



New Jersey Statewide Data System

## NJSDS Overview

July 17, 2024



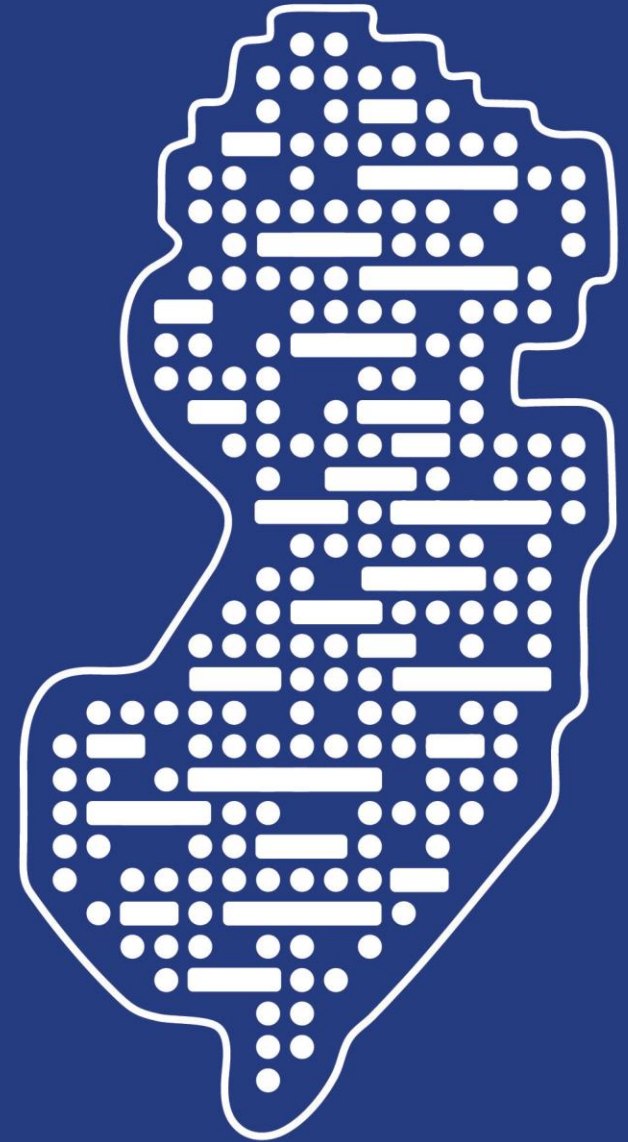
# Agenda

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- What is a Statewide Longitudinal Data System
- NJSDS Overview
- Privacy & Security
- Research Agenda & Recent Products
- Multi-State Collaboration



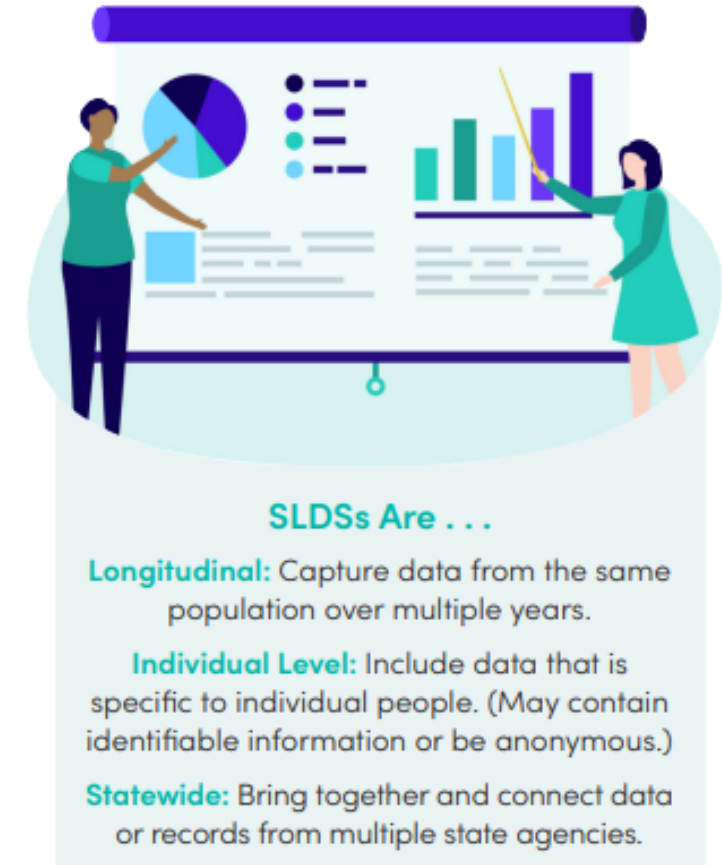
# The Power of an SLDS





# What is a Statewide Longitudinal Data System?

- SLDSs connect statewide information from separate agencies which span early childhood, K-12 and postsecondary education, health, human services, criminal justice involvement, and employment.
- SLDSs enable cross-sector data analysis to build evidence that help leaders address important policy questions and better support the public.
- SLDSs can help the public – families, educators, local leaders – get information they need to make informed decisions.



Source: Data Quality Campaign



# The Power of an SLDS



## KENTUCKY FUTURE SKILLS REPORT

This dashboard is powered by the Kentucky Center for Statistics. Those using screen readers may need to click the enter key to select options in filters. This dashboard is best viewed on a desktop computer. If you have any questions regarding accessibility, please contact [kystats@ky.gov](mailto:kystats@ky.gov). Follow us @KYSTATS on social media.

An alternative, accessible format in Excel is available for download here: [https://bit.ly/KFSR\\_2023\\_Data](https://bit.ly/KFSR_2023_Data)

Technical documentation can be found in PDF form here: <http://bit.ly/3lgW0pT>

Historic Supply

Employment Outcomes

Future Demand

Occupational Profiles

### Five-Year Historic Supply (2016-2020) by Local Workforce Area (LWA)

Historic supply refers to credentialed or credentialed people between the above timeframe. *Credentials* are the total number of credentials issued within each area and credential category. Some people may have earned more than one. *Credentialed People* are unique counts of individuals earning a specific credential and are only counted once in each region or credential category.

Select Credentials or Credentialed People to filter the dashboard.

Credentialed People

Select an Area to filter the dashboard

Kentucky

**Total Credentialed People in Kentucky**

476,924

**Total Credentials Earned in Kentucky**

718,359

#### Map of Credentialed People in Kentucky

#### Total Historical Supply in Kentucky

	Credentialed People	Credentials
Doctoral	10,449	10,485
Master	50,645	51,790
Bachelor	116,622	119,585
Associate	47,861	53,783
Cert/Diploma	50,204	130,803
CTE Certificate	57,139	106,410
HS Diploma/GED	245,503	245,503

#### Credentialed People Grid by Major Group and Credential Level

Majorgroup	Credential Level					
	CTE Certificate	Postsecondary Cert/Diploma	Associate	Bachelor	Master	Doctoral
Arts and Humanities	315	565	26,437	15,922	2,092	340
Business	9,636	6,730	2,838	26,908	6,690	269
Education	5,904	41	401	9,737	14,583	989

Received: 18 March 2019 | Revised: 23 January 2020 | Accepted: 5 February 2020
DOI: 10.1002/jee.20152

**ORIGINAL ARTICLE**

## Illuminating inequality in access: Variation in enrollment in undergraduate engineering programs across Virginia's high schools

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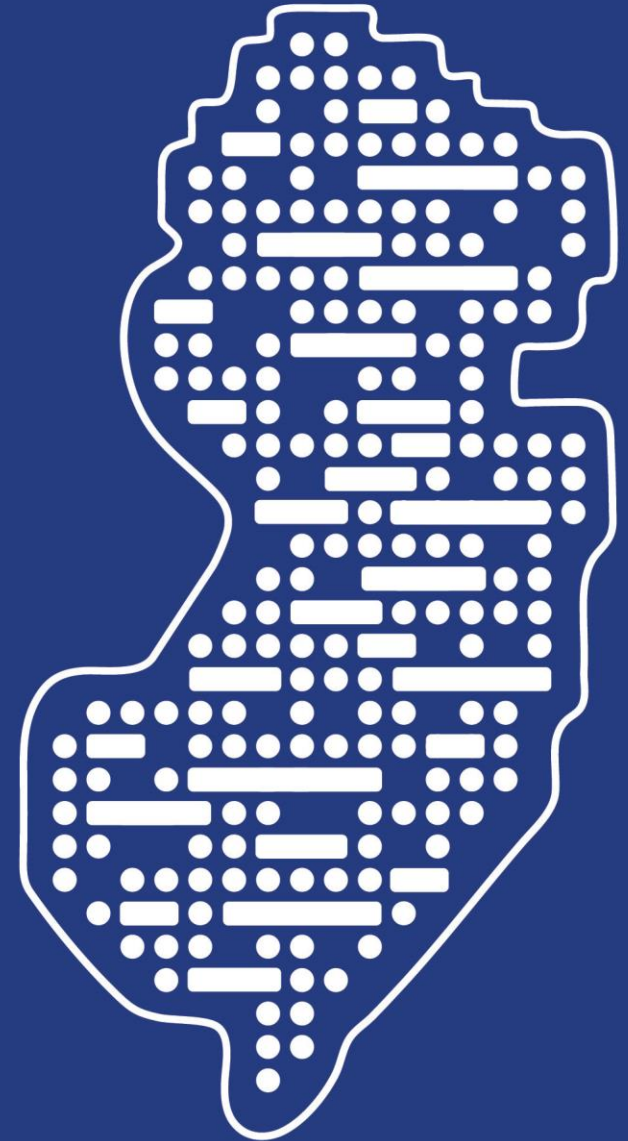
**Funding information**  
Division of Engineering, Education and Centers, Grant/Award Number: 1647926; National Science Foundation, Grant/Award Number: 1911-1647298

**Abstract**  
**Background:** Determining the root causes of persistent underrepresentation of different subpopulations in engineering remains a continued challenge. Because place based variation of resource distribution is not random and because school and community contexts influence high school outcomes, considering variation across those contexts should be paramount in broadening participation research.  
**Purpose/Hypothesis:** This study takes a macroscopic systems view of engineering enrollments to understand variation across one state's public high school rates of engineering matriculation.  
**Design/Method:** This study uses a dataset from the Virginia Longitudinal Data System that includes all students who completed high school from a Virginia public school from 2007 to 2014 ( $N = 685,429$ ). We explore geographic variation in four year undergraduate engineering enrollment as a function of gender, race/ethnicity, and economically disadvantaged status. Additionally, we investigate the relationship between characteristics of the high school and community contexts and undergraduate engineering enrollment across Virginia's high schools using regression analysis.  
**Results:** Our findings illuminate inequality in enrollment in engineering programs at four year institutions across high schools by gender, race, and socioeconomic status (and the intersections among those demographics). Different high schools have different engineering enrollment rates among students who attend four year postsecondary institutions. We show strong associations between high schools' engineering enrollment rates and four year institution enrollment rates as well as moderate associations for high schools' community socioeconomic status.

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J. Eng. Educ. 2020, 90(6):645-684. [www.tandfonline.com/journal/jee](http://www.tandfonline.com/journal/jee) 645

New Jersey Statewide Data System


# NJSDS Overview





# Introduction

- The New Jersey Statewide Data System (NJSDS) is the State of New Jersey's centralized longitudinal data system for administrative data. Formed in 2012, NJSDS connects people to data to improve policy outcomes by providing access to information in support of research and evaluation.
- Administered by the Heldrich Center at Rutgers University, NJSDS is a partnership of four state agencies:



New Jersey Department of Education  
New Jersey Department of Labor and Workforce Development  
New Jersey Higher Education Student Assistance Authority  
New Jersey Office of the Secretary of Higher Education

**RUTGERS**  
Edward J. Bloustein School  
of Planning and Public Policy  
JOHN J. HELDRICH CENTER  
FOR WORKFORCE DEVELOPMENT



# NJSDS Mission

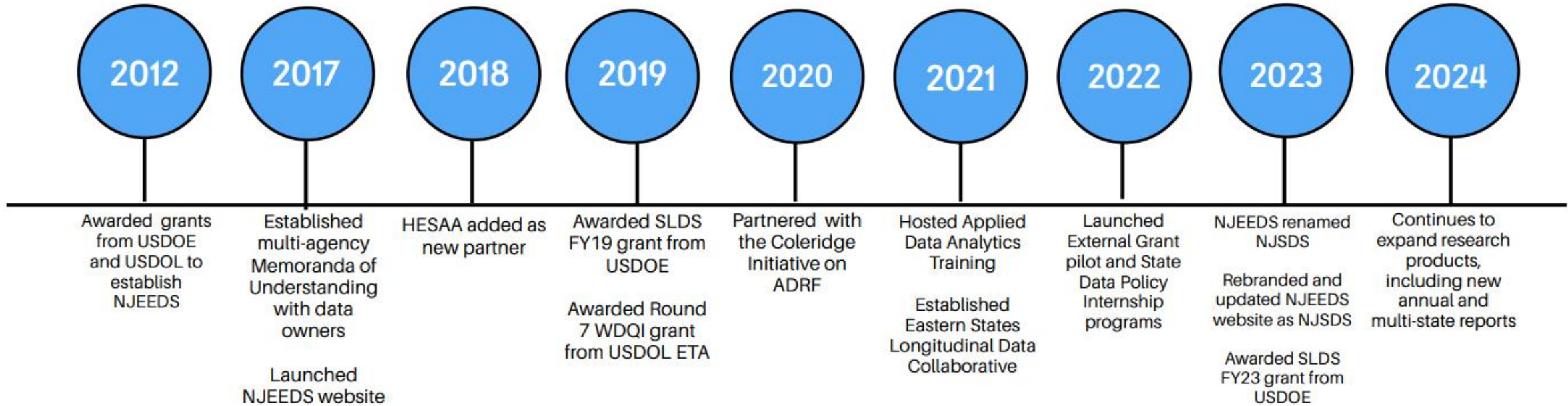


NJSDS aims to **help the public and stakeholders make data-informed decisions** to improve public policies and practices for New Jersey residents. This includes facilitating longitudinal and linked-data research, providing statistical data, and publishing reports on the NJSDS website.





# History of NJSDS



# Governing Bodies



Executive Leadership Committee

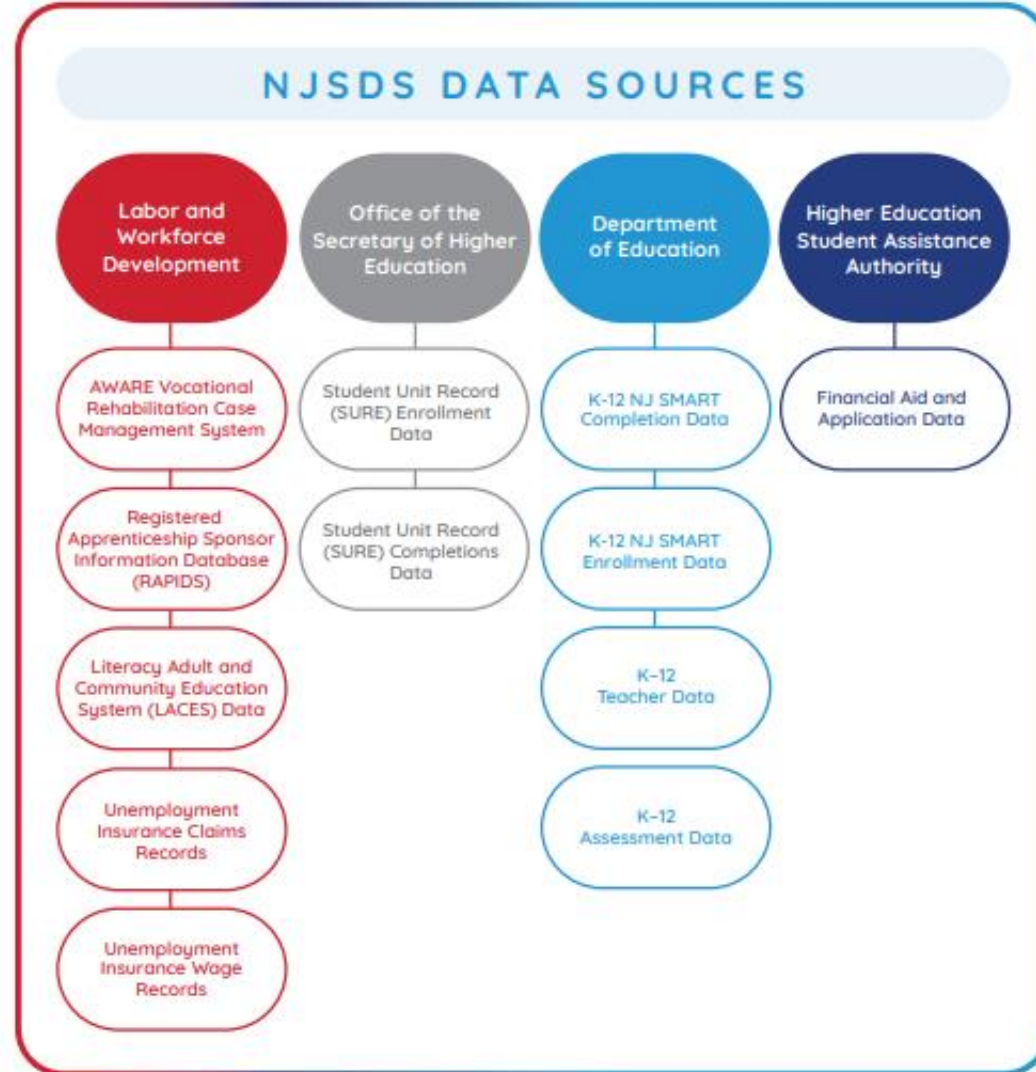
Data Stewards Work Group

Data Advisory Council

Longitudinal Data Advisory Committee




# Current Data Sources





# Current Research Agenda

- Every three years, the NJSDS governing body develops a research agenda which guides the development of internal and external products.
- This year, we updated the research agenda with stakeholder feedback to include new research topics guiding the next three years.



**New Jersey Statewide Data System**  
**Research Agenda**  
**2024-2027**

Consistent with its mission to develop and maintain a statewide longitudinal data system linking administrative records for state agency partners to inform policymaking and decision-making in New Jersey, the following vision guides the research agenda:

NJSDS aims to help the public and stakeholders make data-informed decisions to improve public policies and practices for New Jersey residents. This includes facilitating longitudinal and linked-data research, providing statistical data, and publishing reports on the NJSDS website.

The research agenda for 2024 through 2027 was guided by stakeholder feedback and a review of policy priorities in the state. It is presented first through overarching priorities, then through high-level research areas of interest.

**Priorities**

**I. Cross-Sector Data and Accuracy**

There are several priority areas stakeholders identified related to improving the scope of the data in NJSDS and the quality of administrative data across the state and within the system. Efforts aligned with this priority area include:

- More comprehensive data collection on social determinants of health and sexual orientation/gender identity variables
- More nuanced and shared definitions of variables such as disability type
- Stakeholders across sectors noted the importance of expanding the scope of NJSDS data to include additional linkages to better understand holistic individual experiences throughout their service and program pathways:
  - To health records
  - Homelessness and other content-specific survey data
  - Licensure data
  - Industry certification data
  - Justice data
  - Treasury/self-employment records
  - Human services data

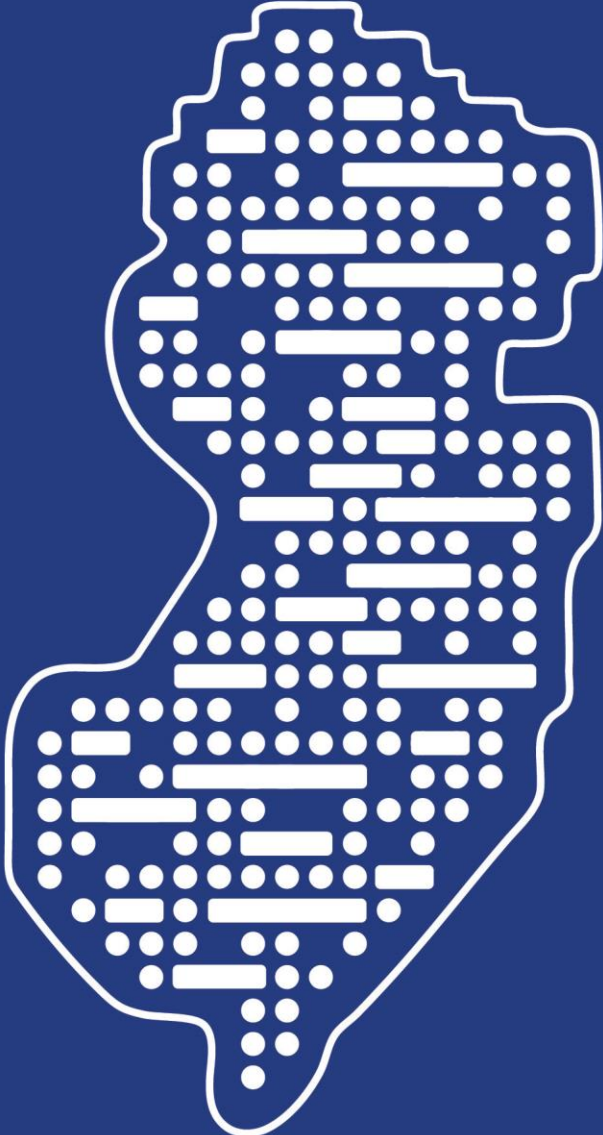
Regarding source data provided by state agencies, a related priority area is improving data quality to ensure administrative data is useable. This may include exploring how to enhance the State's ability to manage ID resolution internally within each agency, as well as across sectors. In addition, expanded data

Final v1 July 2, 2024



# Privacy, Security, & Confidentiality

Five Safes



# Privacy and Confidentiality: Managing Risk



**Safe Projects:** consistent with agency mission and utility

**Safe People:** approved and trained researchers; tiers of legal controls

**Safe Settings:** secure environments

**Safe Data:** deidentified data



**Safe Outputs:** disclosure reviews and export controls

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## SAFE USE



# Safe Outputs: Confidentiality & Safe Reporting

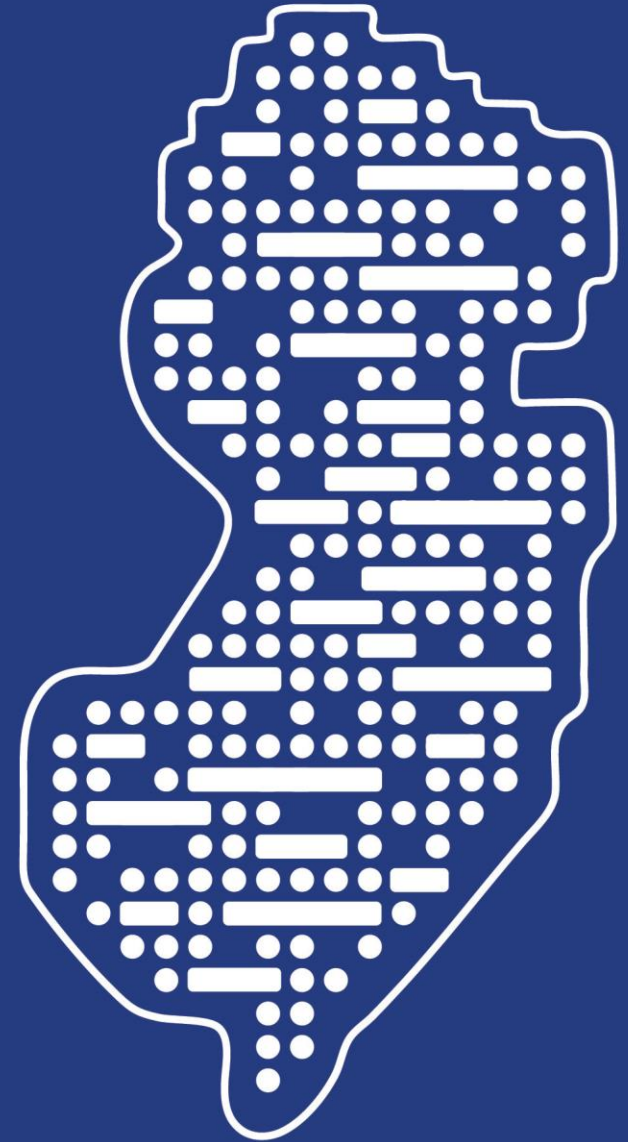


- NJSDS [Acceptable Use Guidelines](#)

- Requires minimum cell counts before data are exported from the data system
- Protects individuals (minimum cells sizes of 10) and Firms (minimum cell size of 3 within a limited geographic area for an industry)
- Redisclosure measures are also examined (even if you meet the cell size standards, if you can infer the size of a group using arithmetic, more suppression is required)



# Recent NJSDS Projects





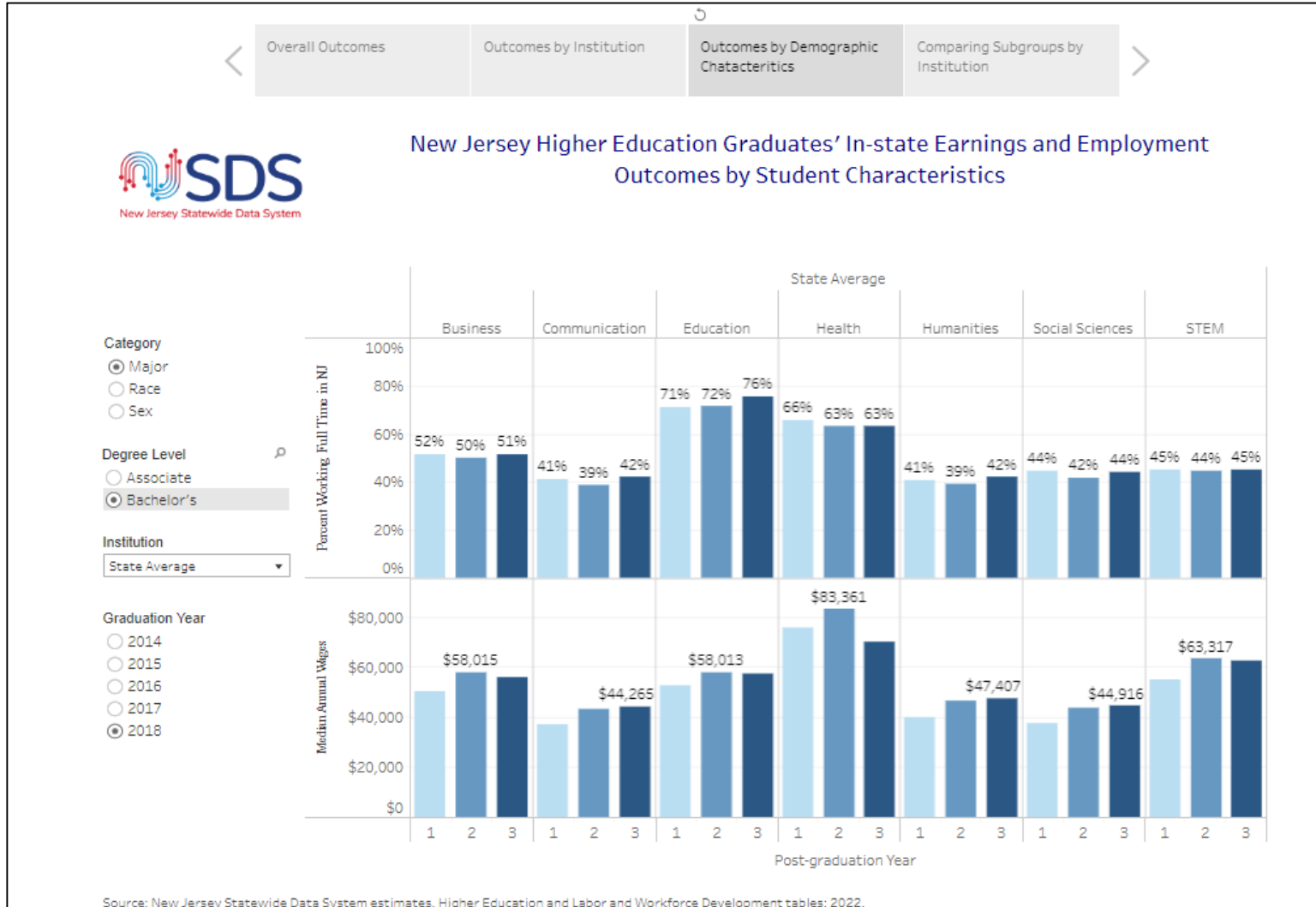
# Project Spotlight: Higher Education Outcomes



- Analyzes **labor market outcomes** such as employment and wages of various **graduating cohorts** in New Jersey:
  - Compares the changes in these outcomes between different groups within an institutions across time including
    - Program majors
    - Demographics
- Shows value added of a college degree within each institutions in the state
- Shows granular level information taking into consideration disclosure issues
- Helps prospective students in their decision-making process



# Project Spotlight: Higher Education Outcomes





# Project Spotlight: Remedial Coursework

Figure 1: Percentage Distribution of Remedial Participation of Fall 2013 Cohort, Non-remedial versus Remedial (N = 52,647)

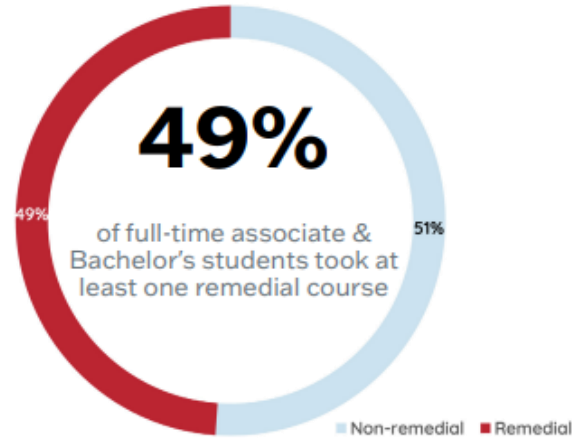


Figure 2: Remedial Course Instances, Distribution of Fall 2013 Cohort, Non-credit vs. Credit-bearing Remedial Courses (N = 25,731)

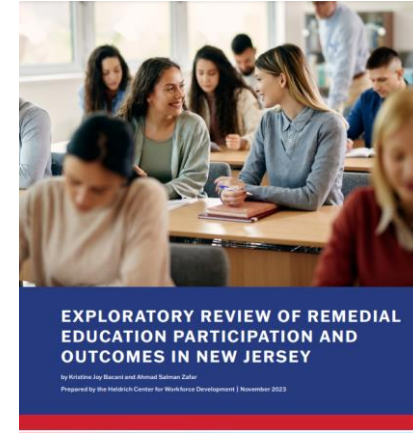
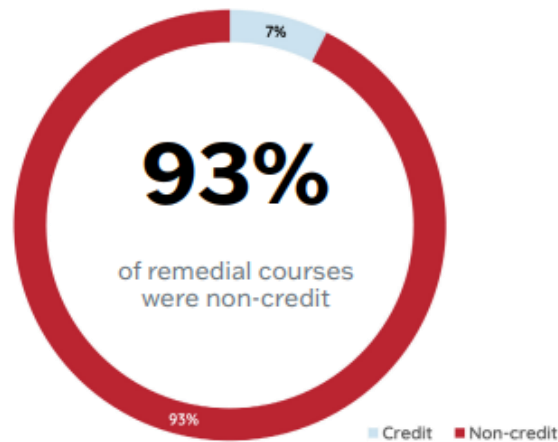
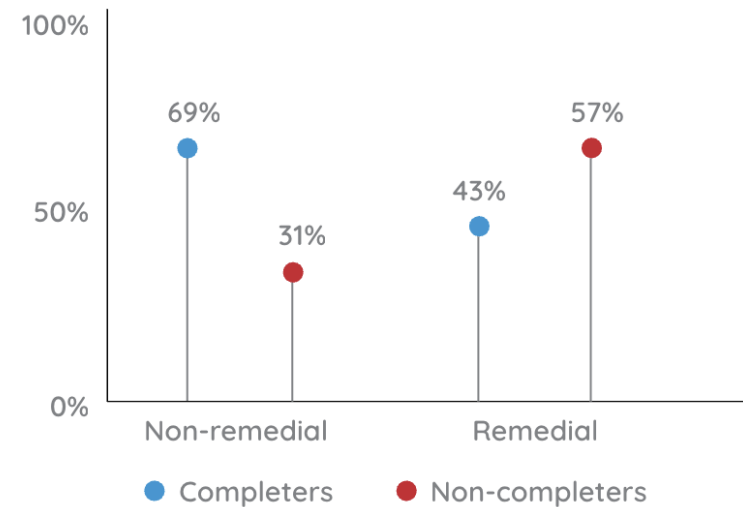


Figure 4: Overall Completion Rates of Fall 2013 Cohort, Non-remedial versus Remedial





# Project Spotlight: Remedial Coursework

Figure 5: Quarterly Earned Median Wages Comparison Post-degree Completion of Fall 2013 Cohort, Non-remedial versus Remedial

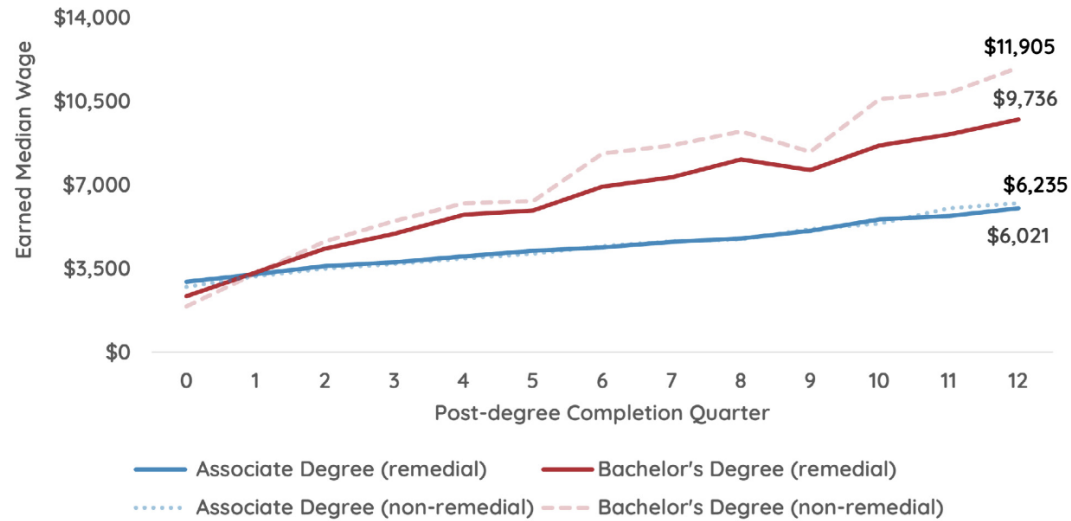
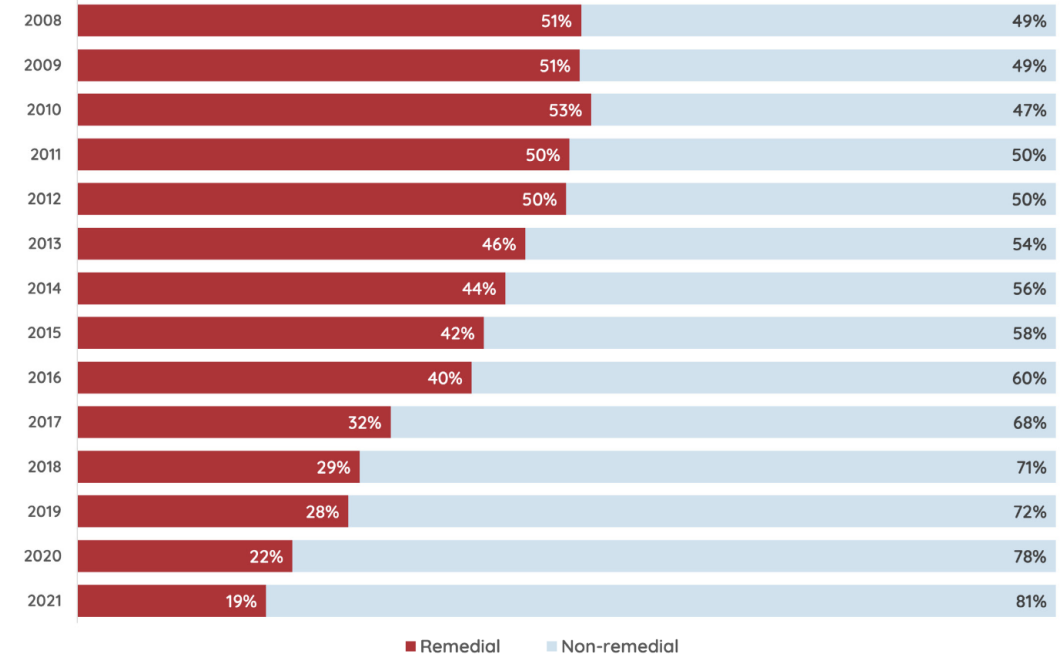


Figure 7: Percentage Distribution of Remedial Participation by Remedial Status from 2008 to 2021





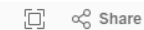
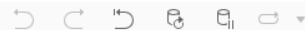
# Tuition Aid Grant Graduation Outcomes

## Tuition Aid Grant (TAG) Recipient Graduation Rates by Institution

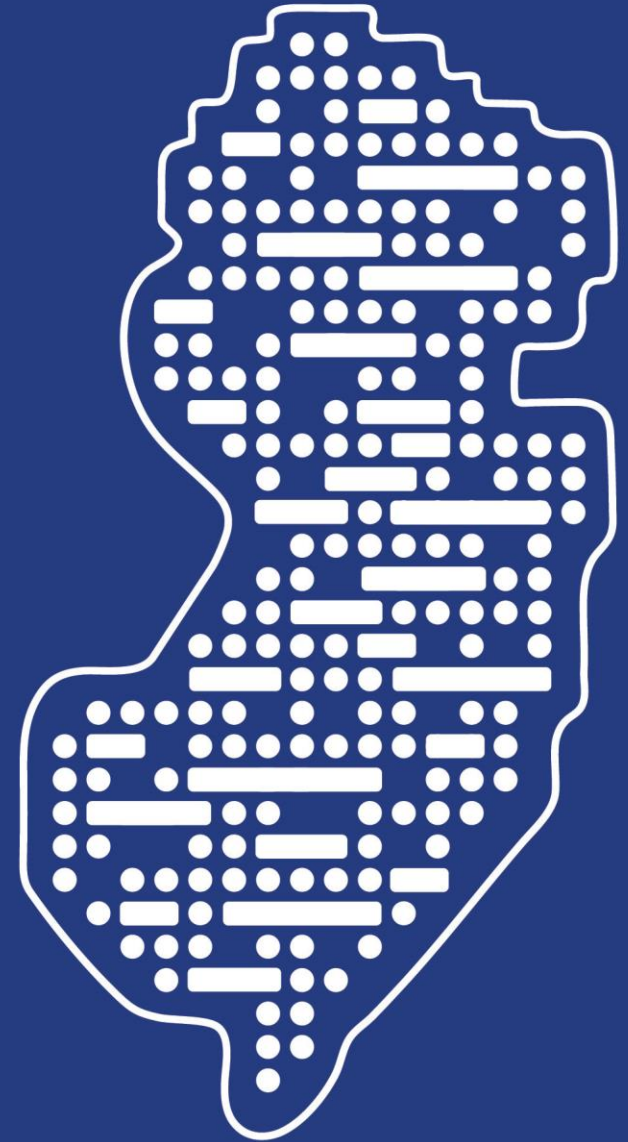
Degree Program: (All) | 
 College Name: (All) | 
 Population: (All) | 
 Year of Enrollment: (All)

College Name	Degree Program	Year of Enrollment	Population	Total Enrolled	Number Graduating in 100% Time	Percent Graduating in 100% Time	Number Graduating in 150% Time	Percent Graduating in 150% Time	Percent Ever Graduating
Atlantic Cape Community College	Associate	2012	General population	1,205	91	7.60%	197	16.30%	27.60%
			TAG recipients	512	20	3.90%	79	15.40%	34.00%
		2013	General population	1,081	51	4.70%	165	15.30%	25.00%
			TAG recipients	572	11	1.90%	84	14.70%	30.60%
		2014	General population	970	52	5.40%	141	14.50%	21.40%
			TAG recipients	475	22	4.60%	76	16.00%	31.80%
		2015	General population	812	48	5.90%	130	16.00%	23.80%
			TAG recipients	400	15	3.80%	75	18.80%	33.50%
		2016	General population	753	51	6.80%	123	16.30%	20.30%
			TAG recipients	406	15	3.70%	67	16.50%	27.10%
		2017	General population	671	44	6.60%	109	16.20%	18.80%
			TAG recipients	463	27	5.80%	92	19.90%	23.80%
2018	General population	737	41	5.60%	90	12.20%	12.20%		
	TAG recipients	412	34	8.30%	90	21.80%	21.80%		
Bergen Community College	Associate	2012	General population	2,959	167	5.60%	519	17.50%	30.60%
			TAG recipients	1,102	42	3.80%	210	19.10%	40.90%
		2013	General population	2,826	173	6.10%	547	19.40%	32.20%
			TAG recipients	1,047	42	4.00%	207	19.80%	41.30%
		2014	General population	2,948	200	6.80%	544	18.50%	30.40%
			TAG recipients	1,006	60	6.00%	221	22.00%	41.70%
		2015	General population	2,751	199	7.20%	519	18.90%	28.80%
			TAG recipients	929	47	5.10%	209	22.50%	41.00%
		2016	General population	2,907	271	9.30%	559	19.20%	26.90%
			TAG recipients	855	39	4.60%	168	19.60%	37.70%

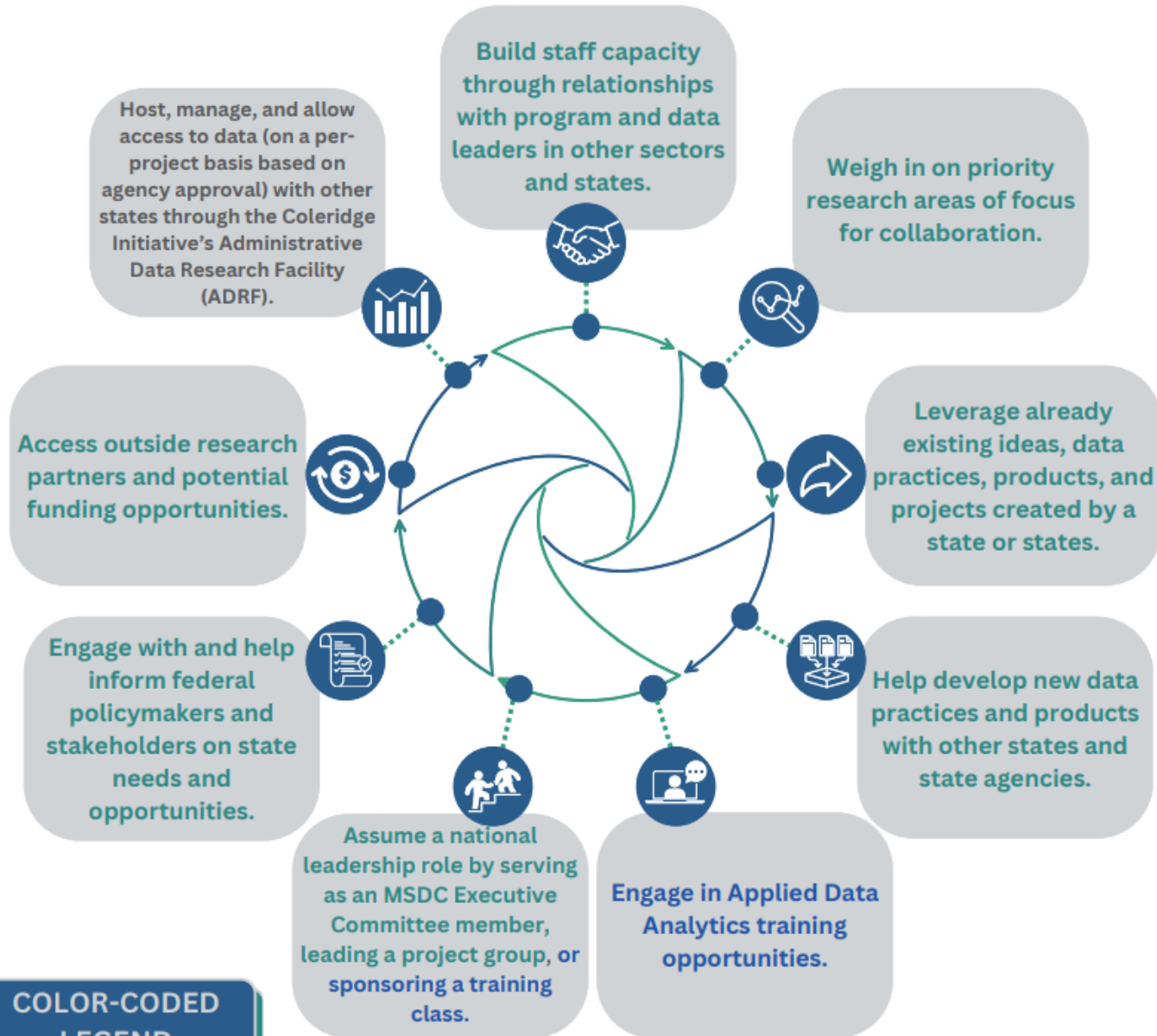
Note: Graduation rates are reported as completion within expected time. For an associate degree, the expected time, or 100% of time, is two years and 150% of time is four years from enrollment. Similarly, for a Bachelor's degree, 100% of time is four years and 150% of time is six years from enrollment. Due to disclosure review practices, some values are suppressed where counts were less than 10 or could be used to calculate other suppressed values. Reporting using the New Jersey Statewide Data System varies slightly from past manual reporting by institution and from federal reporting to the Integrated Postsecondary Education Data System. For more information on the methodology, [click here](#).



# Multi-State Collaboration



# WAYS TO ENGAGE IN THE MULTI-STATE DATA COLLABORATIVE



COLOR-CODED  
LEGEND



# Collaboration Benefits

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- Addressing limitations of individual state systems
- Sharing of ideas and resources
- Avoiding duplication of efforts
- Developing data models for interoperability







# Pilot Data Sharing Projects



## Multi-State Postsecondary Report



COLERIDGE INITIATIVE

Employment by Institution

Employment by Demographic

Employment by Major

This dashboard is powered by the Kentucky Center for Statistics. Those using screen readers may need to click the enter key to select options in filters. This dashboard is best viewed on a desktop computer. If you have any questions regarding accessibility, please contact [kystats@ky.gov](mailto:kystats@ky.gov).

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[https://bit.ly/mspsr\\_technical\\_notes](https://bit.ly/mspsr_technical_notes)

Filter Report by State ▼

Kentucky Postsecondary Completers

This dashboard includes three sections: Employment Outcomes by Major Group, Credential, and Student Origin. Each of these sections are filterable by Institution and Years Post Completion. Wage information can be filtered by percentile group using the wage filter. Employment outcomes looks at Kentucky Postsecondary Completers across the 2007 through 2017 academic years (AY) followed to post completion qualifying employment in Indiana, Kentucky, Ohio, and Tennessee. Qualifying Employment Outcomes are workers with at least 2 quarters employed and at least \$3,000 dollars earned in a 4 quarter period. A double asterisk in a data table represents redacted values, blank data represents no data available.

Filter the Dashboard by Institution ▼

All

Filter the Dashboard by Years Post Completion ▼

3-Years Post Completion

Filter Wages by Percentile ▼

Median Wage

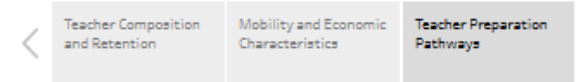
### Employment Outcomes by Major Group

This section provides qualifying employment outcomes for each major group. Major groups are categories that each contain several majors.

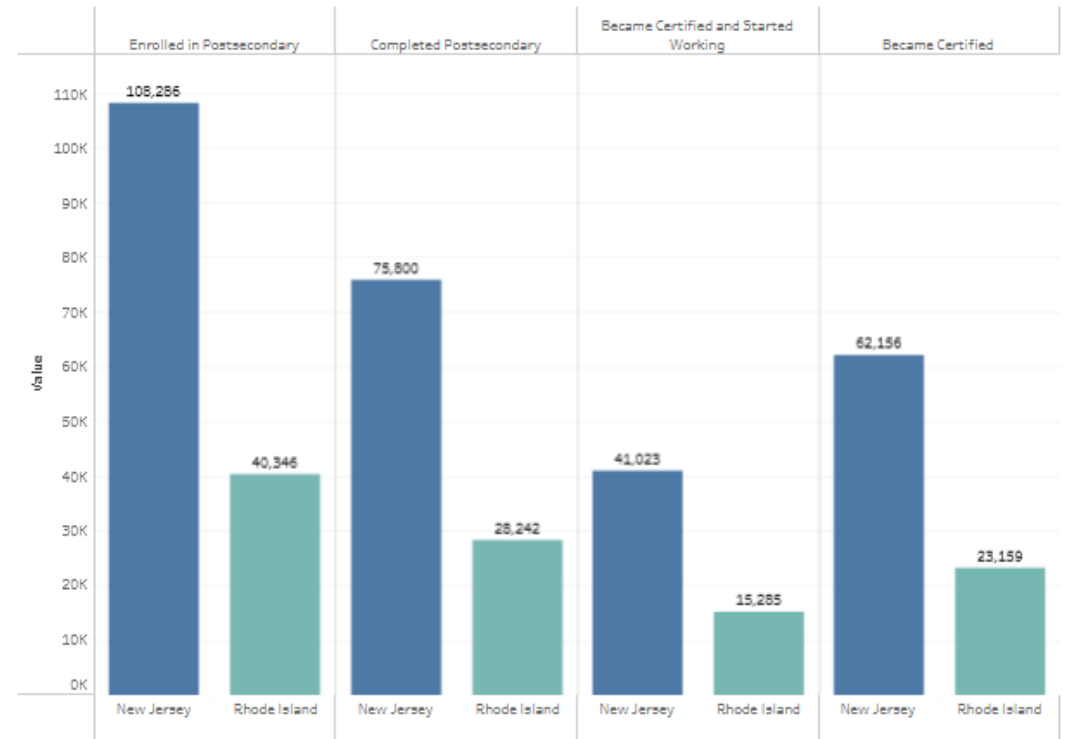
Major Group	Completer Count	In-State Median Wage	Out-of-State* Median Wage	Major Group	Employment Location
					Out-of-State* Employment In-State Employment
All	309,720	\$40,601	\$43,744	All	12% 56% 68%
Arts and Humanities	50,251	\$29,522	\$31,837	Arts and Humanities	10% 52% 62%
Business	53,200	\$42,097	\$48,806	Business	17% 53% 69%
Education	38,290	\$48,704	\$42,228	Education	9% 70% 79%
Health	66,226	\$44,068	\$50,885	Health	11% 63% 74%
Social and Behavioral Sciences	45,003	\$35,215	\$38,460	Social and Behavioral Sciences	13% 50% 63%
STEM	34,603	\$45,628	\$51,778	STEM	12% 44% 56%
Trades	22,147	\$36,035	\$39,598	Trades	8% 58% 66%

\*Out-of-State employment outcomes are limited to Indiana, Ohio, or Tennessee.

## Multi-State Teacher Workforce Report



### Teacher Pathways





# Future Initiatives

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- Future External Data Access
  - Current request process for state agency partners
  - 2025 application for external researchers
  - 2025 Applied Data Analytics courses
- Future Products
  - Career and Technical Education Program Outcomes
  - Benefits of Education Expansion
  - Enhanced Higher Education Outcomes Dashboard



# Thank you!

Website: <https://njsds.nj.gov>

Email: [njsds@ejb.rutgers.edu](mailto:njsds@ejb.rutgers.edu)

