LABOR MARKET ASSESSMENT OF WESTERN NEVADA

Prepared for:

NVEnergy and Nevadaworks

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TABLE OF CONTENTS

BACKGROUND

This Labor Market Assessment report is the product of a contract between Wadley-Donovan GrowthTech (WDG), a Wadley-Donovan Group company, and Nevadaworks. This study uses information obtained through WDG-conducted surveys of labor-related issues among employers and households in Western Nevada, and a review of key statistical and other secondary-source information. The study area encompasses a 40-mile radius surrounding the City of Reno, Nevada and includes the cities of Reno, Carson City, Fernley, Dayton, Sparks, Minden and, Gardnerville. The employer survey gathered information from employers in the region concerning the availability, quality, and cost of labor; the quality and use of educational institutions and training resources; and the future demand for workers. The household survey results allowed us to quantify and profile the region's complete labor force including its hidden labor resources. The household survey was produced in collaboration with Younger Associates (YA), which specializes in business-to-business and business-to-consumer surveys.

The findings presented herein are those of WDG. WDG examined the region from a corporate perspective and from its own knowledge of and experience with labor markets across the U.S.

This authorized study required independent research to review the Western Nevada regional labor resources and basic labor environment from the perspective of a locationally active company. For this study, WDG:

- Prepared maps depicting the geographic concentration of key demographic characteristics in one 30- and two 45-minute commute zones centered around three separate employment centers in the region. The demographic characteristics include the population change 2008-2013, the population with 12-15 years education, and the percent of population between the ages of 25 and 34. These maps are presented in Appendix A. The three employment nodes are located at:
  - Fernley: Intersection of Stanley Drive and Double R Boulevard (45-minutes)
  - South Meadows: Intersection of Arrowhead Road and Newlands Drive (30-minutes)
  - Carson City: Carson City Airport (45-minutes)
- Surveyed employers across the region with 20 or more employees:
  - WDG distributed 1,228 surveys to employers in all key business sectors in the study area in February, 2009. The mailing list was developed through InfoUSA, a private vendor, and modified with local input. 123 surveys were returned, for a 10.0% response rate. The rate of return yielded a representative sample that allowed WDG to provide observations on the condition of the region's labor market based on employer experiences.
- Used the data developed by Younger Associates from a February 2009 survey of area residents. Younger surveyed a random, stratified sample of residents in the age range of 18 to 74 years to gather information on employment status, training needs, and income and education levels. 930 surveys were conducted, yielding results from a statistically valid, stratified sample of residents in the Western Nevada region based on age, gender, race/ethnicity, and geography. To achieve the required response rate for statistical validity and to assure a properly statistically stratified sample of all socio-economic and demographic segments of the population, YA conducted the survey using face-to-face interviews at popular retail centers in the major population centers in the

region. The survey results have a +/- 5% margin of error and a reliability of 95%. Because The household survey findings are presented in Appendix C.

- Prepared and reviewed statistical data on key workforce factors for each of the three commute zones, the Western Nevada region (40-mile radius around Reno), Washoe County, Storey County, Lyon County, Douglas County, Carson City, the five county region, Nevada, and the United States. Research sources include, but are not limited to: the State of Nevada, the U.S. Bureau of the Census, the U.S. Bureau of Labor Statistics, and the U.S. Departments of Education and Commerce. TETRAD, Inc. (a leading demographic-data vendor of Claritas data) was used for 2008 and 2013 demographic, occupational, and related data estimates and projections. Exhibits containing the gathered data are presented in Appendix D.
- Conducted interviews with 30 representative employers and key workforce influencers, such as educators, staffing services and residential realtors.

A study of this nature can do no more than describe local conditions. The actual impact of these conditions for any given organizational activity will vary, reflecting the different characteristics and structure of each organization. The consulting team's principal findings and conclusions are recapped in the Executive Summary, followed by a presentation of our findings on key labor-market factors, business climate and operating environment, and quality of life.

WDG is the nation's oldest independent management consulting firm that specializes in location consulting and economic development. Its corporate clients include many of the world's leading companies. WDG's economic development practice provides expertise to workforce and economic development agencies and utilities in sales and marketing, strategic planning, database development, overall product development, and assessment. Clients have included Elko, NV, Eastern Idaho; Albuquerque; Great Falls, Montana; Greater Memphis; Huntsville; Knoxville; Tampa; Tulsa; Rochester, NY; Buffalo; Boise; El Paso; Great Falls; Phoenix; Sheridan, WY; Ashville, NC; Conway, AR; Richmond; Tallahassee; Tunica County, MS; Collier County, FL; Lee County, FL; Jackson, TN; and the states of Delaware, Iowa, Kansas, Kentucky, New Jersey, Oregon, Wyoming, Wisconsin, and Maryland.

EXECUTIVE SUMMARY

Overview of Findings

For purposes of this study, the Western Nevada region, or study area, is defined as the area encompassed by a 40-mile radius around the City of Reno, Nevada. Portions of Washoe, Lyon, and Douglas Counties and all of Storey County, and Carson City are within the study area. The major urban centers within the region include Reno, Carson City, Fernley, Dayton, Sparks, Gardnerville and Minden. Interstate access is provided by I-80, which extends west to San Francisco and east to Utah and Salt Lake City and beyond. Another primary access route is US-395, which extends north into Oregon and south to the High Desert area of California. Commercial air service is available through the Reno Tahoe-International Airport, located about five miles southeast of the Reno City center.

Accommodation and food service is the industry sector with the most employment in the five-county region, accounting for 17.6% of the area's jobs, followed by *retail trade* (12.9%) and *construction* (11.3%). Healthcare accounts for about 10% of the area's jobs, while manufacturing accounts for about 8% of all jobs in the area. Meanwhile, between 2001 and 2006, the five-county region saw its greatest percent job growth in the management, transportation and warehousing and construction sectors. These top growing industry sectors are the same top growth sectors as those of the state. Transportation and warehousing had the greatest growth in the number of establishments (229%) between 2001 and 2006, which equates to 877 net new facilities. Many of these new establishments are regional distribution centers that serve Nevada, California, and other nearby states.

The region is famous for its gaming and tourism industries, and Carson City is the state capital, but the region is also home to a variety of private- and public-sector employers in other industry sectors, including:

- University of Nevada-Reno (Education)
- International Game Technology (Manufacturing and product design)
- Truckee Meadow's Community College (Education)
- Western Nevada Community College (Education)
- Amazon.com (Distribution Center)
- Starbucks (Roasting Plant)
- Wal-Mart (Distribution Center)
- Boeing (Aerospace)
- Petsmart (Distribution Center)
- Costco (Distribution Center)
- Renown Medical Center (Healthcare)
- Carson Valley Medical Center (Healthcare)
- Chromalloy Nevada (Manufacturing)
- AT&T (Telecommunications)
- Delphi (Manufacturing)
- Cardinal Health (Insurance)

The region is experiencing strong population growth. Between 2000 and 2008, the 40-mile study area's population expanded by 21.1% to 576,898 – which is lower than the state's growth rate (30.9%), but significantly higher than the national rate (8.1%). This trend is expected to continue. Claritas projects an 11.1% increase in population between 2008 and 2013, bringing the total population to 640,862. A significant

contributing factor to the population increase is from residents moving from California and Las Vegas, looking for a lower cost of living and better quality of life. Companies, particularly from California, are attracted to the Reno area to benefit from the area's assets,.

The rapidly growing area offers a number of other workforce-related assets for a new and expanding employer.

- **The region offers employers a large population base from which to draw employees.** This population base, supported by a healthy influx of tourists, supports provides the densities needed to support a variety of urban amenities, such as quality restaurants and retail opportunities. The two largest commute zones in the region studied in this assessment contain 418,000 and 473,000 residents.
- **The region has a rapidly growing labor force**. Between 2000 and 2008 the labor force grew by 24.2% to 312,500. This growth trend is expected to continue for at least the next five years.
- **The area's concentration of young and working-age residents is expected to increase more rapidly than the national rate over the next five years.** This is an advantage for future economic growth, vitality, and sustainability.
- **Overall, the Western Nevada region's residents are better educated than the national and state averages**. In 2008, 85.1% of the region's population had at least a high school diploma. This is higher than the state and national averages. Almost 62% have 12-15 years of education, compared to 56% for the U.S. Many employers prefer to hire people with this level of education because such employees typically have the needed educational foundation for company sponsored training and overall company-specific skill development. Meanwhile, the percentage of residents with a bachelor's degree as their highest level of education equals the national average.
- **The area has high concentrations of employees with key knowledge based occupations.** The study area's employment base in four knowledge-based occupations, as measured by the percentage of employment to total employment, exceeds the national average, indicating a potentially advantageous pool for employer recruitment. The occupations are: arts/design/entertainment/media, financial specialists, legal, and management.
- **Employment growth is strong in the occupations key to some of the area's targeted industries and an economic transition toward more economic diversification.** The job growth has been strongest in transportation and warehousing, administrative support, education, and management business sectors.
- **More than half of the surveyed occupations are either readily available for employers, or can be recruited with modest effort.** Fifty three percent of the surveyed occupations are available at satisfactory to good levels within the region. Office and administrative, assorted management, manufacturing, transportation and material moving and construction skill are the most available according to employer experiences.
- **Employers can recruit individuals from other parts of the country to the area.** Employers can satisfactorily recruit and transfer the talent they need from other parts of the country. The area's quality of life, including housing affordability and availability are leading attractions.

- **The region has a hidden workforce consisting of the under-employed, the not-employed but interested in working, part-time workers who would prefer full-time employment, and recent high school and college graduates.** In total, new and expanding employers could potentially access over 187,795 regional residents within this hidden workforce. The not employed residents interested in working offer a particular opportunity, as just over half have recent working skills (the median time of non-employment is 5 months) and the average desired salary is $27,910 ($13.42/hour), with diversified skills. The underemployed, meanwhile, are well educated (29% have at least a bachelors degree), and have a strong base of management skills. The components of the hidden labor supply consist of:

Hidden Labor Supply
Source: WDG and YA survey results

Component	Number
Not Employed but Interested in Working	110,319
Underemployed	42,027
Residents employed part-time but who would prefer full-time employment	31,345
Recent College Graduates	4,104
Total	***187,795***

- **A competitively paying office operation could hire up to 1,840 qualified and screened workers by relying on already employed residents, underemployed residents and not employed residents.** WDG forecasts a competitively paying office employer located near the intersection of Double R Boulevard and South Meadows Parkway in South Meadows could staff up to 1,840 positions during the first year of operation under current conditions.
- **The region can also support a large manufacturing or distribution operation.** A competitively paying manufacturing or distribution operation could staff up to 1,770 qualified and screened workers by relying on already employed residents, underemployed residents and not employed residents. WDG forecasts a manufacturing or distribution employer located near the intersection Double R Boulevard and South Meadows Parkway in South Meadows could fill up to 1,770 positions under current conditions.
- **Local residents would like to see additional training programs to upgrade their skills.** Thirty nine percent of currently employed residents in the region (approximately 110,615 residents) and 77.8% of those not currently employed but interested in working (approximately 85,804 residents) are interested in receiving training/education to acquire new job skills, many at their own expense and on their own time.
- **Employers report that basic skills among job applicants are generally satisfactory.** Verbal communication/comprehension and team and cooperative skills received the highest ratings by area employers.
- **Employers report good to very good work ethic and productivity among their employees, while absenteeism and employee turnover is low.**
- **Average employee earnings in the core area of the region (i.e. the Reno-Sparks MSA) are roughly 4% below the national average, according to the US Bureau of Labor Statistics.** The median entry-level wages and salaries are 95%-105% of the

U.S. median, depending upon occupation. Meanwhile, Nevada workers compensation insurance rates are lower than the national average. In 2008, workers compensation insurance rates were 1.8% lower than the national average.

- **The region is home to several two and four year post-secondary educational institutions.** There are two community colleges and four four-year colleges/universities in the region, including the University of Nevada-Reno (UNR), which offers bachelor, master's and doctoral degrees in a diverse set of fields. Bachelor and master's degrees in several engineering disciplines, computer science and in business are offered. UNR awarded 180 bachelor-engineering degrees in 2006-2007 and 56 master's degrees. Truckee Meadow's Community College is the region's largest two-year college, and it has five campuses in the study area.
- **Surveyed employers provide high ratings to the graduates of area post-secondary institutions.** Employers with knowledge of the graduates from, and programs at the area's educational institutions rate graduates from University of Nevada-Reno, University of Phoenix-Northern Nevada Campus, and Western Nevada College as good to very good. All other post-secondary schools received a satisfactory to good rating.
- **Baby Boomer retirement is not of major concern.** The employer and household surveys both indicate that roughly 11% of the workforce will be retiring within the next five years, and most employers are confident that they will be able to successfully hire new replacement employees.
- **Employers can operation union-free**.
- **Nevada workers' compensation insurance rates are moderate.** The state ranks 24th out of 45 states with published rates. Its rates are much lower than those of California.
- **Surveyed employers report a satisfactory-to-good quality of life.** Healthcare services, safety from crime, traffic/road congestion and private education received the highest scores by surveyed and interviewed employers. Housing prices have dropped roughly 44% from their peak in October 2005, and housing affordability is now better than the national average. Local residential realtors now see home prices in the Reno market as being affordable for local wages and salaries. Reno's quality of life is frequently very highly rated by national rating indices.

Although the region has many labor assets, it does have some labor-related challenges. In some cases, these challenges are significant enough that they can adversely affect the region's ability to provide the workforce necessary for expansion of existing employers, and attraction of new industries, particularly those being targeted by EDAWN.

- **The region's unemployment rate is higher than the national and state averages.** The average for the five county area was 11.6% in February 2009 versus 10.3% for the state and 8.9% for the nation. This rate is above the average annual 2008 rate of 7.1%. The area's unemployment rate increase between 2008 and February of this year has been less than the national and state rates.
- **The region's largest private employment sector has a low average wage.** The region's single largest employment sector is accommodation and food services, reflecting the strong base of hotel/gaming in the area. This sector employs 17.5% of the

private sector workforce, but it has the lowest or next to lowest wages/salaries in the area. Until other higher paying sectors employ greater percentages of the workforce, this situation will constrain the economic growth of the region.

- **The region's image is more one of a recreational center than a business center.** The area's large casino/hotel presence and tourism activities give the region an image that hurts business attraction, economic diversification and professional talent recruitment. Companies may be reticent to locate a facility in an area that is viewed more as a recreational center than a business center, because of the perception that a suitable workforce is not readily available and that the needed business and training infrastructure is not available. The recent national publicity of the state's housing market related difficulties has also hurt the area's image.
- **The percentage of residents in the region with a graduate or professional degree lags the national average.** The percentage of residents with this level of education is slightly below the national average (7.3% versus 8.9%). Most companies seeking locations for higher technological operations, particularly in research or business services, look for areas with an above average presence of residents with masters and higher degrees. They also frequently look for areas with an above average percentage of residents with a four-year college degree, while the percentage of residents with this level of education only equals the national average.
- **Comparing the projected demand for workers versus the projected availability ratings in one year indicates a general supply-demand gap for some skills.** Occupations for which there will be a projected, general shortage include machinists; engineers; automotive master mechanics; heavy and tractor-trailer truck drivers; computer support specialists/technicians; and network and computer systems administrators.
- **Despite the region's high unemployment rate, the area's labor market is tight to unavailable for almost half of the area's occupations**. Surveyed employers report tight or unavailable recruiting conditions for 47% of the area's occupations. Many highly skilled and technical occupations in the fields of research, design, engineering, management and manufacturing are very difficult to recruit within the local area, and must be recruited from other parts of the country. Engineering, instillation/maintenance and repair, technician, and computer/mathematical occupations are particularly hard to find locally, as well as other higher technical, professional and management skills. The reason for the labor tightness, despite the current high unemployment conditions, exists because much of the growth in unemployment is attributable to the significant downturn in the area's construction industry, and much of the area's newly unemployed are from this and related industries.
- **Experienced and fresh-out engineers, highly talented professional and technical talent and experienced management frequently must be recruited from other parts of the country**. These positions need to be filled through special in-house training programs, recruitment programs for candidates from other parts of the country, and co-op and internship programs. The smaller manufacturing employers are especially affected, as they are not as apt to participate in these programs. Although roughly 46% of surveyed employers are currently using such programs, the overall frequency of use among area educational institutions is only occasional or rare among the surveyed employers. Some employers report working with colleges and universities in other states because of better program availability.

- **While employers report satisfactory results recruiting talent from other areas around the county, recruiting from the Bay Area of California is difficult.** Employers report a great deal of difficulty recruiting talent from the greater San Francisco area because of the image of the study area as a smaller isolated desert town whose economy is casino/tourism oriented. The lower salaries in the study area versus those in the Bay Area also hinder recruiting from that location. Meanwhile, overall recruiting is hurt by a shortage of spousal employment opportunities (particularly in the professional, management and technical levels), and alternative job choices.
- **Much of the area's not-employed residents who are interested in working have been laid off from the construction industry.** Just over 12% of the area's not employed residents who want to work are in this group. Retraining these residents into other occupations will be difficult, unless those occupations mirrored the working conditions typical of construction, e.g. outdoor and or physical work.
- **Surveyed employers reported infrequent use of Nevadaworks for their local recruiting**. Employers typically rely on word-of-mouth, website postings (company and job-boards), personal referrals, job fairs and internships/co-ops to fill open positions.
- **The region's employment ratios lag behind the nation in six of the ten knowledge-based occupational groups**: architecture/engineering, computer and mathematical, education/training/library, healthcare practitioner/technician, installation/maintenance/repair, and life/physical/social science. This lag will adversely affect the region's ability to expand its knowledge-based industries and compete with areas having a richer base of skills. Companies seeking locations for new facilities requiring these occupations could be more attracted to other locations with a deeper talent base in these knowledge-based skills.
- **The study area has an older workforce than the state and nation.** The median age for the area in 2008 was 37.7 years, compared to 35.9 years in Nevada and 36.7 years in the U.S. This profile can be a slight disadvantage, as many companies prefer to locate operations in areas with a median age that approximates or is below the national norm for optimum access to younger talent.
- **Public secondary school results are modest based on statistical indicators, but anecdotally, employers report that area schools are below average in their performance and are not providing the numbers of job ready-job candidates needed.** Interviews with area employers reveal unsatisfactory K-12 school systems as evidenced by elevated high school dropout rates, evaluation models and employer experiences that area schools are not producing enough talent for the workplace with basic, technical, fundamental and soft skills.
- **Overall, the graduation rates from the area's schools are modest.** The high school graduation rates for the 2007-2008 school year range from a high of 100% (Gerlach High School) to a low of 27.8% (Washoe High School). For those schools for which data was available, 36% of high schools report graduation rates of less than 80%.
- **Although the median survey scores indicate that employers are satisfied with the basic skills of job applicants, many interviewed employers think the basic skills of applicants are unsatisfactory or poor**. These employers note that many of their applicants do not have the fundamental skills needed for employment, including soft skills such as hygiene, dress, attitude, knowing how to compete an application form, punctuality, and realistic expectations for work. Forty one percent of the surveyed

employers consider written communication skills as poor or unsatisfactory, and 34.4% consider math skills in the same vein. As the area's economy improves, and hiring increases, the availability of basic skills may tighten.

- **Employers frequently voiced concern about the absence of popular support in the area and at the state level for education.** This lack of real support results in low quality school systems. Widespread employer concern was indicated over the underfunding of public schools and colleges and the proposed state cuts to education. Many interviewed employers see these budget cuts as a threat to the area's and state's business community and will hinder the area's economic advance and transformation.
- **Nevada ranks among the lowest in the nation in comparison to the national average regarding student performance.** According to the February 2007 U.S. Chamber of Commerce report *Leaders and Laggards: State Report Cards*, fourth-graders were reported to score nine percentage points below the national average in the percent of students at or above the proficient level on the NAEP reading exam. However, the report notes that the teaching force in Nevada is among the best on a national level.
- **Attracting young and educated will be difficult unless the proper living conditions are provided and effective marketing is developed.** The area needs to attract more residents with advanced technical, business and other degrees if it is to build the foundation for more economic depth, diversity and stability. The current efforts to attract these residents from around the country, while good first steps, need to be enhanced and expanded.
- **Workers compensation insurance rates have increased faster in proportion to those of other states.** In 2007, the state ranked 19th lowest nationwide in workers compensation insurance costs, but in 2008 its ranking dropped to 24th lowest. The state's workers' compensation insurance rates are higher than all of the surrounding states, except for California.
- **The area's advancement is hurt by its image.** The area is widely viewed as a remote desert town focused on recreation, tourism and gaming. This image runs counter to the region's goal to develop into a more technologically advanced center and attracting younger talented residents.

Conclusions

Western Nevada has a rapidly growing population and labor force. Its employment base is, and has long been strongly influenced by tourism (accommodation, food service, recreation, entertainment) and retail trade. These sectors currently account for roughly 30% of all regional jobs, and are typically among the lowest paying and least demanding in terms of job skills. In recent years, the growth in these jobs has been strong, but a transition is occurring in which there are greater employment growth rates in industry groups requiring higher job skills and paying higher salaries and wages. These sectors include finance, health care, manufacturing, transportation/warehousing, education and construction. This transition is exerting a positive impact on the economy by generating more wealth in the region while diversifying its economy. To further this progress, the area's primary economic development agency, EDAWN, has identified six target industries for development and attraction: advanced logistics, advanced manufacturing, alternative energy, business/financial services, life sciences, and software.

The area has many workforce assets that support the economic transition underway, and at its current stage of development. These assets include workforce growth, a growing younger workforce, educational levels that meet most of the current requirements of employers, and expanding knowledge-based occupations. Other advantages include broadening diversity of occupations, satisfactory to good labor availability for many occupations (especially office related), a good to very good work ethic and labor productivity among area employees, a competitive wage and salary profile, effective and strong local community colleges and a campus of the University of Nevada. The area is blessed with a good and attractive quality of life that facilitates recruiting and transferring employees from other parts of the country, including housing affordability that now ranks the Reno-Sparks area as one of the top ten most affordable metro areas in the West. The area also has a large hidden workforce that consists of many individuals with recent working experience and skills.

The area labor force is large enough to staff a large industrial and office facility. The area can support an office, manufacturing, or distribution center needing up to 1,800 employees during the first year of operation.

Balancing these assets, WDG's assessment identified a number of issues that will adversely affect the region's future development and diversification if not addressed. The largest challenge the region is facing is a shortage of highly skilled, highly educated, and technical workers, such as engineers, computer programmers, engineering and general technicians, industrial mechanics, and top-level management. Meanwhile a potential for a future gap exists in the demand and supply of these skills plus key manufacturing, maintenance, and computer based occupations.

Other challenges include a low ratio of residents with advanced degrees, lagging ratios of employment in most of the knowledge based industries, a weak public education system that is challenged to produce the skills needed by local employers, a significant drop-out rate among the area's public schools, a broad base deficiency in basic and life skills among job applicants. Greater funding of the public schools, community colleges and the University of Nevada-Reno is also needed to help the area's educators meet the basic and advanced talent needs of area business. Recruiting of top technical, professional and managerial talent is adversely affected because of the area's image as an isolated, desert tourist center, and a small base of jobs for spouses.

The area has made great strides in improving its economic diversity and economic strength over the years, and it is proving itself an attractive location for gaining many new residents from other parts of the country. However, the area has reached a point in its development

where the skill base within the labor force must be enhanced. This enhancement would occur through more advanced and rigorous training programs at the public schools and colleges, better preparation of public school students in basic skills, more career guidance and preparation for the non-college bound and “at-risk” youth, training of the not employed in the occupations needed by area employers.

Enhancement of local skills needs to be supplemented by a more aggressive recruiting effort of new residents with advanced degrees and technical training, particularly those in their ‘20’s and 30’s. To meet this end, a rebranding of the area is needed to appeal more strongly to this group, and to attract more technology focused industry.

A concerted and collaborative effort by the workforce development, economic development, educators, the private sector, and government is needed to best address the region’s challenges. The best way to initiate and plan effective action is to through an implementation, or action, plan generated from a community supported strategic plan that integrates the input of each of the five stakeholder sectors.

Recommendations for Action

1. Nevadaworks is urged to form a "Workforce Development Action Team" together with Truckee Meadows Community College and Western Nevada College to help improve the local delivery of training and continuing education within the region, to organize information, and to determine duplicate or missing training programs. Additional membership on the Action Team would consist of top administrators from area school systems and area colleges and UNR, EDAWN, and private-sector employers. A goal of this Action Team would be promotion and encouragement of a stronger collaboration among workforce development organizations, education institutions, economic development organizations, business and other key partners. The Team should consider performing the following activities:

   - Actively engage a variety of community leaders who represent diverse interests, such as public officials, private industry, education, economic development, workforce development, minority populations, and community/social service groups in the development of a collaborative action plan for the region. Involving leaders with diverse interests in every step of the plan's development promotes collaborative action for plan implementation.
   - Align workforce, economic development, education, business, and government stakeholders into a cohesive regional economic development engine for growth in wealth and investment.
   - Create a common, region-wide, workforce vision to be developed and agreed to by all players in workforce-development-related activities. Incorporate this vision into a region-wide Strategic Plan that incorporates workforce and economic development goals.
   - Maintain and expand cooperation among the Team members. A continued and ongoing fluid relationship among the Team members will assist the planning efforts for regional economic growth and create the foundation to identify future growth-target industries and identify current industries in need of training opportunities for current labor.
   - Keep key partners and stakeholders informed and involved by providing monthly progress reports and sending out periodic electronic newsletters to stakeholders.
   - Hold discussions with the region's school systems, Truckee Meadow's Community College, Western Nevada College, UNR, and other stakeholders to determine recent trends in technical training in the region.
   - Coordinate business input and leadership in the articulation of industry needs in EDAWN's targeted industries.
   - Conduct a workforce skills assessment of local businesses and industries to determine their specific needs for expanded education and training, particularly with respect to technical needs.
   - Set up focus groups between business/industry and education to explore ways of improving workforce training in the region to meet current and emerging workforce needs.
   - With the appropriate local educational institutions, devise a plan to modify or expand their existing programs to meet "basic employability skills" such as consistent attendance, being on time, and having a good work ethic.

- Establish a clear contact person at each appropriate educational institution to coordinate the need for information and to handle inquiries as related to workforce and work place development.
- Work toward improving private sector knowledge about programs available at local institutions through the collaboration of area institutions to centralize information and materials in an accessible location. These materials should describe academic and training programs, special interests, grant writing opportunities, student/faculty skills inventory, etc.
- Work to reduce the area's drop-out rate.
- Develop, promote, and incorporate a K-12 "Career Pathways Program" in the region and develop a regional Career Fair for each Pathway.
- Inform guidance counselors and students of opportunities available to those who wish to stay in the region after graduation and on the ways they can prepare for these jobs. For example, a brochure and or website describing career fields, local businesses in those fields, relevant coursework, and other preparations could be developed and distributed. The Action Team could assist in identifying businesses for participation in class presentations and linking them with the school systems.
- Promote the expanded use of Nevadaworks resources by local businesses and facilitate the cross-training of one-stop career center staff to provide multiple services for job seekers and employers, including those in professional fields.
- Work with the area public school systems to develop a Work-Based Learning program to provide real world work experiences for interested students.
- Work with the region's school systems to develop and conduct a series of meetings with Parent-Teacher Organizations to promote the need for increased parental understanding and involvement in education as it relates to a future career for their children.
- Support the school systems in the region as they create opportunities for parents to visit their children's schools and talk to the class about their work.
- Develop a workforce development plan to promote the coordination of existing activities and identify gaps in services, led, if possible by the private sector.
- Seek to more effectively recruit workers to enroll in appropriate education and training programs being developed and offered regionally and locally.
- Establish a region-wide "Forum on the Future" to support the awareness among constituent groups of emerging skill requirements, training needs, and career opportunities as a result of changing economic realities.
- Develop a web site and printed information package containing resources for non-university bound youths. The web site and package should contain information about non-college options, links with training organizations, apprenticeship programs, and the community college. The web site could also contain job postings.
- Evaluate means of expanding vocational/technical facilities and programs at the high school level.

- If needed, develop and seek local sponsors for legislation that modifies the incumbent worker-training program to provide for apprenticeship options.
- Develop a means to provide completers of the Ready-to-Work Program and GED recipients with six credit hours of tuition-free instruction in high-demand, high-wage technical education courses.
- Provide assistance to area employers for implementing ACT WorkKeys job and work readiness profiles.
- Develop a partnership with regional Junior Achievement to highlight target careers as part of JA programming.
- Promote the broader use of co-op and internship programs among college and university students in the broader region, area high schools, and area employers. Such programs can enhance recruitment of students by employers upon graduation, and build an experienced "fresh-out" workforce.
- Promote a greater role by the private sector in workforce training. Because conditions are changing, employers need to recognize that workforce development is no longer the sole responsibility of educators and workforce-development professionals. Employers must now be part of the process. Examples in which employers can participate include: formalized programs in mentoring (by trained employees); job-shadowing with educators, principals, and guidance counselors; and one-on-one mentoring between employees and students on personal development, job skills, and life skills (similar to Big Brother and Big Sister programs).
- Improve graduation rates at area high schools. More student monitoring and intervention programs, focused tutoring efforts, or financial assistance programs are needed to reduce high school dropout rates and college/university retention rates.
- Improve the quality of education in the region. It is recommended that regional school systems link to area employers to ensure that students are learning necessary skills to succeed in the workplace.
- Seek to increase enrollment in science, technology, engineering, and mathematics (STEM) at local public schools and provide a seamless transition in engineering and industrial technologies curricula from secondary through the university level. Implement a program that hires retirees knowledgeable and skilled in the STEM disciplines to teach students in area's K-12 educational systems.
- Work to improve the state's educational standing. In data from the National Science Foundation and Leaders and Laggards: A State-by-State Report Card on Educational Effectiveness, produced by the Institute for Competitive Workforce, Nevada gets poor grades. Representative from the region are encouraged to lobby aggressively to ensure that programs are underway to improve the state's educational performance, and to lobby the Governor's office and the legislative branch to assure that education at all levels is funded at levels needed to provide the workforce needed by business.

2. Nevadaworks and its allies are urged to explore adaptation of alternative education models such as the Youth Development Research Fund Inc. (YDRF) model for the region's disconnected youth to reduce the region's drop-out rate and overall alienation.
   - Utilize star power to motivate students to learn.

3. Nevadaworks should continue helping businesses access available federal, state, and local training programs, including identifying relevant programs and navigate the paperwork.
4. It is suggested that Nevadaworks create a "think tank" of active and retired CEOs to explore ways to improve education and training to meet workplace needs. This might include forming a chapter of SCORE.
5. It is recommended that a "Move to Western Nevada or Come Back Home" campaign be developed to help with outreach and recruitment of high-skilled workers. This campaign could include a website that features all available jobs in the region (the current EDAWN "MyNevadaDreamJob" job portal needs to be enhanced to meet this goal). Other areas such as Kansas and Huntsville AL have implemented such a campaign with success using effective websites that include first class job portals that allow individuals to search for jobs using skills or job titles in a very flexible, one-click system.
6. Nevadaworks and other Action Team members are urged to make the region more culturally appealing for young, educated professionals. Dynamic downtown areas will help draw young, educated professionals to the area. Mixed-use developments, retail establishments, non-tourist oriented entertainment venues, restaurants and attractive outdoor space will all contribute to the development of a thriving, culturally active environment.
    - Reno already has the advantage of being home to a major educational institution – the University of Reno-Nevada. Post-secondary institutions can play a key role in developing attractive and active downtowns.
    - The area has the Reno-Tahoe Young professionals Network.
    - The EDAWN website needs to be enhanced to cover the advantages of the region in addition to recreation. Not all young professionals are active in mountain biking and kayaking, which are major themes in EDAWN website.
7. Nevadaworks, together with other Action Team members, should encourage employers to improve their human-resource practices. The Team, as a catalyst, is urged to promote improved human-resource practices among area employers. Examples include: use of a career-laddering model; providing flexibility in work hours and use of vacation time in partial-day increment; flexible work scheduling; and expanded training on company time. Given the highly skilled labor shortage in the area, employers will have to accommodate more to the needs of employees than visa a versa. Helping employers adapt to the scheduling needs of employees of typical retirement age (such as shorter workweeks or workdays) is recommended as part of this effort. Team programs could include after-hours or breakfast seminars and webinars, and field teams could be used. The special needs of small employers will have to be considered.
8. Nevadaworks, together with other Action Team members, are urged to develop stronger educator/employer linkages to enhance the use of the region's educational resources by small and mid-sized employers. The goal of these linkages would be enhanced employee training and recruiting, to alert employers to the full breadth of educational resources available in the region, and to provide the educators with information on the training needs of area employers.

    Develop a strong brand for the region, which builds on the region's existing strengths and identity (abundant recreational opportunities, strategic location, availability of affordable housing, and very good business climate) but also positions the region as a excellent alternative for knowledge-based industry sectors.

FIGURE 1: STUDY AREA IN RELATION TO THE STATE OF NEVADA

FIGURE 2: DETAIL OF STUDY AREA

LABOR MARKET ASSESSMENT

Geographic Orientation

1. **The study area is located in central-western Nevada on the California border, approximately 220 miles east-northeast of San Francisco and 350 miles northwest of Las Vegas.** In 2008, according to Claritas estimates, the 40-mile area around Reno encompasses a population base of 576,898 residents. The City of Reno is the largest in the area, with 213,259 residents (2008 Claritas estimate) accounting for nearly 37% of the area's population.
   - Sparks, with 87,022 residents, is the second-largest city in the area, followed by Carson City, the state capital (55,550).
   - Within the study area, portions of five Nevada counties are included: Washoe, Storey, Lyon, Douglas, and Carson City. 94.7% of residents residing within these five counties are included in the study area. Within the individual counties:
     - 99.9% of Washoe County's population is within the study area
     - 84.7% of Storey County's population is within the study area
     - 78.8% of Lyon County's population is within the study area
     - 62.2% of Douglas County's population is within the study area
     - 99.8% of Carson City's population is within the study area
2. **Primary access to the area is provided by I-80, which extends west to the San Francisco Bay and east-northeast into Salt Lake City, UT and beyond.** Another primary access route is US-395, which extends north into Oregon and south to the High Desert area of California.
   - Table 1 shows mileage and driving distances from Reno to select local and regional destinations. Destinations in the states of California, Oregon, Idaho, and Utah can be reached in eight hours or less.

TABLE 1: Distance from Reno (Intersection of Mill Street and S. Virginia Street) to Select Local and Regional Destinations
Source: Microsoft MapPoint

	Reno, NV	
Destination City	**Highway Miles**	**Driving Time**
Boise, ID	424	7 hrs, 23 mins
Carson City, NV	31	35 mins
Chico, CA	164	2 hrs, 58 mins
Elko, NV	291	4 hrs, 10 mins
Eugene, OR	472	8 hrs, 3 mins
Fresno, CA	306	4 hrs, 45 mins
Las Vegas, NV	426	8 hrs, 48 mins
Los Angeles, CA	519	7 hrs, 22 mins
Medford, OR	307	5 hrs, 36 mins
Redding, CA	199	3 hrs, 56 mins
Sacramento, CA	132	1 hr, 57 mins
Salt Lake City, UT	519	7 hrs, 39 mins
San Francisco, CA	218	3 hrs, 11 mins

- Air service for the area is provided through the Reno-Tahoe International Airport, located about five miles southeast of the Reno city center. Table 2 shows the locations that can be reached from Reno via daily direct flights. Direct flights are available to 12 domestic cities.

TABLE 2: Daily Direct Flights Offered from Reno Tahoe International Airport (RNO)
Source: OAG, Inc.

	Reno, NV (RNO)	
Destination City	**Daily Direct Flights**	**Flight Time**
Boise, ID	3	1 hr, 10 mins
Chicago, IL	2	3 hrs, 50 mins
Dallas/Fort Worth, TX	3	3 hrs, 10 mins
Denver, CO	3	2 hrs, 10 mins
Las Vegas, NV	11	1 hr, 20 mins
Los Angeles, CA	6	1 hr, 30 mins
Phoenix, AZ	7	1 hr, 45 mins
Portland, OR	4	1 hr, 35 mins
Salt Lake City, UT	6	1 hr, 25 mins
San Diego, CA	2	1 hr, 30 mins
San Francisco, CA	8	1 hr, 5 mins
Seattle, WA	6	2 hrs, 5 mins

Labor Orientation

1. **According to the U.S. Census Bureau's *County Business Patterns*, the top five industry sectors in 2006 (latest regional data available) for the five-county area, as measured by employment, were *accommodation & food services* (45,188), *retail trade* (33,181), *construction* (29,019), *health care & social assistance* (25,899), and *administrative & support services* (23,681).** These five industry sectors encompassed 61% of all jobs in the 5-county area (refer to Table 3).

TABLE 3: Industry Growth in the 5-County Area, Nevada, and the U.S. – Two-digit NAICS Codes
Source: U.S. Census Bureau, County Business Patterns, 2006 and 2001

2-Digit NAICS	Industry	5-County Area				Nevada		U.S.	
		# Jobs 2006	# Estabs. 2006	Jobs % Chg. '01-'06	Estabs. % Chg. '01-'06	Jobs % Chg. '01-'06	Estabs. % Chg. '01-'06	Jobs % Chg. '01-'06	Estabs. % Chg. '01-'06
-	Total-All Industries	256,995	26,943	14.7%	24.0%	27.1%	25.2%	4.2%	7.1%
Industry Sectors in which Regional Job Growth or Establishment Growth Exceeds U.S. Growth									
23	Construction	29,019	3,057	**57.7%**	35.4%	**73.7%**	25.9%	13.0%	14.8%
31	Manufacturing	21,484	2,599	10.1%	28.2%	16.4%	12.3%	-14.5%	-6.1%
42	Wholesale Trade	13,301	1,298	10.8%	6.1%	21.2%	16.2%	-1.8%	-2.0%
44	Retail Trade	33,181	3,031	14.5%	-10.3%	27.7%	17.5%	5.9%	0.0%
48	Transportation & Warehousing	10,118	1,557	**74.7%**	229.9%	**48.2%**	48.4%	**14.8%**	12.8%
51	Information	4,693	380	9.4%	18.8%	-20.9%	21.9%	-9.5%	3.4%
52	Finance & Insurance	9,256	1,315	17.7%	22.8%	22.2%	26.4%	6.4%	16.3%
53	Real Estate & Rental & Leasing	5,676	1,327	11.4%	41.6%	39.6%	64.2%	10.1%	24.5%
54	Professional, Scientific, & Technical Services	12,961	2,644	19.2%	12.7%	38.6%	33.8%	12.5%	14.9%
55	Management of Companies & Enterprises	2,064	191	**75.5%**	-28.7%	**54.5%**	-6.8%	1.3%	1.6%
56	Administrative & Support & Waste Management & Remediation Services	23,681	2,732	**30.8%**	130.0%	**50.5%**	23.6%	10.4%	4.3%
61	Educational Services	1,943	186	**45.1%**	15.5%	**82.3%**	46.5%	**14.1%**	16.6%
62	Health Care & Social Assistance	25,899	2,022	20.2%	16.5%	25.9%	29.5%	**13.2%**	13.6%
81	Other Services (except Public Administration)	9,269	1,385	11.9%	-6.3%	19.2%	16.2%	1.6%	2.4%
Industry Sectors in which Regional Job Growth or Establishment Growth Meets or is Lower than U.S. Growth									
11	Forestry, Fishing, Hunting, & Agriculture Support	130	25	30.0%	-19.4%	-15.8%	-13.2%	-9.7%	-11.0%
21	Mining	723	212	2.4%	-11.7%	8.6%	2.9%	**14.2%**	7.9%
22	Utilities	2,061	86	0.1%	-20.4%	-9.6%	-7.8%	-6.1%	-3.0%
71	Arts, Entertainment, & Recreation	7,652	1,060	-11.1%	53.6%	-11.9%	23.7%	10.9%	16.1%
72	Accommodation & Food Services	45,188	1,881	-4.1%	25.1%	17.0%	32.2%	**14.1%**	11.6%
99	Unclassified Establishments	90	64	-70.1%	-71.2%	-69.2%	-63.5%	-71.9%	-65.6%

** Top five industry sectors by percentage employment growth in **bold**.*

2. **The top five expanding industries in the area (as measured by employment growth, where trend data are available) between 2001 and 2006, in Table 3 (above), are: *management of companies and enterprises*; *transportation and warehousing*; *construction*; *educational services*; and *administrative and support services*.** Table 4 summarizes the top five growing industry sectors in the 5-county area, Nevada, and the U.S. As the table shows, the five leading industry sectors in the area are the same as those of the state, but significantly differ from those of the nation.

TABLE 4: Industry Sector Commonalities – 5-County Area, Nevada, and the U.S.
Source: U.S. Census Bureau, County Business Patterns, 2001 and 2006,

Industry Sectors	5-County Area	Nevada	U.S.
Accommodation & Food Services			14.1%
Administrative & Support & Waste Management & Remediation Services	30.8%	50.5%	
Construction	57.7%	73.7%	
Educational Services	45.1%	82.3%	14.1%
Health Care & Social Assistance			13.2%
Management of Companies & Enterprises	75.5%	54.5%	
Mining			14.2%
Transportation & Warehousing	74.7%	48.2%	14.8%

3. **The study area's employment ratio (percent of total employment) by occupation matches or exceeds national averages in twelve occupational groups, but lags the national average in most knowledge-based occupations.** The five most dominant regional occupations are office/administrative support, sales/related, management including farmers/farm managers, construction/extraction, and transportation/material moving. See Table 5.
   - The area's employment ratios exceed the national average in four knowledge-based occupations: arts/design/ entertainment/sports/media, financial specialists, legal, and management including farmers/farm managers.
   - The area's employment ratios lag behind the nation in six of the ten knowledge-based occupational groups: architecture/ engineering, computer and mathematical, education/training/library, healthcare practitioner/technician, installation/maintenance/ repair, and life/physical/social science (refer to Table 5).

TABLE 5: Percent Employment within Occupational Groups for the Study Area, 5-County Area, Nevada, and U.S. 2008
Source: Claritas

Area Occupational Groups that Match or Exceed National Employment Ratios				
Occupational Group	**Study Area**	**5-County Area**	**Nevada**	**U.S.**
Arts/Design/Entert/Sports/Media*	2.0%	1.8%	2.1%	1.9%
Building/Grounds Cleaning/Maint	3.8%	3.6%	4.4%	3.2%
Construction/Extraction	6.3%	5.9%	7.4%	5.5%
Financial specialists*	2.2%	2.2%	1.9%	2.2%
Food Preparation/Serving-related	6.1%	5.9%	8.0%	4.7%
Legal*	1.2%	1.2%	1.0%	1.1%
Management incl Farmers/Farm Mgrs*	9.5%	9.4%	8.7%	9.4%
Office/Administrative Support	16.1%	16.4%	15.6%	15.4%
Personal Care/Service	5.1%	5.2%	7.1%	2.8%
Protective Service	2.6%	2.6%	2.9%	2.0%
Sales/Related	12.2%	12.1%	12.2%	11.3%
Transportation/Material-Moving	6.1%	6.2%	6.3%	6.1%
Area Occupational Groups that Lag National Employment Ratios				
Occupational Group	**Study Area**	**5-County Area**	**Nevada**	**U.S.**
Architecture/Engineering*	1.8%	1.9%	1.4%	2.1%
Business operations specialists	2.0%	2.1%	1.7%	2.1%
Community/Social Services	1.1%	1.1%	0.8%	1.5%
Computer and Mathematical*	1.4%	1.4%	1.2%	2.5%
Education/Training/Library*	4.5%	4.5%	4.0%	5.6%
Farming/Fishing/Forestry	0.2%	0.3%	0.2%	0.7%
Healthcare Practitioner/Technician*	4.1%	4.0%	3.5%	4.6%
Healthcare Support	1.3%	1.3%	1.1%	1.9%
Installation/Maintenance/Repair*	3.8%	3.9%	3.8%	4.0%
Life/Physical/Social Science*	0.8%	0.8%	0.6%	0.9%
Production	5.9%	6.1%	4.0%	8.3%
Total Knowledge-based Occupational Groups	***31.3%***	***31.1%***	***28.2%***	***34.3%***

**Key Knowledge-based Occupational Groups*

4. **The top six industries in which the residents of the study area are employed according to the household survey are: retail trades (14.95%), professional & business services, (11.99%), health services (8.72%), construction (8.41%), state government (8.41%), and manufacturing (8.41%).** Details are provided in Exhibit C-1, section 1.

5. **The top five occupations of the area's employed residents, according to the household survey are: upper management (9.66%), office & administrative support (7.32%), entry-level management (7.17%), middle management (6.85%), and retail sales & service (5.76%).** Details are provided in Exhibit C-1, section 1.

Population and Demographics Overview

1. **The study area's 2008 population is estimated at 576,898.** The area has been growing since 1990, and significant increases in population are forecast through 2013. Between 2000 and 2008 the area's population increased by 100,474 residents (21.1% growth). Meanwhile, between 2008 and 2013 the population is expected to increase by another 63,964 residents (11.1% growth), bringing the projected population in 2013 to 640,862 (refer to Table 6).
   - Among the three analyzed commute zones, Carson has the largest number of residents, followed closely by South Meadows. The Fernley commute zone, at the eastern edge of the study area, has the smallest population (48,140).

TABLE 6: Population by Commute Zone, Study Area, 5-County Area, State, and U.S.
Source: US Census Bureau, Claritas

Area	1990 Census	2000 Census	2008 Claritas	2013 Claritas	Percent Change			
					Census		Claritas	
					1990 – 2000	2000 – 2008	1990 – 2008	2008 – 2013
Fernley 45-Min CZ	24,081	35,982	48,140	55,881	49.4%	33.8%	99.9%	16.1%
South Meadows 30-Min CZ	263,911	348,217	418,232	462,578	31.9%	20.1%	58.5%	10.6%
Carson Airport 45-Min CZ	307,787	405,192	473,338	517,815	31.6%	16.8%	53.8%	9.4%
Study Area	350,202	476,424	576,898	640,862	36.0%	21.1%	64.7%	11.1%
5-County Area	345,274	471,102	571,143	634,786	36.4%	21.2%	65.4%	11.1%
Nevada	1,201,833	1,998,257	2,616,430	3,010,973	66.3%	30.9%	117.7%	15.1%
U.S.	248,709,873	281,421,906	304,141,549	319,161,431	13.2%	8.1%	22.3%	4.9%

2. **The study area has an older workforce than the state and nation.** According to Claritas, the median age for the area in 2008 was 37.7 years, compared to 35.9 years in Nevada and 36.7 years in the U.S. This profile can be a slight disadvantage, as many companies prefer to locate operations in areas with a median age that approximates or is below the national norm for optimum access to younger talent. Younger employees typically offer a higher energy level and technical awareness; learn faster; are more creative, agile, and flexible; and typically require lower healthcare costs and salaries than older employees. A younger-aged population can offer opportunities for future workforce expansion by employers. See Table 7.

3. **Despite the older workforce, the study area's concentration of young and working-age residents is expected to increase more rapidly than the national rates—which can be an advantage for future growth and sustainability.** Claritas forecasts show that between 2008 and 2013 the concentration of residents in the 18-to-34-year-old age group will increase more significantly relative to the nation. Increases in all age groups are projected for the area (refer to Table 7). The study area's median age is forecast to remain above the U.S. and state averages in 2013.

TABLE 7: Projected Change by Age Groups by Commute Zone, Study Area, 5-County Area, State, and U.S., 2008- 2013
Source: Claritas

Area	Median Age (2008)	Median Age (2013)	Projected % Change in Age Distribution, 2008-2013					
			0-17	18-34	35-54	55-64	65-74	75+
Fernley 45-Min CZ	37.2	37.8	12.6%	16.4%	10.1%	22.3%	34.5%	21.8%
South Meadows 30-Min CZ	37.0	37.9	10.7%	5.5%	4.4%	19.4%	33.9%	16.4%
Carson Airport 45-Min CZ	38.1	39.0	8.8%	5.1%	3.1%	18.3%	29.7%	15.0%
Study Area	37.7	38.8	9.8%	6.8%	4.6%	21.1%	33.2%	18.7%
5-County Area	38.0	38.8	10.0%	7.7%	4.1%	20.1%	32.3%	17.8%
Nevada	35.9	37.1	15.3%	6.7%	12.9%	21.3%	36.2%	24.3%
U.S.	36.7	37.7	2.6%	2.6%	-0.4%	17.5%	22.0%	7.3%

4. **The study area's educational characteristics indicate a well educated population, with a high ratio of residents having 12-15 years of education.** In 2008, 85.1% of the area's population had at least a high school diploma. This rate is higher than the state and national averages (82.0% and 80.6%, respectively). In 2008, 15.8% of residents had attained a bachelor's degree as their highest educational attainment, and on top of this base, 7.6% of residents had attained a graduate or professional degree (refer to Table 8 and Figure 3). Almost 62% of the area's residents 25 years old and older have 12-15 years of education, compared to 56% for the U.S. Many employers prefer to hire people with this level of education because it serves as the desired foundation for company-specific training.

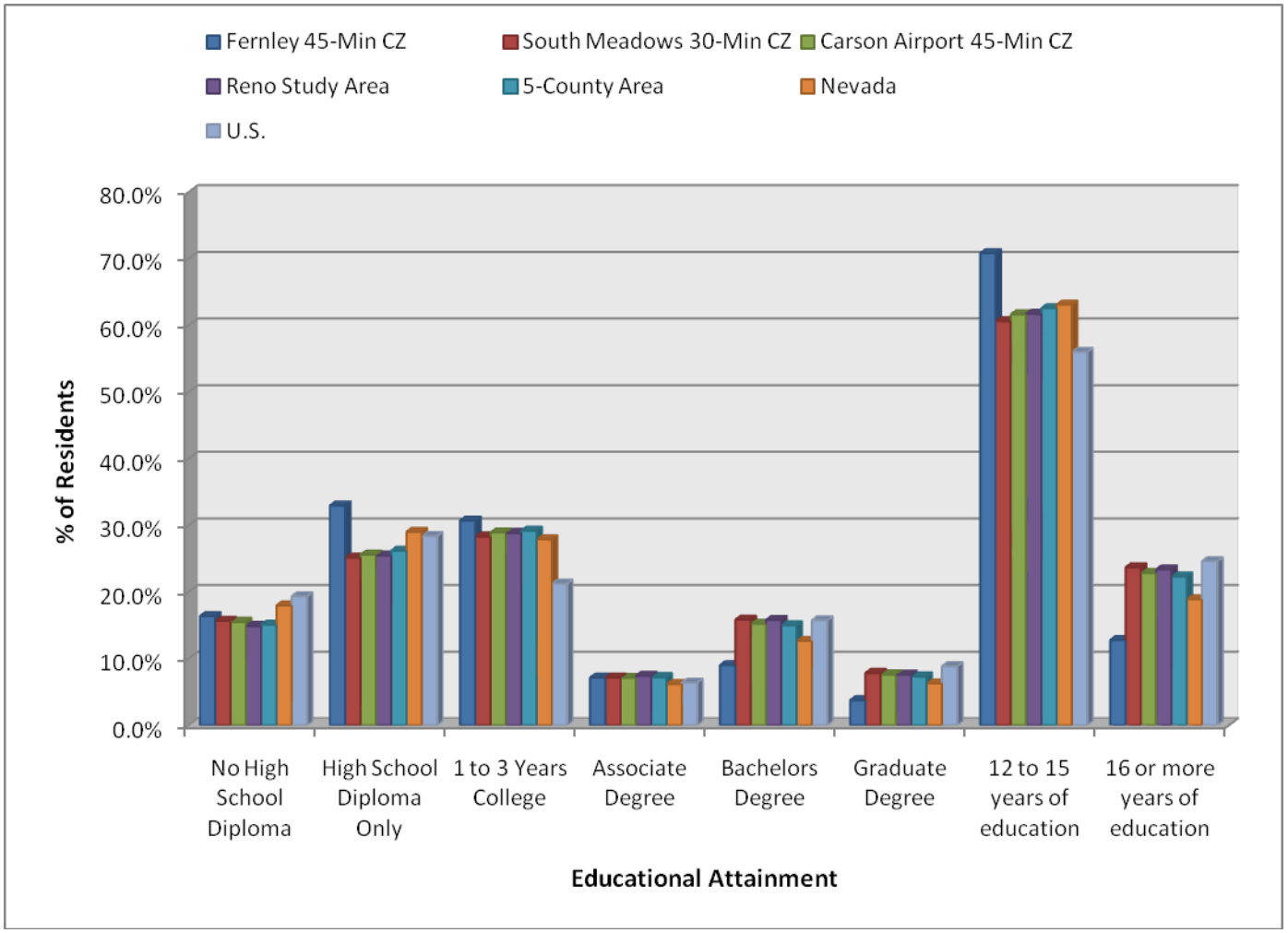
TABLE 8: Highest Attained Education Levels by Commute Zone, Study Area, 5-County Area, State, and U.S., 2008
Source: Claritas

Area	No High School Diploma	High School Diploma Only	1 to 3 Years College	Associate's Degree	Bachelor's Degree	Graduate/ Professional Degree	12 to 15 years of Education	16 or more years of Education
Fernley 45-Min CZ	16.4%	33.0%	30.7%	7.1%	9.0%	3.8%	70.8%	12.8%
South Meadows 30-Min CZ	15.7%	25.5%	28.3%	7.2%	15.8%	7.8%	60.7%	23.7%
Carson Airport 45-Min CZ	15.5%	25.6%	28.9%	7.1%	15.2%	7.6%	61.6%	22.8%
Study Area	14.9%	25.5%	28.9%	7.4%	15.8%	7.6%	61.7%	23.4%
5-County Area	15.1%	26.2%	29.2%	7.2%	15.0%	7.3%	62.6%	22.3%
Nevada	18.0%	29.0%	27.9%	6.2%	12.6%	6.3%	63.1%	18.9%
U.S.	19.4%	28.4%	21.3%	6.4%	15.8%	8.9%	56.0%	24.6%

- The educational attainment levels in South Meadows and Carson Airport commute zones approximate those of the study area. The educational levels of the Fernley area, though strong, lag behind these levels.

- This distribution of educational attainment shows the area has a well-educated population, with the capacity to meet the needs of employers requiring workers with post-secondary education less than a four-year college degree, and employers needing a workforce with a four-year college degree. Such employers include those that are knowledge- and technology-directed in the industrial, office, business services, and technology sectors.

FIGURE 3: Educational Attainment by Commute Zone, Study Area, 5-County Area, State, and U.S., 2008
Source: Claritas



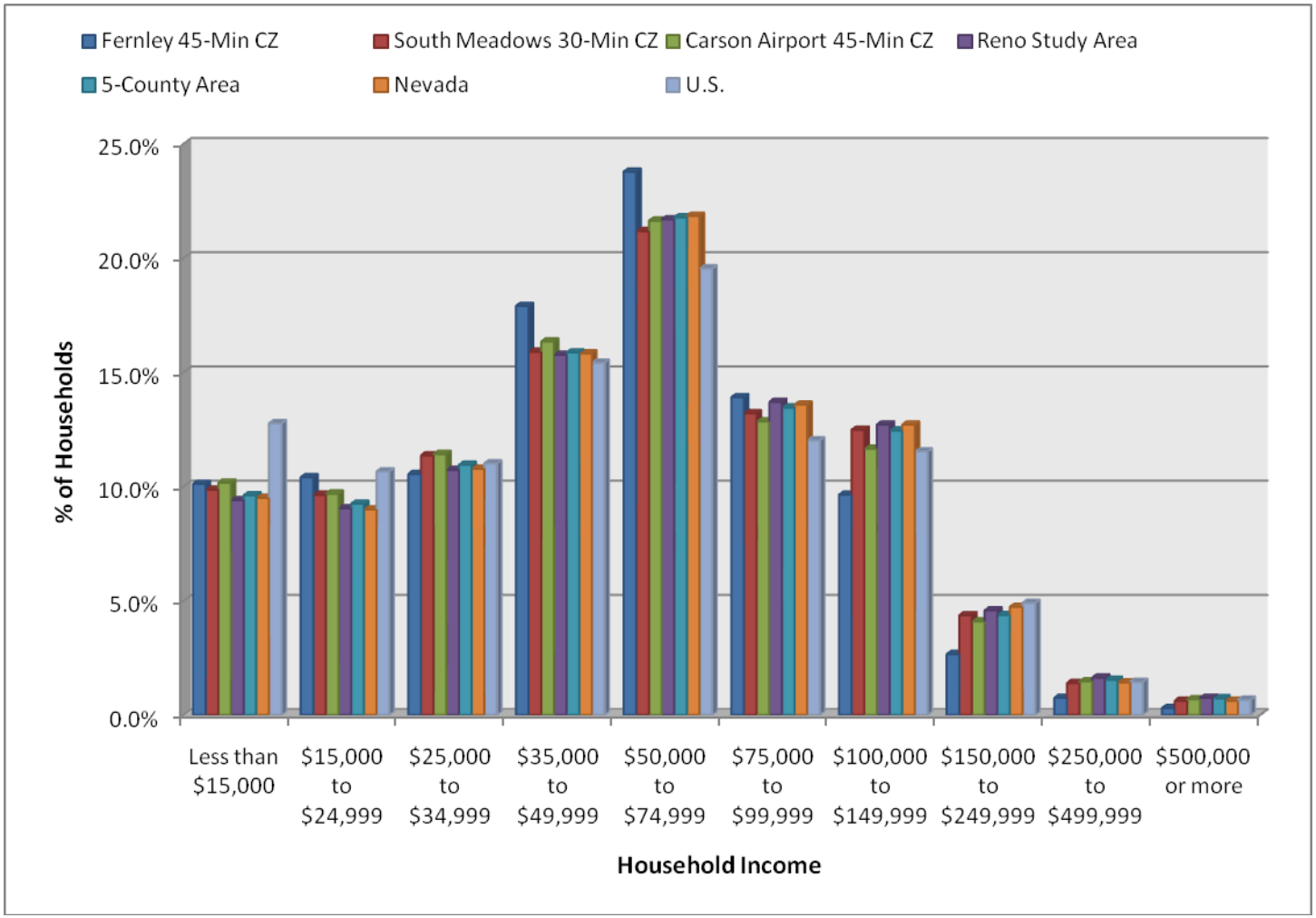
5. **Median household incomes in the area are comparable to the Nevada average and higher the national average.** In 2008, the median household income in the area ($55,832) was about 0.4% lower than the Nevada average ($55,609) and about 11% higher than the national average ($50,170). Refer to Table 9 and Figure 4.
   - According to Claritas, 29.2% of the households in the study area earn less than $35,000 annually, compared to 29.3% in Nevada and 34.4% nationally.

TABLE 9: Household Incomes by Commute Zone, Study Area, 5-County Area, State, and U.S., 2008
Source: Claritas

Area	Median Household Income	% of Households Earning		
		Less than $35,000	Between $35,000 and $75,000	Greater than $75,000
Fernley 45-Min CZ	$51,086	31.1%	41.7%	27.3%
South Meadows 30-Min CZ	$53,833	30.9%	37.1%	32.1%
Carson Airport 45-Min CZ	$52,752	31.3%	38.0%	30.7%
Study Area	$55,832	29.2%	37.5%	33.4%
5-County Area	$54,964	29.8%	37.6%	32.5%
Nevada	$55,609	29.3%	37.7%	33.1%
U.S.	$50,170	34.4%	35.0%	30.6%

6. **The household-income-distribution pattern in the study area closely tracks that of the U.S.** As shown in Figure 5, the income distribution very closely resembles the U.S. standard. The income levels in the South Meadows and Carson commute zones track those of the study area and the nation. The distribution within the Fernley commute zone, meanwhile, shows a greater concentration within the lower- and middle-income ranges than is seen in the study area.

FIGURE 4: Household Income Distribution by Commute Zone, Study Area, 5-County Area, State, and U.S., 2008
Source: Claritas



Labor Availability

1. **The study area has a resident labor force of 312,457, which has been significantly increasing in recent years.** According to the U.S. Bureau of Labor Statistics, the five county area's labor force increased by 15.2% between 2000 and 2008. Comparatively, Nevada's labor force grew by 4.8%, while the nation's labor force grew by 4.6%. See Table 10.
   - The area has a high labor-force-participation rate (68.3% in 2008 according to Claritas) relative to the state (65.8%) and nation (64.2%). The labor-force-participation rate is the ratio of an area's workforce (both employed and registered unemployed) to the population aged 16 years and over. 2008 estimates by Claritas are provided for comparative reference in Table 11. This above-average labor for participation can indicate a potentially smaller pool of residents not in the workforce who are available to work than would be the case with a lower participation rate. However, as shown in Table 17, the WDG/Younger survey of not-employed residents shows a very high percentage of not-employed residents (92.6%) who want to work.

TABLE 10: Regional Labor Force Dynamics by Commute Zone, Study Area, 5-County Area, State, and U.S.
Source: U.S. Bureau of Labor Statistics, U.S. Census Bureau, Claritas

Area	Labor Force 2008	% Labor Force Change 2000-2008	Unemployment Rate, 2008	Unemployment Rate, February 2009	Labor Participation 2008 (Claritas)
Fernley 45-Min CZ	25,034	40.4%	7.2%	N/A	66.5%
South Meadows 30-Min CZ	226,064	22.3%	4.6%	N/A	69.1%
Carson Airport 45-Min CZ	251,725	19.3%	5.1%	N/A	66.9%
Study Area	312,457	N/A	N/A	N/A	68.3%
5-County Area	302,848	15.2%	7.1%	11.6%	67.3%
Nevada	1,335,852	25.7%	4.8%	10.3%	65.8%
U.S.	153,124,000	7.4%	4.6%	8.9%	64.2%

2. **The averaged unemployment rate for the five counties in the region is significantly higher than the national and state norm**. As shown in Table 10, the February unemployment rate was 11.6%, versus 10.3% for the state and 8.9% for the nation. The average rate in 2008 was 7.1%. The growth in unemployment in the area between the 2008 annual average and February 2009 has been less than in the state and nation.

3. **Of the 59 occupations for which sufficient data was received from the WDG employer survey, twenty-one (36%) can be recruited satisfactorily or better (median and average scores of 3.0 or higher).** The best availability is in office and administrative support occupations. Refer to Table 11.

TABLE 11: Select Occupations with Satisfactory or Better Availability, as Reported by Region Employers
Source: WDG Employer Survey, Spring 2009

Occupational Group/Occupation	Employer Responses	*(5=Plentiful; 1=Unavailable)* Average Score	Median Score
Office and Administrative Support			
Bookkeeping, accounting, and auditing clerks	20	3.5	3.5
Executive secretaries and administrative assistants	42	3.6	4.0
Computer operators	21	3.3	3.0
Customer service representatives	33	3.6	4.0
Word processors and typists	18	3.7	4.0
Office clerks	27	3.9	4.0
Stock clerks – stockroom, warehouse and storage yard	32	3.4	3.0
Supervisors of office and administrative support workers	32	3.3	3.0
Management			
Administrative service/accounting managers	28	3.6	4.0
Computer and information systems managers	22	3.3	3.0
Industrial production managers	15	3.0	3.3
Maintenance managers	12	3.3	3.5
Business and Financial			
Accountants	27	3.4	4.0
Construction and Extraction			
Construction and building trades	15	3.9	4.0
Electricians	7	3.3	4.0
Supervisors of construction trades	10	3.4	4.0
Production			
Assemblers and fabricators	18	3.3	3.5
Helpers, production workers	200	3.6	3.5
Installation, Maintenance, and Repair			
Unskilled laborers (manufacturing, repair)	11	3.4	4.0
Transportation and Material Moving			
Industrial truck & tractor (forklift) operators	12	3.6	4.0
Packers and packagers, hand	13	3.4	4.0

4. **Among the 59 occupations for which sufficient data was received, surveyed employers rated ten (17%) as having borderline-satisfactory availability (median scores of 3.0 and average scores of 2.3 to 2.9).** The occupations are diverse and cover seven of the ten major occupational groupings. Borderline availability means that the occupations can be found, but with more effort and time than is required for more easily found occupations. (Refer to Table 12.)

TABLE 12: Select Occupations with Borderline Availability, as Reported by Area Employers
Source: WDG Employer Survey, Spring 2009

Occupational Group/Occupation	Employer Responses	(5=Plentiful; 1=Unavailable) Average Score	Median Score
Management			
Transportation, warehouse and distribution managers	23	2.9	3.0
Sales and Related			
Sales representatives	27	2.8	3.0
Computer-controlled-machine-tool operators, metal and plastic	13	2.8	3.0
Machinists	14	2.9	3.0
Supervisors of production and operating workers	14	2.9	3.0
Installation, Maintenance, and Repair			
Supervisors of mechanics, installers and repairers	9	2.7	3.0
Transportation and Material Moving			
Truck drivers, heavy and tractor trailer	14	2.9	3.0
Computer and Mathematical			
Computer support specialists, technicians	8	2.9	3.0
Computer systems analysts	6	2.8	3.0
Network and computer systems administrators	7	2.3	3.0

5. **Responding employers rated eleven (19%) of 59 occupations for which sufficient data was received as having tight availability.** Median scores ranged from 2.0 to 2.5 and average scores ranged from 2.0 to 2.4. Tight labor market conditions were reported in five of the major occupation groups. (Refer to Table 13.)

TABLE 13: Select Occupations with Tight or Very Tight Availability, as Reported by Area Employers
Source: WDG Employer Survey, Spring 2009

Occupational Group/Occupation	Employer Responses	(5=Plentiful; 1=Unavailable) Average Score	Median Score
Management			
Engineering managers	17	2.1	2.0
Architecture and Engineering			
Drafters	13	2.3	2.0
Architecture engineers (2-year degree)	10	2.5	2.5
Production			
Tool and die makers	7	2.0	2.0
Welders	11	2.5	2.0
Installation, Maintenance, and Repair			
Telecommunications equipment installers and repairers	5	2.2	2.0
Electrical and electronic repairers	5	2.6	2.0
Maintenance workers, machinery mechanics	8	2.6	2.5

TABLE CONTINUES ON NEXT PAGE

TABLE 13 *(continued)*: Select Occupations with Tight or Very Tight Availability, as Reported by Area Employers
Source: WDG Employer Survey, Spring 2009

Occupational Group/Occupation	Employer Responses	(5=Plentiful; 1=Unavailable) Average Score	Median Score
Computer and Mathematical			
Computer programmers	6	2.5	2.0
Database administrators*	4	2.0	2.0
Web administrators	6	2.0	2.0

**Insufficient survey data for analysis of demand/supply. Information can be used as a potential indicator only.*

6. **Seventeen (29%) of the 59 occupations for which sufficient data was received were considered extremely difficult to recruit, with few to no available candidates.** Four of the ten occupational groups surveyed reported unavailability, with architecture and engineering occupations dominating the list. (Refer to Table 14)

TABLE 14: Select Occupations that are Unavailable, as Reported by Area Employers
Source: WDG Employer Survey, Spring 2009

Occupational Group/Occupation	Employer Responses	(5=Plentiful; 1=Unavailable) Average Score	Median Score
Architecture and Engineering			
Engineering technicians, electronic*	4	1.3	1.0
Engineering technicians, industrial*	4	1.8	1.0
Engineering technicians, mechanical*	4	1.3	1.0
Engineers	8	2.3	1.5
Engineers, electric and electronic*	4	1.5	1.0
Engineers, industrial	5	1.6	1.0
Engineering technicians, mechanical	10	1.9	1.0
Mapping technicians*	4	2.0	1.0
Technicians (general)	5	1.8	1.0
Sales and Related			
Telemarketers	2	1.0	1.0
Installation, Maintenance, and Repair			
Automotive master mechanics	5	1.6	1.0
Automotive specialty technicians*	3	1.7	1.0
Industrial machinery mechanics	9	1.9	2.0
Telecommunications line installers and repairers*	2	1.0	1.0
Computer and Mathematical			
Computer security specialists*	3	2.0	1.0
Computer systems engineers/architects*	3	1.7	1.0
Web developers	5	1.4	1.0

**Insufficient survey data for analysis of demand/supply. Information can be used as a potential indicator only.*

7. **Summarizing the above information, the employer survey results show that the depth of the area's overall labor market is borderline.** Fifty three percent of the surveyed occupations are available at borderline to good levels, while 47% were rated as tight to unavailable. Office and administrative, management and construction occupations are the most available, while architecture and engineering occupations are in the shortest supply. The availability distribution is presented in Table 15.

TABLE 15: Summary of Availability Distribution of Occupations within Each Occupational Group, as Reported by Area Employers
Source: WDG Employer Survey, Spring 2009

Occupational Group	Availability Distribution by Number of Occupations			
	Satisfactory To Good	Borderline	Tight to Very Tight	Unavailable
Office and Administrative Support	8	-	-	-
Management	4	1	1	-
Architecture and Engineering	-	-	2	9
Business and Financial	1	-	-	-
Sales and Related	-	1	-	1
Construction and Extraction	3	-	-	-
Production	2	3	2	-
Installation, Maintenance and Repair	1	1	3	4
Transportation and Material Moving	2	1	-	-
Computer and Mathematical	-	3	3	3
Total	21	10	11	17
Pct. of Total (all occupations)	36%	17%	18%	29%

8. **Interviewed employers cannot meet most of their needs for highly skilled office, technical and manufacturing/maintenance personnel from the local workforce.** Positions such as those listed in Tables 13 and 14 plus technicians must be met through special in-house training programs, recruitment programs for candidates from other parts of the country, and co-op and internship programs. Experienced and fresh-out engineers, highly talented professional and technical talent, and experienced management frequently must be recruited from other parts of the country. The area's smaller manufacturing employers are especially affected.
   - Meanwhile employers report a widespread lack of basic, fundamental, and technical skills among local job applicants.

9. **Employers have very modest difficulty recruiting managers and professional talent from outside the area.** Surveyed employers report a median score of 2.9 and an average score of 3.0 (on a scale where 1=unable to recruit and 5=easily recruited) on their ability to relocate talent from outside the commuting area. (Refer to Exhibit B-1 in Appendix B.)
   - Employers report limited employment opportunities for "trailing" spouses. Employers provide a median score of 2.0 and an average score of 2.3 on the availability of jobs for spouses who relocate with their wives/husbands/partners/significant others. This factor is a leading reason for job candidates from outside the area to refuse local job offers.
   - The availability, quality, and cost of housing for relocatees are rated as satisfactory by employers (median score of 3.0 and an average score of 3.1), and are not considered deterrents to job acceptance.
   - The quality of life as perceived by job candidates is rated as good (median score of 4.0 and an average score of 3.5) and serves as an advantage for recruitment of talent from other parts of the country.

- Employer interviews indicate that a shortage of alternative job opportunities in management and some highly technical occupations serves as a deterrent for recruiting some individuals from other locations.
- Recruiting from the Bay Area of California is difficult according to some interviewed employers. The lower salaries in the study area versus those in the Bay Area, and the image of Western Nevada as a desert gaming town are significant recruiting deterrents.

10. **Local employee recruiting is accomplished through a variety of means.** Interviewed employers use job boards, websites newspaper ads, word of mouth, employee referrals, job fairs and internships/co-ops for most of their recruiting. Some employers use recruiters to find candidates to fill management, highly technical and very specialized openings.
    - Very few interviewed employers use Nevadaworks for their recruiting needs.
    - Some employers indicated that the University of Nevada-Reno lacks a usable alumni-recruiting website.
11. **The study area has a potential hidden labor supply of almost 187,795 residents.** The components of the hidden labor supply, shown in Table 16, consist of not-employed residents interested in employment, underemployed residents, residents currently employed in part-time positions but preferring full-time employment, and recent college graduates.

TABLE 16: Hidden Labor Supply
Source: YA household survey results, February 2009, US Department of Education IPEDS

Component	Number
Not Employed but Interested in Working	110,319
Underemployed	42,027
Residents employed part-time but who would prefer full-time employment	31,345
Recent College Graduates	4,104
Total	***187,795***

12. **An important component of the hidden labor supply is not-employed residents who are interested in employment**. WDG/YA estimate from the household survey data and population data that the area holds roughly 110,319 residents aged 18 to 74 years who are not employed but interested in employment. (See Table 17 and the profile of residents not employed but interested in work in Appendix C.)
    - The majority of not-employed residents who are interested in working are interested in full-time work (81.5% or 89,890), as shown in Table 17, and there are an estimated 20,429 individuals not working but would be interested in part-time employment.

TABLE 17: Employment Preferences of Not-Employed Residents 18-74 Years Old
Source: YA Household survey, February 2009

Interest	Percentage	Number
Total - Not Employed	**100%**	**119,128**
Interested in Employment	92.6%	110,319
Not Interested in Employment/Did not Respond	7.4%	8,809
Employment Preference		
Full-Time	81.5%	89,890
Part-Time	18.5%	20,429
Total	**100%**	**110,319**

- Among not-employed residents interested in working, 35.3% (38,862) are under the age of 35, indicating a potential pool of young workers who would welcome improved job opportunities. Meanwhile, the area has a significant potential pool of mature workers: 42.1% of the not-employed residents interested in employment are between the ages of 45 and 64 and 4.9% are between the ages of 65 and 74. (Refer to Table 18)

TABLE 18: Age Distribution of Not-Employed Residents Interested in Employment*
Source: YA Household Survey, February 2009

Age	Percentage	Number
18-24	18.6%	20,476
25-34	16.7%	18,386
35-44	17.8%	19,640
45-54	27.3%	30,087
55-64	14.8%	16,297
65-74	4.9%	5,432
Total	**100.1%**	**110,318**

**Totals may not equal 100% due to rounding*

- The top reason that not-employed residents interested in employment are not working is due to a company closure or lay-offs. This is followed by other unspecified reasons and a lack of jobs in their fields of education/training (refer to Table 19).
  - The dominant "other" reason is a recent relocation to the area.

TABLE 19: Reasons for Non-Employment among Residents Not in the Workforce but Interested in Employment*
Source: YA Household Survey, February 2009

Reason Not Working	Percentage	Number
Laid off/company closure	55.4%	61,100
Other	16.9%	18,669
Lack of jobs in field of education/training	12.3%	13,578
Retired	5.0%	5,516
Attending school	3.5%	3,819
Raising a family	3.5%	3,819
Disabled	1.9%	2,122
Cannot find job with hours/schedule needed	1.5%	1,697
Total	**100%**	**110,320**

** Explains the reasons these residents are not working*

- The occupational skill base of the area's not-employed residents who are interested in working is somewhat diverse. Table 20 outlines the largest occupational skill groups within this sector of the population. As shown, *construction, warehousing, food preparation & serving, office & administrative support,* and *customer services* constitute the largest skill categories, accounting for 12.2%, 9.2%, 7.1%, 7.1%, and 6.6%, respectively, of the not-employed-but-interested skills base.

TABLE 20: Leading Occupational Skills of Residents Not in the Workforce but Interested in Employment
Source: YA Household Survey, February 2009

Occupational Skills	Percentage	Number
Construction	12.2%	13,508
Warehousing	9.2%	10,131
Food Preparation & Serving	7.1%	7,880
Office & Administrative Support	7.1%	7,880
Customer Services	6.6%	7,317

13. **Nearly 78% of the area's not-employed residents interested in employment would like to receive job training.** In total, 85,804 not-employed residents interested in working would like to receive job or career training (refer to Table 21). See Exhibit C-1, section 5 for those fields in which residents would like to receive training. As shown in that exhibit, the training most desired falls within three categories: any/open/undecided; computer-general, technology; and medical-related (except nursing).

TABLE 21: Job Training Interest among Not-Employed Residents Interested in Employment
Source: YA Household Survey, February 2009

Interest	Percentage	Number
Interested in job training	77.8%	85,804
Not interested in job training	22.2%	24,515
Total	100%	110,319

- Education levels among not-employed residents interested in working are modest, with 32.7% of respondents reporting a high school diploma/GED as their highest level of education, and 10.7% report not having received a high school diploma or equivalent. (See Table 22.)
  - 39.9% of not-employed residents interest in working have some post-secondary education less than a four-year degree.
  - 16.8% of not-employed residents interested in working have a four-year degree or higher.

TABLE 22: Educational Attainment of Not-Employed Residents Interested in Employment*
Source: YA Household Survey, February 2009

Highest Grade Level Completed	Percentage	Number
8th grade or lower	0.8%	839
Some high school	9.9%	10,906
High school graduate or equivalent	32.7%	36,074
Some technical or vocational school	1.1%	1,258
Some college, no degree	29.3%	32,299
Technical/vocational certificate	2.7%	2,936
Associates degree	6.8%	7,550
Bachelors degree	12.5%	13,842
Postgraduate study, but no degree	0.8%	839
Graduate degree	2.7%	2,936
Professional degree	0.8%	839
Total	100.1%	110,318

**Totals may not equal 100% due to rounding*

14. **New and expanding employers also would rely heavily on another element of the hidden labor force: the area's already-employed residents who are underemployed.** Approximately 42,000 (14.9%) currently employed residents are underemployed, i.e., qualified for better positions than they currently hold because of experience, training, or education. See the demographic profile on underemployed residents in Exhibit C-4 of Appendix C for additional details on the underemployed component of the workforce. As can be seen in Tables 23 and 26, most of the underemployed are at least 35 years old, indicating a group with experience.

TABLE 23: Age Distribution of Underemployed Residents*
Source: YA Household Survey, February 2009

Age	Percentage	Number
18-24	11.7%	4,896
25-34	23.3%	9,793
35-44	15.5%	6,529
45-54	28.2%	11,833
55-64	17.5%	7,345
65-74	3.9%	1,632
Total	**100.1%**	**42,028**

**Totals may not equal 100% due to rounding*

- The occupational skill base of the area's underemployed residents is diverse. Table 24 outlines the largest occupational skill groups within this sector of the population. As shown, *middle management, upper management, office & administrative support, retail sales & services,* and *customer services* constitute the largest categories of skills. A more detailed profile of the occupational skills of the underemployed is shown in Exhibit C-1, pages C12-13, in the appendix.

TABLE 24: Leading Occupational Skills of Underemployed Residents
Source: YA Household Survey, February 2009

Occupational Skills	Percentage	Number
Management – Middle	12.8%	5,356
Management – Upper	9.8%	4,120
Office & Administrative Support	9.8%	4,120
Retail Sales & Service	8.8%	3,708
Customer Services	7.8%	3,296

15. **Approximately 55% of the area's underemployed would like to receive job training.** In total, about 24,600 underemployed residents interested in working would like to receive job or career training (refer to Table 25). See Exhibit C-1, section 2 for those fields in which residents would like to receive training. As shown in that exhibit, the training most desired falls within three categories: business, counseling, engineer, law, paralegal; any/open/undecided; and computer-general, technology.

TABLE 25: Job Training Interest among Underemployed Residents
Source: YA Household Survey, February 2009

Interest	Percentage	Number
Interested in job training	55.0%	23,115
Not interested in job training	45.0%	18,912
Total	**100%**	**42,027**

16. **The underemployed residents are well educated.** Most (93.2%) have at least a high school diploma, while 44.7% have some post-secondary training less than a four-year degree, and 29.2% have a bachelor's degree or higher (refer to Table 26).

TABLE 26: Educational Attainment of Underemployed Residents*
Source: YA Household Survey, February 2009

Highest Grade Level Completed	Percentage	Number
8th grade or lower	0.0%	0
Some high school	6.8%	2,856
High school graduate or equivalent	19.4%	8,161
Some technical or vocational school	2.9%	1,224
Some college, no degree	27.2%	11,425
Technical/Vocational certificate	4.9%	2,040
Associates degree	9.7%	4,080
Bachelors degree	20.4%	8,569
Postgraduate study, but no degree	0.0%	0
Graduate degree	7.8%	3,264
Professional Degree	1.0%	408
Total	**100.1%**	**42,027**

**Totals may not equal 100% due to rounding*

17. **Ninety three percent of the underemployed do not have any limitations to the working options.** The balance have one or more limitations such as childcare or transportation needs, or a disability.

18. **Many of the area's employed residents would like to enhance their job skills through training.** Returns from the residential survey show that 39.3% of employed residents would be interested in receiving training to acquire new job skills for career development, which amounts to roughly 110,600 residents (refer to Table 27). These individuals would offer a potential workforce for existing and new companies offering career advancement and training opportunities. Exhibit C-1, section 1 indicates those disciplines in which the employed would like to receive training. The five top fields in which training is desired are any/open/undecided; medical related (except nursing), medical billing, massage, psychology; and computer-general, technology.

TABLE 27: Job Training Interest among Employed Residents
Source: YA Household Survey, February 2009

Interest	Percentage	Number
Interested in job training	39.3%	110,615
Not interested in job training	60.7%	171,190
Total	**100%**	**281,805**

19. **Both underemployed and not-employed residents interested in working prefer to travel under 45 minutes for employment opportunities.** The underemployed report an openness to longer commute times than the residents not-employed but interested in working (refer to Table 28).

TABLE 28: Maximum Commute Times Desired by Not-Employed Residents Interested in Employment*
Source: YA Household Survey, February 2009

Maximum Commute Time	Prevailing Commute Pattern of the Employed		Maximum Desired Commute Times			
			Underemployed		Not Employed but Interested	
	%	#	%	#	%	#
Less than 15 minutes	47.4%	133,463	2.2%	914	15.4%	16,972
15-29 minutes	26.9%	75,702	37.0%	15,532	33.8%	37,339
30-44 minutes	7.9%	22,317	21.7%	9,136	26.5%	29,277
45-59 minutes	3.4%	9,627	17.4%	7,309	11.2%	12,305
1 hour to 1 hour, 29 minutes	2.2%	6,126	13.0%	5,482	5.0%	5,516
1 hour, 30 minutes or more	0.9%	2,626	4.3%	1,827	2.7%	2,970

**Totals do not equal 100% due to residents who work from home, have varied commutes, or are willing to relocate*

20. **One or more competitively paying office operations could potentially hire up to 1,843 qualified and screened workers during the first year of operation, depending on their facilities' locations in the area.** As seen in Table 29, these estimates are based on WDG's standard clerical/nonexempt-labor-supply model applied to the three employment nodes analyzed for this report, using in part results from the household survey. These estimates show the number of qualified clerical and administrative support employees an employer could potentially hire given a one-in-three selectivity and a one-in-five selectivity ratio of qualified job applicants offered employment.
    - The 30-minute South Meadows commute zone would provide the largest qualified clerical job applicants (1,843) of the three studied sites.
    - Wages and salaries would have to exceed the prevailing average rates as shown in Exhibit D-7. An operation with wages that significantly exceed the rates shown in this exhibit would be able to attract a higher number of qualified workers.

TABLE 29: Estimated Clerical and Administrative Support Labor Supply Yield by Commute Zone
Source: WDG estimate based on population and employment figures from Claritas and Household survey Data

		Maximum Size of a Clerical Operation		
		Fernley 45 Min CZ	**South Meadows 30 Min CZ**	**Carson Airport 45 Min CZ**
1	Currently employed supply	385	3,599	3,880
2	Potential underemployment yield	639	6,809	7,614
3	Not employed	2,420	18,641	22,364
4	New labor force entrants	278	1,666	1,643
5	Potential workforce	3,723	30,715	35,501
6	Commute propensity	1,489	18,429	14,201
7	Initial employer intercept	745	11,057	7,100
8	**Qualified Applicants**	372	5,529	3,550
9	**1 in 3 selectivity ratio**	124	1,843	1,183
10	**1 in 5 selectivity ratio**	74	1,106	710

TABLE 29 Explanatory Notes

1. Estimate of currently employed clerical workers unhappy enough with their current job to apply. WDG assumes 10% of residents employed in administrative support/clerical occupations will apply for new positions.
2. Individuals currently working in low-level sales and service occupations (including health support, personal services occupations, and food prep/serving-related) who will apply. WDG assumes that 10% of residents currently employed in sales and service occupations will apply for new positions.
3. Not-employed residents (including unemployed and residents not currently participating in the workforce) that would be interested in working in office operations. WDG assumes 16.8% of not-employed residents will apply for office positions, based on the workforce survey not-employed characteristics.
4. Growth component to account for new entrants into the labor force. Includes a percentage of high school graduates and new residents that are likely to apply for administrative/clerical positions.
5. Total eligible population.
6. Percentage of applicants willing to commute up to 30 minutes and 45 minutes for employment – based on prevailing area commuting patterns, 60% of the total number of applicants (line 5) is assumed will commute up to 30 minutes. 40% of the total number of applicants is assumed will commute up to 45 minutes. The propensity for underemployed residents and not-employed residents to commute longer distances for jobs meeting their expectations is not factored into the model. If it were, the number of potential applicants would be higher.
7. Percentage of applicants (among those willing to commute as shown in line 6) who will work at new operation despite similar positions available between their residence and the original employers. In this case, it is assumed that an employer coming into the area will face minimal competition from existing employers. It is assumed that 60% of workers will work at a new operation despite similar positions available between their residence and the new employer within a 30-minute commute zone and 50% will work at a new operation within a 45-minute commute zone.
8. Number of applicants shown in line 7 passing initial screening and offered an interview. The actual percentage will vary according to the skills required by the operation, and the skill level of the available workforce. It is assumed 50% will qualify. This is based on employer survey results and interviews.
9. The number of employees an employer could hire assuming a selectivity ratio of one hire per three applicants.
10. The number of employees an employer could hire assuming a selectivity ratio of one hire per five applicants.

21. **One or more competitively paying manufacturing/distribution operations could potentially hire up to 1,768 qualified and screened workers, depending on their facilities' locations in the area.** As shown in Table 30, these estimates are based on WDG's standard manufacturing/distribution-labor-supply model applied to each of the three representative work sites, based upon data received from the household survey. These estimates show the number of qualified employees a manufacturing/distribution employer could potentially hire given a one-in-three selectivity and a one-in-five selectivity ratio.

- The 30-minute South Meadows commute zone provides the largest qualified manufacturing labor supply (1,768) of the three studied sites.
- Wages and salaries would have to exceed the prevailing average rates as shown in Exhibit D-7. An operation with wages that significantly exceed the rates shown in this exhibit would be able to attract a higher number of qualified workers.

TABLE 30: Estimated Manufacturing/Distribution Labor Supply Yield by Commute Zone
Source: WDG estimate based on population and employment figures from Claritas

		Maximum size of manufacturing/distribution operation		
		Fernley 45 Min CZ	**South Meadows 30 Min CZ**	**Carson Airport 45 Min CZ**
1	Currently employed supply	563	3,382	3,721
2	Potential underemployment yield	663	6,842	7,666
3	Not employed	3,544	17,524	21,403
4	New labor force entrants	434	1,724	1,747
5	Potential workforce	5,204	29,472	34,537
6	Commute propensity	2,082	17,683	13,815
7	Initial employer intercept	1,041	10,610	6,907
8	**Qualified Applicants**	**520**	**5,305**	**3,454**
9	**1 in 3 selectivity ratio**	**173**	**1,768**	**1,151**
10	**1 in 5 selectivity ratio**	**104**	**1,061**	**691**

TABLE 30 Explanatory Notes

1. Estimate of currently employed production, transportation/material-moving, and installation/maintenance/repair workers unhappy enough with their current job to apply. WDG assumes 10% of residents employed in these occupations will apply for new positions.
2. Individuals currently working in low-level sales, service, and farming occupations who will apply. WDG assumes that 10% of residents currently employed in sales and service occupations and agriculture will apply for new positions.
3. Not-employed residents (including unemployed and those not participating in the workforce) that would be interested in working in manufacturing and distribution operations. WDG assumes 24.6% of not-employed residents will apply for manufacturing and distribution positions, based on the workforce survey not-employed characteristics. It is assumed both male and female residents will apply for positions.
4. Growth component to account for new entrants into the labor force. Includes a percentage of high school graduates and new residents that are likely to apply for manufacturing positions.
5. Total eligible population.
6. Percentage of applicants willing to commute up to 30 minutes and 45 minutes for employment – based on prevailing area commuting patterns, 60% of the total number of applicants (line 5) is assumed will commute up to 30 minutes. 40% of the total number of applicants is assumed will commute up to 45 minutes. The propensity for underemployed residents and not-employed residents to commute longer distances for jobs meeting their expectations is not factored into the model. If it were, the number of potential applicants would be higher.
7. Percentage of applicants (among those willing to commute as shown in line 6) who will work at new operation despite similar positions available between their residence and the original employers. In this case, it is assumed that an employer coming into the area will face minimal competition from existing employers. It is assumed that 60% of workers will work at a new operation despite similar positions available between their residence and the new employer within a 30-minute commute zone and 50% will work at a new operation within a 45-minute commute zone.
8. Number of applicants shown in line 7 passing initial screening and offered an interview. The actual percentage will vary according to the skills required by the operation, and the skill level of the available workforce. It is assumed 50% will qualify. This is based on employer survey results and interviews.
9. The number of employees an employer could hire assuming a selectivity ratio of one hire per three applicants.
10. The number of employees an employer could hire assuming a selectivity ratio of one hire per five applicants.

Labor Demand

1. **The occupation currently in greatest demand by local employers that responded to the survey is the *stock clerk* position, for which 80 workers are required by eight responding firms.** This occupation is followed by: customer service representatives (45); supervisors of office and administrative support workers (28); sales representatives (23); and bookkeeping, accounting and auditing clerks (21).
   - Table 31 compares the occupations in greatest demand to their availability. A level of imbalance between availability and demand is shown for each occupation where it exists (and where there were sufficient survey returns), as is the level of education or training needed for each occupation.
   - Comparing the current demand for workers against the current availability ratings indicates there is a **modest imbalance** between labor demand and supply for: stock clerks, supervisors of office and administrative support workers, engineering managers, drafters, sales representatives, automotive master mechanics, industrial machinery mechanics, and truck drivers (heavy and tractor trailer).
   - Also indicated is a **general imbalance** between labor demand and supply for mechanical engineers and mapping technicians.
   - No **critical labor shortages** were observed in any of the occupational groups surveyed.

TABLE 31: Top Occupations/Positions Currently in Demand by Responding Surveyed Local Employers
Source: WDG Employer Survey, Spring 2009
(X=modest imbalance; XX=imbalance; XXX=high imbalance)

Current Labor Demand	Demand		Supply Rating *(5=plentiful; 1=unavailable)*			Level of Education or Training Needed (2)
	Employer Responses (1)	# of Required Applicants	Average Score	Median Score	Level of Imbalance*	
Office and Administrative Support						
Bookkeeping, accounting and auditing clerks	11	21	3.5	3.5	-	Moderate on-the-job training
Executive secretaries and administrative assistants	10	12	3.6	4.0	-	Moderate on-the-job training
Computer operators	6	16	3.3	3.0	-	Moderate on-the-job training
Customer service representatives	8	45	3.6	4.0	-	Moderate on-the-job training
Word processors and typists*	2	4	3.7	4.0	-	Moderate on-the-job training
Office clerks	5	18	3.9	4.0	-	Short on-the-job training
Stock clerks – stockroom, warehouse and storage yard	8	80	3.4	3.0	X	Short on-the-job training
Supervisors of office and administrative support workers	8	28	3.3	3.0	X	Work experience in related occupation
Management						
Administrative service/accounting managers	5	8	3.6	4.0	-	Bachelor's plus experience
Computer and information systems managers*	2	2	3.3	3.0	-	Bachelor's plus experience
Engineering managers*	2	4	2.1	2.0	X	Bachelor's plus experience
Industrial production managers*	1	2	3.0	3.0	-	Work experience in related occupation
Transportation, warehouse and distribution managers*	3	4	2.9	3.0	-	Work experience in related occupation
Architecture and Engineering						
Associate engineers (2-year degree)*	3	3	2.5	2.5	-	Postsecondary vocational award
Drafters*	3	4	2.3	2.0	X	Postsecondary vocational award
Engineers, mechanical*	2	2	1.9	1.0	XX	Bachelor's degree
Mapping technicians*	8	12	3.4	4.0	-	Bachelor's degree
Business and Financial						
Accountants	8	12	3.4	4.0	-	Bachelor's degree

TABLE CONTINUES ON NEXT PAGE

TABLE 31 *(continued)*: Top Occupations/Positions Currently in Demand by Responding Surveyed Local Employers

Source: WDG Employer Survey, Spring 2009

(X=modest imbalance; XX=imbalance; XXX=high imbalance)

Current Labor Demand	Demand		Supply Rating *(5=plentiful; 1=unavailable)*			Level of Education or Training Needed (2)
	Employer Responses (1)	# of Required Applicants	Average Score	Median Score	Level of Imbalance	
Sales and Related						
Sales representatives	12	23	2.8	3.0	X	Moderate on-the-job training
Construction and Extraction						
Construction and building trades*	3	19	3.9	4.0	-	N/A
Electricians*	1	3	3.3	4.0	-	Long on-the-job training
Supervisors of construction trades*	2	2	3.4	4.0	-	Work experience in related occupation
Production						
Assemblers and fabricators*	2	3	3.3	3.5	-	N/A
Computer-controlled-machine-tool operators, metal and plastic*	2	2	2.8	3.0	-	Moderate on-the-job training
Helpers, production workers	4	8	3.6	3.5	-	Short on-the-job training
Machinists*	1	1	2.5	2.0	-	Long on-the-job training
Supervisors of production and operating workers*	2	2	2.9	3.0	-	Work experience in related occupation
Installation, Maintenance, and Repair						
Automotive master mechanics*	1	1	1.6	1.0	X	N/A
Electronic and electronic repairers*	1	1	2.6	2.0	-	Postsecondary vocational award
Industrial machinery mechanics*	1	1	1.9	2.0	X	Long on-the-job training
Maintenance machinery mechanics*	1	2	2.6	2.5	-	Short on-the-job training
Supervisors of mechanics, installers and repairers*	1	1	2.7	3.0	-	Work experience in related occupation
Unskilled laborers (manufacturing, repair)*	1	1	3.4	4.0	-	Short on-the-job training
Transportation and Material Moving						
Industrial truck & tractor (forklift) operators*	3	7	3.6	4.0	-	Short on-the-job training
Packers and packagers, hand*	1	1	3.8	4.0	-	Short on-the-job training
Supervisors of laborers and freight, stock, and material movers, hand*	2	2	3.1	4.0	-	Work experience in related occupation
Truck drivers, heavy and tractor trailer*	3	11	2.9	3.0	X	Moderate on-the-job training
Computer and Mathematical						
Computer support specialists, technicians*	2	3	2.9	3.0	-	N/A
Computer systems analysts*	1	1	2.8	3.0	-	Bachelor's degree

**Insufficient survey data for analysis of demand/supply. Information can be used as a potential indicator only. Applies to all occupations with 3 or fewer employer responses.*

(1) Among survey responding employees. The actual total number needed would be higher.
(2) Source: U.S. Bureau of Labor Statistics

*Degree of Imbalance	Applicants Required	Average Score	Median Score
X = Modest Imbalance	100+	3.5-4.0	3.5-4.0
	30-99	3.0-3.4	3.0-3.5
	10-29	2.5-2.9	2.5-3.0
	<10	2.4 or less	2.5 or less
XX = Imbalance	100+	3.0-3.4	3.0-3.5
	30-99	2.6-2.9	2.5-3.0
	10-29	2.1-2.4	2.0-2.5
	<10	2.0 or less	2.0 or less
XXX = High Imbalance	100+	2.9 or less	3.0 or less
	30-99	2.5 or less	2.5 or less
	10-29	2.0 or less	2.0 or less

2. **In one year, there will continue to be a demand for a variety of the occupations surveyed.** Occupations in high demand include: helpers, production workers (79), customer service representatives (77), construction and building trades (57), and assemblers and fabricators (44). The anticipated occupational demands are presented in Table 32.
   - Comparing the twelve-month demand for workers against the current, employer-reported, workforce availability ratings indicates a **modest imbalance** for: stock clerks; supervisors of office and administrative support workers; engineers; engineering managers; drafters; mapping technicians; sales representatives; assemblers and fabricators; helpers, production workers; supervisors of production and operating workers; tool and die makers; welders; and web administrators.
   - Also indicated is a **general imbalance** between labor demand and supply for: machinists; automotive master mechanics; industrial machinery mechanics; truck drivers, heavy and tractor trailer; computer support specialists, technicians; network and computer systems administrators; and web developers.
   - No **critical labor shortages** were observed in any of the occupational groups surveyed.

TABLE 32: Anticipated Demand for Workers in One Year by Responding Surveyed Local Employers
Source: WDG Employer Survey, Spring 2009
(X=modest imbalance; XX=imbalance; XXX=high imbalance)

Current Labor Demand	Demand		Supply Rating *(5=plentiful; 1=unavailable)*			Level of Education or Training Needed (2)
	Employer Responses (1)	# of Required Applicants	Average Score	Median Score	Level of Imbalance*	
Office and Administrative Support						
Bookkeeping, accounting and accounting clerks	18	38	3.5	3.5	-	Moderate on-the-job training
Executive secretaries and administrative assistants	10	14	3.6	4.0	-	Moderate on-the-job training
Computer operators	7	19	3.3	3.0	-	Moderate on-the-job training
Customer service representatives	11	77	3.6	4.0	-	Moderate on-the-job training
Word processors and typists	4	13	3.7	4.0	-	Moderate on-the-job training
Office clerks	7	25	3.9	4.0	-	Short on-the-job training
Stock clerks – stockroom, warehouse and storage yard	14	36	3.4	3.0	X	Short on-the-job training
Supervisors of office and administrative support workers	8	24	3.3	3.0	X	Work experience in related occupation
Management						
Administrative service/accounting managers	10	18	3.6	4.0	-	Bachelor's plus experience
Computer and information systems managers	8	11	3.3	3.0	-	Bachelor's plus experience
Engineering managers	6	9	2.1	2.0	X	Bachelor's plus experience
Industrial production managers	6	10	3.0	3.0	-	Work experience in related occupation
Maintenance managers*	3	2	3.3	3.5	-	N/A
Transportation, warehouse and distribution managers	6	6	2.9	3.0	-	Work experience in related occupation
Architecture and Engineering						
Associate engineers (2-year degree)*	2	2	2.5	2.5	-	Postsecondary vocational award
Drafters	6	7	2.3	2.0	X	Postsecondary vocational award
Engineers*	3	4	2.3	1.5	X	Bachelor's degree
Engineers, mechanical*	1	1	1.9	1.0	X	Bachelor's degree
Mapping technicians*	1	2	2.0	1.0	X	Moderate on-the-job training

TABLE CONTINUES ON NEXT PAGE

TABLE 32 *(continued)*: Anticipated Demand for Workers in One Year by Responding Surveyed Local Employers
Source: WDG Employer Survey, Spring 2009
(X=modest imbalance; XX=imbalance; XXX=high imbalance)

	Demand		Supply Rating *(5=plentiful; 1=unavailable)*			
Current Labor Demand	**Employer Responses (1)**	**# of Required Applicants**	**Average Score**	**Median Score**	**Level of Imbalance***	**Level of Education or Training Needed (2)**
Business and Financial						
Accountants	11	16	3.4	4.0	-	Bachelor's degree
Sales and Related						
Sales representatives	10	23	2.8	3.0	X	Moderate on-the-job training
Construction and Extraction						
Construction and building trades	5	57	3.9	4.0	-	N/A
Electricians*	1	2	3.3	4.0	-	Long on-the-job training
Supervisors and construction trades*	4	5	3.4	4.0	-	Work experience in related occupation
Production						
Assemblers and fabricators	6	44	3.3	3.5	X	N/A
Computer-controlled-machine-tool operators, metal and plastic*	2	6	2.8	3.0	-	Moderate on-the-job training
Helpers, production workers	8	79	3.6	3.5	X	Short on-the-job training
Machinists*	3	10	2.5	2.0	XX	Long on-the-job training
Supervisors of production and operating workers	5	11	2.9	3.0	X	Work experience in related occupation
Tool and die makers*	2	2	2.0	2.0	X	Long on-the-job training
Welders*	3	5	2.5	2.0	X	Long on-the-job training
Installation, Maintenance, and Repair						
Automotive master mechanics*	2	4	1.6	1.0	XX	N/A
Electrical and electronic repairers*	1	1	2.6	2.0	-	Postsecondary vocational award
Industrial machinery mechanics*	3	5	1.9	2.0	XX	Moderate on-the-job training
Maintenance workers, machinery*	2	3	2.6	2.5	-	Short on-the-job training
Supervisors of mechanics, installers and repairers*	1	1	2.7	3.0	-	Work experience in related occupation
Telecommunications equipment installers and repairers*	2	2	2.2	2.0	-	Long on-the-job training
Unskilled laborers	5	18	3.4	4.0	-	Short on-the-job training
Transportation and Material Moving						
Industrial truck & tractor (forklift) operators	5	12	3.6	4.0	-	Short on-the-job training
Packers and packagers, hand	6	10	3.8	4.0	-	Short on-the-job training
Supervisors of laborers and freight, stock, and material movers, hand*	2	2	3.1	4.0	-	Work experience in related occupation
Truck drivers, heavy and tractor trailer*	4	17	2.9	3.0	XX	Moderate on-the-job training
Computer and Mathematical						
Computer programmers*	1	1	2.5	2.0	-	Bachelor's degree
Computer support specialists, technicians	4	5	2.9	3.0	XX	N/A
Computer systems analysts*	2	3	2.8	3.0	-	Bachelor's degree
Network and computer systems administrators*	3	4	2.3	3.0	XX	Bachelor's degree
Web administrators*	1	1	2.0	2.0	X	N/A
Web developers*	2	2	1.4	1.0	XX	N/A

**Insufficient survey data for analysis of demand/supply. Information can be used as a potential indicator only.*

(1) Among survey responding employees. The actual total number needed would be higher.
(2 Source: U.S. Bureau of Labor Statistics

TABLE CONTINUES ON NEXT PAGE

TABLE 32 *(continued)*: Anticipated Demand for Workers in One Year by Responding Surveyed Local Employers
Source: WDG Employer Survey, Spring 2009

*Degree of Imbalance	Applicants Required	Average Score	Median Score
X = Modest Imbalance	100+	3.5-4.0	3.5-4.0
	30-99	3.0-3.4	3.0-3.5
	10-29	2.5-2.9	2.5-3.0
	<10	2.4 or less	2.5 or less
XX = Imbalance	100+	3.0-3.4	3.0-3.5
	30-99	2.6-2.9	2.5-3.0
	10-29	2.1-2.4	2.0-2.5
	<10	2.0 or less	2.0 or less
XXX = High Imbalance	100+	2.9 or less	3.0 or less
	30-99	2.5 or less	2.5 or less
	10-29	2.0 or less	2.0 or less

3. **To maintain and attract knowledge-based and technology-focused industries, the area must be able to provide the requisite skill sets.** The U.S. Bureau of Labor Statistics identified the technology-based skills that will be in the greatest demand in the country between 2004 and 2014. (See Table 33.)

TABLE 33: Top U.S. Technical Occupations by Rate of Projected Growth 2004-2014
Source: US Bureau of Labor Statistics; Institute of Electrical and Electronic Engineers

Occupation	U.S. Change		Most Significant Source of Post-Secondary Education or Training
	Number (000's)	Percent	
Network systems & data communications analysis	126	54.6%	Bachelor's degree
Computer software engineers, applications	222	48.4%	Bachelor's degree
Computer software engineers, systems software	146	43.0%	Bachelor's degree
Network & computer systems administrators	107	38.4%	Bachelor's degree
Database administrators	40	38.2%	Bachelor's degree
Computer systems analysts	153	31.4%	Bachelor's degree
Biomedical engineers	3	30.7%	Bachelor's degree
Environmental engineers	15	30.0%	Bachelor's degree
Personal financial advisors	41	25.9%	Bachelor's degree
Actuaries	4	23.2%	Bachelor's degree or higher, plus work experience
Accountants and auditors	264	22.4%	Bachelor's degree
Financial analysts	34	17.3%	Bachelor's degree
Engineers, all	195	13.4%	Bachelor's degree or higher
Engineering managers	25	13.0%	Bachelor's degree or higher, plus work experience
Architects & engineers	315	12.5%	Bachelor's degree or higher
Electrical engineers	18	11.8%	Bachelor's degree
Computer hardware engineers	8	10.1%	Bachelor's degree
Electronics engineers, except computer	14	9.7%	Bachelor's degree

4. **Non-technically-focused occupations also will be needed locally to meet the needs of a growth economy.** According to the U.S. Bureau of Labor Statistics, there are many occupations that will be in high demand by general industry between 2006 and 2016. Although all of these may not be needed as strongly in the area, many will be. It is the challenge of the area to provide the training needed for such skills to sustain general economic growth. These occupations are listed in Tables 34 and 35, and can be used to supplement the data gathered from the WDG/YA surveys. They are listed by the fastest growing and those that are forecasted to grow the most numerically. Interestingly, most of the high-growth jobs require only a high school diploma or up to two years of post-secondary education.

TABLE 34: Fastest-Growing U.S. Occupations by Rate of Projected Growth 2006-2016
Source: US Bureau of Labor Statistics

Occupation	Change		Most Significant Source of Post-Secondary Education or Training
	Number (000's)	Percent	
Network systems and data communications analysts	140	53.4%	Bachelor's degree
Personal and home care aides	389	50.6%	Short-term on-the-job training
Home health aides	384	48.7%	Short-term on-the-job training
Computer software engineers, applications	226	44.6%	Bachelor's degree
Veterinary technologists and technicians	29	41.0%	Associate degree
Personal financial advisors	72	41.0%	Bachelor's degree
Makeup artists, theatrical and performance	1	39.8%	Postsecondary vocational award
Medical assistants	148	35.4%	Moderate on-the-job training
Veterinarians	22	35.0%	First professional degree
Substance abuse and behavioral disorder counselors	29	34.3%	Bachelor's degree
Skin care specialists	13	34.3%	Postsecondary vocational award
Financial analysts	75	33.8%	Bachelor's degree
Social and human service assistants	114	33.6%	Moderate-term on-the-job training
Gaming surveillance officers and gaming investigators	3	33.6%	Moderate-term on-the-job training
Physical therapist assistants	20	32.4%	Associate degree
Pharmacy technicians	91	32.0%	Moderate-term on-the-job training
Forensic science technicians	4	30.7%	Bachelor's degree
Dental hygienists	50	30.1%	Associate degree
Mental health counselors	30	30.0%	Master's degree
Mental health and substance abuse social workers	37	29.9%	Master's degree

TABLE 35: Fastest-Growing U.S. Occupations by Numeric Increase 2006-2016
Source: US Bureau of Labor Statistics

Occupation	Change		Most Significant Source of Post-Secondary Education or Training
	Number (000's)	Percent	
Registered nurses	587	23.5%	Associate degree
Retail salespersons	557	12.4%	Short-term on-the-job training
Customer service representatives	545	24.8%	Moderate-term on-the-job training
Combined food preparation and serving workers, incl. fast food	452	18.1%	Short on-the-job training
Office clerks, general	404	12.6%	Short-term on-the-job training
Personal and home care aides	389	50.6%	Short-term on-the-job training
Home health aides	384	48.7%	Short-term on-the-job training
Postsecondary teachers	382	22.9%	Doctoral degree
Janitors and cleaners, except maids and housekeeping cleaners	345	14.5%	Short-term on-the-job training
Nursing aides, orderlies, and attendants	264	18.2%	Postsecondary vocational award
Bookkeeping, accounting, and auditing clerks	264	12.5%	Moderate-term on-the-job training
Waiters and waitresses	255	10.8%	Short-term on-the-job training
Child care workers	248	17.8%	Short-term on-the-job training
Executive secretaries and administrative assistants	239	14.8%	Work experience in related occupation
Computer software engineers, applications	226	44.6%	Bachelor's degree
Accountants and auditors	226	17.7%	Bachelor's degree
Landscaping and groundskeeping workers	221	18.1%	Short-term on-the-job training
Elementary school teachers, except special education	209	13.6%	Bachelor's degree
Receptionists and information clerks	202	17.2%	Short-term on-the-job training
Truck drivers, heavy and tractor trailer	193	10.4%	Moderate-term on-the-job training

Labor Quality

1. **Employers, overall, report that the level of basic skills seen among job applicants is satisfactory.** As seen in Table 36, the *median* score (on a five-point scale where 1=poor and 5=excellent) for all of the seven basic skills included in the WDG employer survey was 3.0 (i.e., satisfactory).
   - The *average* ratings, however, indicate that employers in the area view two skills as borderline satisfactory: written communication and math (with an average score of 2.7 and 2.9, respectively).
   - Although the median scores indicate that employers are satisfied with the basic skills of job applicants, many interviewed employers think the basic skills of applicants are unsatisfactory or poor. They note that many of their applicants do not have the fundamental skills needed for employment, including soft skills, such as hygiene, dress, attitude, knowing how to compete an application form, punctuality, and realistic expectations for work. Table 36 shows that 41% of the surveyed employers consider written communication skills as poor or unsatisfactory, and 34.4% consider math skills in the same vein.
2. **Surveyed employers report good-to-very-good work ethic and productivity among their employees.** Workforce quality ratings were rated as good in all six categories. Willingness to work overtime (median score of 4.0 and average score of 3.9) and overall employer/employee relations (median score of 4.0 and average score of 3.8) received the highest ratings. (See Table 36)

TABLE 36: Employer Ratings on Labor-Quality Measures
Source: WDG Employer Survey, Spring 2009

Quality Measurement	*(1=Poor; 5=Excellent)*		% Poor or Unsatisfactory
Basic Skills of Job Applicants	**Average**	**Median**	
Written communication	2.7	3.0	41.2
Reading comprehension	3.0	3.0	31.6
Math	2.9	3.0	34.4
Thinking and judgment/problem solving	3.0	3.0	28.5
Verbal communication/comprehension	3.1	3.0	28.0
Team and cooperative skills	3.2	3.0	20.5
Productivity and Work Ethic of Employees			
Work ethic	3.5	4.0	15.1
Productivity	3.5	4.0	10.0
Productivity compared to that of company's other sites	3.5	4.0	11.5
Willingness to work overtime	3.9	4.0	8.4
Punctuality	3.5	4.0	11.8
Overall employer/employee relations	3.8	4.0	5.9

3. **Turnover rates for newly hired workers and for employees after the first year are low.** The employer-reported average turnover rate for new hires ranges from 0% to 10%, and the average turnover rate for workers after the first year of employment is between 0% and 5%. The average daily absenteeism rate for responding employers is between 0% and 5%. Refer to Exhibit B-1 in Appendix B.

Labor Cost

1. **On average, the salaries/wages for which not-employed residents are willing to work are moderate.** Not-employed residents interested in employment would be willing to enter the workforce for an average wage/salary of $27,910 ($13.42/hr).
2. **Residents who consider themselves underemployed would be willing to accept a new position for an average annual wage/salary of $50,035 ($24.06/hr).** This higher wage/salary seems justified, for, as previously mentioned, the underemployed residents have higher educational attainment levels than all of the employed for post-secondary education less than a four-year degree (44.7% vs. 43.8%) and for bachelor's degrees and higher (29.1% vs. 26.6%).
3. **Average industry earnings in the Reno-Sparks MSA are higher than the Nevada average, but lower than the U.S. average.** The MSA's overall May 2007 average earnings per year per worker ($38,980), latest data available from the Bureau of Labor Statistics, were 4.0% higher than the Nevada average ($37,440) and 4.2% lower than the national average ($40,690).
4. **Earnings for entry-level and experienced workers are very close to national averages.**
   - Table 37 identifies median annual earnings for selected benchmark occupations in the Reno area according to *SalarySource.com*. Wages in the Reno area are 95%-105% of the U.S. median earnings, depending upon occupation.

TABLE 37: Median Annual Earnings by Selected Benchmark Occupations, Spring 2009
Source: SalarySource.com

Occupation	Reno City	Carson City	Sparks City	Minden City	U.S. Average	Salary Difference: US vs. Area			
						Reno City	Carson City	Sparks City	Minden City
Accounting Clerk	$32,221	$32,221	$32,880	$32,274	$32,988	2.3%	2.3%	0.4%	2.2%
Administrative Assistant	$41,043	$40,493	$41,432	$41,432	$41,551	1.2%	2.5%	0.3%	0.3%
Assembler	$26,803	$26,803	$27,334	$27,334	$27,287	1.8%	1.8%	-0.2%	-0.2%
CAD Drafter	$44,390	$43,713	$44,743	$44,109	$44,846	1.0%	2.5%	0.2%	1.6%
Civil Engineer	$71,587	$68,150	$70,232	$69,976	$69,881	-2.4%	2.5%	0.5%	-0.1%
Computer Programmer	$59,109	$56,883	$58,490	$58,182	$58,234	-1.5%	2.3%	-0.4%	0.1%
Customer Service Representative	$33,514	$33,514	$34,198	$33,569	$34,314	2.3%	2.3%	0.3%	2.2%
Electronics Technician	$40,997	$40,612	$41,521	$40,858	$41,695	1.7%	2.6%	0.4%	2.0%
Engineering Technician	$46,963	$45,856	$47,016	$46,473	$46,997	0.0%	2.4%	0.0%	1.1%
Lab Technologist	$38,026	$37,791	$38,613	$37,963	$38,816	2.0%	2.6%	0.5%	2.2%
Machinist - Journey	$40,886	$40,291	$41,235	$40,642	$41,337	1.1%	2.5%	0.2%	1.7%
Maintenance Specialist	$38,767	$38,391	$39,253	$38,629	$39,405	1.6%	2.6%	0.4%	2.0%
Nurse, Licensed Practical	$35,733	$35,636	$36,386	$35,736	$36,582	2.3%	2.6%	0.5%	2.3%
Nursing, Certified Assistant	$26,284	$26,284	$26,818	$26,340	$26,734	1.7%	1.7%	-0.3%	1.5%
PC Support Specialist	$60,122	$58,171	$59,750	$59,326	$59,593	-0.9%	2.4%	-0.3%	0.4%
Secretary, Executive	$47,093	$45,940	$47,110	$46,583	$47,078	0.0%	2.4%	-0.1%	1.1%
Systems Analyst	$79,365	$75,499	$77,819	$77,677	$77,532	-2.4%	2.6%	-0.4%	-0.2%
Tool & Die Maker	$51,159	$49,391	$50,754	$50,344	$50,551	-1.2%	2.3%	-0.4%	0.4%

- Table 38 provides average and median starting salaries according to surveyed area employers as of the Spring of 2009.

TABLE 38: Annual Salaries of Surveyed Employers
Source: WDG Employer Survey, Spring 2009

Occupation	Responses	Average Starting Rate	Median Starting Rate
Office and Administrative Support			
Bookkeeping, accounting and auditing clerks	44	$32,696	$31,200
Executive secretaries and administrative assistants	38	$31,658	$31,200
Computer operators	17	$30,976	$31,200
Customer services representatives	26	$26,202	$24,960
Word processors and typists	11	$23,682	$22,880
Office clerks	25	$23,250	$21,840
Stock clerks – stockroom, warehouse and storage yard	32	$24,234	$22,880
Supervisors of office and administrative support workers	30	$38,355	$37,095
Management			
Administrative service/accounting managers	18	$55,679	$52,000
Computer and information systems managers	14	$59,534	$52,000
Engineering managers	14	$74,925	$74,326
Industrial production managers	10	$50,064	$47,880
Maintenance managers	8	$40,439	$39,760
Transportation, warehouse and distribution managers	16	$52,369	$45,000
Architecture and Engineering			
Architecture engineers (2-year degree)	6	$39,757	$45,380
Drafters	11	$36,995	$35,000
Engineering technicians, electronic	1	$37,000	$37,000
Engineering technicians, industrial	1	$24,960	$24,960
Engineering technicians, mechanical	1	$24,960	$24,960
Engineers	4	$56,520	$57,500
Engineers, electric and electronic	1	$63,000	$63,000
Engineers, industrial	2	$53,000	$53,000
Engineers, mechanical	6	$59,913	$60,000
Mapping technicians	1	$45,760	$45,760
Technicians (general)	2	$27,040	$27,040
Business and Financial			
Accountants	24	$50,208	$46,000
Sales and Related			
Sales representatives	24	$46,273	$39,520
Construction and Extraction			
Construction and building trades	12	$34,941	$32,240
Electricians	5	$42,632	$41,600
Supervisors of construction trades	8	$55,701	$61,000

TABLE CONTINUES ON NEXT PAGE

TABLE 38 *(continued)*: Annual Salaries of Surveyed Employers
Source: WDG Employer Survey, Spring 2009

Occupation	Responses	Average Starting Rate	Median Starting Rate
Production			
Assemblers and fabricators	17	$23,648	$20,800
Computer-controlled-machine-tool operators, metal and plastic	10	$26,920	$26,000
Helpers, production workers	19	$22,192	$19,240
Machinists	11	$36,837	$33,280
Supervisors of production and operating workers	11	$41,177	$41,600
Tool and die makers	4	$37,310	$35,360
Welders	10	$34,160	$32,240
Installation, Maintenance, and Repair			
Automotive master mechanics	4	$42,656	$40,591
Automotive specialty technicians	1	$41,600	$41,600
Electric and electronic repairers	4	$47,143	$47,840
Industrial machinery mechanics	7	$42,500	$39,250
Supervisors of mechanics, installers and repairers	6	$47,770	$42,350
Telecommunications equipment installers and repairers	2	$36,119	$36,119
Unskilled laborers (manufacturing, repair)	9	$21,449	$20,800
Transportation and Material Moving			
Industrial truck & tractor (forklift) operators	9	$26,520	$24,960
Packers and packagers, hand	10	$25,594	$21,580
Supervisors of laborers and freight, stock, and material movers, hand	9	$32,327	$31,200
Truck drivers, heavy and tractor trailer	12	$34,412	$33,280
Computer and Mathematical			
Computer programmers	3	$47,972	$49,837
Computer security specialists	1	$66,810	$66,810
Computer support specialists, technicians	7	$34,799	$33,280
Computer systems analysts	3	$43,437	$43,056
Computer systems engineers/architects	1	$60,590	$60,590
Database administrators	3	$44,203	$45,000
Network and computer systems administrators	6	$44,968	$42,220
Network designers	1	$66,810	$66,810
Web administrators	4	$42,120	$36,680
Web developers	3	$47,839	$38,000

TABLE CONTINUES ON NEXT PAGE

TABLE 38 *(continued)*: Annual Salaries of Surveyed Employers
Source: WDG Employer Survey, Spring 2009

Occupation	Responses	Average Starting Rate	Median Starting Rate
Other			
Airport communications specialist	1	$28,912	$28,912
Airport operations officers	1	$51,002	$51,002
Attorneys	1	$55,000	$55,000
Casino cage cashier	1	$17,680	$17,680
Certified nurse assistant	2	$26,752	$26,752
Chemist	1	$80,000	$80,000
Facility manager	1	$65,000	$65,000
Flooring installers (skilled)	1	$53,435	$53,435
Instrumentation technician	1	$52,000	$52,000
Janitors	2	$18,200	$18,200
Journeyman sign installers	1	$45,760	$45,760
Journeyman sign service technicians	1	$45,760	$45,760
Lab technicians	1	$40,000	$40,000
Lending officers	1	$52,000	$52,000
Management trainees	1	$52,000	$52,000
Medical imaging technicians	1	$52,000	$52,000
Occupational therapist/physical therapist	1	$60,590	$60,590
Registered nurses	2	$58,298	$58,298
Security officers	1	$21,590	$21,590
Tellers	1	$21,840	$21,840
Tile setters	1	$37,440	$37,440

Education and Training

1. **There are a number of post-secondary educational institutions within the area offering certificate, associates, bachelors, masters, doctorate, and professional degree programs.** In the Fall of 2007, these institutions combined had 35,574 enrolled students and graduated 4,488 students upon the completion of the 2007-2008 school year (refer to Table 39).

TABLE 39: Graduation and Enrollment at Regional Post-Secondary Schools
Source: U.S. Department of Education, IPEDS

Less-than-Four-Year Institutions	Location	Total Fall Enrollment (2007)	Total Graduates (2007-2008)
Career College of Northern Nevada	Reno	303	134
Truckee Meadows Community College	Reno	12,166	701
Western Nevada College	Carson City	4,820	418
Total:		*17,289*	*1,253*
Four-or-More-Year Institutions	**Location**	**Total Fall Enrollment (2007)**	**Total Graduates (2008)**
Morrison University	Reno	134	42
Sierra Nevada College	Incline Village	833	132
University of Nevada – Reno	Reno	16,681	2,863
University of Phoenix – Northern Nevada Campus	Reno	637	198
Total:		*18,285*	*3,235*
Grand Total		***35,574***	***4,488***

2. **The University of Nevada in Reno is the largest post-secondary institution in the study area. In the Fall of 2007 it enrolled 16,681 students, and conferred approximately 2,863 degrees upon the completion of the 2007-2008 school year**.
   - Programs encompass bachelors, masters, doctorate, and professional degrees in the arts and the sciences.
   - The university offers more than 100 certificate and degree programs, entailing a broad spectrum of the arts and sciences.
   - Program areas with the highest number of annual graduates include psychology, general (166); biology/biological sciences, general (146); general studies (133); and nursing/registered nurse (107). Bachelors and masters degrees are offered in chemical, civil, electrical/electronic, environmental, geological, mechanical, metallurgical, and mining engineering. The university also has an MBA program. Refer to Exhibit D-10 of the Appendix for a complete listing of degrees conferred.
3. **Truckee Meadows Community College is the second-largest post-secondary institution in the area.** In the Fall of 2007 Truckee Meadows Community College (TMCC) enrolled 12,166 students and graduated approximately 701 in 2008. TMCC is the largest *two-year* post-secondary institution in the study area.
   - TMCC has five campuses in the area, all of which are located within Reno. The main facility is the Dandini Campus. Additional facilities include the IGT Applied Technology Center, the Meadowood Center, the Nell J. Redfield Foundation Performing Arts Center, and the TMCC High Tech Center at Redfield.

- The top programs with the highest number of degree-earners include: liberal arts and sciences/liberal studies (279); general studies (89); physical sciences, other (56); and nursing/registered nurse (53).

4. **Western Nevada College is a two-year, post-secondary institution located in Carson City, and it is the third largest post-secondary institution in the area.** In the fall of 2007 the college enrolled 4,820 students, and it conferred 418 degrees in 2008.
   - Western Nevada College offers over 50 certificate, and associate degree programs, entailing a broad spectrum of the arts and sciences.
   - Program areas with the highest number of degree earners include: liberal arts and sciences/liberal studies (131); general studies (95); nursing/registered nurse (49); and business/commerce, general (28).
5. **The area also has numerous smaller post-secondary institutions.**
   - Four-year, post-secondary institutions include: Morrison University (Reno); Sierra Nevada College (Incline Village); and the University of Phoenix-Northern Nevada Campus (Reno).
   - One additional two-year, post-secondary institution, The Career College of Northern Nevada, is located in Reno.
6. **Less than half of the surveyed employers are currently using co-ops, apprenticeships, internships or similar programs, but the use is infrequent.** About 46% of surveyed employers are currently using such programs; however, the frequency of use among area institutions is only occasional or rare among the surveyed employers. Meanwhile, on a positive note, the number of employers using co-op or similar programs seems to be increasing, and the users of these programs report good results.
   - When such programs are used, however, the University of Nevada-Reno is most often reported as the provider. (Refer to Table 40).
   - Of survey respondents, 23% report that their training needs are not met locally, which is in line with what WDG sees elsewhere in the country. Employers report a need for training programs including HVAC service technician, food preparation, blueprint reading/calibration, commercial printing production workers, CNC repair, forklift training, personnel management, specialty welding, and many others. Please refer to Exhibit B-9 in the appendix.

TABLE 40: Employer Ratings of Utilization Frequency of Training Programs from Regional Training Providers
Source: WDG Employer Survey, Spring 2009

Institution	Responses	*(1=Never; 5=Continuously)*	
		Average Score	Median Score
Area high schools	68	1.5	1.0
Career College of Northern Nevada	68	1.3	1.0
Truckee Meadows Community College	70	1.9	1.0
University of Nevada – Reno	72	2.4	2.0
Morrison University	67	1.1	1.0
University of Phoenix – Northern Nevada Campus	69	1.3	1.0
Sierra Nevada College	68	1.2	1.0
Western Nevada College	69	1.7	1.0
Private vendors (e.g., training and development consultants)	69	1.7	1.0

7. **Those employers responding to WDG's survey with knowledge of the graduates from and programs at the area's educational institutions report satisfactory-to-good quality ratings.** The quality ratings are presented in Table 41. The University of Nevada-Reno, University of Phoenix, and Western Nevada College were the highest-rated institutions in the region. Employers indicate that the area's high schools, community colleges, and four-year colleges and universities need improvement. Program improvements are needed in basic skills, math, job preparedness, work ethic, reading/writing, and communication/speaking, among others. The needed improvements are listed in Exhibit B-1, Appendix B.

TABLE 41: Employer Ratings of the Quality of Graduates and Programs from Regional Educational Institutions
Source: WDG Employer Survey, Spring 2009

Institution	Responses	*(1=Poor; 5=Excellent)*	
		Average Score	Median Score
Area high schools	87	2.8	3.0
Career College of Northern Nevada	81	3.1	3.0
Truckee Meadows Community College	83	3.5	3.0
University of Nevada – Reno	88	3.8	4.0
Morrison University	79	3.1	3.0
University of Phoenix – Northern Nevada Campus	80	3.5	4.0
Sierra Nevada College	80	3.3	3.0
Western Nevada College	82	3.5	4.0
Private vendors (e.g., training and development consultants)	79	3.3	3.0

8. **The full-time total graduation rates for the seven post-secondary educational institutions range from 21% to 100%** (refer to Table 42). Female students generally had higher graduation rates than their male counterparts.

TABLE 42: Retention and Graduation Rates at Regional Post-Secondary Schools, 2007
Source: U.S. Department of Education, IPEDS

Less than Four-Year Institutions	Retention Rate*		Graduation Rate**		
	FT	PT	FT Total	Male	Female
Career College of Northern Nevada	87%	N/A	43%	43%	43%
Truckee Meadows Community College	64%	42%	9%	7%	10%
Western Nevada College	63%	35%	21%	14%	26%
Four Years or More Institutions					
Morrison University	100%	100%	100%	N/A	N/A
Sierra Nevada College	73%	N/A	27%	25%	29%
University of Nevada – Reno	79%	41%	46%	39%	52%
University of Phoenix – Northern Nevada Campus	62%	N/A	33%	N/A	N/A

* *Retention rates measure the percentage of entering students who continue their studies the following fall.*
** *The graduation rate is the percentage of students in a given entering group who graduated within 150% of normal time to program completion.*
N/A – Data not available

- Interviews with area employers show deep concern about the quality of the graduates from area high schools. Many employers frequently find job applicants with local high school diplomas (and in some cases 2 year college degrees) lack basic skills, life skills (dressing properly, basic hygiene, showing up on time to work if hired, life goals).

- The lack of basic skills requires employers to spend the money to conduct their own remedial training programs. Training programs are also needed for basic work skills. These costs can be significant, adding to the cost of doing business in the area.
- Interviewed employers frequently noted that the local public high schools are not producing the quality or volume of ready-to work graduates needed.

9. **Interviewed employers frequently voiced concern about the absence of popular support in the area and at the state level for education.** This lack of real support results in low quality school systems. Wide spread employer concern was voiced about the underfunding of public schools and colleges and the proposed state cuts to education. Many interviewed employers see these budget cuts as a threat to their ability to do business and as a shortsighted solution to bridge the state's financial shortfall at the expense of short and long-term economic development.

10. **Nevada ranks among the lowest in the nation in comparison to the national average regarding student performance.** According to the February 2007 U.S. Chamber of Commerce report *Leaders and Laggards: State Report Cards*, fourth-graders were reported to score nine percentage points below the national average in the percent of students at or above the proficient level on the NAEP reading exam. However, it is reported that the teaching force in Nevada is among the best on a national level.

11. **High school graduation rates for the 2007-2008 school year range from a high of 100% (Gerlach High School) to a low of 27.8% (Washoe High School).** Graduation rates for those schools where data is currently available are presented in Table 43.

12. **For the 2007-2008 school year, 84% of the high schools in the five-county area met the Adequate Yearly Progress requirements under No Child Left Behind.** Only four high schools in the area (Pioneer Alternative H.S., I Can Do Anything Charter School, Reed High School, and Washoe High School) failed to meet AYP requirements. The performance of Nevada schools is assessed in two ways: one is to meet the state's High School Proficiency Exam (HPSE), and the other is to comply with the federal No Child Left Behind Act rules. The Nevada High School Proficiency Exam scores students' performance in the areas of reading, mathematics and writing. In addition to numerical scores, the report also indicates the proficiency level of each student. Based on their scores, students are ranked into four categories: emergent/developing, approaches standard, meets standard, and exceeds standard. These scores are included in the annual report cards and Adequate Yearly Progress (AYP) calculations, as required by federal law. No Child Left Behind designations are indicated in Table 43. The results of the HPSE tests are listed in Table 44.

TABLE 43: Public High School Enrollments and No-Child-Left-Behind Designations – 2007-2008
Source: NV Dept of Education; School Tree.org

School District	High School	Grades	# Enrolled	# Sr.'s	Grad Rate (2008)	Magnet School	Made NCLB AYP Progress?	School Designation (2007)
Carson City	Carson H.S.	9-12	2,594	552	86.8%	No	Yes	High Achieving
Carson City	Pioneer High Alternative School	9-12	99	43	45.9%	No	No	Watch
Douglas County	Douglas County H.S.	10-12	1,492	477	85.2%	No	Yes	Adequate
Douglas County	George Whittell H.S.	9-12	236	51	89.5%	No	Yes	High Achieving
Douglas County	Jacobsen H.S.	7-12	55	4	100.0%	No	Yes	Adequate
Lyon County	Dayton H.S.	9-12	606	129	83.3%	No	Yes	Adequate

TABLE CONTINUES NEXT PAGE

TABLE 43 *(continued)*: Public High School Enrollments and No-Child-Left-Behind Designations – 2007-2008
Source: NV Dept of Education; School Tree.org

School District	High School	Grades	# Enrolled	# Sr.'s	Grad Rate (2008)	Magnet School	Made NCLB AYP Progress?	School Designation (2007)
Lyon County	Fernley H.S.	9-12	638	135	70.8%	No	Yes	Adequate
Lyon County	Smith Valley H.S.	7-12	138	21	80.8%	No	Yes	High Achieving
Lyon County	Yerington H.S.	9-12	499	111	84.5%	No	Yes	High Achieving
Storey County	Virginia City H.S.	9-12	133	26	64.3%	No	Yes	Exemplary
Washoe County	Academy for Career Education Charter	9-12	114	20	78.4%	No	Yes	High Achieving
Washoe County	Galena H.S.	9-12	1,934	327	90.3%	No	Yes	Adequate
Washoe County	Gerlach H.S.	6-12	53	3	100.0%	No	Yes	Adequate
Washoe County	I Can Do Anything Charter School	9-12	373	60	62.7%	No	No	Improvement (Y4)
Washoe County	Incline H.S.	9-12	404	82	86.0%	No	Yes	High achieving
Washoe County	McQueen H.S.	9-12	1,968	408	86.0%	No	Yes	Adequate
Washoe County	North Valleys H.S.	9-12	1,773	222	75.1%	No	Yes	Improvement (Y3 – Hold)
Washoe County	Proctor R Hug H.S.	9-12	1,245	176	57.1%	No	Yes	Adequate
Washoe County	Reed H.S.	9-12	2,180	424	82.4%	No	No	Watch
Washoe County	Reno H.S.	9-12	1,726	292	87.4%	No	Yes	Adequate
Washoe County	Spanish Springs H.S.	9-12	1,549	177	81.3%	No	Yes	High Achieving
Washoe County	Sparks H.S.	8-12	1,195	176	72.6%	No	Yes	Improvement (Y4 – Hold)
Washoe County	TMCC Magnet H.S.	11-12	165	96	96.6%	Yes	Yes	High Achieving
Washoe County	Washoe H.S.	7-12	559	51	27.8%	No	No	Improvement (Y4)
Washoe County	Wooster H.S.	9-12	1,532	180	67.4%	No	Yes	Improvement (Y3 – Hold)

TABLE 44: Public High School Proficiency Exam (HSPE) Summary: 2007/2008
Source: Nevada Department of Education

		Reading		Mathematics		Writing	
School District	School	% Meets Standard or Above	% Exceeds Standard	% Meets Standard or Above	% Exceeds Standard	% Meets Standard or Above	% Exceeds Standard
Carson City	Carson High School	97.1%	62.5%	87.7%	32.5%	91.7%	9.2%
Carson City	Pioneer High Alternative School	89.5%	26.3%	65.2%	0.0%	73.1%	0.0%
Douglas County	Douglas County High School	96.7%	55.6%	83.1%	23.1%	91.6%	7.5%
Douglas County	George Whittell High School	96.3%	75.9%	90.8%	27.8%	96.3%	9.3%
Douglas County	Jacobsen High School	N/A	N/A	N/A	N/A	N/A	N/A
Lyon County	Dayton High School	95.5%	42.7%	66.7%	12.8%	90.6%	2.8%
Lyon County	Fernley High School	93.6%	47.5%	66.6%	7.8%	83.4%	2.0%
Lyon County	Smith Valley High School	100.0%	75.0%	87.5%	12.5%	93.8%	6.3%

TABLE CONTINUES NEXT PAGE

TABLE 44 *(continued)*: Public High School Proficiency Exam (HSPE) Summary: 2007/2008
Source: Nevada Department of Education

School District	School	Reading		Mathematics		Writing	
		% Meets Standard or Above	% Exceeds Standard	% Meets Standard or Above	% Exceeds Standard	% Meets Standard or Above	% Exceeds Standard
Lyon County	Yerington High School	92.4%	43.8%	79.0%	20.0%	86.7%	1.0%
Storey County	Virginia City High School	100.0%	58.6%	93.1%	51.7%	93.4%	6.7%
Washoe County	Academy for Career Education	93.9%	31.8%	72.7%	9.1%	75.7%	1.4%
Washoe County	Galena High School	96.7%	68.2%	85.0%	29.4%	96.8%	11.7%
Washoe County	Gerlach High School	N/A	N/A	N/A	N/A	N/A	N/A
Washoe County	I Can Do Anything Charter School	87.3%	20.6%	40.0%	0.0%	74.2%	1.5%
Washoe County	Incline High School	94.9%	59.5%	78.2%	16.7%	87.6%	4.9%
Washoe County	McQueen High School	96.5%	61.1%	85.5%	30.9%	93.2%	9.8%
Washoe County	North Valleys High School	93.3%	53.0%	73.0%	12.4%	86.4%	4.9%
Washoe County	Proctor R. Hug High School	87.7%	25.9%	54.9%	7.5%	75.3%	3.0%
Washoe County	Reed High School	95.1%	53.3%	77.7%	19.4%	90.9%	6.6%
Washoe County	Reno High School	96.3%	69.2%	85.7%	32.4%	94.6%	16.3%
Washoe County	Spanish Springs High School	96.5%	55.0%	79.9%	21.1%	92.7%	8.4%
Washoe County	Sparks High School	87.9%	33.7%	63.3%	9.9%	82.2%	1.6%
Washoe County	TMCC Magnet High School	100.0%	82.4%	91.3%	27.5%	100.0%	14.3%
Washoe County	Washoe High School	91.4%	37.4%	61.6%	5.8%	82.4%	2.8%
Washoe County	Wooster High School	88.5%	43.9%	68.5%	26.9%	82.1%	6.6%

Business Climate and Operating Environment

TABLE 45: Labor Legislation in Nevada
Source: WDG Database

Legislation		Legislation	
Employment at will?	Yes	Relatively difficult for an employer to contest and win a workers' comp. claim?	No
If yes, significant restrictions (from employers standpoint)	No	Relatively difficult for an employer to contest and win an unemployment ins. claim?	No
Restrictions on employee drug testing	No	Right-to-Work law in effect?	Yes
Telephone monitoring restrictions for regulation of productivity (or customer service)	None	EEO hiring standards more restrictive than Federal?	--
Plant Closing Law stricter than Federal?	No	Sexual harassment laws more restrictive than Federal?	--
ADA legislation stricter than Federal?	--	Mandated parental leave legislation more generous than Federal?	No
Ban on hiring replacement workers during a strike?	--	Onerous provisions for wrongful discharge	--
Striking workers entitled to unemployment insurance?	--		

1. **According to data published in 2008, Nevada workers' compensation insurance rates are moderate.** In 2008, average workers' compensation costs were 1.8% lower than the national average, according to the annual analysis of workers' compensation costs by Actuarial & Technical Solutions of Ronkonkoma, New York. According to Actuarial & Technical Solutions, Nevada ranked 24th among 45 states evaluated (with 45 being the most expensive). In Table 46, the index indicates the percentage above or below the U.S. average for workers' compensation rates.
   - California has a significantly higher rate, but all of the neighboring states have much lower rates than Nevada.
   - The 2008 state ranking is higher than in 2007. In that year, the state rate ranked 19th and its rate was 10.8% of the U.S. average.

TABLE 46: Workers' Compensation Comparative Costs, 2008* (Index U.S. Average=1)**
Source: Actuarial & Technical Solutions

State	Index	Rank	State	Index	Rank	State	Index	Rank
Utah	0.474	1	Rhode Island	0.872	16	New Hampshire	1.090	31
Indiana	0.528	2	Nebraska	0.918	17	Missouri	1.090	31
Virginia	0.533	3	Kansas	0.923	18	Oklahoma	1.195	33
Arizona	0.556	4	Mississippi	0.926	19	Texas	1.197	34
Arkansas	0.579	5	South Carolina	0.951	20	Hawaii	1.205	35
Massachusetts	0.582	6	Georgia	0.962	21	Tennessee	1.208	36
Oregon	0.633	7	Minnesota	0.977	22	New York	1.223	37
Colorado	0.728	8	New Mexico	0.979	23	Illinois	1.238	38
South Dakota	0.746	9	**Nevada**	**0.982**	**24**	New Jersey	1.262	39
Maryland	0.790	10	Florida	0.997	25	Connecticut	1.277	40
Idaho	0.797	11	Louisiana	1.000	26	Montana	1.479	41
Michigan	0.821	12	Kentucky	1.015	27	Delaware	1.536	42
North Carolina	0.831	13	Alabama	1.033	27	California	1.562	43
Wisconsin	0.833	14	Pennsylvania	1.049	29	Alaska	1.654	44
Iowa	0.841	15	Maine	1.056	30	Vermont	1.821	45

** Ranked from lowest to highest ** Five states are self-insured and not reported in this index*

2. **Sixteen percent of the employers responding to the survey indicated that unions represented some of their employees. These employers reported that an average of 59% of their employees is represented by one or more unions.**
3. **Between 1990 and 2007, there have been 115 union-certification elections, 10 union-decertification elections, and one union-representation election in the five-county area, according to the National Labor Relations Board** (refer to Exhibit C-17 in the Appendix)**.**
   - Of the 115 certification elections, unions won 51, representing a 44% union success rate.
   - Of the 10 decertification elections, unions won three (30%).
   - Of the one representation election, the unions won (100%).
4. **Interviews with area employers and key stakeholders point to an environment with a strong sense of individualism and independence.** Many interviewed employers voiced a desire to operate free from governmental assistance and programs and collaborations with other companies. This attitude supports an entrepreneurial outlook, but it hinders collective action within the business community for any overall area improvement of operating conditions.

Quality of Life

1. **The quality of life in the study area is commensurate with its population size and density.** Cultural offerings in the area are limited, but outdoor recreational opportunities are plentiful.
   - The Pioneer Center for Performing Arts, located in downtown Reno, annually hosts several touring artists and is the largest performing arts facility in northern Nevada. The Center, built in 1968, attracts over 150,000 visitors annually from Reno, Sparks, and rural areas of northern Nevada. In addition to the Pioneer Center, Reno is also home to the Nevada Opera Association, the Reno Chamber Orchestra, and the Reno Philharmonic. The area also boasts several museums and historical sites, including the National Automobile Museum, the Nevada Historical Society, the Nevada Museum of Art, the Sierra Arts Foundation, and the Wilbur D. May Museum.
   - The Reno area has 19 golf courses, including daily fee, municipal, and private courses. Land in recreational use exceeds 309,000 acres, which includes four federal parklands and two state parks. In addition to the available land recreation areas, there are also more than 133,000 acres of lakes and rivers for recreation. The area is also home to numerous skiing and snowboarding opportunities.
2. **Employers report a satisfactory-to-good quality of life.** Quality-of-life factors receiving a good rating (median rating of 4.0) include private education (K-12), healthcare services, safety from crime, and traffic/road congestion. Quality-of-life factors receiving a slightly-higher-than-satisfactory to satisfactory rating (median rating of 3.0) include public education (K-12), availability of affordable homes, availability of transferred or relocated personnel, and availability of childcare services. (Refer to Table 47.)

TABLE 47: Quality-of-Life Ratings
Source: WDG Employer Survey, Spring 2009

Factor	*(1=Poor; 5=Excellent)*	
	Average	**Median**
Public education (K-12)	3.2	3.0
Private education (K-12)	3.5	4.0
Availability of affordable homes	2.8	3.0
Availability of homes for transferred or relocation personnel	3.3	3.0
Availability of childcare services	3.1	3.0
Healthcare services	3.5	4.0
Safety from crime	3.4	4.0
Traffic/road congestion	3.4	4.0

3. **Employer interviews and survey results, and the workforce survey results indicate a modest commute pattern.** The data results from these sources show that about 74% of workers commute less than 30 minutes to work.

4. **Housing at multiple price points is available in the area, with housing prices higher than the state and national averages.** The area's Claritas-estimated 2008 median home value ($323,341) is roughly 14% higher than the state average ($284,094) and is 81% higher than the national median ($178,626). Current Multiple Listing Service real estate offerings indicate moderate housing availability throughout the housing price-points within a 30-mile radius of Reno (largest area available). Refer to Table 48.

- The MLS data shows that a high percentage (43%) of the available housing is for sale at $350,000 or higher.
- According to a local residential realtor housing study, housing prices have dropped roughly 44% from their peak in October 2005 (and are still dropping). Local residential realtors now see home prices in the Reno market as being more affordable for local wages and salaries, which is confirmed by interviewed employers and by the National Association of Home Builders and Wells Fargo (see Table 49). However, interviews show that there is a need for more housing in the $100,000 to $200,000 range to accommodate the demand for starter homes and for individuals with moderate incomes, including the large number of residents employed in the hospitality and gaming industry.

TABLE 48: Available Homes by Price Level, February 2009
Source: Realtor.com

Home Value	Reno 30-Mile Radius	
	#	%
Under $100,000	593	6.9%
$100,000-$149,999	953	11.2%
$150,000-$199,999	1,129	13.2%
$200,000-$249,999	908	10.6%
$250,000-$299,999	793	9.3%
$300,000-$349,999	471	5.5%
$350,000-$399,999	520	6.1%
$400,000-$449,999	315	3.7%
$450,000-$499,999	388	4.5%
$500,000 and over	2,474	29.0%
Total:	8,544	100%

5. **Since the third quarter of 2008, housing affordability in the Reno MSA (Washoe and Storey Counties) has been better than the national average, and is now one of the best in the western U.S.** The National Association of Home Builders and Wells Fargo publish a Housing Opportunity Index (HOI) each quarter that "measures the percentage of the homes sold in a given area that are affordable to families earning that area's median income". Prices of new and existing homes sold are collected from actual court records by First American Real Estate Solutions.
   - During the first quarter of 2009, the HOI showed that affordability of homes in the MSA was better than the national average (see Table 49) and the 8th most affordable in the West, and the 80th most affordable nationwide. According to the data provided by the HOI, housing affordability historically has been low to very low in the MSA. The third quarter of 2008 was the first quarter since at least 2005 that the housing affordability index was better in the MSA than the nation as a whole, although just marginally. Since then, the affordability index has been improving versus the national average, showing the impact of the region's housing price drop.
   - Almost all of the population of the MSA (99.7%) is in the study area, and 71.2% of the study area's population is within the MSA.

TABLE 49: Housing Affordability 2005-2009
Source: National Association of Home Builders/Wells Fargo Housing Opportunity Index (NAHB Economics)

Year/Quarter	Median Price (000)		Housing Opportunity Index *		Median Income (000)		National Rank (Reno MSA)	Regional Rank (Reno MSA)
	Reno MSA	US	Reno MSA	US	Reno MSA	US		
2005								
1st Quarter	$289	$225	30.9	50.1	$64	$58	132	32
2nd Quarter	$316	$241	21.9	45.9	$64	$58	134	32
3rd Quarter	$343	$253	18.7	43.2	$64	$58	137	33
4th Quarter	$350	$254	21.5	41.0	$64	$58	131	30
2006								
1st Quarter	$335	$250	17.4	41.3	$63	$60	153	37
2nd Quarter	$333	$250	15.3	40.6	$63	$60	171	39
3rd Quarter	$320	$248	18.0	40.4	$63	$60	164	31
4th Quarter	$320	$247	18.4	41.6	$63	$60	167	35
2007								
1st Quarter	$303	$238	21.2	43.9	$64	$59	181	36
2nd Quarter	$302	$240	20.0	43.1	$64	$59	181	39
3rd Quarter	$290	$239	21.1	42.0	$64	$59	177	36
4th Quarter	$285	$227	24.4	46.6	$64	$59	185	38
2008								
1st Quarter	$261	$219	47.6	53.8	$70	$62	158	22
2nd Quarter	$255	$215	49.8	55.0	$70	$62	150	21
3rd Quarter	$233	$206	56.2	56.1	$70	$62	132	19
4th Quarter	$216	$190	64.8	62.4	$70	$62	127	19
2009								
1st Quarter	$193	$176	80.6	72.5	$70	$64	80	8

* The higher the index, the more affordable the housing.

6. **The property-crime and violent-crime rates in the Reno-Sparks MSA are lower than the Nevada averages, yet higher than the U.S. averages.** According to the 2005 FBI crime reports (latest data available), the property-crime rate for the Reno-Sparks MSA (4,094 crimes per 100,000 residents) was lower than the Nevada average (4,241 crimes per 100,000 residents), but higher than the national average (3,430 crimes per 100,000 residents). The Reno-Sparks MSA violent-crime rate (532 crimes per 100,000 residents) was lower than the Nevada average (607 crimes per 100,000 residents), but higher than the U.S. average (469 crimes per 100,000 residents).
7. **The study area hosts six hospitals containing a combined total of approximately 1,041 beds, and a physician population of approximately 834.** According to the *Places Rated Almanac* published in 2007 (latest version available), the Reno-Sparks MSA is slightly underserved in the areas of internists, pediatrics, psychiatry, and osteopathy. However, the MSA is well-served in the areas of general and family practitioners, as well as medical and surgical specialists.
8. **The Reno area has little potential of weather systems affecting the area.** The Tahoe Basin is a temperate desert. Sunshine is abundant year-round and the temperatures are mild. Temperatures during the summer months often reach the high-eighties to low-nineties, with cooler nights rarely above 60 degrees. Autumn and winter temperatures are milder, occasionally falling to freezing or below. Average annual rainfall is approximately 7.5 inches per year, and is evenly distributed throughout the year. The humidity is low during the summer and moderately low during the winter. The area also has a slight risk of being affected by earthquakes. Additionally, because of the low humidity and minimal rainfall, the area is susceptible to wildfires and cyclical droughts.