

School Success = Workforce Success

Recommendations from the PED Employer Advisory Group

Prepared for the
Legislative Education Study Committee

Senator Bill Soules, *Chair*
Representative Andrés Romero, *Vice-Chair*

November 14, 2022



“74% of business leaders say a skilled workforce is the most important factor to business success.”

-Zogby International



PED Hosted an Education/Workforce Convening in Dec 2021

Topics:

- Challenges
- Opportunities
- Partnership
Recommendations

Sponsored by:



Key Points

- **Increase school attendance** – deepening student engagement in the world of work and making it easier for educators to partner with employers
- **Further assist students with IEPs (Individual Education Plans)** – work experiences and transitions
- **Better coordinate with Workforce Solutions and update our policies & practices** – foster student participation and employer partnerships
- **Graduate students ready for college, career, and civic life** – a top priority for PED and for our entire state



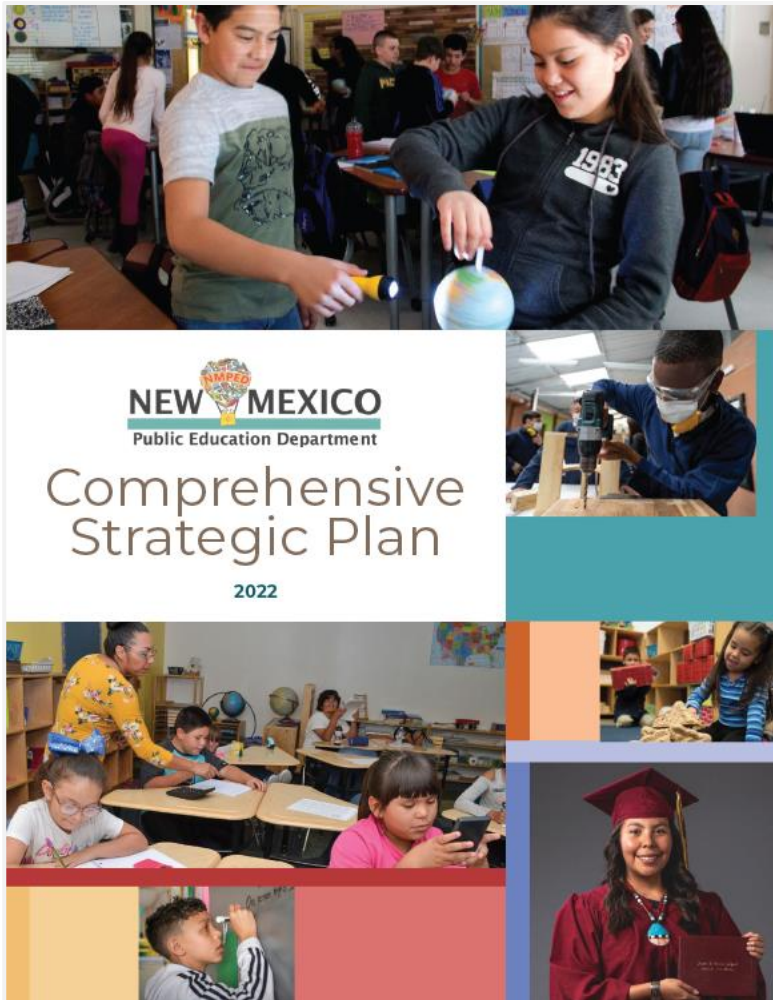
Future Workforce

The competitiveness of small, medium and large companies depends on having a pipeline of talented, educated employees with the skills needed in today's economy:

- Problem-solving
- Communication
- Decision-making
- Critical thinking
- Collaboration



Strategic Plan Priorities



I

Educator
Ecosystem



Workforce

II

Whole Child and
Culturally/Linguistically
Responsive Education

III

Profiles and
Pathways



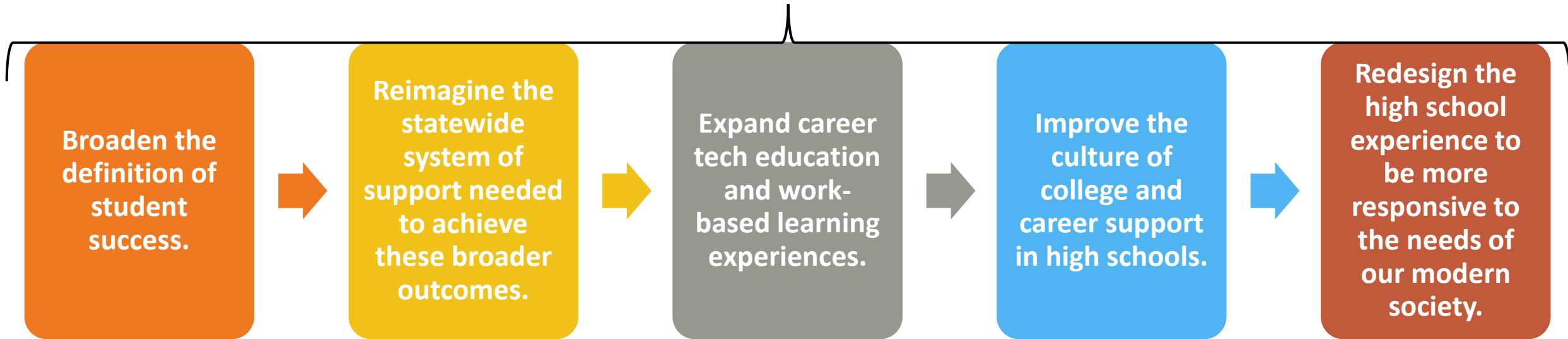
High School
Transformation

IV

Asset-Based Supports
and Opportunities

How We Are Approaching High School Transformation

PED is partnering with the business community to support our education/workforce priorities.



PED Reengaged The Hunt Institute to Facilitate an Employer Advisory Group

- Five Meetings in 2022
- Meeting Goals:
 - Elevate employer voice to improve alignment and foster partnerships between education and industry
 - Address challenges that New Mexico employers face with labor recruitment and engagement with education systems
 - Ensure that all students in New Mexico graduate high school with the skills and competencies for college and career success

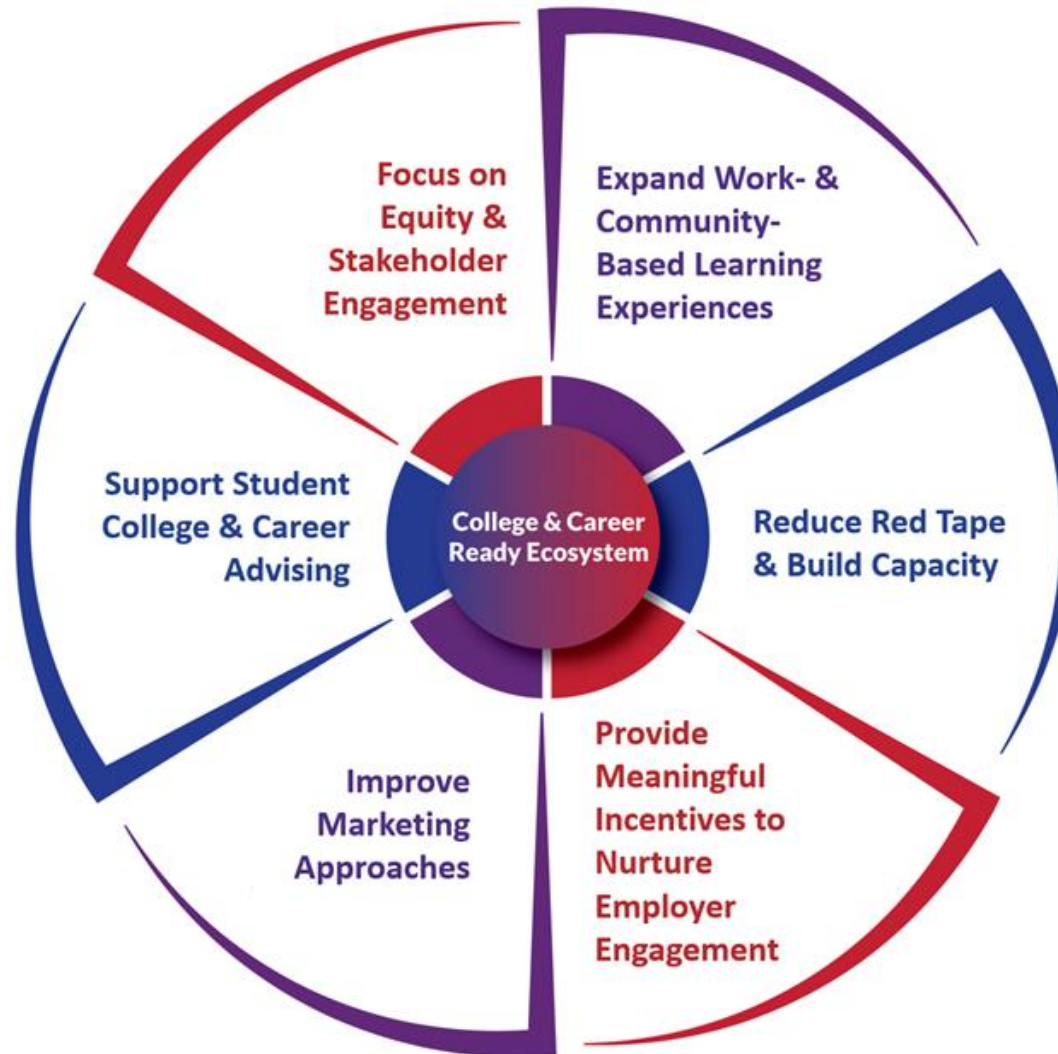
Partnerships Recommendations

- Build an infrastructure that can outlast the tenure of any individual
- Create a unified vision with accountability for action
- Identify and eliminate barriers to engagement

“Maybe there’s something we can create where it doesn’t matter who the next Secretary or Governor is; the only thing that matters is whether these things are working for our community. If we can come to that type of agreement, I’m down.”

– Participant in the PED Education/Workforce Convening

Six Strategies Were Identified



Immediate Priorities

Strategy	Top Priority
Support College and Career Advising	Increase funding to hire additional counselors to support individual college and career advising and coaching.
Focus on Equity and Stakeholder Engagement	Provide additional financial incentives for partnerships that support historically underserved students and promote diversity among participants.
Expand Work- and Community-Based Learning Experiences	Implement a work-based learning requirement for high school graduation that promotes career readiness.
Reduce Red Tape and Build Capacity	Invest in work-based learning coordinators to develop and maintain partnerships.
Provide Meaningful Incentives to Nurture Employer Engagement	Invest in paid internship opportunities for students.
Improve Marketing Approaches	Organize a statewide campaign to connect students to careers and employers to schools.

Employer Perspective

Lutz Arnhold

Managing Director, Rosewood Inn of the Anasazi





Rob Black, President & CEO
New Mexico Chamber of Commerce



Driving New Mexico's Future

Empowering a Competitive Economy in
a Post-Pandemic World

2020



The post-pandemic economy will bring new opportunities for New Mexico to improve its overall competitiveness and grow the state's economy.



Identified Economic Competitiveness Factors:

1. Business Climate: business friendliness, regulation, taxation, and public safety;

2. Workforce and Education: early childhood, K through 12, career technical education, and post-secondary education and re-training

3. Infrastructure: road, rail, air, water, broadband, housing, energy; and,

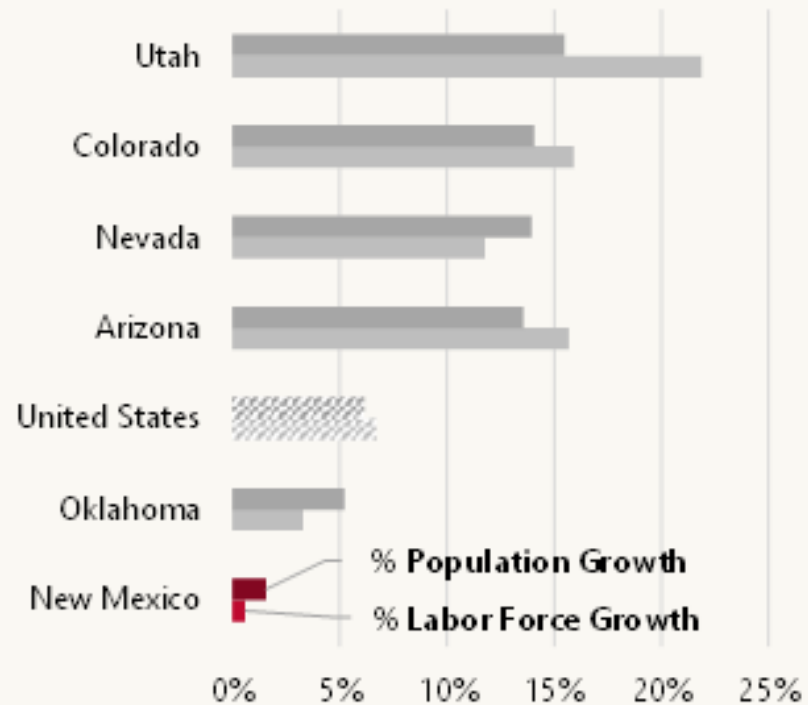
4. Innovation Capacity: entrepreneurship, innovation hubs, research and availability of capital.

State's Six Key Challenge Areas

1. Lack of collaboration between economic development stakeholders
2. Difficulty attracting and retaining talent in urban, rural and tribal areas
3. Misalignment between higher education and industry
4. Disengagement of socioeconomically disadvantaged communities in planning processes
5. Public-sector dominance in New Mexico's innovation ecosystem
6. Concentration of economy in a few key industries

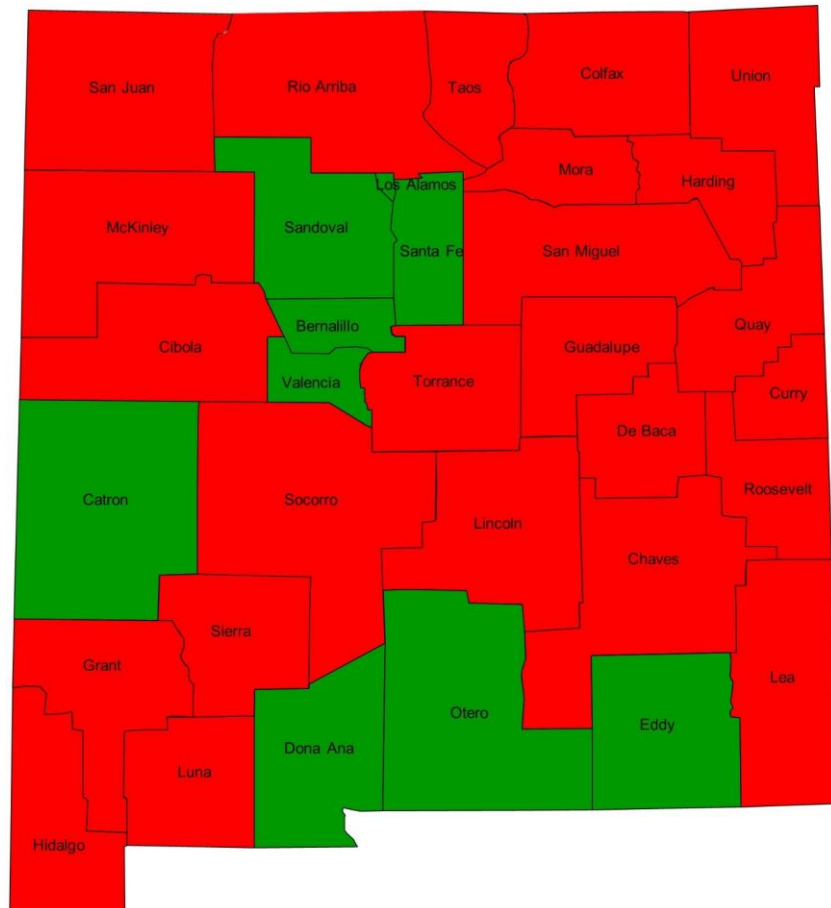
Population and Workforce

Figure ES-1: Population & Labor Force Growth, 2010–2019.



Population and Workforce

5 Year Population Growth 2014-2019



Projected Population Working Age Change 2020-2030

	<u>Total</u>	<u>Percentage</u>
New Mexico	- 33,423	-3.2%
Texas	+517,908	+3.4%
Oklahoma	- 46,500	-2.3%
Colorado	+ 81,593	+2.6%
Utah	+101,999	+6.5%
Arizona	+133,760	+3.6%

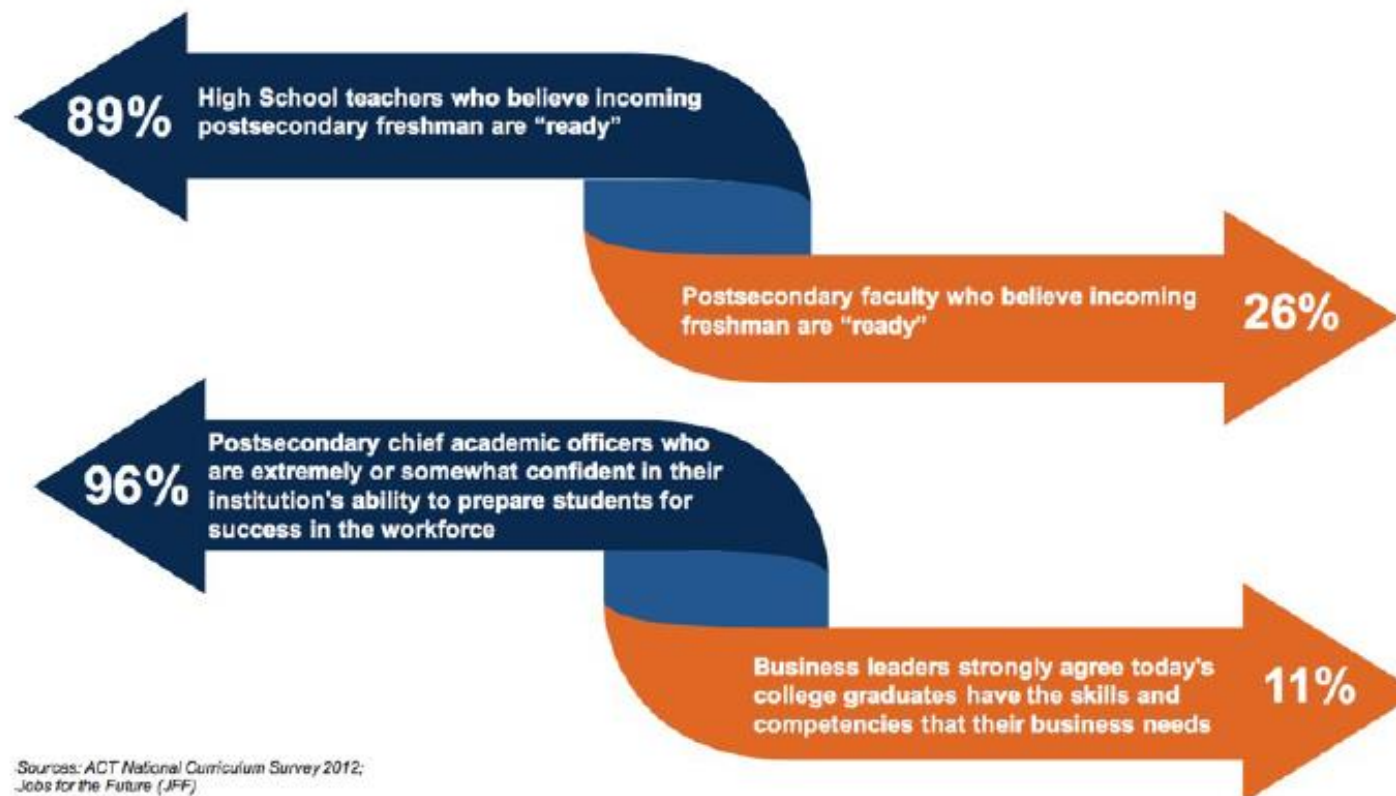


population growing



population declining

Mismatch in “Readiness”



Sources: ACT National Curriculum Survey 2012;
Jobs for the Future (JFF)

How can **relevance** be **increased** while supporting the pathway to postsecondary success for all students, particularly those traditionally underserved?



HIGH SCHOOL DISENGAGEMENT

The 2012 Gallup Student Poll asked students how involved and enthusiastic they feel about school. Nearly eight in 10 elementary students reported high engagement. **By high school, only half that many did.**

ELEMENTARY SCHOOL

76%

MIDDLE SCHOOL

61%

HIGH SCHOOL

44%

Understanding Motivation

Table 4
Strategy effect sizes from meta-regression model.

Strategy	Effect size	<i>p</i>
Career Development/Job Training	0.81	0.56
Family Engagement	0.67	0.00
Mentoring	0.63	0.91
Behavioral Intervention	0.46	0.01
Literacy Development	0.42	0.00
Work-Based Learning	0.26	0.01
School/Classroom Environment	0.25	0.00
Service-Learning	0.21	0.00
Health and Wellness	0.18	0.00
Academic Support	0.11	0.00



<http://www.dropoutprevention.org/meta-analysis-dropout-prevention-outcome-strategies/>



What is the HS graduation rate for CTE Students Nationwide?

- a) 81%
- b) 73%
- c) 60%
- d) 93%**



What percent of students that take 2 CTE Credits enroll in Post Secondary?

- a) 58%
- b) 91%
- c) 75%**



What is the college completion rate for CTE Concentrators?

- a) 80%**
- b) 56%

Pathway2Careers Lessons Include:

- ✓ Job Duties and Responsibilities
- ✓ Education Requirements
- ✓ Types of Employers
- ✓ Career Cluster and Pathway
- ✓ Labor Market Data (wage and demand projections)
- ✓ Occupation-Related Math Concepts
- ✓ Common Work Tasks



LESSON 10

Volume of Cylinders, Cones, and Spheres



CAREER SPOTLIGHT: Agricultural Engineer

Occupation Description

Agricultural engineers work on the storage and processing of agricultural products. They use computer programs to solve problems and design various systems, structures, and facilities. Their work can involve pollution and environmental issues. They work in various fields of farming, such as aquaculture, forestry, and food processing.

This career is relevant to New Mexico as agricultural engineers are employed in the industry sector of sustainable agriculture and value-added agriculture.

Agricultural engineers who solve design problems involving structure will need to understand and apply concepts involving volume.

Education

Agricultural engineers need a bachelor's degree, often in agricultural engineering or biological engineering. Students study advanced calculus, physics, biology, and chemistry.

Potential Employers

Agricultural engineers held about 2,600 jobs in 2018. The largest employers of agricultural engineers were as follows:

Crop production	31%
Federal government, excluding postal service	13%
Colleges, universities, and professional schools; state	10%
Management, scientific, and technical consulting services	8%
Engineering services	4%

Watch a Video about Agricultural Engineers:

<https://www.bls.gov/bos/architecture-and-engineering/agricultural-engineers.htm>



NS4ed™ Pathway2Careers™ 2018 Trademark NS4ed, LLC

Career Cluster

Agriculture, Engineering, Food and Natural Resources

Career Pathway

Power, Structure and Technical Systems

Career Outlook

Salary Projections:

- Low-End Salary, \$46,500
- Median Salary, \$77,110
- High-End Salary, \$116,850
- Jobs in 2018: 2,600
- Job Projections for 2028: 2,800 (Increase of 8%)

Geometry Concepts

- Apply volume of solids.
- Apply concepts of density.
- Apply geometric methods to solve design problems.

Is this a good career for me?

Agricultural engineers tend to:

- Use computers to design equipment, systems, or structures
- Modify factors that affect production
- Test equipment
- Oversee construction and production operations

Moving Forward: Be Pro Be

Proud *“To build a diverse and robust economy that engages local talent, cultivates innovation, and delivers prosperity for all New Mexicans”*





STEP INTO
OUR DYNAMIC
TECHNICAL CAREER
INITIATIVE


BUILDING TOMORROW'S WORKFORCE

BEGIN
HERE...

BE PRO BE PROUD®

PROFES-
SIONS

Right now, there's enormous demand for technical professionals all across the country. As this skills gap grows, the number of unfilled roles is expected to reach two million by 2025.*





80%

of Arkansas teachers tell us that
one or more of their students are
going to stay in school because of
their Be Pro Be Proud experience.



*I believe our graduation rate
has increased because we have
given young people options,
hope & an education path that
will lead to a good paying job.*

ARKANSAS GOVERNOR ASA HUTCHINSON







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Questions

