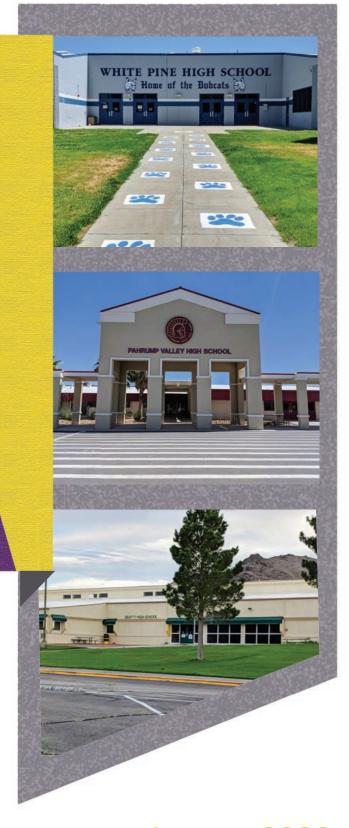
Rural Education in Nevada





August 2020

RIURALIEDIU(CATICON IN NEWAD)A

EXECUTIVE SUMMARY

In Nevada, approximately nine percent of students attend school in a rural school district; yet, the geographic area these districts cover is 87 percent of Nevada's total land. This report provides an overview of rural education in the Silver State and how demographics, student achievement, and state funding compare to urban districts. Demographically, rural districts vary significantly from urban districts. The percentage of students that qualify for free-and-reduced price lunch (FRL), which is used as a proxy for poverty, is approximately 13 percentage points lower in rural areas. Additionally, rural school districts serve a smaller percentage of English Language Learners (ELLs) but a greater percentage of students with an Individual Education Program (IEP), which is the designation for special education.

In addition to demographic differences, rural students in grades 3 through 8 have lower proficiency scores than their urban counterparts on the Smarter Balanced Assessment (SBAC). This finding holds across every grade and each testing area (e.g., ELA and mathematics). Interestingly, this relative underperformance disappears in high school, as rural students report slightly higher average ACT composite scores, graduation rates, and percentage of students receiving an Advanced Diploma. This finding warrants further research to better understand how rural high schools close this achievement gap in a relatively short time span.

Like many other states, Nevada provides additional funding to rural school districts to cover increased transportation costs, high fixed costs (due to less students to spread expenses across - like utilities, building maintenance, and administrative costs), and the relative scarcity of professional services resulting in higher costs. However, the system that currently funds K-12 education - the Nevada Plan - was replaced during the 80th (2019) Session of the Nevada Legislature with the Pupil-Centered Funding Plan, the implementation of which is scheduled to commence with the 2021-2022 school year. The new funding plan provides student weights for ELLs, students with an IEP, students deemed to be "at-risk," and gifted and talented (GATE) students.

However, it is likely that the initial, effective student weights will be significantly lower than targeted student weights due to funding constraints. Without an infusion of additional money, under the proposed new Pupil-Centered Funding Plan only four school districts in Nevada are expected to realize an increase in funding: Clark, Mineral, and Washoe County School Districts, as well as the State Public Charter School Authority (SPCSA). While the Commission on School Funding is still finalizing the model, the Pupil-Centered Funding Plan is expected to adversely affect rural school districts more than urban ones, based on preliminary data presented at the time Senate Bill 543 of the 2019 legislative session was introduced.

As noted previously, the Pupil-Centered Funding Plan includes weighted funding for students categorized as "at-risk." Historically, this has been conceptualized by districts across the country as students that qualify for free-or-reduced price lunch (FRL). While FRL status is widely used by states and districts, it is likely not an adequate or fair conception of "at-risk." By way of example, current data indicates the poverty rates in urban and rural countries in Nevada are nearly identical; however, the proportion of students receiving free-orreduced price lunch in rural school districts is approximately 13 percentage points less than in urban school districts. The discrepancy between rural county level and rural school district poverty rates suggests that using FRL rates as the sole indicator of "risk" undercounts poverty (and need) in rural school districts in Nevada.

Ultimately, the state of rural education in Nevada reveals several strengths particularly when compared to its urban counterparts; among these are high graduation rates and the percentage of graduating students who received an Advanced Diploma. However, our analysis also suggests that local and state education agency leaders and school building leaders should consider instructional interventions and programs that are specific to needs of rural students, especially in primary grades.

RURAL EDUCATION IN NEVADA

Nationally, one out of every seven students in the United States is enrolled in a rural school district. In Nevada, one out of every eleven students attend school in a rural school district.1 However, when educational issues are discussed in Nevada, the focus of the discussion is largely on the State's urban districts, namely the Clark County School District (CCSD) and Washoe County School District (WCSD). This is for good reason; the Clark County School District — located in southern Nevada – represents 69 percent of the Silver State's total K-12 enrollment.2 When Washoe County School District — located in northern Nevada is included, these two districts represent 79 percent of the total K-12 enrollment.3 Additionally, the third largest school district in Nevada, the State Public Charter School Authority (SPCSA), primarily enrolls students living in Clark and Washoe Counties.

However, while most of Nevada's population resides in the state's three urban areas, consisting of Clark and Washoe Counties, as well as Carson City, most of the land area is held by rural counties. In fact, Nevada's 14 rural counties account for approximately 87 percent of Nevada's land.⁴ And while much of this land is owned by the federal government, this large, sparsely inhabited area presents its own unique challenges to the provision of high-quality educational services.

Among these are the long commutes often required to transport students to school, a lack of basic infrastructure (e.g., broadband service, well-maintained roads), challenges in the recruitment and retention of high quality teachers, in particular, specialists including bilingual and special education teachers, as well as declining levels of student enrollment. These challenges make it difficult to cover fixed overhead costs and the costs of instruction.

The data presented in this report, most of which is publicly available and retrieved from the Nevada Department of Education's Nevada Report Card website, provides an initial look at the state of rural education in Nevada.⁵ Comparative data and research suggest that rural students and school districts face their own, sometimes unique, challenges. This policy report provides additional context around Nevada's educational outcomes for all students.

Because Nevada's school districts have the same geographic boundaries as the counties, this report classifies the school districts based on the urban/rural county classification of the State of Nevada.⁶ Carson City, Clark, and Washoe County School Districts are considered urban school districts. Most of the charter schools in the Silver State are located within Clark or Washoe County, although not all are. Accordingly, our team has classified individual charter schools as either urban or rural, depending upon the school's location. All schools outside of Carson City, Clark County, or Washoe County are classified as rural. Because virtual schools can enroll students across all counties in Nevada, these schools have been excluded from the analysis.

This report is comprised of three sections with each presenting data on a different aspect of rural education in Nevada. Section One presents general enrollment and demographic data, noting that student populations in rural school districts differ from their urban counterparts.

Section Two analyzes student achievement. Because each state addresses its educational needs differently, national educational outcomes in rural school districts vary. Additionally, national studies on the state of rural education have reported contradictory results. For example, one study noted that, when controlling for prior kindergarten achievement and demographics, rural third grade students scoring in the 10th percentile on reading assessments actually underperform when compared to their similarly situated urban peers.7 Another report noted that, on average, rural students outperform urban students on the National Assessment of Education Progress (NAEP).8 In this section, our team reports that Nevada's rural elementary and middle school students lag their urban peers on statewide, summative assessments. Interestingly, this urban/rural achievement gap closes in high school.

Section Three presents information on school district funding. This is particularly important given that the 80th (2019) Session of the Nevada Legislature passed legislation that revises how the State funds K-12 education.⁹ The concluding section summarizes the major findings from the report and provides future policy considerations.

ENROLLMENT AND DEMOGRAPHICS

Nationally, approximately one-third of all K-12 schools are rural, ¹⁰ and, as noted in the introduction, nearly one of every seven students attends a rural school district. In Nevada, that percentage is lower — with approximately one-quarter of all schools located in rural districts — accounting for only 9 percent of the total K-12 student enrollment in Nevada (see Figure 1). ¹¹

Additionally, the racial and ethnic composition in Nevada's rural and urban districts is distinct from one anoth-

er. Because approximately 90 percent of students are schooled in urban districts, the State of Nevada averages in any metric will have a strong urban bias. But, for every ethnic and racial group, except for white and American Indian students, the rural enrollment percentages are below the urban average (see Figure 2). In urban districts, Latino students comprise the largest student population at 44.3 percent of the total urban enrollment. In rural districts white students comprise 61.6 percent of the total student population.

Figure 1: Nevada's Urban and Rural School District Enrollment and Schools

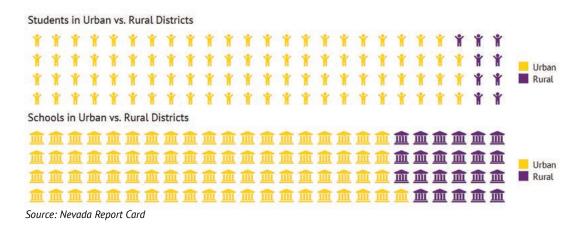
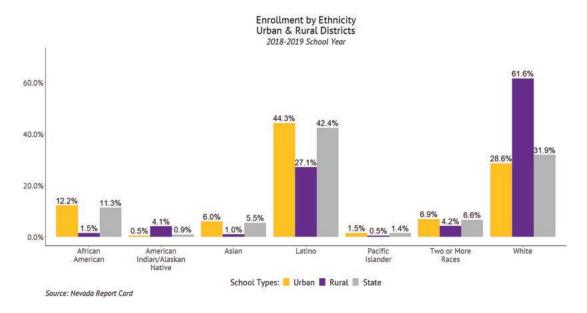


Figure 2: Racial/Ethnic Composition of Rural and Urban School Districts



"Nevada's rural elementary and middle school students lag their urban peers on statewide, summative assessments."

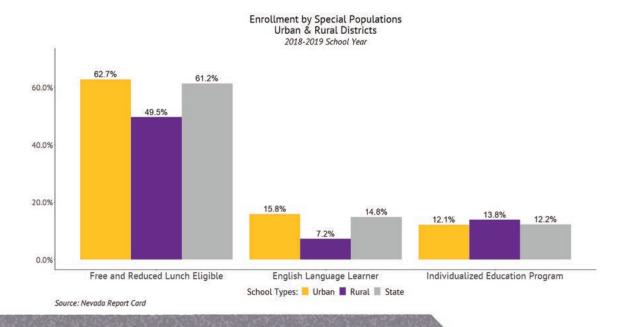
Similarly, the percentage of students qualifying for free-and-reduced-price lunch (FRL), which is a measure of poverty, and those that are English Language Learners (ELLs) are higher in urban districts (see Figure 3). Interestingly, rural districts have identified a higher percentage of its students as requiring special education services, denoted as students with an Individualized Education Program – IEP.

Nevada's rural districts account for approximately 9 percent of the state's K-12 student enrollment. On aver-

age, rural students do not share the same demographic profiles as students in urban districts. There is a higher percentage of white students in rural districts, as well as fewer English Language Learners and students identified as qualifying for free and reduced-price lunch.

This suggests that solutions to improve educational outcomes, which we address in the subsequent section, will likely need to be tailored to the needs of the rural population and may be different from the needs of the state's urban population.

Figure 3: Special Populations in Urban and Rural School Districts



STUDENT OUTCOMES

Student outcomes refer to any number of metrics that are used to evaluate student, school, and/or district performance. Most often, these outcomes are measures of student achievement. However, the Elementary and Secondary Education Act of 1965 (ESEA), as amended by the Every Student Succeeds Act (ESSA), requires each state to create a report card for each school, district, and state that details student performance and progress in a clear and accessible format.¹² In Nevada, this

"report card" is referred to as the Nevada School Performance Framework (NSPF). This section examines the difference between urban and rural school performance on Nevada's "report card," and then explores the differences across specific student outcomes: grades 3-8 proficiency rates, grade 11 ACT composite scores, career and technical education opportunities, and graduation rates.

Nevada School Performance Framework

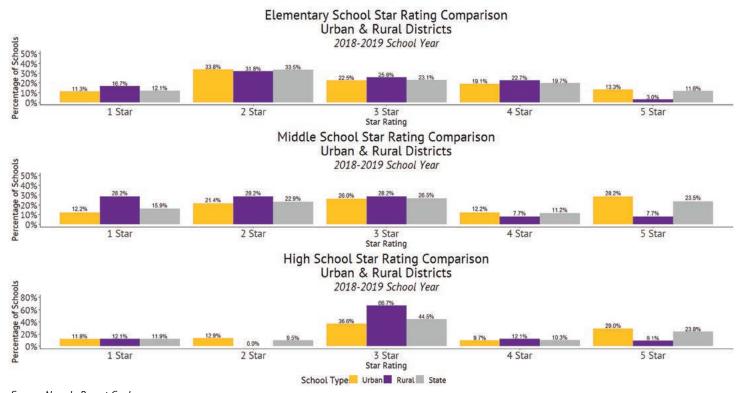
The NSPF, created by the Nevada Department of Education (NDE), is a star-rating system to evaluate school performance. It provides "points" to a school based on several performance indicators. Elementary and middle schools receive points based on academic achievement, academic growth, English language proficiency, and smaller opportunity gaps. High schools are evaluated on a similar rubric, but the opportunity gaps measure is replaced with a college and career readiness measure. The points earned in each performance indicator are summed to provide an overall "score" for the school. This score is converted to a star-rating: five stars reflects the highest designation a school can receive and one star reflects the lowest.¹³

The school star ratings in rural and urban school districts is displayed in Figure 4 (Appendix A includes summary tables of the data presented in this section). Of the elementary schools in rural school districts, 48.5 percent received one or two stars, 25.8 percent received three stars, and 25.7 percent received four or five stars.

In urban school districts, 45.1 percent of schools received one or two stars, 22.5 percent earned three stars, and 32.4 percent received four or five stars. In middle schools, 56.4 percent of rural schools received the one-or two-star designation, compared to 33.6 percent of urban district schools. Approximately the same percentage of schools in urban and rural districts received three stars – 26.0 and 28.2 percent, respectively. Only 15.4 percent of rural middle schools received a four- or five-star rating, while 40.4 percent of urban schools received high marks.

When considering high schools, rural school districts have a lower percentage of one- and two-star schools than urban districts, 12.1 to 24.7 percent, respectively. In rural districts, 21.2 percent of high schools received a four- or five-star rating, compared to 38.7 percent of urban high schools. Most rural high schools received three stars (66.7 percent), while 36.6 percent of urban high schools received three stars.

Figure 4: Nevada School Performance Framework Star Ratings



Smarter Balanced Assessment Proficiency Rates

While star ratings provide a general understanding of student performance, the disadvantage is that it is a scaled score that aggregates many different measures. This section evaluates a more specific student performance metric — student proficiency rates.

Each spring, Nevada's 3rd to 8th grade students take the SBAC (Smarter Balanced Assessment Consortium). Nevada is one of 13 states (and the U.S. Virgin Islands) that administers this summative assessment, which measures a student's proficiency in both English Language Arts (ELA) and mathematics.¹⁴ Furthermore, the results of this assessment comprise a significant portion of each elementary and middle school's annual NSPF rating.

Rural students, in every grade level, for both the ELA and mathematics portions of the SBAC, underperform compared to their urban counterparts (see Figure 5). The difference in proficiency rates is as large as 6.3 percent in 7th grade ELA and as small as 2.3 percent in 7th grade mathematics. However, the data is striking

in its consistency of rural students' underperformance compared to urban students. This finding necessitates further inquiry to better understand why rural students are lagging their urban peers and what supports could be implemented to increase rural student achievement. This urban/rural achievement gap is reversed on the National Assessment of Educational Progress (NAEP), given every other year to a random sample of 4th and 8th grades. Nationally, rural students outperform urban students on the NAEP; however, in Nevada, rural student performance lags that of urban students.¹⁵

While it does not appear to be an urban/rural issue, but rather a statewide issue, mathematics proficiency rates decrease for each grade level. Interestingly, this declining mathematics proficiency rate is experienced in several other states that administer the SBAC.¹⁶ Finding a solution for Nevada's students would greatly increase the likelihood of achieving the Nevada Department of Education's goal of becoming the fastest improving state on the SBAC assessment.¹⁷

SBAC ELA Comparison SBAC Math Comparison Urban & Rural Districts Urban & Rural Districts 2018-2019 School Year 2018-2019 School Year 48.6% 31.6% 8 43.8% 26.4% 51.4% 33 4% 45.1% 31.1% 47.0% 35.1% Grade Level Grade Level 40.9% 32 2% 53.2% 37.8% 47.5% 33.8% 50.3% 45 2% 46.5% 39 9% 47.4% 48.9% 3 41.7% 10.0% 30.0% 40.0% 50.0% 60.0% 10.0% 30.0% 40.0% 50.0% 60.0% 20.0% 20.0% Percentage of Proficient Students Percentage of Proficient Students School Type Rural Urban Source: Nevada Report Card

Figure 5: 3rd to 8th Grade SBAC Proficiency Rates

•

ACT Assessment

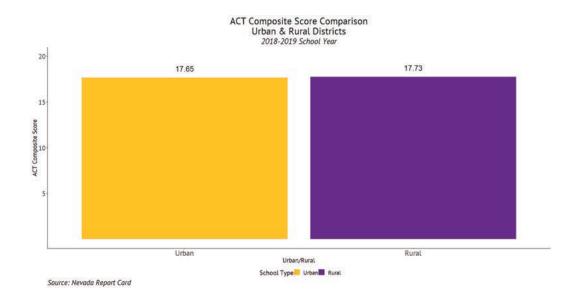
In high school, the mandated assessment students take is the ACT. Notably, the Silver State is one of only 15 states that requires each student to participate in the ACT assessment. In Nevada, the ACT composite score for rural students is slightly higher (approximately one tenth of a point) than that of urban students (see Figure 6). Unfortunately, in the national context, these composite scores place Nevada's students behind the 14 other states that require the ACT.¹⁸

Additionally, the ACT has set college and career readiness benchmark scores for each of the four testing areas: English, mathematics, reading, and science.¹⁹ The composite score a student receives is the average of these four testing areas. Using these college and career readiness benchmarks, the corresponding composite score would be 21.25. Because the ACT only provides scores in whole numbers, a student would need a composite score of 22 to have met the college and career readiness benchmarks. Neither the averages for rural or urban students qualifies as college and career-ready based on ACT's guidance. Many universities require students entering university or community college to take entrance tests to determine the appropriate English

and mathematics class placement. For those students who are deemed not ready for the rigors of college-level mathematics and/or English, they are required to take remedial coursework. Analyzing the percentage of Nevada's high school students who enter Nevada System of Higher Education (NSHE) institutions, we note that approximately equal percentages of students from urban and rural districts require remedial coursework (See Appendix B for additional information).

When ACT composite scores are examined in combination with the findings of the SBAC assessment in the previous subsection, the ACT composite scores highlight an important distinction in the data. While the academic achievement of rural elementary and middle school students lags their urban counterparts, this difference disappears in high school. To further explore this finding, the following two subsections analyze career and technical education opportunities available to both urban and rural students, as well as graduation rates in rural and urban school districts to better understand the differences in student outcomes –if anybetween these two types of school districts.

Figure 6: ACT Composite Score



Career and Technical Education

The ACT data presented previously suggests that urban and rural high school students are performing similarly in high school. This section considers the career and technical education (CTE) programs available to urban and rural high school students. These programs intend to strengthen college and career pathways and to increase opportunities for students to graduate with job skills. Using data from the Nevada Department of Education detailing the CTE programs at each school, and combining it with growth and/or wage prospects for each field (obtained from the Nevada Department of Employment, Training, and Rehabilitation²⁰), Figure 7 details the percentage of CTE programs at high schools by career prospects (job growth and wage rates)...

Preferably, both urban and rural students would have equal access to high growth, high paying CTE programs. While high schools in rural districts have a lower percentage of high growth, high wage programs than do urban district high schools, this balances out when programs in high growth, low pay sectors are included. This finding is likely driven by the high prevalence of agricultural, food, and natural resources CTE programs

in rural areas – which is a high growth, low wage field. Low growth careers comprise 26.4 percent of CTE programs in rural school districts, compared to 27.0 percent in urban districts. In a conversation with a superintendent of a rural school district, the individual noted that oftentimes the CTE programs offered by rural districts are determined by what the community deems important, as well as the access to businesses and industry to support these programs.

Figures 8 and 9 display the percentage of rural and urban high schools that offer each selected program. Figure 8 provides data for high growth fields and Figure 9 highlights programs offered in programs projected to have lower career growth opportunities. The data reveals several interesting trends. First, in most cases, the percentage of high schools offering various programs are relatively similar in both urban and rural school districts. However, a significantly greater percentage of rural high schools offer programs in architecture and construction, as well as in agriculture, food, and natural resources.

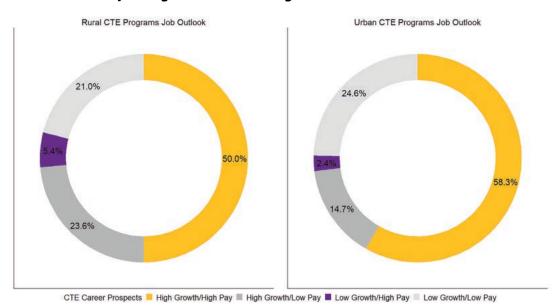
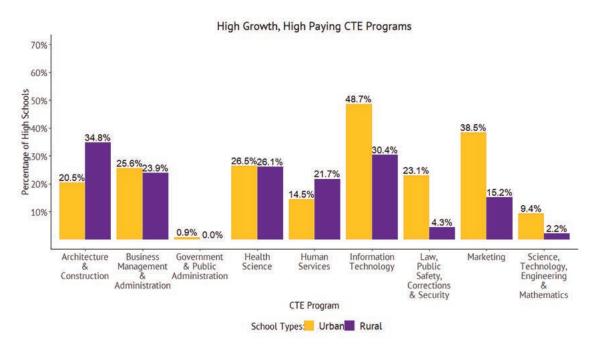
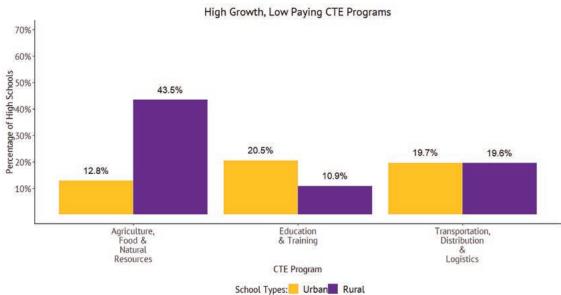


Figure 7: Growth and Pay of High School CTE Programs

Data obtained from the Nevada Department of Education & Nevada Department of Employment, Training, and Rehabilitation

Figure 8: High Growth Career and Technical Education Programs

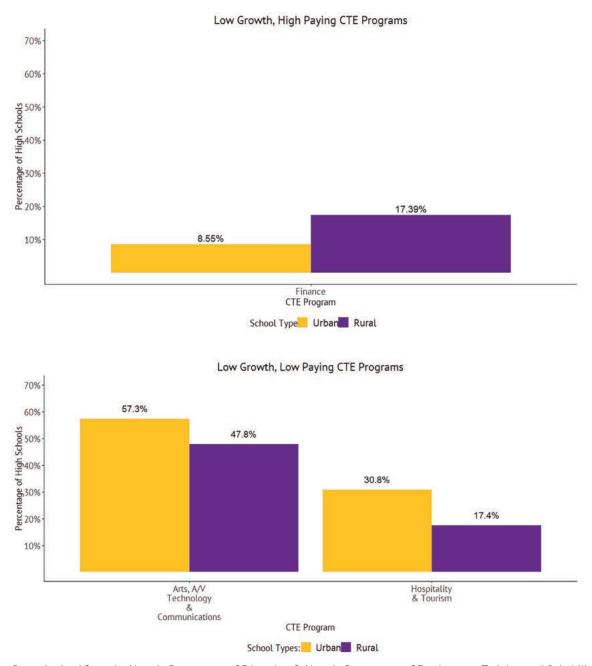




Data obtained from the Nevada Department of Education & Nevada Department of Employment, Training, and Rehabilitation

"... a significantly greater percentage of rural high schools offer programs in architecture and construction, as well as in agriculture, food, and natural resources."

Figure 9: Low Growth Career and Technical Education Programs



Data obtained from the Nevada Department of Education & Nevada Department of Employment, Training, and Rehabilitation

A greater percentage of urban high schools offer programs in both information technology and science, technology, engineering, and mathematics (STEM). These sectors are considered both high wage and high growth sectors and expose students to many of the skills required by today's employers.

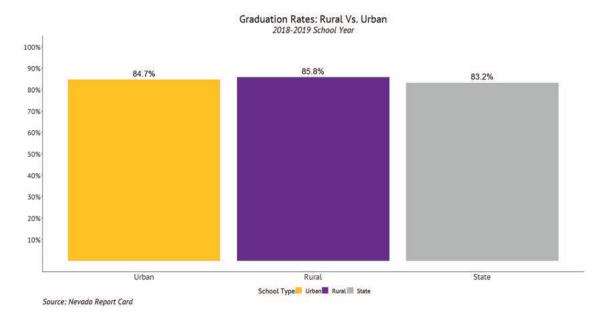
The data presented in Figures 7, 8, and 9 suggest that students in both urban and rural school have similar access to career and technical programs, with a similar distribution between wage and growth fields.

Graduation Rates

Another way to compare high school student outcomes is to analyze graduation rates. Figure 10 displays the graduation rates of rural and urban school districts, as well as the State average. Rural school districts have a graduation rate that is approximately 1 percent higher than urban school districts. Also, it is not an anomaly that the State of Nevada graduation rate is below both the rural and urban rates. This owes to the fact that certain schools are not included in individual district rates but are included in the state graduation rate.²¹

Additionally, Nevada students can earn an Advanced Diploma, as codified in Nevada Administrative Code (NAC) 389.664. To receive a standard diploma, a student must take 15 required credits and 7.5 elective credits. For those students that opt to pursue an Advanced Diploma, they must take 18 required credits and 6 elective credits. As noted in Table 1, the primary difference in the two diploma types is that students receiving the Advanced Diploma have a credit of social studies, an additional credit of math, and an additional credit of science (with a half credit reduction in health education and computer usage requirements).

Figure 10: Graduation Rates: Rural Vs. Urban



"Rural school districts have a graduation rate that is approximately 1 percent higher than urban school districts."

"Nevada students can earn an Advanced Diploma, as codified in Nevada Administrative Code (NAC) 389.664."

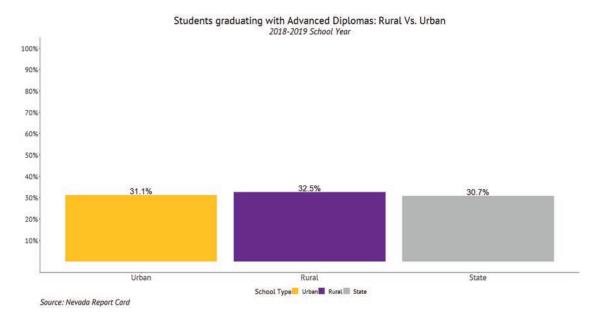
Table 1 - Required Credits for a Standard and Advanced Diploma

Required Course	Standard Diploma	Advanced Diploma
American Government	1	1
American History	1	1
Arts and Humanities, Junior Reserve Officers' Training Corps (Level III or Level IV), or Career and Technical Education	1	1
Social Studies	0	1
English, including Reading, Composition, and Writing	4	4
Health Education	1	0.5
Mathematics	3	4
Physical Education	2	2
Use of Computers	1	0.5
Science	2	3
Total	15	18

Figure 11 displays the percentage of students in urban and rural districts that graduated with an Advanced Diploma. Like the overall graduation rates, rural students graduated with a slightly higher percentage of Advanced Diplomas than their urban district counterparts (32.5 percent versus 31.1 percent).

While not a significant difference, both the overall graduation rate and percentage of students graduating with an Advanced Diploma are higher in rural Nevada school districts than urban school districts. Rural school districts appear to close the achievement gap between urban elementary school students (as measured by the SBAC) and actually outperform – if only marginally – their urban counterparts in high school.

Figure 11: Advanced Diplomas: Rural Vs. Urban



Lessons Learned from Rural Student Achievement

Ultimately, measures of student achievement across rural school districts in Nevada are mixed. On average, rural elementary and middle schools report lower ELA and mathematics proficiency rates than their urban counterparts. However, in high schools, rural school districts slightly outperform urban districts on the ACT composite score, graduation rates, and percentage of students receiving an Advanced Diploma. Unsurprisingly, Nevada's star rating system for schools reflects the outcomes noted above, with a greater percentage of one- and two-star elementary and middle schools in rural districts than in urban districts.

Our findings prompted our research team to explore the following question: what are rural districts doing to close the achievement gap between their urban counterparts by the end of high school? National studies have suggested that rural students have different opportunities than their urban counterparts: rural students outpace urban students in taking dual enrollment courses in high school (where the student gets both high school and college credit), but they lag urban students in taking Advanced Placement courses.²²

In Nevada, there are similar career and technical education opportunities in both urban and rural school districts. Additionally, students graduating from urban and rural school districts that pursue postsecondary educa-

tion at a Nevada System of Higher Education (NSHE) institution require remedial coursework in mathematics and/or English at similar rates. This suggests that urban and rural students are equally prepared (or unprepared) for the rigors of college education (see Appendix B). Finally, increasing transiency rates in schools are likely to adversely affect proficiency rates and ACT composite scores, and in Nevada there is an inverse correlation between a school's transiency rate and its proficiency rates/ACT composite scores (i.e., as transiency rates increase, achievement decreases).²³ However, transiency rates for schools in rural districts are lower than the rates for schools in urban districts at all levels (elementary, middle, and high schools). While addressing transiency rates is important in addressing achievement for Nevada's students, it is likely not an effective explanation to understand the gains made by rural high schools.

Additional research should seek to understand why students in rural districts are able to close the achievement gap that existed between students in urban districts in high school. Current public data only allows for an analysis of aggregate, school-wide measures. These future studies would benefit from student-level measures to better understand the underlying factors influencing each student's performance.



K-12 EDUCATION FUNDING

Nationally, most states provide additional funding to rural school districts to account for the higher cost to educate students – primarily due to increased transportation costs to get students to school and less opportunity to realize economies of scale in rural schools. ^{24,25} Similarly, Nevada provides additional funding to rural school districts. The system that currently funds K-12 education - the Nevada Plan - was created by the Legislature in 1967 [Nevada Revised Statutes (NRS 387.121)]. However, the Nevada Plan was replaced during the 80th (2019) Session of the Nevada Legislature with the Pupil-Centered Funding Plan. The implementation of the new funding plan is scheduled to commence with the 2021-2022 school year.

"The implementation of the new funding plan is scheduled to commence with the 2021-2022 school year."

Nevada Plan (1967-2021)

The current Nevada Plan provides differentiated funding for districts with small student populations and accounts for local variations in wealth and costs per student. As such, the Nevada Plan creates a mechanism to provide State aid to supplement local funding "to ensure each Nevada child a reasonably equal educational opportunity" (NRS 387.121).

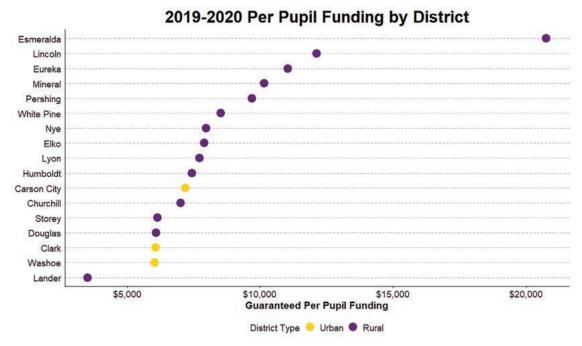
The Nevada Plan also establishes a basic support guarantee for each school district.²⁶ State aid is the difference between the basic support guarantee and local funds. If local revenues are higher or lower than projected, State aid is adjusted to cover the total guaranteed support. When local revenues exceed projections and the basic support guarantee, school districts can retain the additional funds outside the Plan and State aid is reduced.

Under the Nevada Plan, each school district has its own per pupil basic support guarantee, which varies substantially throughout the State. For Fiscal Year (FY) 2020, the statewide average basic support is \$6,218 and increases to \$6,288 in FY 2021.²⁷ As of 2015, the Nevada Plan includes an Equity Allocation calculation (NRS 387.121 and NRS 387.122), meaning that the basic support guarantee for each district is run through an Equity Allocation Model that considers the following variables:

- Demographic characteristics of each district
- Weighted average costs of operations, salaries, and benefits
- 85 percent of average transportation costs over a four-year period, adjusted for inflation using the Consumer Price Index (CPI)
- Licensed teacher, administrative, and support services staffing requirements based on a school district's urban or rural characteristics through the concept of attendance areas, and
- Ability of a district to generate revenues ("outside revenues") in addition to the guaranteed funding (a district's wealth).²⁸

For the 2019-2020 school year, the basic support guarantee approved by the Nevada Legislature for each school district is shown in Figure 12. The districts with the largest basic support guarantee are small, rural school districts. In contrast, the largest districts — Clark and Washoe — have basic support guarantees below the statewide average of \$6,218 per pupil. Lander County School District has the lowest basic support guarantee due to the wealth factor calculation, which reduces the guarantee based on revenues received outside the formula. In practice, Lander County School District receives more revenue than the basic support guarantee provides because actual local revenues exceed the basic support guarantee.

Figure 12: 2019-2020 School Year Guaranteed Per Pupil Funding by School District



Source: Senate Bill 555, State of Nevada 80th Legislature

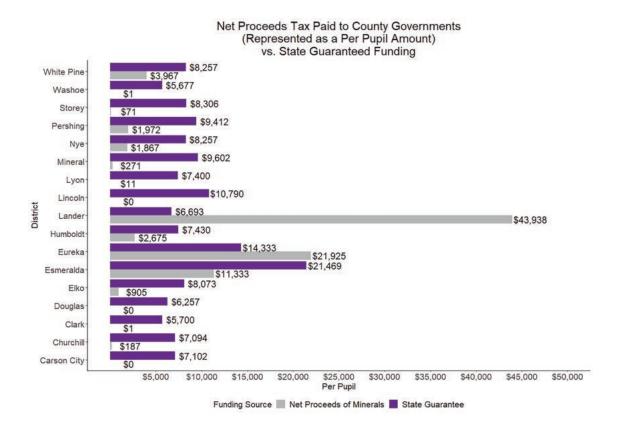
A major source of local revenue for certain rural school districts in Nevada are the Net Proceeds of Minerals Tax. This tax is an annual collection based on the "actual production of minerals from all operating mines, oil and gas wells, and geothermal operations in Nevada." Mining operators disclose the gross yield and net proceeds of each geographically distinct operation where minerals are extracted. Based on this information, the operator pays a tax between 2 to 5 percent (based on the ratio of net to gross proceeds). Of the total tax paid, a portion remains with the county where the mine is located. The county portion depends on the local tax rate, with the remaining balance going to the State.

School districts with mining operations located within their jurisdictions receive a portion of this net proceeds of minerals tax, which is included with property taxes for accounting purposes. Figure 13 displays the per pupil net proceeds of minerals tax collected by each county. This is not to say all the local net proceeds of minerals tax is dedicated to education, but the figure provides an estimate of the impact of mining tax revenues on each school district. For comparison, the state quaranteed per pupil rate is also included.

"A major source of local revenue for certain rural school districts in Nevada are the Net Proceeds of Minerals Tax." As noted in Figure 13, Lander, Eureka, and Esmeralda County rely most heavily on the Net Proceeds of Minerals taxes, with the school districts benefiting as well. To a lesser extent, White Pine, Humboldt, Pershing, and Nye County also receive a sizable share from mining

taxes. What is important to note is that while Net Proceeds of Minerals Taxes benefit rural school districts almost entirely, it does not benefit all rural districts equally (with some rural districts receiving little, or no, revenue).

Figure 13: Per Pupil Net Proceeds of Minerals Tax by School District



The New Funding Formula – The Pupil-Centered Funding Plan (2021 and Beyond)

The above data describes Nevada's current K-12 education funding formula that was implemented in 1967. During the 80th (2019) Legislative Session, the Nevada Legislature passed a new funding model [or plan] that will take effect in the 2021-2022 school year.^{30,31} The plan seeks to improve the transparency of K-12 funding in the Silver State. Its genesis was the recognition that Nevada's K-12 education system is funded by dozens of distinct revenue sources, and the allocation of funds to

individual districts lacks transparency. To remedy this, the new funding mechanism will provide each district with the same base per pupil amount, then add per pupil weights for students who are classified as English Language Learners (ELL), or have an individualized education program (IEP), or are determined to be "at-risk." However, it is likely that the initial, effective student weights will be significantly lower than targeted student weights due to funding constraints.

"...under the proposed new formula and without an infusion of additional funding, only four school districts are expected to realize an increase in funds from the State." "Accordingly the bill mandates that no school district should receive less money than it did for the fiscal year ending on June 30, 2020."

Small school districts and small schools will receive additional weights as well, given that these smaller districts and schools still must pay the fixed costs of operating a school district, no matter the size of the student population. Additionally, as one Chief Financial Officer of a rural school district noted:

Transportation and fewer students are only the tip of the iceberg. Professional services in general are tough to come by. For example, we must contract for special education services, school psychologists, and other professional special services. Decentralization is another reason. We cannot easily share services because we are so spread out and we are unable to hire a part-time position for small schools. Both the costs to hire an employee or to contract for professional services will be much greater on a per pupil basis compared with larger areas. Cost for construction, facilities and supplies tend to be more also. The implementation of the new funding plan is scheduled to commence with the 2021-2022 school year.



tricts are expected to realize an increase in funds from the State.³² According to data presented during the 2019 legislative session, these include Clark, Mineral, and Washoe County School Districts, and the State Public Charter School Authority. Because of the expected decline in state funding for 14 rural school districts un der the Pupil-Centered Funding Plan, the bill includes language that will 'hold harmless' any school district that is projected to receive less money under the new funding formula than the old Nevada Plan. Accordingly, the bill mandates that no school district should receive less money than it did for the fiscal year ending on June 30, 2020.33 At the time of publication of this report, the base per pupil amounts and weights have not been finalized. As such, it is not currently possible to assess or quantify the impact the transition to the Pupil Centered Funding Plan will have on school districts. However, based on preliminary data presented at the time the bill was introduced, the Pupil-Centered Funding Plan is expected to adversely affect rural school districts more than urban ones.

This likely adverse impact on rural school districts led one rural school district superintendent to note that, "in the absence of additional money, this (the Pupil Centered Funding Plan) simply becomes a redistribution of inadequate resources. Everyone, even legislators, acknowledge that education is not 'optimally' funded. Yet, the plan was developed and is scheduled to be implemented. The rural perspective is that this was an intentional sweep of rural dollars to Clark County." Certainly, most legislation has proponents and opponents, but the Pupil Centered Funding Plan seems to have pitted urban and rural school districts at odds with one another. Adding to this divide is the notion that the current Nevada Plan has been determined to be equitable in various studies, but those same studies generally note that equity has been decreasing over time.34

Possibilities for Rural Funding Under the Pupil-Centered Funding Plan

As noted above, Nevada's new K-12 education funding formula, the Pupil-Centered Funding Plan, includes a per pupil weight for students that are enrolled in small school districts and/or small schools. However, the language in the legislation is silent on what those weights should be and defers the decision to the Commission on School Funding and its recommendations. However, there are various models in use by other states which the Commission on School Funding may want to consider.

While seeking different options for a weighted funding formula, the Nevada Department of Education

commissioned a study in 2018.³⁵ The report offered a possible small district weight for consideration by decision-makers. Table 2 presents information about the proposed small district weight and how those weights would affect school districts in Nevada based on the 2018-2019 school year enrollment. Note that the recommended weights are based on a sliding scale, so that the smaller a district, the larger the per student weight. While the commissioned report did not provide recommended weights for small schools, the researchers did suggest considering a similar scale for small schools (i.e. a sliding scale based on school enrollment).

Table 2: Proposed Small District Weights

District Size Student	Recommended	Nevada School Districts Meeting this Criteria	
Enrollment	Weight	Trevada Serios Sistrices Freezing and effective	
0 - 50	2.3	-	
51 - 100	2.11	Esmeralda County School District	
101 - 250	1.85	-	
251 - 500	1.65	Eureka and Storey County School Districts	
501 - 1,000	1.46	Mineral, Pershing, and Lincoln County School Districts	
1001 - 2000	1.26	Lander and White Pine County School Districts	
2,001 - 3,000	1.15	-	
3,001 - 4,000	1.08	Churchill and Humboldt County School Districts	
4.001 +	1	State Public Charter School Authority and Nye, Douglas, Carson City,	
4,001 +	1	Lyon, Elko, Washoe, and Clark County School Districts	

Source: Weights from Augenblick, Palaich and Associates 2018 and Enrollment data from the Nevada Department of Education's Nevada Report Card

"The Nevada's new K-12 education funding formula, the Pupil-Centered Funding Plan, includes a per pupil weight for students that are enrolled in small school districts and/or small schools." Including a per-pupil weight for small schools and districts is not uncommon. There are 32 states that include a weight based on low student enrollment and/or some measure of geographic size.³⁶ For example, Texas includes a per-pupil weight that accounts for regional differences in costs to educate students, small school districts, and/or for school districts that have a large geographic size relative to its student population.³⁷ The final criteria is an interesting option that Nevada's decision-makers may want to consider. Table 3 presents the 2018-2019 school year enrollment for each school dis-

trict in Nevada, as well as the geographic area covered by those school districts. What is striking is how sparsely populated most of Nevada's rural school districts are. Based on the small district weights proposed in the Nevada Department of Education's 2018 report (as presented in Table 2), Elko and Nye County School Districts would not receive a small district weight. However, if Nevada's decision-makers considered the geographic size of the district in relation to the student enrollment served (as Texas has), it is likely these districts would receive the small district weighted funding.

Table 3: Enrollment and Geographic Size of Nevada's School Districts

School District	2018-2019	Saurra Miles	Enrollment Per
School District	Enrollment	Square Miles	Square Mile
Esmeralda	96	3,589	0.03
Eureka	321	4,176	0.08
Lincoln	993	10,634	0.09
Pershing	658	6,037	0.11
Mineral	582	3,756	0.15
Lander	1,002	5,494	0.18
White Pine	1,655	8,876	0.19
Nye	5,367	18,147	0.3
Humboldt	3,514	9,648	0.36
Elko	10,131	17,179	0.59
Churchill	3,396	4,929	0.69
Storey	460	263	1.75
Lyon	9,066	1,994	4.55
Douglas	5,834	710	8.22
Washoe	64,402	6,342	10.15
Clark	325,081	7,910	41.1
Carson City	7,850	143	54.9
State Charters	43,845	-	-

Source: Enrollment data from the Nevada Department of Education's Nevada Report Card and Geographic Size of Counties from Nevada Geographic and Demographic Data

Poverty in Rural School Districts

As noted previously, in addition to small district and small schools weights, the Pupil-Centered Funding Plan includes weighted funding for students that are English Language Learners (ELL), students with an IEP, and students categorized as "at-risk," the latter of which is currently being conceptualized as students that qualify for free-and-reduced price lunch (FRL). This section considers this final weight — the "at-risk" weight — and suggests that decision-makers in Nevada should consider a more nuanced measure than simply whether a student qualifies for free-and-reduced price lunch. This is especially relevant since using FRL rates to capture the incidence of poverty within schools is a relatively new occurrence, with the Victory School categorical program instead using zip code level poverty data to allocate funding.

Many districts use the FRL indicator to capture risk. FRL is likely the easiest indicator to use because schools and districts regularly collect and report FRL data. However, many have argued that FRL is not an adequate or accurate conception of "at-risk."

Here in Nevada, there is concern that using FRL as a measure of "at-risk" will underestimate the number of students who need additional resources and deprive rural school districts of the resources they need. Our team illustrates this point with recent data. First, a 2019 report from the Nevada Health Workforce Research Center suggests the poverty rate of children aged 17 and under in urban and rural counties is approximately equivalent; the urban poverty rate is 18.8 percent and the rural poverty rate is 18.3 percent - a difference of 0.5 percentage points.³⁸ However, Nevada Report Card data (see Figure 3) indicates that the rate of students receiving free-and-reduced price lunch in urban districts is 62.7 percent while the rate of students receiving free-or-reduced price lunch in rural school districts is 49.5 percent. In short, county level data suggests that poverty rates in rural and urban districts are comparable; however, there is a significant difference in school level FRL data between rural and urban school districts. This difference suggests that there may be underreporting resulting in an undercount of the number of FRL students in rural districts. Accordingly, if Nevada uses FRL to measure "at-risk" students, rural school districts may be deprived of critical resources they need to educate this group of students.

The possible solution is to consider alternative or additional measures to incorporate into the "at-risk" weight that may not be captured under a single measure of poverty. To maintain the spirit of the current categorical programs (specifically, Zoom, Victory, and Senate Bill 178 of the 2017 legislative session), the alternative measure might consider student achievement in addition to a socio-economic measure.

While this measure could be structured so that students would be eligible to receive a weight if they either qualify for free- and-reduced price lunch or tested in the bottom 25th percentile of the state mandated proficiency assessment (currently the Smarter Balanced Assessment Consortium or SBAC), an additive effect might be even more beneficial — namely students receive a specific weight for either qualifying for free-and-reduced price lunch or performing in the bottom quartile and adding to that weight if both conditions are met.

Furthermore, this model could then be applied to the English Language Learner and the Pupils with an IEP weights – meaning that students would receive an increased weight if they also scored in the bottom quartile on the state proficiency assessment.

Including a measure of achievement as an additive measure to the discussed weights recognizes there is nuance to these classifications, maintains the spirit of the current categorical programs, and would provide the additional supports needed for students and schools regardless of their location. It could also assist to rectify the potential under-reporting of measures of poverty in rural areas.

Lessons Learned in School District Funding

Like many other states, Nevada recognizes the cost to educate rural students is higher than the cost to educate urban students. This largely owes to increased costs to transport students and fewer students to absorb the fixed costs of operating a school district. However, while Nevada's current K-12 funding mechanism differentiates funding based on where students are located and provides increased funding for rural school districts, the new Pupil-Centered Funding Plan will differentiate funding both on where the student is located and the educational challenges they face.

Senate Bill 543 of the 2019 legislative session in-

cluded language that the final funding formula is to include a small district and small school weight, as well as weights to address the different needs of students; however, it is currently unclear what final form those weights will take. For the small district and small school weights, Nevada's rural school districts could benefit from two different weights: one based on student enrollment and another based on geographic size relative to its student enrollment. For weights directed at student characteristics, especially the "at-risk" category, the inclusion of student achievement measures, in addition to the FRL indicator, would offer a more comprehensive view of the "at-risk" student profile.

CONCLUSION

This brief provides an initial overview of the conditions and opportunities facing rural students and school districts in Nevada. This report has grouped rural districts together as a unitary group, but we acknowledge that Nevada is comprised of 14 unique rural school districts of varying geographic sizes and student populations. Future studies should look at the individual contexts of each district to better understand specific challenges and costs associated with addressing the desired educational outcomes for students of each school district.

This section summarizes the findings noted previously: Rural students in Nevada make up approximately 9 percent of the student population, but the geographic area these districts cover is 87 percent of Nevada's total land.

- Rural students have a different demographic profile than urban students.
 - o Nevada's rural students are predominantly white, with 61.6 percent of the students belonging to this racial/ethnic group, followed by Latino students (21.1 percent), two or more races (4.2 percent), American Indian/Alaskan Native (4.1 percent), African American (1.5 percent), Asian (1.0 percent), and Pacific Islander (0.5 percent).

- o Conversely, in Nevada's urban districts, 44.3 percent of students are of Latino descent and 28.6 percent are white, followed by African American (12.2 percent), two or more races (6.9 percent), Asian (6.0 percent), Pacific Islander (1.5 percent), and American Indian/Alaskan Native (0.5 percent).
- Generally, rural districts have fewer "under-resourced" students than urban districts.
 - o Rural school districts have fewer students than their urban counterparts that qualify for free-and-reduced-price lunch (49.5 to 62.7 percent) and students receiving English Language Learner services (7.2 to 15.8 percent). The one exception is that rural school districts have a higher percentage of students with an Individualized Education Program (13.8 percent to 12.1 percent).
- Rural students in elementary and middle schools underperform compared to their urban district peers on the Smarter Balanced Assessment (SBAC). This holds for all grades and on both subjects tested ELA and mathematics.

- o However, students in rural school districts outperform urban districts in high school measures, specifically average ACT composite scores, graduation rates, and percentage of students receiving an Advanced Diploma.
- o Rural high school students have similar career and technical education (CTE) opportunities as urban students when considering programs in high growth career fields.
- o Our report reveals that rural education in Nevada has robust secondary pathways, specifically as they relate to graduation rates and the percentage of students receiving an Advanced Diploma.
- o An analysis of the data suggests that academic supports for rural students will most likely be different than supports needed by urban students. For example, the two major categorical programs in Nevada target English Language Learners (ELLs) and students living in the poorest zip codes in the state through the Zoom and Victory programs, respectively. The data reveals that these populations are more prevalent in urban school districts than rural districts.
- Nevada's K-12 education funding is currently undergoing a period of transition. Beginning in the 2021-2022 school year, the state will move to a new funding mechanism, the Pupil-Centered Funding Plan, that provides funding based on student populations. The new funding formula provides additional funds, or "weights," for students who may require more resources.
 - o The new education funding formula includes language for a small school district weight, which appears to be based solely on the district's student enrollment. However, as other states have done, Nevada decision-makers may want to consider

adding a weight that acknowledges the geographic size of a district relative to its student enrollment.

o Rural districts have a smaller percentage of students that qualify for free-and-reduced price lunch than urban districts. But statewide measures of poverty suggest nearly equal percentages of individuals living in poverty in both urban and rural areas. This suggests that there is under-reporting of students who qualify for FRL at rural schools. Consequently, the use of the FRL measure as the only metric to inform the "at-risk" weight could adversely affect rural school districts and deprive them of critical resources they need to adequately support these students.

The primary challenge faced by rural school districts in Nevada currently is the lack of certainty regarding the transition to the new Pupil Centered Funding Plan. Rural school districts may be asked to do even more with frozen funding levels for the foreseeable future. As the Commission on Education Funding and lawmakers consider weights, our team would recommend the following:

- Nevada should consider an additional weight that takes into account the geographic size of a district relative to its student population.
- Nevada should consider an "at-risk" weight that does not rely solely on FRL to capture the needs of the student. As the data suggests, relying on FRL would likely result in an under-reporting of students with greater needs in rural school districts and would deprive rural school districts of resources they need to educate these students.

"An analysis of the data suggests that academic supports for rural students will most likely be different than supports needed by urban students."

"Rural districts have a smaller percentage of students that qualify for free-and-reduced price lunch than urban districts."



About the Guinn Center

The Guinn Center is a 501(c)(3) nonprofit, nonpartisan, independent policy institute that seeks to advance evidence-based policy solutions for Nevada through research, public engagement, and partnerships.

© 2020 Guinn Center. All rights reserved.

Contact information: P.O. Box 750117 Las Vegas, Nevada 89136 Email: info@guinncenter.org Website: www.guinncenter.org



APPENDIX A – SUMMARY OF STUDENT ACHIEVEMENT DATA

This appendix provides the data that is visually presented in the Student Outcomes section of this report.

Table A.1: Star Ratings in Urban and Rural Districts

	Number of Schools	
Star Patings	Rural School	Urban School
Star Ratings	Districts	Districts
Elementary School Star Ratings		
1-Star	11	39
2-Star	21	117
3-Star	17	78
4-Star	15	66
5-Star	2	46
Middle School Star Ratings		
1-Star	11	16
2-Star	11	28
3-Star	11	34
4-Star	3	16
5-Star	3	37
High School Star Ratings		
1-Star	4	11
2-Star	-	12
3-Star	22	34
4-Star	4	9
5-Star	3	27

Source: Nevada Report Card

Table A.2: SBAC Proficiency Rates by Grade

	ELA		Mathematics	
Grade Level	Rural School	Urban School	Rural School	Urban School
	Districts	Districts	Districts	Districts
3rd Grade	41.7%	47.4%	44.5%	48.9%
4th Grade	46.5%	50.3%	39.9%	45.2%
5th Grade	47.5%	53.2%	33.8%	37.8%
6th Grade	40.9%	47.0%	32.2%	35.1%
7th Grade	45.1%	51.4%	31.1%	33.4%
8th Grade	43.8%	48.6%	26.4%	31.6%

Source: Nevada Report Card

Table A.3: ACT Composite Scores

	ACT Composite Score		
Crada Laval	Rural School	Urban School	
Grade Level	Districts	Districts	
11th Grade	17.73	17.65	

Source: Nevada Report Card

Table A.4: Graduation Rates – Regular and Advanced Diplomas

Item	Rural School Districts	Urban School Districts
Graduation Rate	85.8%	84.7%
Percentage of Students Receiving an	32.5%	31 1%
Advanced Diploma	32.3%	31.1%

Source: Nevada Report Card

APPENDIX B – NSHE REMEDIAL COURSEWORK

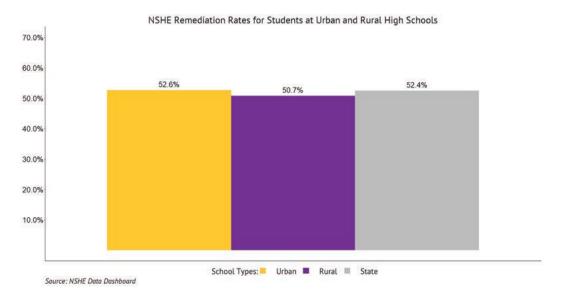
A major problem confronting many incoming college students is not demonstrating the required academic knowledge to thrive in introductory college courses. Oftentimes, these students are placed in remedial coursework, or non-credit earning courses, that must be passed prior to enrolling in credit earning classes. National estimates of students requiring remedial coursework range from 40 to 60 percent, costing students and families approximately \$1.3 billion each year in tuition and fees. Unfortunately, in addition to the added costs, students requiring remedial coursework are less likely to graduate. One of the State of Nevada's goals, as documented in the Every Student Succeeds Act (ESSA) Plan, is that all Nevada

students be prepared to enter post-secondary education college and career ready, without the need to enroll in remedial courses.⁴⁰

Unfortunately, data reveal that the rates of Nevada high school students entering post-secondary institutions needing remedial coursework are comparable with national averages. Figure B.1 displays the Nevada System of High Education (NSHE) remediation rates for Nevada's high school students. Of Nevada's rural school district graduates, 50.7 percent of require remedial coursework once in college, compared to 52.6 percent of urban high school students.⁴¹

"...data reveal that the rates of Nevada high school students entering post-secondary institutions needing remedial coursework are comparable with national averages."

Figure B.1: NSHE Remediation Rates



NSHE is redesigning remedial supports for students by eliminating the remedial courses and offering additional instructional time and mandatory tutoring for qualifying students in credit-bearing courses; this is known as "corequisite support." 42

Addressing this problem will require greater collaboration between school districts and institutions of higher education to ensure high school curricula and standards, as well as college course requirements, are in alignment. Nevada may want to consider the practice used by other states that now use college readiness assessments in high school. These assessments often resemble the tests

given by colleges and universities to incoming students that place those students in the appropriate mathematics and English courses. Doing this would allow students to use their performance on these tests to better inform their high school course scheduling to reduce gaps in their knowledge before enrolling in college.⁴³

The data suggests that approximately 50 percent of all of Nevada's high school students enrolling at NSHE intuitions require at least one remedial course in either mathematics or English. Nevada high schools, both rural and urban, must begin to look at solutions to this problem.

"...over half of all Nevada high school students continuing their education at NSHE institutions require remedial coursework upon enrollment."

- ¹ Showalter, Daniel, Sara L. Hartman, Jerry Johnson, & Bob Klein. "Why Rural Matters 2018-2019." November 2019. http://www.ruraledu.org/WhyRuralMatters.pdf.
- ² Lair, Samuel & Kenneth J. Retzl. "Clark County School District: A Super-Sized District." Guinn Center (Blog). September 21, 2019. https://quinncenter.org/clark-county-school-district-a-super-sized-district/.
- ³ State of Nevada Department of Education. "Nevada Report Card." Accessed September 23, 2019. http://nevadare-portcard.nv.gov/.
- ⁴ State of Nevada. "Nevada Geographic and Demographic Data." Accessed September 23, 2019. http://grant.nv.gov/uploadedFiles/grantnvgov/Content/Research/Appendix%20B.NevadaGeographicandDemographicData.pdf.
- 5 State of Nevada Department of Education. "Nevada Report Card." 2019. http://nevadareportcard.nv.gov/.
- ⁶ State of Nevada. "Nevada Geographic and Demographic Data."
- ⁷ The Line, "A Snapshot: Rural/Urban/Suburban," October 2018, https://thelinek12.com/rural-suburban-urban-snapshot/.
- ⁸ Showalter, Daniel, Sara L. Hartman, Jerry Johnson, & Bob Klein. "Why Rural Matters 2018-2019." November 2019. http://www.ruraledu.org/WhyRuralMatters.pdf.
- ⁹ Nevada Legislature, Senate. An act relating to education; creating the State Education Fund; revising the method for determining the amount of and distributing money to support the operation of the public schools in this State; establishing certain requirements for the accounting and use of such money; establishing requirements for the establishment of budgetary estimates relating to the public schools in this State; creating the Commission on School Funding and establishing its duties; establishing provisions relating to reports of expenditures by public schools; directing certain revenues to be deposited in the State Education Fund; making an appropriation; and providing other matters properly relating thereto, Senate Bill 543, 80th Session. Introduced in Senate May 13, 2019, https://www.leg.state.nv.us/App/NELIS/REL/80th2019/Bill/7052/Overview.
- ¹⁰ The Line, "A Snapshot: Rural/Urban/Suburban," October 2018.
- For the purposes of this report, a school is not defined as a building, but rather a unit that receives a star rating on the Nevada School Performance Framework (NSPF). For example, Carlin Junior High and High School in the Elko County School District are considered two different schools, even though they share a building.
- U.S. Department of Education. "Every Student Succeeds Act State and Local Report Cards Non-Regulatory Guidance." January 2017, https://www2.ed.gov/policy/elsec/leg/essa/essastatereportcard.pdf
- State of Nevada Department of Education. "Nevada's School Rating System." July 2019, http://nevadareportcard. nv.gov/DI/MoreDownload?filename=Nevadas%20School%20Rating%20System.pdf
- Smarter Balanced Assessment Consortium. "Members and Governance." January 2020, http://www.smarterbalanced.org/about/members/
- ¹⁵ Showalter, Daniel, Sara L. Hartman, Jerry Johnson, & Bob Klein. "Why Rural Matters 2018-2019." November 2019.
- Retzl, Kenneth J. "Math is Hard: SBAC Results Across States." November 5, 2019. https://guinncenter.org/math-is-hard-sbac-results-across-states/
- ¹⁷ Nevada Department of Education. "Fastest Improving State in the Nation: Annual Report of the State of Public Education." February 2019. https://www.leg.state.nv.us/App/NELIS/REL/80th2019/ExhibitDocument/ OpenExhibit-Document?exhibitId=35765&fileDownloadName=0207_DOE.pdf
- National ACT. "The Condition of College and Career Readiness," October 2019, https://www.act.org/content/dam/act/unsecured/documents/cccr-2019/National-CCCR-2019.pdf
- For the college and career readiness benchmarks, see "The Condition of College and Career Readiness" at https://www.act.org/content/dam/act/unsecured/documents/cccr-2019/National-CCCR-2019.pdf
- Moody's Analytics. "Economic and Selected Revenue Outlook." November 2018, https://www.leg.state.nv.us/App/InterimCommittee/REL/Document/13430
- Retzl, Kenneth J. "Graduation Rates in Nevada The Devil in the (Unknown) Details." November 1, 2018. https://guinncenter.org/graduation-rates-in-nevada-the-devil-in-the-unknown-details/
- ²² Showalter, Daniel, Sara L. Hartman, Jerry Johnson, & Bob Klein. "Why Rural Matters 2018-2019." November 2019.
- The correlation coefficients between transiency and proficiency rates for Elementary Schools was -0.494 for ELA and -0.509 for mathematics. In middle school, it was -0.348 for ELA and -0.451 for mathematics. In high school, the correlation coefficient for transiency rates and ACT Composite score was -0.536.
- ²⁴ For a comprehensive review of the Nevada Plan and funding of K-12 education, see Guinn Center, "Nevada K-12 Education Finance," April 2019, https://guinncenter.org/wp-content/uploads/2019/04/Guinn-Center-K12-Ed-Finance-2019.pdf

- Showalter, Daniel, Sara L. Hartman, Jerry Johnson, & Bob Klein. "Why Rural Matters 2018-2019." November 2019. http://www.ruraledu.org/WhyRuralMatters.pdf.
- Fiscal Analysis Division, Legislative Counsel Bureau. "The Nevada Plan for School Finance: An Overview," 2017, https://www.leq.state.nv.us/Division/Fiscal/NevadaPlan/Nevada Plan.pdf.
- Nevada Congress, Senate, An act relating to education; ensuring sufficient funding for K-12 public education for the 2019-2021 biennium, SB 555, 80th Legislature, 2019, https://www.leg.state.nv.us/App/NELIS/REL/ 80th2019/Bill/7082/Overview.
- Nevada Department of Education, "2018 Update of the Equity Allocation Model," 2018, https://www.leg.state.nv.us/App/InterimCommittee/REL/Document/12240.
- Nevada Department of Taxation, Division of Local Government Services, "2018-2019 Net Proceeds of Minerals Bulletin," June 20, 2019, https://tax.nv.gov/LocalGovt/PolicyPub/ArchiveFiles/NetProceedsBulletins/ 2018-19_Net_Proceeds Bulletin Final 190620/.
- Unless otherwise noted, the information and data contained in this section are derived from the presentation on the Pupil Centered Funding Formula during the 80th (2019) Session of the Nevada Legislature. The information contained may be different than the information from the Commission on School Funding ("the Commission"). However, because the Commission has not finalized any recommendations at the date of publication of this report, as well as because the Commission's recommendations must still be acted upon at the 81st (2021) Session of the Nevada Legislature, this report defers to the presentation to legislators at the time of enactment.
- Nevada Congress, Senate, An act revising provisions relating to the funding of public schools, SB 543, 80th Legislature, 2019, https://www.leg.state.nv.us/App/NELIS/REL/80th2019/Bill/7052/Overview.
- ³² Applied Analysis, "Modernizing Nevada's K12 Education Funding System," May 2019, https://www.leg.state. nv.us/App/NELIS/REL/80th2019/ExhibitDocument/OpenExhibitDocument?exhibitId=43750&fileDownload-Name=SB543%20Applied%20Analysis%20Modernizing%20Nevadas%20K12%20Education%20Funding%20System. pdf.
- Nevada Congress, Senate, An act revising provisions relating to the funding of public schools, SB 543, Section 15.2, 80th Legislature, 2019, https://www.leg.state.nv.us/App/NELIS/REL/80th2019/Bill/7052/Overview.
- ³⁴ Augenblick, Palaich and Associates, "Nevada School Finance Study," October 22, 2018, http://www.doe.nv. gov/uploadedFiles/ndedoenvgov/content/Boards_Commissions_Councils/State_Board_of_Education/2018/November/APASchoolFinanceStudyFinalReport.pdf
- ³⁵ Augenblick, Palaich and Associates, "Nevada School Finance Study," October 22, 2018. Ibid.
- ³⁶ Verstegen, Deborah, "How Do States Pay for Schools? An Update of a 50-State Survey of Finance Policies and Programs," Paper Presented at the Association for Education Finance and Policy Annual Conference, March 15, 2014, https://schoolfinancesdav.files.wordpress.com/2014/04/aefp-50-stateaidsystems.pdf.
- Mudrazija, Stipica and Kristin Blagg, "School District Funding in Texas: Computing the Effects of Changes to the Foundation School Program Funding Formula," Urban Institute, January 2019, https://www.urban.org/sites/ default/files/publication/99706/school_district_funding_in_texas.pdf
- University of Nevada, Reno School of Medicine. 2019. "2019 Nevada Rural and Frontier Health Data Book." https://med.unr.edu/statewide/reports/data-book-2019
- ³⁹ Jimenez, Laura, Scott Sargrad, Jessica Morales, and Maggie Thompson. "Remedial Education: The Cost of Catching Up." Center for American Progress. September 2016. https://cdn.americanprogress.org/content/up-loads/2016/09/29120402/CostOfCatchingUp2-report.pdf
- ⁴⁰ Nevada Department of Education. "Consolidated State Plan Under the Every Student Succeeds Act." April 2017. http://www.doe.nv.gov/uploadedFiles/ndedoenvgov/content/Boards_Commissions_Councils/ESSA_Adv_Group/NevadaSubmittedConsolidatedPlanFinal.pdf
- ⁴¹ An important caveat with this data is necessary. Only those Nevada high school students who went to NSHE institutions are included. Students who enrolled in out of state or private colleges/ universities are not included in this data.
- ⁴² Nevada System of High Education. "NSHE Board of Regents Transforms Remedial Education, Mandates 'Corequisite Support." June 6, 2019. https://nshe.nevada.edu/2019/06/nshe-board-of-regents-transforms-remedial-education-mandates-corequisite-support/
- The Hamilton Project. "Policies to Address Poverty in America." June 2014. https://www.hamiltonproject.org/ assets/files/policies address poverty in america full book.pdf