$26/hour at the 90th percentile for this occupational group.

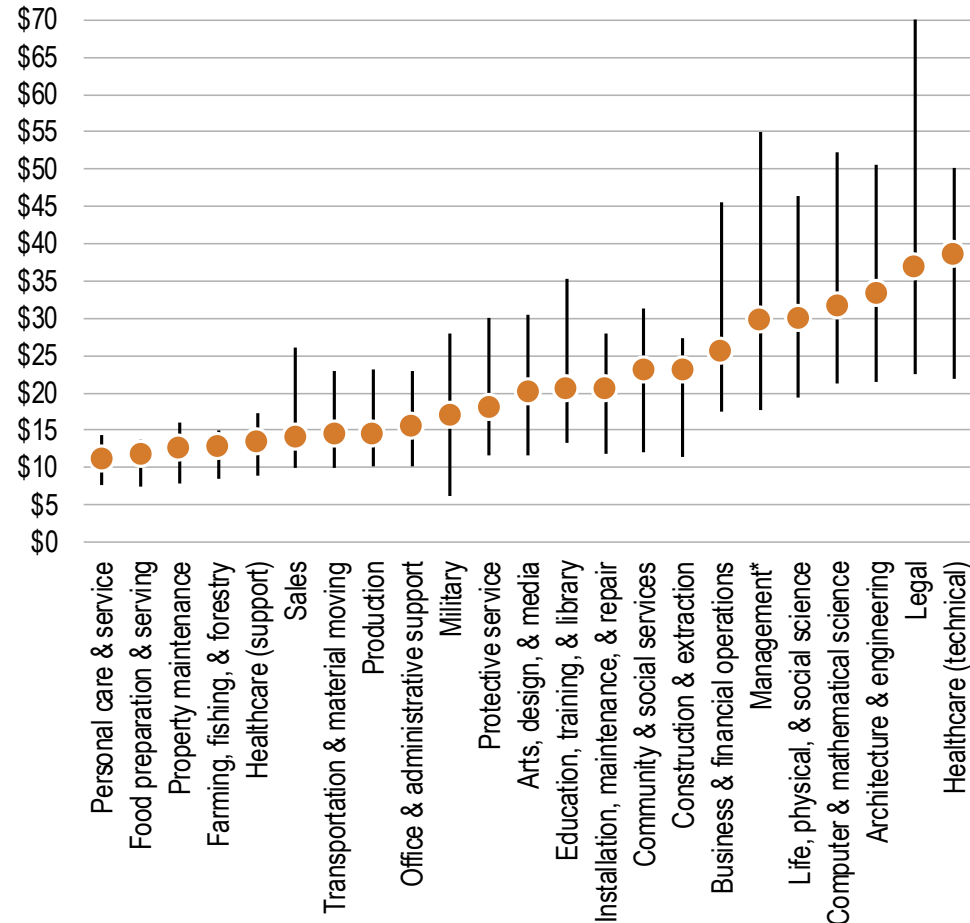
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■ Another exception to the general trend can be found in construction occupations. Despite huge layoffs among these workers, those still employed make relatively high wages by national standards in this occupational group.

Figure 21: Median hourly wage rate by occupational group

Clark County median wage presented in the context of the national wage range.

Circle represents the county median; line represents the national range between the 10th and 90th percentiles



*NOTE: Management occupations include self-employed real estate agents and farmers & ranchers as well as construction managers and general managers.

SOURCE: EMSI Complete Employment - 2012.2

HOW IS CLARK COUNTY'S WORKFORCE SPECIALIZED?

Workforce

■ Occupational groups with high location quotients exemplify Clark County's tourism-oriented economy. The local economy has a higher than average share of workers in food services, personal services (which includes many hotel and casino jobs), property maintenance, and protective services (which includes security services).

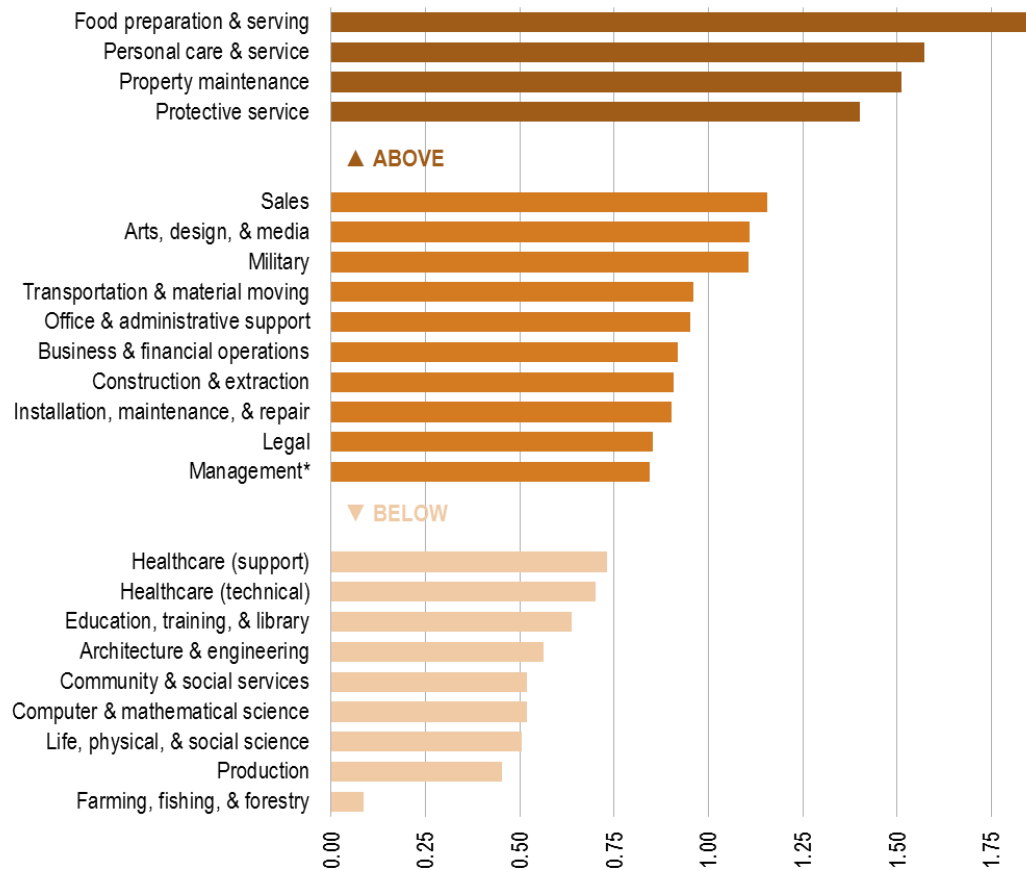
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■ Healthcare and education occupations—these were among the most stable US jobs through the recent recession—are slightly underrepresented in the Clark County workforce. Scientists, engineers, and computer workers are also among those underrepresented locally.

Figure 22: Occupational group concentrations in Clark County

Location quotient analysis:

US average for each industry = 1.00 (regional strength >1.25; regional weakness <0.75)



*NOTE: Management occupations include self-employed real estate agents and farmers & ranchers as well as construction managers and general managers.

SOURCE: EMSI Complete Employment - 2012.2

WHAT LEVEL OF SKILLS OR EDUCATION IS REQUIRED FOR JOBS IN CLARK COUNTY?

Workforce

■ A decade ago, only 15% of existing jobs in Clark County required a 4-year degree as a minimum prequalification. This inched up over the course of the decade to 17% of the existing job base.

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■ According to RCG Economics, focused skills training is currently in more demand than a college degree (e.g., Microsoft certification).

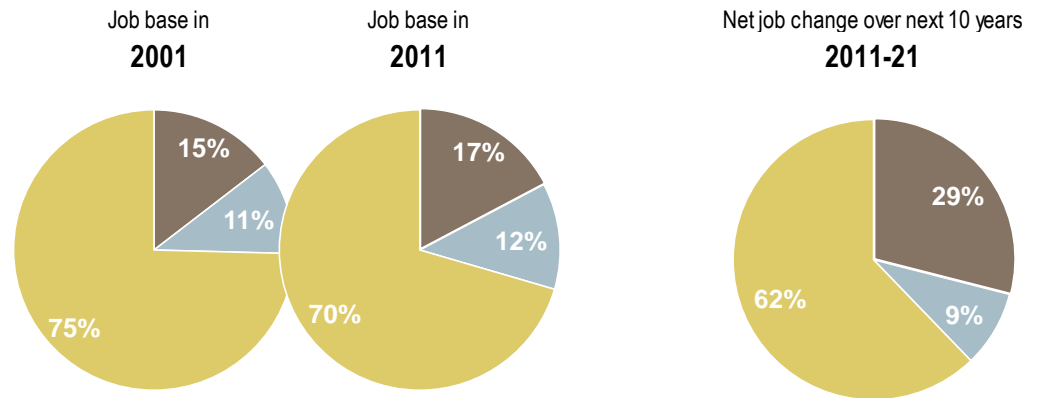
....

■ Looking ahead, the new jobs projected to be added over the coming 10 years will require increasingly more preparation. A full 29% of the projected new jobs will require at least a 4-year degree as an entry-level condition.

Figure 23: Threshold skills preparation required for Clark County’s job base

Past, present, and the decade ahead

- On-the-job training or previous experience
- Vocational or 2-year degree
- 4-year degree or higher



SOURCE: EMSI Complete Employment - 2012.2

WHAT IS THE LEVEL OF DEMAND FOR SKILLED WORKERS?

■ A recent study by the Brookings Institution looked at metropolitan area demand for H1B visas, a competitive work permit for highly skilled immigrants. The Las Vegas MSA (i.e., Clark County) lagged well behind the current US demand level of 2.4 visa applications per 1,000 workers.

....

■ Fewer than half of Clark County's H1B applications (48%) were in the so-called "STEM" occupations. Nationwide, the STEM occupations made up nearly two-thirds (64%) of total demand.

Perspective

The apparent lack of demand for STEM workers, as well as the region's low LQ for scientists, engineers, and computer workers suggests that the local economy currently is lagging in high tech sectors, and that this is a reflection of Clark County's dependence on the lower-skilled gaming and tourism sectors.

Figure 24: Assessing the demand for skilled workers

H1B applications in Clark County compared to the US average.

	Clark County	USA
H-1B applications overall □ average number, 2010-2011	780	325,522
H-1B application intensity □ number of applications per 1,000 workers	0.96	2.40
Share of requests from "uncapped" employers*	7%	10%
Number of employers applying	651	70,216
Share of requests from top 5 employers submitting applications	13%	5%
Number of occupation groups impacted (out of 97 possible groups)	47	87
Share of applications for the occupation group with the highest demand	34%	45%
Share of applications in STEM* occupations	48%	64%
Skill grants awarded by ETA*** □ 2001-2011 total	\$420,727	\$628,537,903
Skill grants awarded by ETA*** □ 2001-2011 per capita, age 16+	\$0.28	\$2.58

*The number of applications accepted each year is capped by Congress for private sector employers. Academic and government research institutions are exempt, and thus "uncapped"

** STEM = science, technology, engineering, & mathematics

*** U.S. Department of Labor, Employment & Training Administration

SOURCES: Brookings Institution, The Search for Skills: Demand for H-1B Immigrant Workers in U.S. Metropolitan Areas, 2012

HOW DOES THE STATE'S BUSINESS CLIMATE COMPARE?

■ State tax structures are notoriously difficult to compare fairly, but that does not stop advocacy organizations from trying as best they can. In the Tax Foundation's most recent annual look at this topic, Nevada scored a perfect "10" for its individual income tax and corporate tax. Nevada is a highly competitive state in this area. The overall business climate scored a 7.5, which exceeds the 90th percentile of scores among US states.

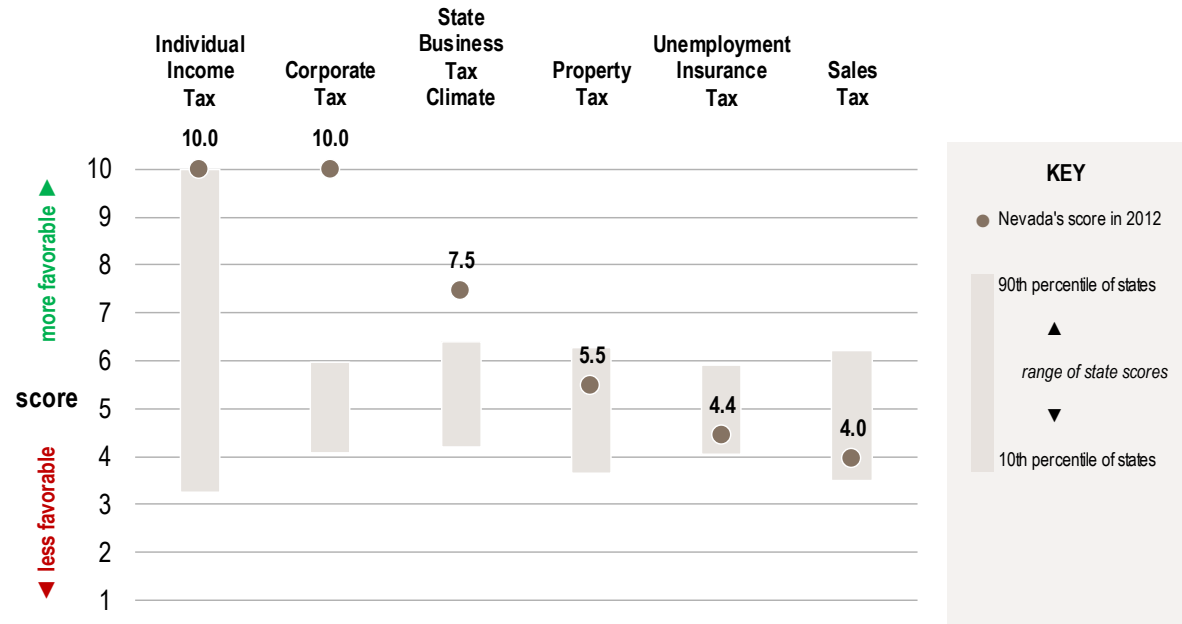
■ The upside of scoring well in some tax categories is that there will inevitably be some compensation for this in other categories. Indeed, Nevada gets a middling score for its property tax (5.5) and relatively low scores for the unemployment insurance tax and the sales tax. (One might reasonably argue that a tourism-oriented economy with relatively high sales taxes is actually a win for state residents since visitors pick up some of this tab.)

■ According to the Tax Policy Center, Nevada ranked 28th in the nation in tax collections per capita.

Figure 25: Nevada's business climate in context

2012 scores on various taxes for 50 states and the District of Columbia.

Scaled scores with 10 = best, and 1 = worst



SOURCES: 2012 State Business Tax Climate Index (The Tax Foundation)

WHAT ARE THE SOURCES OF REVENUE FOR CLARK COUNTY?

■ Clark County's revenues peaked in FY 2008 with the recession and have since slipped back to 2005-era levels.

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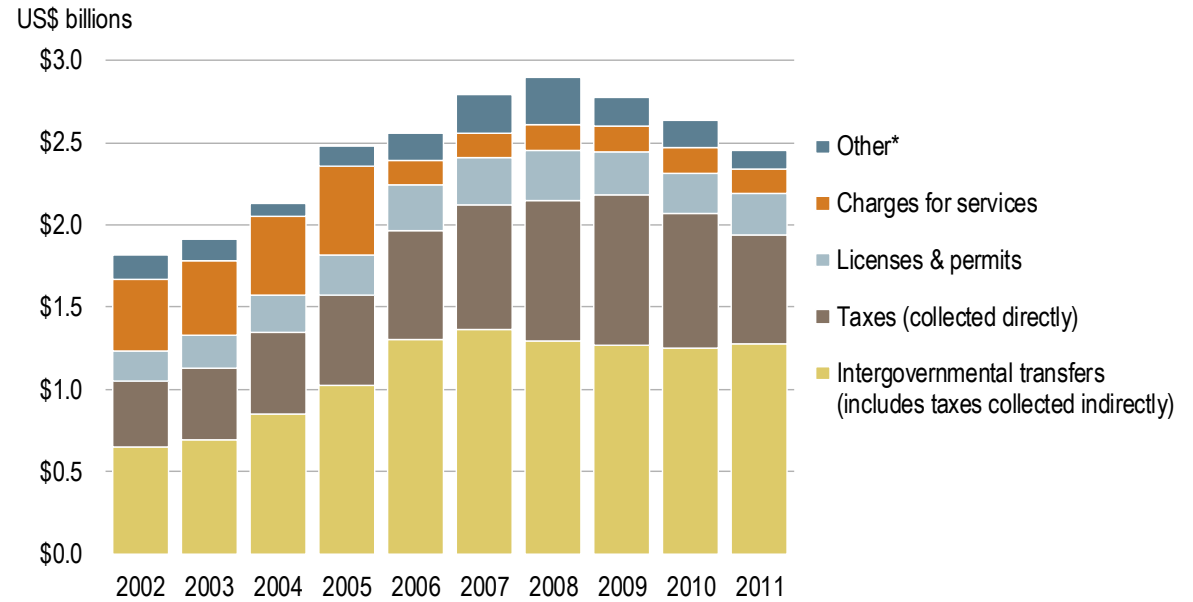
■ Taxes collected directly by the county, which includes property taxes, peaked later (2009) than overall revenue sources.

....

■ Charges for services peaked in excess of a half-billion dollars in 2005, but have since averaged about \$150 million annually.

Figure 26: Major sources of Clark County revenue

Balance at end of fiscal year.



*includes special assessments, interest, fines, et al.

SOURCES: Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

WHAT ARE THE SOURCES OF TAX REVENUE FOR CLARK COUNTY?

- Property (ad valorem) taxes are the largest single source of tax revenue for Clark County, but this revenue stream has declined precipitously since 2009 as property values have fallen.

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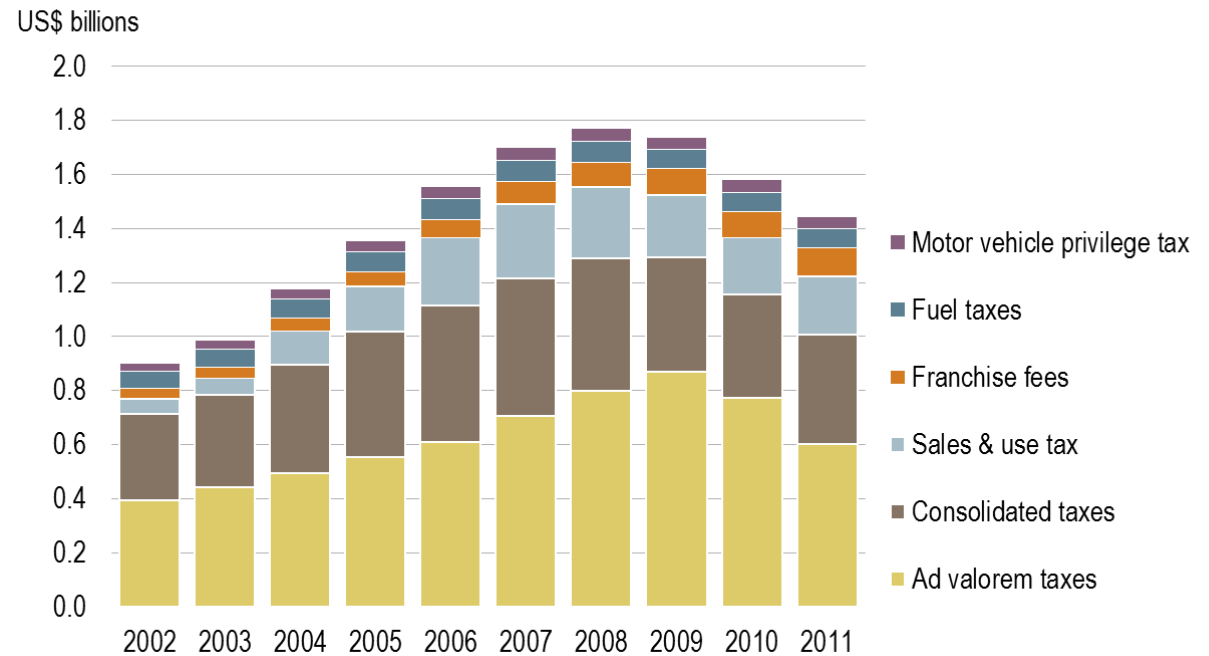
- Sales tax revenues peaked in 2007, two years earlier than property taxes. The sales tax revenue stream is sensitive to economic conditions and quicker to respond than property taxes, where adjustments can take years to play out. Moreover, property taxes tend to be the least volatile income streams for local jurisdictions.

Perspective

Because property taxes make up the largest portion of local revenues, the budget for Clark County will continue to be restrained until the region's real estate market improves, which could result in several more years of austerity.

Figure 27: Major sources of Clark County tax revenue

Balance at end of fiscal year.



SOURCES: Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

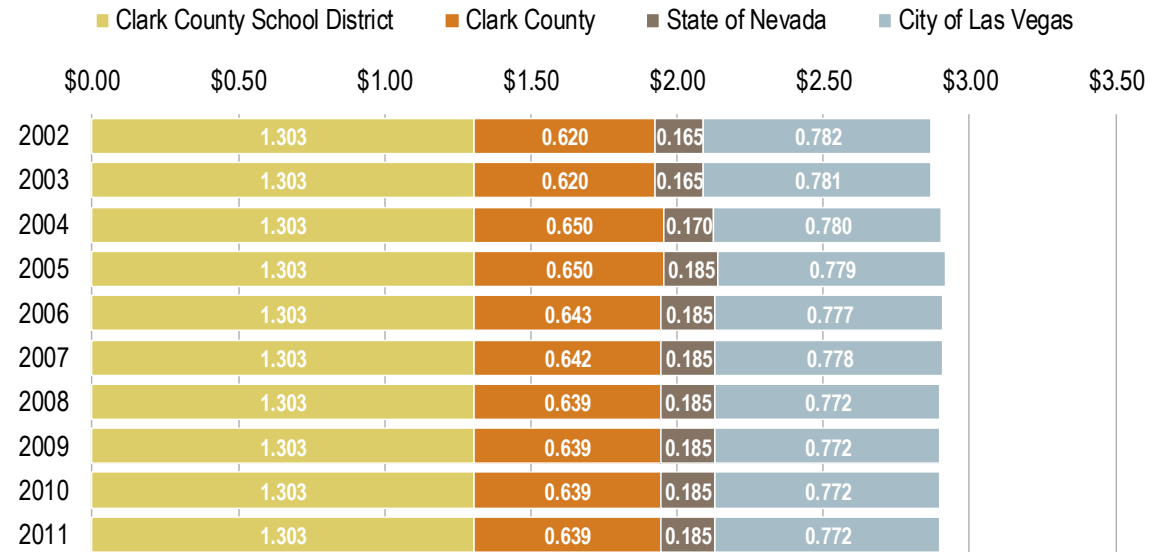
HOW ARE PROPERTY TAXES ALLOCATED IN CLARK COUNTY?

■ The core components of the property tax rate—the state, the county, the county school district, and the City of Las Vegas—have changed little over the past decade. Declines in property tax revenue can thus be attributed largely to changes in appraisal values rather than in tax rates.

Figure 28: Allocation of the local property tax in recent years

Tax rates of major overlapping governments (excludes rates for special districts).

Rates applied per \$100 of assessed valuation



NOTE: Nevada caps the overlapping tax rate at \$3.64 per \$100 of assessed valuation.

SOURCES: Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

HOW DO PROPERTY TAX RATES COMPARE ACROSS REGIONAL JURISDICTIONS?

- Among the larger incorporated areas within Clark County, North Las Vegas has the highest property tax rate.

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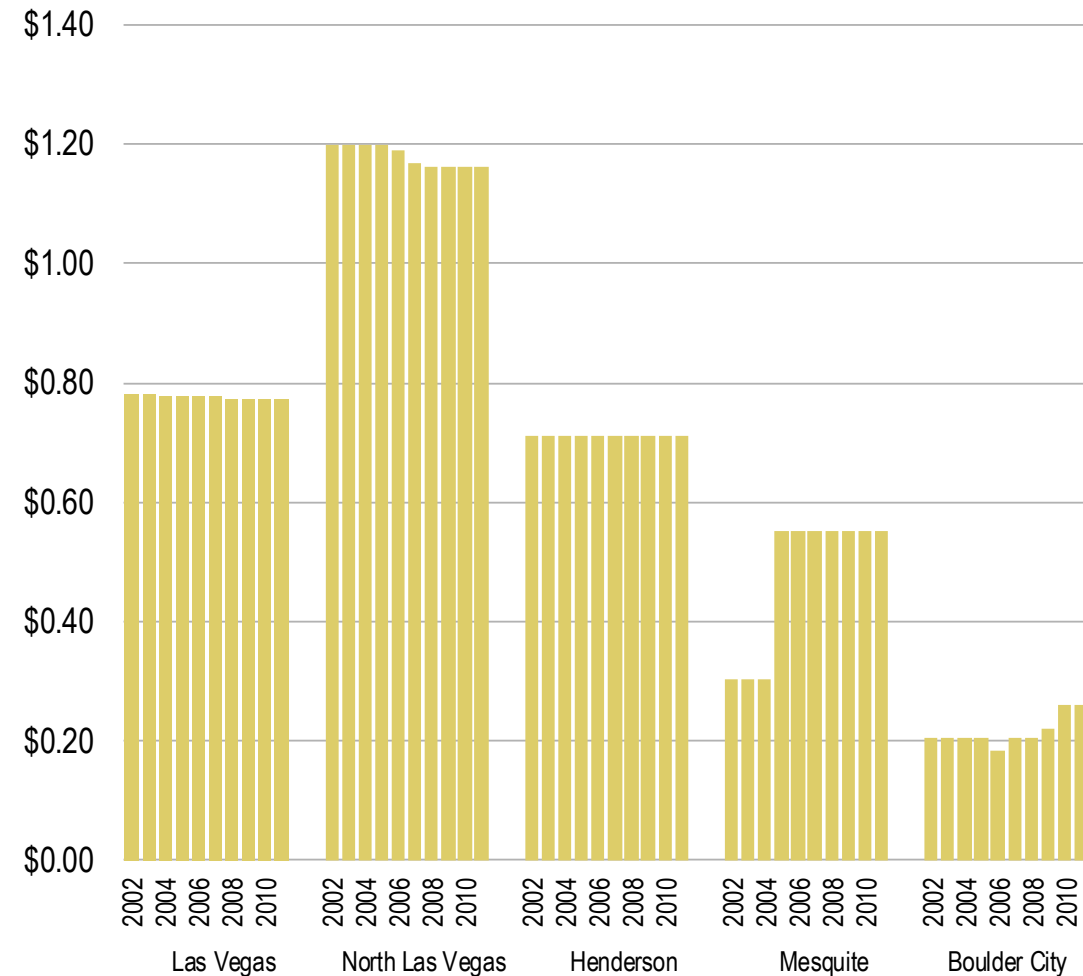
- The property tax rates in the cities of Las Vegas and Henderson are very similar.

....

- Mesquite was the only one of the county's larger cities to experience a significant property tax rate hike between 2002 and 2011.

Figure 29: Property tax rates for incorporated places in Clark County

Rates applied per \$100 of assessed valuation.



SOURCES: Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

WHO ARE CLARK COUNTY'S LARGEST PROPERTY TAX PAYERS?

■ Over the last 10 years, Clark County has become incrementally more reliant on its largest taxpayers. In 2002, the county's largest property owner controlled just under 5% of all taxable property value. That same taxpayer controlled an even larger share (7% of the base) by 2011.

....

■ Moreover, the county increased its reliance on the 10 largest taxpayers, largely comprised of casinos, from 18.4% of the base in 2002 to 19.2% in 2011. This points to the need for increased diversification of the region's economy and tax-base. Over-reliance on a handful of employers from the same sector places Clark County at risk of potential structural changes in gaming.

Figure 30: Major tax payers in Clark County

2011			2002		
Taxpayer	Taxable value	% of base	Taxpayer	Taxable value	% of base
1 MGM Mirage	4,256,172,907	7.0%	1 MGM Mirage	1,545,549,220	4.8%
2 Nevada Energy	1,858,918,194	3.1%	2 Mandalay Resort Group	951,067,060	3.0%
3 Harrah's Entertainment, Inc.	1,818,498,366	3.0%	3 Park Place Entertainment	905,636,760	2.8%
4 Las Vegas Sands Corporation	934,068,855	1.5%	4 Nevada Energy	687,984,440	2.1%
5 Wynn Resorts Ltd.	679,025,458	1.1%	5 Venetian Casino Resort LLC	387,458,540	1.2%
6 Boyd Gaming Corporation	614,081,067	1.0%	6 F.S. Rouse LLC	374,321,520	1.2%
7 General Growth Properties	549,434,198	0.9%	7 Station Casinos, Inc.	306,203,500	1.0%
8 Station Casinos, Inc.	524,653,622	0.9%	8 Harrah's Club	305,189,590	0.9%
9 Universal Health Services Inc.	200,196,877	0.3%	9 Aladdin Gaming LLC	258,769,660	0.8%
10 Nevada Property 1 LLC	194,862,163	0.3%	10 Sierra-Nevada Multifamily Investm€	189,494,730	0.6%
Top 10 taxpayers	11,629,911,707	19.2%	Top 10 taxpayers	5,911,675,020	18.4%
<i>Total assessed value of real proper</i> 60,420,431,199			<i>Total assessed value of real proper</i> 32,205,771,521		
100.0%			100.0%		

SOURCES: Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

WHO ARE CLARK COUNTY'S LARGEST EMPLOYERS?

■ For every 1,000 jobs in Clark County in 2002, about 95 could be traced to the county's 10 largest employers. By 2011, the top 10 employers were providing 119 of every 1,000 jobs, or about 12% of the total.

♦♦♦♦

■ Six of the county's 10 largest employers were private-sector firms in 2011 and all six were in the hotel/casino business. This concentration of private-sector employment in a single industry is a uniquely defining characteristic of Clark County.

Figure 31: Major employers in Clark County

2011				2002			
Employer	Jobs*	% of base		Entity	Jobs	% of base	
Clark County School District	35,000	4.4%	↔	Clark County School District	25,000	3.4%	↔
Clark County, Nevada	8,250	1.0%	↔	Clark County, Nevada	8,250	1.1%	
Wynn Las Vegas, LLC	7,750	1.0%					
Bellagio, LLC	7,750	1.0%					
MGM Grand Hotel/Casino	7,750	1.0%					
Aria Resort and Casino, LLC	6,750	0.8%					
Mandalay Bay Resort and Casino	6,250	0.8%					
Las Vegas Metropolitan Police	5,750	0.7%	↔	Las Vegas Metropolitan Police	4,250	0.6%	↔
Caesars Palace	5,250	0.7%	↔	Caesars Palace	4,250	0.6%	↔
University of Nevada-Las Vegas	5,250	0.7%	↔	University of Nevada-Las Vegas	5,250	0.7%	↔
				The Mirage Casino Hotel	5,750	0.8%	
				Rio Suite Hotel	4,250	0.6%	
				State of Nevada	4,750	0.7%	
				Luxor	3,750	0.5%	
				Treasure Island	3,750	0.5%	
Top 10 employers	95,750	11.9%		Top 10 employers	69,250	9.5%	
<i>Total number of covered jobs in county</i>	<i>802,100</i>	<i>100.0%</i>		<i>Total number of covered jobs in county</i>	<i>730,400</i>	<i>100.0%</i>	

SOURCES: Nevada Department of Employment, Training, & Rehabilitation; Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

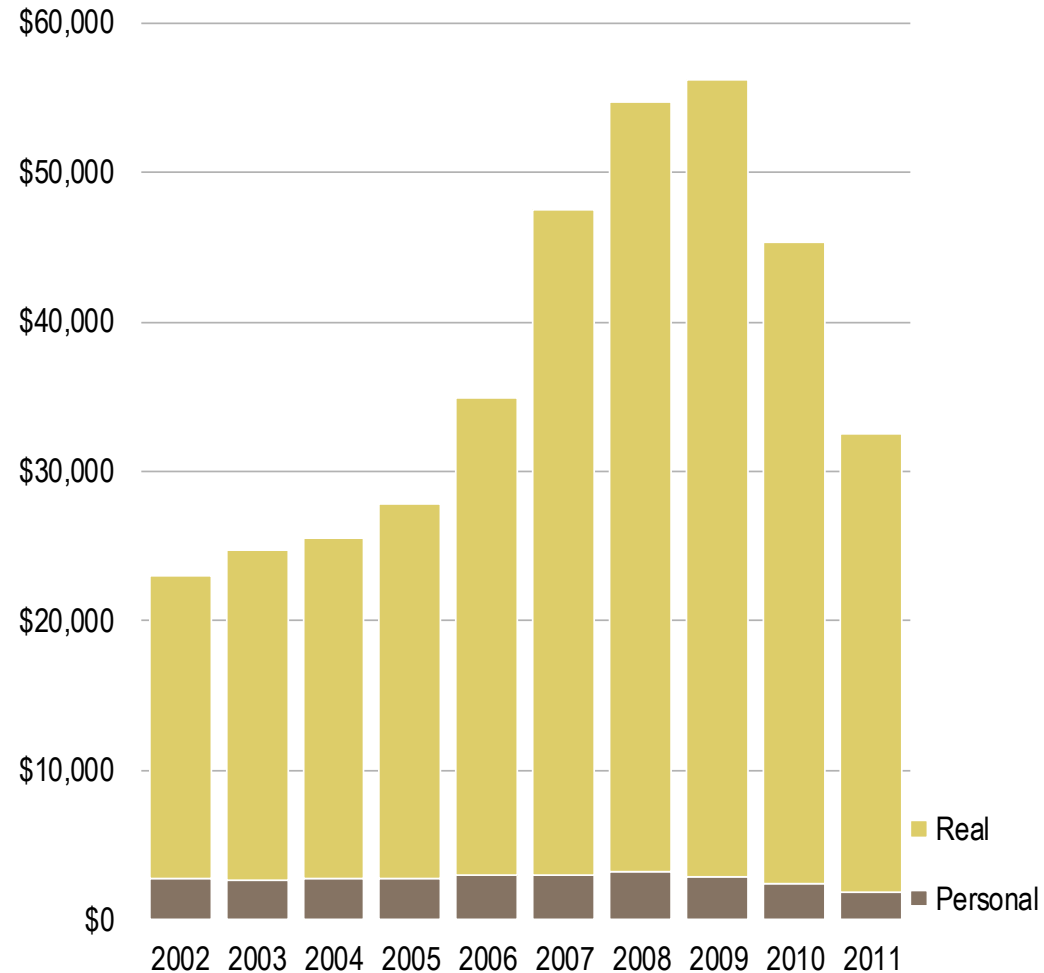
HOW HAVE PROPERTY VALUES CHANGED AS THE REGION GROWS?

- Real property accounts for the vast majority of taxable value in Clark County, with personal property making up a much smaller share of the base.

....

- Average taxable personal property peaked at \$3,172 in 2008. Real property did not peak until the next fiscal year. In 2009, taxable real property per resident averaged \$53,325, the highest point ever recorded in the county in a single fiscal year. And, it has been in decline since then because of the Great Recession's impact on Southern Nevada's residential and commercial real estate markets.

Figure 32: Average net taxable property value per Clark County resident



SOURCES: Clark County Assessor; Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

HOW HAVE PROPERTY VALUES CHANGED AS THE REGION GROWS?

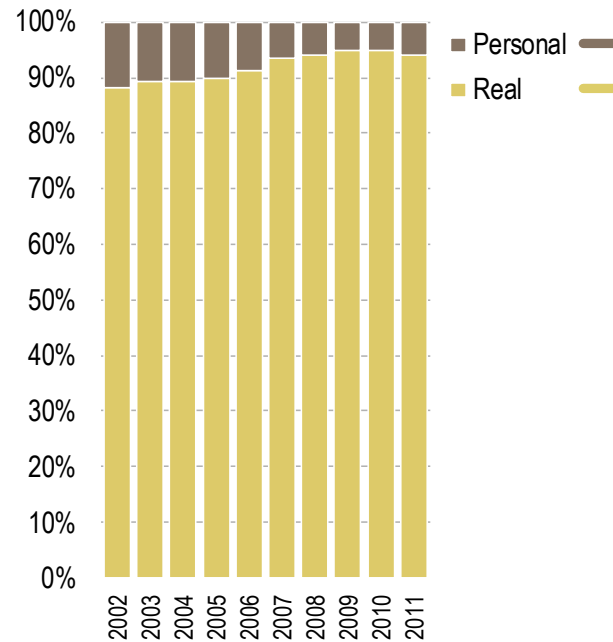
■ Over the past decade, personal property has been squeezed as a share of the county's overall property tax base, from nearly 12% in 2002 to consistently less than 6% since 2008. This is likely due to the region's reliance on the real estate market as a means for growth during the last decade.

....

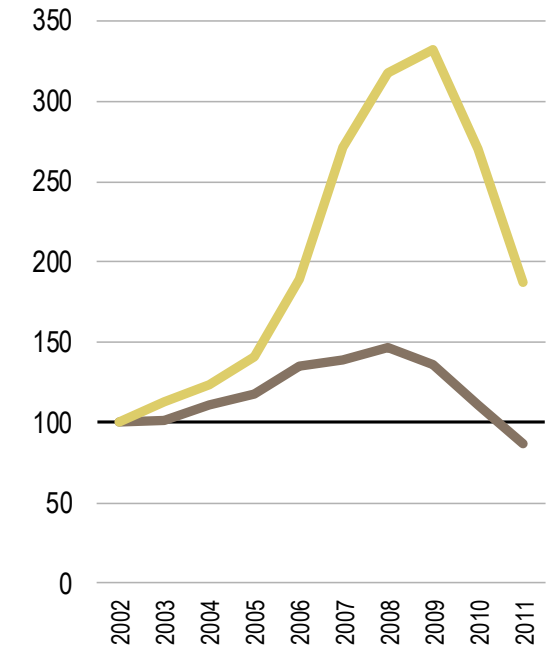
■ Real property values rose more dramatically than personal property over the course of the decade, but as of the end of fiscal year 2011, real property values had fallen back to 2006 levels. Personal property values were below 2002 levels.

Figure 33: Real vs. personable taxable property

Distribution of total taxable property...



...with each component indexed to 2002=100



SOURCES: Clark County Assessor; Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

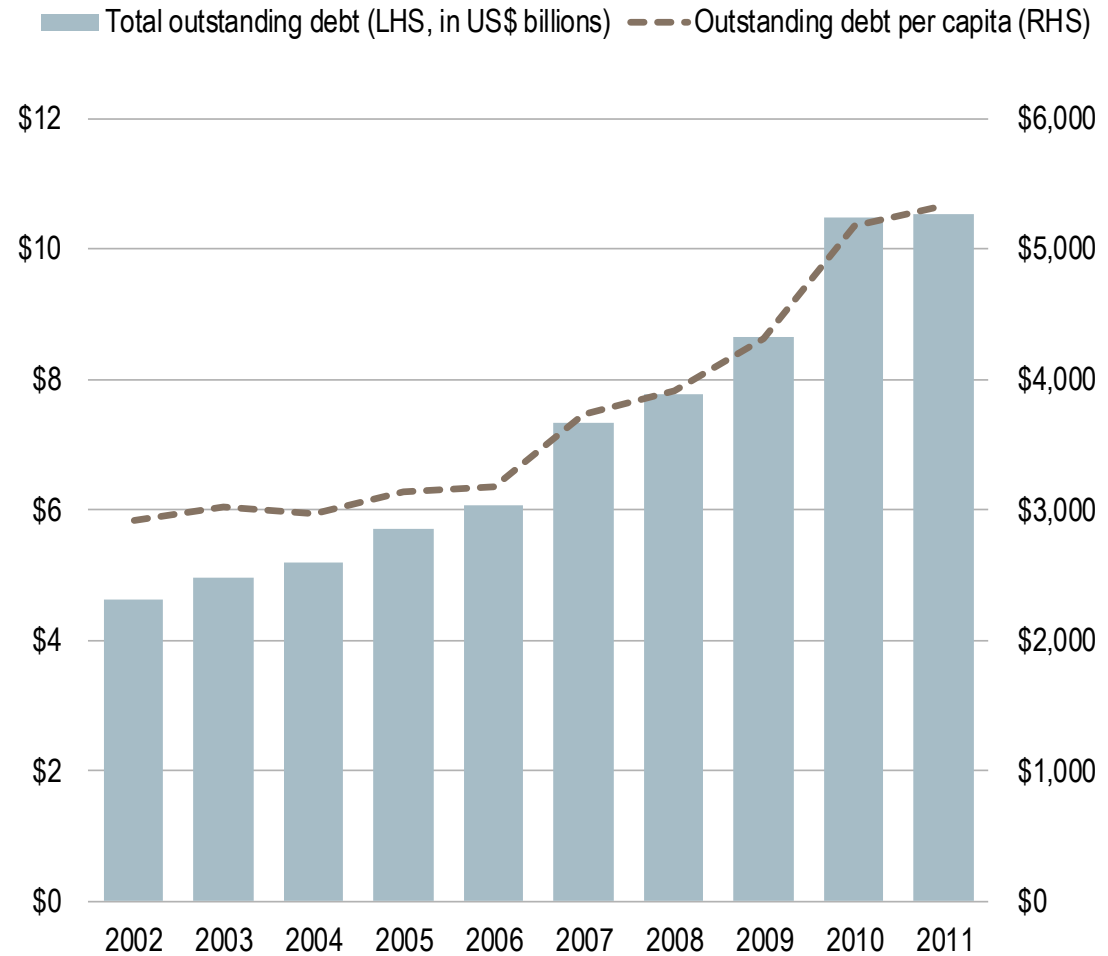
WHAT IS CLARK COUNTY'S TAX BURDEN?

- Clark County's debt has climbed over the past decade, both in absolute terms and in per capita terms.

....

- Outstanding debt passed the \$5 billion mark in FY 2004 and the \$10 billion mark six years later in FY 2010. The rise of debt in per capita terms has not been quite as high, due to population growth.

Figure 34: Clark County's total tax burden*



*outstanding debt from all sources, including GO bonds, revenue bonds, special assessment bonds, and loans
 SOURCES: Clark County Assessor; Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

HOW IS CLARK COUNTY'S DEBT STRUCTURED?

- Up until 2004, more than half of the county's debt was in general obligation bonds.

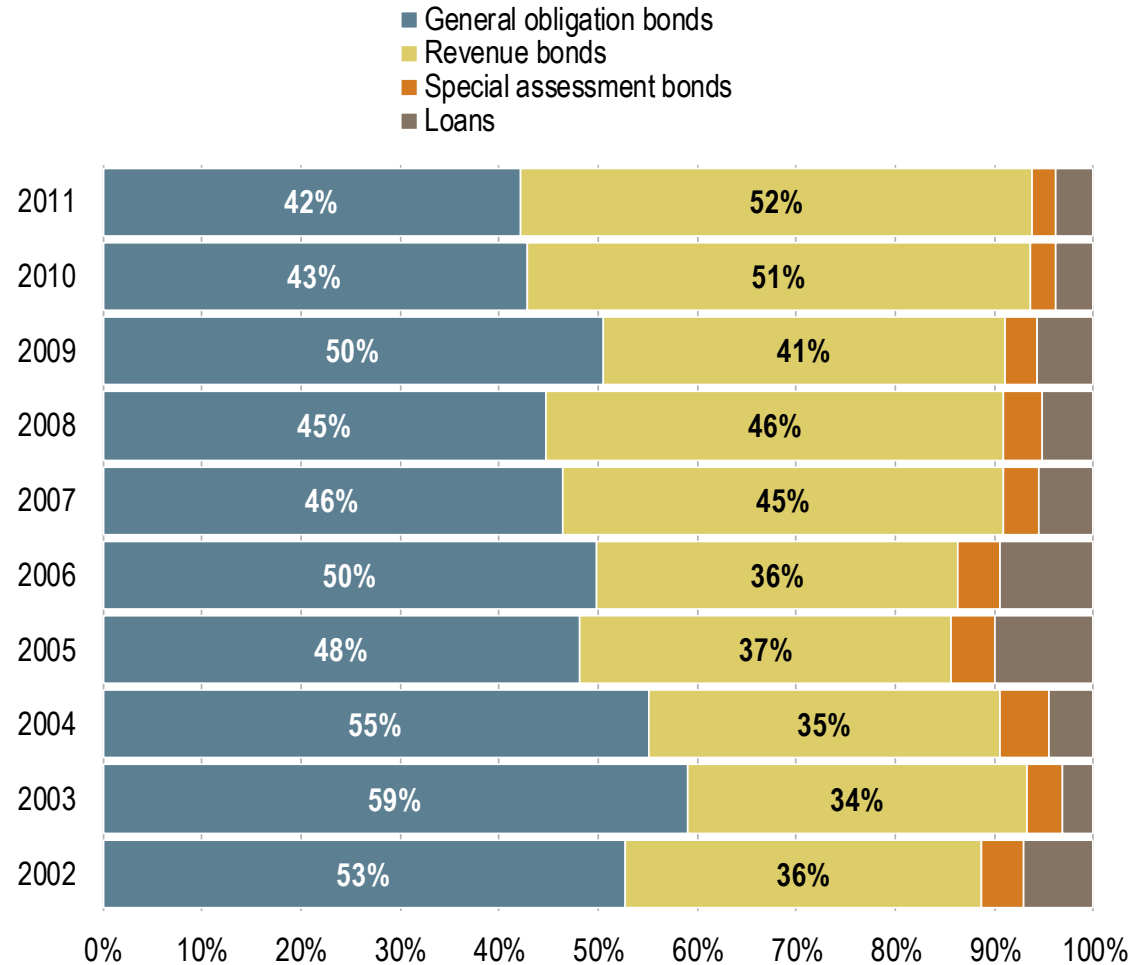
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- Since 2010, the majority of debt has shifted to revenue bonds.

Perspective

Revenue bonds are often preferable to government policymakers, because they have a dedicated funding stream, often alleviating the need to tinker with tax rates. Bond rating agencies, on the other hand, are sometimes more comfortable with the security of general obligation bonds for the exact opposite reason—the payback options of GO bonds are less narrowly defined.

Figure 35: Clark County's debt structure



SOURCES: Clark County Assessor; Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

WHAT IS CLARK COUNTY'S DEBT RELATIVE TO ITS TAX BASE?

■ Rising debt levels and shrinking tax-bases are a common theme of governments at all levels around the world these days. When these forces coincide, the ratio of liabilities to implied collateral suddenly changes, sometimes dramatically.

....

■ In 2008, the county owed \$7.15 for every \$100 of assessed property value. Three years later in 2011, that ratio was \$16.42 per \$100.

Figure 36: Clark County debt burden relative to the tax base

Total outstanding debt per \$100 of net taxable property value.



SOURCES: Clark County Assessor; Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

WHAT IS THE UNEMPLOYMENT RATE?

- Local unemployment rates have improved from peak levels, but they currently run 2-6% higher than the national average.

....

- Of the three cities in Clark County that are large enough to be measured monthly, unemployment is highest in North Las Vegas and lowest in Henderson. The City of Las Vegas is near the county and statewide average.

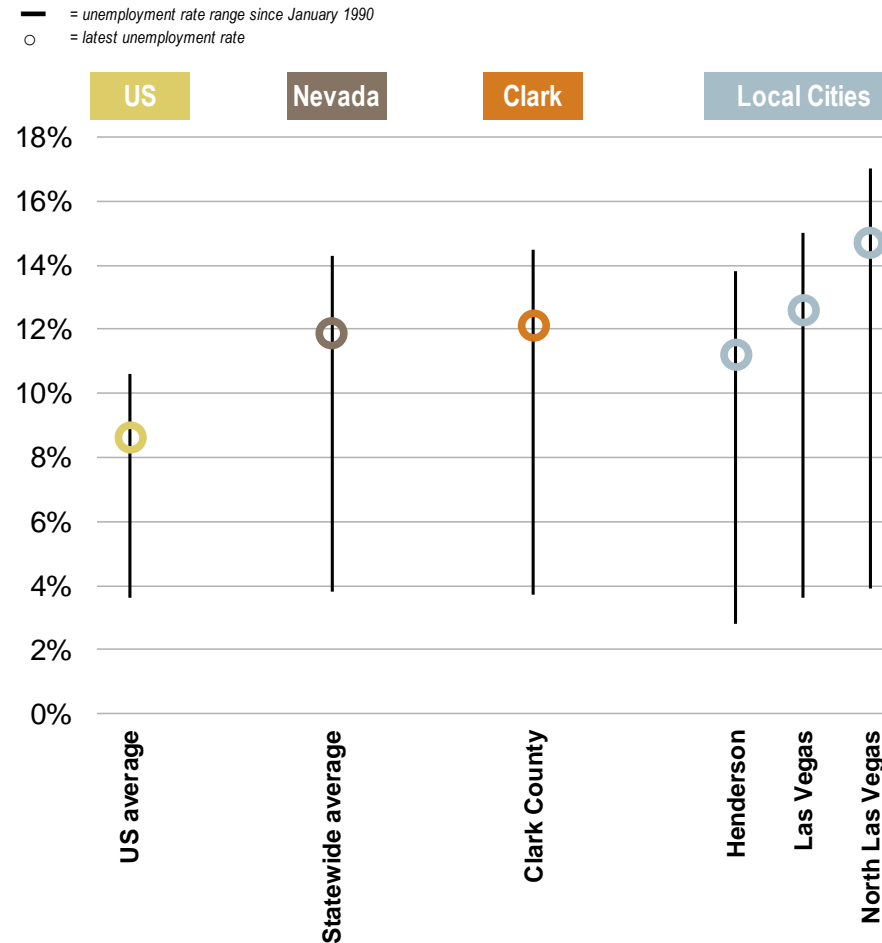
....

- The higher unemployment rate in North Las Vegas implies that a disproportionate share of its workforce was employed in those sectors that were impacted by the effects of the recession.

- Of the three cities in Clark County that are large enough to be measured monthly, unemployment is highest in North Las Vegas and lowest in Henderson. The City of Las Vegas is near the county and statewide average.

Figure 37: Average annual unemployment rate, 1990-2012 (%)

Latest 2012 unemployment rate relative to the historical range.



NOTE 1: Most municipal areas fall below the threshold population level for unemployment statistics from the state-federal LAUS program
 NOTE 2: Because seasonal adjustment is not available for all jurisdictions, none of the rates shown (including comparables) are seasonally adjusted
 SOURCES: U.S. Bureau of Labor Statistics, CPS (US rate) and LAUS (state & county rates)

HOW HAS THE UNEMPLOYMENT RATE COMPARED TO THE NATION OVER TIME?

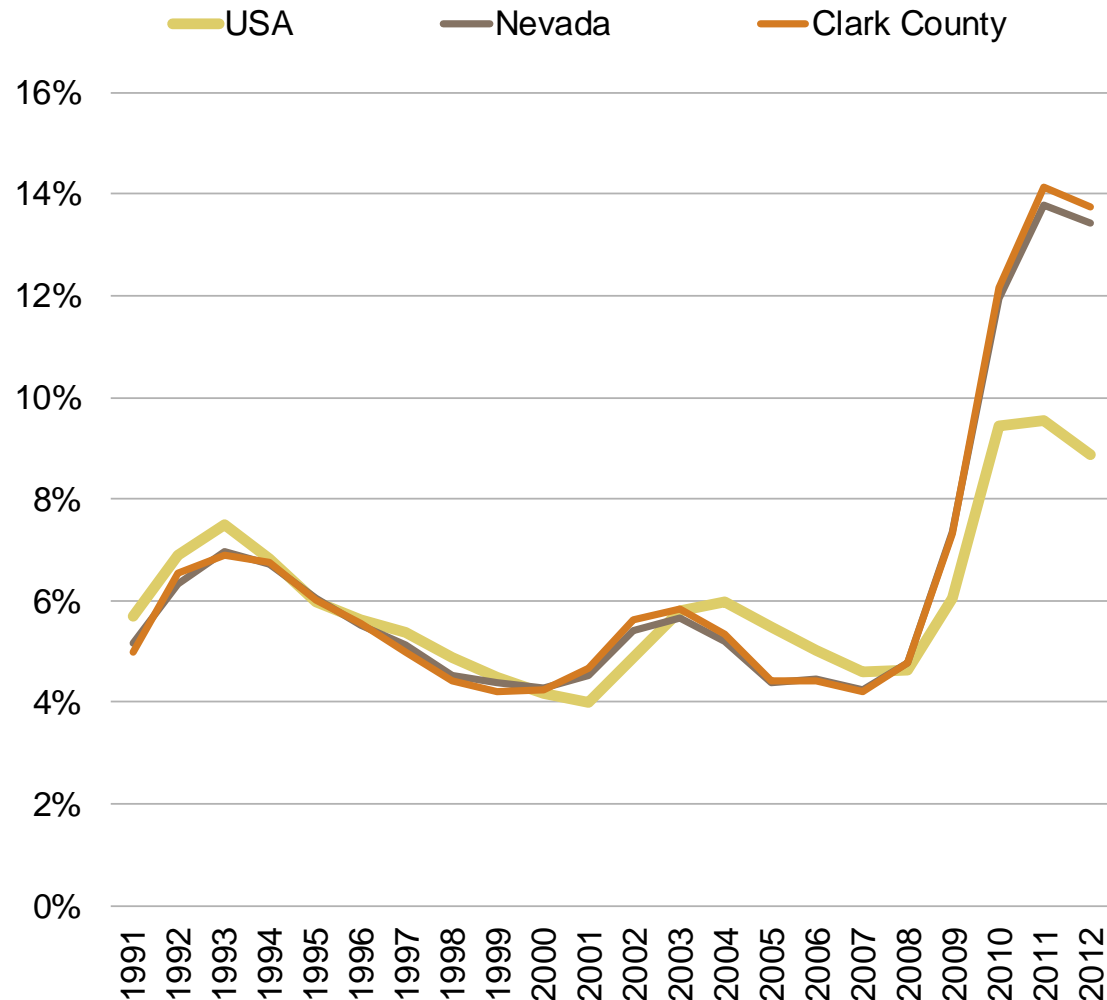
■ In neither the 1991-1992 recession nor the 2001-2002 recession did unemployment rates in Nevada, Clark County, or Las Vegas, diverge significantly from the US average.

....

■ The Great Recession of 2007-2009 was different. Jobless rates in Nevada swung wildly out of balance from a US cyclical pattern that was already quite severe. This reflects the “one-two punch” of discretionary losses to the region’s export base (tourism and gaming) and the secondary impacts on its growth sector.

Figure 38: Unemployment rates compared

Latest 2012 unemployment rate relative to the historical range.



SOURCE: U.S. Bureau of Labor Statistics, CPS (US rate) and LAUS (state & county rates)

HOW MUCH HAS UNEMPLOYMENT IMPROVED?

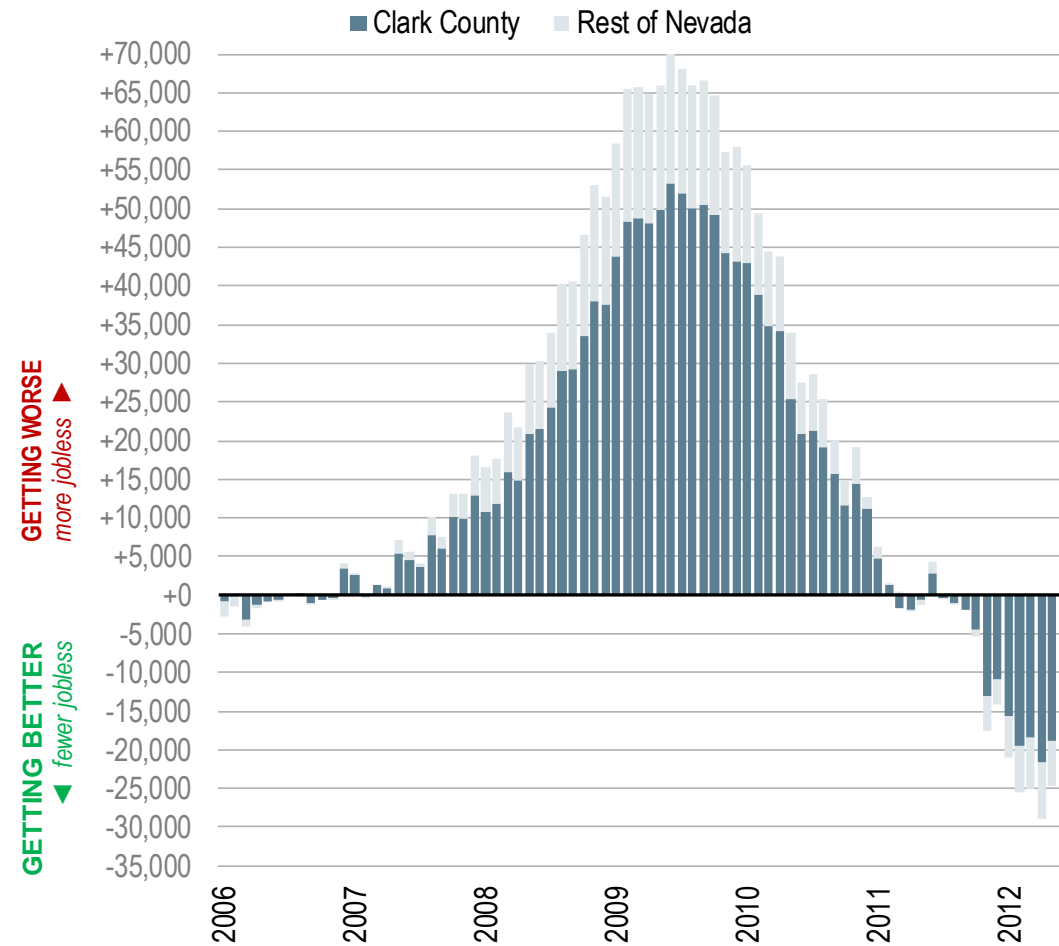
■ At the depths of this labor cycle in 2009, Nevada's unemployment rolls rose at a rolling rate of 65,000-70,000 annually, and Clark County accounted for the bulk of this number. Through much of 2009, the rank of unemployed workers in Clark County was increasing at a rolling rate of 50,000 per year.

♦♦♦

■ Unemployment levels stabilized by early 2011 and over the past 12 months the county's jobless tally has steadily receded. The drop in the number of unemployed residents reflects a possible improvement in the region's labor market. Some of this improvement has occurred through a drop in the number of persons counted in the labor force in combination with an increase in the number of employed persons.

Figure 39: Change in the number of unemployed residents in Nevada

Rolling 12-month change since January 2006*.



*NOTE: presented as a 12-month rolling change because data not seasonally adjusted
 SOURCE: U.S. Bureau of Labor Statistics, CPS (US rate) and LAUS (state & county rates)

WHERE DO THE UNEMPLOYED LIVE IN THE REGION?

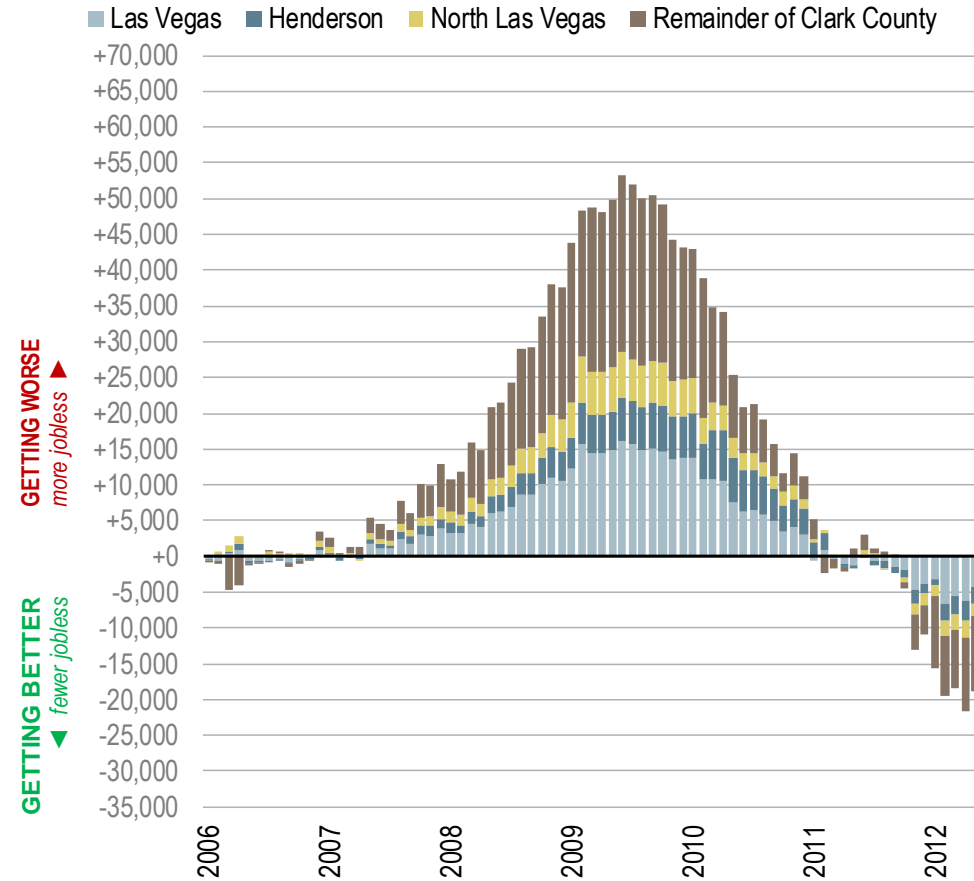
- A look at unemployment data below the county level shows no distinct geographic pattern of severity.

....

- The only discernible trend (and it is a fuzzy one) is that Henderson residents suffered their worst unemployment increases just a bit later than other parts of the county.

Figure 40: Change in the number of unemployed residents in Clark County

Rolling 12-month change since January 2006.*



*NOTE: presented as a 12-month rolling change because data not seasonally adjusted
 SOURCE: U.S. Bureau of Labor Statistics, CPS (US rate) and LAUS (state & county rates)

WHAT ARE LONG-TERM EMPLOYMENT TRENDS IN THE REGION?

Economy • Infrastructure • Tax Base

■ According to EMSI, total employment (this includes full-time and part-time jobs and self-employed workers) peaked just below 1.2 million in Clark County in 2007.

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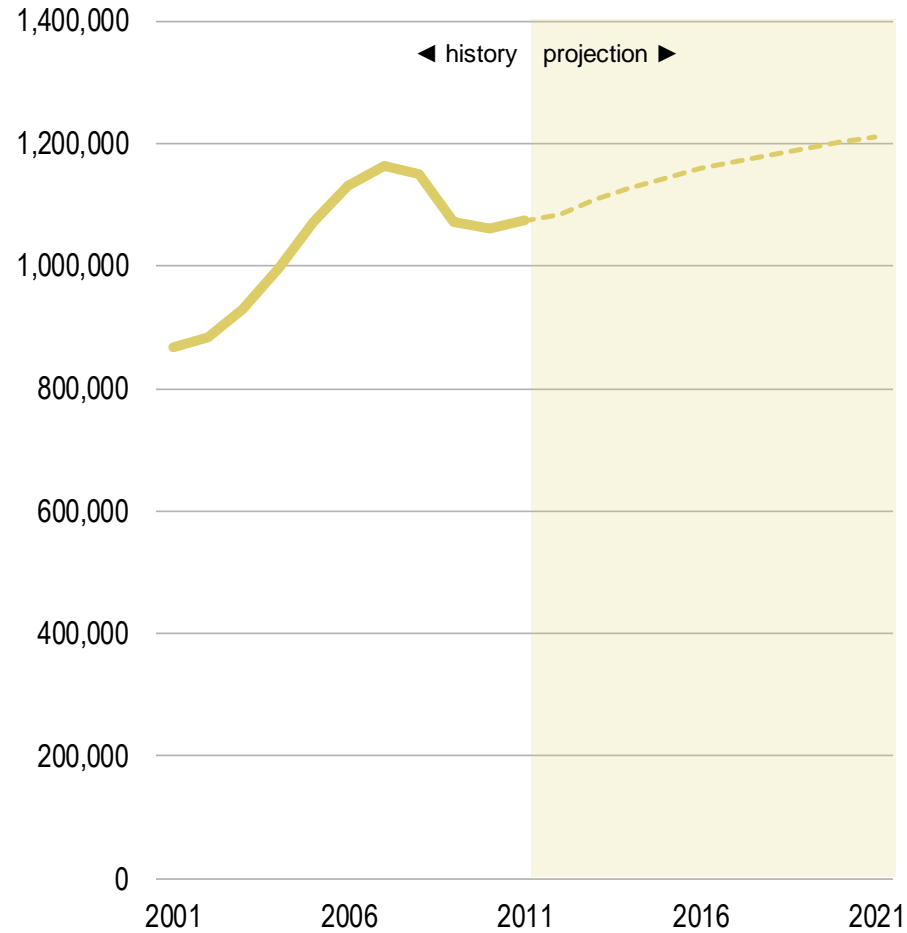
■ EMSI does not project the county to surpass its previous peak job level again until 2017, another five years from now.

....

■ The pace of job growth in the years ahead will be slower than Clark County has experienced in recent years.

Figure 4.1: The job base in Clark County

Projected recovery of lost jobs still years ahead.



SOURCE: EMSI Complete Employment - 2012.2

HOW MANY JOBS ARE PROJECTED FOR THE FUTURE?

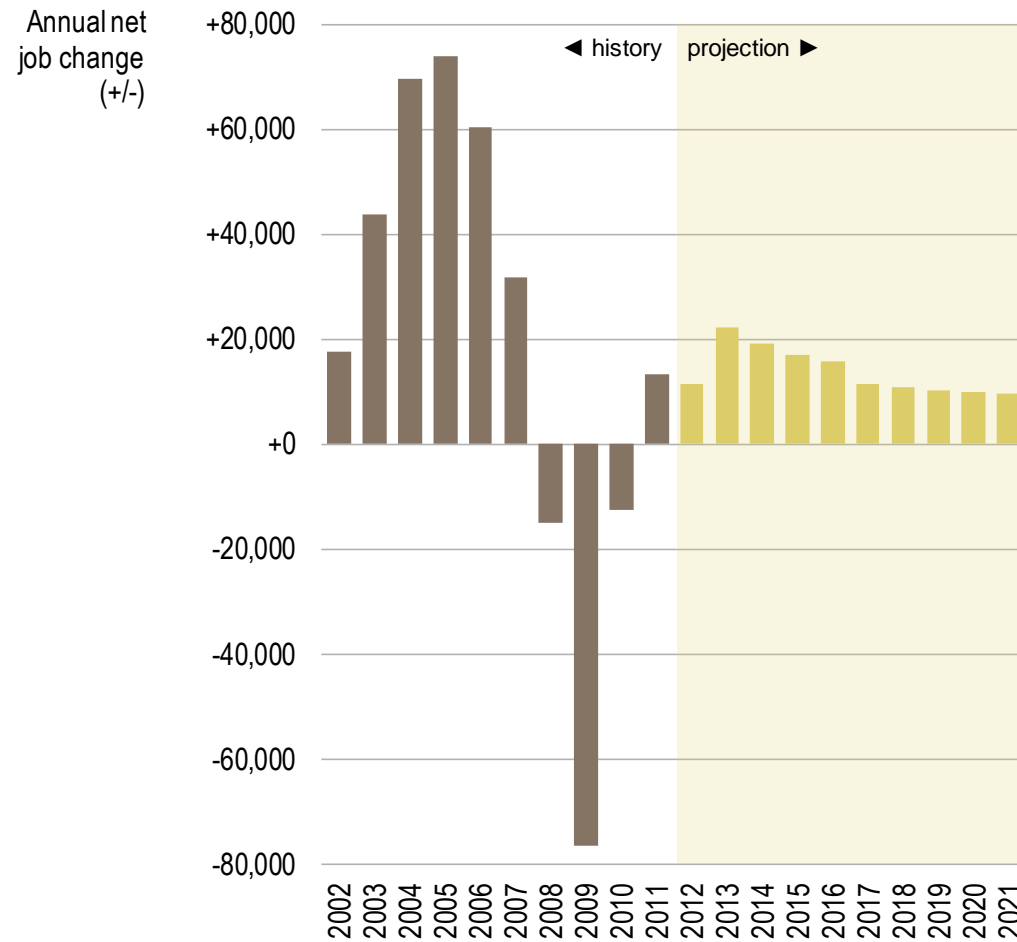
■ At the peak of the boom in 2005, the Las Vegas MSA added nearly 74,000 jobs in a single year. At the depths of the recession in 2009, more than 76,000 jobs were shed. This was an unprecedented cyclical swing within a four-year period.

♦♦♦

■ Sometimes severe recessions can be followed by a palpable "snap" in recovery. Not so this time. Employment in the years ahead will flirt with perhaps as many as 20,000 net new jobs per year, but job growth is unlikely to outpace this level according to EMSI.

Figure 42: Annual net job change in Clark County

With projections for the decade ahead.



SOURCE: EMSI Complete Employment - 2012.2

WHAT IS THE DISTRIBUTION OF JOBS IN CLARK COUNTY?

■ The full scope of the tourism and hospitality sector—hotels, food services, retail stores—includes more than 350,000 jobs in Clark County, or about one-third of the entire job-base.

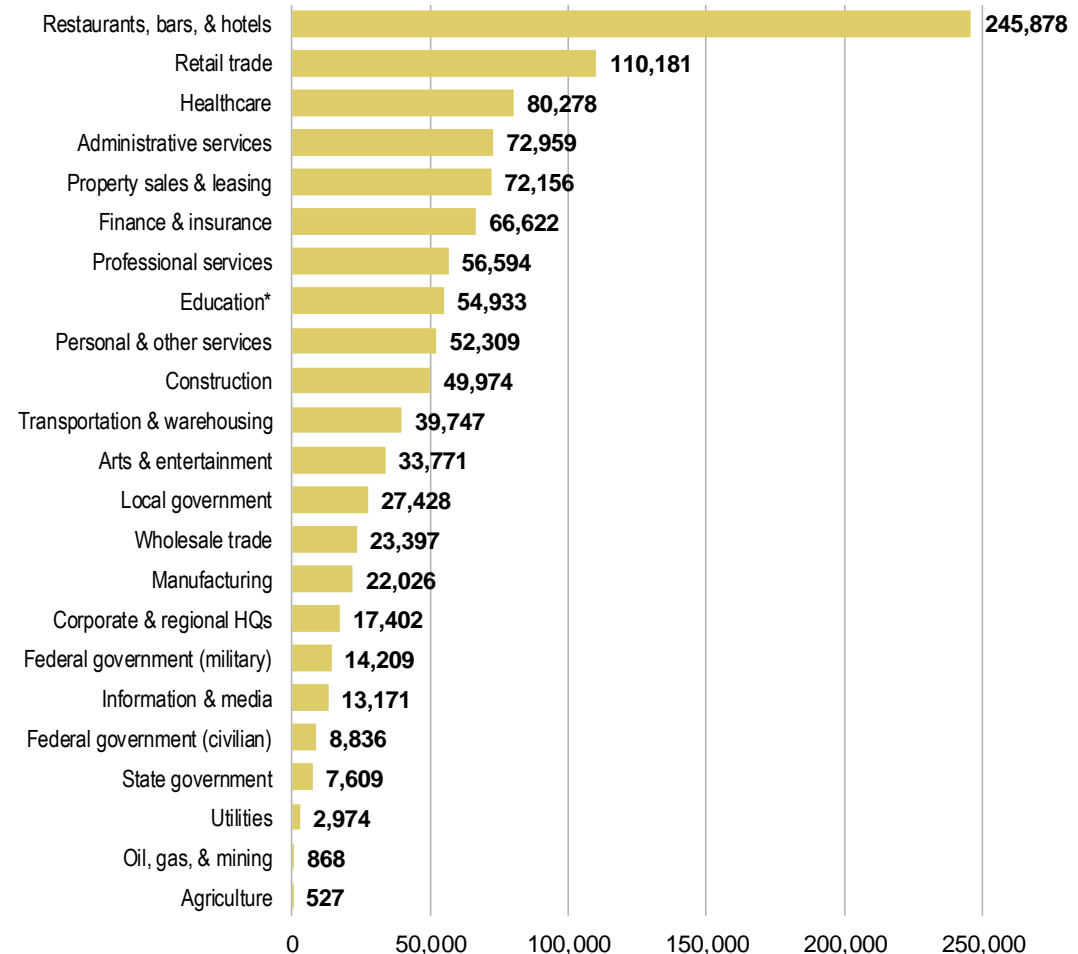
♦♦♦♦

■ The size of other economic sectors is small by comparison. The healthcare sector employs only 80,000 jobs and education 55,000.

♦♦♦♦

■ Manufacturing and information/media account for fewer than 25,000 jobs each. The construction sector, which peaked at 122,000 jobs in 2006 now employs fewer than 50,000 workers.

Figure 43: Job base by industry sector in Clark County, 2011



*NOTE: Education includes all public schools, colleges, & universities, i.e., these jobs are not included with local or state government
 SOURCE: EMSI Complete Employment - 2012.2

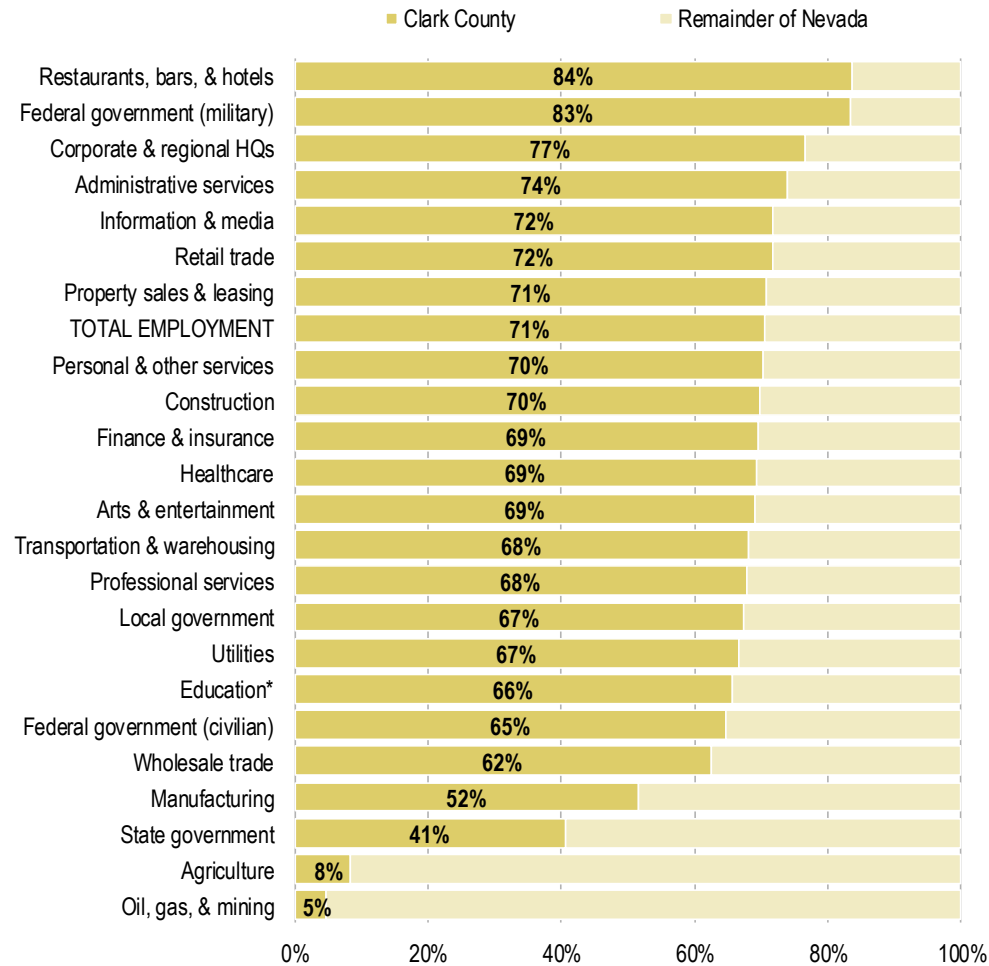
HOW DOES THE LOCAL DISTRIBUTION OF JOBS COMPARE TO THE STATE?

■ As of 2011, Clark County was home to 71% of the state's jobs. The sector with the largest share of statewide employment is accommodation / food services (84%). More than 1 in 5 of the state's military-related jobs are also located in Clark County.

♦♦♦♦

■ Sectors with surprisingly low shares of state employment are manufacturing (barely half of the state total) and education (just 66% despite the presence of UNLV, CSN, and other higher education institutions).

Figure 44: Distribution of jobs in Nevada as of 2011



*NOTE: Education includes all public schools, colleges, & universities, i.e., these jobs are not included with local or state government
 SOURCE: EMSI Complete Employment - 2012.2

HOW HAVE THE VARIOUS SECTORS PERFORMED SINCE THE RECESSION?

■ The construction sector shed substantial numbers of jobs in each of the past four years. Wholesale trade is the only other sector in the county that contracted across the past four consecutive years, but job losses were small compared to construction.

....

■ The healthcare sector grew steadily through the past four years, even at the depths of the downturn. Some sectors that suffered heavy job losses in 2008 and 2009 were clearly in recovery by 2011. Job gains in 2011 in property sales & leasing represented a hopeful sign of pending real estate recovery.

....

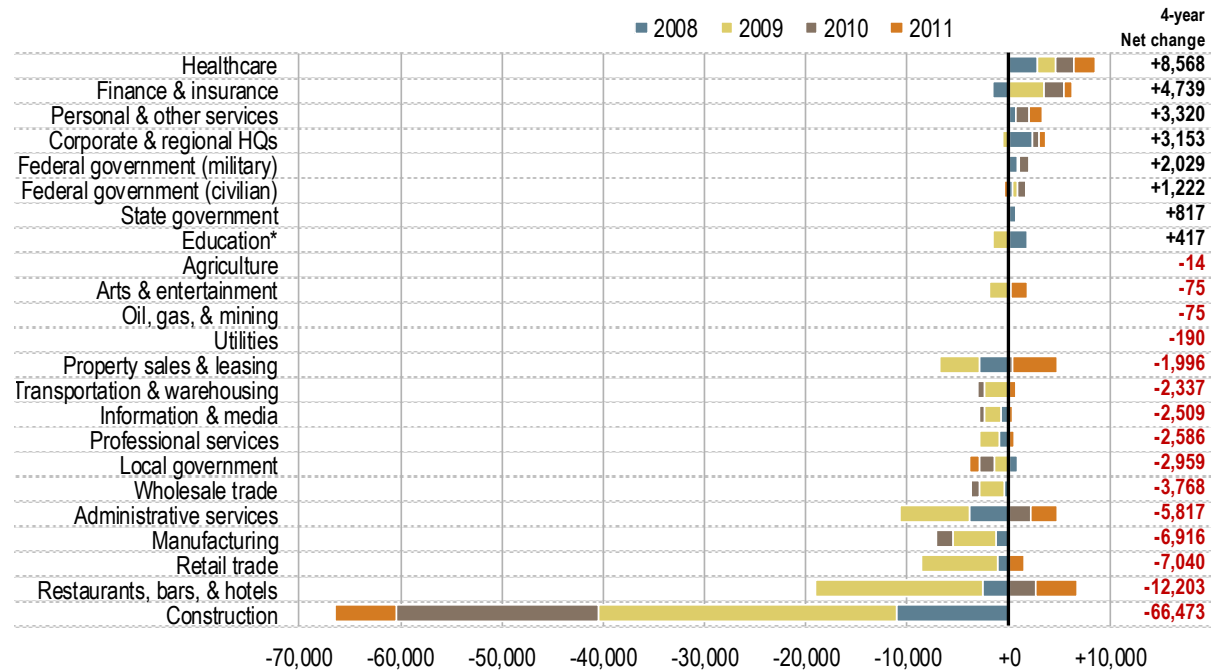
■ Other sectors, such as information and professional services showed emerging signs of recovery during 2011.

....

■ Notably finance & insurance and corporate & regional HQs posted job losses early in the recession but have added positions each year since.

Figure 45: Clark County job trends by economic sector since 2008

A wide gap in the types of jobs gained and lost during the recession.



*NOTE: Education includes all public schools, colleges, & universities, i.e., these jobs are not included with local or state government
 SOURCE: EMSI Complete Employment - 2012.2

HOW HAVE THE VARIOUS SECTORS PERFORMED SINCE THE RECESSION?

■ Clark County's job performance over the past four years in aggregate has paralleled state patterns, but with a few exceptions.

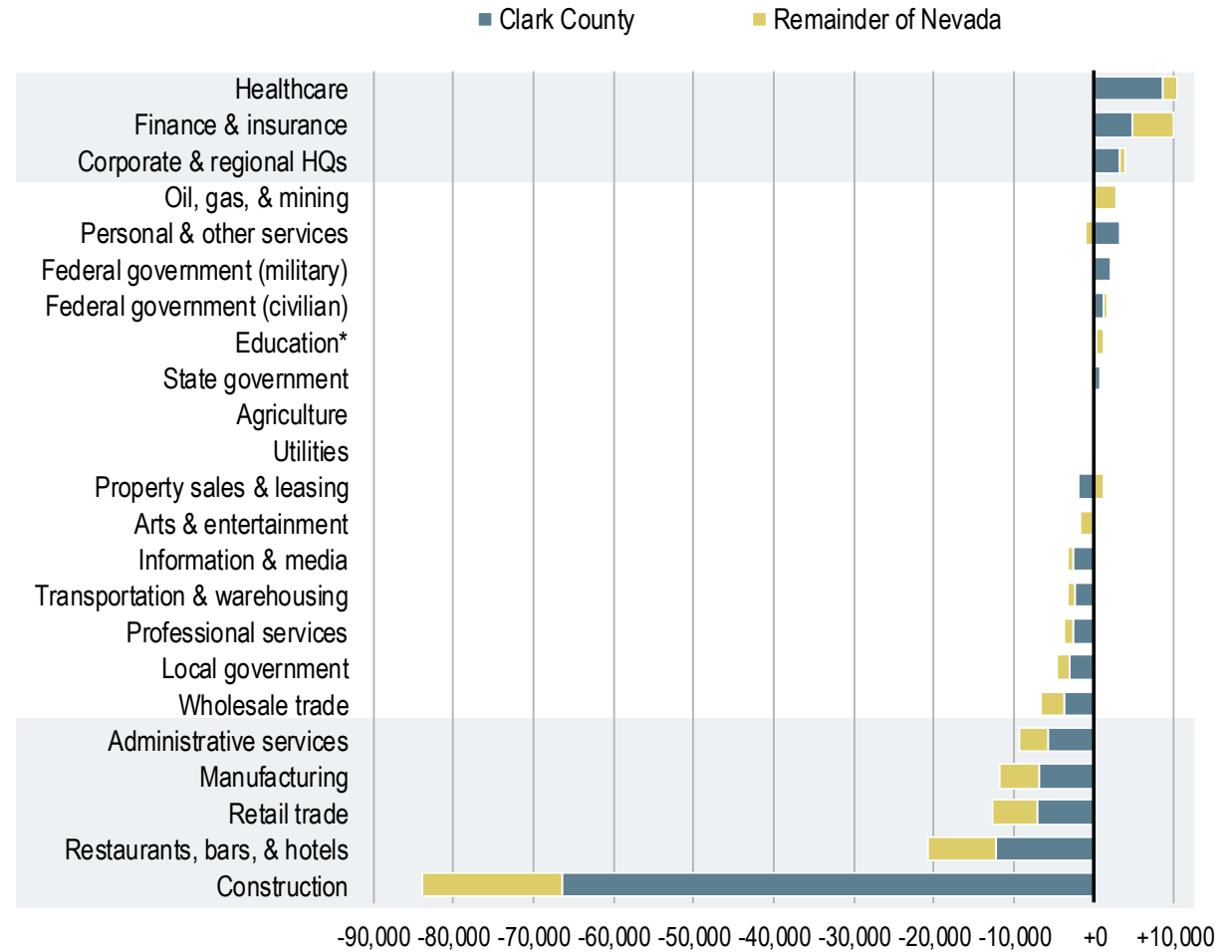
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■ Healthcare has been the state's biggest job success during the recession years. Nevada added more than 10,000 jobs in this sector from 2008 through 2011, with about 8,500 of these new jobs in Clark County. Finance & insurance was the second largest jobs producer statewide, but its impact on job creation was locally was not as strong.

....

■ On the other hand, Clark County outpaced the state in corporate and regional headquarters, adding about 3,100 of the state's 3,900 jobs in this sector over the four-year period.

Figure 46: Net job change in Nevada, 2008-2011



*NOTE: Education includes all public schools, colleges, & universities, i.e., these jobs are not included with local or state government

SOURCE: EMSI Complete Employment - 2012.2

HOW ARE THE VARIOUS SECTORS EXPECTED TO PERFORM OVER THE NEXT DECADE?

■ Healthcare will continue to be a major job gainer in the years ahead, but other sectors, including hotel & food services, retail trade, financial services, and property sales/leasing will also be among the largest job gainers.

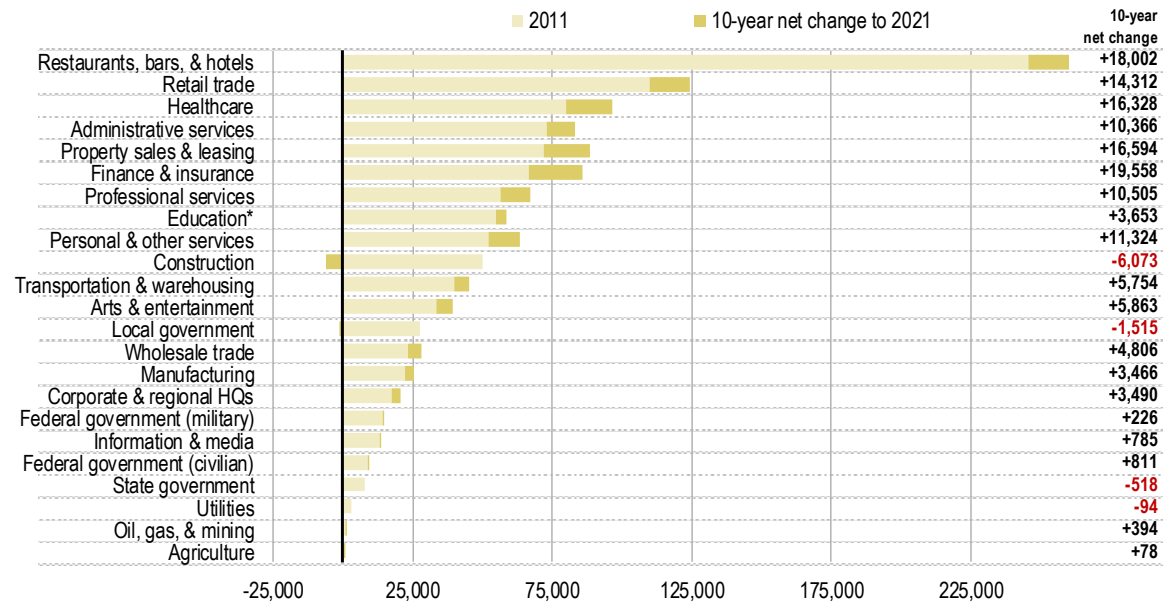
♦♦♦♦

■ Construction jobs as well as state and local government employment will be among the weakest performing labor sectors in the years ahead, according to EMSI.

Perspective

Notably, EMSI's projections do not foresee significant increases in the region's professional services sector or information & media. It is within these two sectors that most information technology companies are classified. EMSI's methodology is based partially on national forecasts and past local trends. This may account for low projections in spite of the region's recent success in drawing IT investment in Clark County.

Figure 47: Clark County's job base in 2011 + forecast 10-year change



*NOTE: Education includes all public schools, colleges, & universities, i.e., these jobs are not included with local or state government
 SOURCE: EMSI Complete Employment - 2012.2

IN WHAT SECTORS IS CLARK COUNTY'S ECONOMY SPECIALIZED?

■ Industry sectors associated with tourism (hotels & restaurants; arts & entertainment) as well as those associated with population growth (property sales & leasing) held high concentrations of employment in Clark County as of 2011. More surprising is the relatively high LQ of 1.36 for corporate and regional headquarters, although this may be associated with some of tourism and gaming-related companies based in the county.

....

■ Slipping into the category of "under-represented" are the healthcare and education sectors, two of the most stable types of jobs nationwide. The tech-oriented sector of information & media also is a bit below average.

Perspective

While the region has enjoyed recent success in attracting investment from technology-related companies, Clark County cannot yet call itself a technology center. This, however, is not to say that the Valley is without significant potential.

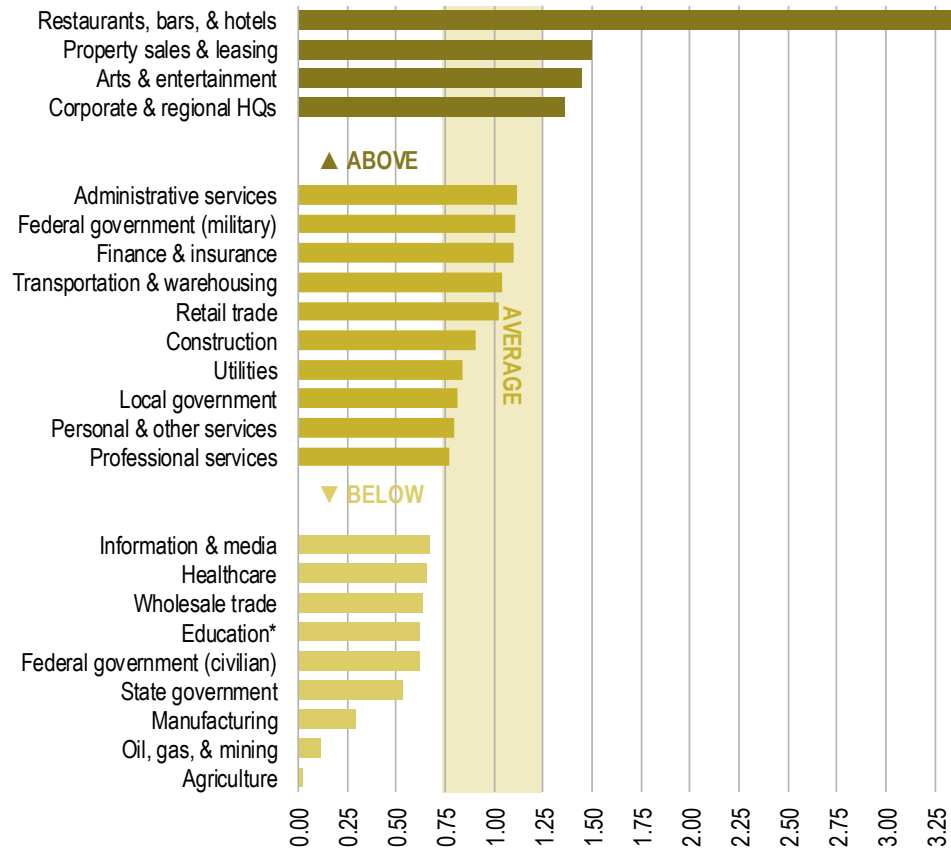
Figure 48: Clark County industry sector strengths relative to the US

Location quotient analysis

US average for each industry = 1.00

regional strength > 1.25

regional weakness < 0.75



*NOTE: Education includes all public schools, colleges, & universities, i.e., these jobs are not included with local or state government

SOURCE: EMSI Complete Employment - 2012.2

HOW IS THE TOURISM SECTOR FARING?

■ Tourism indicators point to mixed, but hopeful signals of a recovery underway in the tourism sector.

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■ The number of visitors to Clark County in 2011 had fully recovered to the 2007 peak level.

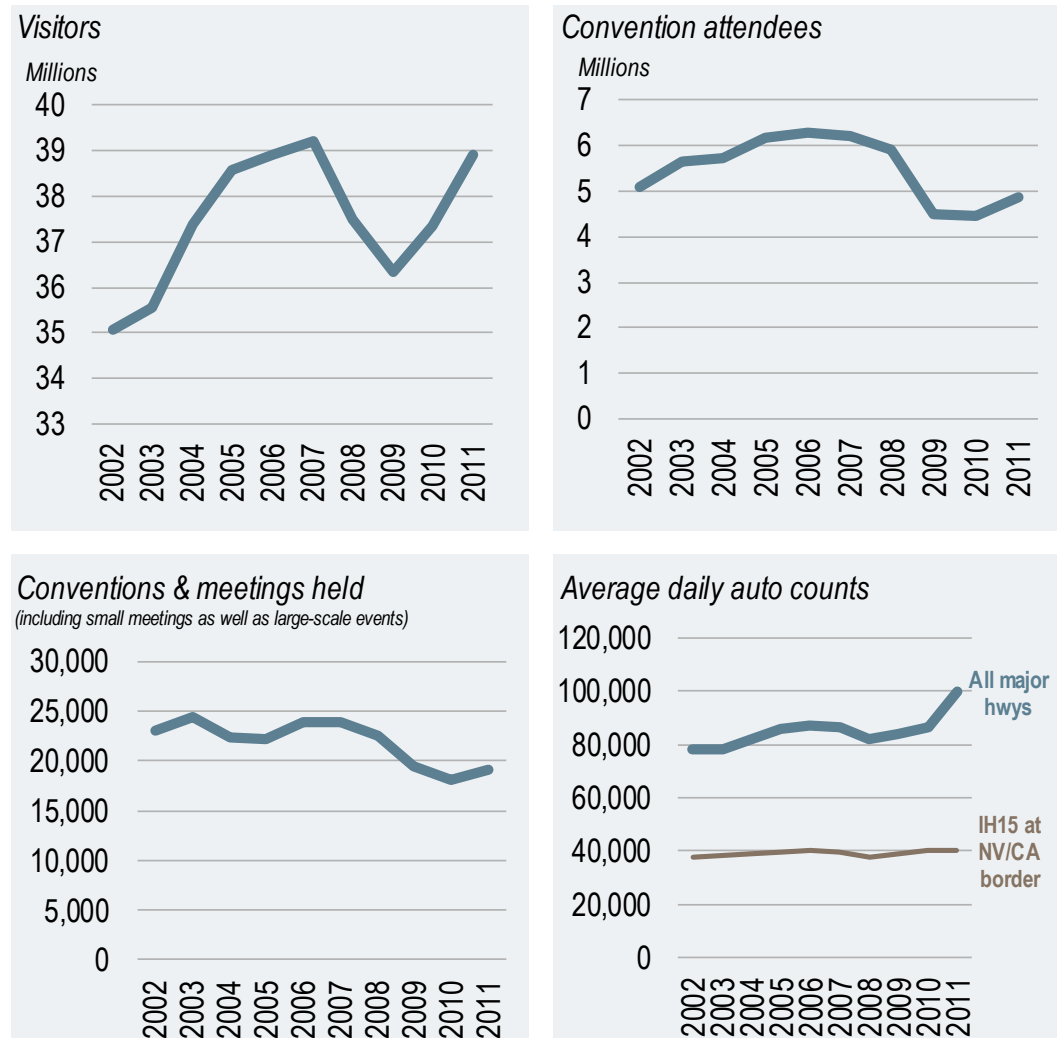
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■ The convention sector has not come back with the same vigor, at least not yet. Attendance has turned a corner but is still below peak levels. This may be due to the historic pattern of consumer spending leading business spending.

....

■ Interestingly, traffic counts have increased significantly on local highways, but cross-border traffic with California has hardly budged—through boom, bust, and subsequent recovery.

Figure 49: Tourism indicators, part 1: People



SOURCES: Las Vegas Convention and Visitors Authority; Nevada Department of Transportation; Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

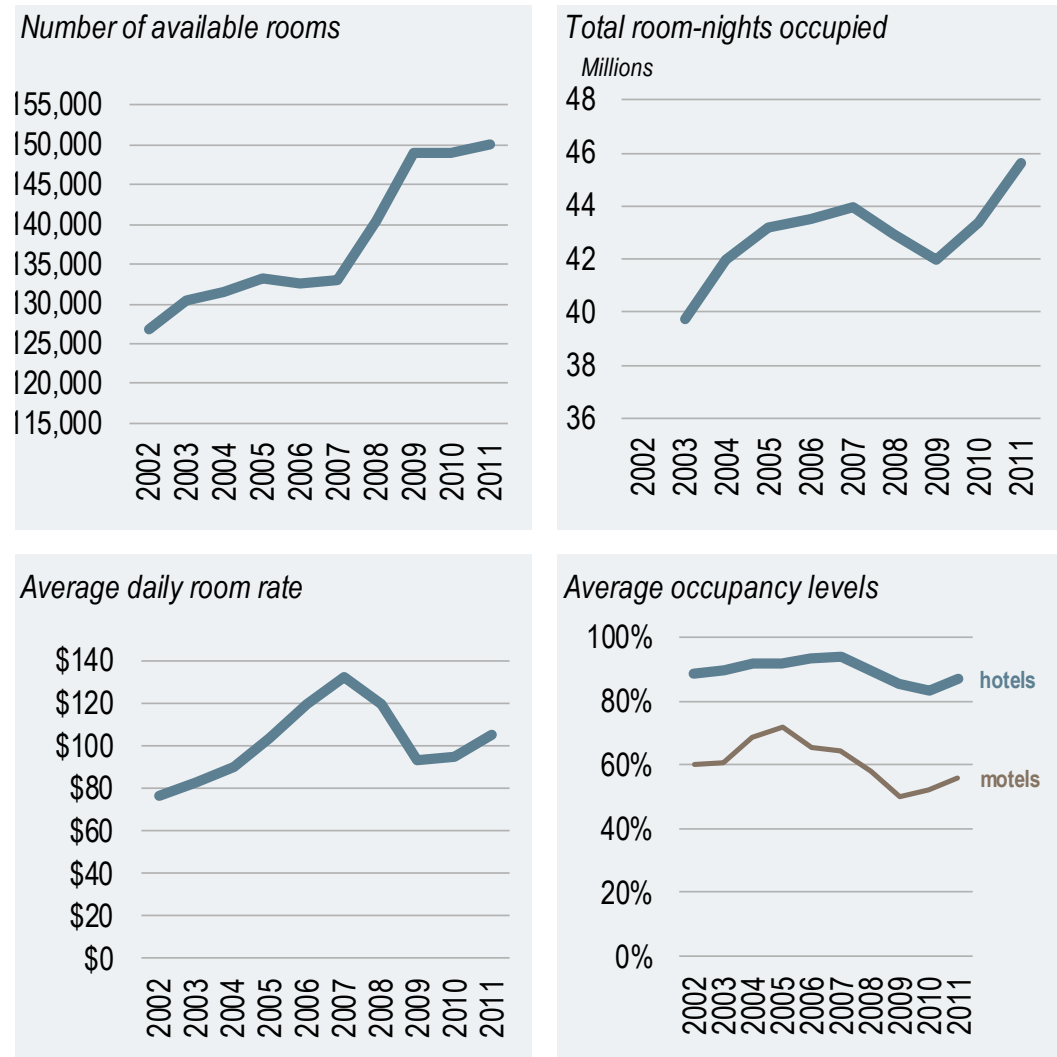
HOW IS THE TOURISM SECTOR FARING?

■ The Clark County hotel sector deserves close inspection. A surge in the supply of new rooms occurred amid the downturn, with the total room count rising from 133,000 in 2007 to 149,000 in 2009. This sent the average daily room rate plummeting from \$132 to \$93 over the same period since it coincided with softer demand conditions.

....

■ The upside is that supply and demand have since found better balance. Occupancy levels are once again rising briskly and a breather in hotel construction has stabilized room supplies. These conditions have allowed room rates and occupancy rates to begin ticking up at last.

Figure 50: Tourism indicators, part 2: Accommodation



SOURCES: Las Vegas Convention and Visitors Authority; Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

HOW IS THE TOURISM SECTOR FARING?

- Gaming revenues in Clark County had stabilized, but had not fully recovered as of 2011.

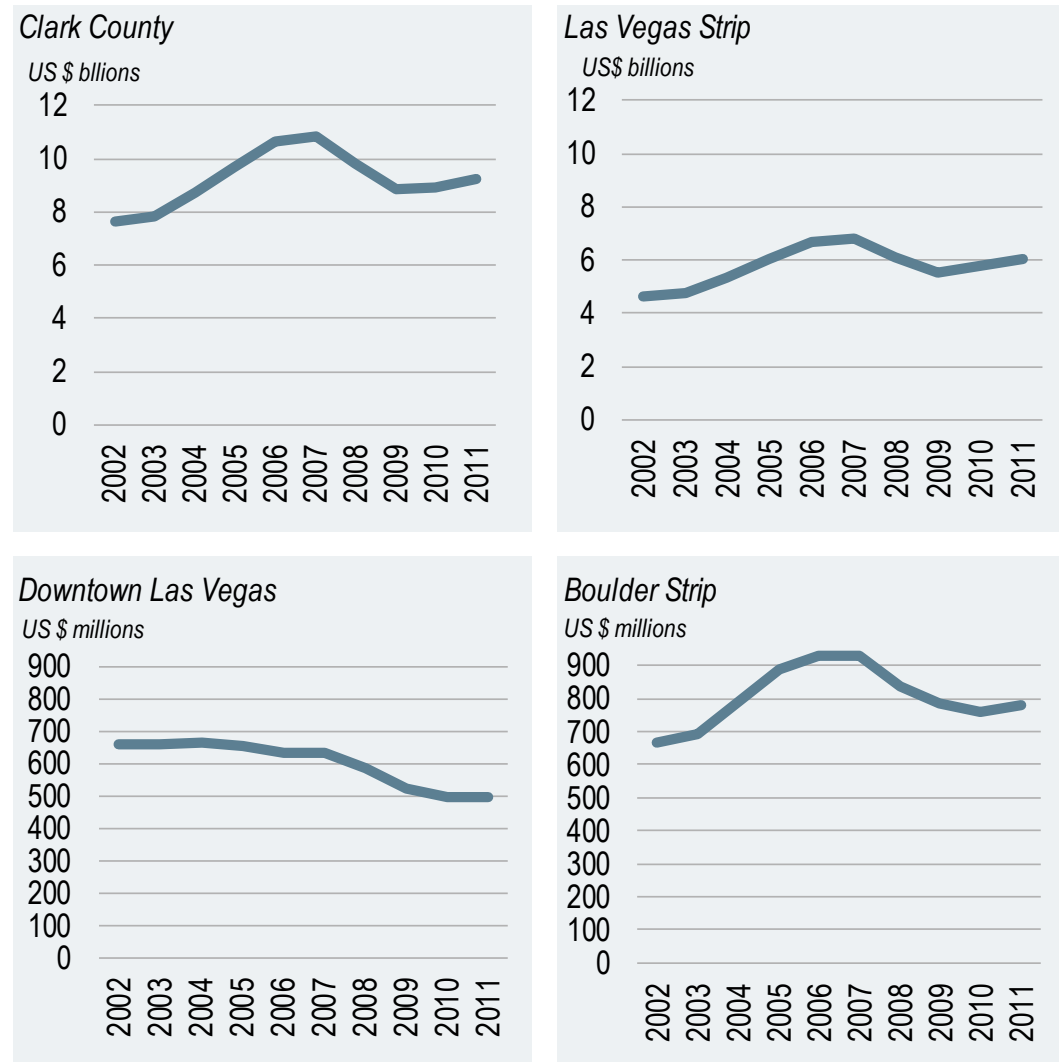
....

- The largest of the county's major gaming zones, the Las Vegas Strip, lost the least momentum during the downturn, and appears best positioned to reach full recovery first.

....

- Compared to the Las Vegas Strip, the county's other major gaming zones like the Boulder Strip and Downtown Las Vegas were still lagging behind peak revenue levels as of 2011.

Figure 51: Tourism indicators, part 3: Gaming



SOURCES: Nevada Gaming Control Board; Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

HOW CONNECTED IS THE REGION THROUGH AIR?

■ Passenger enplanements at McCarran have declined in this economic cycle, yet the worst year of this recent downturn (2010) still exceeded the peak year of the dot-com boom era (2001).

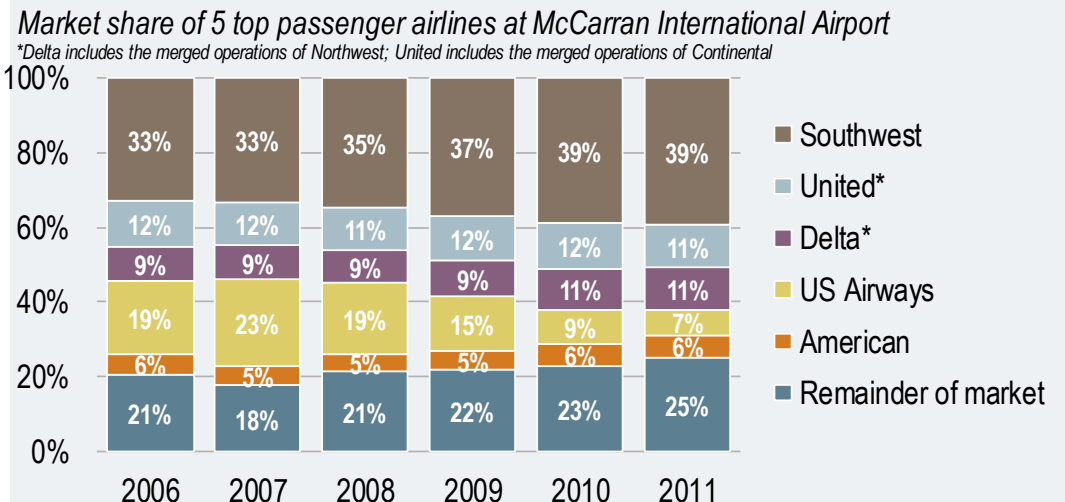
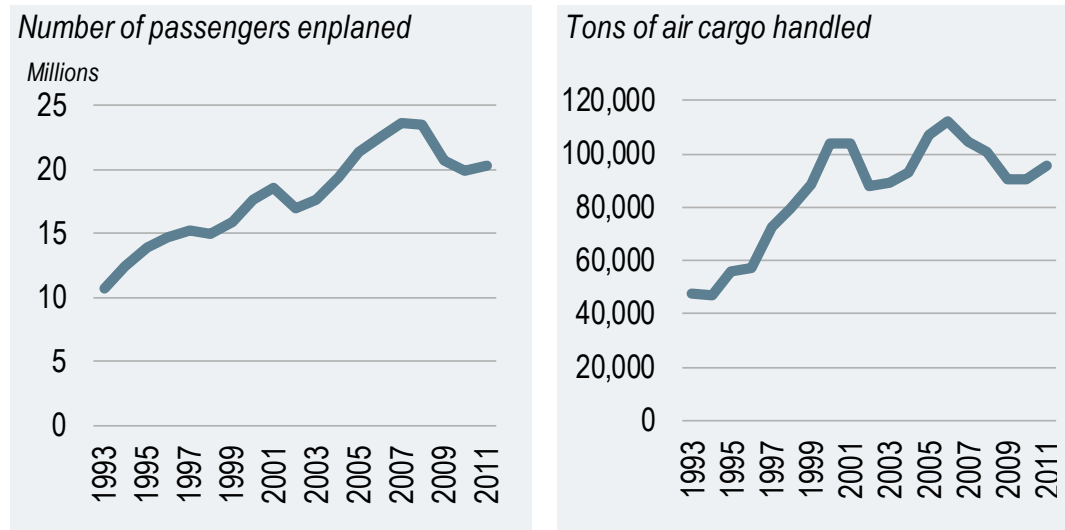
Not the cuts in capacity in and out of McCarran

■ Air cargo volumes have not performed as well but this may be due, in part, to structural changes in the IT era; similar trends have been seen at other airports.

....

■ Perhaps overlooked are the market shares of passenger carriers. Southwest continues to strengthen its position as McCarran's top carrier. It has lost a major direct competitor as US Airway's role at the airport has receded. As of 2011, SWA was nearly four times the volume of the airport's second placed carrier.

Figure 52: McCarran International Airport: infrastructure & connectivity



SOURCES: McCarran International Airport, Department of Aviation; Clark County Comptroller's Office, Comprehensive Annual Financial Report, FY 2011

HOW CONNECTED IS THE REGION THROUGH RAIL?

Economy • Infrastructure • Tax Base

■ Great inland freight rail hubs like Omaha, Kansas City, Dallas-Fort Worth, Memphis, Atlanta, and especially Chicago maintain their competitive edges by providing service from two or more Class I railroads.

....

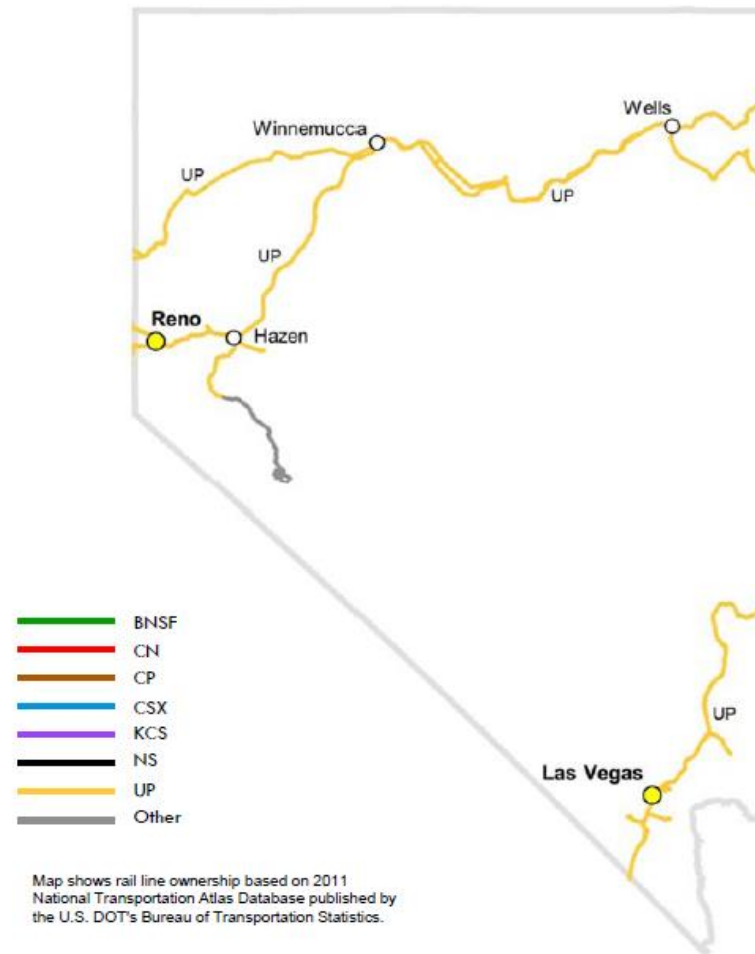
■ Southern Nevada does have Union Pacific service, but the region lacks the presence of other Class I railroads that add to local price competition and extend the choices of destinations and schedules.

....

■ The presence of a single Class I railroad does not necessarily preclude an intermodal logistics strategy for the region, but it may limit some of the available options.

Figure 53: Freight railroads in Nevada

Union Pacific has no competition in Southern Nevada from other Class I railroads.



SOURCE: Association of American Railroads

HOW DOES NEVADA COMPARE TO OTHER WESTERN STATES ON ELECTRICITY RATES?

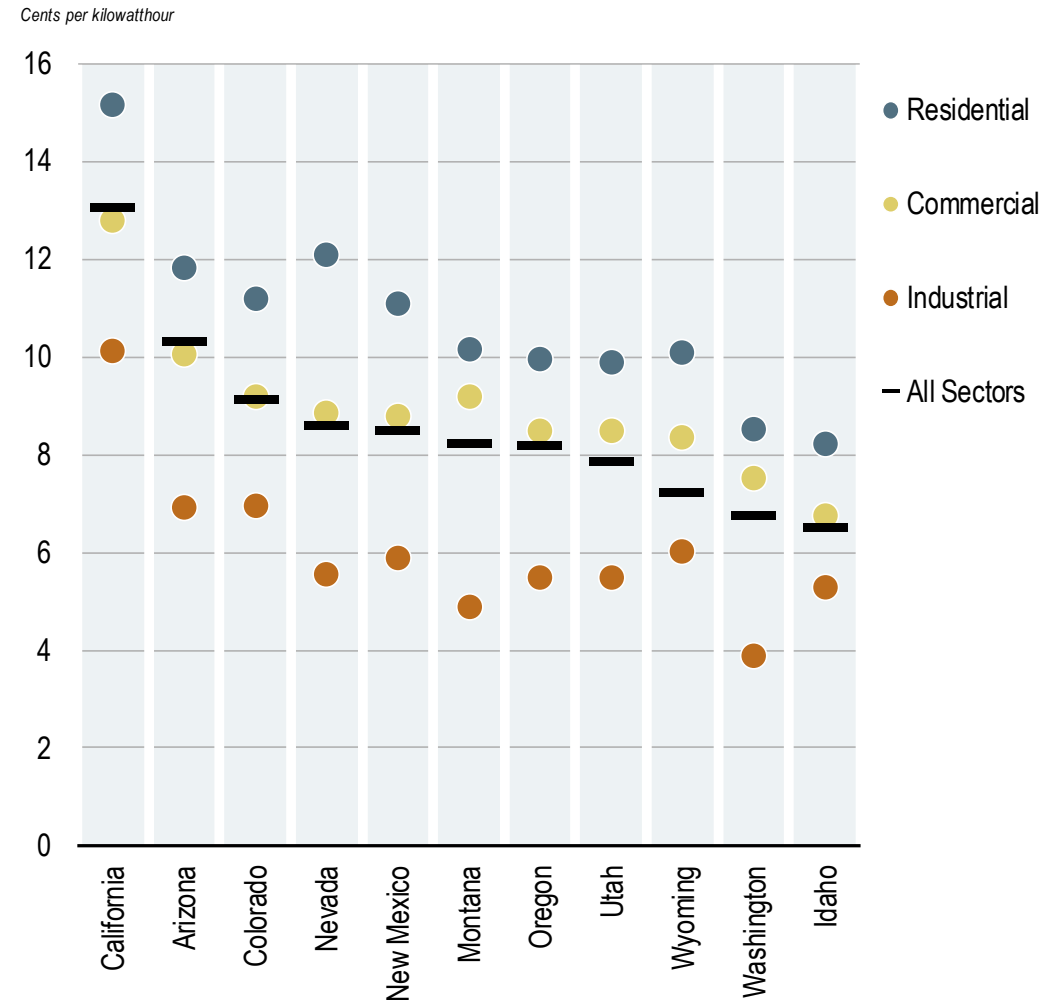
■ Nevada's electricity prices are near-average among the Western US states. It may be impossible to compete directly against the cheap hydroelectric power of the Pacific Northwest, yet among the dry and highly urbanized Southwestern states of California, Arizona, and Colorado, Nevadans are in a good competitive position.

....

■ There is a noticeably wide gap in average electricity prices for the state's residential versus industrial customers. In spite of Nevada's competitive prices among the states of the US West, Clark County has yet to see significant industrial development as evidenced by its low manufacturing LQ. The low concentration of manufacturing activity may, in part, be due to the lack of a history of the industry in the region and the associated lack of skilled workers.

Figure 54: Average retail price of electricity by end-use sector

Prices across Western US states as of May 2012.



SOURCE: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report.

HOW INNOVATIVE IS THE REGION?

Economy • Infrastructure • Tax Base

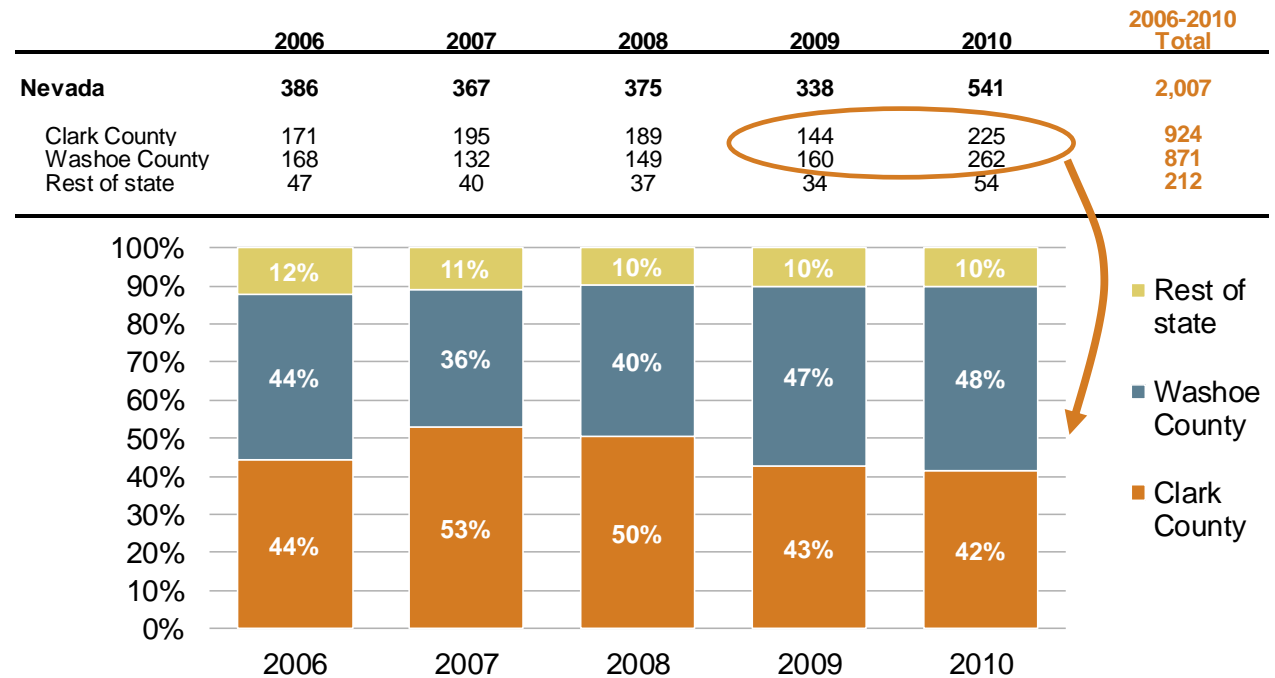
■ No economic development plan can be complete without assessing the environment for new ideas and new businesses, yet the whole concept of measuring entrepreneurship and innovation is fuzzy. One option available is a review of local patenting activities.

■ The last 5 years of federal patent statistics available at the state and county level (2006-2010) show that Nevada as a whole had just over 2,000 applications accepted, and in 924 of them, the principal "inventor" listed on the patent was located in Clark County. While Clark County ranked first among Nevada's counties for the 5-year period as whole, it appeared to be ceding its leadership role to Washoe County by 2009 and 2010.

■ On a per capita basis, one patent was issued in Clark County per 8,672 residents. By comparison, the ratio in Maricopa County, Arizona, was one per 2,851.

Figure 55: New utility patent grants by county of origin

Distribution of utility patents originating in Nevada.



SOURCE: US Patent & Trademark Office (calendar year data)

WHO IS INNOVATING IN THE REGION?

- Over the past five years, Clark County's top patent grant recipients have all been associated in some way with the gaming industry.

Figure 56: New utility patent grants by applicant

Top 5 patent grantees from Clark County since 2006.

	2006	2007	2008	2009	2010	2006-2010 Total
International Game Technology (IGT)	9	14	14	16	31	84
Shuffle Master, Inc.	7	12	14	9	11	53
Bally Gaming, Inc.	1		8	4	8	21
Wms Gaming, Inc.		3	4	6	6	19
Progressive Gaming International Corp.	2	9	1			12

SOURCE: US Patent & Trademark Office (calendar year data)

HOW MUCH FEDERAL FUNDING IS THE REGION RECEIVING FOR INNOVATION?

■ Another angle for gauging the pulse of local creative development is to look at federal (Small Business Innovation Research (SBIR) and Small Business Technology Transfer) STTR awards. Clark County companies picked up over \$11 million in awards between 2001 and 2010, with 2010 being the biggest year yet (as this coincided with federal stimulus initiatives).

■ In 2010, the most recent year available, the SBIR/STTR grants from DoD's innovative DARPA unit (\$1.1 million) and from the Department of Energy (also \$1.1 million) were particularly large.

Figure 57: Aggregate of federal SBIR & STTR awards in Clark County

Data aggregated by year and by federal agency source.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Agency Total
Annual \$ total	162,756	960,228	1,252,274	2,803,678	79,670	297,268	1,756,499	639,594	336,394	3,001,189	
DOD	62,756	860,314	1,152,531	2,803,678	79,670		198,000	139,605	336,394	1,857,156	7,490,104
Army			914,503					139,605	67,730	716,553	1,838,391
MDA	62,756	661,501	69,626	734,352							1,528,235
USAF		99,333	99,815	1,249,751							1,448,899
DARPA							198,000		99,000	1,140,603	1,437,603
Navy		99,480	68,587	819,575	79,670				69,665		1,136,977
DLA									99,999		99,999
HHS	100,000					197,325	1,558,499				1,855,824
DOE			99,743							1,144,033	1,243,776
NSF		99,914				99,943		499,989			699,846

Note: Includes the sum of Phase 1 and Phase 2 grants for each year shown
 SOURCE: U.S. Small Business Administration, Technet

WHICH FEDERAL AGENCIES ARE FUNDING INNOVATION IN THE REGION?

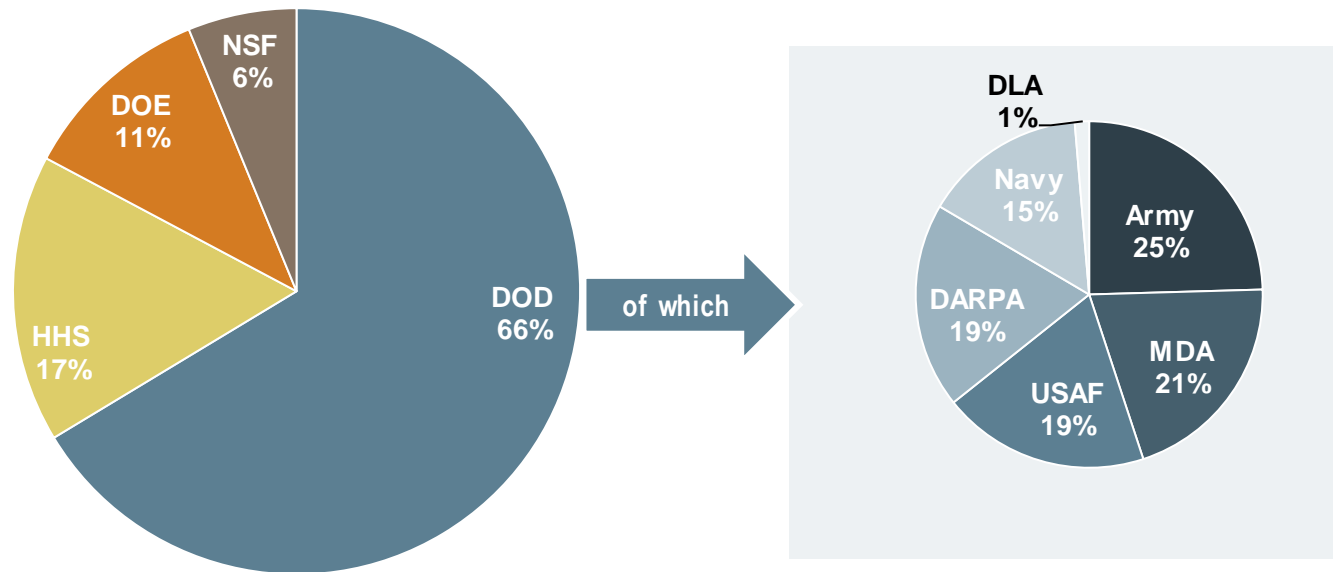
Economy • Infrastructure • Tax Base

■ Of all federal agencies, the U.S. Defense Department has been the most consistent (9 out of 10 years) and the most lucrative source of SBIR and STTR grants for Clark County companies (66% of all awards since 2001).

No particular military branch dominates the awards. Rather, DoD sources have been well dispersed across agencies and branches.

Figure 58: Distribution of federal SBIR & STTR awards in Clark County

Data aggregated by federal agency source, 2001-2010.



Note: Includes the sum of Phase 1 and Phase 2 grants for each year shown
SOURCE: U.S. Small Business Administration, Technet

WHO IS RECEIVING FEDERAL FUNDING?

Figure 59: Aggregate SBIR & STTR awards to companies in Clark County

Data aggregated by year of award distribution.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Company Total
Annual \$ total	162,756	960,228	1,252,274	2,803,678	79,670	297,268	1,756,499	639,594	336,394	3,001,189	
Rocky Research			984,129	804,312	79,670			69,752	67,730	1,860,586	3,866,179
Idea International, Inc.						197,325	1,558,499				1,755,824
E-Viz, Inc.			99,815	1,249,751							1,349,566
Exogi LLC							99,000		99,000	745,883	943,883
ASI Technology Corp.	62,756	760,834	68,587								892,177
Bonn Corp.		99,480		749,615							849,095
Thies Technology						99,943		499,989			599,932
Manufacturing Laboratories, Inc.									99,999	197,996	297,995
Latel Corporation							99,000			196,724	295,724
K2 Energy Solutions, Inc.								69,853	69,665		139,518
Lambda Pharmaceuticals	100,000										100,000
Harbinger		99,914									99,914
First American Scientific Corporation			99,743								99,743

Economy • Infrastructure • Tax Base

■ Three companies in Clark County—Rocky Research, Idea International, and E-Viz—have received SBIR/STTR awards of more than \$1 million in aggregate since 2001. With the exception of a stimulus-related grant from DOE in 2010, all of Rocky Research’s awards in the past decade have been sourced from DoD. The Boulder City company concentrates on a variety of energy-related technologies. The awards to Idea International (a dental training award from HHS) and to E-Viz (a nanodisplay technology award from the USAF) were essentially single technology grants that came earlier in the decade. Rocky Research has been a more repetitive applicant for multiple technological innovations.

Note: Includes the sum of Phase 1 and Phase 2 grants for each year shown
 SOURCE: U.S. Small Business Administration, Technet

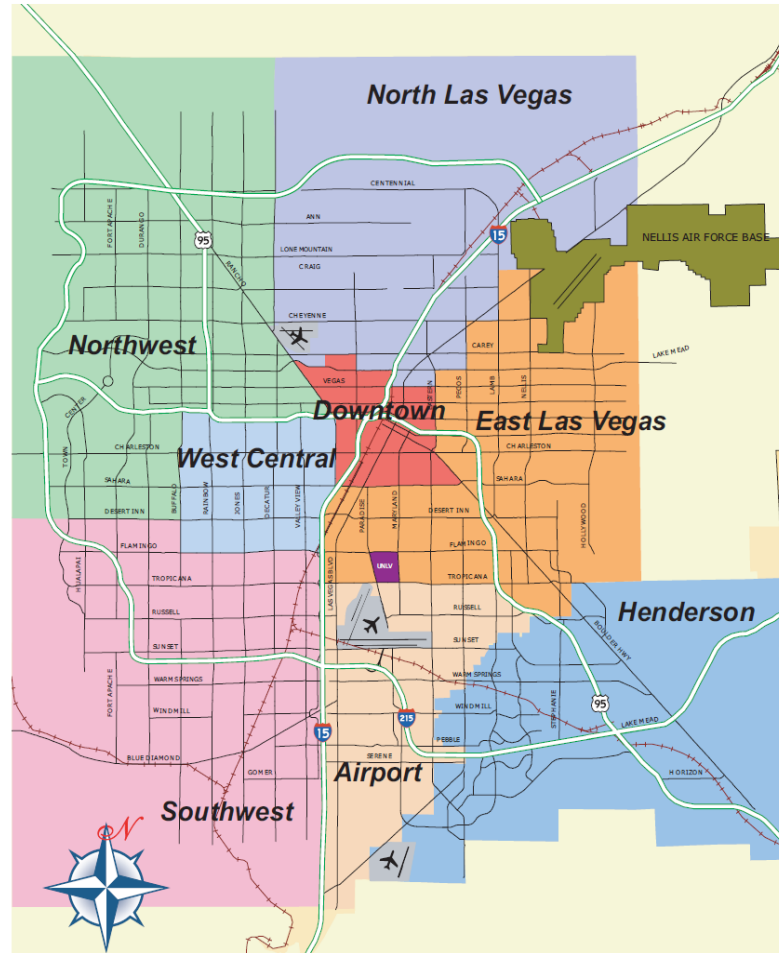
HOW ARE THE REGION'S REAL ESTATE SUBMARKETS DEFINED?

Figure 60: Real estate submarkets in the Las Vegas Valley

INDUSTRIAL SUBMARKET MAP



OFFICE SUBMARKET MAP



Real Estate

SOURCE: RCG Economics

HAS THE REGION'S INDUSTRIAL MARKET RECOVERED?

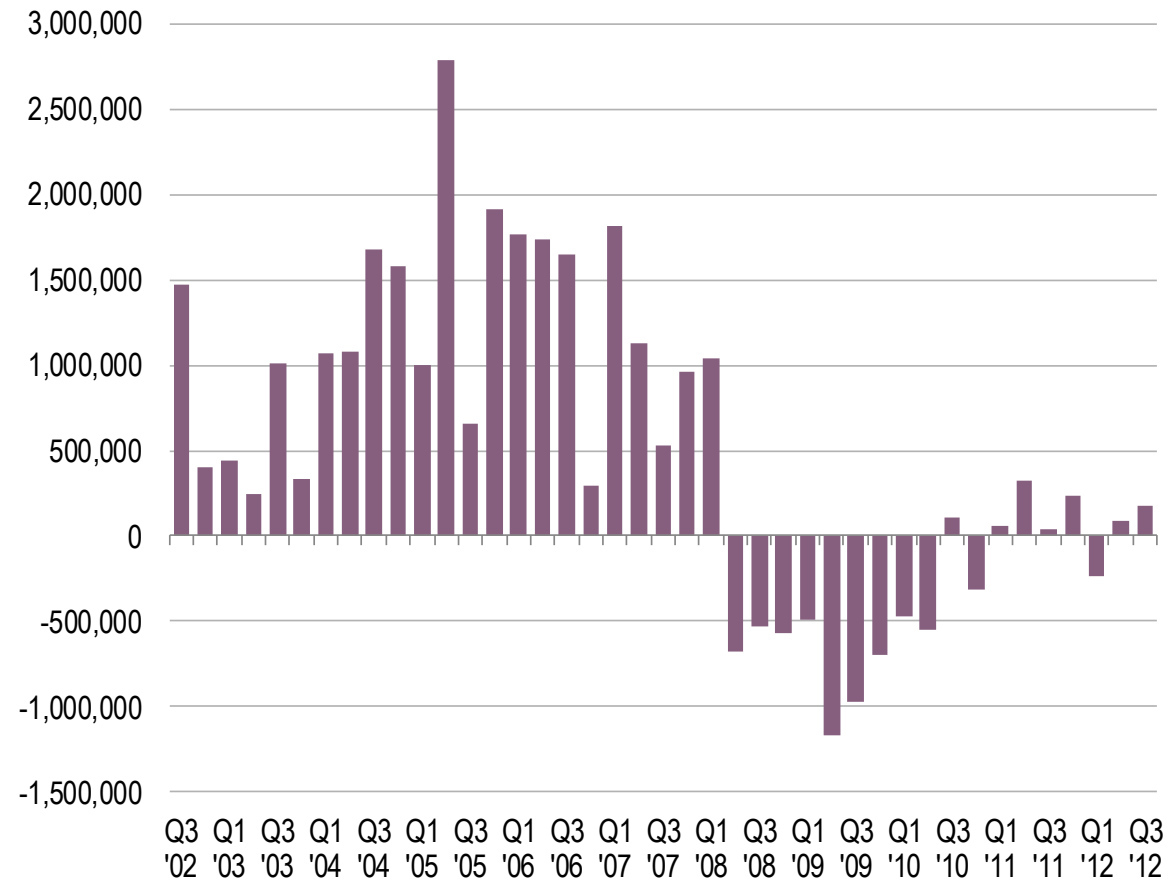
Real Estate

■ Prior to the recession, the Las Vegas Valley enjoyed rapid absorption of industrial space, peaking in the second quarter of 2005. During the recession, the area experienced nine consecutive negative quarters resulting in over one million square feet of space becoming available.

■ Since the middle of 2010, the region's industrial market appears to have stabilized, but no significant gains have been made.

Figure 61: Las Vegas Valley industrial market absorption trends

Quarterly net absorption of industrial square footage, 2002-2012.



SOURCE: RCG Economics

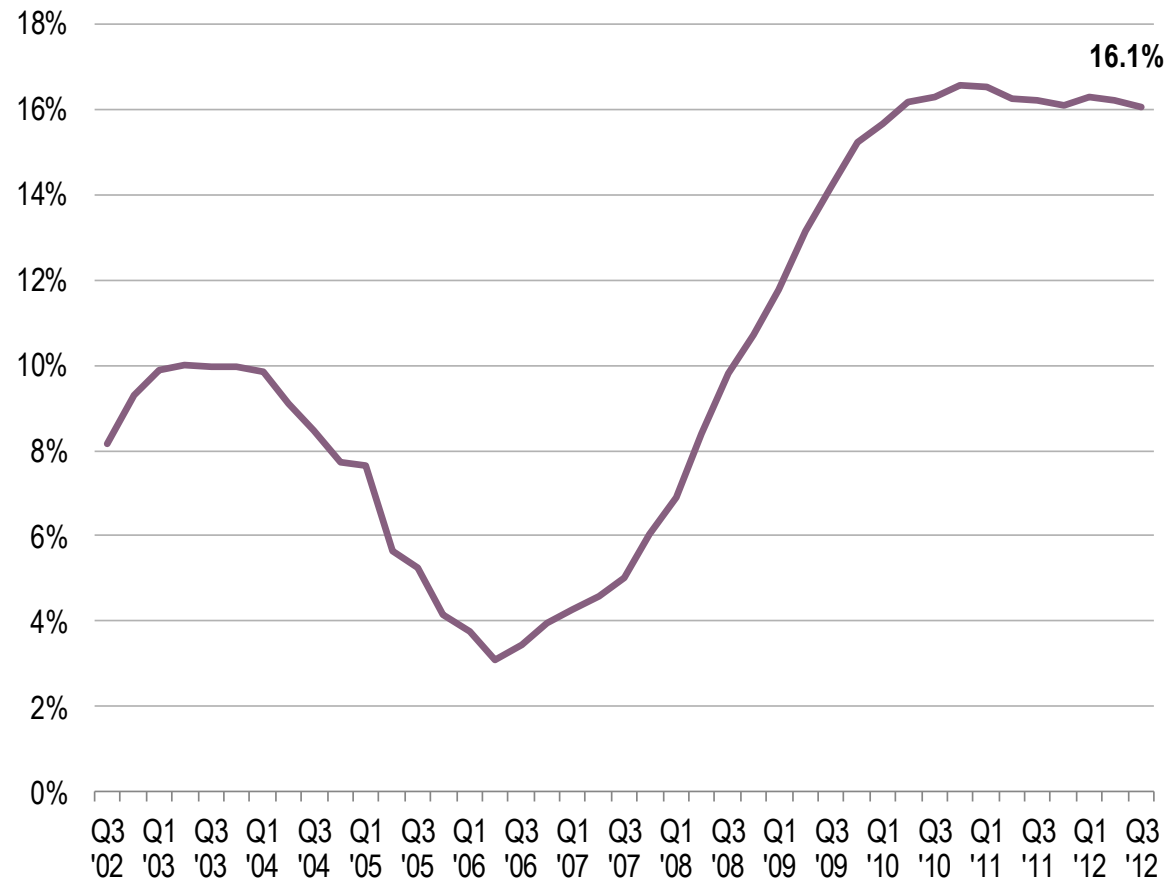
ARE VACANCY RATES WITHIN THE INDUSTRIAL MARKET DECLINING?

Real Estate

- As industrial space was quickly absorbed during the middle of the last decade, vacancy rates declined to 3.1 percent in the second quarter of 2006.
- After a sharp rise in rates during the recession, the region's industrial vacancy rate has stubbornly remained above 16 percent since the second quarter of 2010.

Figure 62: Las Vegas Valley industrial vacancy rate trends

Industrial market quarterly vacancy rates, 2002-2012.



SOURCE: RCG Economics

HOW IS INDUSTRIAL SPACE DISTRIBUTED THROUGHOUT THE REGION?

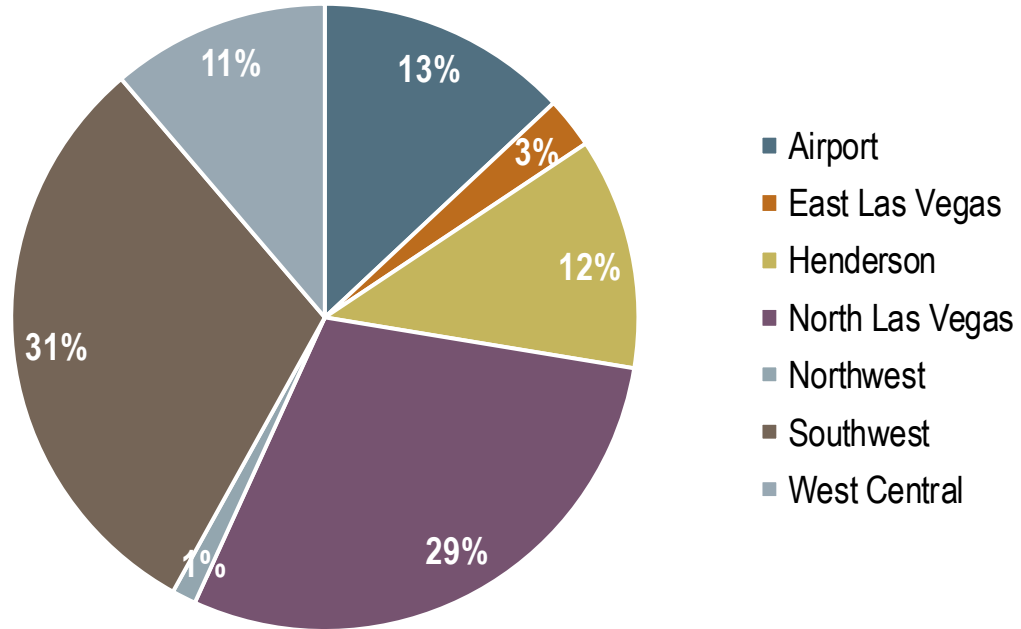
Real Estate

■ Just two submarkets provide the majority of industrial space in the Las Vegas Valley: Southwest and North Las Vegas. Combined, they comprise 60 percent of the total market.

Other substantial submarkets include: Airport, Henderson, and West Central.

Figure 63: Share of industrial space by submarket

Percent of all industrial square footage in the Las Vegas Valley.



SOURCE: RCG Economics

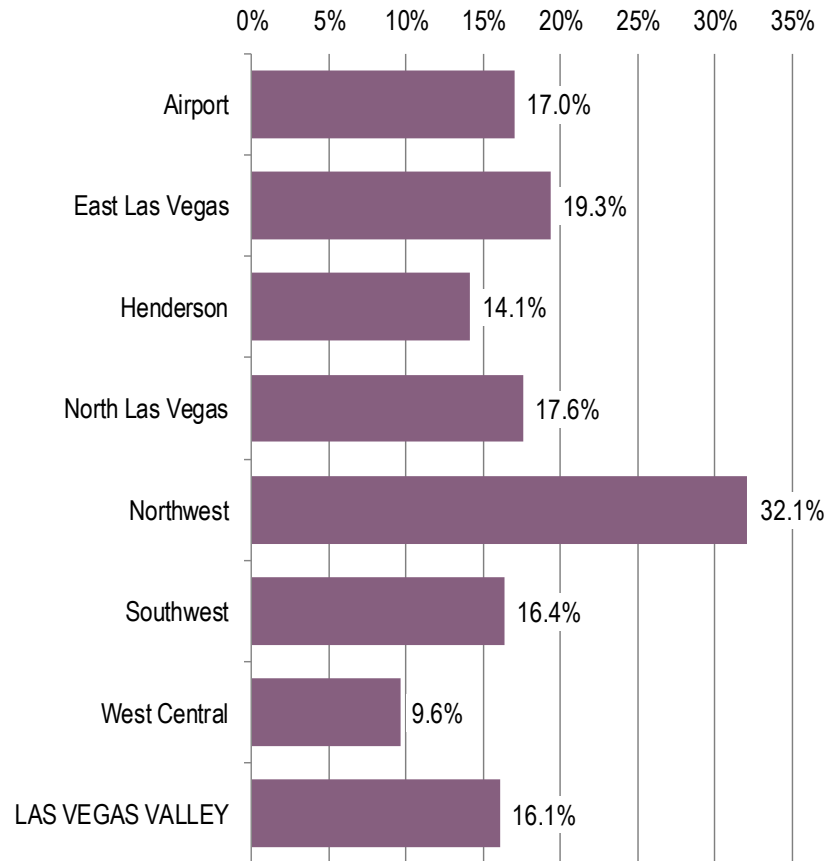
WHICH INDUSTRIAL SUBMARKETS ARE PERFORMING BETTER?

Real Estate

■ The overall vacancy rate for industrial space in the Las Vegas Valley stood at 16.1 percent; however, this rate varied widely depending on the submarket.

The Northwest submarket, by far, had the largest share of vacant space, which implies that new construction of space likely will not occur in this area a substantial portion of this space is absorbed.

Figure 64: Industrial vacancy rates by submarket, 2012-Q3



SOURCE: RCG Economics

HAS THE REGION'S OFFICE MARKET RECOVERED?

Real Estate

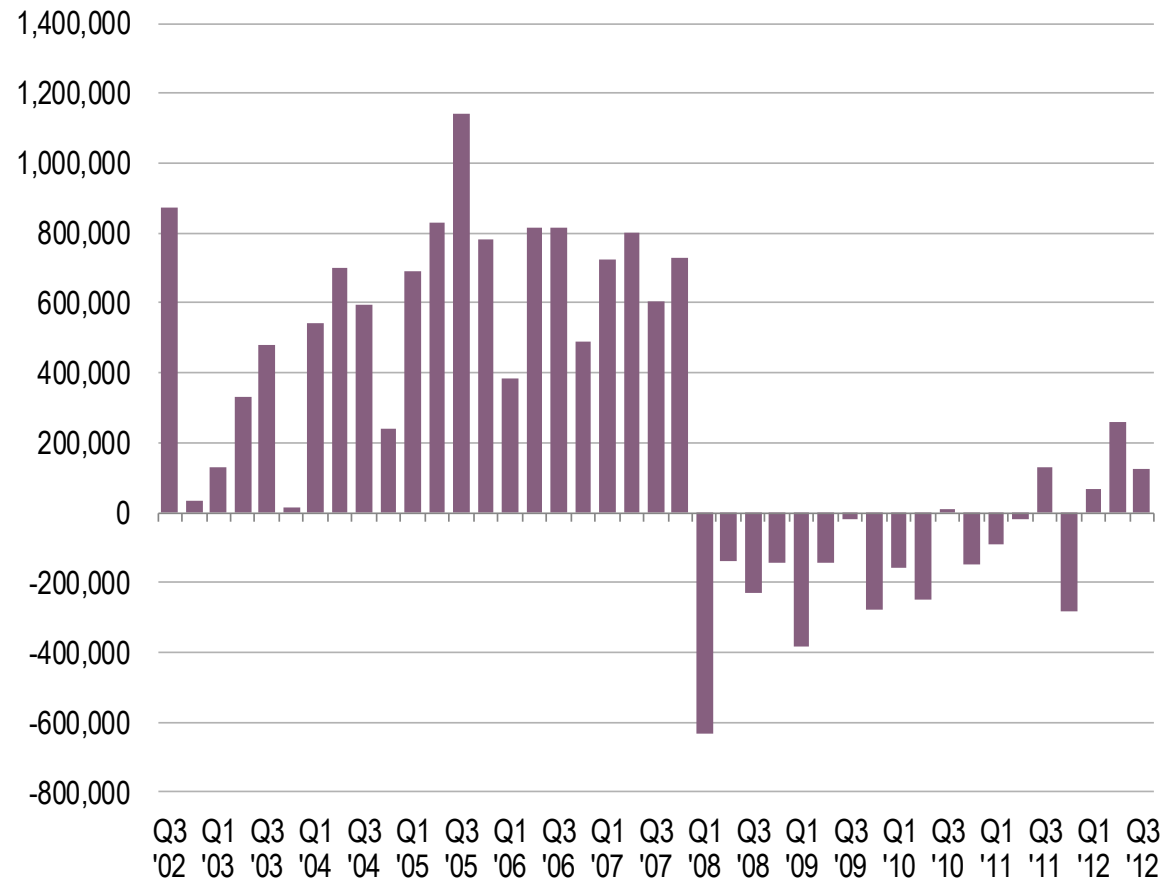
■ Prior to the “Great Recession,” office space within the region was absorbed at a rapid pace, peaking during the third quarter of 2005 with over a million square feet occupied during those three months.

Absorption rates plummeted during the first quarter of 2008, which was the first period of negative absorption during the time series.

■ After several quarters of more office space becoming vacant than occupied, the Las Vegas Valley began to experience positive absorption occurring at a noticeable rate during 2012.

Figure 65: Las Vegas Valley office market absorption trends

Quarterly net absorption of office square footage, 2002-2012.



SOURCE: RCG Economics

ARE VACANCY RATES WITHIN THE OFFICE MARKET DECLINING?

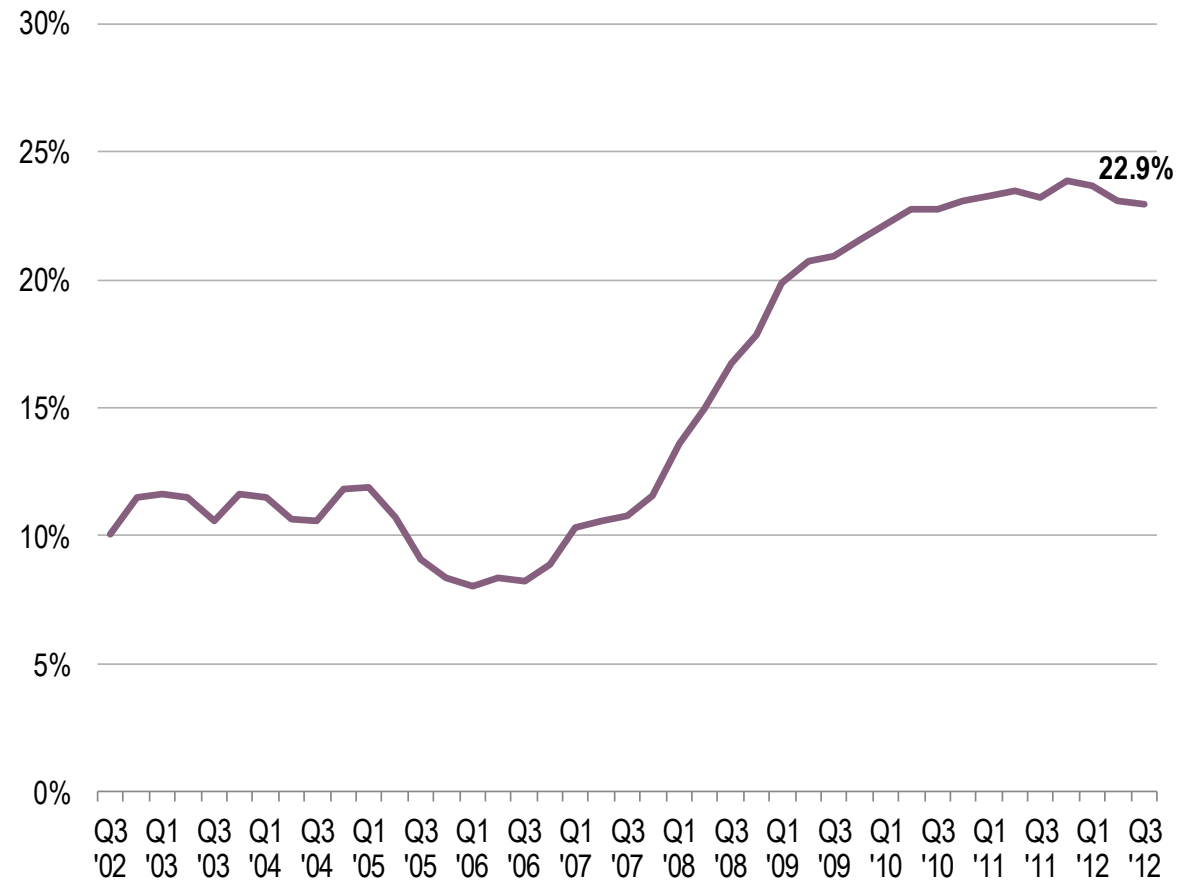
Real Estate

■ During the recession, the vacancy rate for office space in the region more than doubled. Since 2010, however, the rate stabilized.

In recent quarters, the vacancy rate appears to be declining, which appears to indicate that the Valley's office market is showing signs of recovery.

Figure 66: Las Vegas Valley office vacancy rate trends

Office market quarterly vacancy rates, 2002-2012.



SOURCE: RCG Economics

HOW IS OFFICE SPACE DISTRIBUTED THROUGHOUT THE REGION?

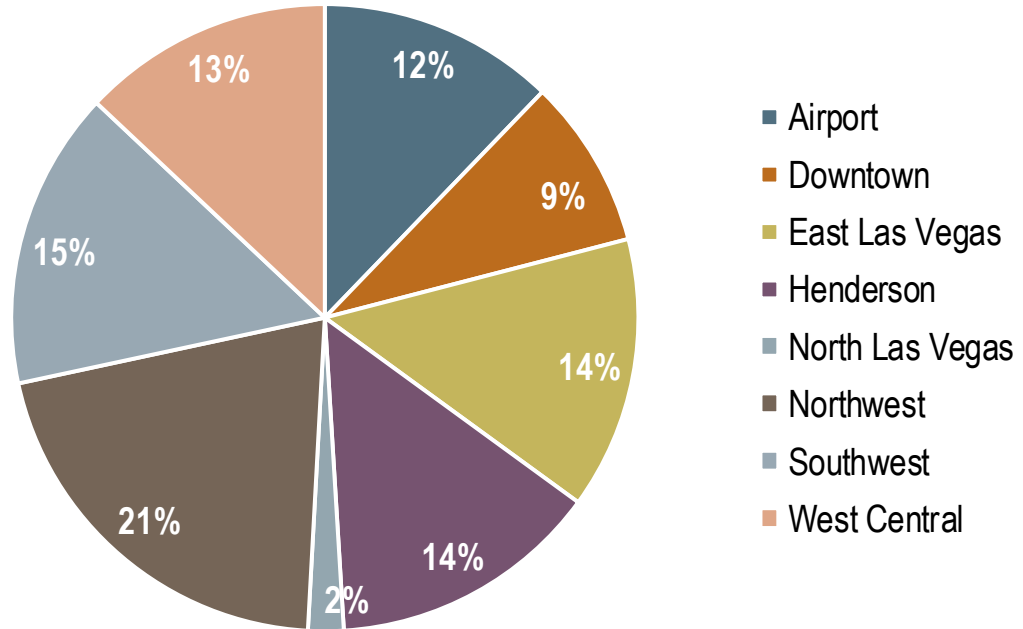
Real Estate

■ Nearly half the office space in the region is located within three submarkets: Northwest, Southwest, and West Central.

East Las Vegas and Henderson account for nearly a third of the Valley's office market.

■ Downtown Las Vegas holds a notably low share (9%) of the region's total inventory of office space.

Figure 67: Share of office space by submarket



SOURCE: RCG Economics

WHICH OFFICE SUBMARKETS ARE PERFORMING BETTER?

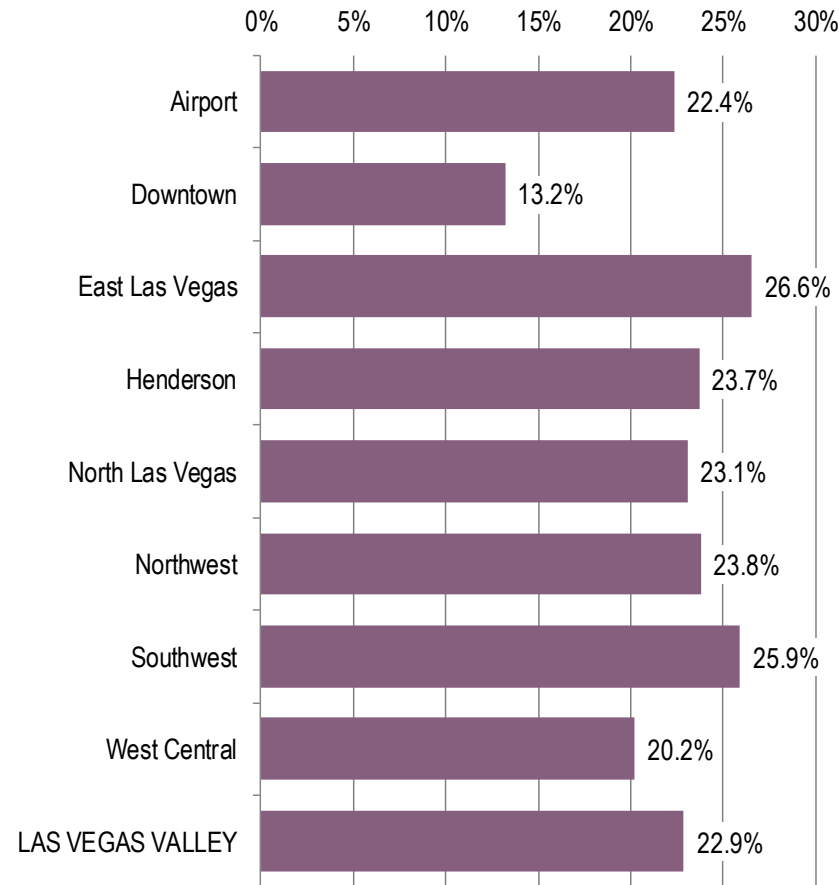
Real Estate

■ Twenty-three percent of the region's office space was vacant in the third quarter of 2012. Two submarkets (East Las Vegas and Southwest) had rates topping 25 percent.

The vacancy rate in Henderson was approximately 24 percent.

■ The vacancy rate in Downtown Las Vegas was a much lower 13.2 percent, an indicator of that area's recent success in attracting new businesses and start-ups.

Figure 68: Office vacancy rates by submarket, 2012-Q3



SOURCE: RCG Economics