

**Nevada P-20 to  
Workforce Research  
Data System (NPWR)**

**STRATEGIC  
PLAN 2024-2025**



Website: [npwr.nv.gov](http://npwr.nv.gov)



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# WELCOME

Welcome to the first NPWR Strategic Plan!

This document is to act as the goals and guide for the State of Nevada's P-20W longitudinal data system, known as NPWR, for the near future. The purpose of this plan is to help address gaps and resources that can help NPWR grow to become a more valuable tool to the entire State, through modernization efforts and bringing resources and talent in-state to work to help our citizens, departments, researchers, and resources as a whole.

NPWR can be the tool to become the data hub for the State of Nevada, and that is what we are all working towards.

We hope you are looking forward to where data is going in our State as much as we all are, and how NPWR can help fill in the gaps to help drive policies through data-driven solutions.

Thank you,  
NPWR Advisory Committee

The NPWR Advisory Committee members are:

- Office of Workforce Innovation (OWINN) – Kristen Dwyer, NPWR Manager
- Nevada Department of Education (NDE) – Glenn Meyer, *Chair*
- Nevada System of Higher Education (NSHE) – José Martinez, *Vice Chair*
- Department of Employment, Training and Rehabilitation (DETR) – Krista Marshall
- Nevada Department of Motor Vehicles (Nevada DMV) – Molly Lennon
- Department of Health and Human Services (DHHS) – Michael Yoder
- Nevada Department of Corrections (NDOC) – Christopher Franklin
- Nevada Department of Veteran Services (NDVS) – Brandon Torres
- Department of Business and Industry (B&I) – Toni Giddens

Please reach out to Kristen Dwyer with any comments at [kdwyer@detr.nv.gov](mailto:kdwyer@detr.nv.gov).

# OVERVIEW

## About

The Nevada P-20 to Workforce Research Data System (NPWR) is a state-of-the-art research tool that provides Nevadans with unparalleled access to the knowledge needed to understand the trends shaping our state's education and workforce outcomes. Using state of the art technology and best-in-class security, NPWR is designed to inform education and workforce policies and initiatives across Nevada.

NPWR, per NRS Chapter 400, is managed by the Office of Workforce Innovation (OWINN) and started as a collaborative partnership with the Nevada Department of Education (NDE), the Nevada System of Higher Education (NSHE), and the Department of Employment, Training and Rehabilitation (DETR). Additional partners have joined NPWR since its inception in the past year: Nevada Department of Motor Vehicles (Nevada DMV), Nevada Department of Veterans Services (NDVS), Nevada Department of Corrections (NDOC), and the Division of Welfare and Supportive Services (DWSS) under the Nevada Department of Health, Human Services (DHHS), and the Department of Business and Industry (B&I).

Current NPWR data partners:

- Office of Workforce Innovation (OWINN)
- Department of Employment, Training and Rehabilitation (DETR) – collects wage data, onboarding Title I and Title III
- Nevada Department of Education (NDE) – includes Adult Education and early childhood data
- Nevada System of Higher Education (NSHE)
- Nevada Department of Motor Vehicles (Nevada DMV) – for matching only
- Department of Health and Human Services (DHHS) – for early childhood information that is collected through NDE, but working for larger onboard
- Nevada Department of Corrections (NDOC) – onboarding
- Nevada Department of Veteran Services (NDVS) – onboarding
- Department of Business and Industry (B&I) – onboarding, for apprenticeship data

## Growth

The past year has seen tremendous growth in NPWR. OWINN hired a new NPWR Data Manager, Kristen Dwyer, to manage the project and continue to move the initiative forward in the state, by collaborating with additional partners and implementing best practices, as recommended at national levels.

OWINN hosted the inaugural NPWR Research Forums in Reno and Las Vegas in December 2022 to bring together professionals from the academic, business, and research communities for the launch of the NPWR portal system. This system allows researchers to request and receive deidentified data at the individual level record level from the participating data sharing entities. This allows researchers to submit one request for their project and can pull-down the data, without having to go out to individuals at the organizations to make a request for each dataset.

Also in December 2022, OWINN received approval from the Nevada Legislature's Interim Finance Committee to launch competitive NPWR research grants using \$100,000 that supported research studying Nevada's most challenging policy problems in the areas of workforce development, economic diversification, and education.

The inaugural 2023 funded projects were:

### Workforce and Economic Development

- The Brookings Mountain West's project, The Gender Gap in Nevada: A K-12, Higher Education, and Workforce Study would explore the gender gap in Nevada and propose public policy interventions to improve educational and workforce outcomes.
- The Kenny Guinn Center for Policy Priorities and the University of Nevada, Las Vegas (UNLV) Center for Business and Economic (CBER) Research's project An Analysis of Nevada's Pre- and Post-Pandemic Labor Force Participation Rate would identify and evaluate factors contributing to Nevada having the 3rd largest decrease in labor force participation following the pandemic.

- The University of Nevada, Reno's (UNR) University Center for Economic Development's (UCED) Examination of the Relationship between Workforce Development and Housing, Education and Childcare Services, and Healthcare Services would explore how labor force barriers impact workforce and economic development and business creation, retention, and expansion abilities.

### Education

- The Lincy Institute's project Nevada K-12 Performance and Implications for Economic Diversification would evaluate the differentiating factors between Nevada's highest and lowest performing schools and districts in terms of on-time graduation rates, performance on standardized tests, and college-going rates.
- UNLV's Center for Research, Evaluation, and Assessment's (CREA) project Piloting School Funding Equity: How the Enactment of Senate Bill 178 Impacted Student Outcomes After Graduation explored how Nevada's student funding pilot program impacted students post-secondary and vocational outcomes.
- Dr. Megan Rauch Griffard from UNLV's Department of Educational Psychology and Higher Education's project Dissecting the Educator Talent Pipeline and Educators' ROI in Nevada would focus on whether CTE certificates in education concentrations lead to eventual employment in education, seek to understand how long NSHE education majors take to earn their desired degree by educational attainment level, and how the wages of educators compare to other workers with comparable education and experience in Nevada by educational attainment level.

### Students

- Anna Dreibelbis, a UNLV law and doctorate student, for her project Assessing Career Readiness Gaps in Nevada looked to understand what the gaps are in soft skill development in CTE programs across Nevada.

- Curtis L. Cobbins, a doctorate student, for his project Causes of Innovation Engineering Management Failure in Workforce Development Within the Nevada System of Higher Education looked to understand how strong the correlation is, if any, between employee analysis of skills gap alignment and the role of innovation engineering management.

Due to the interest and success of these two initiatives, the second round of funding for research grants and more forums are already moving forward.

The second NPWR Research Forums are already scheduled in December 2023 in Reno (December 5) and Las Vegas (December 7) to share the findings of the 2022 NPWR research grant recipients and unveil this NPWR's Strategic Plan, so all partners are aware of how NPWR is looking to continue to grow and enhance the system to be a better data source for its partners and researchers for the State.

The NPWR Research Grants for fiscal year 2023 have increased to an available amount of \$230,000 for the State's researchers to compete for funding to use the NPWR portal system. The applications opened in October 2023, with a due date of the end of November 2023, and the awardees will be announced mid-December 2023. These recipients will then share their work in the NPWR Research Forums in 2024, and reports will be shared on the NPWR website.

# GOALS

OWINN, as the managers of NPWR, and the NPWR data partners want to continue to capitalize on the growth and interested placed on the system in the last year, by continuing to work to bring on more data sharing partners, increasing the available data from the current partners in the system, streamline the process for researchers, and make NPWR a leading data-source for individuals in the State. Below are the three main goals for the next two years to help ensure NPWR meets this vision.

## I. NPWR Structure

To understand the need for structural updates to NPWR, a brief background on the system is below. NPWR was initially funded through the Institute of Education Sciences (IES) – National Center for Education Statistics (NCES) 2012 Statewide Longitudinal Data Systems (SLDS) Grant. This created a 14-month implementation of the system, with the architecture based on Virginia P20W System (VLDS), provided by an outside vendor (DBDriven out of Virginia). This implementation was to link data from K-12 and post-secondary education into the workforce (through NDE, NSHE and DETR). Since the implementation of NPWR, it was used by the members for mandated reporting requirements, production of some public reports on the NPWR website, and continued to be run by the implementing vendor.

With the growth of data sets, data partners and researchers now utilizing the NPWR system, there is a recognized need to increase the capabilities of the system, to enhance data reporting for partners and data access for researchers.

The first structural change that will be pursued to update the system is to have a dedicated NPWR server for the State. The reasoning behind this is when NPWR was first implemented, it was designed to “hit” each partner’s dedicated server to pull down the associated data. With the first outside researchers going through the portal in Spring 2023, it was quickly identified as a problem for some partners of the constant “hitting” of their servers for data and caused issues on both ends. The identified solution would be to have one NPWR specific server, that all the partners can upload their data to on a quarterly or more frequent basis, and that the researchers can then use to pull down their data requests. This dedicated server would not interrupt any day-to-day systems



at the partner institutions. This will also make onboarding of additional data partners more efficient.

Having met with data departments in other states through Data Labs, which is a nationwide initiative led by the Beeck Center for Social Impact + Innovation at Georgetown University and the National Governors Association., Kristen has been able to identify some best practices, such as having individuals with more crossover capabilities so there is a better understanding of the data and bringing work that was previously outsourced to a vendor under the umbrella of the State.

Another key aspect around the NPWR Structure and growth seen is the need for dedicate personnel with the system. OWINN has a contract with NSHE for a funded analyst position to focus on NPWR and would like to continue this across the other partners. Initially a dedicated NDE analyst and DETR analyst, who would work in those departments but have a key understanding of all NPWR data; to help buildout more reports on NPWR (as NSHE has created dedicated dashboards that utilize NPWR data that is housed on their website); and most importantly, these individuals would help researchers on their data requests, answering any questions on the system and the data available, and validating research that is produced. The objective for three main analysts (NSHE, NDE, DETR) is to work within their organizations and crossover amongst the new data partners coming on board, to help prove the concept and the work, and then expand to more departments. The thought would be:

- NSHE analyst oversees NDOC, NDVS, B&I
- DETR analyst oversees NevadaDMV, DHHS (upon onboard of additional data sets)
- NDE analyst focuses on more dashboards, especially mapping/GIS capabilities to tie in its students more on the workforce side

Another personnel aspect that would help NPWR grow and be an asset to current data partners, researchers and legislatures would be to have its own dedicated system engineer – who would manage the backend of the system, perform matches and help ease the system use for public consumption (which leads into the next goal of modernization). Currently, all the NPWR work, of the dashboards, matching and system

updating is handled by an outside vendor, and the above approach would work to bring some of these functions back into Nevada.

## 2. Modernize

The plan to update the structure of NPWR above directly leads into this goal of ensuring the operability of the system, both through the public reports side on the NPWR website and the backend through the portal side that researchers request data will lead to a more customer friendly format, which will then in turn allow for more interest and use of the system, which will then lead into more data-driven solutions and policy recommendations for the State of Nevada.

The modernization and enhancement of the NPWR longitudinal system is much needed because currently there are missing data that limits the ability to understand the full landscape in Nevada in terms of educational and workforce outcomes, who the target audience is, and whether Nevadans are getting the skills they need to obtain a meaningful career. Another missing link in the State's workforce development ecosystem is the connectivity between workforce development programs and how social services impede or support a worker's ability to participate in the labor force. Nevada's underinvestment in education to workforce pathways can help be addressed by NPWR and the ability for researchers and consumers to understand how the state is doing, through data and resources like dashboards.

To ensure the NPWR modernization is accessible to all legislators, employers, jobseekers, researchers, media, etc., OWINN will continue to pursue current/potential vendors to disseminate the data and research put forth by the research centers in a more user-friendly format. The modernization work will enhance the capacity to collect, measure, store, and analyze data related to job quality. The research completed by the centers will ensure the data is thoroughly analyzed and provide recommendations on programs and policies, because of the data that are utilized through NPWR, and provide recommendations on additional datasets that should be considered.

To develop, expand, and modernize the collection of data, the funding will have to support a modernized NPWR website that eases use for researchers and onboards data-

sharing partners to use the system for grant applications and optimize workforce programs. The potential barriers to NPWR's enhancements would be not receiving additional data from current data-sharing partners and the unwillingness of potential data-sharing partners to onboard onto the NPWR system, which has not been the case so far with NPWR, but by improving the process for partners and researchers/analysts to use the provided data, it will continue to ensure the need for NPWR and the continued support of the system. Without more data, it will be difficult to develop and expand NPWR's data collection.

### 3. Funding

The first two goals of updating and enhancing the NPWR system are very much dependent on funding. Nevada's legislature has shown a strong commitment to the success of the NPWR System through solidifying their support via Nevada Revised Statute Chapter 400. Legislation has mandated specific agencies to participate in the data system and established the NPWR Advisory Board that increases transparency and accountability of the data system. Since the founding of NPWR in 2017, the State has funded the NPWR Manager position as a permanent state position, the NPWR technology vendor, and research grants through State General funds and occasionally with WIOA Title I Governor's Reserve for research grants and the forums.

OWINN will work into the upcoming budget builds the additional need for contracts with NDE and DETR to grow the analyst positions, like it has for NSHE. OWINN will also request additional funding for the system administrator position. As OWINN already has approved amounts for the vendor contract work, it will look at those amounts to bring some of that funding back to within the state.

OWINN is also committed to pursuing other funding opportunities through federal grants and private foundations. In the first few months of Kristen Dwyer in the NPWR Manager role at OWINN, she applied for the Workforce Data Quality Initiative (WDQI) grant through the U.S. Department of Labor (DOL). While the grant was unsuccessful, through the feedback from DOL and the continued work and commitment from the identified partners, OWINN will be applying for this opportunity again upon its next release. Nevada has not received this grant before and it will be a great chance to

highlight and push NPWR at a national level. Looking for funding such as this will be the main avenue in ensuing the modernization, especially through website and portal development.

Through the 2023 Data Labs program this past year, the connection through the Beeck Center for Social Impact + Innovation at Georgetown University and the National Governors Association also lead to other conversations with other states around funding opportunities and things to consider, like looking at private foundations such as the Gates Foundation and Lilly Endowment. There are other programs that have potential to fund data initiatives and have been used in other states that may be considered to grow NPWR, such as through Medicaid and unemployment insurance.

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## WHY NOW

The purpose of this first NPWR Strategic Plan is to see where the system has been and where it could go to become a truly useful tool for the State of Nevada. The system was created and in this past year, there were finally researchers utilizing the system and providing feedback. There is momentum with the NPWR Advisory Committee partners, as seen with the addition of new agencies in the recent year, and with the research community at our Tier 1 research institutions.

Kristen Dwyer as the NPWR Manager at OWINN was able to participate in the 2023 Data Labs program this past year. This opportunity opened the doors to other like-minded data people in other states around the country who were looking to enhance their current programs or focus on specific projects.

The inaugural NPWR Research Grants also provided feedback on the portal system that led into the importance for the considerations to modernizing the system. Below is selected feedback from the NPWR Research Grant awardees:

*“Improve the user interface by streamlining the steps and ensuring that there is clear information about what is required at each step; work with state agencies to increase consistency in file structure, unit of analysis and variable coding; develop codebooks to augment the data dictionary.”*

*“While the data itself is high-quality, and it is useful to access it from a single source, the process could benefit from greater efficiency. Multiple steps, including intermittent approvals, delay the research process. The data is de-identified and/or not collected at the individual level, so it is not clear why such a process is necessary. Many states have implemented dashboards, and while they have their limitations, dashboards do have the advantage of simplicity... Modernization of the UI also would help signal the capacity of the NPWR research tool.”*

The opportunities and learning of the past year helped lead the development of this Strategic Plan and the development of the goals and rationale behind each one.



**NPWR**  
Climb Higher

**GOWINN**  
GOVERNOR'S OFFICE OF WORKFORCE INNOVATION



**Nevada Department of Health and Human Services**  
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Nevada Department of Business and Industry  
"Growing business in Nevada"