

**RISE**<sup>NM</sup>  
*Research Informing Success in Education*

July 25, 2024

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**RISE NM:**  
Longitudinal Data System Presentation  
for the Legislative Education Study Committee

Presented by RISE NM Team



# Promotional Video

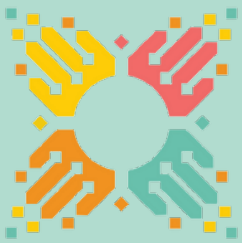




# DISCUSSION POINTS

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1. Introduction
2. RISE NM Vision
3. Partners and Key Stakeholders
4. Data Pipeline and Sources
5. Research Process and Questions
6. Data Visualization Draft Examples
7. Major Milestones and Key Lessons
8. Data Governance
9. Phase II
10. Discussion



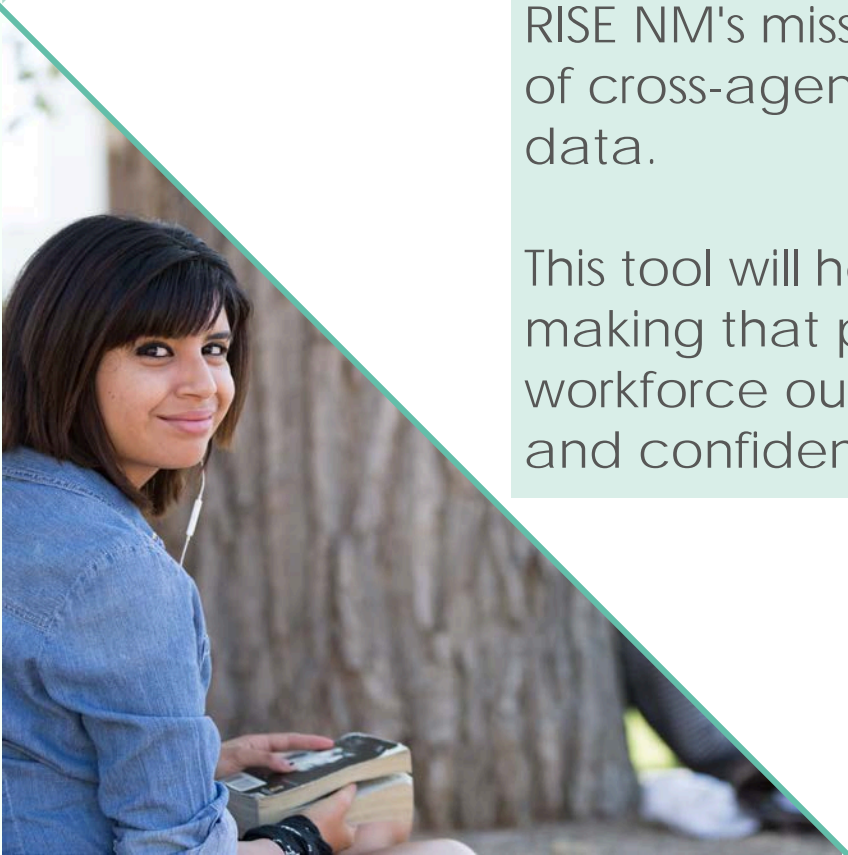
# Project Vision

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RISE NM (Research Informing Success in Education) or the New Mexico Longitudinal Data System (NMLDS) is a resource for reliable statewide, cross-agency data and reports.

RISE NM's mission is to expand accessibility and usability of cross-agency statewide educational and workforce data.

This tool will help drive informed decision- and policy-making that produces positive impacts to education and workforce outcomes while protecting individual privacy and confidentiality.





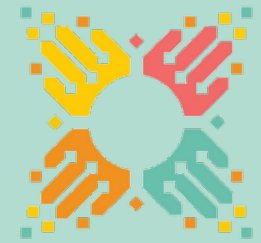
# How It All Started

Although one of the last states to build a statewide longitudinal data system (SLDS), New Mexico had an ambitious vision for RISE NM:

- The first cloud-native SLDS in the country
- Data available from Pre-K through workforce
- Only 19 other states had full early education-to-career systems as of December 2021
- 5 contributing government agencies
- 4 implementation technical vendors
- 11 source data systems
- 250+ visualization requirements
- 1 year implementation timeline



# Partners



## Technical Partners



carahsoft.



## State Partners

NEW MEXICO  
HIGHER EDUCATION  
DEPARTMENT



*Fostering Student Success from Cradle to Career*



## Policy Partners

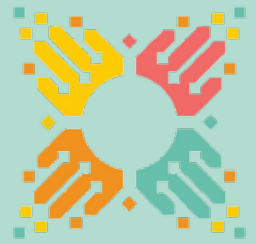
BILL & MELINDA  
GATES *foundation*



STRATEGIC DATA PROJECT



# Stakeholders



## Decision-Making Groups

- Office of the Governor
- Executive Leadership: Cabinet Secretaries and Chief Information Officers (CIOs)
- Project Steering Committee (PSC)
- Data Governance Advisory Council (DGAC)

## Non-Project Stakeholders

- Policymakers
- State leaders
- Students and families
- State and local education agencies
- Educators
- Workforce developers
- Early childhood practitioners
- Internal and external researchers

# Data Pipeline



**Implement Data Lake**  
Repository for storing data in its raw format

**Tamr Installation and MUID Creation**  
Create Master Unique Identifier (MUID) for records found across various data sources

**Create Data Analysis and Visualizations**  
Data analysis and visualizations will help inform programmatic and policy decision-making

1

2

3

4

5

**Data Ingestion**  
Ingest data into NMLDS from ten data source systems across five agencies

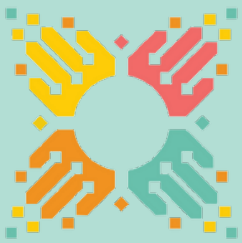
**Implement Data Warehouse**  
Repository of data used to create data analysis and visualizations



# Data Sources

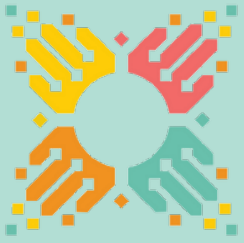


Agency	Data System
Early Childhood Education and Care Department (ECECD)	Early Childhood Observation Tool (ECOT)
ECECD	Enterprise Provider Information and Constituent Services (EPICS)
Public Education Department (PED)	Professional Licensure System
PED	PED K-12 State Longitudinal Data System
Higher Education Department (HED)	Electronic Data Editing and Reporting (eDEAR) System
HED	Literacy, Adult and Community Education System (LACES)
HED	National Student Clearinghouse
Division of Vocational Rehabilitation (DVR)	Case Management System (CMS)
Department of Workforce Solutions (DWS)	New Mexico Workforce Connection
DWS	Unemployment Insurance Tax and Claims System (UI Tax and Claims)



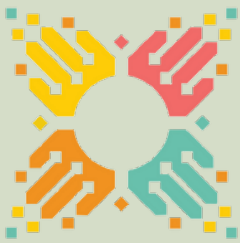
# Research Process





# Examples of Research Questions

1. How do measures of **school readiness** vary by early childhood programming factors and demographics?
2. How do measures of **college and career readiness** vary by demographics, district, and locale?
3. How do **employment metrics** vary by demographic characteristics, workforce area, educational attainment level, and study program?



# Visualization Draft Examples



**RISE<sup>NM</sup>**  
Research Informing Success in Education

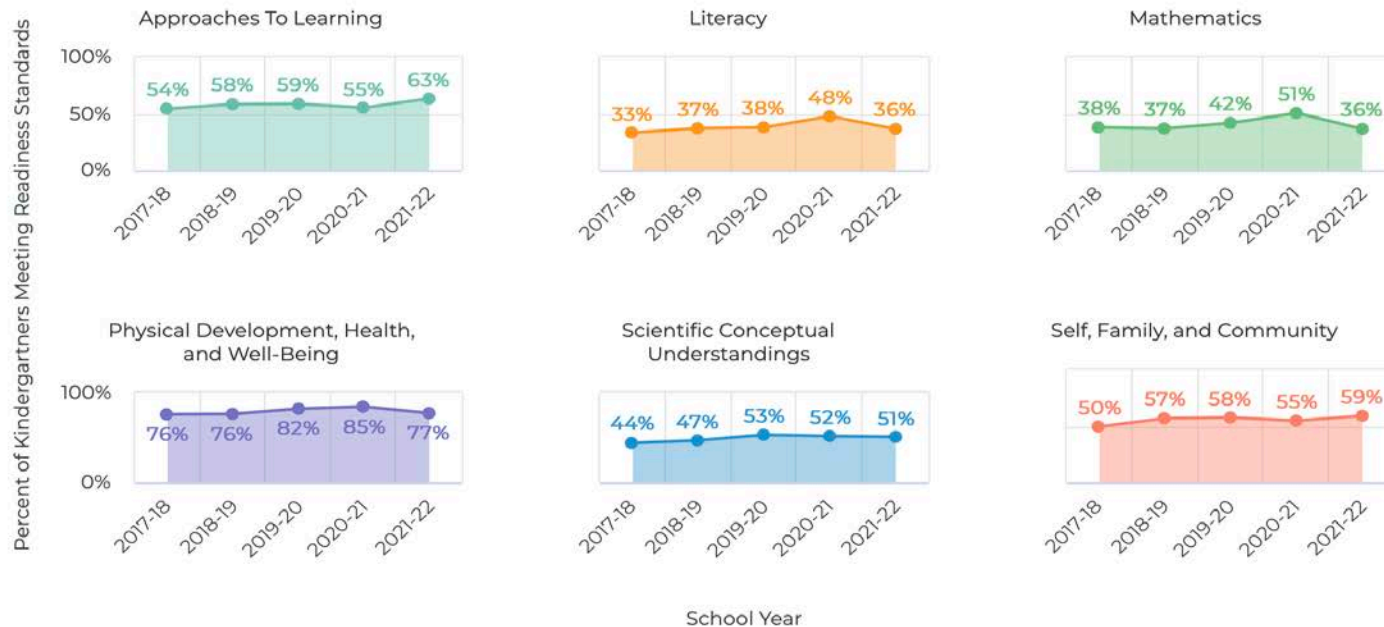
[ABOUT](#) [NEWS](#) [SAMPLE DATA](#) [CONTACT](#)

Primary Language

is Diné

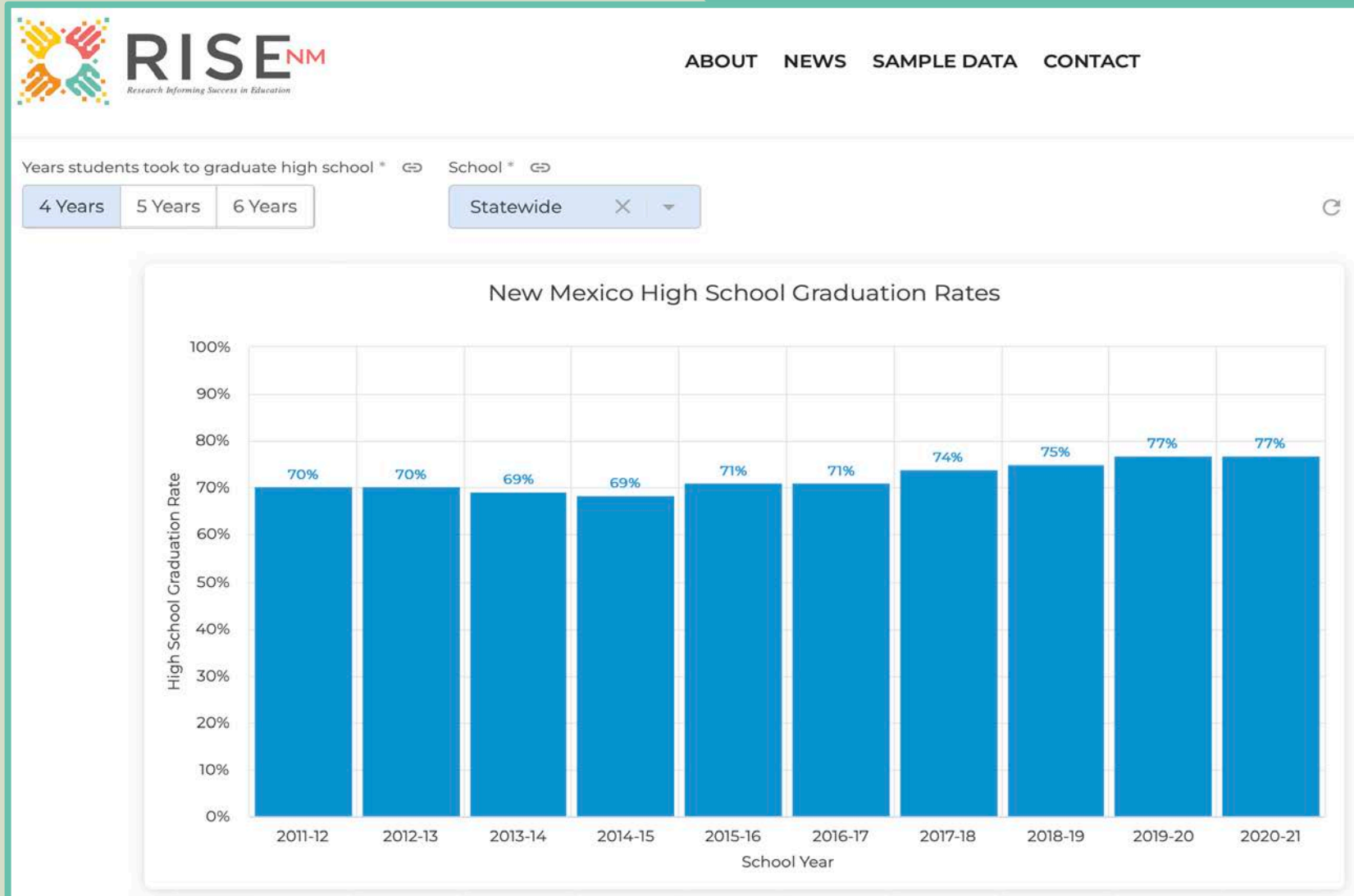


## New Mexico Kindergarten Readiness by Primary Language



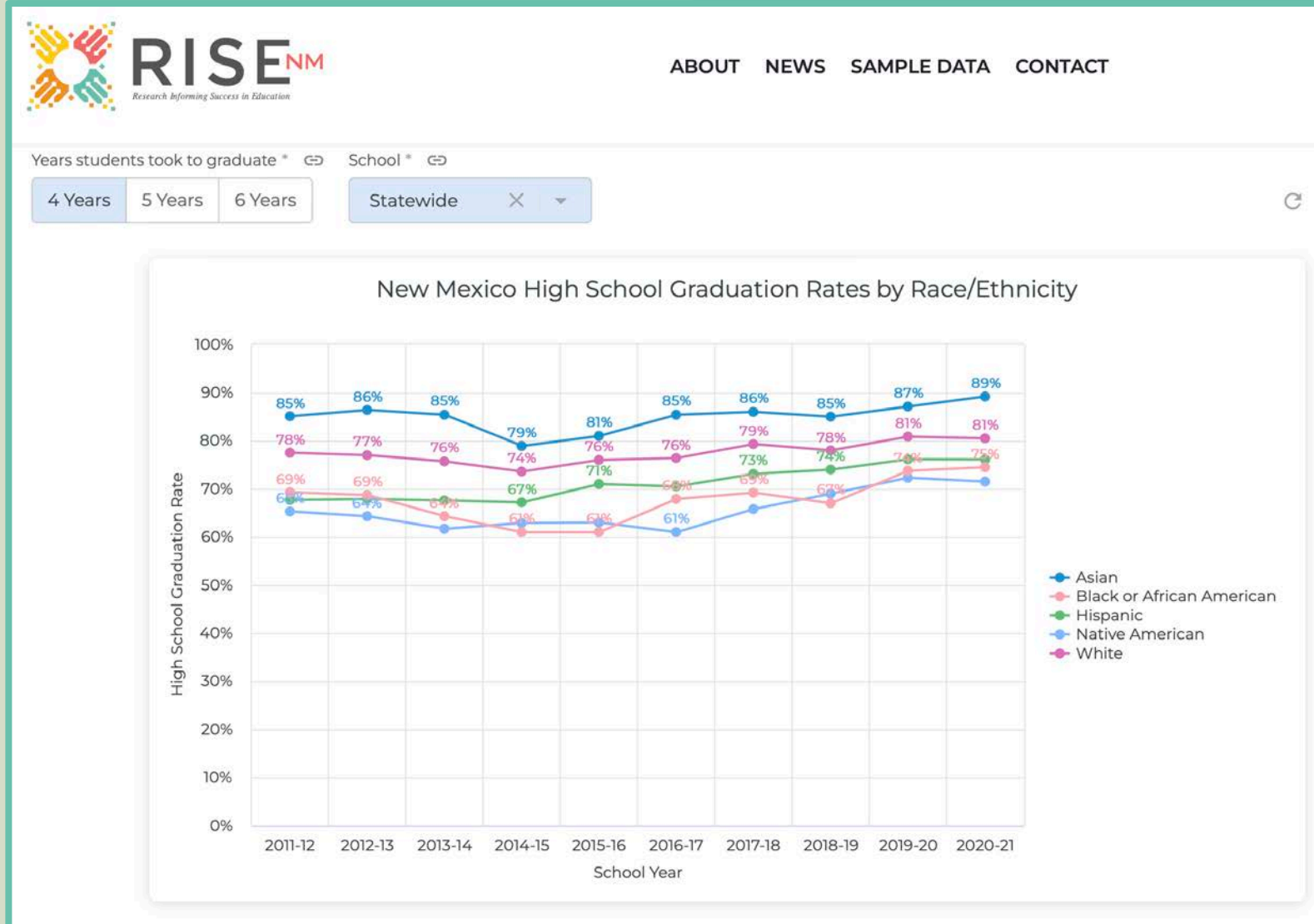


# Visualization Draft Examples



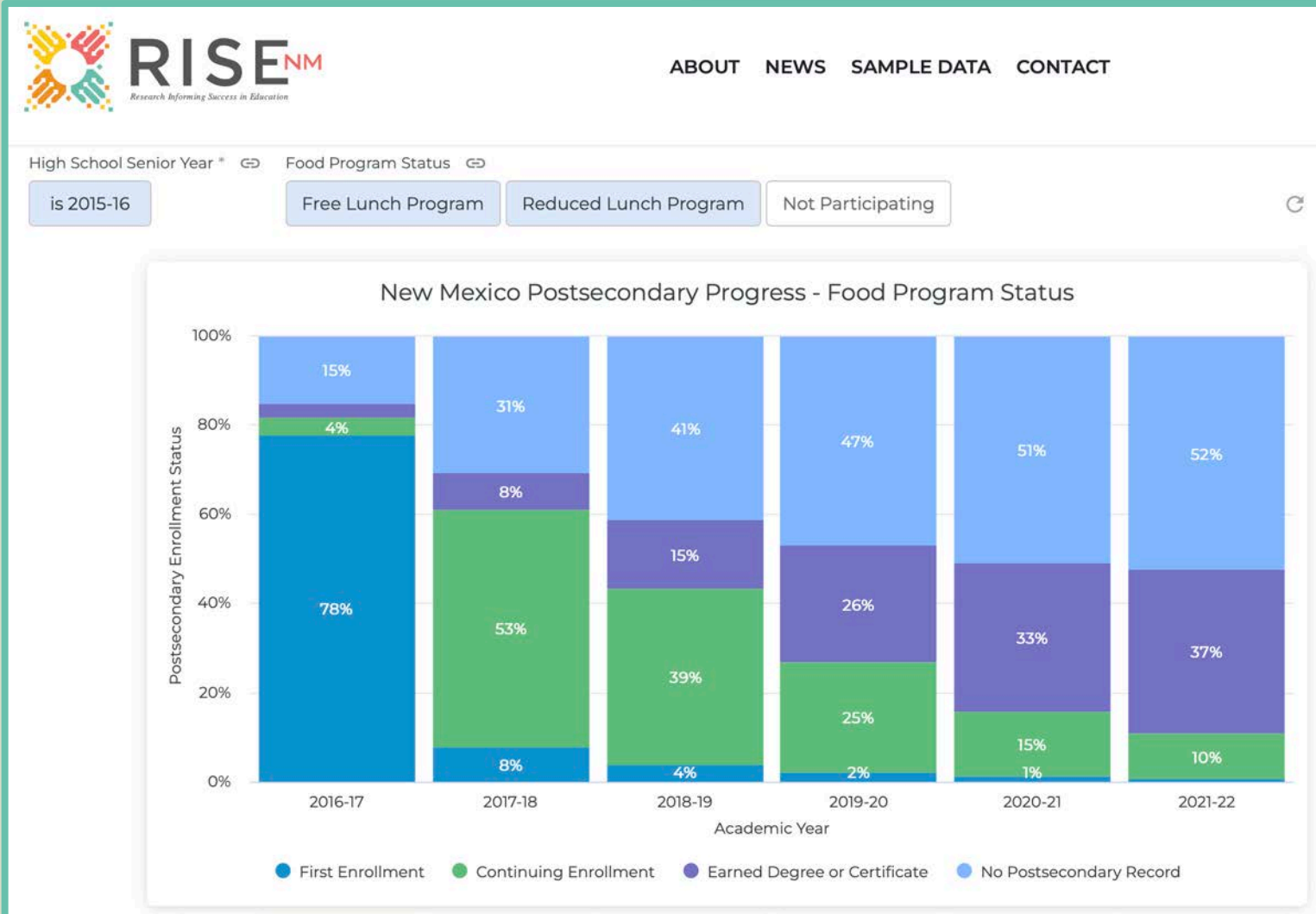


# Visualization Draft Examples






# Visualization Draft Examples





# Visualization Draft Examples



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Postsecondary Graduate Wages

Adult Education Participant Wages

Academic Year Graduated \* Degree Attained Study Program ↻

2015-16 ✕

is any value

is Computer And Information Sciences ...

↻ ☰

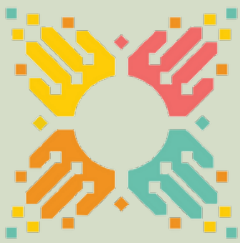
Wage Aggregation Type

Average Yearly Wage
  Median Yearly Wage

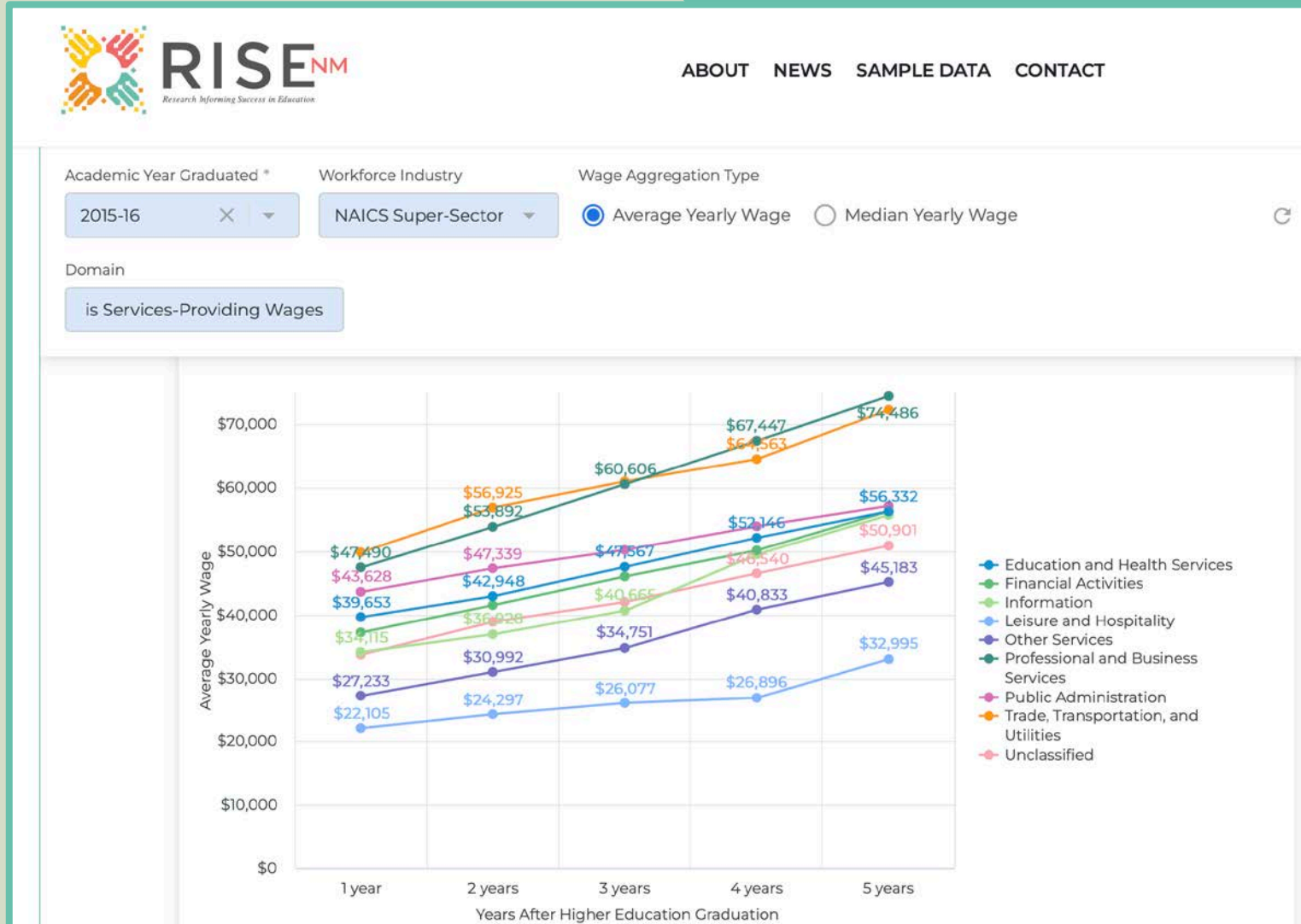
### New Mexico Postsecondary Graduate Wages by Study Program

Years After Higher Education Graduation	1 year	2 years	3 years	4 years	5 years
Study Program	Average Yearly Wage	Average Yearly Wage	Average Yearly Wage	Average Yearly Wage	Average Yearly Wage
Computer And Information Sciences And Support Servi...	\$45,867	\$52,193	\$58,642	\$62,272	\$66,630
Engineering	\$63,324	\$72,858	\$79,376	\$88,639	\$95,277
Engineering/Engineering-Related Technologies/Techni...	\$49,121	\$54,775	\$60,568	\$63,253	\$69,082
Mathematics And Statistics	\$42,906	\$47,619	\$58,939	\$62,390	\$65,675





# Visualization Draft Examples





# Major Milestones

- 5 engaged partner agencies
- Research agenda foundation with 5 visualization dashboards
- First state in the country to build a cloud-native SLDS
- Expanding scope and budget to incorporate second phase of project
- Promotional video in English and Spanish
- Harvard Strategic Data Project fellows completed fellowship work
- Retrospective and planning
- Department of Education SLDS grant



# Data Work is People Work

## Ownership and Decision Making

- Balance technical, people, and leadership roles
- Develop decision-making norms and responsibilities

## Communication

- Set expectations and assess progress
- Create communication and escalation channels

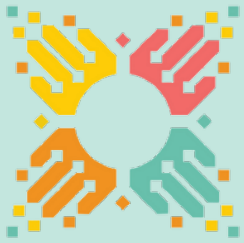
## Planning and Strategy

- Communication and relationship dynamics and opportunities
- Involve executive leadership early and often
- Craft mitigation plans for delays and project obstacles



# Data Governance

- Data Governance Advisory Committee
- Project Steering Committee
- Technical Control Board
- Data Working Group
- Data governance policies and procedures
- Data Request Portal and Disclosure Review Board



# Data Confidentiality and Privacy

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- Master Unique Identifier (MUID) through Tamr to protect Personally Identifiable Information (PII)
- Data warehouse and visualizations without PII
- Trend-based visualizations and reporting
- Range of cloud services to support security, governance, and oversight
- VPN and encryption for data transfers and data storage
- IT best practices for secure and automated processes with minimal human involvement
- Privacy Impact Assessment

# What's to Come for RISE NM in Phase II?

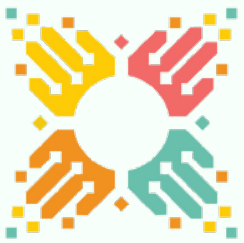
- System enhancements and improvements based on lessons learned and beta testing
- Addition of new data sources
- Increased access for internal and external researchers
- Expansion of and additions to research agenda and visualizations
- Enabling advanced tooling to increase the range of analytics available to state researchers





# Questions?





# Thank You!

NEW MEXICO HIGHER EDUCATION DEPARTMENT

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Website: [rise.nm.gov](http://rise.nm.gov)

