An NPWR Research Grant Study Conducted by Social Impact Consultants

# The Challenges Facing the Male Workforce in Nevada and What to Do About It

Prepared for the Nevada Office of Workforce Innovation (OWINN)

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**Research Question**: What are the unique workforce challenges faced by males in Nevada, including those belonging to racial minorities and from low-income households, and what steps should Nevada stakeholders take to address them?

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### **Executive Summary**

The State of Nevada faces a growing crisis in the labor market, with a startling 19 percent of males aged 18-24 not in school, training, or at work; this poses a significant threat to the state's long-term economic prosperity and social stability. The present study, funded by an NPWR Research Grant from the Nevada Office of Workforce Innovation, examines the educational and workforce challenges accompanying this trend among Nevada males and offers five evidence-based strategies for addressing the crisis.



Our analysis reveals two seemingly contradictory facts. First, males in Nevada are falling behind in education. At every level, from high school diplomas to postgraduate degrees, females in Nevada are outperforming males, and in most cases the gap is widening. Aside from biological sex, our research identifies a number of key factors that predict lower educational attainment by Nevada students, including poverty/socioeconomic status, having received Individualized Education Plan (IEP) or Limited English Proficiency (LEP) services, and identifying as a member of specific racial minorities.

Second, this educational underperformance by males has not yet translated into an economic disadvantage in the workforce. Our analysis shows that males in Nevada earn significantly more than females, even after controlling for education, industry, hours worked, children, and other factors. This persistent wage premium, which is \$5,500 annually in one of our models, strongly suggests that systemic inequities remain in the labor market.

Our study concludes that the state should pursue a dual strategy: (1) implement three evidence-based initiatives in secondary education that would prepare more males for promising educational and career pathways, and (2) encourage more employers to pilot two initiatives that would invest in their workforce and expand their pool of eligible talent. We offer the following five recommendations:

1. **Durable Skills Training**: To prepare males for a labor market that increasingly values interpersonal skills, Nevada should integrate *durable skills* training statewide.<sup>1</sup> Building on the strong foundation of its existing Career and Technical Education (CTE) Employability Standards, the state should embed durable skills training into all high school (and probably middle-school) curricula, supplementing existing postsecondary- and career-readiness standards with durable skills standards that predict employability. Partnerships with employers that engage students in real-

<sup>&</sup>lt;sup>1</sup> Durable skills are also known as "soft skills" and sometimes "future-ready skills."



- world learning experiences like internships and apprenticeships also encourage growth in durable skills. This evolution in secondary education will be key to equipping students—especially males who are falling behind—with the communication, critical thinking, leadership, and other skills that are in high demand by employers and key to long-term career success.
- 2. **CTE Programming**: Participation in Nevada CTE programs significantly predicts improved educational attainment and workforce readiness (as measured by wages), even for those who find employment outside their CTE program of study. In other states, studies have found that males educated in technical high schools had a tenpercent higher graduation rate. Nevada should expand awareness of CTE as a promising option for middle and high school students and make programs more inclusive of students receiving IEP services, who (in our datasets) are at least 60-percent more likely to be male.
- 3. **Role Models**: The state should leverage the power of role models and mentorship by actively encouraging males to pursue careers in the high growth HEAL (Health, Education, Administration, and Literacy) occupations. This would grow the pipeline of male teachers and HEAL professionals in a virtuous cycle that will guide more males toward rewarding careers that are less vulnerable to automation, many of which require less than a bachelor's degree for entry level positions.
- 4. Skills-Based Hiring: To find and retain a better-prepared workforce, we recommend that Nevada employers place increased weight on foundational and durable skills—a practice research shows to be more predictive of job performance. Executing this strategy will require collaboration between the Nevada Department of Education (NDE); Nevada System of Higher Education (NSHE); the Nevada Department of Employment, Training, and Rehabilitation (DETR); workforce development organizations; and private employers to identify roles where skills assessments could replace degree expectations and prepare students for those roles. Internships and apprenticeships offer Nevada employers low-risk



- opportunities to partner with educational institutions to pilot innovative hiring practices such as this.
- 5. **Tuition Assistance Programs**: Given the state's budget challenges, we recommend more employers pilot tuition assistance and other financial incentives for postsecondary education to attract and retain young talent in exchange for employment tenure. This strategy will encourage more young men to join the labor force with the opportunity to expand their education down the road.

By addressing its education and workforce challenges with these evidence-based interventions, Nevada will foster a more equitable, prosperous, and resilient economy for its emerging workforce.



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### Section 1: Introduction

Nationwide, a growing and increasingly visible number of men are struggling to find and keep their footing in a rapidly evolving economy. Between 1990 and 2024, for example, the share of young men aged 18 to 24 who were not in education, employment, or training ("NEET") doubled from 4 percent to 8 percent.<sup>2</sup> Nevada's current percentage of males in this age range who are NEET, a startling 19 percent, is the second highest in the country and portends a serious challenge for the state's economy, its future workforce, and its social institutions.<sup>3</sup> Nevada also has the largest disparity of any state between males and females who are NEET (19 percent vs. 10 percent; see Figure 1a).

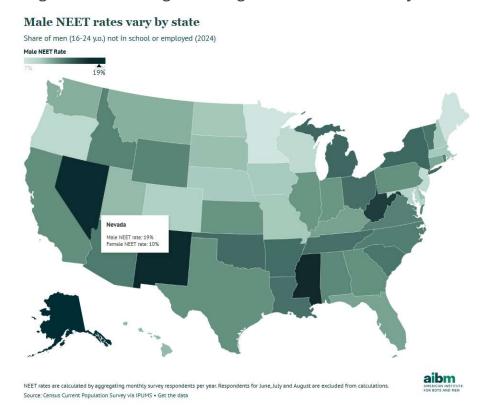


Figure 1a: Percentage of Young Males Who are NEET by State<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Hawrami and Reeves, May 21, 2025



<sup>&</sup>lt;sup>2</sup> Ravan Hawrami and Richard Reeves, "<u>A generation of lost men? The reality of NEET data</u>," American Institute for Boys and Men, May 21, 2025

<sup>&</sup>lt;sup>3</sup> For the economic and fiscal impact of reconnecting 30,000 youth in Nevada who are NEET/ disconnected, see "30k by 2030: The Potential Economic and Fiscal Benefits of Connecting 30,000 Disconnected Youth in Nevada to Education and Employment," Social Impact Consultants, 2024.

This disconnection from school and work is transitory for some and not for others. For many young males, it becomes a persistent way of life with adverse personal and societal consequences. Lower educational attainment among males, in particular, is associated with diminished social support, pessimism, and acute loneliness. This social isolation frequently has terminal outcomes, as men die "deaths of despair"—suicide, drugs, or alcohol—at nearly three times the rate of women, and often those most impacted by these trends are working-class men, men of color, or both. In fact, young working class men (aged 25 to 34 with less than a bachelor's degree) now have a greater mortality rate than middle-aged men (aged 45 to 54) who are not working class.

A significant educational attainment gap now separates males and females, particularly at the postsecondary level. As shown in Figure 1b below, by 2019 females in the United States were earning bachelor's degrees at a ratio of almost 1.4 to 1 compared to males, meaning that for every five bachelor's degrees earned by males, females earned approximately seven. The disparity is even more pronounced at the postgraduate (master's, etc.) and associate's degree levels, with approximately 50 percent more postgraduate degrees awarded to females than to males in 2019.

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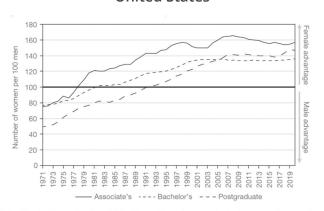
<sup>&</sup>lt;sup>7</sup> "The State of Working Class Men," American Institute for Boys and Men, August 29, 2024; "working class" is defined as having less than a bachelor's degree education.



<sup>&</sup>lt;sup>5</sup> "<u>State of American Men 2023</u>," Equimundo Center for Masculinities and Social Justice, 2023

<sup>&</sup>lt;sup>6</sup> Nina Pasquini, "<u>The New Gender Gaps: What to do as men and boys fall behind</u>," *Harvard Magazine*, May-June 2025

Figure 1b: Degrees awarded to females for every 100 awarded to males, 1971-2019,
United States<sup>8</sup>



*Note:* Master's, professional, Ph.D., and law degrees included in postgraduate degrees.

Source: U.S. Department of Education, National Center for Education Statistics, "Degrees conferred by degree-granting institutions, by level of degree and sex of student" (2005 and 2020).

More concerning still, research shows that after accounting for factors like family income and high school grades, male students are at a higher risk of dropping out of college than any other category of student (low-income, etc.), incurring student loan debt with minimal labor market value to show for it.<sup>9</sup>

As of June 2025, the percentage of working-age men who are either employed or actively seeking employment is 67.8 percent, down over five percentage points since June 2006 and less than two percentage points above April 2020 (at the depths of the pandemic). <sup>10</sup> In other words, almost 1 in 3 males aged 16 and older are neither working nor actively seeking employment.

According to the American Institute for Boys and Men,

[w]hile the shift to a knowledge-based economy has blessed the more highly educated with strong and rising wages, working class men face dwindling job prospects, stagnant wages,

<sup>&</sup>lt;sup>10</sup> Source: Bureau of Labor Statistics and Current Population Survey; Ben Smith, "<u>Men at Work:</u> <u>Trends and Metrics</u>," American Institute for Boys and Men, Dec 1, 2024; Accessed July 8, 2025



<sup>&</sup>lt;sup>8</sup> Reeves, Richard V., *Of Boys and Men: Why the Modern Male Is Struggling, Why It Matters, and What to Do about It*, Germany: Rowman & Littlefield Publishers, 2022, p. 45.

<sup>&</sup>lt;sup>9</sup> Ibid., p. 52.

and declining health. These challenges have been intensifying for decades but have now reached a point of crisis. ... Marriage and family formation rates have declined significantly among working class men. Social isolation is on the rise, with fewer close friendships and weakened social bonds, contributing to a deeper sense of loneliness and disconnection.<sup>11</sup>

These national trends pose serious questions for the State of Nevada. To what degree is our state experiencing a similar decline in male educational attainment? What are the resulting workforce challenges faced by males in Nevada, including those belonging to the working class, racial minorities, and from low-income households? And what steps should Nevada stakeholders take to address these challenges?

The report is structured as follows. **Section 2** examines secondary dropout and postsecondary attainment rates to determine the size of the male-female education gap, exploring key demographic and socioeconomic factors—such as race, poverty, disability status, and geography—that predict educational success or struggle for Nevada's youth.

Building on this foundation, **Section 3** investigates the relationship between educational pathways and employment outcomes in the state, exploring how socioeconomic status, Career and Technical Education (CTE) programs, educational attainment, race, children, and other factors predict both wages and workforce participation (as measured by hours worked).

Finally, **Section 4** compares the report's analysis to national best practices to propose five targeted recommendations for jobseekers, the public, the public sector, and employers. It provides a roadmap for data-informed policies and interventions that would address the unique challenges facing Nevada's male workforce.

<sup>&</sup>lt;sup>11</sup> "The State of Working Class Men," 2024; workers without a bachelor's degree are defined as "working class."



The report's overarching goal is to provide the state's government agencies, policymakers, school districts, and employers with analysis that will help build a more resilient and equitable economy for all Nevadans.

**Section 2**: Analysis of educational attainment gaps between males and females in Nevada by race/ethnicity, age, socioeconomic status, etc.

In the section that follows we analyze the educational attainment gaps between male and female members of the Nevada workforce. While the overall ratio of NSHE degrees awarded by sex is a contributing factor to the gap—and worthy of future study—the outmigration of degree-completers to other states also influences Nevada's balance of degrees between the sexes. As such, current Nevada residents are the focus of this study.

### High School Dropout Rates are 15 Percent Higher for Males

We used a logistic regression model to identify which factors (including age, sex, race, poverty, disability status, etc.) predicted dropping out of secondary education.<sup>12</sup> Using the 2023 American Community Survey ("ACS") dataset for ages 16 to 24 who were not currently in school nor head of their households, the following factors were significant in predicting educational attainment below a high school equivalency:<sup>13</sup>

- **Poverty**: Higher household income levels, adjusted for family size, were associated with a lower likelihood of dropping out. For example, young adults living at the poverty line were 12 percent more likely to drop out than their peers living at 200 percent of the poverty line, all else being equal.
- **Mortgage**: Homeownership and its associated financial stability also supports educational attainment, as measured by a household's monthly mortgage payment.

<sup>&</sup>lt;sup>13</sup> Head of households were excluded because the household poverty level of these young adults may be a function of having dropped out rather than a predictor of dropping out.



<sup>&</sup>lt;sup>12</sup> Linear regression of educational attainment less than 12th-grade resulted in an adjusted R-square of only 0.05.

- A \$1,000 increase in monthly mortgage payments was predictive of a 20-percent lower chance of dropping out of high school.
- Multigenerational Households: Young adults from households with three or more generations were twice as likely to have dropped out of high school by age 24, all else being equal.
- Race: After controlling for socioeconomic factors, young adults identifying as Chinese were more than twice as likely to have dropped out of high school (significant at the 0.10 level). While poverty largely explains dropout rates better than race, for this subset of Nevada's population poverty insufficiently explains dropout rates. This finding aligns with 2022 data indicating that Nevada has one of the highest percentages in the country of Asian youth who are NEET. Other race/ethnic identities were not significant predictors of dropping out, after controlling for poverty and other factors.
- English Language Proficiency: English proficiency significantly affects dropout rates. Those who speak English "but not well" were more than five times as likely to have dropped out than those who speak English "very well."
- **Children**: Young parents, aged 16-24, were almost 60 percent more likely to have dropped out of high school.
- Location: Certain geographic locations in the state predict lower dropout rates,
  even after controlling for socioeconomic status (i.e., poverty and mortgage
  payments). For instance, residing in Henderson West predicted a 65-percent lower
  chance of dropping out, while residing in Southwest Las Vegas (including
  Summerlin) predicted a 45-percent lower chance. Most locations were not
  significant predictors.
- **Disabilities**: Young adults reporting a cognitive or self-care difficulty were 70-percent and 78-percent more likely to have dropped out, respectively.

<sup>&</sup>lt;sup>14</sup> Kristen Lewis, Alex Powers, Cara Wohnsigl, Kate Harvey, and Tara Shawa, "Broad Recovery, Persistent Inequity: Youth Disconnection in America," New York: Measure of America, Social Science Research Council, 2024.



• **Sex**: All else being equal, males in this age range were **15 percent more likely to drop out of high school than females**. This means that for every 14 females who drop out, there are approximately 16 males who drop out for reasons that are not explained by English language proficiency, multigenerational households, socioeconomic status, etc.

Males who drop out of high school see particularly poor social outcomes. Nationally, more than one in seven males ages 18-24 without a high school degree or GED are either incarcerated or on parole at any given time.<sup>16</sup> This proportion rises alarmingly to 30 percent among African American males.

### Females Are Significantly Outperforming Males in Postsecondary Education

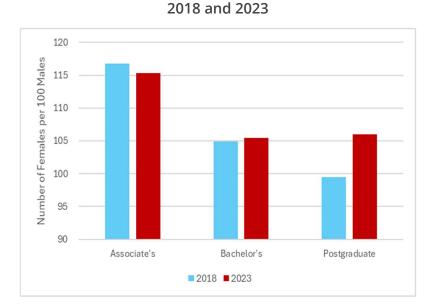
Our analysis of postsecondary attainment among Nevada residents reveals a significant gender disparity, with females holding a much larger share of degrees across various education levels compared to males. As displayed in Figure 2a below, U.S. Census estimates for Nevada (across all age groups) show the largest gap at the associate's degree level, where females held 115 associate's degrees for every 100 held by males 2023. Furthermore, postgraduate degrees (master's and higher) show the most substantial gains for females between 2018 and 2023, indicating an accelerating trend in higher-level education among female residents.

<sup>&</sup>lt;sup>16</sup> Michael Wald and Tia Martinez, *Connected by 25: Improving the life chances of the country's most vulnerable 14-24 year olds*, Stanford: Stanford University, 2003, p. 7.



<sup>&</sup>lt;sup>15</sup> Standard Error = 9 percentage points

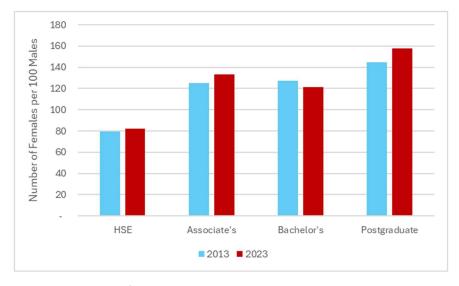
Figure 2a: Degrees Held by Females for Every 100 Held by Males in Nevada, All Ages,



Sources: 2018 and 2023 American Community Survey, 5-Year Estimates

Focusing the analysis on recently completed degrees among the 25- to 29-year-old age subset, Nevada's census data from 2013 and 2023 (a ten-year period) reveals that the gender gap has accelerated for this age group versus the population at large, as shown in Figure 2b.

Figure 2b: Education Attainment by Nevada Females for Every 100 Males, 25- to 29-yearolds, 2013 and 2023



Sources: 2013 and 2023 American Community Survey, 5-Year Estimates



Observations by postsecondary category:

- High School Equivalency (HSE): Males with only a High School Equivalency outnumbered females by 25 percent, reflecting a ratio of 5 males for every 4 females in this educational category.
- 2. **Associate's and Bachelor's Degrees**: Females consistently held a significant advantage in these categories, possessing 24 percent more associate's and bachelor's degrees (combined) than males. The ratio of females with associate's or bachelor's degrees for this age group is roughly double that for the entire population (compare Figure 2a).
- Postgraduate Degrees: The disparity was even more pronounced at the
  postgraduate level, where in 2023 there were 158 females holding master's or
  higher degrees for every 100 males.
- 4. **Trends in Gender Gaps**: Over the ten-year period from 2013 to 2023, the educational attainment gap between females and males widened for both the associate's and postgraduate categories, increasing by 7 percent and 9 percent (respectively), while the gap for bachelor's degree holders narrowed by 5 percent.

### Factors That Significantly Influence Postsecondary Educational Attainment

To evaluate the factors that influence postsecondary educational attainment in Nevada, an analysis was conducted on a dataset of over 32,000 records from the NPWR database, a state research tool that provides researchers with the data needed to analyze Nevada's trends in education and workforce outcomes.<sup>17</sup>

Our research for this section modeled postsecondary education completed at NSHE institutions between 2015 and 2023 by in-state students (whose sex, ethnicity, and other demographics were obtained from an NDE dataset). Before conducting the analysis, we converted NSHE degrees and certificates earned to the educational attainment scale used by the U.S. Census Bureau ("EDUCD"; detailed version), as shown in Table 2a.

<sup>&</sup>lt;sup>17</sup> The NPWR acronym stands for the Nevada P-20 to Workforce Research Data System.



Table 2a: American Community Survey Educational Attainment Scale (EDUCD)

Value	Education Level	Value	Education Level
065	Some college but < 1 year	101	Bachelor's degree
070	1 year of college	114	Master's degree
071	1 or more years of college credit, no degree	115	Professional degree
081	Associate's degree	116	Doctoral degree
100	4 years of college		

Source: American Community Survey, IPUMS USA<sup>18</sup>

A regression model built to predict the educational attainment of students completing postsecondary education in Nevada found the following factors (shown in Table 2b) best explained the variation in EDUCD completed by in-state students (Adjusted R-squared = 0.20). **Note**: A record of a student receiving Free and Reduce Lunch ("FRL") services was not used to predict EDUCD. Through discussions with experts in Nevada secondary education, it was determined that FRL services might be an unreliable predictor of socioeconomic status as this is often assigned on a school-wide basis to Title I schools.

Table 2b: Significant Predictors of NSHE-Completed EDUCD by 2015 - 2023 Nevada High
School Completers

Factor	Effect on EDUCD	p.value
Gender: Male	-2.3	0.001
LEP Services	-4.5	0.001
IEP Services	-7.9	0.001
Ethnicity: American Indian/Alaskan Native	-6.7	0.001
Ethnicity: Black/African American	-3.4	0.001
Ethnicity: Hispanic or Latino	-5.3	0.001
CTE Certificate Earned	+1.8	0.001

<sup>&</sup>lt;sup>18</sup> Steven Ruggles, Sarah Flood, Matthew Sobek, Daniel Backman, Grace Cooper, Julia A. Rivera Drew, Stephanie Richards, Renae Rodgers, Jonathan Schroeder, and Kari C.W. Williams. IPUMS USA: Version 16.0 [dataset]. Minneapolis, MN: IPUMS, 2025. https://doi.org/10.18128/D010.V16.0



Factor	Effect on EDUCD	p.value
CTE Completer	-1.2	0.001
District: Clark County	+3.5	0.001
District: Nevada State Charter	+2.9	0.001
District: Washoe County	+2.5	0.001

Sources: NDE, DETR, Social Impact Consultants

### Some noteworthy results:

- CTE Participation: Earning a Career and Technical Education (CTE) certificate in high school was a small but positive predictor, adding 1.8 points to expected EDUCD. Students earn the CTE Skills Certificate and earn college credits by completing their program with at least a 3.0 GPA and passing both end-of-program and Workplace Readiness Skills assessments. However, completing a CTE program—meaning that the student successfully finished their CTE program of study and passed the end-of-program assessment but NOT the Workplace Readiness Skills assessment—was predictive of 1.2 fewer points on the EDUCD scale.
- **Ethnicity**: Ethnicity predicted educational attainment, especially without controlling for socioeconomic status (i.e., FRL, which is often correlated with race/ethnicity). All else being equal, three ethnicities had greater than average effect sizes. American Indian/Alaskan Native students achieved approximately 6.8 fewer points in EDUCD, Black/African American students 3.4 fewer points, and Hispanic/Latino students 5.3 fewer points.<sup>20</sup>
- **IEP Services**: Students who received IEP services in their senior year of high school earned 7.9 fewer points in EDUCD, all else being equal, the greatest obstacle to postsecondary attainment in the dataset. This is not to say that the IEP services were not of benefit to those students, since we cannot say what level they would

<sup>&</sup>lt;sup>20</sup> The reference group for analysis by ethnicity is Asian/Asian American students, who show the highest educational attainment, all else being equal.



<sup>&</sup>lt;sup>19</sup> See, for example, <u>cteinccsd.org/Programs-Of-Study/</u>.

have achieved without these services. It does say that we still have work to do in supporting our students who receive IEP services with their postsecondary endeavors.

- **LEP Services**: Students who received LEP services in their senior year of high school earned 4.5 fewer points in EDUCD, all else being equal. As with IEP services, this is not to say that LEP services were not of benefit to those students. It does say that we still have work to do. Furthermore, it's important to note that the effects in the table are additive. For example, an Hispanic male from this cohort who received LEP services achieved approximately 12.1 points lower on the EDUCD scale compared to an Asian female who did not receive LEP services, all else being equal; 12 points is the difference between three years of college and a bachelor's degree.
- **Sex**: Sex (State Gender Code) was a highly significant predictor of EDUCD attainment at the p < 0.001 level, with males earning 2.3 fewer points in EDUCD, all else being equal. While a difference of 2.3 points is smaller than one full year of postsecondary education, its statistical significance suggests a systemic disadvantage for males.

Data available through NPWR did not allow us to conduct an analysis of postsecondary *persistence*, the degree to which NSHE students continued their enrollment or received at least an associate's degree or certificate by the fall of their fourth year of college. However, the disparity displayed in Figure 2b combined with nationwide analysis of postsecondary dropout rates suggests that persistence is likely a concern here in Nevada as well.

According to data cited in *Of Boys and Men* (2022), an all-female four-year institution would be expected to have a graduation rate 14 percentage points higher than an all-male institution, all else being equal.<sup>21</sup> Furthermore, after accounting for other influential factors such as test scores, family income, and high school grades, male students are at a higher risk of dropping out of college than any other demographic group, including low-income students, Black/African American students, and foreign-born students.

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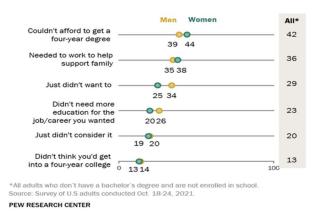
<sup>&</sup>lt;sup>21</sup> Reeves, 2022, p. 52.

### Choice of Educational Attainment by Sex

One explanation for the attainment gap is the possibility of an "aspiration gap" between males and females. As Reeves (2022) observes, "[m]ost young women today have it drummed into them how much education matters, and most want to be financially independent. Compared to their male classmates, they see their future in sharper focus." This shift is evident in historical trends: in 1980, male high school seniors were more likely than their female counterparts to expect a four-year degree, but within two decades, this trend reversed. Reeves suggests this difference in ambition may explain why many educational interventions, including free college initiatives, tend to benefit women more than men, positing that women's "appetite for success is just higher." He concludes, "Girls and women have had to fight misogyny from without. Boys and men are now struggling for motivation within."

Some survey data indicates that, compared to females, males either uninterested in earning a four-year degree or don't believe that a four-year degree is needed for their desired career path, as shown in Figure 2c.<sup>23</sup>

Figure 2c: Reasons for Not Completing Four Years of College,
Pew Research Center Survey, 2021



Source: Pew Research Center

<sup>&</sup>lt;sup>23</sup> Kim Parker, "<u>What's behind the growing gap between men and women in college completion?</u>" Pew Research Center, November 8, 2021



<sup>&</sup>lt;sup>22</sup> Reeves, 2022, p. 53.

### **Outmigration and Educational Attainment**

Beyond individual choices and aspirations, the educational profile of Nevada's workforce is also shaped by the movement of residents across state lines. While the state has seen an increase in college-educated in-migrants, it still lags many other states in net in-migration (in-migration minus outmigration) of educated workers, a continuous drain on the state's higher-educated workforce. In 2021, 38.5 percent of in-migrants to Nevada aged 21 to 64 held a bachelor's degree or higher.<sup>24</sup> This rate placed Nevada amongst the bottom 10 states for attracting college-educated workers. Conversely, among those who moved from Nevada to other states (ages 21 to 64) in 2021, more than half (50.2 percent) held a bachelor's degree or higher, resulting in a net outflow of highly educated individuals.

Naturally, movement across state lines influences the male-female ratio of educational attainment of Nevada's workforce. Table 2c below shows the following trends among former Nevada residents who were not in school:

- Fifteen percent more males with a 12th-grade education left the state than females.
- Eleven percent more females with two years of college left the state than males.
- Seven percent more males with five or more years of college left the state than females.
- There was minimal difference between the sexes with four years of college.

<sup>&</sup>lt;sup>24</sup> "<u>An Analysis of Nevada's Pre- And Post-Pandemic Labor Force Participation Rate: Trends Analysis</u>," UNLV Center for Business and Economic Research and the Guinn Center, December 2023.



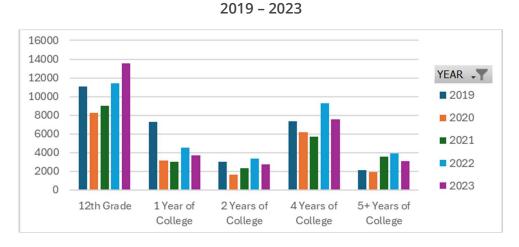
Table 2c: Average Annual Outmigration by Sex and Education (66 years of age and younger) of Former Nevadans Not in School, 2019 – 2023

Education	Males	Females	% More Males
12th Grade	10,193	8,893	15%
1 Year of College	3,641	3,627	0%
2 Years of College	1,942	2,177	-11%
4 Years of College	6,134	6,022	2%
5+Years of College	2,611	2,444	7%
Grand Total	24,520	23,162	6%

Source: 2019-2023 ACS 1-Year Estimates

In terms of specific trends, outmigration by males with five or more years of college is on a 24 percent annual uptrend (CAGR) since 2019. As shown in Figure 2d, the rate of female outmigration at this education level is growing at 10 percent annually, although 2023 was down from previous years. Conversely, outmigration by females with one year of college has sharply decreased from 2019 (3,600 fewer).

Figure 2d: Outmigration of Females from Nevada by Educational Attainment,



Source: American Community Survey, 2019 - 2023

For additional analysis of the factors predicting the education level of outmigrants from Nevada, see Appendix 1.

Some implications of these migration trends are as follows:



- The 15-percent higher rate of high-school educated males leaving Nevada makes
  the imbalance shown in Figure 2b even more concerning. If more males with a HSE
  remained in Nevada, the ratio of males with a HSE to females with a HSE would be
  greater than 5 to 4.
- Likewise, if fewer females with two years of college left Nevada, then the gap between males and females having an associate's degree would be higher than the 30 percent shown in Figure 2b.
- The state is losing over 5,000 of its highly educated workforce (five or more years of college) every year, on average, and approximately seven percent more of these are males. This explains, in part, the higher ratio of females having postgraduate education (see Figure 2b).

# **Section 3**: Relationship between education and employment outcomes for males in the state

To examine the predictive power of various factors on employment outcomes in Nevada, we analyzed four datasets: two from NPWR and two from the ACS. While the NPWR dataset tracks students educated within Nevada, the ACS captures all current Nevada residents, including those who moved from out of state. Comparing analyses of the two datasets allows us to differentiate between outcomes for homegrown talent and the broader state workforce.

The employment outcomes evaluated in this section are wages and usual hours worked. Wages are a measure of self-sufficiency as well as demand for specific occupations within Nevada's economy. But since wages are not the only employment outcome worth measuring, usual hours worked per week is the focus of the fourth predictive model in this section. For comparability across models (which were built from different datasets), the



median annual wage across all industries was used to estimate the effect of the various factors tested; that median wage for 2023 was \$44,810.<sup>25</sup>

# a. 2023 wages of those completing high school in 2017 and 2018 (NDE and DETR extract from NPWR)

A regression model built to predict the 2023 wages of those students completing secondary education in Nevada found the following factors best explained the variation in wages after controlling for industry (shown in Table 3a with their p-value measures of significance; adjusted R-squared = 0.25).

Table 3a: Significant Predictors of 2023 Wages, 2017 and 2018 High School Completers,
Nevada

Factor	Expected Wages (vs. Median)	p.value
Gender: Male	+\$1,300	0.001
Ethnicity: Black/African American	-\$2,400	0.001
Ethnicity: White (non-Hispanic)	+\$800	0.05
Ethnicity: Hispanic or Latino	+\$1,100	0.001
IEP Services	-\$3,100	0.001
Notable CTE Programs <sup>26</sup>		
Animal Science	+\$6,300	0.10
Diesel Technology	+\$7,700	0.01
Electronic Technology	+\$6,300	0.10
Environmental Engineering	+\$7,600	0.05
Mechanical Technology	+\$5,200	0.05
Veterinary Science	+\$6,500	0.10

Sources: NDE, DETR, Social Impact Consultants

<sup>&</sup>lt;sup>26</sup> The CTE programs shown in Table 3a are those that are significant predictors of higher wages.



<sup>&</sup>lt;sup>25</sup> <u>nevadaworkforce.com/Home/DS-Results-OES2</u>; in order to increase the explanatory power of the models, nonlinear transformations of the dependent variable (wages) were used, which necessitates using a reference point like median wages to quantify the effects of the independent variables.

Males from this cohort of high school completers earned approximately \$1,300 more than females, annually, all else being equal. Additionally, the model estimates that Black/African American workers earned approximately \$3,200 less in wages five-to-six years after high school than White, non-Hispanic workers (p < 0.05) and \$3,500 less than Hispanic workers (p < 0.001). This disparity was even larger after limiting the dataset to males only; Black/African American males from this cohort earned approximately \$4,000 less than both White, non-Hispanic males and Hispanic males (p < 0.05).

The model also estimated the effects of two services that indicate barriers to education. Free and Reduced Lunch services—a proxy for low socioeconomic status—were not a significant predictor of wages for this cohort (at the p < 0.1 level), perhaps due to the reliability concerns mentioned in Section 2. Having received IEP services was a significant predictor of wages (p <0.001), though. Students who received IEP services earned \$3,100 less in wages five-to-six years after high school than median earners who did not receive IEP services. Here again, the effects are additive. For example, a black male from this cohort who received IEP services earned approximately \$6,600 less in wages than an Hispanic male who did not receive IEP services, all else being equal.

The analysis also revealed positive effects of specific Career and Technical Education (CTE) programs on wages after controlling for the industry in which the worker was employed. The following six CTE programs showed statistically significant effects and predicted at least 12 percent higher wages than the median five-to-six years after high school: Animal Science, Diesel Technology, Electronic Technology, Environmental Engineering, Mechanical Technology, and Veterinary Science.

The data does not indicate a particularly linear path between the six CTE programs and the industries where the workers found employment, as shown in Figure 3a below. This suggests that whatever benefits were gained from these CTE programs were likely broader than the specific skills required of the industry corresponding to that program. In other words, these programs may have equipped students with transferable skills—e.g.,



communication skills, teamwork, and critical thinking—that enhanced their adaptability and competitiveness across a range of industries.

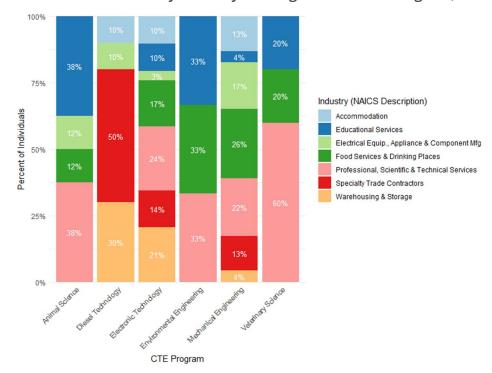


Figure 3a: Percent of Workers by Industry and High School CTE Program, Nevada, 2023

Sources: NDE, DETR, Social Impact Consultants

Across the six CTE programs in Figure 3a, the most common industries where workers found employment after high school are shown in Table 3b:

Table 3b: Three Most Common Industries for the Six CTE Programs in Figure 3a, 2023

Industry	Percentage of Workers
Professional, Scientific, & Technical Services	16%
Food Services & Drinking Places	12%
Specialty Trade Contractors	10%

Sources: NDE, DETR, Social Impact Consultants



While this first model shows a wage premium for males and certain CTE programs among recent graduates, it does not account for higher education or hours worked. To understand the effect of these two variables on wages, the next model analyzed a dataset from the ACS that includes data for both education and hours worked.

# b. Wage income of Nevada workers, aged 17 to 66, between 2018 and 2023 (ACS data extract)

To examine the effect of educational attainment and other factors, a regression model was built to predict the wage income of workers after controlling for various factors, including age, industry, geographic location, English language ability, and usual hours worked per week in the previous 12 months. Table 3c displays the factors that best explained the variation in wages from the median of \$44,810 (adjusted R-squared = 0.44).

Table 3c: Significant Predictors of Wage Income, Workers Aged 17 - 66, Nevada<sup>27</sup>

Factor	Expected Wages (vs. Median)	p.value
Gender: Male	+\$5,500	0.001
Education: Bachelor's Degree (vs. HSE)	+\$23,000	0.001
Marital Status: Never Married/Single	-\$8,500	0.001
Race: American Indian or Alaska Native	-\$13,800	0.001
Race: Black/African American	-\$9,000	0.001
Hispanic: Cuban	-\$7,800	0.001
Cognitive Disability	-\$14,000	0.001
Physical Disability	-\$7,500	0.001
Location: Clark County	+\$5,800	0.001
Location: Washoe County	+\$4,900	0.001
Number of Children (per child effect size)	+\$1,800	0.001

Sources: American Community Survey, Social Impact Consultants

 $<sup>^{27}</sup>$  Age accounts for approximately \$475 per year, i.e., 10 years = \$4,750.

The key findings in Table 3c show significant wage disparities across various demographic characteristics and geographic locations (all at the p < 0.001 level). Notably, after controlling for education and usual hours worked per week, males in this cohort earned substantially more in wages (\$5,500) than females, a \$4,200 larger effect than that observed in Section 3a. Educational attainment played a crucial role, with bachelor's degree holders earning \$23,000 more per year than those with a high school equivalency (HSE) and almost \$12,000 more than workers holding an associate's degree, all else being equal. Marital status had a significant effect on earnings, with single workers earning approximately \$8,500 less per year in wages compared to their married, working counterparts. Significant wage gaps separate several race/ethnic groups: workers identifying as American Indian or Alaska Native, Black/African American, and White Hispanic-Cuban earned between \$7,000 and \$14,000 less in wages than their White, non-Hispanic counterparts. The analysis also revealed that workers with physical or cognitive disabilities earned between \$7,000 and \$14,000 less than those without disabilities. Geographically, workers in Nevada's most populous counties, Clark and Washoe, received higher wages, earning 13 percent and 11 percent more, respectively, than workers in other counties.

While motherhood is often cited as a primary driver of the wage disparity nationally, our analysis of ACS data reveals that, in Nevada, number of children is *positively* related to wage income, with each child associated with almost \$1,800 of wages above the median, after controlling for hours worked. Hence, the census data suggests that factors apart from motherhood are contributing to Nevada's pay inequity for females.

A key takeaway here is that education explains much but not nearly all of the variation in wages over this five-year period of data. The state has persistent wage gaps related to sex, race, disability, and other factors. Unlike the NPWR dataset, it is important to note that the ACS data includes respondents who did not complete high school in Nevada. While the ACS dataset was limited to those who were Nevada residents in the year prior to the survey, this is a meaningful distinction between the ACS and NPWR datasets and may account for much of the difference in explanatory power of the models.



# c. 2023 wages of those completing high school between 2015 and 2017 (NDE, NSHE, and DETR extract from NPWR)

To further investigate the role of education and CTE in employment outcomes, a third regression model was built from an NPWR extract of 2023 wages of those students completing secondary education in Nevada between 2015 and 2017.<sup>28</sup> The following factors best explained the variation in wages from the median of \$44,810 after controlling for industry (shown in Table 3d with their p-value measures of significance; adjusted R-squared = 0.29).

Table 3d: Significant Predictors of 2023 Wages, 2015 - 2017 High School Completers,
Nevada

Factor	Expected Wages (vs. Median)	p.value
Gender: Male	+\$2,000	0.001
Education: Bachelor's Degree (vs. HSE)	+\$3,200	0.001
Education: Certificate of Less Than 1 Year	+\$1,200	0.001
Education: Master's Degree (vs. HSE)	+\$5,900	0.001
Ethnicity: Black/African American	-\$2,300	0.001
Ethnicity: Two or More Races	-\$1,000	0.01
IEP Services	-\$3,400	0.001
CTE Skills Certificate	+\$1,200	0.01

Sources: NDE, NSHE, DETR, Social Impact Consultants

Males from this cohort earned approximately \$2,000 more than females in 2023 (p < 0.001). Compared to the model in subsection 3a above, the "male effect" in this model is \$700 larger (approximately 50-percent greater) after controlling for education.

As in subsection 3a, this model also shows Black/African American workers earning approximately \$2,300 less in wages six-to-eight years after high school (p < 0.001), i.e.,

 $<sup>^{\</sup>rm 28}$  2015 is the first year that a CTE extract is available from the NPWR database.



controlling for postsecondary education reduced the earnings gap for Black/African American workers by only \$100 per year. The effect of having an IEP worsened by approximately 10 percent compared to the effect in 3a. In this model a CTE Skills Certificate—which requires passing both end-of-program and Workplace Readiness Skills assessments—was a strong predictor of wages after controlling for postsecondary education et al.

# d. Usual hours worked per week by Nevada workers, aged 17 to 66, between 2018 and 2023 (ACS data extract)

According to a 2023 report from the Equimundo Center for Masculinities and Social Justice, nationally,

[m]en with no post-secondary education have seen an especially acute drop in work, pay, and status, across all ethnic groups, weighing down average incomes for all men. One of the more dramatic signs of how these men are doing is their labor force participation: researchers have noted particularly steep drops among men of prime working age, to the point that men who are not in the labor force, or not actively seeking employment, outnumber men who are unemployed by four to one.<sup>29</sup>

The analysis in subsections 3a - 3c above shows that males in Nevada earn higher wages than females after controlling for a number of factors, including the usual hours worked per week in the prior twelve months. In other words, hours worked per week does not explain the wage gap in Nevada, though males do tend to work more hours than females. In fact, the model (subsection 3b) that controls for usual hours worked has a larger "male effect" for wages (at least \$3,500 larger) than the two NPWR models that do not control for this variable.

To examine sex-based differences in hours worked, a model was built to predict the usual hours worked per week after controlling for education, industry, race, etc. Note, this dataset includes workers who are unemployed, underemployed, and not in the labor force



<sup>&</sup>lt;sup>29</sup> Equimundo, 2023.

(NILF); it does not include workers who were in school, even if they worked part-time. Table 3e displays the factors that best explained the variation in hours worked (adjusted R-squared = 0.48, median = 40).

Table 3e: Significant Predictors of Usual Hours Worked, Workers Aged 17 - 66, Nevada

Factor	Expected Hours Worked (vs. Median)	p.value
Gender: Male	+3.9	0.001
Education: Bachelor's Degree (vs. HSE)	+1.9	0.001
Cognitive Disability	-3.8	0.001
Physical Disability	-3.9	0.001
Relationship to Householder: Child	-5.0	0.001
Relationship to Householder: Grandchild	-6.3	0.001

Sources: American Community Survey, Social Impact Consultants

Education is a significant predictor of hours worked in Nevada but has a relatively small effect, with those holding a bachelor's degree working almost two hours more than workers with a high school equivalency, after controlling for industry, etc. This is a smaller effect than the worker's biological sex (by two hours). This is an important finding. While the wages analysis in Section 3c shows that a wage premium exists even after controlling for hours worked, the hours worked analysis shows that males are somewhat less likely to be underemployed, unemployed, or NILF than females, all else being equal. Also, workers with only a HSE are not less likely to be working full-time than those with a college education (38 versus 40 hours per week, after controlling for other factors).

Though race, number of children, and other factors are significant predictors of hours worked, their effect is relatively small compared to those shown in Table 3e. For example, each child accounts for only 0.5 fewer hours worked. The factors that have the largest effect are the relationships between the worker and the head of household, with children and grandchildren of the householder, aged 17 and older, working between 5 and 6.3 fewer hours per week, all else being equal.

### Section 4: Recommendations

Almost 25 years have passed since Jim Collins published *Good to Great: Why Some Companies Make the Leap... and Others Don't*, but observations from the third chapter, "First Who, Then What," seem especially relevant to the current challenges facing Nevada workers, its educational institutions, and its employers.<sup>30</sup> The book was based on a five-year study of 1,435 public companies, from which Collins and his team identified 11 that transitioned from "good" to "great," defined as outperforming the broader market by at least three times (3x) over 15 or more years.

The "First Who, Then What" principle describes how the 11 great companies prioritized getting the "right people" on the team *before* defining their winning strategy. A key feature of this recruitment strategy was that, "[i]n determining 'the right people,' the good-to-great companies placed greater weight on character attributes"—such as discipline, integrity, work ethic, and alignment with the company's core values—"than on specific educational background, practical skills, specialized knowledge, or work experience." This observation has been put succinctly as, "Hire for character; train for competence." The first phrase speaks to the responsibility of the jobseeker, but also of society—parents, school districts, social institutions, etc.; the second is the responsibility of the employer—to bridge the skills gap between where a promising applicant is currently and what the job requires.

The recommendations that follow are divided between these two spheres of responsibility.

- Public: for jobseekers, the public, and the public sector (including school districts)
- Private: for Nevada employers

<sup>&</sup>lt;sup>32</sup> Peter Rea, Alan Kolp, and James K. Stoller, "Hire for character. Train for competence," *Journal of Applied Corporate Finance*, 2025.



<sup>&</sup>lt;sup>30</sup> James Charles Collins, *Good to Great: Why Some Companies Make the Leap...and Others Don't*, United Kingdom: HarperCollins, 2001.

<sup>&</sup>lt;sup>31</sup> Ibid., p. 45

### a. Public: for jobseekers, the public, and the public sector

#### Recommendation 1: Soft/Durable Skills

What were commonly referred to as "soft" skills, when *Good to Great* was written, are increasingly being referred to as "durable" skills: "a combination of how you use what you know – skills like critical thinking, communication, collaboration, and creativity – as well as character skills like fortitude, growth mindset, and leadership."<sup>33</sup> These are the same skills that the Portrait of a Nevada Learner describes as "future-ready skills."<sup>34</sup> There is some evidence that females not only have an advantage in these skills but that this is giving them an advantage in the labor market, especially as occupations less reliant on soft/durable skills are increasingly automated.<sup>35</sup> According to Reeves (2022), "[o]ne thing is certain. The long-run shift away from jobs requiring physical strength is going to continue."

Nevada's CTE programming includes a measurement of these soft/durable skills in its Workplace Readiness Skills Assessment, which evaluates student proficiency in the Employability Skills for Career Readiness state standards.<sup>36</sup>

The twenty-one standards are organized in three areas: (1) Personal Qualities and People Skills; (2) Professional Knowledge and Skills; and (3) Technology Knowledge and Skills. The standards are designed to ensure students graduate from high school properly prepared with skills employers prioritize as the most important. The standards provide a means through which students may acquire and exhibit leadership qualities, as leadership development principles are embedded in most, if not all, of the standards.<sup>37</sup>

<sup>&</sup>lt;sup>37</sup> "Employability Skills for Career Readiness Standards," Nevada Department of Education, 2012.



<sup>&</sup>lt;sup>33</sup> <u>americasucceeds.org/durable-skills</u>

<sup>&</sup>lt;sup>34</sup> See "Policy Recommendations," Nevada Commission on Innovation and Excellence in Education, December 2024, p. 8.

<sup>&</sup>lt;sup>35</sup> Reeves, 2022, p. 62; see also Guido Matias Cortes, Nir Jaimovich, and Henry Siu, "The 'End of Men' and Rise of Women in the High-Skilled Labor Market," Working Paper 24274, Cambridge, MA: National Bureau of Economic Research, November 2018; and Deborah A. Cobb-Clark and Michelle Tan, "Noncognitive skills, occupational attainment, and relative wages," *Labour Economics* 18, no. 1, 2011.

<sup>&</sup>lt;sup>36</sup> doe.nv.gov/offices/craleo/cte

A 2023 NPWR report on CTE programs and soft/durable skill development addressed this Employability Skills for Career Readiness measurement in Nevada's CTE programming and concluded with a recommendation that the state integrate similar soft skills training into the curricula for all Nevada students, including those not enrolled in CTE programs.<sup>38</sup>

Our first recommendation echoes that one: that the state incorporate durable skills training into high school programs and existing education pathways, supplementing existing postsecondary- and career-readiness standards with durable skills standards that predict employability. Though no causal relationship has been demonstrated in the present study, other research has made the case for integrating durable skills-focused lessons into K-12 education, certificate programs, and work-based learning like internships and apprenticeships. A joint research study of 82 million job postings—conducted by a nonprofit, America Succeeds, and Lightcast, a data analysis firm—found that seven of the ten most in-demand skills are durable skills (especially Communication and Leadership), based on employer job postings.<sup>39</sup>

The urgency to prioritize durable skills stems, in part, from rapid technological change, as evolving industries render various technical skills obsolete while durable skills remain consistently valuable.<sup>40</sup> These adaptable, transferable, human competencies enable individuals to navigate shifting workplace demands, tackle new challenges, and sustain long-term professional effectiveness and economic mobility.

Building upon these findings, America Succeeds launched a Research Practice Collaborative in 2024 with a cohort of four high schools. Phase 1 of the collaborative identified five best practices used by this cohort to encourage the development of students' durable skills:

<sup>&</sup>lt;sup>40</sup> Crawford, Unger, and Dean, 2024, p. 2.



<sup>&</sup>lt;sup>38</sup> Anna Dreibelbis-Colquitt, "<u>Connecting Soft Skill Development in CTE Programs to Meaningful</u> Employment in Nevada," 2023.

<sup>&</sup>lt;sup>39</sup> See americasucceeds.org/portfolio/the-high-demand-for-durable-skills, p. 31.

- Interest-Driven Learning: Where possible, integrate students' personal passions and goals into their educational experiences to foster deeper engagement and motivation.
- 2. **Project-Based Learning:** Utilize projects that have students tackle complex, authentic problems that require the simultaneous application of multiple skills.
- 3. **Real-World Engagement:** Extend learning beyond the classroom through internships, projects for regional employers, job shadowing, and community interactions.
- 4. **Competency-Based Learning and Assessment:** Employ clear frameworks that define skills and provide measurable markers of progress, tracked on digital platforms where possible.<sup>41</sup>
- Intentional Advising Practices: Provide students with consistent guidance, mentorship, and personalized support to help them reflect on their progress and set goals.

Those familiar with Nevada's CTE programming will note the high correspondence between these five best practices and the standards for High Quality CTE programming.<sup>42</sup>

The report from America Succeeds' Research Practice Collaborative (Phase 1) makes a number of recommendations for implementing durable skills training into secondary education.<sup>43</sup> Below is a selection of those recommendations that are highly relevant to the present study:

• Embed durable skills into schools' core missions, culture, and instructional practices.

<sup>&</sup>lt;sup>43</sup> Crawford, Unger, and Dean, 2024; <u>americasucceeds.org/portfolio/empowering-learners-for-school-work-and-life-insights-from-the-research-practice-collaborative-phase-i</u>



<sup>&</sup>lt;sup>41</sup> See also "Policy Recommendations," Nevada Commission on Innovation and Excellence in Education, December 2024.

<sup>&</sup>lt;sup>42</sup> See Catherine Imperatore and Alisha Hyslop, "<u>ACTE Quality CTE Program of Study Framework®</u>," October, 2018.

- Build partnerships with local businesses and community organizations to create authentic learning experiences like internships and real-world projects.<sup>44</sup>
- Provide ongoing professional development to train teachers in strategies like project-based learning and competency-based assessment.
- Enable and encourage educators to act as mentors/coaches, building supportive and individualized relationships with students.<sup>45</sup>

A role model for how this has been successfully implemented elsewhere is the Listening with Curiosity Project.<sup>46</sup> A 2023 study found that this 26-lesson curriculum, implemented in middle and high school classes, improved students' listening skills, empathy, and social connection. The program, which involves students interviewing classmates and family members and then presenting their conversations, also led to reports of better classroom climate and increased academic engagement, from both students and teachers.

### **Recommendation 2: CTE Programming**

As shown in Section 3 of this report, CTE participation is a significant predictor of higher annual wages in Nevada, up to \$7,700 higher for some CTE programs. In other states, studies have found that males educated in technical high schools had a 10 percent higher graduation rate and 32 percent higher average quarterly earnings compared to males educated in traditional high schools.<sup>47</sup> And, naturally, males with higher earnings have more disposable income for postsecondary education if and when their careers would benefit from it.

<sup>&</sup>lt;sup>47</sup> Pasquini, 2025; Eric J. Brunner, Shaun M. Dougherty, Stephen L. Ross; "The Effects of Career and Technical Education: Evidence from the Connecticut Technical High School System." *The Review of Economics and Statistics* 2023; 105 (4): 867–882. doi: <a href="https://doi.org/10.1162/rest\_a\_01098">https://doi.org/10.1162/rest\_a\_01098</a>



<sup>&</sup>lt;sup>44</sup> This aligns with OWINN's recommendation in its 2024-2025 Annual Report that the state expand work-based learning opportunities like internships and apprenticeships; see <a href="https://owinn.nv.gov/wp-content/uploads/2025/06/OWINN-Annual-Report-2024-2025.pdf">owinn.nv.gov/wp-content/uploads/2025/06/OWINN-Annual-Report-2024-2025.pdf</a>

<sup>&</sup>lt;sup>45</sup> See Michael Crawford, Chris Unger, and Michael Dean, "<u>Empowering Learners for School, Work,</u> and Life: <u>Insights from the Research Practice Collaborative (Phase I)</u>," America Succeeds, 2024, p. 22. <sup>46</sup> <u>niobewaylab.squarespace.com/listening-with-curiosity-project</u>; Pasquini, 2025.

Because of the alignment between best practices for durable skills development and those for CTE programming, one of the best ways to facilitate the growth in durable skills may be to encourage the growth of CTE Skills Certificate Attainment in the state.<sup>48</sup> It is plausible—and a topic for further study—that the higher wages earned by students with the Skills Certificate, after controlling for postsecondary education (subsection 3c), are related (in part) to the state's Employability Skills standards for CTE programs. CTE participation appears to contribute to workforce readiness and career outcomes, even for those who find employment in industries outside their CTE concentration (subsection 3a).

Consequently, the state should expand awareness of CTE as a promising option for middle and high school students.<sup>49</sup>

Furthermore, we recommend greater inclusion of students with IEPs in CTE programming, who (in our datasets) are at least 60-percent more likely to be male. Having received IEP services was the greatest predictor of lower educational attainment (EDUCD) and lower wages, all else being equal, in every dataset from NPWR analyzed by the present study. Experts in Nevada's Education sector indicated to us that students are often told that a CTE program cannot accommodate their IEP, presenting a further barrier to their future success.

#### Recommendation 3: The Role Model Effect

Because of a "role model effect," research suggests that encouraging more males to pursue teaching careers may be instrumental in reducing the postsecondary education gap for male students. There is solid evidence, Reeves (2022) writes, "that male teachers boost academic outcomes for boys, especially in certain subject areas like English," though "the

<sup>&</sup>lt;sup>49</sup> According to the Nevada Commission on Innovation and Excellence in Education, "We can—and must—supercharge investments in building the capacity to expand our CTE workforce pipeline." December 2024, p. 10.



<sup>&</sup>lt;sup>48</sup> See, for example, <u>cteinccsd.org/Programs-Of-Study/</u>.

precise mechanisms are not well understood."<sup>50</sup> While males have historically dominated STEM fields, Black and Latino male students pursuing STEM-related degrees continue to face barriers to success, including the lack of same-race peers and professors.<sup>51</sup> By contrast, a 2017 study found that low-income Black male students taught by at least one Black teacher in grades 3 through 5 were 39% less likely to drop out and up to 29% more likely to report postsecondary ambitions.<sup>52</sup>

Encouraging more males to pursue careers in education aligns with labor trends favorable to the "HEAL" occupations: health, education, administration, and literacy. In broad terms, HEAL occupations are "jobs that help people acquire skills and knowledge, stay healthy, and receive care," and they tend to require more literacy skills than math skills.<sup>53</sup> Nationally, the HEAL occupations are projected to grow by 1.6 million jobs by 2033, "an increase of 7%, compared to 1.1 million new jobs for STEM, an increase of 10%," and about four in ten HEAL jobs require less than a bachelor's degree for entry-level positions. Often overlooked by males (e.g., males constitute only 13% of registered nurses nationally), these growing occupations offer stable, well-paying jobs with opportunities for advancement and are relatively less vulnerable to automation.<sup>54</sup> The HEAL occupations include:

- Health: registered nurses, nurse practitioners, medical assistants, nursing assistants, social and human service assistants, pharmacy technicians, etc.
- Education: teachers, tutors, professors, school administrators, training and development specialists, self-enrichment teachers, etc.

<sup>&</sup>lt;sup>54</sup> nursejournal.org/resources/financial-aid/nursing-scholarships-for-men/



<sup>&</sup>lt;sup>50</sup> Reeves, 2022, p. 245-6; also see Kirabo C. Jackson, "What do test scores miss? The importance of teacher effects on non-test score outcomes," *Journal of Political Economy* 126, no. 5 (2018): 2072-2107.

<sup>&</sup>lt;sup>51</sup> Strayhorn, T. L., Long, L. L., Kitchen, J. A., Williams, M. S., & Stenz, M. E. (2013), "Academic and Social Barriers to Black and Latino Male Collegians' Success in Engineering and Related STEM Fields," Retrieved from <a href="https://commons.erau.edu/publication/295">https://commons.erau.edu/publication/295</a>

<sup>&</sup>lt;sup>52</sup> Desiree Carver-Thomas, "<u>Diversifying the Teaching Profession: How to Recruit and Retain Teachers of Color,</u>" The Learning Policy Institute, April 2018, p. 4.

<sup>&</sup>lt;sup>53</sup> Ben Smith, Ravan Hawrami, and Richard Reeves, "<u>The HEAL Economy</u>," American Institute for Boys and Men, Mar 28, 2025; Reeves, 2022, p. 261ff.

- Administration: business managers, project managers, administrative assistants, human resources professionals, government officials, etc.
- Literacy: writers (incl. copywriters and technical writers), journalists, editors, etc.

Because of the role model effect, and given the promising outlook for the HEAL occupations, we recommend that Nevada heighten its efforts to encourage males to pursue careers (especially) in education and health, enlarging the pipeline of male role models and mentors in these sectors for the students that follow them. <sup>55</sup> For the roughly six in ten HEAL jobs that currently require a bachelor's degree (not just demonstrable skills), scholarship programs and other financial aid established by nonprofits and private philanthropy will be needed to attract more males to these professions, address the postsecondary educational attainment gap in the state, and reduce the shortage of workers in these industries. The ECMC Foundation, for example, has a Men of Color initiative that helps colleges and universities implement data-driven programs that close equity gaps for these students. <sup>56</sup> While financial aid and scholarships are numerous for historically disadvantaged students, aid specifically earmarked for males is uncommon.

## b. Private: for Nevada employers

#### **Recommendation 4: Skills-Based Hiring**

So long as Nevada males are earning postsecondary degrees in fewer numbers than females (see Section 2), more employers adopting skills-based hiring practices will be key to providing meaningful employment and upward mobility for a large segment of Nevada's homegrown workforce. While we do advocate for greater numbers of males pursuing postsecondary education in the HEAL sectors, we also encourage Nevada employers to begin placing increased weight on foundational skills—including durable skills—in their

<sup>&</sup>lt;sup>56</sup> www.causeig.com/organizations/ecmc-foundation,411990628/#grantmaking



<sup>&</sup>lt;sup>55</sup> This aligns with OWINN's recommendation from its 2024-25 Annual Report that the state invest in skills training and education for high demand fields, including education and healthcare (see <a href="https://owinn.nv.gov/wp-content/uploads/2025/06/OWINN-Annual-Report-2024-2025.pdf">owinn.nv.gov/wp-content/uploads/2025/06/OWINN-Annual-Report-2024-2025.pdf</a>).

hiring efforts, aligning with the principle of "First Who, Then What." Both strategies should be pursued simultaneously.

Our understanding of the value of postsecondary education needs to evolve, informed by data from employers themselves. Many employers, for example, are giving candidates with *microcredentials* (certifications that validate specific skills) an opportunity to show what they can do—through internships and apprenticeships, for example—and build upon those foundations through training. We recommend that more Nevada employers partner with educational institutions to pilot innovative hiring practices such as this.

Research has begun to debunk the commonly held belief that degrees are highly predictive of job performance. In a 2022 article, renowned consulting firm McKinsey & Company advises that "[h]iring for skills is *five times more predictive of job performance than hiring for education* and more than two times more predictive than hiring for work experience." Workers without degrees also have a 34-percent longer job tenure than workers with college degrees. Consequently, skills-based hiring practices "allow employers to not only find the best workers but also retain them during a time when it is historically difficult to do so. The approach saves time, energy, and resources while fostering a more diverse and better-prepared workforce." Employers who have implemented skills-based hiring practices have reported increased applicant numbers, a broader pool of talent, and a higher proportion of qualified applicants. 58

To implement this recommendation, DETR, NDE, and NSHE should collaborate with employers, industry associations, and workforce development organizations to identify roles where skills assessments and/or certificates would be sufficient, encouraging industry leaders to pilot more skills-focused hiring practices. Convening industry workshops that educate employers on skills-based hiring would be beneficial. At ADTC, a vocational school



<sup>&</sup>lt;sup>57</sup> Bryan Hancock, Chris Higgins, Jonathan Law, et al., "<u>Taking a skills-based approach to building the future workforce</u>," McKinsey & Company, November 2022; emphasis added.

<sup>&</sup>lt;sup>58</sup> Ibid., 2022.

in Ohio, administrators ask employers what skills they look for, then tailor their education offerings to the responses.<sup>59</sup> The school claims to offer "job-ready training in trades such as truck engine repair, truck body repair, and HVAC in just weeks," not months or years.

We wish to make clear that the present report is **not** saying that postsecondary education is unimportant; for many occupations, a certain level of postsecondary education is necessary and desirable. Fortunately, the gender gap for bachelor's degree holders in Nevada actually narrowed between 2013 and 2023 (see Section 2). That said, we see skills-based pathways as an essential and complementary strategy for employing many jobseekers.

### **Recommendation 5: Financial Incentives for Postsecondary Education**

As of the date of this report, the State of Nevada faces an acute budget challenge, so further financial assistance for postsecondary education may fall to employers in the nearterm. At the ADTC vocational school, employers cover the cost of some students' education if they stay with the employer for a defined period of time. <sup>60</sup> We recommend that the state facilitate the Nevada state business tax abatement process, as suggested by the Nevada Commission on Innovation and Excellence in Education. <sup>61</sup> This would incentivize businesses to increase their involvement in workforce development, such as offering tuition subsidies for their employees.

Tuition subsidy benefits align with a second recommendation from McKinsey & Company for recruiting what the firm calls "The Idealists"—young adults, aged 18-24, who rank quality of the job—flexibility, career development/advancement potential, meaningful work, and a workplace that feels like a community—above quantity of their

<sup>&</sup>lt;sup>61</sup> "Policy Recommendations," December 2024.



 $<sup>^{59}</sup>$  Pasquini, 2025; this practice aligns with OWINN's recommendation from its 2024-2025 Annual Report that the state strengthen employer partnerships (see <a href="https://owinn.nv.gov/wp-content/uploads/2025/06/OWINN-Annual-Report-2024-2025.pdf">owinn.nv.gov/wp-content/uploads/2025/06/OWINN-Annual-Report-2024-2025.pdf</a>)

<sup>&</sup>lt;sup>60</sup> Pasquini, 2025.

compensation.<sup>62</sup> "An appealing value proposition for these workers," say the authors, "would include pairing traditional tuition subsidies with flexible work schedules to accommodate classes, along with development programs that offer clear advancement trajectories." To encourage many more young males to join the labor force before taking on student loan debt, which would benefit Nevada's economy immensely, we recommend that more Nevada employers develop tuition subsidy programs to invest in their workforce.<sup>63</sup>

#### Conclusion

The state finds itself at a critical moment in time—confronting a workforce challenge that is both a reflection of national trends and a product of Nevada's unique economic and social landscape. The fact that one in five Nevada males aged 16 to 24 are not in education, employment, or training poses a serious threat to the state's long-term economic prosperity and social stability.

Our analysis in this study reveals two seemingly contradictory realities. First, Nevada males are falling behind in education. At every level, from high school diplomas to postgraduate degrees, females in Nevada are outperforming males. These educational gaps have profound consequences, contributing to social isolation and "deaths of despair" that are increasingly prevalent among working class males who face diminished prospects in the labor market. Fortunately, Nevada has an abundance of meaningful jobs that are strong contributors to the economy and require less than a bachelor's degree, especially if employers utilize skills-based hiring practices.

<sup>&</sup>lt;sup>62</sup> Aaron De Smet, Bonnie Dowling, Bryan Hancock, and Bill Schaninger, "<u>The Great Attrition is</u> making hiring harder. Are you searching the right talent pools?" McKinsey Quarterly, July 13, 2022.

<sup>&</sup>lt;sup>63</sup> For the economic benefits of employing workers with a HSE, see "30k by 2030: The Potential Economic and Fiscal Benefits of Connecting 30,000 Disconnected Youth in Nevada to Education and Employment," Social Impact Consultants, 2024, especially Appendix A.2 and following (pp. 32ff).

To date, the educational underperformance of males has not yet resulted in a wage disadvantage at work. Males in Nevada still earn significantly more than females, even after controlling for education, industry, hours worked, age, and children. It was beyond the scope of the present research to explore the reasons for the enduring wage disadvantage for females in Nevada. However, given that the wage gap persists after controlling for other factors, the most likely explanation for the wage disadvantage may be inequitable employment practices.

Nevada needs to continue policies that have supported females in their educational and career journeys, especially when it comes to equal pay for equal work. The state *also* needs to direct more attention to the education and labor market challenges faced by males. It is not either/or nor "zero-sum" (where resources are diverted from supporting females to supporting males); pursuing both paths will be critical to Nevada's future.

The recommendations presented in this report are aimed at advancing this dual strategy. Expanding Career and Technical Education and integrating durable skills training into the spectrum of K-12 curricula are two evidence-based methods for equipping students of both sexes with the tools they need to succeed. Encouraging skills-based hiring and employer-funded training would offer alternative pathways to prosperity for males who may not pursue a bachelor's degree immediately after high school, while at the same time building a more skilled and resilient workforce for Nevada's economy.

Effectively addressing the challenges faced by males need not come at a cost for females. The entire state, females included, will benefit from lower high school dropout rates, a better-educated male population, reduced social isolation, improved marriage rates, and greater participation of Nevada males in the labor force. By addressing its education and workforce challenges with the evidence-based interventions proposed here, Nevada will foster a more equitable, prosperous, and resilient economy for its emerging workforce.



## Suggestions for future research

A number of questions warranting further investigation emerged in the course of this research:

- **Geography**: A few higher-income regions in the state see lower high school dropout rates, even after controlling for poverty and homeownership. Which other factors improve dropout rates in these areas that could be replicated in other areas?
- Poverty: The influence of poverty and homeownership on high school dropout
  rates highlights the significant role that socioeconomic status plays in educational
  attainment. Experts in Nevada's Education sector told us that, "we [as a society]
  don't talk about the impact of poverty enough." What conversations about
  childhood poverty and educational attainment need to be held and how could these
  conversations create more educational equity?<sup>64</sup>
- **High School Dropout Rates**: How could the state address the relationship between high school dropout rates, multigenerational households, and teenage parenthood?
- **IEP Outcomes**: Receiving IEP services in high school is a strong predictor of lower educational attainment and wage outcomes, and, in our datasets, students with IEPs were at least 60-percent more likely to be male. What factors predict better outcomes for students who do receive IEP services? What could NDE and the school districts do to improve the effectiveness of IEP services? What has worked in other states and regions?
- Postsecondary Education Effect on Wages: The analysis in Sections 3b and 3c revealed significantly different effects of postsecondary education on wages. The datasets, age ranges, models, and independent variables are different, and the fact that the model in 3c does not control for hours worked may largely explain the

<sup>&</sup>lt;sup>64</sup> In our analysis of educational attainment in Section 2, FRL services were predictive of lower EDUCD (1.9 fewer points), but this variable was removed from the analysis due to questionable reliability. After removing FRL, Black/African American students moved into the bottom three ethnicities by educational attainment, replacing Native Hawaiian/Pacific Islander.



discrepancy. If future NPWR analyses could control for hours worked, this would be insightful.

- Interconnected Challenges: How do gender, race/ethnicity, and age interact with in-migration and educational attainment? Are there mediating variables? How do they affect labor force participation in Nevada?<sup>65</sup>
- Industry-Specific Analysis: For employers, this research has provided a starting point for industry sectors to dig deeper into the gender-specific differences in their unique workforce trends. It now falls to industry associations to commission their own analyses of education trends in their respective labor markets.

<sup>&</sup>lt;sup>65</sup> "An Analysis of Nevada's Pre- And Post-Pandemic Labor Force Participation Rate: Trends Analysis," 2023.



# Appendix 1: Factors predicting the education level of outmigrants from Nevada

Analysis of factors predicting the education level of those who leave the state (ages 17-66) reveals the following patterns:

More Likely to Have Higher Education:

- Females
- Age: education peaks at age 33
- Individuals identifying as Chinese and Other Asian/Pacific Islander (API)
- Those who were in school within the prior three months
- Those who speak English "very well" or "only English"

More Likely to Have Lower Education:

- Males
- Individuals at lower poverty levels (poverty level is directly related to lower education)
- Individuals identifying as Black/African American and Hispanic–Mexican
- Those from multigenerational households

The largest industries employing ex-Nevadans provides insight into the types of jobs that are enticing males to leave the state.<sup>66</sup>

1. Construction: Despite a shortage of construction workers in Nevada, this is a significant industry for male outmigrants. The mean annual wage for construction laborers in Nevada is \$51,060. HUD classifies a household of three or more earning less than \$54,000 in the Greater Vegas Area as low income, \$57,350 in Greater Reno.<sup>67</sup> Thus, even in a high-demand field like construction, low median wages

<sup>&</sup>lt;sup>67</sup> Rent Burden Statistics for Washoe and Clark Counties



<sup>&</sup>lt;sup>66</sup> For females who leave the state, the top industries are Elementary and Secondary Schools, Restaurants and Other Food Services, and General Medical and Surgical Hospitals.

- combined with Nevada's high cost of living may create an incentive for male workers to leave the state.
- 2. Restaurants and Other Food Services: This industry also sees a substantial outflow of male workers. The mean annual wage for all food preparation and serving related occupations in Nevada is \$33,850. In the Greater Vegas Area, HUD classifies a household of one earning less than \$42,000 as low income, \$44,600 in Greater Reno, so workers earning this salary in food service qualify as cost burdened.
- 3. Computer Systems Design and Related Services: While the mean annual wage for all computer and mathematical occupations in Nevada is \$94,620 (considerably higher than other roles), it is less than the annual wages for similar roles in other states. For instance, California, the largest employer of workers in this field, has a mean annual wage of \$142,270.<sup>68</sup>

The state's dependence on a few core industries and "ongoing underinvestment" in its workforce contributed to reduced job opportunities for its labor force during economic downturns of the past, the effects of which may still be felt in outmigration of workers with higher education. <sup>69</sup> The Guinn Center and UNLV's Center for Business and Economic Research write in a recent report that "Nevada continues to see a depletion in its pool of workers, who either permanently leave the job market in frustration, move to another state (which is more likely to occur with college-educated workers), or 'sit on the sidelines' until jobs and wages improve enough to a point that they return to the labor force." This shortage of qualified workers is an ongoing challenge for Nevada employers.

<sup>&</sup>lt;sup>69</sup> "An Analysis of Nevada's Pre- And Post-Pandemic Labor Force Participation Rate: Trends Analysis," 2023.



<sup>&</sup>lt;sup>68</sup> U.S. Bureau of Labor Statistics

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