



2024 Annual Report

Ohio Education Research Center



THE OHIO STATE UNIVERSITY
JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

Organizational Background

The **Ohio Education Research Center** (OERC) addresses critical issues in education practice and policy through a comprehensive preschool-through-workforce research agenda. The OERC identifies and shares successful practices, highlights emerging trends, and addresses the needs of educators and policymakers in Ohio and across the nation.

Established at the request of the Ohio Department of Education in 2011, the OERC was created to support initiatives funded by the American Recovery and Reinvestment Act of 2009 and Race to the Top. Initially, the center's work was conducted across several Ohio universities and non-profits as part of The Ohio State University's John Glenn College of Public Affairs.

In 2012, the OERC launched the **Ohio Longitudinal Data Archive** (OLDA), a vital data management resource for both state government and external partners. The OLDA is used broadly to study education and training outcomes, with additional opportunities for analysis in human services, housing, and healthcare. 10+ years after its launch, the OLDA remains the backbone for some of the most important analyses that individual agencies conduct. In collaboration with our **State of Ohio partners**, the OERC currently supports research on a wide array of topics, including K-12 education, higher education, workforce, housing, and disability services.

Our Mission & Vision

- The Ohio Education Research Center provides solution-focused data and evaluation to enhance educational, workforce, and social outcomes for Ohio communities and government.
- By leveraging evidence-based research and data science, we support continuous improvement in education and workforce development across the state.



Our Team



Joshua Hawley
Ed.D. Harvard
Director



Lisa Neilson
Ph.D. OSU
CHRR Research Scientist



Erin Joyce
M.A. U Notre Dame
Associate Director



Ryan Knighton
B.S. OSU
Senior Systems Developer



Julie Maurer
Ph.D. OSU
Senior Researcher



Tian Lou
Ph.D. UCONN
CHRR Research Scientist



Jessica Collura
Ph.D. UW Madison
Senior Research Associate



Brian Stamper
M.A. OSU
CHRR Senior Data Scientist



Ceanna Burnheimer
B.A. OSU
Research Associate



Caroline Barto
B.S. OSU
CHRR Data Scientist



Sean Quigley
B.S. OSU
Data Governance Manager



Mark Oleson
B.S. OSU
CHRR Data Scientist



Xiangyu Ren
M.P.A., M.S. NYU
CHRR Data Scientist



Sungjin Lee
Ph.D. MU
Postdoctoral Scholar



Kathleen Krzyzanowski Guerra
Ph.D. OSU
Postdoctoral Scholar



Seong Ji Jeong
Ph.D. SNU
Postdoctoral Scholar



Sam Rosselot
B.A. OSU
Associate Project Manager



Katie Jennings
B.S. OSU
Research Associate

Public Sector Data Science Interns

The **Public Sector Data Science Internship Program** is an experience learning opportunity for Ohio State students interested in exploring careers in policy research and evaluation. Students are partnered with an Ohio state agency where they will grow their data science and analysis skills while addressing a pertinent data science or policy issue. At the end of the program, students present a poster showcasing their work at a reception attended by OERC's state agency partners.



Ella Busch

Ella worked with Opportunities for Ohioans with Disabilities to assist with their Comprehensive Statewide Needs Assessment. She examined areas where there were gaps or delays in vocational rehabilitation services using Microsoft Excel and Tableau.



Isabelle Frohlich

Isabelle collaborated with the Ohio Department of Job and Family Services, analyzing data from the Comprehensive Case Management and Employment Program. Utilizing Microsoft Excel and Tableau, she gained valuable insights into the program's performance and its target demographics.



Samuel Gadkar

Samuel worked with the Ohio Department of Job and Family Services on their Re-employment Services and Eligibility Assessment (RESEA). He gathered and joined data involving employment, SNAP, and RESEA in SQL and made visualizations in Tableau.

 For more information on each student's project, visit oerc.osu.edu/interns

OERC Student Workers

Our **Student Workers** play a crucial role in advancing the mission of the Ohio Education Research Center. They provide essential administrative support, conduct qualitative research, and perform data analysis, significantly contributing to our projects.



Alexandra Avery, *STEM Education*

Alexandra provides administrative and qualitative research support for OERC projects involving the Ohio Department of Education and Workforce. She has assisted with the Attendance Study and is currently working with both the Principal Pipeline and Ohio Evidence-Based Clearinghouse Redesign projects.



Farzeen Hussain, *Political Science*

Farzeen provides administrative and qualitative research support for OERC projects involving the Ohio Department of Education and Workforce. She is currently working on the School Success Case Studies and Literacy Coaching research projects.



Elizabeth Yirava, *Statistics and Public Policy Analysis*

Elizabeth assists the OERC with data cleaning & visualizations using R and designing dashboards in Tableau. She also helps with data coverage projects, creating variables, and data documentation. Most recently, she created figures in R and wrote descriptions of them for the Attendance Study.

 For more information on each student worker, visit oerc.osu.edu/staff

Staff Highlight: Lisa Neilson

Q: Can you share a bit about your role and what a typical day looks like for you?

My primary role is to manage the data governance and associated data use activities of the Ohio Longitudinal Data Archive (OLDA). This involves understanding the permissible uses of the data, developing and documenting procedures for data use, and consulting with researchers who want to use the data, as well as communicating with our technical staff at CHRR to keep track of incoming and outgoing data and collaborating with state agencies who provide data to the OLDA. I spend a lot of time communicating through E-mail, meetings, and JIRA project tracking.

I also lead research and analysis projects, so some of my time is spent programming and analyzing data, often in collaboration with the OERC's data scientists and research associates.



Q: What inspired you to pursue a career in research, and how did you come to work here?

I have always been interested in helping people use accurate, reliable information to make decisions. I began my career working as a consumer research manager and then returned to school to do graduate work in sociology. When I was preparing to graduate and began looking for the next step in my career, the OERC had just been founded and was hiring. A position that combined my technical and research skills with the OERC's mission of using data and evidence to inform policy was very appealing to me.

Q: What do you enjoy most about working at the Ohio Education Research Center?

A: I am very proud of the high-quality work our team does, and it is fulfilling to be able to contribute to improving programs and services for the public.

 For more information about Lisa Neilson, visit oerc.osu.edu/staff/lisa-neilson

Our Sponsors

We acknowledge the following support from our sponsors, whose funding is crucial to our mission of enhancing educational, workforce, and social outcomes. Our sponsors, including **state agencies, private foundations, and industry partners**, provide the financial resources that enable us to conduct impactful research, develop innovative programs, and deliver data-driven insights.

OLDA Partnership

- Ohio Longitudinal Data Archive - \$1,767,472

Ohio Department of Education and Workforce

- Ohio Alternative Attendance Study - \$277,788
- Research and Evidence-based Policy & Practice Support - \$633,892
- Evidence-based Practice & Research Support - \$1,053,038
- Principal Pipeline - \$255,980

Ohio Department of Job and Family Services

- Ohio RESEA Evaluation - \$474,533
- Ohio Adult Protective Services - \$849,623
- Quality Jobs, Equity, Strategy, and Training - \$345,593
- Data Science - \$231,895

Ohio Housing Finance Agency

- OHFA Ohio Longitudinal Data Archive - \$122,000

Ohio Manufacturers' Association

- 5G - Good Jobs Challenge - \$179,400

Coleridge Initiative

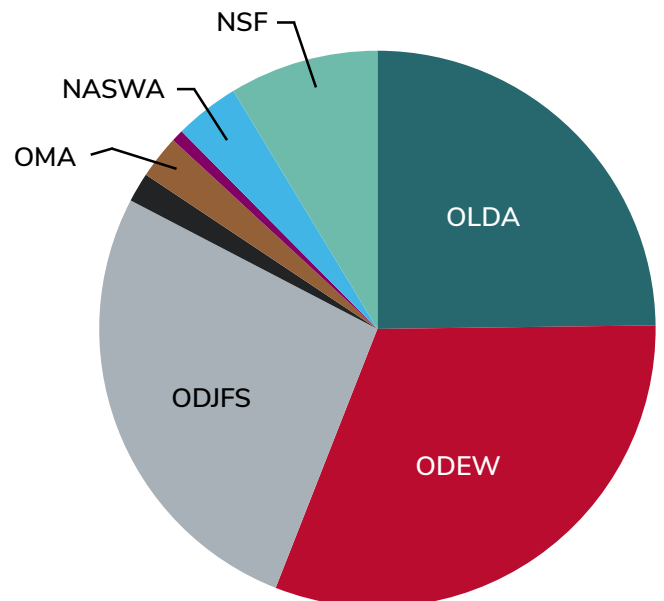
- Democratizing our Data - \$50,000

National Association of State Workforce Agencies

- Regional Data Collaboratives - \$268,407

National Science Foundation

- Industries of Ideas - \$617,449



Attendance Study

Ohio Department of Education and Workforce

The Ohio Department of Education and Workforce (ODEW) partnered with the Ohio Education Research Center to conduct a statewide study on school attendance. This mixed-methods study sought to learn more about patterns and outcomes related to student attendance in Ohio and local school district attendance policies. Three primary data sources were used: EMIS records from 2016 - 2023; local attendance records from eight partnering school districts; and a statewide survey of 138 school districts.

Findings from this study showed improved student attendance after districts notified parents of their students' excessive absence. The study also found that districts report using more preventative, as opposed to punitive, approaches to improve student attendance. House Bill 410 outlines attendance policies for Ohio schools and requires districts to notify parents of excessively absent students and create absence intervention plans. This study found implementing House Bill 410 requirements placed an administrative burden on school districts, with districts frequently requesting additional funding for personnel and increased support and consistency from local court systems. The study also found inconsistencies in student information systems and local data entry processes that impacted the accuracy of attendance tracking and intervention efforts. Additional variations in how local school districts designate excused versus unexcused absences further affected student attendance records.



Jessica Collura
Principal Investigator



Erin Joyce
Associate Director



Ceanna Burnheimer
Research Associate



Caroline Barto
Data Scientist

Employment First

Ohio Department of Developmental Disabilities

Ohio's Employment First framework supports community employment for individuals with developmental disabilities. While schools offer education and training for school-aged youths, individuals become eligible for Employment First services from the Ohio Department of Developmental Disabilities (DODD) at age fourteen. A study of individuals with intellectual and developmental disabilities aged fourteen to thirty years was conducted to identify best practices for successful transition planning and related K-12 outcomes. The research team utilized data from the OLDA to measure postsecondary education enrollment, persistence, and completion of students who graduated from high school in Ohio between 2014 and 2023. They also examined employment and participation in cross-agency services across various disability types, ages, and other sub-groups of transition-aged individuals. Qualitative interviews conducted by collaborators from OSU's Nisonger Center provided further insight into factors contributing to positive outcomes for transition-aged youth.



Lisa Neilson
Principal Investigator

Another objective of the study was to forecast the number of students expected to transition from K-12 to developmental disability services through 2032. The team statistically modeled the annual number of youth who could potentially be served by DODD as they prepare to transition out of high school. The findings were displayed in an interactive Tableau dashboard delivered to DODD.



Caroline Barto
Data Scientist



Seong Ji Jeong
Postdoctoral Scholar



Elizabeth Yirava
Student Worker

Industries of Ideas

National Science Foundation

Over the past two decades, innovation and productivity have slowed, posing a significant threat to sustainable and inclusive economic growth. This stagnation is particularly concerning in emerging fields such as artificial intelligence (AI) and green energy, where accelerated innovation is crucial for reversing these trends. Universities, state governments, and private firms are pivotal in driving innovation; however, they cannot effectively track research-led innovation flow from academic institutions into regional economies.

To address this challenge, a new collaboration between the Technology, Innovation, and Partnerships Directorate of the National Science Foundation, the Institute for Research on Innovation and Science at the University of Michigan, The Ohio State University, and the Social Science Research Council aims to establish a robust data infrastructure. This initiative is rolling out in phases, beginning with an Alpha version of an interactive dashboard that includes scientific investment metrics for AI and Electric Vehicles (EV) across all IRIS-member universities and placeholder workforce metrics for design and usability review. The subsequent Beta version expands these metrics, integrating more comprehensive workforce and labor market analysis based on Ohio administrative data. The beta prototype features a fully developed interactive dashboard linking scientific investment and workforce metrics specifically for AI and EV in Ohio.



Tian Lou
Principal Investigator



Sungjin Lee
Postdoctoral Scholar



Brian Stamper
Senior Data Scientist



Xiangyu Ren
Data Scientist

Ohio's Broadband & 5G Sector Partnership

Good Jobs Challenge | Quality Jobs, Equity, Strategy, and Training

The transformative impact of 5G is evident globally, but many Ohioans lack access to high-speed internet. During the COVID-19 pandemic, digital access disparities were amplified, prompting the CARES Act to fund initiatives like Ohio's 5G and Broadband Connectivity Center at OSU. This center, along with an industry sector partnership (ISP), addresses workforce shortages through career awareness, education, and training. Sector partnerships bring employers in an industry together with education, training, government, and community-based organizations to close workforce gaps. The OERC supports these efforts with data analytics and evaluation.

The Good Jobs Challenge grant, funded by the Ohio Manufacturer's Association and the U.S. Economic Development Administration, along with a Quality Jobs, Equity, Strategy, and Training grant from the Ohio Department of Job & Family Services and the U.S. Department of Labor, supports comprehensive workforce data collection, analytics, evaluation, and impact research for the Broadband & 5G Sector Partnership.

This initiative standardizes and aggregates project data, composes quarterly reports for stakeholders including the Governor's Office of Ohio Workforce Transformation, and provides public access to Ohio's Broadband & 5G Workforce Asset Mapping Dashboard. Through monthly regional ISP or "Node" meetings, webinars, and user support resources, this research ensures that Ohio's workforce development system is well-positioned to meet the rapidly growing demand for skilled workers in the Broadband & 5G sector.



Julie Maurer
Principal Investigator, QUEST
Co-Principal Investigator, GJC



Anish Arora
Principal Investigator, GJC

Ohio's Broadband & 5G Workforce Asset Mapping Dashboard

Led by principal investigator Julie Maurer, the Broadband & 5G team launched the initial phase of the **Workforce Asset Mapping Dashboard** in 2024. The dashboard offers customized regional resources such as education and training program contacts, labor market trends, and skills aligned with available jobs in Ohio's growing telecom industry. This information aids decision-making for regional Node Leadership and statewide Sector Partnership stakeholders.

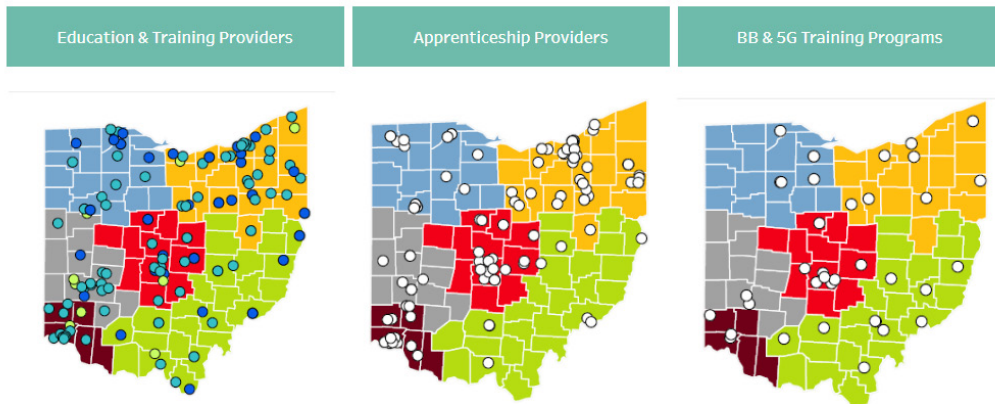


Overview

This Workforce Asset Map Dashboard displays Ohio's Broadband & 5G Sector Partnership workforce development resources to answer questions about industry-specific workforce profiles across Ohio. Locate contact information about education and training programs, labor market trends by geographic region, and skills aligned with the needs of employers.

This dashboard for was made possible by generous support from Quality Jobs, Equity, Strategy, and Training (QUEST) funding from the Ohio Department of Job & Family Services with contributions by partners at the Governor's Office of Workforce Transformation and the Wireless Infrastructure Association.

Select Institution Category



Mark Oleson
Data Scientist



Katie Jennings
Research Associate



Ryan Knighton
Systems Developer



Sungjin Lee
Postdoctoral Scholar

On the Road: Bridging Research and Industry

In August 2024, the OERC team visited **Lit Fiber - Medina Deployment Center and Warehouse** in Medina, OH to explore the company's operations in the Broadband & 5G sector. Lit Fiber - Medina is a fiber internet service provider offering high-speed fiber optic internet and Wi-Fi to homes and businesses in the Medina region.

Broadband & 5G technology is essential for future-proofing communities, both in service provision and product delivery. During this field visit, the OERC team learned about the company's fiber splicing technology, the development and implementation of fiber networks, and workforce development initiatives. Installing this technology requires meticulous coordination and engagement with the local community and businesses to ensure that construction methods, development, and implementation align with client needs. This visit was crucial in informing the OERC about the experiences of employers and inspired the team to connect employer-identified occupations, knowledge, skills, and attributes with education and training programs.



"I was inspired to hear about LitFiber's progress in connecting communities. I am hopeful that the future of communication technology will expand to include Ohioans statewide."

-Katie Jennings, Research Associate

Ohio Longitudinal Data Archive

OLDA Partnership

The Ohio Longitudinal Data Archive (OLDA) is a collection of restricted-access administrative records used to support the research interests of the state of Ohio. In partnership with Ohio State's Center for Human Resource Research (CHRR), the OERC manages the technical functions and data governance activities of the OLDA on behalf of several state agencies collectively known as the OLDA Partnership. The OLDA consists of current and historical records dating back at least a decade and as long as 30 years, allowing researchers to study transitions and interrelationships between state programs and services and their associated long-term outcomes.



Lisa Neilson
Principal Investigator

The OLDA team made several technical improvements to its operations in 2024, including web access for agency partners to track project approvals, new secure data access procedures through the CHRR data enclave, and updated routines for managing data flow to the IOP. In 2024, the OLDA served as a data source for 45 active studies led by the OERC and by research teams from Ohio State University, Columbia University, Kansas State University, Stanford University, the University of Michigan, the Kentucky Center for Statistics, and RAND.



Brian Stamper
Senior Data Scientist



Caroline Barto
Data Scientist



Jeremy Alexander
CHRR Tech



Tomasz Michalak
CHRR Tech

Pandemic EBT Cards

Ohio Department of Job and Family Services

During the COVID-19 pandemic, the Ohio Department of Job and Family Services (Office of Family Assistance) mailed out EBT cards to addresses throughout Ohio. Many of these cards were left uncashed, and JFS is interested in understanding the characteristics of these households to improve future assistance programs. On behalf of ODJFS, the OERC will attempt to match the addresses of these unclaimed cards to BMV data to collect the individuals living at the addresses at the time of mailing. We will then use UI wage data to estimate the household income surrounding the pandemic. From there, we will conduct a descriptive analysis of the household earnings to gain insight into why these households might not have cashed these cards. The OERC will deliver a report to JFS with the aggregated results from the analysis.

SNAP: Able-Bodied Adults Without Dependents

Ohio Department of Job and Family Services

The Ohio Department of Job and Family Services requested that the OERC perform representative interviews of the Able-bodied Adults Without Dependents (ABAWD) sub-population of Ohioans receiving SNAP/TANF benefits. The purpose of the study is to create profiles of the ABAWD sub-population and to determine the reasons for not pursuing job opportunities, training, and other services provided through the benefits program. The results of this study will be used by agency managers to determine barriers to entering the workforce for ABAWDs and to improve the information dissemination of training, workshops, job fairs, and other resources available to this group. Additionally, results will inform the effectiveness of SNAP requirements in finding work and outcomes after program exit.



Joshua Hawley
Principal Investigator



Sean Quigley
Data Governance Manager

Ohio's Evidence-Based Clearinghouse

Ohio Department of Education and Workforce

Ohio's Evidence-Based Clearinghouse, an OERC project sponsored by the Ohio Department of Education and Workforce, catalogs strategies from leading sources of high-quality research, and provides information and tools to help Ohio educators find, understand, select, and implement evidence-based interventions, programs, and practices. Ohio's Evidence-based Clearinghouse was launched in September of 2018. In 2024, the OERC conducted a comprehensive redesign of the site based on input collected from a broad cross-section of Ohio educators and updated all the strategies included in the OEBC to reflect the most current research-based evidence available.

Positive Outliers - Early Literacy

Ohio Department of Education and Workforce

The Ohio Department of Education and Workforce engaged the OERC to conduct a mixed methods study to identify “positive outlier” schools in Ohio and document and catalog their practices. Positive outlier schools, as defined in this study, are schools whose students are demonstrating higher than expected growth in moving students from “not on track” to “on track” in literacy from their initial kindergarten reading diagnostic scores to their third-grade fall reading diagnostic assessments.

The central research question guiding the quantitative analysis of this positive outliers study was: Which schools result in greater than expected growth between the reading diagnostics in kindergarten and third-grade diagnostic assessments based on schools' demographic characteristics? The central research question guiding the qualitative portion of this study was: What factors contribute to the better-than-expected growth in literacy from students' initial kindergarten reading diagnostic scores to their third-grade reading diagnostic assessment?



Erin Joyce
Principal Investigator



**Department of
Education &
Workforce**

Unemployment Insurance Equity

Ohio Department of Job and Family Services

During the COVID-19 pandemic, the surge in Unemployment Insurance (UI) claims underscored the urgent need to understand the equity and efficiency of the UI system. The UI Equity project examines disparities in the benefits determination process, approval rates, and the timeliness of UI payments among claimants from various demographic and socioeconomic backgrounds. The research team analyzed five large administrative datasets, tracking over 3.6 million new claims from 3.4 million claimants between 2017 and 2022. The study found more significant disparities across industries and income levels than among different demographic groups. The final report was submitted to the Ohio Department of Job and Family Services in May 2024, with the results presented in July 2024.

Reemployment Services and Eligibility Assessment

Ohio Department of Job and Family Services

The RESEA evaluation assesses the effectiveness of Ohio's Reemployment Services and Eligibility Assessment (RESEA) program, which aims to help eligible Unemployment Insurance (UI) claimants return to work quickly by providing job search assistance. The study uses an experimental design, randomly assigning claimants to treatment and control groups each week. This approach allows us to estimate the causal impact of RESEA services on employment rates and claimants' reliance on UI benefits.

A pilot study was conducted between April and June 2024 in three workforce areas to establish the randomization process and collect preliminary data. Statewide randomization began in mid-July 2024 and will continue throughout 2025.



Tian Lou
Principal Investigator



**Department of
Job & Family
Services**

Presentations

Barto, C., Joyce, E., Neilson, L. (2024, October 17). Multi-State Postsecondary Report: Vocational & Apprenticeship Outcomes. Democratizing our Data Challenge Virtual Convening. Online. <https://youtu.be/O49DquPllQo?si=r7BopdJOuyx-FhXN>

Hawley, J., Wichitaksorn, N.(2024): Measuring labour market transitions of youths in Thailand: Evidence from rotation groups (2012-21) in the Labour Force Surveys, ILO Working Paper, No. 110, ISBN 978-92-2-040189-7, International Labour Organization (ILO), Geneva, <https://doi.org/10.54394/RIND3740>

Joyce, E., Berry, M., Hartman, E., Johnson, M. (2024, September 25-26). Data in Harmony: The Multi-State Data Collaborative Showcase. National Association of State Workforce Agencies Summit. New Orleans, LA, United States.

Joyce, E., Kurz, C., Pettway, C., Putnam, G., Weinberg, B. (2024, March 18-20). Progression of Research Partnerships: State-Driven Priority Topics. Coleridge Initiative's 4th Annual National Convening Building Bridges, Breaking Barriers: Data Collaboration for the Public Good. Washington, DC, United States.

Joyce, E., C. Pettway, Tombari, A., McGough, R., Putnam, G., Walsh, S. (2024, March 18). Project and Product Show and Tell. 2024 Multi-State Data Collaborative Annual Meeting. Washington, DC, United States.

Joyce, E., Bahr, P., McQuown, D., Weinberg, B., Yildirmaz, A. (2024, March 18). Building the Product Pipeline: The Midwest Collaborative's (MWC's) Request For Information (RFI) Process. 2024 Multi-State Data Collaborative Annual Meeting. Washington, DC, United States.

Lou, T., Barto, C., Jeong, S., Hawley, J., (2024). Evaluating Ohio's Third-Grade Reading Guarantee Program with a Regression Discontinuity Design (Association for Public Policy Analysis and Management, National Harbor, Maryland).

Code

Lou, T. (2025, March 2). Public Sector Data Science Class: Basics in Python. Zenodo. <https://doi.org/10.5281/zenodo.14957301>

Lou, T. (2025, March 2). Public Sector Data Science Class: How to Use Web API. Zenodo. <https://doi.org/10.5281/zenodo.14957314>