SNS White Paper: Supporting the Education Imperative: The Role of Community Development

1. Background
In the Southern Nevada region, statistically valid surveying and stakeholder interviews have revealed that quality education and good jobs consistently rank among the top two highest priorities for Southern Nevadans. To ensure that the Regional Plan works directly to support these two priorities, the project team hosted an event in July of 2013 entitled Supporting the Education Imperative: The Role of Community Development. The team invited an expert speaker on educational attainment data and strategies (John Tapogna from ECONorthwest) to discuss recent research and case studies that highlight ways to support schools and education through place-based, community development policies. The presentation attracted nearly 200 community stakeholders. This white paper follows that presentation and provides additional, specific policy and other strategies to pursue through the Southern Nevada Strong regional planning process.

2. Purpose
The purpose of this document is to support the Regional Plan by outlining the connection between healthy, complete neighborhoods and educational outcomes in the K-12 and higher education systems. The Regional Plan will support the Comprehensive Economic Development Strategy (CEDS), adopted in 2013. The CEDS, which has adopted a multi-pronged agenda that focuses on government advocacy, regional collaboration among educational institutions and businesses while supporting efforts to attract talent, identifies educational attainment as among the most foundational obstacles that the Southern Nevada region faces as it achieves long-term economic growth and stability.¹

The CEDS recognizes that fostering a better match between the skills base in the region’s workforce and future industry needs will improve the region’s economic competitiveness. Doing this requires that the region focus on improving educational attainment at all levels and for all students. This document identifies the ways in which the Regional Plan (which sets a vision for changes in regional development patterns and land use) can support CEDS implementation, so that both work together to improve educational attainment.

Figure 1 shows the relationship among education/workforce training, economic development, and communities.

- A community with a talented and flexible workforce and an appealing environment attracts diverse, value-adding industries that provide well-paying jobs.
- As income increases, communities generate revenues for excellent schools, quality public services, and public

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¹ Southern Nevada Comprehensive Economic Development Strategy, 2013
facilities, which in turn attract a talented and flexible workforce.

- The more prosperous communities are, the more they tend to invest in education.

To foster economic growth, Figure 1 suggests the importance of considering a range of economic, housing, health, social, and education policies, because all are inter-related. In a time of rising inequality and low social mobility, improving the quality of and access to education has the potential to increase equality of opportunity for people in Southern Nevada.

This document summarizes what we know about structural changes in the future economic base, the kind of workforce that the region will need to meet its economic development goals, and what is currently known about the achievement gap. It has the following sections:

- What kind of workforce does Southern Nevada need to be competitive?
- What is the reality of educational attainment in Southern Nevada today?
- What role might community development play in supporting educational attainment?
- What policies or activities might the region consider?

3. What kind of workforce will Southern Nevada need in the future?

Globalization and technological changes have caused work patterns worldwide to shift. In the U.S., many jobs have moved overseas, and mechanization has reduced the number of well-paying, middle-class jobs. This technological change has contributed to sustained gains in GDP per capita, while simultaneously reducing the availability of middle-class jobs. Many middle-skill jobs that provided work for generations of high school graduates have been eliminated, while high-skill and low-skill jobs have been on the rise.²

Job growth has been concentrated in occupations that feature non-routine tasks. “The middle-skill jobs that survive will combine routine technical tasks with abstract and manual tasks in which workers have a comparative advantage — interpersonal interaction, adaptability and problem-solving.”³ Labor economist Lawrence Katz has referred to those who fruitfully combine the foundational skills of a high school education with specific vocational skills as the “new artisans.”

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³ Autor & Dorn
The need to boost the quality of education is increasing rapidly as a result of technology and innovation. If the supply of skilled workers able to use the technology exceeds the demand, then the wage premium for those skills falls. If the supply of skilled workers is less than the demand, the wage premium rises. In addition, routine work that is done repeatedly in the same way will be replaced by technology if it has not been already. In short, when technology improves, the most successful employees are those who know how to use it, but those employees must be able to keep up with the pace of technological change to stabilize their wages.

To begin to address these and other interrelated economic development challenges, the Southern Nevada region has recently adopted its first ever CEDS: a collaborative regional effort that seeks to “increase cooperation in the community resulting in greater capital investment, talent recruitment, and innovation in technology and entrepreneurship.” The strategy seeks to broaden the base of the regional economy while strengthening its core industries, while also addressing workforce development needs. The CEDS identified five key target sectors that “emphasize those jobs with higher earning potential across all skill levels, focus on the more realistic growth opportunities with less focus on the more daunting challenges, and capitalize on geography and location and build on existing local capacities and assets.”

- Tourism, Gaming, and Entertainment
- Health and Medical Services
- Business IT Ecosystems
- Clean Energy
- Logistics and Operations

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4 The Race between Education and Technology. Goldin, Claudia and Lawrence F. Katz. Harvard Press,
6 Unify, Regionalize, Diversify Revisited: Refining the Brookings Institute Framework.
The CEDS (and this white paper) recognize that among the keys to success in these industries is developing a workforce that is not just adaptable to new technologies, but knowledgeable and entrepreneurial enough to develop new technologies.

4. **What is the reality of educational attainment in Southern Nevada today?**

While the research in this white paper does not constitute a comprehensive scan of all the region’s educational programs and attainment data (there are undoubtedly bright spots and successes that are worthy of notice), overall, the patterns are troubling for a region that is looking to increase its competitiveness for future jobs growth. Three major patterns suggest that increased investment in the region’s schools will be critical to its ability to create a resilient economy in the future:

1. Educational attainment lags behind national averages, limiting the region’s competitive advantages for future job growth.
2. Inequities in access to educational opportunities reduce social mobility.
3. Patterns of spending on educational programs suggest that the State and the region have not committed to investments in its educational future at the same level as other communities have.

4.1 **Educational attainment**

Right now, Southern Nevadans as a whole are not keeping pace with national averages for educational attainment, and therefore are not likely to compete well. Figure 3 shows that in Clark County about 15% of working-age adults have not completed high school, 30% have only a high school diploma, 33% have completed some college or an associate’s degree, 15% have a bachelor’s degree, and 7% have a graduate degree.

**Figure 3. Education Attainment for adults age 25 and over the U.S., Nevada, and Clark County, 2012**

Enrollment data for Clark County parallels the U.S. in most educational categories except higher
education.

- A larger share of U.S. residents is enrolled in higher education programs (8%) than in Clark County (6%). As employers continue to increase their educational and/or certification requirements for workers. If there is a perceived shortage of highly educated workers in the region, it will be considered at a competitive disadvantage.\(^8\)

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

### 4.2 Inequality

Nationally, the difference in the achievement gap between high- and low-income students is at an all-time high, and the region is not immune from these problems. The difference in test scores between the families at the 10\(^{th}\) and 90\(^{th}\) percentiles indicates an achievement gap equivalent to about 3 years of educational experience. Between 1970 and 1998, the achievement gap grew by 40%.\(^9\) Researchers have found several trends in the experience of young children in families of different income levels that may affect the achievement gap in the long run:

- **Language in the home.** In one study, the number of words spoken to children varied significantly by family status. On average for the study group, families receiving welfare spoke significantly fewer words to their children than a working-class family. Similarly, working-class families spoke fewer words to their children than professionals. Not only did the number of words vary, but also the type of words used. Lower-income families used more directive words and commands, while higher income families used questions and more interpretive language.\(^10\)

- **Spending.** High-income families spent about seven times more on their children than low-income families, a gap that has continued to widen since the 1970s. The higher the individual’s income, the more they tend to invest in education.\(^11\)

Research and media have identified inequality in access to education as a significant issue for Southern Nevada. For example, Education Week's "Chance for Success" index named Nevada was named the worst place in America for a child to grow up and hope to become "successful." At about the same time, a Brookings Institution report showed significant income disparities between schools in the Las Vegas valley, indicating a severe concentration of poverty geographically, that lead to decreased educational opportunities. The region has one of the lowest graduation rates and standardized test score averages in the nation. Inequality reduces social mobility and limits the talent pool for current and potential future employers.

A 2012 Brookings Institution report compared regional zoning data with school test score data. When comparing standardized test scores across schools in Las Vegas in 2010 and 2011, only 23% of students were low-income in the top-quintile schools, compared to 78% at the bottom quintile schools. The average annual housing cost for the top quintile was $15,381, compared to

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\(^8\) TIP Strategies. Las Vegas Regional Economic Assessment. 2012.  
\(^9\) The Hamilton Project, Brookings. Reardon, 2011.  
\(^10\) Meaningful Differences in the Everyday Experience of Young American Children. Hart and Risley, University of Kansas.  
\(^11\) The Hamilton Project, Brookings. Duncan and Murnane, 2011
the bottom quintile at $6,840. About 68% of those in the top quintile own their home, while only 43% in the bottom quintile do.12

Table 1. Comparison of students within top and lowest performing schools across the Las Vegas valley measured by standardized test scores

<table>
<thead>
<tr>
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<th>Top Quintile Schools</th>
<th>Bottom Quintile Schools</th>
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<tbody>
<tr>
<td>Low-income</td>
<td>23%</td>
<td>78%</td>
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<tr>
<td>Average housing cost</td>
<td>$15,381</td>
<td>$6,840</td>
</tr>
<tr>
<td>Home ownership</td>
<td>68%</td>
<td>43%</td>
</tr>
<tr>
<td>Black students</td>
<td>10%</td>
<td>17%</td>
</tr>
<tr>
<td>Hispanic students</td>
<td>20%</td>
<td>68%</td>
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Source: Brookings Institution, 2012

In the Las Vegas metro area, about 34% of low-income students would have to change their zip codes to achieve an equal distribution of low-income students across schools. Housing costs near high-scoring elementary schools are 2.2 times higher than housing costs near low-scoring schools. The average middle/high income student attends a school that ranks 22% higher on state exams than an average low-income student attends. In effect, families are paying for better education by paying for more expensive housing in higher valued neighborhoods. This trend is not uncommon nationally. However, given distortion in the housing market resulting from an unusually deep drop in market values in the most recent recession, which has disproportionately affected lower income families, the problem is exacerbated in the Las Vegas Valley.

For many reasons, including poverty, children in Las Vegas’ low-income communities, particularly those who are Black, Latino, and speak English as a second language, face incredible odds for achieving educational success. Berliner (2009) identified six out-of-school factors: (1) low birth-weight and non-genetic prenatal influences on children; (2) inadequate medical, dental, and vision care, often a result of inadequate or no medical insurance; (3) food insecurity; (4) environmental pollutants; (5) family relations and family stress; and (6) neighborhood characteristics. He suggests these factors are “common among the poor” and limit what schools can accomplish on their own.13

4.3 Disinvestment in education

This section presents data and research that show that: (1) the region’s income (which is a key indicator of revenues available to local governments for all government spending) is falling relative to the nation; (2) as a result, revenues to local and State governments are falling; and (3) Nevada has always trailed the nation in spending on education, but given declining revenues, that spending is falling further behind. The combined effect is that, without intervention, even fewer financial resources are available to Nevada schools in the future, so that they can effectively prepare students for the jobs of the future.

Figure 4 shows Nevada personal income per capita expressed as a share of the U.S. average from 1929 to 2011. Nevada’s per capita personal income has historically been high relative to national averages, but has declined as a share of the U.S. average from the 1940s until the

13 The Las Vegas Promise Neighborhood Initiative: A Community-Based Approach to Improving Educational Opportunity and Achievement, 2013
2000s. However, it did not fall below the average until 2008, and the trend is continuing downward.

Figure 4. Nevada personal income per capita expressed as a share of the U.S. average, 1929-2011

Source: ECONorthwest, using data from …

Figure 5 shows combined state and local revenues expressed as a share of personal income in Nevada from 1977 to 2011. In general, both have remained stable when measured as a share of personal income, but given that personal income is declining (see Figure 4), in real dollar terms, the revenues are also declining.
Figure 5. State and local revenue expressed as a share of personal income, Nevada, 1977-2011

![Graph showing state and local revenue as a share of personal income, Nevada, 1977-2011.](image)

Source: ECONorthwest, using data from ...

Figure 6 shows education expenditures expressed as a share of personal income in Nevada and the U.S. from 1977 to 2011. The share that the nation and Nevada residents contribute to education has grown slowly since the 1980s, but Nevada residents consistently spend about 1% less on education than the U.S. average. Again, because personal income is declining, in real dollar terms, the amount available for education has also declined.
Figure 6. Education expenditures expressed as a share of personal income, Nevada and U.S. 1977-2011

Source: ECONorthwest, using data from …

Figure 7 shows the education expenditures per capita in Nevada and the U.S. from 1977 to 2011. Nevada residents increased their expenditures from a low point of $1,300 in 1984 to more than $2,400 in 2008. On average, other places in the U.S. consistently spent more on education, rising from a low point about $1,500 in 1982 to more than $2,900 in 2008. Nevada’s education spending has declined even more starkly than the nation’s as a whole since the 2008 recession.
5. What role might community development play in supporting educational attainment?

One of the key purposes of this white paper is to suggest ways that the regional plan (which sets a vision for community development and identifies policy and other implementation steps help the region move toward that vision) can support the CEDS as it addresses the economic development imperatives it has identified. If improvements to workforce development and educational attainment are one of the CEDS imperatives, what role does community development play in achieving those improvements?

First, there is substantial anecdotal and observed evidence that higher quality communities (when measured in terms of property values) produce higher educational attainment outcomes. Some related data for the Southern Nevada region are presented earlier in this white paper. However, the causal pathways that link community development efforts (interventions that improve the quality of place, such as improved pedestrian access, high amenity open space, or improvements to streetscape) with improvements in measureable student achievement gains have not been well-established in literature. There is no clear evidence that, for example, building a new park or creating a new mixed-use community center will necessarily lead to improvements in graduation rates in adjacent schools.

The literature does, however, tell a compelling story that the achievement gap is established primarily outside of the K-12 schools—in families and communities. As an illustration of this point: family income does not play a role in attainment at very early childhood stages. Early childhood longitudinal survey data suggests that no significant gap in cognitive ability exists among children under the age of one across families of different incomes. Instead, significant
cognitive improvements emerge with an additional month of age and for female children in higher income families, suggesting that the differences in later life attainment begin not in the schools, but in the households and communities of very young children. As such, interventions that improve a community and create value for adjacent properties are investments in the "platform" on which educational attainment grows.

This section of the white paper provides additional data and information regarding the interaction among the community learning environment, the achievement gap, and educational attainment.

5.1 Studies on the achievement gap

Opportunities to decrease the gap exist both inside and around the K-12 schoolhouse. Within the classroom, researchers have completed few studies with experimental design, at least in part because ethical issues arise when researchers regarding access even to the experimental interventions designed to improve educational outcomes. According to the literature, early investments in children tend to pay off the most, because the ability to acquire skills at any age depends on skills acquired at earlier ages.

Inside the schoolhouse

To date, interventions within K-12 schools have done little to appreciably increase or decrease the gap, as shown in Error! Reference source not found.. For example, kids who are behind in 3rd grade tend to stay the same distance behind through the continuation of their schooling. The literature finds that the most effective interventions are programs aimed at early learners, like full-day kindergarten and The Reading Recovery Program, used throughout New Zealand, and having an exceedingly effective teacher. Though many efforts focus on increasing spending per student, studies show that just increasing spending by 10% per student with no specific direction does not produce an effect.

Figure 8. Effect size of selected in-school interventions

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15 J. Heckman
Figure 8. Effect size of selected in-school interventions


**Around the schoolhouse**

The achievement gap is established primarily outside of K-12 schools within families and communities. There has been substantial research documenting the significant impact poverty, neighborhood context, and related out-of-school factors such as housing, food security, health care, and family supports have on student learning and achievement. These indicate a more profound effect on student outcomes than in-school interventions and are shown in Figure 9.

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16 The Las Vegas Promise Neighborhood Initiative: A Community-Based Approach to Improving Educational Opportunity and Achievement, 2013
6. What policies or activities might region consider?

While it cannot address all of the issues that have been identified in this white paper, the regional plan, which is focused on identifying strategies that improve community character, access, and equity, can improve the educational environment in the communities. It should work collaboratively with CEDS implementation and focus on strategies that: (1) increase opportunities for people of all ages to access educational opportunities; and (2) invest in communities with low performing schools to improve the educational environment in the community.

1. **Enhance multi-modal transportation opportunities, prioritizing low-income neighborhoods**

One of the most specific and direct strategies to connect people to opportunity is by improving transportation between areas that are most socioeconomically disadvantaged and areas that are provide services and supports. This should include transit service, with a focus on frequency and reliability, as well as improved bicycle and pedestrian access and auto access.

**Policy examples:**
• **Create safer routes to schools.** Make investments to promote access to a variety of educational opportunities. Safe Routes to School programs are ubiquitous around the country. The program promotes the practice of bicycling and walking to and from school. Research shows a positive relationship between physical activity and grade point average, rate of learning, and classroom behavior.17

• **Identify disconnected communities.** Increase transit service.

• **Concentrate new housing along transit corridors with existing service.**

### 2. *Encourage diverse mixed-income housing and neighborhoods, with a focus on urban infill development*

Encourage a mix of incomes within developments and within neighborhoods to decrease income disparities between schools. Diverse housing products create communities that are attractive and accessible to a wide range of income levels and family composition. Additionally, to attract high-quality teachers (an intervention known to have a significant impact on learning for all students), the region’s neighborhoods should provide the amenities and housing options that teachers will desire. The region should make strategic investments in existing neighborhoods that bolster a community’s chance to succeed and lead to new private investments. The current development pattern reflects more opportunities on outer ring suburbs and a policy focus on education will require incentives and an emphasis on urban revitalization.

**Policy examples:**

• **Perform context mapping.** Another effective way to identify areas of concerns is to use a context tool. By mapping demographic indicators like share of individuals receiving free and reduced priced lunch with facility indicators like their seismic stability. It can also help illustrate the spatial relationship between facilities that are important to learning outside of the schoolhouse and the schoolhouse.

• **Review the impacts of restrictive zoning on educational achievement.** Restrictive zoning discourages inexpensive housing, driving economic segregation. Nationwide, housing costs near high-scoring public schools are about $11,000 more per year than near low-scoring public schools. Eliminating exclusionary zoning in most metro areas would reduce the housing cost gap and thereby reduce the test-score gap by an estimated 4% to 7%.18 Research suggests that economically disadvantaged students in schools with low levels of economically disadvantaged students perform better on standardized tests than those in schools with high levels of economically disadvantaged students.19

**Further research**

• What is the effect of being low-income/minority on a student? How does that affect their ability to learn? How can that be connected to land use issues?

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3. **Create economic development opportunities within neighborhoods.**

In addition to connecting disadvantaged communities to access to regional opportunities, localized employment near existing housing areas is also effective. Community development corporations and neighborhood based economic developers are especially well positioned to assess the worker profile of residents in disadvantaged neighborhoods and target efforts in local neighborhoods.

*Policy examples:*

- **Explore the concept of Promise Neighborhoods.** Promise neighborhoods are a place-based strategy for education reform that aims to significantly improve the educational and developmental outcomes of children and youth in our most distressed communities, and to transform those communities. Funded by the U.S. Department of Education, the Promise Neighborhoods model was inspired largely by Harlem Children's Zone (HCZ) - perhaps one of the most popularized examples of a community-based approach to educational improvement and reform. One goal of the program is to develop the local infrastructure of systems and resources needed to sustain and scale up proven, effective solutions across the broader region beyond the initial neighborhood. The proposed neighborhood in Southern Nevada is the Clark County School District Prime 6 Schools Attendance Zone, located in historic West Las Vegas, as the target neighborhood.

- **Employ the Strive tool.** Strive is a framework of civic infrastructure that helps to support individuals from cradle to career. Strive helps pull individuals from various community groups together to develop a vision, evidence-based decisions, and align actors with similar programs. A toolkit provides Strive participants with a way to estimate the likelihood that a 7th grader will graduate from high school, enroll in a 2-year post-secondary institution, or enroll in a post-secondary 4-year institution based on their 7th grade standardized test math score. The tool can help communities identify who they are serving now and help them think strategically about where they want to focus their efforts in the future.

*Further research*

- What are land use policies that can encourage safe neighborhoods with reduced crime?
- How can we foster the kind of infrastructure that encourages safe passage to school via bike, foot, and transit?
- What is the broad inventory of learning spaces (e.g., schools, pre-K centers, libraries, museums, playgrounds) across the metropolitan area?
  - How are these spaces distributed?
  - Where is birth-to-five programming offered across the region?

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20 The Las Vegas Promise Neighborhood Initiative: A Community-Based Approach to Improving Educational Opportunity and Achievement, 2013
• How do participation rates vary among eligible learners? What are the barriers to participation?
• Is the nature of programming different across geography? Is it evidence-based?
  ○ How is the inventory distributed relative to where young learners live, both today and 10 years from now?
  ○ If you look at your highest needs and most challenged schools, where are the head start centers and pre K facilities in relationship to those challenged schools?
  ○ Where are high schools in relation to colleges and places to gain technical skills?
  ○ What the spatial relationship between high schools and postsecondary institutions? How does that affect collaboration and opportunities for dual enrollment and other methods of accelerated learning?

4. Thoughtful school and service siting
Nevada faced significant increases in school enrollment (1.6%) in 2011. If enrollments continue to grow rapidly, how can the placement of educational facilities impact achievement? Schools should be located adjacent to public facilities and Pre-K, health, social, and educational services that support healthy families. Currently school siting policy should be revamped to consider spatial relationships and access to opportunity.

Policy examples:
• Co-locate schools. Some areas are locating schools and other learning facilities near other community resources to capitalize on community skillsets and knowledge. For example, in Jenkins, Oklahoma, Grace Living built two classrooms inside its facility and arranged for the school district to rent the space. Results were mutually beneficial, with better health outcomes for the elderly and improved reading skills for the children. An aviation high school in Seattle Washington located its facility right next to the Boeing Fields and the Museum of Flight. The location allows for easy and frequent interaction between students and mentors in the field. Portland, Oregon is considering locating a pharmacology and life sciences institute near the Oregon Health Sciences University.

Future research
• How can we think about learning places much more flexibly then we did in the past?
• How is technology integrated into community centers, libraries, etc.? Internet, space for devices/to use devices, etc.
• For afterschool programs:
  ○ Regionally, how much is spent on afterschool programming?
  ○ How many different agencies deliver it?
  ○ Does it appear enrollees are making more progress in school than non-enrollees?
  ○ Who is served and who is missed?