



LR261

NSWERS EVALUATION OF UNFUNDED TUITION AND FEE WAIVERS

TECHNICAL DOCUMENTATION

November 25, 2025

The Nebraska Statewide Workforce & Education Reporting System (NSWERS)

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Acknowledgment

The Nebraska Statewide Workforce & Educational Reporting System (NSWERS) extends its sincere appreciation to our partners who made this report possible: the Nebraska State College System, the University of Nebraska System, Metropolitan Community College, Northeast Community College, Southeast Community College, Mid-Plains Community College, Western Nebraska Community College and the Nebraska Coordinating Commission for Postsecondary Education (CCPE).

This project required a significant collective effort—drawing on the expertise, collaboration, and dedication of institutional and system partners across Nebraska’s higher education community. We are deeply grateful for their commitment to advancing understanding of this important topic and for their shared efforts to inform the state’s ongoing work to improve access, affordability, and outcomes for Nebraska students.



The Nebraska Statewide Workforce & Educational Reporting System, or NSWERS, is a one-of-a-kind research partnership among Nebraska’s education and workforce systems designed to create a data-informed decision culture that supports pathways of learning and earning for the people of Nebraska. The NSWERS data system is the most comprehensive education-to-workforce longitudinal information source ever created in Nebraska.

Data

This analysis utilizes integrated administrative data from the NSWERS data system, which includes records from public K12 schools, public postsecondary institutions, and workforce records for those students via the Nebraska Department of Labor. This report was enabled by supplemental data submissions by postsecondary institutions on tuition and fee waiver recipients, terms, quantities of fee waivers, and the statutory basis for the waiver. All public post-secondary institutions contributed data to enable this report, with the exception of Central Community College, who elected not to participate. This group of participating institutions and systems included: the Nebraska State College System, the University of Nebraska System, Metropolitan Community College, Mid-Plains Community College, Northeast Community College, Southeast Community College, and Western Nebraska Community College.

Each institution reported waivers applied from academic years between 2015-16 through 2024-25.

Data processing

The supplemental LR261 data submissions by postsecondary institutions were cleaned and processed to harmonize the data and facilitate analysis. All data cleaning and processing procedures applied by NSWERS were approved by subject matter experts at each institution. The data cleaning and processing included:

- Merging records - some institutions provided an itemized breakdown of each tuition waiver and fee per student within a semester. In these circumstances, the itemized records were merged by summing the total waiver amounts.
- Removing \$0 waivers - some institutions submitted waivers in which \$0 were waived. In these cases, NSWERS first confirmed with the data contributing institutions that these students did not receive an unfunded tuition or fee waiver and then excluded these students from all analyses in this report.
- Absolute value transformation of waiver amounts - some institutions represented waived amounts of tuition and fees as a negative value in their data systems. In these cases, NSWERS transformed these data by taking the absolute value of these amounts. These transformed waiver amounts were used in all analyses.

- Beneficiary relationship type - in some cases this variable was re-coded to harmonize this field across institutions for waiver programs in which there was only one relationship type based on NSWERS interpretation of program eligibility criteria. Categories included primary, dependent, unknown, and not applicable. Waiver recipients of Dependents of Deceased or Disabled Veteran (80-411), Community College State Dependents (81-1329), Line of Duty Dependent Education Act (85-2301) were all coded as dependents. Waiver recipients of Member of Active Selected Reserve (80-901) were all coded as primary beneficiaries. Beneficiary relationship codes for all other programs were unmodified.

Evaluation Methods

The methods used to produce the analyses in each section of this report are described below.

Descriptive Statistics

This section includes calculations of:

- total waived amounts - which were calculated by summing the waiver amounts included in the LR261 supplemental files. These values are not inflation adjusted.
- recipient counts - the count of distinct students that have received a waiver.

These two statistics were calculated for different groups.

- The main results show these calculations aggregated by academic year.
- The *System* results are aggregated by the postsecondary system that provided the waiver. While the community colleges in Nebraska operate independently, for the purposes of this analysis, the Nebraska public 2-year institutions were grouped together (except for Central Community College which did not submit data for this report).
- The *Growth Trends* sections show these statistics aggregated by academic year, waiver program, and beneficiary relationship type.

Please note that the recipient counts in the *System* and *Growth Trends* may exceed the totals in the main section. This is because waiver recipients may receive a waiver at multiple postsecondary systems or under multiple waiver programs.

Student Outcomes

This section quantified the education and workforce outcomes of students that receive unfunded, statutorily mandated tuition and fee waivers. The student outcomes evaluated in this report include college graduation, employment in Nebraska, and annual earnings in Nebraska. These outcomes were chosen based on their connection to a range of purposes encompassed by the tuition and fee waivers as a benefit to students in waiver eligible

populations and for state goals surrounding credential attainment and workforce development.

To understand outcomes of students who received tuition and fee waivers, this study compares their results with students who did not receive a waiver. Two kinds of comparison groups were used:

- All Nebraska Students
 - This group includes students at Nebraska public colleges and universities who did not receive an unfunded waiver, excluding out of state students who would not have been eligible for a waiver.
- Similar Students
 - Non-waiver students who attended the same institutions and had similar academic records, work experience, and backgrounds before receiving the waiver.

The first comparison provides a broad look at how waiver recipients perform relative to the overall student population. However, this approach does not account for important differences between students who received waivers and those who did not receive waivers. For example, Rural Health Opportunities Program (RHOP) participants are already high-achieving students, and first responders often have stable employment in Nebraska before enrolling, both of which could affect outcomes independently of the waiver.

To address this, a second, more appropriate comparison uses a matched sample of students enrolled in the same institutions and terms, with comparable academic progress, work history, and demographic characteristics. This method provides a more accurate picture of whether differences in graduation, employment, or earnings are linked to the waiver itself rather than to pre-existing differences between groups.

For each waiver program, the evaluation presents three findings:

1. The overall outcomes for students receiving waivers.
2. The difference in outcomes between waiver recipients and all other students.
3. The difference in outcomes between waiver recipients and similar non-waiver students, which better isolates the effect of the waiver from other factors.

Together, these comparisons show how recipients of Nebraska's unfunded tuition and fee waivers achieve student success, employment, and long-term outcomes compared to their non-waiver receiving peers.

Cohorts and outcomes

- Postsecondary Graduation
 - Outcome Definition: Postsecondary graduation is defined as completion of a postsecondary academic award within 150% time of expected degree

length. This 150% window would be three years at a 2-year institution and six years at a 4-year institution.

- Cohort Definition: The cohorts used for postsecondary graduation for waiver recipients includes all waiver recipients that were degree-seeking for first received a waiver between the 2015-16 through 2017-18 academic year. The time of initial entry is either the student's first degree-seeking term at their waiver granting institution or the initial term of waiver receipt if a student was not degree seeking during or before the first term using an unfunded waiver. The comparison group of non-waiver students includes all degree seeking students that began in the same 2015-16 to 2017-18 time frame and were Nebraska students.
- Data Source: Graduation is determined using data from Nebraska public postsecondary institutions which is submitted to NSWERS as part of our regular data submission in addition to National Student Clearinghouse which includes data on nearly all postsecondary enrollments and graduations in the United States.
- Talent Retention (Employment in Nebraska)
 - Outcome Definition: Talent retention is determined by whether a student works at least four quarters (one year) within two years of exiting a public postsecondary institution.
 - Cohort Definition: The cohort for waiver recipients includes all students that exited a Nebraska public postsecondary within the 2015-16 to 2021-22 academic years. The comparison cohort includes all degree-seeking non-waiver students that exited in the same time frame. Note that these cohorts include all students regardless of whether they earned an award or dropped out.
 - Data Source: In-state employment was identified via the Nebraska Department of Labor's Unemployment Insurance Quarterly Wage Records. The NDOL UI wage records include employment data for all state UI eligible employees which comprises an estimated 95-98 percent of workers in Nebraska (NDOL, personal communication). Non-eligible employees include federal employees and self-employed/sole proprietors.
- Annual Earnings
 - Outcome Definition: Annual earnings are defined as the estimated annual wage a student earned within the two years after college. This annual wage is estimated by calculating the average quarterly wage for each student and multiplying it by four. All wages were adjusted to 2024 USD prior to calculation of annual earnings.
 - Cohort Definition: The cohort for waiver recipients includes all students that exited a Nebraska public postsecondary within the 2015-16 to 2021-22 academic years. The comparison cohort includes all degree-seeking non-waiver students that exited in the same time frame. Note that these cohorts

include all students regardless of whether they earned an award or dropped out.

- Data Source: Wages are identified via the Nebraska Department of Labor's Unemployment Insurance Quarterly Wage Records. The NDOL UI wage records include wage data for all state UI eligible employees which comprises an estimated 95-98 percent of workers in Nebraska (NDOL, personal communication). Non-eligible employees include federal employees and self-employed/sole proprietors.

Matching process

NSWERS used one-to-one nearest neighbor propensity score matching without replacement to create comparisons groups for each waiver program. In general, this results in waiver and quasi-control groups that have an equal sample size. To improve the similarity of the waiver recipients and the non-waiver students, NSWERS matches exactly on postsecondary institution and enrollment term. This means a waiver recipient can only be matched with a non-waiver student that also attended the same institution and was enrolled during the initial waiver receipt term.

The propensity scores were calculated using a logistic regression model that included main effects of the following list of variables. Note that all variables including the term "prior" capture student characteristics measured prior to the first term of waiver receipt (among waiver recipients) or before each of the terms in which a non-waiver recipient had concurrent enrollment with the first term of any waiver recipient. By treating the matching variables in this way, NSWERS can create more similar matched groups by ensuring that the waiver and comparison groups had similar levels of prior postsecondary (duration of enrollment and earned credits) and workforce (participation and earnings) experience.

- Prior terms of college enrollment: the number of terms completed at the same postsecondary institution.
- Prior cumulative earned college credit: the number of college credit earned at the same postsecondary institution.
- Prior postsecondary GPA: the postsecondary grade point average. This variable was binned into the following categories: ≥ 3.0 , $2.0 - 3.0$, < 2.0 , or "NA" (for students that had no prior college GPA).
- Prior quarters of employment in previous year: number of quarters (0 to 4) in the previous year with wage records in the NDOL UI wage records.
- Prior annual earnings in previous year: annualized and inflation adjusted earnings in the previous year. This is calculating by inflation adjusting all wages to 2024 dollars and multiplying the quarterly average wage by four.
- ACT composite score: ACT composite scores as reported to Nebraska Department of Education by ACT. While ACT scores range from 1 to 36, this variable was binned into three groups for analysis: ≥ 20 , < 20 , or unknown.

- Gender: Student gender is based on the latest postsecondary administrative records and include these categories: female, male, non-binary, or unknown. Student gender is determined by NSWERS using the most recently available record of a student's reported gender (female, male, non-binary, or unknown). This may come from postsecondary enrollment file records or from Nebraska public K-12 records.
- Race: Student race/ethnicity was determined using a combination of K-12 and postsecondary data which allows up to five non-exclusive choices for student race and a binary indicator for Hispanic ethnicity. These data are used to derive a race/ethnicity code in line with IPEDS reporting categories for race (<https://nces.ed.gov/ipeds/report-your-data/race-ethnicity-definitions>).
 - This results in seven race/ethnicity categories:
 - Hispanic: any student who had affirmed Hispanic ethnicity, regardless of race selection.
 - Two or more races (Multiracial): any student who is not Hispanic and selected two or more races.
 - Students can be categorized as the following only if they are non-Hispanic and were only designated in one racial category.
 - American Indian or Alaska Native
 - Asian
 - Black or African American
 - Native Hawaiian or Other Pacific Islander
 - White
- Age group: Student age at time of enrollment was categorized into three groups: < 20, 20 - 24, and 25+ years of age.

After matching, the difference between waiver and matched non-waiver students generally had an adjusted propensity score difference within 0.1 standard deviations. No further adjustment was made since the evaluation was not intended to obtain causal effect estimates. The matching procedure achieved the goal of reducing pre-waiver differences between waiver and non-waiver matched groups across all programs and outcome cohorts.

Estimation

These three statistics were calculated where possible for each waiver program and outcome:

1. The overall outcomes for students receiving waivers.
 - This was computed as the rate (postsecondary graduation and talent retention) or median (annual earnings).
2. The difference in outcomes between waiver recipients and all other students.

- This difference was computed by subtracting the rate/median of the non-waiver comparison group from the waiver group. Positive values mean that the group of waiver students were more likely to achieve an outcome relative to non-waiver students. Negative values mean that the waiver students were less likely to achieve an outcome relative to the non-waiver students.
 - This calculation uses all waiver students and all non-waiver students from Nebraska.
3. The difference in outcomes between waiver recipients and similar non-waiver students, which better isolates the effect of the waiver from other factors.
- This was computed by subtracting the rate/median of the matched non-waiver comparison group from the waiver group using a logistic regression (postsecondary graduation and talent retention) or quantile regression model (annual earnings). A 95% confidence interval for the difference was calculated using the Delta method based on student-level cluster adjusted standard errors.
 - Model specification:
 - Logistic regression: $\text{logit}(\text{Pr}(Y = 1)) = \beta_t T$
 - Y is an indicator for whether the outcome was attained (1) or not (0)
 - β_t : is the main effect estimate of the effect of waiver receipt on the outcome
 - T is an indicator for whether a student received a waiver (1) or not (0)
 - $Q_\tau(Y) = \beta_t T$
 - Q_τ is the median for $\tau = 0.5$
 - Y is the annual earnings
 - β_t : is the main effect estimate of the effect of waiver receipt on the outcome
 - T is an indicator for whether a student received a waiver (1) or not (0)
 - This calculation uses all waiver student and all matched non-waiver students from Nebraska. Since a non-waiver student may be matched multiple times, models were estimated using model weights which were the reciprocal of the number of a times a student was included in a data set.

Sustainability

Net New

Net new students is the difference between the estimated number of college students that were expected to go to college without a waiver compared to the number of student observed to go to college that had a waiver. This analysis focuses on waiver programs for

which dependent are eligible for a waiver, such as the Community College State Dependents, Dependents of Deceased or Disabled Veterans, and the First Responder Recruitment and Retention Act programs.

This analysis utilized NSWERS existing models and data for college going in Nebraska. Using NSWERS predictive models of college enrollment, NSWERS predicted the probability that a waiver student would have gone to college. The sum of these individual probabilities is the total expected number of college goers. The difference between this estimated number and the actual number of students enrolled using the dependent-eligible waiver is the estimated number of net new students. Note, this analysis is only possible for students that attended a Nebraska public high school which comprises the majority of waiver recipients among the programs included in this analysis.

The predictive model NSWERS uses is a logistic regression model. The data for this model uses high school characteristics to predict college going. These characteristics include:

- Demographics:
 - Race
 - Gender
- 11th grade state assessment scores
- High school GPA

This college going predictive model has an overall error rate of 22 percent at predicting whether a student will attend college. This accuracy results in a 9 percent relative error rate for predicting total counts of students that will enroll in college.

Organic Growth in Eligible Populations

NSWERS projected the growth in the number of Nebraskans who are likely to qualify for and use the Dependents of Deceased and Disabled Veterans tuition waiver. These projections were then used to forecast the number of future waiver recipients under this program and the associated costs of these unfunded waivers.

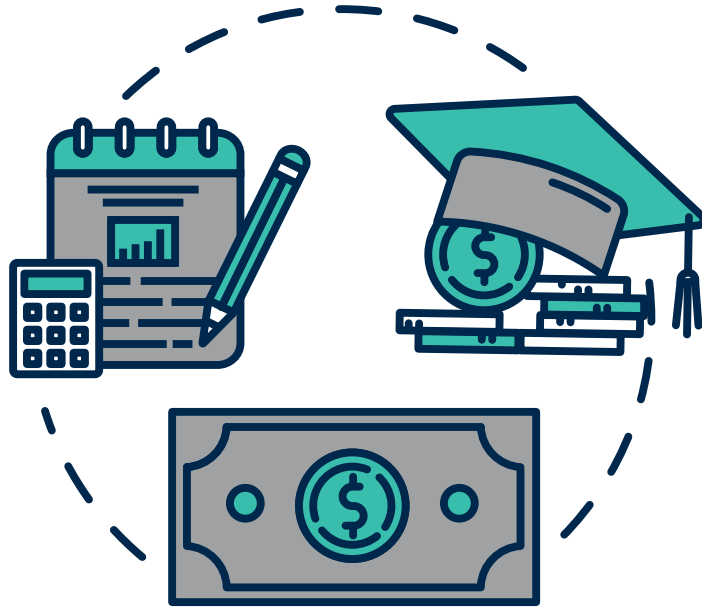
Under Nebraska statute, a veteran's dependents are eligible for this program if the veteran is rated as having a 100 percent service connected disability or died as a result of service. To approximate the organic growth in this eligible population, NSWERS relied on two historical data series:

- The estimated number of Nebraska veterans with at least a 70 percent service-connected disability rating, derived from the 2016–2023 American Community Survey (ACS) Public Use Microdata Sample (PUMS). Because ACS reports disability ratings in grouped categories, the 70-percent-and-higher range was used as a proxy for the population of fully disabled veterans. When projecting this series forward, NSWERS incorporated historical trends in total active-duty military size, which serves as a leading indicator of future veteran populations. These active-duty

counts were modeled separately and introduced as a lagged predictor in the disability-projection models.

- The number of Nebraska participants in the federal Dependents' Educational Assistance (DEA, Chapter 35) program, which has eligibility criteria closely aligned with Nebraska's Dependents of Deceased and Disabled Veterans tuition waiver. These counts were obtained from the U.S. Department of Veterans Affairs Annual Benefits Report and were treated as an additional empirical signal of the underlying population of eligible dependents.

These series were incorporated as predictors in time series models that relate participation in the state waiver program to the estimated counts of disabled veterans and to participation in the analogous federal DEA program. NSWERS estimated several forecasting models, including autoregressive integrated moving average (ARIMA), exponential smoothing, random walk with drift, and time series regression with lagged predictors and trend. Forecasts from these models were combined to produce a single ensemble forecast of future eligible populations and program use, which then informed projections of future waiver counts and costs. To quantify uncertainty, NSWERS used simulation based forecasting, repeatedly drawing future values from the fitted models (conditional on simulated military, disability, and DEA participation trajectories) to generate many plausible paths for each outcome; prediction intervals and uncertainty bands in the figures reflect central percentiles of these simulated paths and were propagated through to the final waiver and cost projections.



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