

A photograph of a woman with dark hair, wearing a yellow top, smiling as she looks at a book held by a young girl with curly hair and a white headband. The background is blurred, suggesting a classroom or library setting. The image has a dark blue overlay.

Teacher Workforce Data & Strong Pipelines

Two Key Levers States Can Use to Strengthen the Teacher Workforce



National Council
on Teacher Quality

We work to improve the preparation, support, and recognition America provides to our teachers.

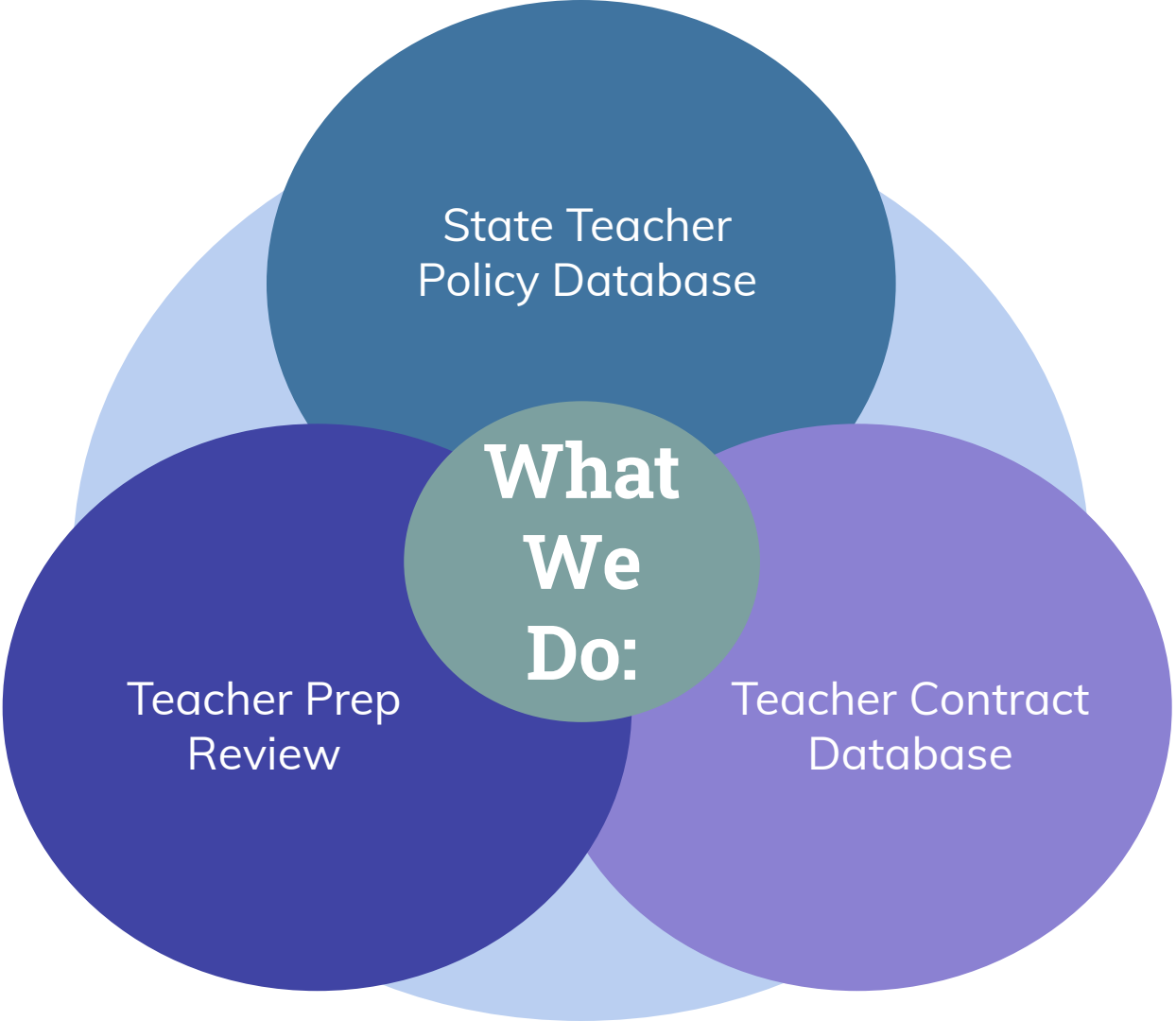
What We Do:

We are:

- Researchers
- Analysts
- Former state leaders & teachers

We Provide:

- Data Tools
- Technical assistance
- Research reports & briefs



AGENDA

→ Teacher Workforce Data

- Why it matters
- State examples

→ Strong Pipelines

- What the research says
- State examples

→ Recommendations for New Mexico

Teachers matter most to student success.

Students with effective teachers are more likely to...



Graduate high school



Go to college



Receive higher incomes



Experience greater well-being

TEACHER WORKFORCE DATA

The poor quality of data on the teacher labor market poses a serious obstacle to strengthening and diversifying the teacher workforce

Why do we need teacher supply and demand data?

What subject areas present the largest number of initial **vacancies**?

Are teachers **teaching out of field** more prevalent in some subjects than others?

Are local educator preparation programs **preparing enough teachers** in specific subject areas **to meet demand**?

Do the most vulnerable students have **equitable access** to the most effective teachers?

How many teachers do we need in the next five years?
Where?

Why are teachers leaving, and **are some types of teachers leaving more than others**?

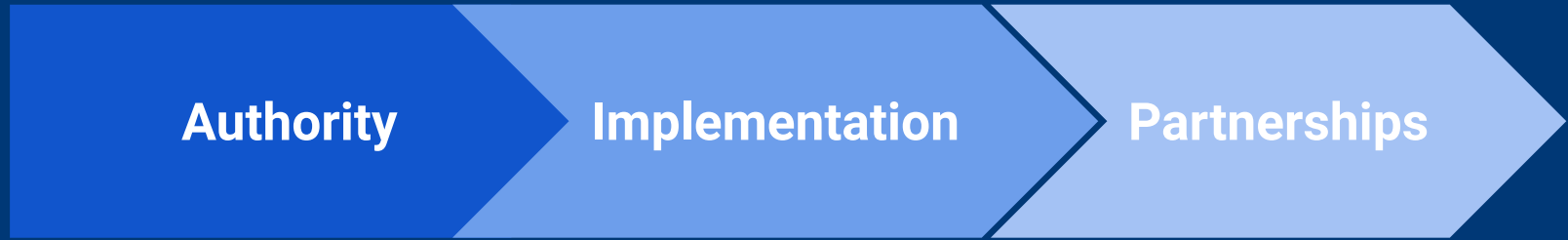
Current New Mexico Data Landscape

Does the state ...

Produce new teacher supply data?	X
Produce new teacher demand data?	X
Disaggregate supply and demand data by district or certification area?	X
Report on teacher shortages?	X
Publish teacher mobility data?	X

How do states take action to improve data systems and reporting?

Colorado: One Approach



Authority through legislation was critically important for the department to provide rich workforce tools

[Colorado House Bill 13-1219](#) required an annual report tracking new teachers (from both traditional and alternative programs) into the workforce and monitoring effectiveness and retention; the same legislation also established unique educator identifiers

[Colorado House Bill 17-1003](#) led to a strategic plan to annually collect educator hiring needs by content area and district/geographical location

[Colorado Senate Bill 10-191](#) established a new state evaluation system for licensed educators and State Board Rule [1 CCR 301-87] provides authority to collect and report aggregate evaluation metrics

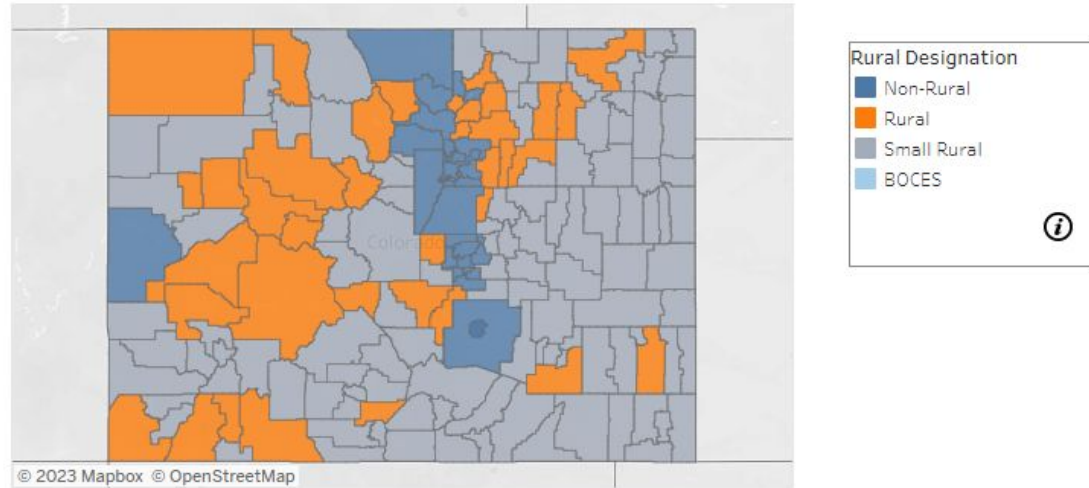
[House Bill 08-1384](#) authorized the statewide educator survey to support improvement planning, i.e., the Teaching and Learning Conditions Colorado survey

Use various mechanisms to collect the educator supply and demand data needed

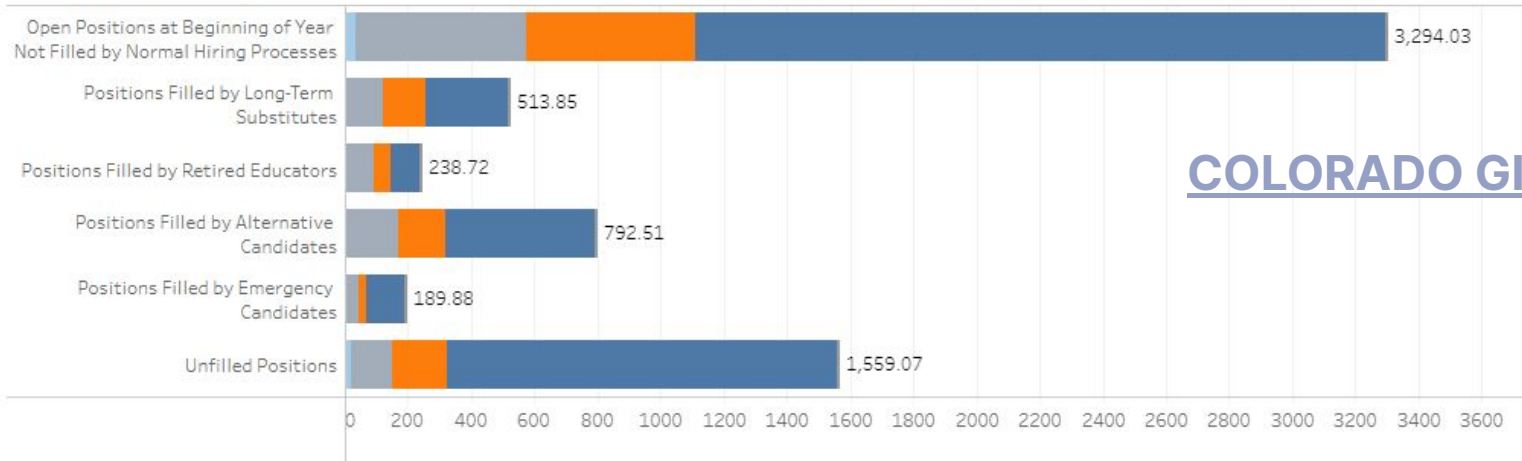
Important data the department needed to collect to included:

- School district hiring needs by content area and geographical location
- EPP graduates by content area
- Educator mobility, attrition and retention
- Educator performance
- School climate and culture survey data
- Additional local economic data available from the American Community Survey

District Level Shortage Data | 2022-2023 | All



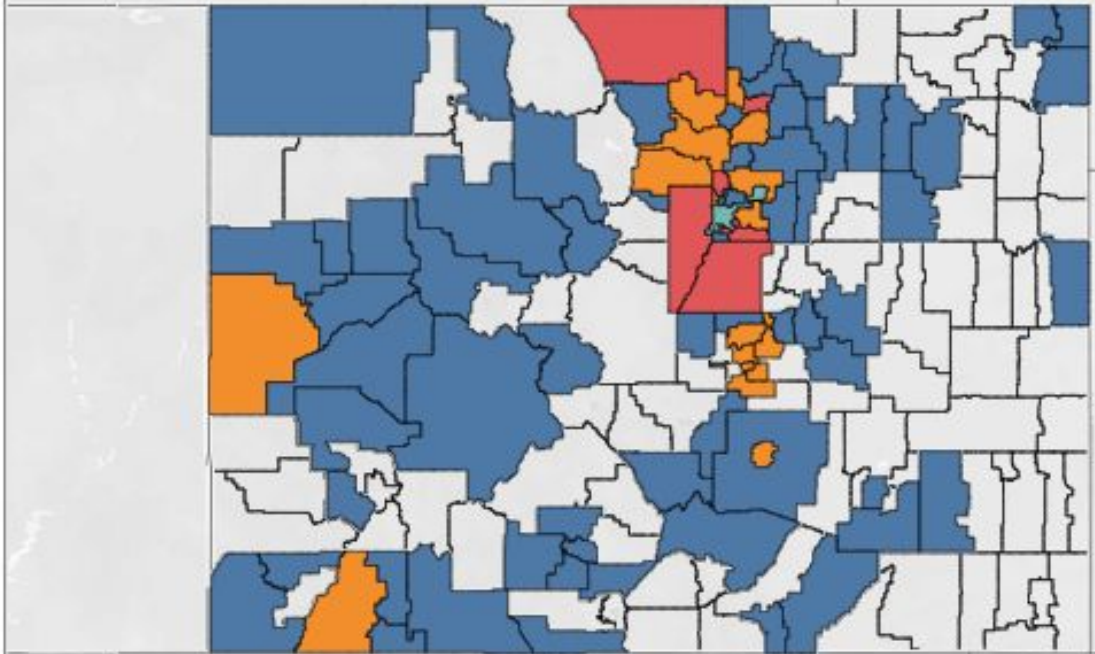
State Level Shortage Data | 2022-2023 | All



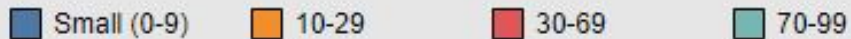
COLORADO GIS MAPS

CO EPP
REPORT
DASHBOARD

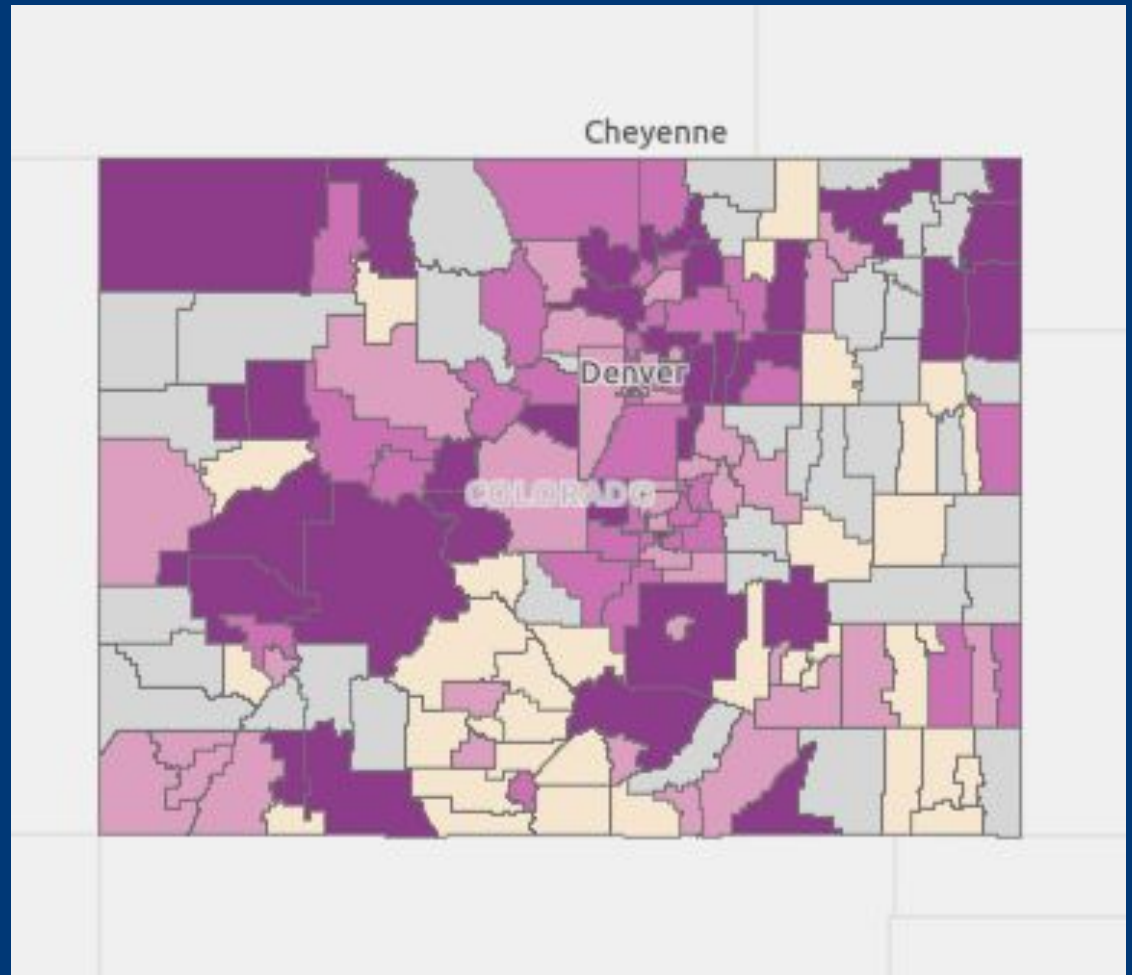
 New Teacher Employment by District



Number of Teachers



CO
WORKFORCE
PIPELINE
DASHBOARD



New Jersey Example

[NJ Bill S2835](#) - Sponsored by Senator Ruiz - Teacher workforce report

Requires compilation of data and issuance of annual reports on New Jersey teacher workforce.

Four Key Elements

- Districts report on vacancies/demand by October 15th each year.
- Districts report on teacher retention by September 1st each year (*how many left the district, why, and who*).
- Commissioner annually compiles a report on statewide, county, and district **trends in teacher retention**, with recommendations to the governor and legislature to consider.
- Requires **by March 1 of each year, a report on teacher workforce projections for the subsequent three to five years.**
 - (1) the teaching positions, by certification area, in high demand in the State and existing vacancies;
 - (2) the number of bilingual teachers needed to provide adequate limited English proficiency programming to students in the State;
 - (3) the number of computer science teachers needed to provide access to computer science coursework to all students in the State;
 - (4) the classes and programs that may be eliminated within the next three years;
 - (5) the areas in which teachers and school leaders should be prepared so that they can ensure students are ready for the future economy.

Delaware

- Created portal for educator preparation programs
- Reports on where graduates were teaching, retention, and performance

Indiana

- Statewide Recruitment Portal
- Building backend reporting for the state

Recommendations

- Evaluate what teacher workforce data is currently collected
- Enact legislation to require the collection of identified data points
 - [NCTQ Recommendations](#)
- Consider requiring a report to the LESC annually or biannually
- Dedicate resources to improving the data systems

Strong Pipelines

Teacher Pipelines

What does the research say?

- RAND study found teachers in Grow Your Own programs were as effective as other traditionally trained teachers, sometimes more, and found programs were most successful when they -
 - **Lowered costs for teacher trainees**
 - **Recruited from the community**
- Grow Your Own Programs may include:
 - Residencies, Apprenticeships, 2+2 programs
- Some evidence suggests that **residency** programs may attract high percentages of teachers of color: One data point from 2016 found that 45% of all residency program participants nationwide were people of color.²⁶

Grow your own & reduce your cost

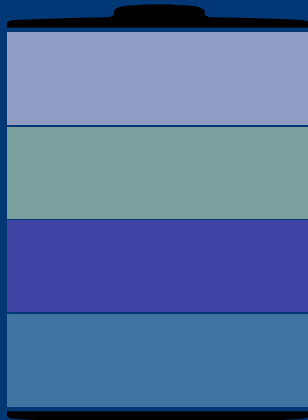
National Center for Grow Your Own Center

- Houston Independent School District distributed an [award of \\$1 million](#) via their Grow Your Own grant program to multiple educator preparation providers to have over **130 aspiring teachers** be able to become a teacher for free and get paid to do so.
- The total cost that HISD is covering with this grant, gets the cost of all tuition, books, and fees down to **only \$7,190** per candidate.

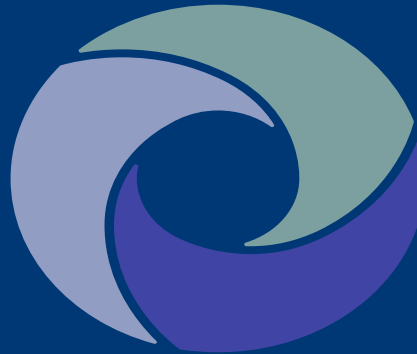
How can states ensure quality and drive continuous improvement in teacher pipelines?

Data and Multiple Measures are the Foundation

DATA
SOURCES



PROCESS



TIMELINE &
TRANSPARENCY



FLORIDA

- Collects and publishes data annually
- Combines output & outcome data with site visit analysis for program approval
- Requires plan on three specific improvement goals

RHODE ISLAND

- Collects and publishes data annually
- Incorporates data into site visit rubric
- Differentiated timeline for next visit based on performance (2-7 years)
- Allows approval with conditions
- Reports are public

Overall Recommendations: Teacher Pipelines

- Collect data annually to inform program improvement, and understand the labor market, etc.
- Use a mix of data and site visit results for official review
- Differentiate timeline for reviews based on program performance
- Dedicate resources for quality site visits
- Focus on state priorities in rubric (Reading, MLL)
- Incorporate conditional approval/program improvement progress monitoring

Overall Recommendations: Teacher Pipelines

- Build multiple pathways to entry into the profession
- Lower cost of becoming a teacher
- Support programs with strong clinical practice partnerships (Residencies, apprenticeships, etc.)
- Collect data and evaluate outcomes of these investments
 - Residencies
 - Loan Forgiveness