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# Shaping Nevada's Future: What the State Can Do to Invest in College Access and Success

BY NIRJAN RAI



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#### **EXECUTIVE SUMMARY**

Fueled primarily by the success of its gaming industry, Nevada has developed a booming economy in less than 50 years. Today, the gaming and hospitality industry serves as an integral part of Nevada's economy, employing more than 25 percent of the workforce and providing a major revenue source for the state. However, the rise of global competition along with recent political and economic volatility has led to increasing skepticism about Nevada's ability to sustain its prosperity with a one-dimensional economy. Many analysts and policymakers believe it is in the interest of the state to diversify its economy by attracting new industries offering high-skilled, high-wage jobs.

However, Nevada is not fully prepared to make this transition. For all its wealth, Nevada ranks among the weakest states in the nation in postsecondary educational attainment. To change this ranking, the state must make a significant investment in promoting a college-going culture. Higher education can lead to significant economic benefits for individuals and the state, and it can also help to develop informed consumers, an educated electorate, and a community with greater social cohesion and appreciation for diversity.

Nevada students face critical barriers that impede access and success in postsecondary education. For example, many students—particularly those from low-income families and minority groups—are troubled by the rising cost of college and the lack of need-based financial assistance to cover these costs. Moreover, many of these students lack the guidance at home, at school, and in the community that would enable them to dream of pursuing a postsecondary degree, let alone provide them with necessary information about college admissions and financial aid. To address these concerns, we make the following recommendations.

Emphasize early intervention. Early intervention programs—packaged as a comprehensive effort and adapted to the needs and strengths of local communities—should be designed to increase awareness about the benefits of higher education, help students and their families aspire to a college education, provide information about the college applications process and financial aid options, and prepare students for the rigors of postsecondary education.

**Increase family involvement.** Parents play a crucial role in their children's educational aspirations, but getting them involved can be a difficult task, especially in a city like Las Vegas where many parents work double shifts or odd hours. Given the demographics of the newer population in Nevada, parental outreach programs should recognize the cultures, skills, and resources available to the community and present materials in language people can understand (Perna 2005).

**Increase targeted financial aid.** Previous reports have shown that Nevada invests very little in need-based financial aid. Because the cost of college is a primary barrier to postsecondary access, especially for students from low-income families and minority groups, Nevada must provide more aid targeted to these students.

Nevada students also demonstrate relatively low levels of postsecondary success, which can be attributed to three key barriers: a lack of academic preparation among high school graduates; the cost and confusion associated with the process of transferring from a two-year to a four-year institution to complete a degree; and the increasing number of part-time college students, for whom job commitments often take precedence over academics. To address these concerns, we make the following recommendations.

**Emphasize academic preparation.** The lack of academic preparation that prevents many Nevada students from succeeding in college can best be addressed at the K–12

level, perhaps through high school reform initiatives. Nevada must also consider new efforts to recruit and retain qualified teachers, especially those with the ability to teach students for whom English is a second language. Finally, the state should also investigate renewed involvement with the American Diploma Project and similar college readiness initiatives.

Facilitate the process of transfer. To help students transfer between postsecondary institutions, Nevada colleges and universities should work to better align their course requirements. Transfer rates might also be enhanced by an incentive system for state funding of higher education in which institutions receive financial rewards for successful transfers. Finally, Nevada must work to provide more financial assistance to low-income students to help cover the cost of attending a four-year institution.

Provide career and technical exchange (CTE) pathways. Given the reality of Nevada's economy, students would benefit from more options for career and technical education through which they can quickly develop a marketable skill. At the same time, it is important to provide opportunities for these students to transition into colleges and universities through transferable credits earned from their CTE education.

Make postsecondary success a state priority. Federal and state policies have historically favored the issue of college access over that of college success (Hauptman 2007), so many postsecondary institutions have focused on admissions rather than on retention and completion. Nevada should consider providing financial incentives to institutions based on their performance in retaining and graduating students.

Developing new investments in college access and success will require the participation of three primary institutional stakeholders in Nevada: the education sector, the business community, and the state government. We offer the following recommendations for ways these stakeholders can help promote access and success at the postsecondary level.

**Prioritize higher education.** Initiatives to encourage adequate funding will be an important indicator that Nevada is willing to make higher education a state priority. The higher education community in Nevada must work to promote and maintain informed public discussions about the role of higher education in the state.

**Emphasize coordination among stakeholders.** Connections among the three primary stakeholders are crucial to promote investment in higher education in Nevada. A stronger and more coordinated relationship among these stakeholders will help ensure the level of accountability and transparency that is essential to make higher education accessible and affordable to every Nevadan.

**Develop strategies based on consistent and relevant data.** Nevada would benefit from a comprehensive database capable of tracking students from K–12 education through the postsecondary level and into the workforce. Such a database would increase accountability at each educational level.

Create a long-term political vision. Fundamental policy change takes commitment and perseverance—and a vision within which comprehensive public policy can be built. Nevada is in a position to choose between maintaining the economic status quo and moving forward into a new economic world. State policies surrounding higher education will play a crucial role in that choice and in Nevada's future.

#### INTRODUCTION

Faced with global competition and a new knowledge-based economy, many state policymakers are coming to appreciate the connection between investment in higher education and economic growth. An increasing number of states have made substantial investments in higher education to avoid falling behind in the competition for new jobs and new industries. Nevada, however, has not made this kind of investment, despite warnings that the state's underperformance in promoting higher education "could limit [its] access to a competitive workforce and weaken its economy over time" (National Center for Public Policy and Higher Education [NCPPHE] 2006, 3).

Nevada ranks at the bottom of many national measures of college access and success. The lack of postsecondary achievement has not generally been considered a serious problem because the state has become wealthy hosting the largest casino industry in the world—an industry that does not require a college degree for many of its jobs. However, an increasing number of Nevadans are realizing that they can no longer sustain a middle-class lifestyle without a postsecondary degree. Moreover, as Nevada attempts to define its place in the global economy, policymakers must decide between the economic status quo and transformation to a more diversified economy. If they choose the latter, they will have to invest in their citizens.

This study uses a variety of existing data sources, along with interviews with state and local policymakers, K–12 and higher education officials, students, and citizens of Nevada. Focusing on Clark County, the report explores the barriers that Nevada students—particularly those from low-income families and racial/ethnic minority groups—face in their pursuit of postsecondary education. These barriers are similar to those found across the nation, but they are complicated by Nevada's unique

economic situation. The report also identifies the responsibilities of three primary stakeholders—the education sector (both K–12 and postsecondary), the business community, and the state government—in promoting access to and success in higher education. Finally, we offer a number of recommendations to help Nevada increase access and success at the postsecondary level.

#### THE IMPORTANCE OF HIGHER EDUCATION IN NEVADA

In this section, we examine the unique economic composition of Nevada, its ongoing demographic trends, and the impact these factors may have in shaping the future of the state. In general, we found a lack of visionary leadership for college access and success as Nevada moves into the 21st century. Without more investment—both financial and social—in increasing access to and success in higher education, the low educational attainment of the state's labor force will make it challenging for Nevada to meet the demands of a knowledge-based economy.

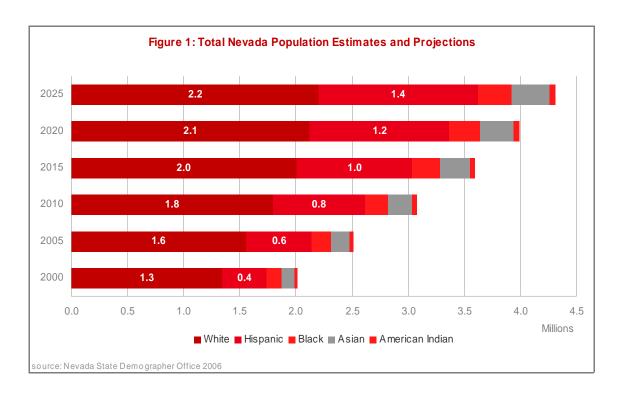
#### The New Face of Nevada

For many years, mining was the primary industry in Nevada, and it still is important in several rural areas. However, after World War II, the casino business began to boom, and mining was quickly overshadowed by the gaming and entertainment industry (Tingley 1993). The neon signs of present-day Las Vegas, rather than its silver mines, have become emblematic of the Silver State. The profits raked in by the casinos, and the associated hospitality industry, have become a major revenue source for Nevada. In 2006, for example, 20 percent of the state's general fund revenues came exclusively from gaming taxes (Augustine 2006).

The success of these industries has also meant abundant career opportunities and economic rewards for the residents of Nevada—as can be seen in an unemployment rate that has historically remained below the national average and a per capita personal income that has remained above the national average (Rural Policy Research Institute 2006). The hospitality industry today employs approximately 27 percent of the state labor force, and the top 10 largest private employers in Nevada are hotels and casinos (Nevada Department of Employment, Training and

Rehabilitation [NDETR] 2008). The tourists (more than 38 million a year in the past few years), who come primarily for the gaming and entertainment and who fill the hotels and restaurants, also have a significant impact on other industries, such as retail sales (Center for Business and Economic Research [CBER] 2008). The construction industry, which employs about 11 percent of the labor force (NDETR 2008), also benefits from the demands of the increasing population, the relatively high income of residents, and the new casinos and hotels that are built every year.

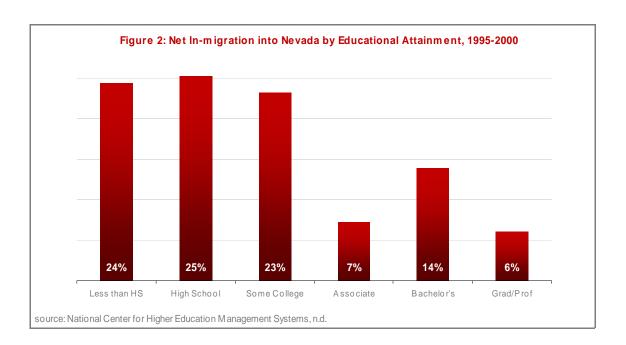
In response to the economic opportunities in the world's biggest casino industry, a significant number of people have migrated into Nevada "with the intention of finding and/or making a better life" (Governor's Task Force on Tax Policy in Nevada 2002, 6). Nevada has been the fastest growing state in the United States for 20 of the past 21 years. Between 2000 and 2006, Nevada experienced a 23 percent increase in population, significantly higher than the 4 percent increase nationwide. Today, more than 2.5 million people live in Nevada, and the population is projected to top 4 million by 2025 (Figure 1). A significant portion of the population increase has been in three counties: Clark, Washoe, and Nye. Clark County is of particular interest to this report for two reasons: (1) it hosts the Las Vegas casino industry, and (2) it is home to more than 70 percent of state residents.



This population increase has also dramatically transformed Nevada's racial/ethnic composition. Between 1980 and 2000, the White working-age population of Nevada decreased from 86 to 70 percent; it is projected to drop below 60 percent by 2020. During the same period, the percentage of minorities ages 25 to 64 increased from 14 to 30 percent and is projected to reach well over 40 percent by 2020 (NCPPHE 2006). There has been considerable in-migration by Black and Asian individuals, who now constitute about 8 and 6 percent of the population, respectively, but Hispanic residents, have experienced the largest population increase. They currently make up 24 percent of the population, and analysts project this group to increase to approximately 33 percent of the state population by 2025 (Nevada State Demographer Office 2006). The changing population dynamic is noticeable in several key places. For example, in 2006, for the first time, Hispanic students outnumbered White students in the Clark County School District (Planas 2006).

An important characteristic of these new Nevada residents is their low educational attainment. Seventy-two percent do not have a postsecondary degree, which

indicates that Nevada has been attractive primarily to lower skilled workers (Figure 2). Not surprisingly, many of these people are employed in low-wage service jobs in the hospitality industry (Riddel and Schwer 2003b). But low educational attainment is not characteristic just of the newer population. As the casino-based economy flourished, many Nevadans were able to achieve a middle-class lifestyle without having to acquire a college degree. In the early 1990s, Nevada was already at the bottom of various national postsecondary rankings. In 1992, for example, it ranked 50th in the likelihood that ninth graders would enroll in college by age 19. In 1990, it ranked 48th in the likelihood that first-time college freshmen would return for their second year (National Center for Higher Education Management Systems [NCHEMS] 2007).



In recent years, Nevada has continued to demonstrate low postsecondary performance. For example, in 2006, Nevada ranked 47<sup>th</sup> in the nation in postsecondary attainment, with only 21 percent of the population between ages 25 and 64 having completed a bachelor's degree, compared with 29 percent nationwide (NCHEMS 2007). In 2007, the state ranked 49<sup>th</sup> in college graduation, with only 38

percent of first-time full-time students earning a bachelor's degree within six years, compared with 56 percent nationwide (NCHEMS 2007). For all its wealth, Nevada ranks with some of the poorest states by almost every measure of higher education access and success.

The educational attainment of the minority population in Nevada is also very low. As Table 1 shows, 46 percent of Black Nevada residents and 43 percent of Native Americans have no postsecondary experience. Perhaps the biggest concern for Nevada is the educational attainment of its rapidly increasing Hispanic population: Approximately 74 percent of these residents have no postsecondary experience, and 46 percent have not completed high school (NCHEMS 2007).

	Less than High School	High School	Some College	Associates'	Bachelor's +
Nevada	18	29	28	7	19
US	16	28	22	7	27
White	8	31	28	8	25
Black	11	35	28	9	17
Hispanic	46	28	14	4	8
Asian/Pacific Islander	11	24	24	8	33
American Indian/Alaska Native	8	35	25	14	19

## Diversifying Nevada's Economy

Even by the most conservative estimates, there is no doubt that the gaming and hospitality industries are likely to remain the dominant industries in Nevada. As the state moves into the 21st century, many people believe that the success of these industries is "a safe bet" (Augustine 2006, 15). But others cite various economic and social indicators that point to the need for Nevada to diversify its economy. For example, the state suffered a severe economic disruption in 2001 when Las Vegas experienced a dramatic drop in the number of visitors following the 9/11 terrorist attacks (Mille 2006). Similar disruptions nationwide showed the vulnerability of one-

dimensional tourism-based economies (Riddel and Schwer 2003a). Although recent reports indicate that the economy of Nevada has returned to its pre-9/11 level, other fiscal upheavals, such as the current economic crisis, may lead to trouble for the state (Spillman 2008).

Analysts have also suggested that Nevada could learn from the failures of other states. The fact that the economies of the Manufacturing Belt were brought to their knees by foreign competition illustrates the danger of a non-diversified economy (Riddel and Schwer 2003a). Nevada has already experienced an increase in competition for lucrative gaming profits from the Internet, tribal casinos, and other states that have legalized some forms of gambling. While research has yet to show that Nevada has suffered from this competition, many people agree that it would be a good policy decision for Nevada to prepare for the uncertainties that lie ahead.

According to the Nevada Development Authority in Las Vegas, initiatives are in place to attract industries—especially technology, biotech, and renewable energy—that pay high salaries. Promoters advertise Nevada's pro-business environment and cite the lack of a state corporate income tax or franchise tax, the ease and benefits of incorporating in the state, and the creation of a business court to minimize the time, costs, and risks associated with litigation (Nevada Secretary of State 2007). The state offers other incentives to relocating companies, such as sales and use tax abatement/deferral and property tax abatement. These incentives, along with Nevada's world-class infrastructure, 1 can help attract high-tech and other new economy industries.

However, unlike many jobs in the gaming and hospitality industries, the higher wage jobs in the new knowledge-based economy require significantly more

<sup>&</sup>lt;sup>1</sup> Nevada ranked second in infrastructure resources in the 2007 Development Report Card created by the Corporation for Enterprise Development (CED 2007).

postsecondary education. Nevada, with its low educational attainment, is unprepared to meet these demands. The Development Report Card created by the Corporation for Enterprise Development (CED) "to provide a more comprehensive description of each state's economy and its effort to create a hospitable climate for both business and workers" cites the lack of college-educated residents as a major weakness for Nevada (CED 2007).

### Other Benefits of Higher Education

The individual economic benefits of higher education can already be seen in Nevada. Residents who have a college degree reported a significantly higher income than those with only a high school diploma. High school graduates in Nevada in 2006 earned approximately \$30,570, while bachelor's degree graduates earned approximately \$42,970 (U.S. Census Bureau 2007). Similarly, in the population over age 25, the poverty rate for those with less than a high school degree was almost three times higher than that for those with a bachelor's degree (NCPPHE 2006).

The returns from postsecondary education are not limited to economic benefits. Previous studies have identified a range of non-economic benefits that people enjoy as a result of their postsecondary experience, including improved personal health for themselves and their families, better consumer decision-making, and greater personal status in the community (Baum and Ma 2007; IHEP 1998). These studies also identify benefits enjoyed by the community at large from additional higher education, such as a decrease in crime, an increase in charitable giving, and greater social cohesion and appreciation for diversity (Table 2).

	Public	Private	
	Increased Tax Revenue	Higher Salaries and Benefits	
ü	Greater Productivity	Employment	Д
Economic	Increased Consumption	Higher Savings Level	Economic
Щ	Increased Workforce Flexibility	Improved Working Conditions	C
	Decreased Reliance on Government Financial Support	Personal/Professional Mobility	
Social	Reduced Crime Rates	Improved Health/ Life Expectancy	
	Increased Charitable Giving/ Community Service	Improved Quality of Life for Offspring	
	Increased Quality of Civic Life	Better Consumer Decision Making	Social
	Social Cohesion/ Appreciation for Diversity	Increase Personal Status	
	Improved Ability to Adapt to Use Technology	More Hobbies, Leisure Activities	
	Public	Private	

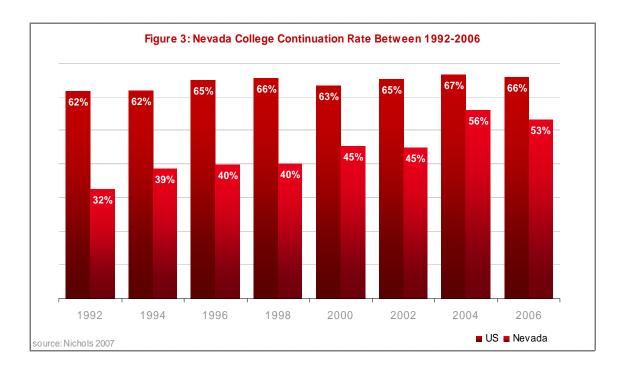
There are, moreover, other reasons for Nevada to invest in higher education. The state faces acute shortages in various critical professions. For example, Clark County is in urgent need of qualified high school math and science teachers because of its rapid population growth (Planas 2007). Additionally, Nevada is projected to experience a more than 200 percent increase in its retirement-age population between 2000 and 2025 (NCHEMS 2007), which will exacerbate its existing shortage of health care professionals (Western Interstate Commission for Higher Education [WICHE] 2008). Most importantly, analysts project that Nevada's reliance on sales and gaming taxes will be inadequate to support schools and other social services for its growing population (McRobbie and Makkonen 2005).

Almost everyone we spoke with while preparing this report was conscious about the importance of higher education in Nevada: Students defined it as a way to increase social mobility and achieve success; business and community leaders saw it as a

source of educated and skilled employees; social activists saw it as a way to build a responsible citizenry; and policymakers saw it as an instrument to drive the state's economy forward. Despite this awareness, however, Nevada lags behind the nation in postsecondary educational attainment by almost every measure, suggesting that serious barriers to college access and success exist in the state.

#### BARRIERS TO POSTSECONDARY ACCESS

Historically, relatively few Nevada high school graduates have enrolled in college immediately after completing high school (Figure 3). Only 28 percent of Nevada residents between the ages of 18 and 24 were enrolled in college in 2006, compared with 41 percent for the top states in this category (NCPPHE 2006). These numbers indicate that many Nevada students never even start on the postsecondary path.



The figures are even lower for students from low-income and minority families. Students from high-income families are more than twice as likely to enroll in college as students from low-income families, and White students are twice as likely to enroll as non-White students (NCPPHE 2006). These numbers raise questions about why Nevada's young people, especially those from low-income and minority families, are not seeking a college education.

#### **Economic Barriers**

Numerous studies have proposed the high cost of postsecondary education as one of the primary barriers to college accessibility for students nationwide (e.g. Hauptman 2007). Tuition at public postsecondary institutions in Nevada is lower than the national average: \$1,695 versus \$2,017 for public two-year institutions; \$2,844 versus \$5,685 for public four-year institutions; and \$13,552 versus \$20,492 for private four-year institutions as of 2008–09 (Chronicle of Higher Education 2009). However, families in Nevada devote a larger share of their income to cover the higher net price (i.e., college expenses minus financial aid) to attend Nevada's public institutions, especially compared with the top-performing states (NCPPHE 2006). Several students we interviewed who were not enrolled in college cited cost as a significant factor in their decision not to attend college.

One reason for this situation is that Nevada provides very little financial support to its needy students. In *Measuring Up 2006: The National Report Card on Higher Education*, Nevada received a failing grade, because it "makes little investment in need-based financial aid" (NCPPHE 2006). Only about 25 percent of Nevada's state grants for higher education are need-based, 48 percent lower than the national average (WICHE 2008). In 2000, Nevada enacted the Governor Guinn Millennium Scholarship Program with the goal of increasing postsecondary enrollment, but such merit-based state aid has been shown to be less successful than need-based aid in increasing student enrollment from low-income families and minority groups (Heller and Rasmussen 2001). In fact, some researchers have suggested that merit-based scholarships channel benefits to upper income families at the expense of low-income students, who may not have the same academic opportunities in high school (Sanoff and Powell, 2003).

The dissemination of accurate information about postsecondary affordability is another major problem for Nevada. The lack of financial aid awareness among students and parents leads many families, especially low-income families, to perceive postsecondary education as beyond their reach, whether or not that is actually the case (Tierney forthcoming).

Another factor in Nevada's low postsecondary enrollment rates is a belief in the ready availability of high-paying jobs in the gaming and hospitality industries, commonly referred to as "the lure of the Strip." Students are believed to either drop out of high school or choose not to enroll in college because they can make \$60,000 a year parking cars. Nevada (and Clark County in particular) is in a unique position because of the availability of low-skilled jobs in these industries, and a decent-paying job can be an attractive alternative to college for students from low-income families who want to break out of poverty and into a life of independence.

But the decision to work rather than attend college ultimately limits the options available to Nevada residents. Many people end up working multiple jobs and barely making a living wage (McRobbie and Makkonen 2005). Some families need all able members to contribute to their income, and the cost associated with sending a family member to college can be a significant barrier. As a result, many students forgo college entirely, while the more determined ones attend on a part-time basis at best. In fact, it seems likely that a significant number of students who decide not to enroll in college are not lured by the temptation of high-paying jobs on the Strip or elsewhere in Nevada, but are working out of financial necessity.

#### **Social and Institutional Barriers**

The lack of a college-going culture<sup>2</sup> has been shown to be one of the primary reasons for low postsecondary enrollments nationwide, particularly for students from low-income and minority families and first-generation students (College Board 2006). Young people whose parents have at least some college experience—and, therefore, the necessary "college knowledge"—are more likely to enroll than those whose parents have never experienced college (Vargas 2004). The lack of a college-going culture in Nevada, where approximately half the adult population has no college experience, is likely an important factor in the state's low postsecondary enrollment.

Many communities in Nevada lack the resources to develop a favorable environment for postsecondary education. In our research, we were frequently reminded of the absence of strong role models in many communities. Without such guidance, students are more susceptible to risky behaviors—such as violence, substance abuse, and unprotected sexual activity—that may lead them to drop out of high school or prevent them from continuing their education. Between 1992 and 2000, the state had the highest rate of teen pregnancy in the nation (Guttmacher Institute 2006). In 2006, Nevada also had a higher percentage of youths in juvenile detention and correctional facilities than the national average (Kids Count Data Center 2008). According to the Children's Defense Fund (2007), minority youth in Nevada are disproportionately represented in the "cradle-to-prison pipeline."

Low-income and minority students are especially dependent on schools for support and guidance (Perna and Cooper 2006), but the K–12 system in Nevada has the highest dropout rate (11 percent) and the lowest public high school graduation rate

perspective to enhance access and success in postsecondary education."

<sup>&</sup>lt;sup>2</sup> College Tools for Schools (n.d.) defines college-going culture as "the environment, attitudes, and practices in schools and communities that encourage students and their families to obtain the information, tools, and

(49 percent) in the nation (Kids Count Data Center 2008; NCHEMS 2007). This performance indicates a fundamentally broken system and an inability to provide students with the academic foundation they need to continue and excel at the postsecondary level. Schools in Nevada face increasing challenges and have few resources with which to address them. For example, the number of students for whom English is not the primary language has grown significantly in recent years, but many schools do not have properly trained teachers to meet their needs (McRobbie and Makkonen 2005).

Another result of insufficient resources for K-12 education is inadequate postsecondary guidance counseling in most public schools in Nevada. Researchers have shown that counseling is especially beneficial to students whose parents may be unable to help them prepare for college (Perna and Cooper 2006). The ideal counselor-to-student ratio recommended by the National Association for College Admission Counseling (NACAC) is 1:100; in Nevada, the ratio is more than 1:500 (Hawkins and Clinedinst 2006). According to this study, counselors in schools with such high ratios spent significantly less time on postsecondary counseling and more on scheduling high school courses and personal needs counseling. Nevada students with whom we spoke confirmed that school counselors had little time for college counseling; they said counselors in their schools devote most of their time to students at risk of dropping out.

The difficulty in providing adequate college counseling to students is exacerbated by the transience of Nevada's population. According to the 2000 Census, only 37 percent of Nevada's population had lived in the same residence in 1995, compared with 54 percent nationwide. In contrast to more conventionally rooted families, the newer population of Nevada is likely to move frequently in search of lower rent and better paying jobs (McRobbie and Makkonen 2005). The increasing population adds to this challenge, especially in Clark County where the school district has been

adding new schools at a breakneck pace. In the 2009–10 school year alone, four new elementary schools and one new high school are scheduled to open, which is likely to cause further reshuffling of students. The high level of transience makes it difficult for schools to intervene early when students struggle with their studies or to provide them with consistent guidance on how to prepare for and apply to college.

#### Recommendations

Financial barriers are important, but they are not the only impediments that prevent students in Nevada from enrolling in higher education. Low postsecondary participation is the result of a complex combination of financial concerns, challenges in the K–12 education system, and the lack of a college-going culture. The following recommendations are intended to offer possible solutions while recognizing the complexity of the situation.

#### Recommendation 1: Emphasize Early Intervention

Numerous studies on the issue of postsecondary access have emphasized the need to intervene early (Perna and Cooper 2006, Vargas 2004, Hauptman 2007)). Early intervention programs can be designed to increase awareness about the benefits of higher education, help students and their families aspire to a college education, develop an understanding of the application process, provide information about the financial options, and prepare students for the rigors of postsecondary education.

The benefits of early intervention programs can be maximized if they are packaged as a comprehensive effort and adapted to the needs and strengths of the local community (Perna and Cooper 2006). In Nevada, the newer population has largely migrated to the state for economic opportunities, and achieving financial stability is a key factor in their decision-making. For many of these new residents, even

completing a high school diploma may seem challenging. It is necessary to market higher education as achievable and relevant to their personal aspirations.

One possible approach to increased early intervention in Nevada would be to place additional emphasis on support for established programs, such as Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) and the various TRIO programs that help students from economically disadvantaged families prepare for college. Volunteer organizations, such as Big Brothers/Big Sisters, that help students with guidance and mentorship needs, can also provide college-going information and support. Such organizations can help the state reach more students and use limited resources more efficiently.

#### Recommendation 2: Increase Parental Involvement

Parents play a crucial role in their children's educational aspirations. Through their involvement in the various stages of college preparation, parents provide essential support for their children to enroll and succeed in higher education (Cabrera and La Nasa 2000). However, getting parents involved can be a difficult task, especially in a city like Las Vegas, where many people work double shifts or odd hours. The business community can play a key role in parental outreach by making clear to employees the value of a college education and by giving parents time off to attend to their children's college-planning needs.

In addition to work, parents may have other reasons to be hesitant about college planning. The college preparatory process may seem intimidating to parents who did not themselves attend college. They may be reluctant to seek help even when it is readily available, or they may find that the available information does not resonate with their level of college knowledge. Parental outreach programs should recognize the cultures, skills, and resources available to the community and present materials in language people can understand (Perna 2005).

#### Recommendation 3: Increase Targeted Financial Support

Research indicates that merit-based financial aid favors better prepared students from affluent neighborhoods with better high schools, students who already have a higher probability of going to college and less need for financial aid (Hauptman 2007). Meanwhile, as the purchasing power of federal Pell Grants has decreased over time (Sanoff and Powell 2003), low-income students cannot count on federal sources to provide adequate financial aid. If Nevada is to increase the postsecondary enrollment of students from low-income families and minority groups, it must provide more aid targeted at these students.

However, providing sufficient targeted aid may be a significant challenge for the state. Even the Governor Guinn Millennium Scholarship Program is battling for survival. Because the scholarship was funded through settlement money received from tobacco litigation, it is expected to go into bankruptcy if certain measures are not taken (Littlefield 2007a). Nevada has already increased the academic requirements for eligibility, and there are proposals to target funding to students who enroll in the science, technology, engineering, and mathematics (STEM) fields. Not only would these proposals modify the original objective of increasing college enrollment for Nevada students, it could further reduce the impact of the scholarship on college enrollment among low-income and minority students.

#### BARRIERS TO COLLEGE FOR UNDOCUMENTED STUDENTS

As is the case throughout the nation, the status of undocumented college students is a controversial issue in Nevada. The *Plyler v. Doe* Supreme Court case grants access to K–12 education for undocumented students, but this right does not extend to postsecondary education (Frum 2002). Undocumented students and the citizen children of undocumented residents in Nevada face significant barriers, both perceived and real. Although the Nevada System of Higher Education (NSHE) does not require that students prove they are U.S. citizens to attend public colleges and universities or to receive the Millennium Scholarship, undocumented students who do not have social security numbers cannot apply for federal student aid and are always at risk of deportation if their undocumented status is discovered. In addition, there have been repeated legislative efforts to restrict undocumented students from accessing higher education benefits in Nevada (Skinner 2008).

Undocumented immigrants nationwide are typically Hispanic, younger, less educated, and from low-income families (Passel 2005). They are more likely to be employed in occupations that require very little education, such as farming, cleaning, construction, and food preparation. Undocumented students' fear of exposing themselves—or their parents—to immigration authorities can prevent them from seeking a college education and thus from earning higher wages, which would benefit Nevada's economy.

While Nevada's current policy of making higher education available to undocumented residents seems like a sound approach for a state that needs to increase postsecondary attainment for its residents, the furor surrounding the topic of immigration makes it a sensitive political issue. State statutes expanding postsecondary education benefits to undocumented students have not been without controversy (Olivas 2004), and several states face legal challenges to their laws. California and Kansas, for example, successfully defended the legality of their undocumented student tuition policies in federal court (National Conference of State Legislature 2006). However, a recent court decision in California raise questions about the legality of offering undocumented students the same postsecondary educational benefits offered to state residents (Redden 2008). Ultimately, it seems likely that only federal action, such as passage of the Development, Relief, and Education for Alien Minors (DREAM) Act (National Immigration Law Center 2007), will alleviate the challenges faced by undocumented students seeking a college education in Nevada. Nonetheless, offering education benefits such as in-state tuition and state merit- and need-based financial aid will remain a state prerogative and will require affirming policy decisions by states intent on expanding access for undocumented students.

#### BARRIERS TO POSTSECONDARY SUCCESS

Getting high school graduates into college is only half the battle; retaining them through to graduation is equally important. The individual and societal benefits of higher education are fully realized only if students complete their degrees (Adelman 1999). This aspect of higher education accountability has only recently emerged as a priority in many state and federal policies (Hauptman 2007).

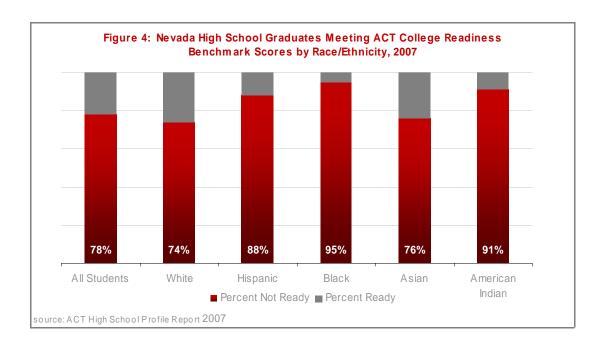
As in the area of college access, Nevada performs poorly in student persistence and on-time graduation at the postsecondary level. As of 2005, the retention rate at four-year public institutions in Nevada was 71 percent—5 percent below the national average; at two-year public institutions, the retention rate was 46 percent—6 percent below the national average (NCHEMS 2007). The six-year graduation rate for Nevada bachelor's degree students in 2007 was 38 percent—18 percent below the national average (NCHEMS 2007). These low completion rates suggest that even students who enter college in Nevada may face challenges that prevent them from completing a degree.

## Lack of Academic Preparation

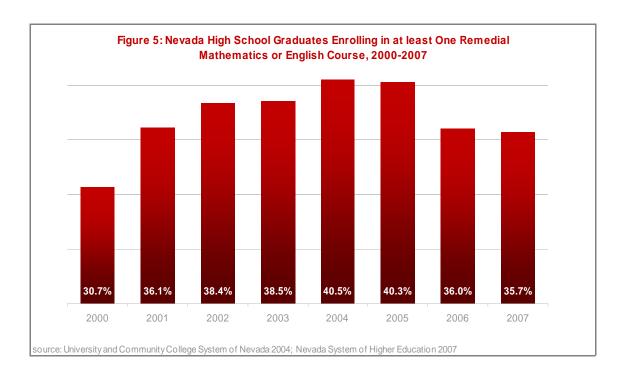
Nationwide, many students fail to persist and graduate at the postsecondary level because they are underprepared for the academic work required. According to research (e.g., Adelman 1999; Bangser 2008), a leading indicator of student success in postsecondary education is the intensity of the high school curriculum. Adelman reported that the probability of completing a bachelor's degree more than doubled for students who had completed high school mathematics beyond Algebra II; in 2006, only 49 percent of high school students in Nevada had taken at least one upper level math course (NCPPHE 2006). Another significant correlation is the positive relationship between Advanced Placement (AP) courses in high school and

bachelor's degree completion rates. In 2001, only 46 percent of high school students in Nevada took any AP courses, compared with 57 percent nationwide. Moreover, only 3 percent of low-income students in Nevada had taken an AP course, compared with 15 percent nationwide (WICHE 2002).

Perhaps as a result of taking a less rigorous high school curriculum, Nevada students have been shown to be inadequately prepared for college. In 2007, 78 percent of high school graduates in Nevada did not meet the American College Testing (ACT) College Readiness Benchmark score, which is defined as "a minimum score needed on an ACT subject-area test to indicate a 50 percent chance of obtaining a B or higher or about a 75 percent chance of obtaining a C or higher in the corresponding credit-bearing college course" (ACT 2007). Nevada's numbers are similar to the national average, but this only indicates that high school graduates around the nation are unprepared for the academic challenges at the postsecondary level. As Figure 4 indicates, students from minority groups in Nevada perform even less well on this measure.



This lack of academic preparation means that many students who enroll in college must take remedial courses. In Nevada, almost 41 percent of high school graduates who enrolled in college in 2004 had to take at least one remedial math or English class (Figure 5). While these percentages have dropped in recent years—perhaps because of changes in state funding for remedial courses at the University of Nevada-Las Vegas (UNLV) and the University of Nevada-Reno (UNR) in 2006—nearly 36 percent of Nevada students still enroll in remedial courses. Research has shown that students who take remedial courses, particularly in math and reading, are less likely to complete their college degrees (Camara 2003). Remedial courses increase the time students must take to finish a degree and add to the cost of postsecondary education for both the student and the state, suggesting that the lack of academic preparation for college-bound students is a serious problem.



#### **Transfer and Articulation**

As tuition and fees have increased and admissions criteria for four-year institutions have become more stringent, community colleges have become a popular postsecondary alternative in Nevada. For example, enrollment at the College of Southern Nevada (CSN)—the largest college in the Nevada System of Higher Education (NSHE) offering two-year degrees, certificates, and workforce training—increased by 107 percent between 1994 and 2003 (College of Southern Nevada n.d.). Given the increasing number of graduates from Nevada's high schools, this enrollment trend is likely to continue (Prescott 2008).

Community colleges have traditionally served as a stepping-stone to a postsecondary degree for many low-income, nontraditional, and first-generation students nationwide (Wellman 2002). But students are not the only ones who recognize the value of community colleges; college officials and policymakers also realize the important role these institutions play in the realm of postsecondary education policy. By increasing the academic requirements for admission at UNLV and UNR, the Board of Regents is encouraging more students to start higher education at a community college.

The expanded role for community colleges makes the process of transfer and articulation an essential factor in increasing the rate of bachelor's degree completion among Nevada students. But the reality in Nevada of students successfully transferring from a two-year to a four-year institution in order to complete their degree does not reflect this. In our interviews, college officials repeatedly cited a lack of coordination between two-year and four-year institutions, especially in transferring credits, as a primary barrier faced by many students. While NSHE has a specific Board of Regents policy and formal agreements to facilitate transfer, students still have a difficult time navigating this complex process. Without a proper

understanding of credits and their transferability, students may waste time and resources on nontransferable credits.

Even when community college students do manage to transfer to a four-year institution, they face financial and institutional barriers. Cost is one such barrier. Although the difference in cost between public two-year institutions and public four-year institutions is significantly less in Nevada (\$1,149) than in the nation as a whole (\$3,668), it can still be problematic, especially for students from low-income families. Other indirect costs associated with transfer, such as moving and housing costs (for students whose families do not live close to a university), may also discourage students from transferring.

#### **Part-Time Students**

In Nevada, fewer than half of all students attend college on a full-time basis. They must balance their academic work with full- or part-time jobs. While part-time attendance helps increase enrollments and offers students more opportunity to earn money, it can prevent them from achieving academic success. Nationwide, part-time students have lower rates of persistence and graduation than full-time students, even after controlling for factors such as academic preparation and family background (Chen and Carroll 2007). This pattern holds true in Nevada. For example, in 2007, the retention rate for part-time students at UNLV was 21 percent lower than that for full-time students (UNLV 2007).

Throughout the United States, part-time students are more likely to come from low-income families, less likely to be prepared for the academic rigors of postsecondary education, and more likely to experience interruptions in college enrollment (Chen and Carroll 2007). According to NSHE (Heiss 2008), part-time Nevada students in 2007 were likely to be older than full-time students (30 years old versus 21 years old)

and to be enrolled at a two-year institution (only 18 percent of part-time students were enrolled in a four-year institution).

#### Recommendations

Success in college requires that students have adequate academic preparation before enrolling. It also requires that students, especially those who attend college part time or start at a community college, be provided with supports to help them complete a degree. The following are recommendations to increase postsecondary success for Nevada students.

#### Recommendation 4: Emphasize Academic Preparation

The lack of academic preparation that prevents many Nevada students from succeeding in college can best be addressed at the K–12 level, perhaps through high school reform. A key issue for Nevada's high schools is the lack of alignment between performance standards and "the rest of the pieces—curriculum, instruction, assessment, professional development" (McRobbie and Makkonen 2005, 27). Nevada needs to consider mandating a rigorous high school curriculum that will prepare students for postsecondary work. At the same time, the state must direct ample resources to ensuring that students develop the skills to succeed in high school. The state must also recruit and retain qualified teachers—especially those with the ability to teach students for whom English is a second language—and invest in their professional development (McRobbie and Makkonen 2005).

Another key issue is the lack of coordination between K–12 and postsecondary institutions. Ongoing efforts to link these two sectors through the Nevada P-16 Advisory Council are crucial to improving students' chances for academic success at the postsecondary level. Despite being an original member of the American Diploma Project (ADP), a collaborative effort among various states to align their high school

standards with college and career expectations, Nevada's decision to drop out of this alliance reflects the reality of the educational system of the state. Clearly, there must be renewed effort to reconnect with ADP and other college readiness initiatives.

#### Recommendation 5: Facilitate the Process of Transfer

Streamlining the transfer process in Nevada depends largely on partnerships between two-year and four-year institutions. These institutions must coordinate efforts to align course requirements and expectations. The current system of common course numbering required by the Board of Regents should decrease the confusion associated with credit transfer. Transfer rates might also be enhanced by an incentive system for state funding of higher education in which both two- and four-year institutions receive financial rewards for successful transfers.

Past reports have indicated a positive correlation between transfer rates and the level of state need-based financial aid (Wellman 2002). Earlier, we discussed the lack of need-based aid in Nevada and its impact on enrollment. The lack of such aid also creates a barrier for students in transferring from a two-year to a four-year institution to complete a bachelor's degree. For example, the state of Washington offers Educational Opportunity Grants (EOGs) for students who have completed their associate's degree or achieved junior class standing but are unable transfer to a four-year college because of financial barriers or employment concerns (Washington Higher Education Coordinating Board n.d.). For Nevada to prioritize postsecondary success, it must provide similar targeted financial assistance to help students cover the higher cost of attending a four-year institution.

#### Recommendation 6: Provide Career and Technical Education Pathways

Given the reality of Nevada's economy, a significant share of available jobs will continue to require on-the-job training rather than a college degree. Students should therefore be given more options for career and technical education (CTE) in high

school and at community colleges (Schmidt 2006). This nicely fits into the desire of students and parents, as stated by several during the interviews conducted for this report, for an educational path that allows students to quickly develop a marketable skill and increase their capacity to succeed in a competitive job market.

This recommendation is not intended to diminish the role of traditional higher education in Nevada. As noted earlier, the benefits of higher education are not limited to employability but include a range of economic and social benefits. Thus, it is also important to provide opportunities for students who initially decide on a CTE path to transfer their CTE credits and transition into colleges and universities.

#### Recommendation 7: Make Postsecondary Success a State Priority

One explanation for the current low level of postsecondary success in the United States is that federal and state policies have historically favored the issue of college access over the issue of college success. For example, the vast majority of state financial support for postsecondary institutions is based on the number of students enrolled rather than the number of students graduated. This creates an incentive for institutions to focus on admissions rather than on retention and graduation. Only recently has there been an increased level of interest and investment in the latter (Hauptman 2007).

The General Assembly of Indiana recently began funding institutions based on the number of degrees awarded and the number of students who graduate on time, with particular emphasis on first-time, full-time students (Erisman and Del Rios 2008). In light of the success of this effort, the Indiana Commission for Higher Education (ICHE) has recommended that the state continue and expand this approach, replacing incentives for enrollment growth with incentives for course completion (Erisman and Del Rios 2008). Nevada should consider this incentive-driven approach.

### **KEY STAKEHOLDERS**

No one denies that higher education can provide significant help to the state of Nevada as it moves into the globalized economy of the 21st century. However, for the state to reap maximum benefit from higher education, it must increase college access and success, especially for students at highest risk of not attaining a college degree. In this section, we examine the roles of three key stakeholders in the higher education system in Nevada: the education sector (both K–12 and postsecondary), the business community, and the state government.

#### The Education Sector

The responsibilities of the education sector begin at the K–12 level, where the foundations for students' academic aspirations and achievement are first laid. Throughout its K–12 system, Nevada must ensure that students receive a challenging academic experience that prepares them for postsecondary education. Most important, educators must recognize that their ultimate responsibility is not just graduating students from high school but rather preparing them for work or postsecondary education. In Nevada, educators face serious challenges in fulfilling these responsibilities—Nevada ranks among the lowest performing states in high school academic achievement and graduation (McRobbie and Makkonen 2005).

Postsecondary institutions must assume their share of the responsibility for student success, as well. Colleges and universities must do a better job of recruiting and retaining high school graduates, especially those from low-income families and minority groups. They must foster better communication with their K–12 counterparts to ensure clear expectations about the academic curriculum, the qualification of high school graduates, and a seamless academic pipeline.

# The Business Community

Tapping into the business community's political influence at the state level can provide a significant boost to ensuring postsecondary success. One problem in Nevada is that many major business players have little need, and therefore little incentive, to invest in higher education. During the interviews we conducted for this report, many Nevadans said that if the gaming and hospitality industries do not actively participate in educational reform efforts, the status quo is unlikely to change. So far, beyond some philanthropic involvement, these industries have done little to promote higher education in Nevada. Since it is natural for profit-seeking companies to demand a return on their investment, these companies must first be convinced that an educated Nevada serves their interests.

The peculiarity of Nevada's situation is that the gaming and hospitality industries employ the majority of the less educated labor force. As a result, the potential impact these industries can have in promoting higher education in Nevada is significantly higher than for other industries in the state. Once these industries are convinced of the benefits of an educated workforce, they could encourage higher education among their employees and their employees' children by providing funding for workforce development courses, offering incentives to workers who enroll in higher education, and setting up college scholarships for the children of employees—all initiatives that can be found in industries where an educated workforce is a crucial need.

Other Nevada industries, especially those that do require a more educated workforce, should also take responsibility for supporting higher education reform. Companies can push for sustained leadership and vision from policymakers so they are ensured of a supply of appropriately trained college graduates. Businesses should promote stronger partnerships with academic institutions, not only through

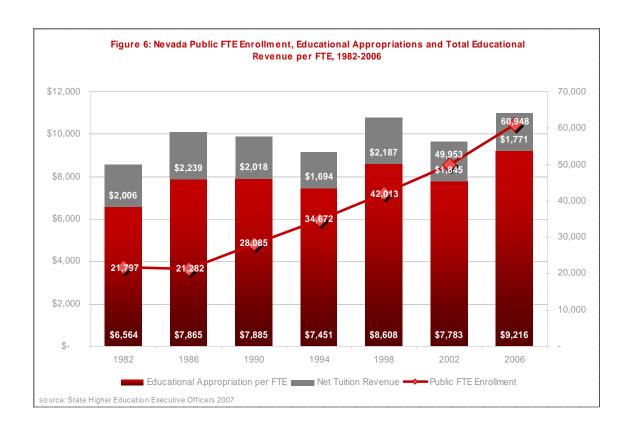
financial contributions but also in terms of discussions about their workforce needs and strategic investments.

#### The State Government

The state plays two critical roles in promoting higher education. The first is to provide a vision for the future of Nevada higher education within which other stakeholders can work. Unfortunately, Nevada has been less than successful in this regard. As awareness of the need for more college-educated workers has increased, there have been some efforts to reform the educational system, but Nevada continues to lag behind other states. If Nevada is serious about change, the state government needs to provide strong bipartisan leadership to bring together all the key stakeholders and address the state's educational needs.

The other role of the state is to provide financial support to higher education institutions through appropriations and to students through financial aid awards. However, as the state budget has tightened, public funding for higher education has become a contentious issue, competing with other state priorities such as K–12 education, Medicare, and corrections.

As Figure 6 shows, the amount appropriated per full-time equivalent (FTE) student in Nevada has trended slightly upward over the past few decades. However, these increases in appropriations have yielded little in the way of higher enrollments or additional degree completions among underserved students. In part, this may be due to the ongoing lack of need-based financial aid in Nevada. As noted earlier, merit-based grants such as the Governor Guinn Millennium Scholarship Program require substantial financial investments but do not target the students who most need the aid.



#### Recommendations

If Nevada is to improve the educational attainment of its population, all key stakeholders must take on new responsibilities. The following recommendations may encourage stakeholders to take more concrete and sustained action in this arena.

# Recommendation 8: Prioritize Higher Education

Given the current economic conditions in the United States, most states are projected to face ongoing problems finding the resources to increase or even sustain spending. As states weather difficult economic times, the budgets they craft will shed light on their priorities. In Nevada, as in many other states, public funding of higher education has been contentious. There exists—to borrow a term from a report by the Ohio Governor's Commission on Higher Education and the Economy (OGCHEE)—a "cultural debate" in which "colleges and universities decry cuts in higher education

funding and call for increased state investments, [and] legislators and governors call for cost containment, better efficiencies and better return on their investment of higher education funding" (OGCHEE 2004, 10) This debate has gained particular momentum in Nevada because of a proposal to cut higher education budgets, which will be decided during the 2009 legislative session.

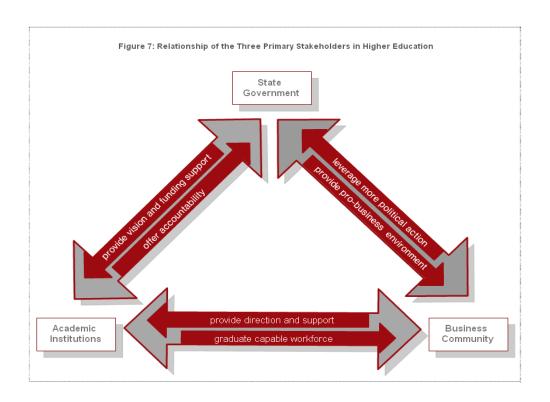
If Nevada is to increase educational attainment among its citizens, policymakers must come to see higher education not simply as a current expenditure but as a high-yielding long-term investment. There are proposals on the table to ensure a steady stream of revenue for essential social services, including higher education. Such stable financial commitment would allow higher education institutions to plan ahead for the anticipated increases in the state's population. Providing additional resources to public school districts would allow middle and high schools to offer adequate college preparatory services to all their students, including more access to guidance counselors.

But making higher education a priority in Nevada requires more than adequate funding. Just as topics such as health care and social security have become hotly debated election issues, the higher education community must work to make its concerns equally important in the public discourse. The popular media cover higher education issues mostly to sensationalize soaring costs; stakeholders need to promote informed public discussions on the role of higher education in the state. The recent public exchange between Chancellor James E. Rogers and Governor Jim Gibbons on the proposed higher education budget cuts received significant media coverage, which may have made the issue more salient to Nevada residents. Public debate of this sort must continue.

### Recommendation 9: Emphasize Cooperation among Stakeholders

According to the OGCHEE, the solution to the problem of higher education as a cultural debate is "to focus on a shared vision and bold goals and to build a 'compact' [among stakeholders] for moving forward" (OGCHEE 2004, 11). We believe a similar solution would help the state of Nevada in promoting access and success at the postsecondary level.

In Figure 7 we illustrate the relationship among the primary stakeholders in higher education in Nevada. The state government which must work with the business community to provide an environment that generates a demand for more high-skilled, high-wage jobs; simultaneously, it must work with educational institutions by providing strategic vision and direction and appropriate funding. The business community, on the other hand, must provide support (not limited to philanthropy) to educational institutions and articulate the kind of education needed for the workforce; concurrently, it must work with the state to leverage political action for more investment in higher education. In all this, the education sector plays a key role, providing both accountability for the investment made by the state and the educated workforce needed by the business community while also making its needs known to those who have the political capital to effect change.



## Recommendation 10: Develop Strategies Based on Consistent and Relevant Data

Numerous studies (e.g. Wellman 2002) have emphasized the need to improve the effectiveness of public policies through the use of consistent and relevant data. Statelevel data systems that bring together data from many agencies can be very helpful in evaluating the success or failure of educational programs and policies. Since the Nevada Education Reform Act (NERA) of 1997, Nevada has invested in an expansive database at the K–12 level managed through the Statewide Management of Automated Record Transfer (SMART) system. At the postsecondary level, NSHE is the repository of considerable data from public colleges and universities. However, these databases have not been sufficiently linked. Nevada would benefit from a comprehensive database that is capable of tracking students from K–12 education through the postsecondary level and into the workforce in order to increase accountability at each level (Bangser 2008).

# Recommendation 11: Create a Long-Term Political Vision

Transformation does not happen overnight. Change is often the result of both an understanding that new approaches are necessary and the development of a solid framework within which change can occur. For example, it took Indiana 12 years to move from 34<sup>th</sup> to 10<sup>th</sup> in the nation in college enrollment rates for high school graduates, and that transformation happened only because key stakeholders came to see the importance of higher education to the state's economy and took action to promote change (Erisman and Del Rios 2008).

The process of transformation in Nevada will begin when more stakeholders understand that higher education can elevate the well-being of the entire state. It will require their collaboration to create a vision within which a comprehensive public policy can be built. A key problem in Nevada has been a lack of comprehensive commitment to higher education combined with piecemeal policies that have resulted in episodic rather than systemic progress (McRobbie and Makkonen 2005). Fundamental policy change takes commitment and perseverance. Nevada has a choice to make: maintain the economic status quo or move forward into a new economic world. State policies on higher education will play a crucial role in that choice and in Nevada's future.

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#### APPENDIX: LIST OF INTERVIEWEES

Maggie Arias-Petrel: Director, Las Vegas Latin Chamber of Commerce.

Ray Bacon: Executive Director, Nevada Manufacturing Association.

Kim Boyle: Director of Guidance and Counseling, Clark County School District.

Hannah Brown: President, Las Vegas Urban Chamber of Commerce.

Art Byrd: Vice-President of Student Affairs, College of Southern Nevada.

Carlos Campo: Vice-President of Academic and Student Affairs, College of Southern Nevada.

Renee Cantu: Vice-President of Multicultural Affairs, Nevada State College; Co-chair of NSHE Chancellor's Diversity Roundtable.

Christine Clark: Vice-President for Diversity and Inclusion, University of Nevada—Las Vegas.

Charlotte Curtis: GEAR UP State Coordinator for Nevada.

Leslie Di Mare: Provost, Nevada State College.

**Thalia Dondero:** Board of Regents, Nevada System of Higher Education.

Juanita Fain: Interim Vice-President for Student Affairs, University of Nevada—Las Vegas.

A Somer Hollingsworth: President, Nevada Development Authority.

**Patricia Ring:** Registrar, Nevada State College.

Walt Rulffes: Superintendent, Clark County School District, Nevada.

Mary Beth Scow: President of the Board of Trustees, Clark County School District.

**Neal Smatresk:** Executive Vice-President and Provost, University of Nevada—Las Vegas.

**Porter Troutman**, Jr.: Professor, College of Education, University of Nevada—Las Vegas; Cochair of NSHE Chancellor's Diversity Roundtable.

**Janet Usinger:** Associate Professor, University of Nevada—Reno.