



30+ years building our nation's skilled technical workforce

U.S. National Science Foundation



Why ATE: Skilled Technicians Power the Economy

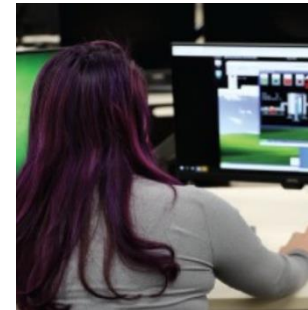
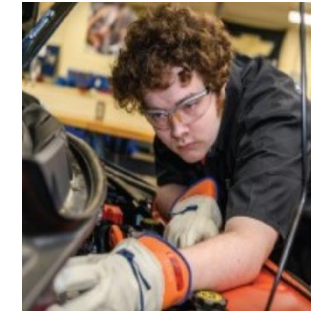
“

The education of highly qualified science and engineering technicians for the advanced-technology fields that drive the nation's economy.

~18M

Over half of the U.S. STEM workforce
are skilled technicians with sub-baccalaureate credentials

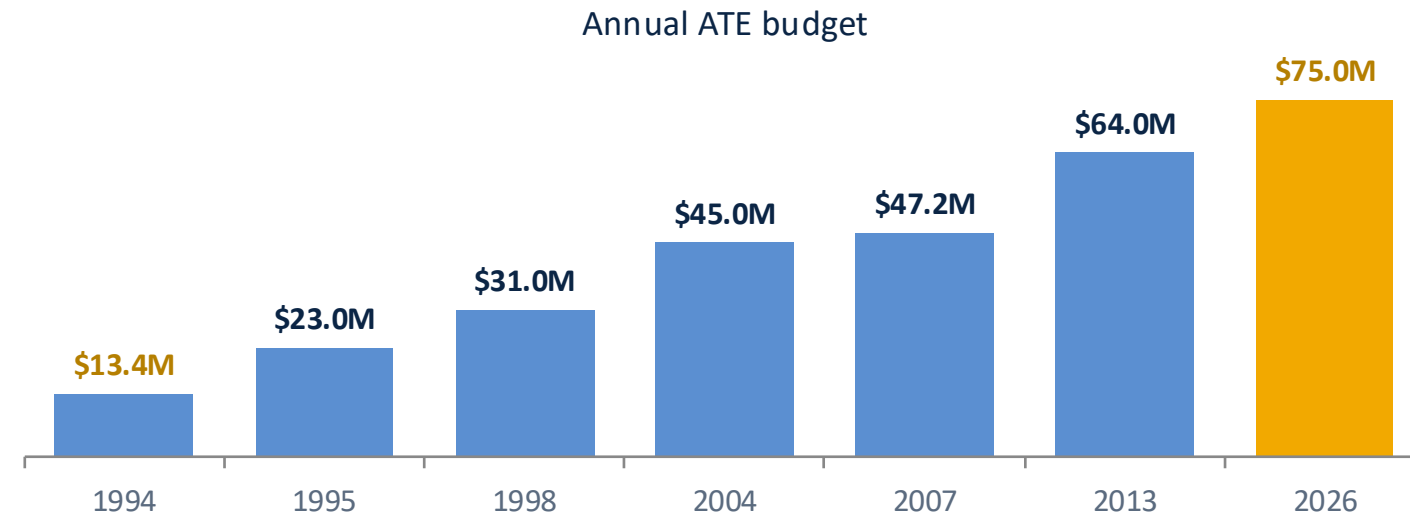
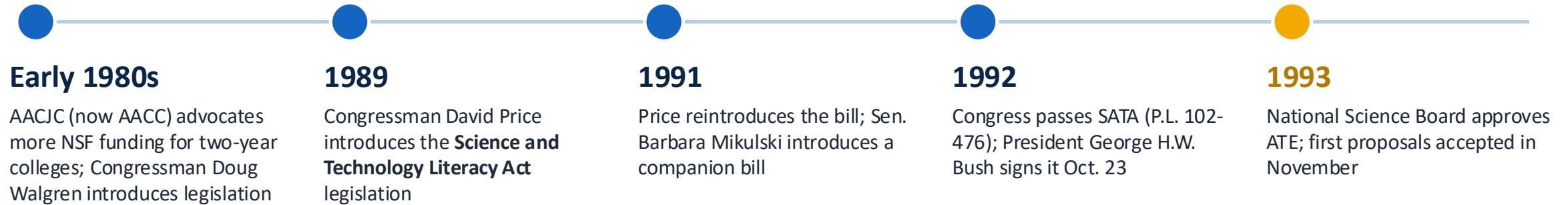
Our skilled technical workforce is **essential to our nation's tech innovation leadership**



Read the solicitation
NSF 24-584 · scan for details



From Legislation to a National Program



\$13.4M → \$75M

NSF recognized technician education as a national capacity issue

NSF ATE by the Numbers



32+

years of sustained
federal funding



\$1.7B+

cumulative NSF
investment since
1993



1,000+

community &
technical colleges
reached (direct &
indirect)



50

states with NSF ATE
funding

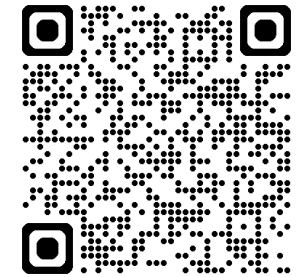


30–60K

students reached
each year by ATE
educational
experiences

A national innovation infrastructure for technician education

ATE Investments Reach Every Corner of the Nation



Explore the map

Find ATE projects and
centers near your
college

Built for the Nation's Community & Technical Colleges

1,024 colleges (2025)

924

Public

36

Tribal

64

Independent

10.5M students

6.4M credit · 4.1M noncredit (Fall 2023)

Median student age: 23

Sources: AACC Fast Facts 2025 (sector count). AIHEC lists 37 TCUs; all award associate degrees.

ATE invests in the 4 Ps





From a First Grant to a National Center

★ Entry point for colleges new to ATE

Small Projects

\$475K

up to 3 years

Planning and capacity building
at one college

Projects

\$1M

up to 3 years

Single-college strategy; includes
applied research

Regional Consortia

\$1.2M–\$3M

3–4 years

Must be led by a two-year
college, with 1–2 two-year
partners

National Centers

\$7.5M

5 years (renewable)

National strategy reaching
hundreds of colleges

 **Industry partnership & engagement is required** in every
ATE proposal

 **Applied research on technician education** is also
supported

Two-Year Colleges Hold Leading Roles in Every Project

TRIBAL COLLEGES & UNIVERSITIES

37 of 37

TCUs award associate degrees

22 also award bachelor's degrees

~15 award associate degrees only

Every TCU can bring the two-year leadership ATE requires.

Source: AIHEC, aihec.org/tcu-locations



Your college leads

Small Projects • Projects • Centers

Your TCU is the lead organization and your faculty serve as PI.



A four-year partner leads

Projects • Centers

The four-year partner can be the fiscal lead, but two-year college faculty must be Co-PIs.



A regional consortium

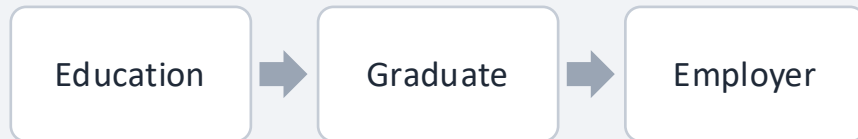
Regional Consortia

Must be led by a two-year college, with one or two other two-year colleges as subawardees.

The rule: two-year colleges and their faculty must have significant leadership roles on every ATE project.

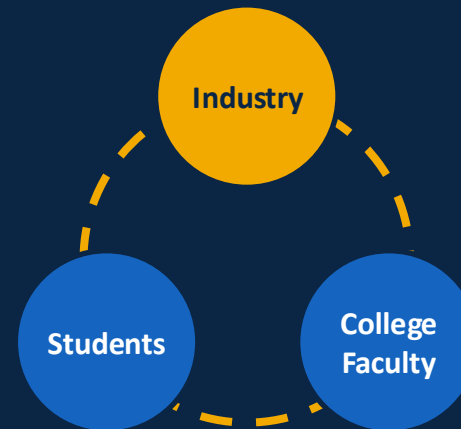
Industry Is an Essential Partner in Every ATE Project

THE OLD WAY · LINEAR



Employers validate a finished curriculum after the fact.

NSF ATE'S MODEL · CONTINUOUS FEEDBACK



Industry co-leads from day one

Employers help define the skills, shape curriculum, and validate student competencies in an ongoing loop.

Learn the BILT model:



The BILT Academy



Current ATE National Centers



Micro/Nano Technology



Biotechnology



Information Technology



Cybersecurity



Advanced Manufacturing



Autonomous Technologies



Applied AI



Energy Infrastructure Tech



Environmental Technology

Each center reaches

100–400

community colleges at
the program level

ATE Resource & Support Centers, Hubs, and Projects



AACC

National community college partner



ATE Central

Hub for ATE projects, centers & resources



EvaluATE

Evaluation resource hub



Mentor-Connect

Mentoring for colleges new to ATE



CCPI-STEM

Community College Presidents Initiative



Project Vision

Community college capacity building



Pathways to Innovation

BILT Academy: industry partnership model

New to ATE?

Mentor-Connect and Project Vision help colleges build capacity and prepare competitive proposals.

From Projects to a National Innovation Infrastructure

1



Local Innovation

Faculty-led projects, new programs, curriculum, and employer partnerships at individual colleges

2



Regional Ecosystems

Multiple colleges, industry clusters, and career pathways working together across a region

3



National Coordination

ATE Centers provide system-level leadership, national coordination, faculty capacity building, dissemination, and evaluation

4



Ecosystem Infrastructure

ATE Central, EvaluATE, Mentor-Connect, AACC, BILT, and other national resources



Getting Started with ATE: Five Steps



1

Talk with a program director

Share your idea early:
ate-prog@nsf.gov



2

Connect with a mentor

Mentor-Connect supports colleges new to ATE (mentor-connect.org)



3

Start right-sized

Small Projects: up to \$475K over 3 years



4

Partner up

Engage local employers (required) and an ATE Center in your field



5

Mark the deadline

First Thursday in October, every year (NSF 24-584)

ATE welcomes proposals from all eligible two-year colleges, including Tribal Colleges. Every TCU awards associate degrees, so every TCU can bring the two-year leadership every ATE project needs.

Join the ATE Community



WELCOME

The 2026 ATE Conference will be held October 21–23 at the Omni Shoreham Hotel in Washington, D.C., hosted by the American Association of Community Colleges in partnership with the National Science Foundation (NSF). The event convenes more than 800 NSF Advanced Technological Education (ATE) grantees and partners from across the country in fields such as information technology, engineering technologies, biotechnology, artificial intelligence, advanced manufacturing technologies, and other high-demand workforce areas.

ATE Principal Investigators Conference

Oct. 21–23, 2026

Washington, DC



Scan



HI-TEC 2027

July 19–22, 2027

Denver, CO



Scan



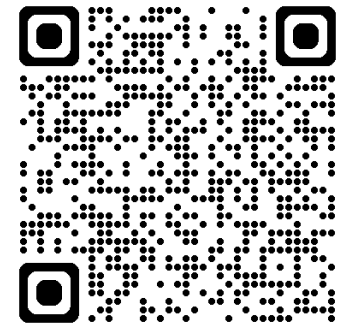
Thank you!

Questions?

Lulu Sun, Ph.D.

Program Director, NSF ATE · lsun@nsf.gov

NSF ATE Program · ate-prog@nsf.gov



ATE solicitation