WHITE PAPER 2
EDUCATION AND STATE ECONOMIC GROWTH: THE FUNDAMENTAL LINKAGE

December 2010

Prepared for the:

UNLV
UNIVERSITY OF NEVADA LAS VEGAS

Prepared by:

DR. ALAN M. SCHLOTTMANN, PH.D.
PROFESSOR OF ECONOMICS-UNLV DEPARTMENT OF ECONOMICS
&
RCG
RESTREPO CONSULTING GROUP LLC

WHITE PAPER 2
EDUCATION AND STATE ECONOMIC GROWTH: THE FUNDAMENTAL LINKAGE

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

WHITE PAPER 2
EDUCATION AND STATE ECONOMIC GROWTH: THE FUNDAMENTAL LINKAGE

EXECUTIVE SUMMARY

This white paper is the second in a series of four white papers that look at the role of education in Nevada's future. These white papers are designed to objectively assess and evaluate the role of higher education in meeting Nevada's future economic targets. These white papers focus on:

- the role of higher education in promoting and sustaining economic growth and development;
- what the economic value of an education to the individual and community state-wide is; and
- how education impacts economic growth.

The fourth and final white paper will be summarizing the findings of the first three white papers outlined above.

White Paper 2 presents a survey of studies and key findings on the relationship between education and state economic growth. In this respect, it is concerned with a fairly broad concept of economic growth and education, as contrasted to individual industries and specific development targets for Nevada. These latter topics were addressed in White Paper 1.

The relationship between growth and education has been one of the central discussions in regional economic analysis for many years. Economists have long believed that investments in education are an important source of economic growth and, more importantly, future economic and business development.

This paper includes findings on the significant association between quantitative and qualitative measures of education and economic growth. It then analyzes the relationship between worker education levels and basic economic indicators (e.g., unemployment rate, wages) in Nevada. Thus, White Paper 2 evaluates the role of education in Nevada's economic prosperity.

Although the research on this topic tends to be statistically laborious, the basic summaries presented here agree that:

- Overall, state growth is directly impacted by education levels, both in terms of quality and quantity.
- Wages are positively impacted by education, and
- Unemployment is significantly reduced with educational attainment.

It is important to note that this broader view of the relationships between education and economic growth is consistent with White Paper 1 that explored, by specific industries, education and economic development.

The literature review and analyses herein are divided into the following areas:

1. Education and Economic Growth
2. Measuring the Relationship between Education and Economic Growth
3. Quality versus Quantity of Education
4. National and Southern Nevada Analysis

EDUCATION AND ECONOMIC GROWTH

Since nearly its inception, the study of economic growth has focused on the importance of education[1]. There are two main reasons for expecting to find some link between education and economic growth. First, "education is needed for people to benefit from scientific and technological advances"[2]. Second, a variety of studies on the topic indicate that, to a large extent, incomes depend on the level of education.

[1] *Dickens, W. T., Sawhill, I, and Tebbs, J. The Effects of Investing in Early Education on Economic Growth. April 2006. The Brookings Institution.*
[2] *Stevens, P., Weale, M. Education and Economic Growth. National Institute of Economic and Social Research, August 2003.*

There is general agreement among economists that more and better education is an important way to improve a region or state's economic growth. According to an April 2006 report by The Brookings Institution on the effects of investing in early education on economic growth, the contribution of education to labor productivity growth over the last 40 years is estimated to be between 13 and 30 percent of this productivity. Many believe that investments in education will become even more important in the future as we continue to evolve as a knowledge-based economy[3].

According to a study by the Center for Labor Market Studies at Northeastern University, over their working lives, the average high school dropout will have a negative net fiscal contribution to society of nearly -$5,200, while the average high school graduate generates a positive lifetime net fiscal contribution of $287,384. The same figure for a college graduate with only a bachelor's degree is $793,079.[4]

Educational Attainment	Lifetime Net Fiscal Impact
No High School Diploma	-$5,191
High School Diploma/GED	$287,384
Some College	$461,661
Bachelor Degree	$793,079
Master's or Higher Degree	$1,094,945

Source: Center for Labor Market Studies, Northeastern University.

MEASURING THE RELATIONSHIP BETWEEN EDUCATION AND ECONOMIC GROWTH

The significant increase in educational measures, like student test scores, for mathematics and science, by countries, such as Korea, Singapore and Taiwan has prompted an extensive empirical literature, which attempts to measure the impact of education on economic growth. This literature has covered a range of topics, including hard-to-measure issues, such as "quality" and the impact of enhancing general learning (cognitive) skills.

In simple terms, education does matter in directly and positively impacting the rate of economic growth over time. The studies cited below cover fairly lengthy time periods (such

[3] *Dickens, W. T., Sawhill, I, and Tebbs, J. The Effects of Investing in Early Education on Economic Growth. April 2006. The Brookings Institution.*
[4] *Sum, A., Khatiwada, I., McLaughlin, J. The Consequences of Dropping Out of High School. Sheila Palma Center for Labor Market Studies Northeastern University, October 2009.*

as 10 or 20 years, etc.). Also, the positive and significant relationship between education and economic growth appears to be solidly established.

The main and specific focus of the macro-economic literature on the topic of education and economic growth has analyzed the relationship between the level of educational attainment for a country, as a whole, and the standard measure of economic growth in terms of Gross Domestic Product ("GDP"). Most studies find evidence of higher GDP growth in countries where the population has, on average, completed more years of education or attains higher scores on tests of cognitive achievement when compared to other countries.[5] For example, regional annual growth rates vary from 1.4% in Sub-Saharan Africa to 4.5% in East Asia.[6]

The consensus of the studies to-date is that education does make a difference for the growth of national income but that "it is a complicated picture that depends on how different aspects (quantitative and qualitative) of both the economy and education system interact"[7]. This observation is due to the fact that the kinds of occupations dominant in one society over another change economic performance[8]. This is the case explored in White Paper 1, where specific business sector development, such as clusters of medical services and procedures, interact with education by occupation. There is some supportive evidence that countries with higher growth in more technical degrees grow faster than countries with less technical orientations.[9] For example, higher growth rates appear to be associated with countries with higher growth rates in engineering graduates compared to general educational growth.[10]

The micro-economic literature on the topic has looked at the relationship between different ways of measuring a person's educational achievement and earnings. Most studies show consistent results for what can be called the "personal pay-off" from education.

---

[5] *Fadel, C. and Miller, R. Education and Economic Growth. Commissioned by Cisco Systems, Inc.*
[6] *Hanushek, E. A. and Wößmann, L. Education and Economic Growth. February 2008. Chapter prepared for the International Encyclopedia of Education. 3rd Edition.*
[7] *Fadel, C. and Miller, R. Education and Economic Growth. Commissioned by Cisco Systems, Inc.*
[8] *Ibid.*
[9] *Hanushek, E. A. and Wößmann, L. Education and Economic Growth. February 2008. Chapter prepared for the International Encyclopedia of Education. 3rd Edition.*
[10] *Ibid. The basic suggestion here is that certain education-occupation pairings prompt a higher level of entrepreneurial activity.*

Although technical in nature, the (statistical) results in these studies suggest truly significant contributions of education to economic growth. Denison (1985)[11] estimated that over the lengthy time period of 1929 and 1982, increasing levels of education were the source of 16 percent of the growth of output (and 30 percent of the growth in labor productivity). A more recent study by Jorgenson and Stiroh (2000)[12] puts the contribution of education to economic growth at 8.7 percent of total growth between 1959 and 1998 and, more importantly, 13 percent of growth in labor productivity (output per worker).

These results are particularly important as they relate to the interplay between education and labor productivity.

Theoretical models of economic growth have emphasized different ways through which education may affect economic growth[13]:

1. The output of the macro economy is a direct function of the capital and labor in the economy.
2. Later models added technological change to understand the evolution of the economy over time[14].
3. Neoclassical growth theories[15] extended the analysis to include education, emphasizing the role of education as a factor of production.

A new perspective on the topic of education and economic growth comes from the "endogenous growth" literature that has developed over the last several decades. A variety of studies stress the role of education in increasing the innovative capacity of the economy through developing new ideas and new technologies. These studies emphasize that a given level of education can lead to a continuing stream of new ideas. Another view of the role of education in economic growth centers on the diffusion of technologies. "If new technologies increase firm productivity, countries can grow by adopting these new technologies more broadly"[16].

---

[11] Denison, E.F. (1985) Trends in American Economic Growth, 1929-1982. The Brookings Institution. Washington, D.C.
[12] Jorgenson, D. W., Stiroh, K. J., Gordon, R. J., and Sichel, D. E. (2000). Raising the Speed Limit: U.S. Economic Growth in the Information Age. Brookings Papers on Economic Activity, 1: 125-235.
[13] Fadel, C. and Miller, R. Education and Economic Growth. Commissioned by Cisco Systems, Inc.
[14] Solow, R. M. (1957). "Technical Change and the Aggregate Production Function." Review of Economics and Statistics 39 (August), pp. 312–320.
[15] Mankiw, N. G. Romer, D. and Weil. D. N. (1992). "A Contribution to the Empirics of Economic Growth." Quarterly Journal of Economics 107 (May), pp. 407–437.
[16] Fadel, C. and Miller, R. Education and Economic Growth. Commissioned by Cisco Systems, Inc.

QUALITY VERSUS QUANTITY OF EDUCATION

Many researchers argue that the quality of education, measured by the knowledge that students gain (as indicated in tests of cognitive skills) is more important for subsequent economic growth than the quantity, measured, for example, by years of attainment[17]. The quality of education, measured by the cognitive skills learned, appears to dramatically alter the role of education in economic development.

Using data from the international student achievement tests through 1991 to build a measure of educational quality, Hanushek and Kimko, in their 2000 study[18], found a statistically and economically significant positive effect of the quality of education on economic growth between 1960 and 1990 that is far larger than the association between the quantity of schooling and growth. Thus, these findings confirm that ignoring quality differences significantly misses the true importance of education for economic growth.

In a series of studies conducted over several years, Hanushek, Jamison, Jamison and Woessmann explored the role of both school attainment and cognitive skills in economic growth. Beginning in the mid-1960s, international agencies started conducting tests of students' performance in mathematics and science at various grade levels. The researchers used performance on 12 of these standardized tests as rough measures of the average level of cognitive skill in a given country. With this information, they assessed how human capital related to differences in economic growth for 50 countries from 1960 to 2000 (more countries over a longer period of time than any previous study). What they discovered can be summarized as follows:

- The level of cognitive skills of a nation's students has a large effect on its subsequent economic growth rate.

- Increasing the average number of years of schooling attained by the labor force boosts the economy only when increased levels of school attainment also boost cognitive skills[19].

---

[17] *Barro, R. J. Education and Economic Growth. Available at http://www.oecd.org/dataoecd/5/49/1825455.pdf*
[18] *Hanushek, E.A., and D.D. Kimko. December 2000. "Schooling, labor force quality, and the growth of nations." American Economic Review 90 (5).*
[19] *Hanushek, E. A., Jamison, D. T., Jamison, E. A. and Woessmann, L. Education and Economic Growth. Education Next, Spring 2008.*

These researchers also found that countries with higher test scores experienced far higher growth rates. However, the underlying issue of success often appears to center on the ability of an educational system to allow individuals to increase cognitive skills, or, in simple terms, enhanced ability to "learn" and hence re-train.

For example, once the impact of higher levels of cognitive skills is taken into account, the significance of school attainment on economic growth, i.e., additional years of schooling, drops significantly. To summarize, a country benefits from asking its students to remain in school for a longer period of time only if the students are learning something as a consequence and in a manner conducive to future learning.

Another indication of the importance of education quality to economic growth lies in the researchers' ability to explain global variation in GDP growth. As far back as 1960, researchers tried to account for economic growth with information about just school attainment levels and the level of a country's GDP, they were able to explain only 25 percent of the differences among countries.

But when they also included cognitive skills in statistical models of economic growth, they were able to attribute nearly 75 percent of the differences among countries to these three factors. In other words, higher levels of cognitive skill appear to play a major role in explaining international differences in economic growth. If future economic growth requires an ability to learn new technologies, new occupations and new methods of organization, then knowledge improvement (or cognitive skills and the ability to learn) will become increasingly critical for success. Basically, the ability to engage in life-long learning appears to be more critical for an individual than, for example, a simple addition of a year in education.[20]

Furthermore, in the above mentioned studies, making American high-school students the best in the world in math and science would have had a substantial impact on the nation's economic growth, "enough to pay for the K-12 education system by 2015"[21].

[20] *Although a simplification, the literature tends to suggest that countries in Asia/East Asia have been relatively successful compared to overall computed "averages".*
[21] *Hanushek, E. A., Jamison, D. T., Jamison, E. A. and Woessmann, L. Education and Economic Growth. Education Next, Spring 2008.*

Had the U.S. raised cognitive skills (as measured by the PISA[22] math and science exams) by 50 test points, which would have brought the U.S. close to world leadership, the economic returns to the country would probably been enough to cover the entire cost of education in 2015 and after, since GDP would, by 2015, be 4.5% greater than the current GDP at the time of the study.[23]

Moreover, the analyses in the study by Hanushek et al.[24] suggest that the value of a high-quality education system is substantially diminished in closed economies. The study estimates that the effect of a one standard deviation improvement in cognitive skills on annual economic growth is 0.9 percentage points per year in closed economies that have a variety of restrictions on international trade, but 2.5 percentage points in open economies.

NATIONAL AND SOUTHERN NEVADA ANALYSIS

National Analysis

An analysis of unemployment rates by educational attainment reinforces the points made above and does so without resorting to somewhat meaningless state averages.[25] As is well-known, many economic forecasts suggest that the national unemployment rate over the next two years will remain relatively high when compared to historical rates, and it is especially burdensome for those who do not have college degrees.

The national seasonally adjusted unemployment rate for those with only a high school degree in October 2010 was 10.1 percent. This is more than 2.1 times the 4.7 percent rate for workers with a bachelor's degree or more (see Chart 1 at the end of this paper). The unemployment rate of workers without a high school diploma is 15.3 percent, and over the last 11 years the unemployment rate for this group has not fallen below 6.4 percent (see Chart 2). As discussed below, specifically for Nevada (see Chart 6), there is a strong relationship between Nevada's unemployment rate and educational level.

---

[22] *PISA stands for "Performance on International Student Achievement".*
[23] *Hanushek, E. A., Jamison, D. T., Jamison, E. A. and Woessmann, L. Education and Economic Growth. Education Next, Spring 2008.*
[24] *Ibid.*
[25] *Simple state averages for unemployment rates mask industry detail, occupational detail, educational requirements and economic development strategies as discussed in White Paper 1. Thus, although many (most) states in 2010 with high percentages of educational attainment (college graduates) have lower unemployment rates than states with low percentages of educational attainment, exceptions can be found in either direction.*

Furthermore, there is a hierarchical relationship between formal education level and workers' annual wages, which reflects the compensation that employers are willing to pay to workers, on average, for the knowledge, skills and abilities they attained at every consecutive education level. Data shows the persistent wage premium for those who obtain at least some college, a postsecondary certificate, or an Associate's degree, and the growing wage premium for those with Bachelor's degrees or better (see Chart 3)[26].

Postsecondary education provides great accumulated earnings over a worker's lifetime:

- Having some college but no degree or a postsecondary certificate is worth about $473,000 more than a high school degree.
- An Associate's degree is worth about $15,000 more than some college but no degree.
- A Bachelor's degree is worth about $1.1 million than an Associate's degree.
- A Master's degree is worth $457,000 more than a Bachelor's degree.
- A Doctoral degree is worth about $193,000 more than a Master's degree.
- A Professional degree is worth about $621,000 more than a Doctoral degree (see Chart 4)[27].

Nevada Analysis

The results above relate directly to current discussions in Nevada to diversify the economy through selected business clusters. As we presented in White Paper 1, in 2009, Nevada's workforce had far fewer college degrees than the nation, as a whole, and substantially less than the most educated states. According to the U.S. Bureau of Labor Statistics, a high percentage of 25 year olds and older, about 16.1 percent, had less than a high school education. About 25.8 percent of 25+ year olds in Nevada in 2009 had only some college

[26] *Carnevale, A., Smith, N., Strohl, J. Projections of Jobs and Education Requirements Through 2018. Georgetown University Center on Education and the Workforce. June 2010.*
[27] *Ibid.*

education but no college degree. In 2009, Nevada ranked 46th for 25+ year olds with bachelor degrees or higher.

An analysis of employment trends, by industry, shows that the majority of industries in Nevada have been negatively impacted by the current recession, as evidenced by significant job losses, especially in such industries as Construction, Manufacturing and Professional and Business Services and Leisure & Hospitality. It is important to note that the health of most of the state's industries is directly or indirectly related to the health of the Leisure & Hospitality industry/cluster. There currently is very little independence from the state's Leisure & Hospitality sector, which speaks to why Nevada's economy is one of the hardest hit economies in the nation.

	2006	2009	Difference	Difference as % of 2006 Employment
Construction	142,900	81,533	-61,367	-42.9%
Manufacturing	50,400	40,167	-10,233	-20.3%
Professional & Business Services	157,900	136,108	-21,792	-13.8%
Information	15,200	13,125	-2,075	-13.7%
Leisure & Hospitality	337,000	307,658	-29,342	-8.7%
Trade, Transportation, & Utilities	226,000	212,958	-13,042	-5.8%
Other Services	35,500	33,842	-1,658	-4.7%
Natural Resources & Mining	11,600	11,625	25	0.2%
Government	150,200	158,392	8,192	5.5%
Education & Health Services	87,700	97,500	9,800	11.2%

Source: DETR.

In Nevada, leisure and hospitality, along with trade, transportation and utilities industries, employ the largest number of employees and have the lowest average annual wages (as of Q2, 2009) (see Chart 5 in the Appendix section of the paper). The higher wage sectors shown are associated with higher educational requirements required by business clusters selected for future development, such as medical services.[28]

Consistent with the national trends discussed above and, based on the *2009 American Community Survey*, the highest unemployment rate in Nevada in 2009 was among those who had less than a high school diploma (16.7 percent) and the lowest unemployment rate

[28] *See White Paper 1, "Education and Economic Development". The business targets discussed for future development in Southern Nevada have been adopted by local governments to include Southern Nevada Regional Planning Commission. Business clusters are sets of related firms directly connected to each other through customers or through relationships in the supply-chain.*

was recorded among those with a bachelor's degree or higher (6.3 percent of the labor force) (see Chart 6).

An analysis of median earnings in the past 12 months (in 2009 inflation-adjusted dollars), by educational attainment, shows that in Nevada, a person with less than a high school education made, on average, $22,774, whereas a person with a bachelor's degree made 97.2 percent more than that, or $44,918. And, a person with a graduate/professional degree made 2.7 times more than a less than high school graduate (or $60,497) (see Chart 7).

At the national level and in Nevada, the projected jobless recovery will most likely cause greater distress for less educated, low-income workers.

CONCLUSIONS & OBSERVATIONS

This paper summarized a wide range of studies that have investigated the relationship between education and economic growth and development. The main findings described in these studies support the view that both public and private returns on investment in education are positive—at the individual and economy-wide levels[29]. This fundamental conclusion is consistent with White Paper 1, which explored, by specific industries and occupations, education and economic development.

So, why does education matter for economic growth and development? To oversimplify: a more educated labor force is more mobile and adaptable, needs less supervision and is more creative in thinking about how to improve the management of work[30]. Furthermore, a more educated labor force can learn new tasks and new skills more easily and use a wider range of technologies and sophisticated equipment. All of these attributes not only make a more highly skilled worker more productive, but also enable a workplace that employs more educated workers to organize differently, manage differently, choose technologies and equipment differently, and adjust better to changes[31].

[29] *Fadel, C. and Miller, R. Education and Economic Growth. Commissioned by Cisco Systems, Inc.*
[30] *Dickens, W. T., Sawhill, I, and Tebbs, J. The Effects of Investing in Early Education on Economic Growth. April 2006. The Brookings Institution.*
[31] *Ibid.*

According to The Brookings Institution's report on the effects of investing in early primary education on future learning and subsequent impacts on economic growth, "skills beget more skills and new ways of doing business, workers learn from one another. The benefits of having a more educated workforce accrue to everyone, not just to the organization where these individuals happen to work. Moreover, these kinds of indirect (or spillover) effects for the firm or the economy as a whole may be especially important in an increasingly competitive global marketplace"[32]. This statement also serves as an appropriate summary of the literature reviewed herein across educational levels.

Thus, "education can facilitate the diffusion and transmission of knowledge needed to understand and process new information and to implement successfully new technologies devised by others, which again promotes economic growth"[33].

For instance, the bioscience industry[34], as a unique industry cluster and a diverse and rapidly growing sector, is expected to contribute significantly to national, state and regional economies. This industry's employment-base continued to grow, even during the first year of the Great Recession. Bioscience employment growth greatly outpaced national employment growth from 2001 to 2008. Additionally, the bioscience sector continues to be a source of high-wage jobs. On average, bioscience jobs paid $32,366 more than the average annual wage of the total U.S. private sector. Bioscience wages are also outpacing the national private sector in growth. That said there is still a concern that, at the K-12 level, the U.S. is continuing to fall behind in math and science education and may have trouble meeting the needs of bioscience companies for skilled, technical workers[35].

Several recent studies suggest that education is critical as an investment in human capital and "in facilitating research and development, as well as the diffusion of technologies. And, that initial phases of education are more important for imitation and higher education for innovation"[36].

---

[32] *Ibid.*
[33] *Hanushek, E. A. and Wößmann, L. Education and Economic Growth. February 2008. Chapter prepared for the International Encyclopedia of Education. 3rd Edition.*
[34] The bioscience industry sector is defined as including the following four subsectors: Agricultural Feedstock and Chemicals, Drugs and Pharmaceuticals, Medical Devices and Equipment, Research, Testing, and Medical Labs (*Source: Battelle BIO State Bioscience Initiatives 2010. Prepared for Biotechnology Industry Organization. Prepared by Battelle Technology Partnership Practice. May 2010*).
[35] *Battelle BIO State Bioscience Initiatives 2010. Prepared for Biotechnology Industry Organization. Prepared by Battelle Technology Partnership Practice. May 2010.*
[36] *Hanushek, E. A. and Wößmann, L. Education and Economic Growth. February 2008. Chapter prepared for the International Encyclopedia of Education. 3rd Edition.*

It is generally accepted that the U.S. economy is demanding more and more workers with postsecondary education, and employers are willing to pay more for them, as evidenced by the data presented in this paper. Thus, past experience and the research show that there are enormous economic gains for regions that focus on promoting education.

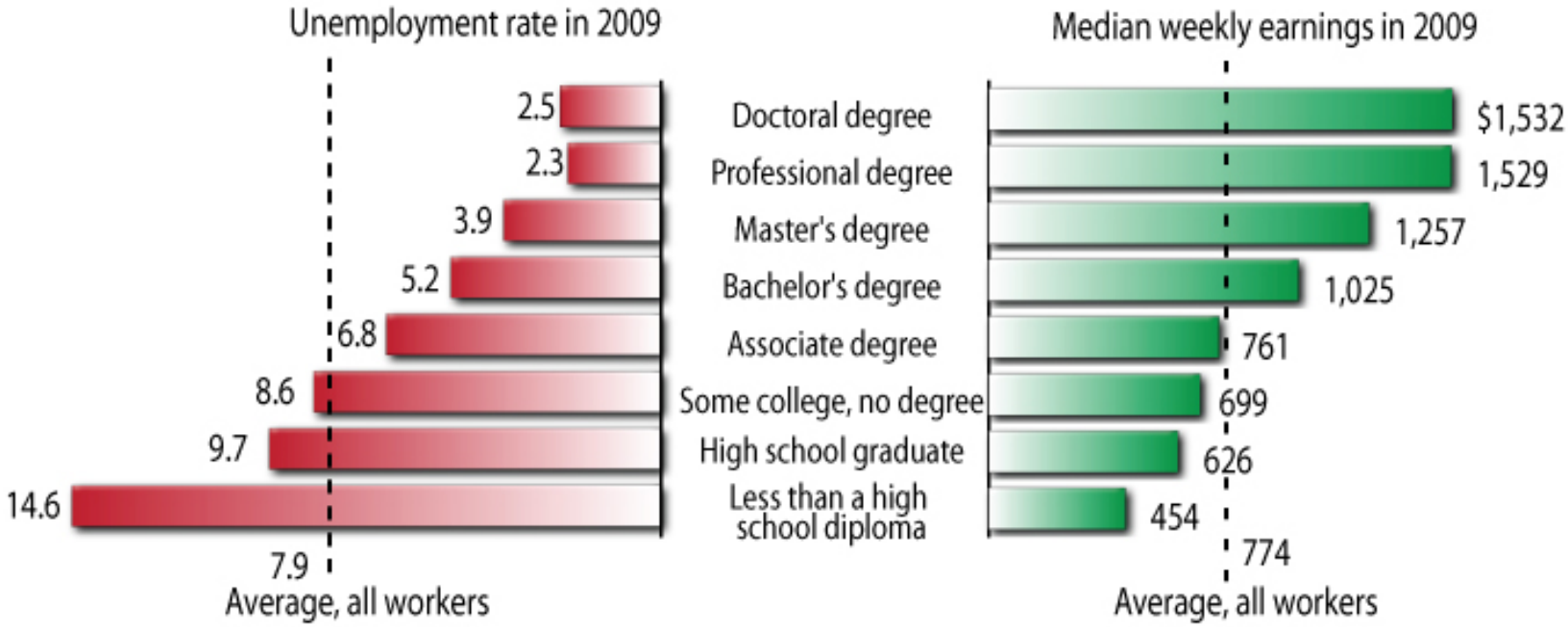
As discussed in our first white paper, public investment to create a strong and high quality higher education system is an investment in the long-term evolution and sustainability of a state's economy. Accordingly, there are significant payoffs in the future[37].

As a result of the current recession, thousands of jobs in Southern Nevada (especially low-degree jobs) have been lost or are at risk of being lost; many permanently. Additionally, the jobs that will replace them will be very different kinds of jobs, requiring different kinds of workers and very different and more comprehensive kinds of worker's training and education. With no credible economic forecasts for Nevada suggesting a return to the rates and patterns of pre-recession employment and growth, education is increasingly becoming a fundamental building block for Nevada's future, especially for the long-term sustainability of its economy.

[37] *Ibid.*

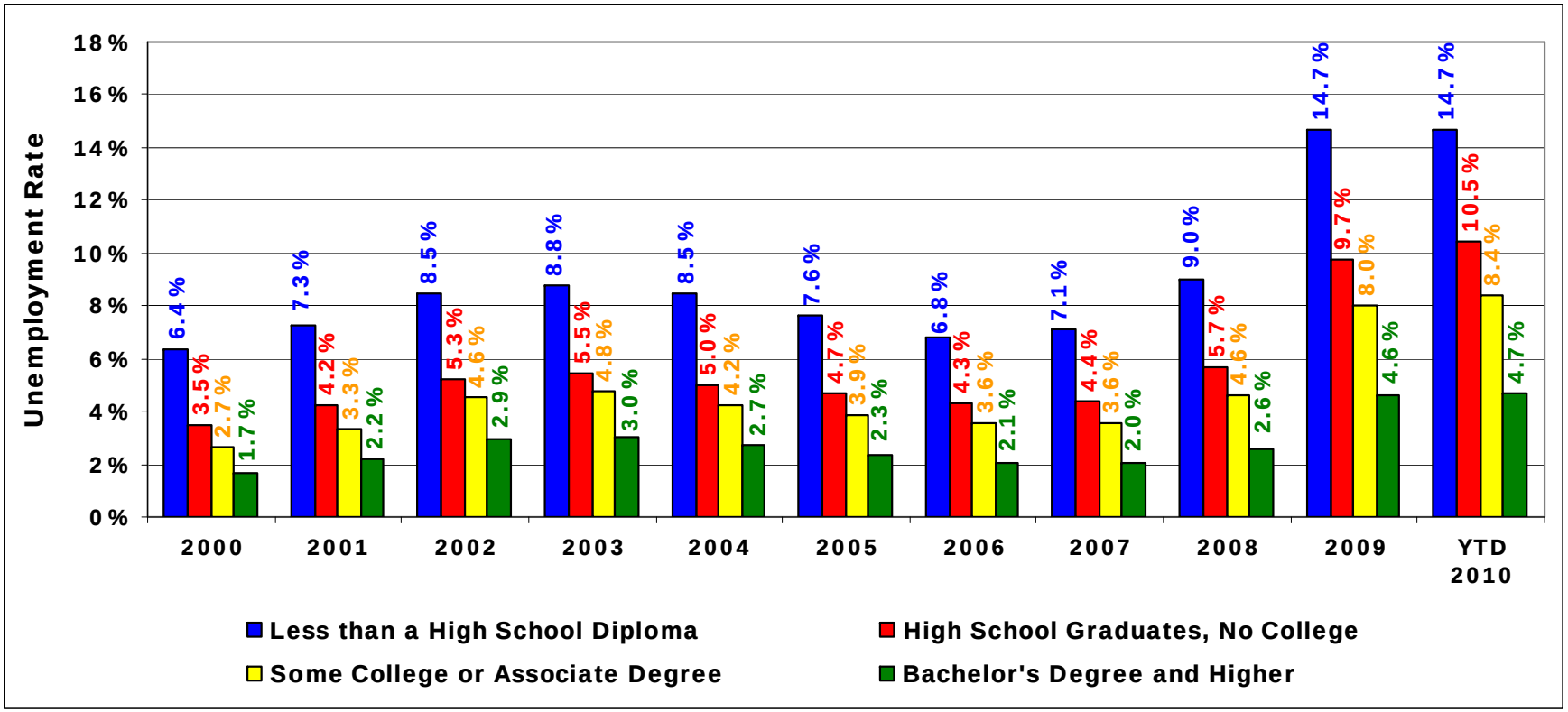
Appendix

CHART 1: U.S. UNEMPLOYMENT RATE AND MEDIAN WEEKLY EARNINGS, BY EDUCATIONAL ATTAINMENT
(SEASONALLY UNADJUSTED)
2009



Source: Bureau of Labor Statistics, Current Population Survey.
Note: Data are 2009 annual averages for persons age 25 and over. Earnings are for full-time wage and salary workers.

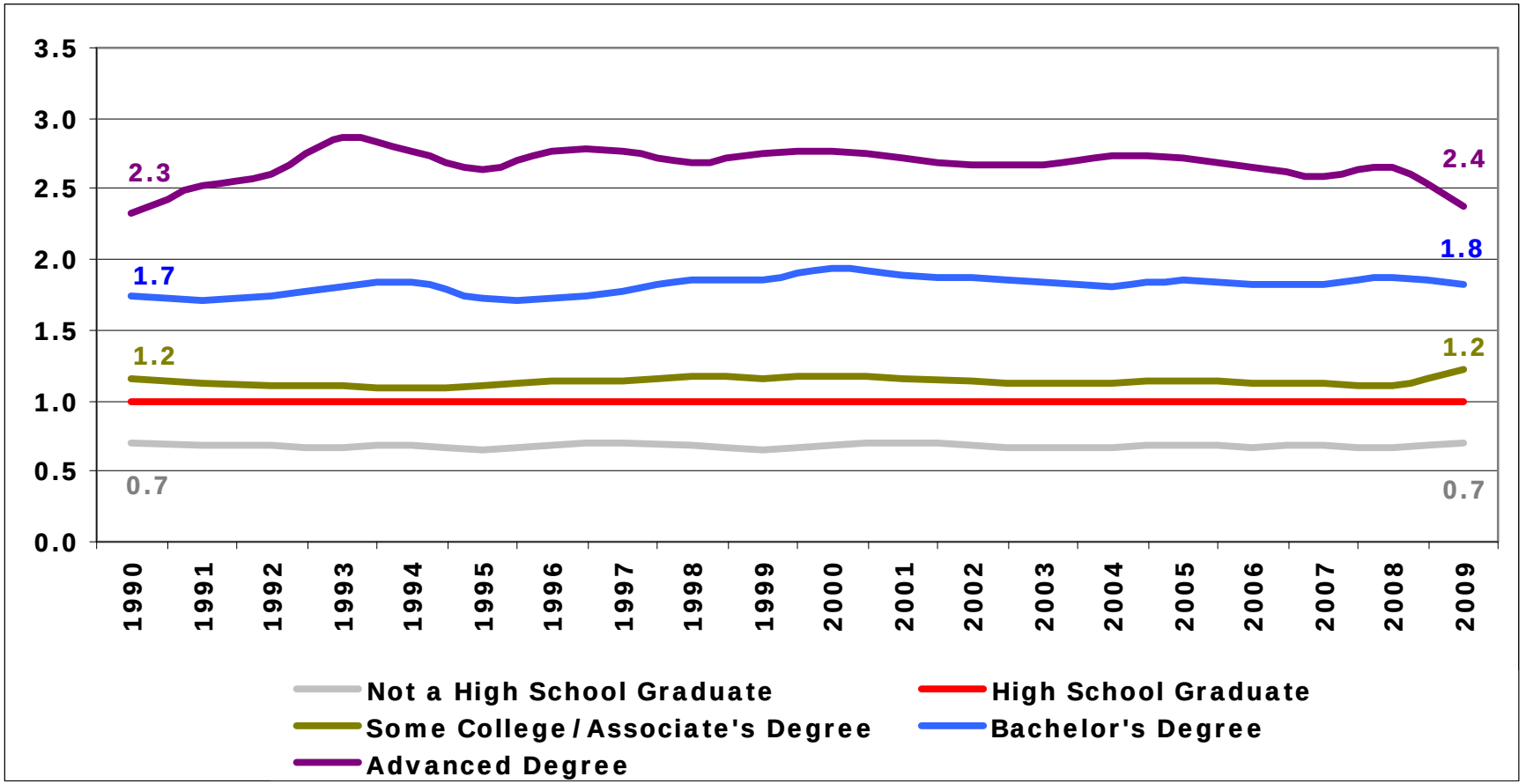
CHART 2: U.S. UNEMPLOYMENT RATE BY EDUCATION ATTAINMENT
(SEASONALLY ADJUSTED)
2000-2010YTD



Source: U.S. Bureau of Labor Statistics.

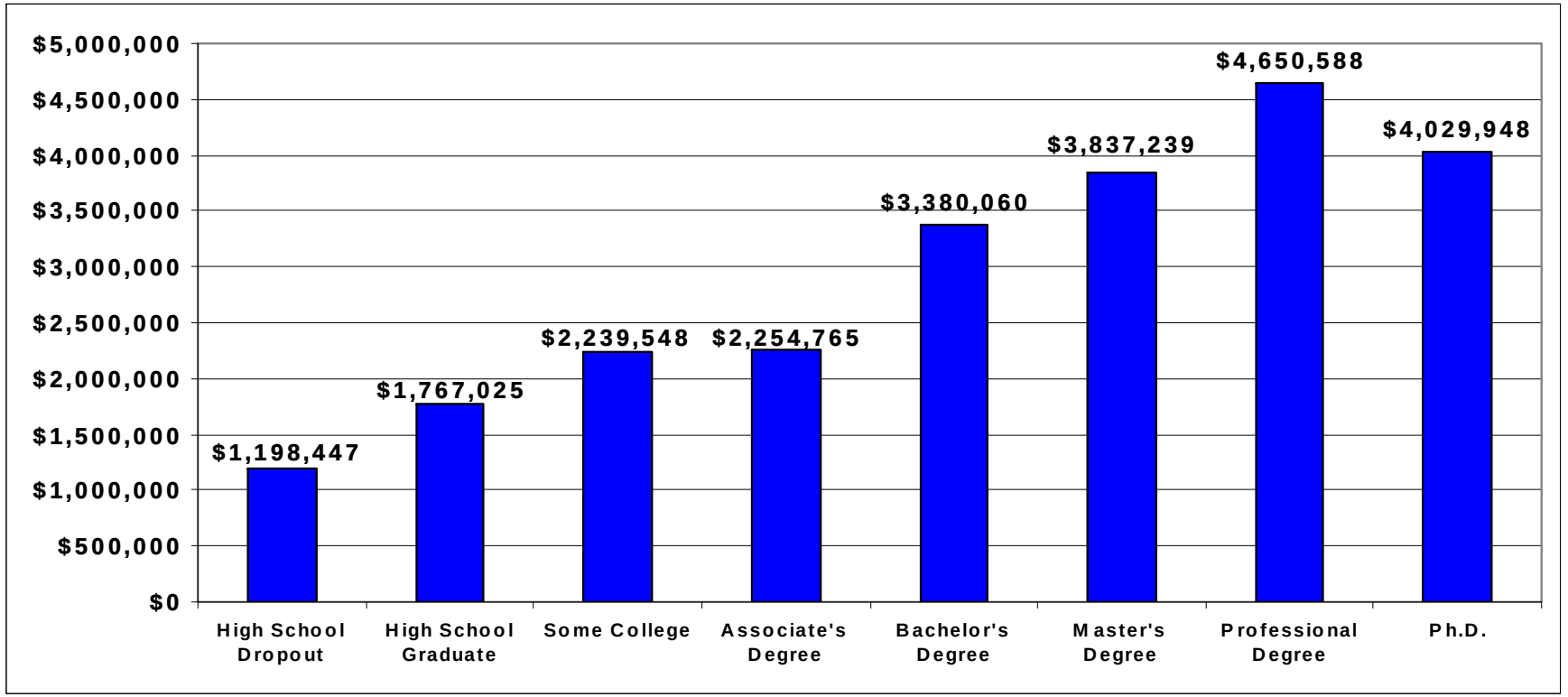
Notes: For persons 25 years and over.
YTD 2010 data includes data for Q1 2010 through Q3 2010.

CHART 3: U.S. WAGE PREMIUMS (AVERAGE EARNINGS AS A PROPORTION OF HIGH-SCHOOL GRADUATES' EARNINGS), BY EDUCATIONAL ATTAINMENT 1990-2009



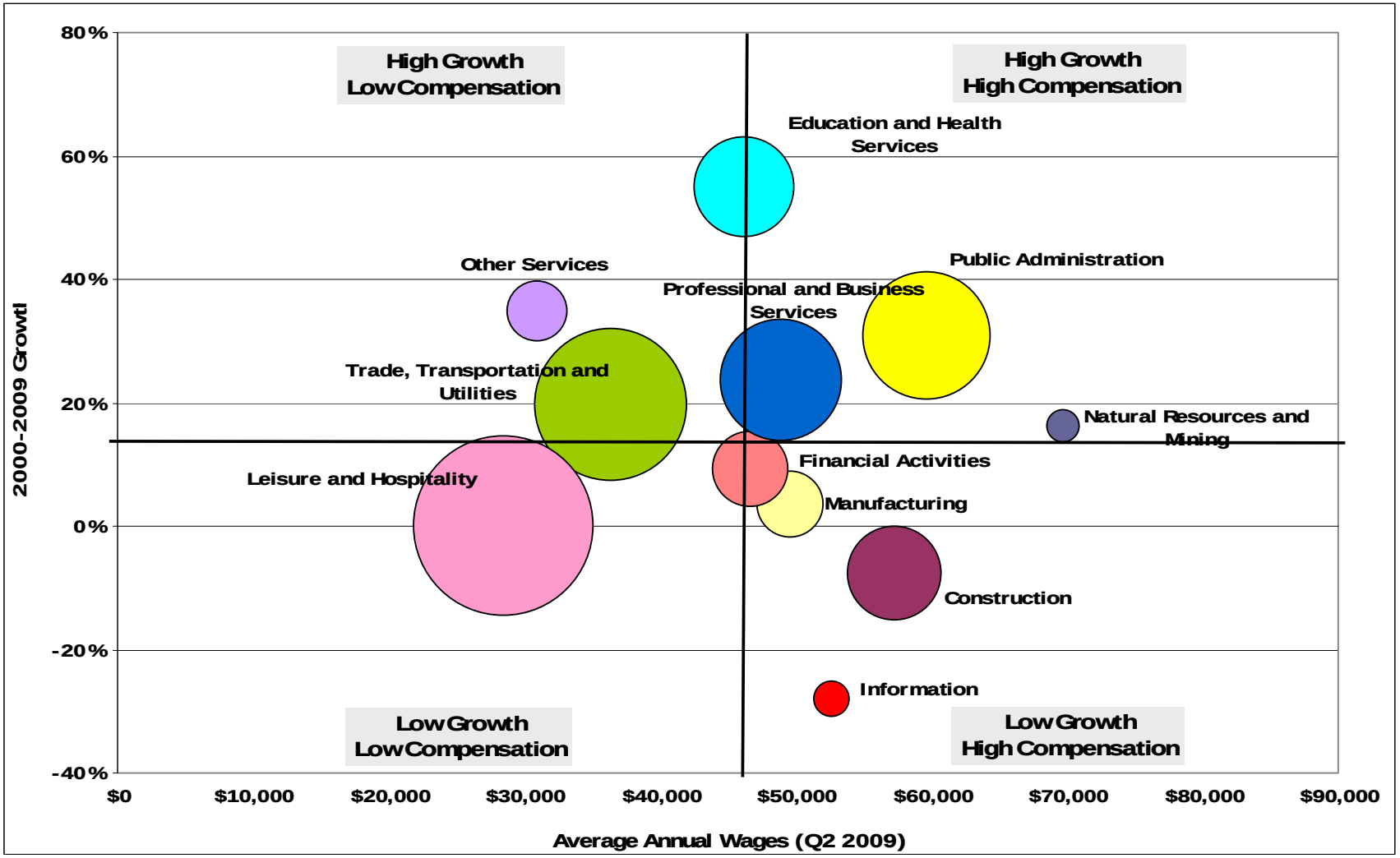
Source: U.S. Census Bureau, Current Population Survey.
Note: 1990-2008 data shows mean earnings of workers 18 years and over, whereas 2009 data is for workers 25 years and older.

CHART 4: U.S. ESTIMATED AVERAGE LIFETIME EARNINGS BY EDUCATION LEVEL (IN CURRENT DOLLARS)



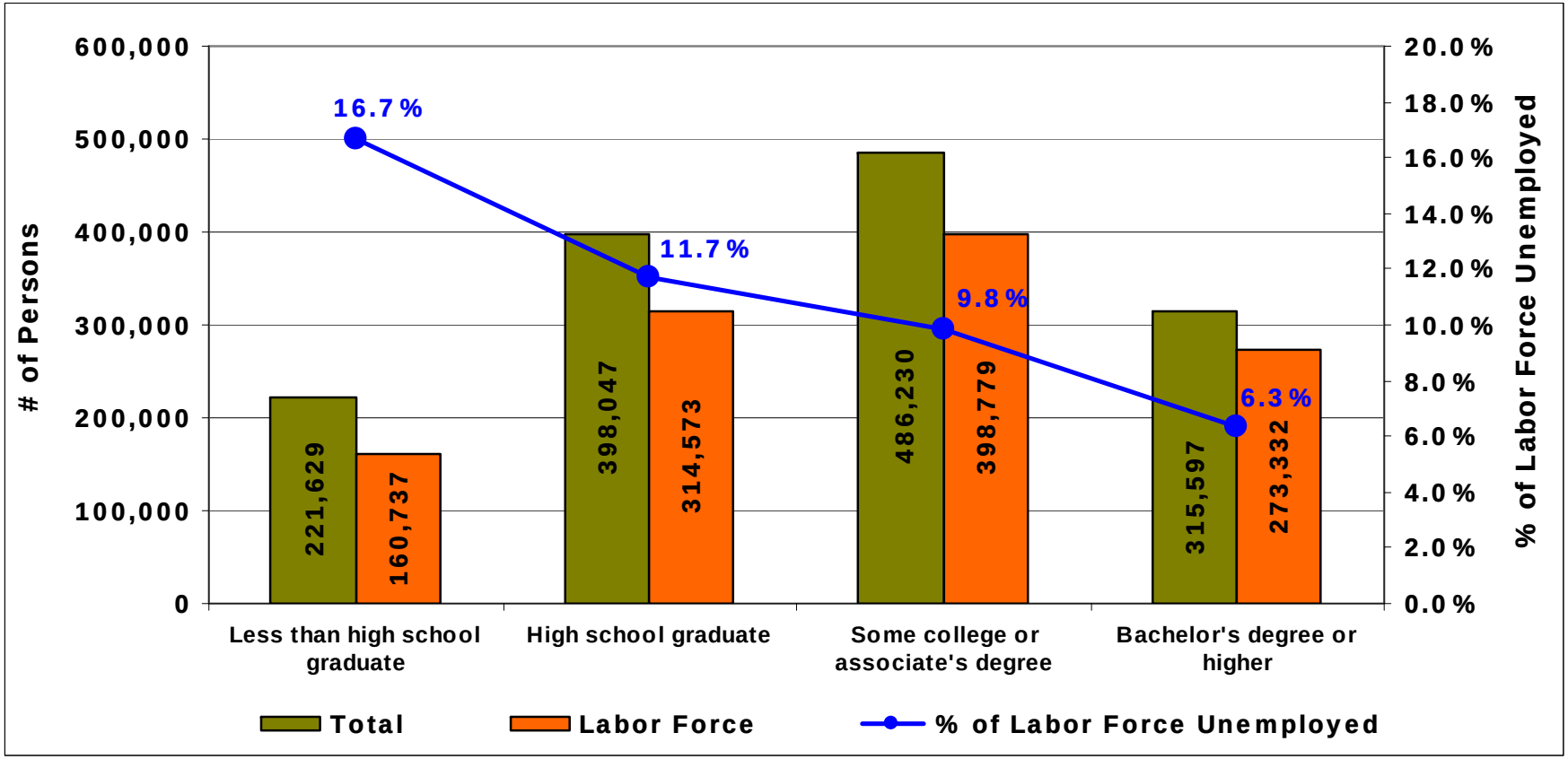
Source: Carnevale, A., Smith, N., Strohl, J. Projections of Jobs and Education Requirements Through 2018. Georgetown University Center on Education and the Workforce. June 2010, based on the from Bureau of Labor Statistics, Current Population Survey, March 2008.

CHART 5: NEVADA INDUSTRIES BY GROWTH RATE, NUMBER OF EMPLOYEES, AND AVERAGE ANNUAL WAGES



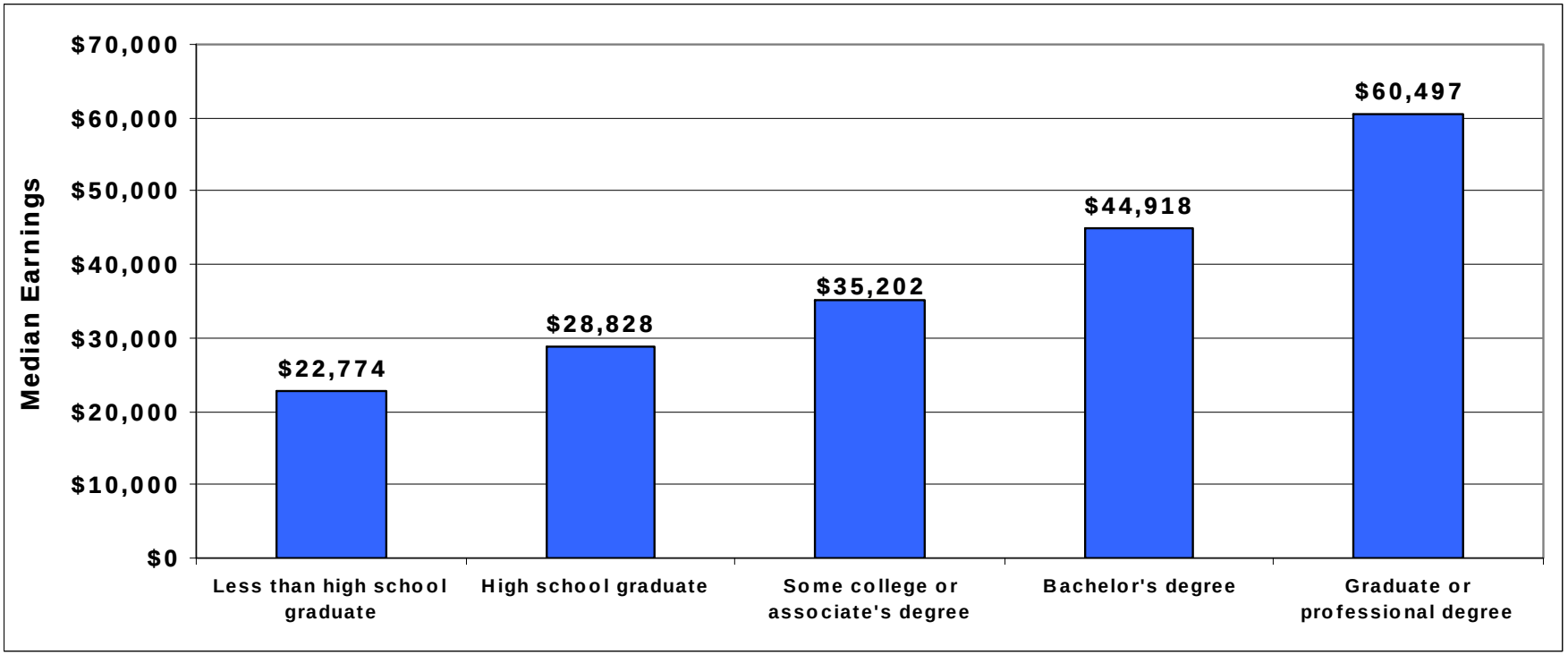
Source: DETR, RCG.

CHART 6: EDUCATIONAL ATTAINMENT BY EMPLOYMENT STATUS: NEVADA 2009



Source: 2009 American Community Survey.
Note: For persons 25 to 64 years.

CHART 7: MEDIAN EARNINGS IN THE PAST 12 MONTHS (IN 2009 INFLATION-ADJUSTED DOLLARS) BY EDUCATIONAL ATTAINMENT: NEVADA, 2009



Source: 2009 American Community Survey.
Note: For persons 25 years and over.