

24th Biennial
Joint AMS/AGU
Heads and Chairs Meeting

Earth and Atmospheric Sciences in Higher Education

Positioning our disciplines for success in an era of challenges, OR how to work with your University Administrators

Lourdes B. Avilés, Ph.D.

Associate Provost
Plymouth State University





- Vice Chair UCAR BOT
- Vice Chair Mount Washington Observatory


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150
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TODAY

Brief Highlights

- State of Higher Education
- Challenges and Opportunities for EAS
- Productively Advocating to your Administrators



The State of Higher Education

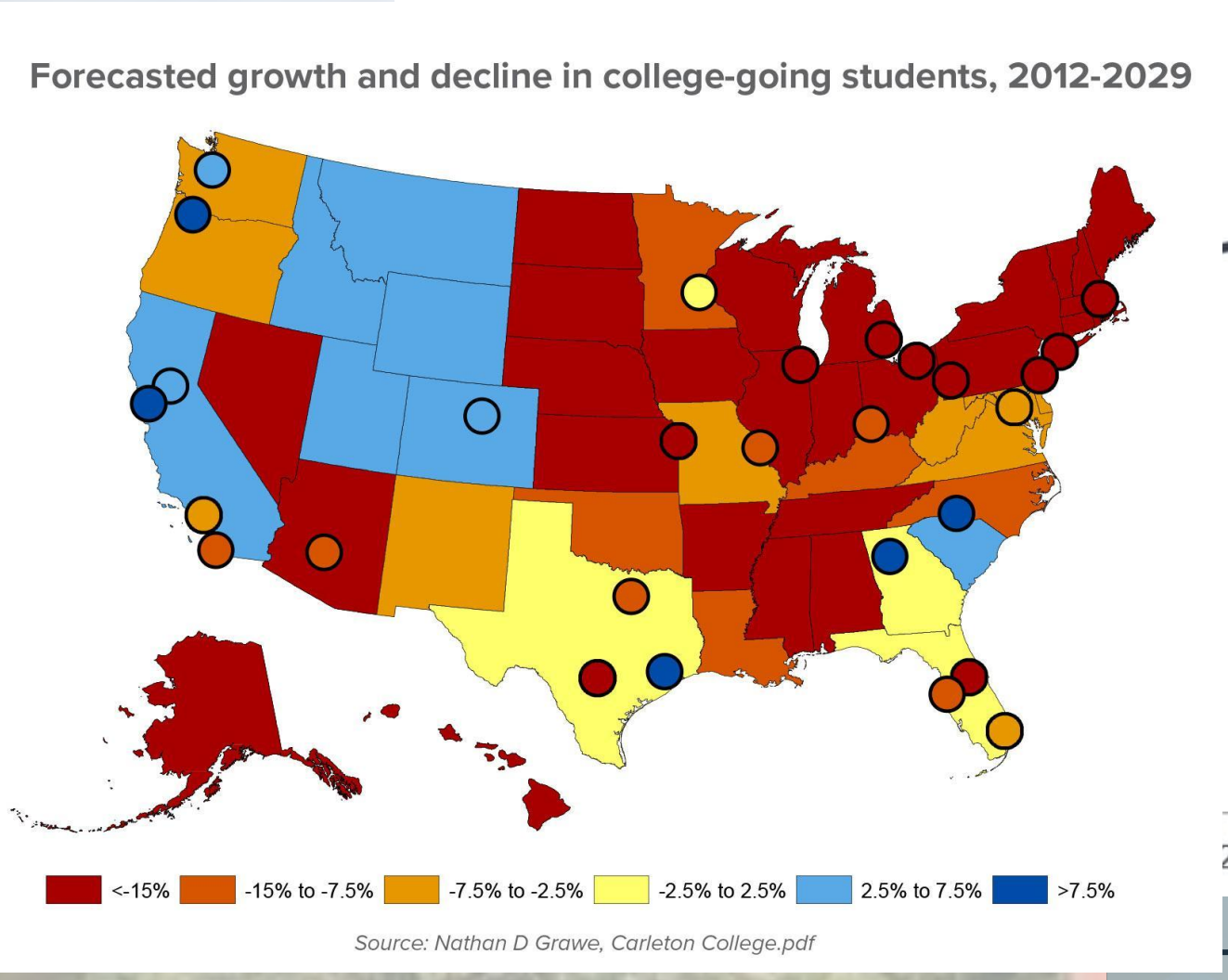
Challenges currently experienced by Universities

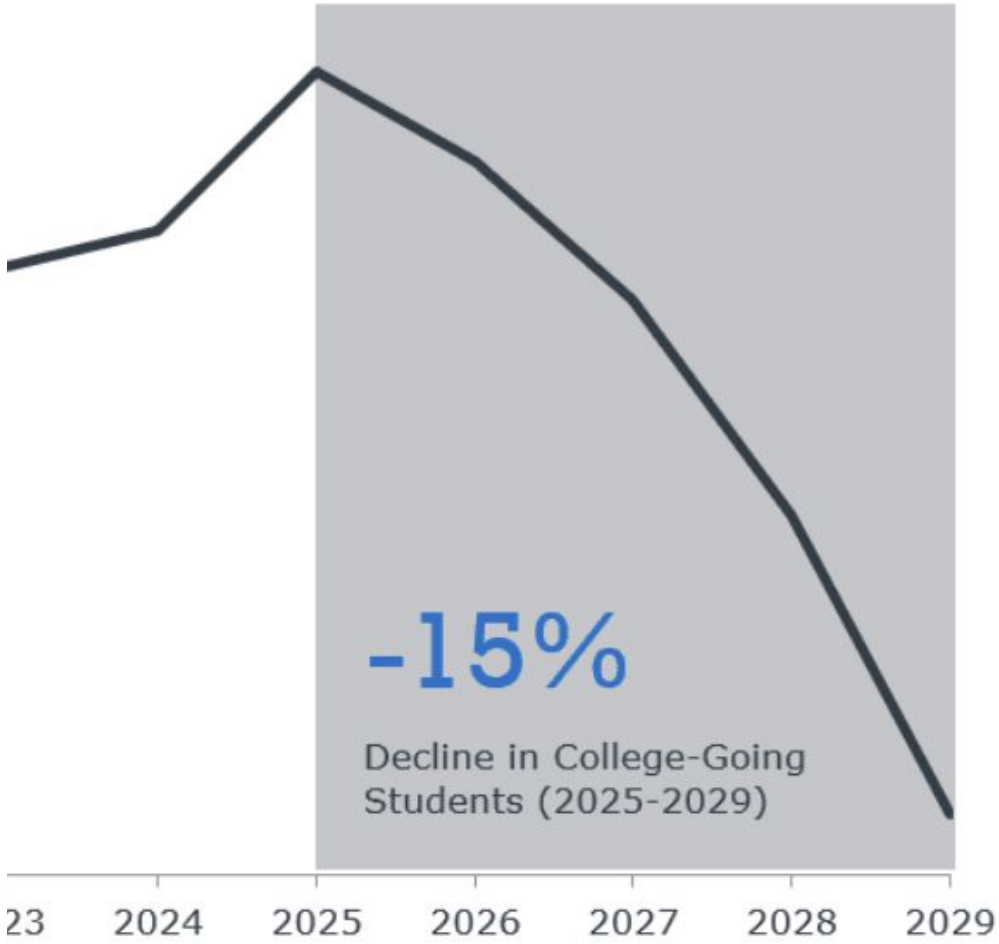


1. Financial Constraints
   - Decreased funding
   - Increased costs
   - Less college-age students
   - Less students choosing college
   - Increased competition

Enrollment Projected to Drop Sharply After 2025

Forecasted Number of College-Going Students in the U.S. (millions), by Year of High School Graduation





https://eab.com/resources/blog/enrollment-blog/what-the-looming-demographic-storm-means-for-your-state/

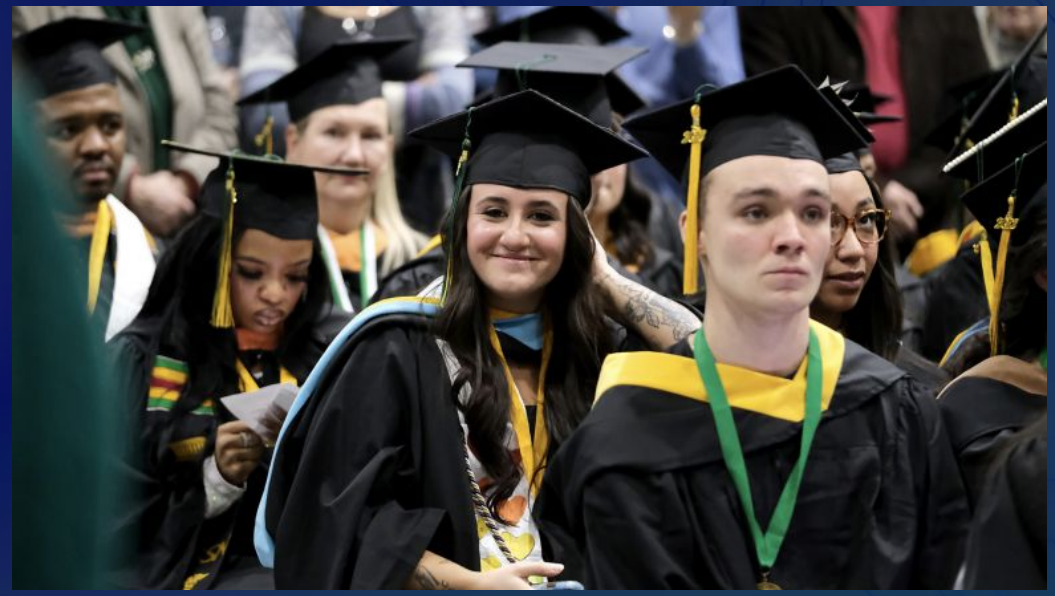
Challenges currently experienced by Universities



2. Faculty/Staff Retention

- Hard to maintain competitive wages/pay raises
- Post-pandemic changes in attitudes toward “work”
  - Loss to “grass is greener”
- Remaining faculty/staff overworked

Challenges currently experienced by Universities



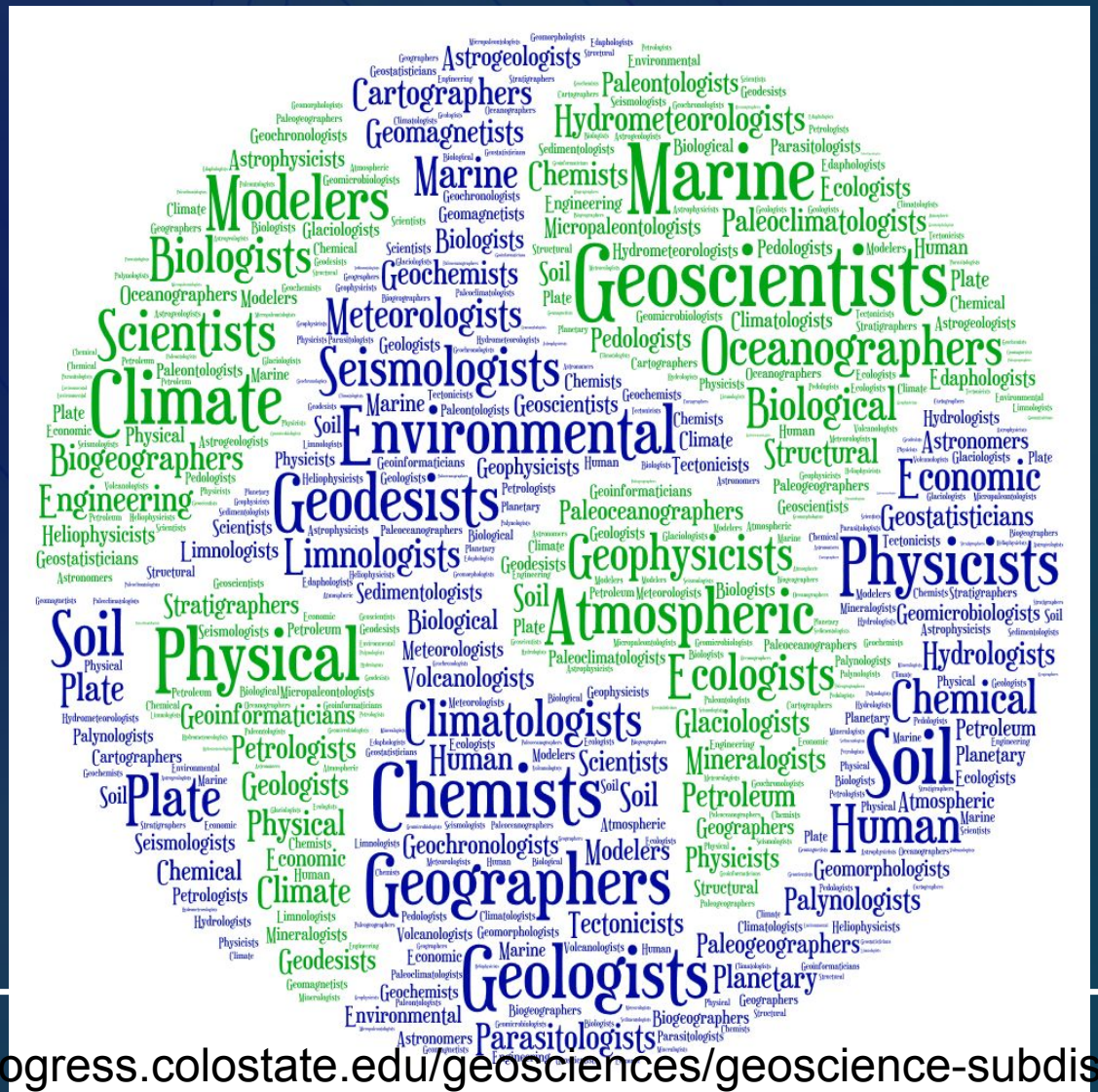
3. Changing Students

- Different expectations
- Knowledge and skill gaps
- Mental Health
- (more resources needed to support and retain them)



Challenges and Opportunities for EAS Programs

EAS Programs – approx. 450 in the U.S.



https://progress.colostate.edu/geosciences/geoscience-subdisciplines/

EAS Programs

- Atmos Science
- Meteorology
- Geography
- Geoscience
- Earth Sciences
- Other…

1. Good News

- Important, exciting, high tech, plenty of jobs forecasted, etc.
- Move toward Earth System Science



EAS Programs



2. Challenges

- Departments/programs affected by financial, political, social pressures on their Institutions
- Rapidly changing fields, high tech, high expertise of staff
- Not as many students choosing as warranted by job demands, competition



Advocating with your Administrators

Advocating for your discipline(s): Disclaimers



- **Very nuanced versus simplifications**
- Different institutions
- Different regions
- Different reactions
- Different administrators

Advocating for your discipline(s): Disclaimers



- Very nuanced vs. simplifications
- **Different institutions**
- Different regions
- Different reactions
- Different administrators

- R1s vs. PUI
- Private vs. state-funded
- Elite vs. regional

Advocating for your discipline(s): Disclaimers



- Very nuanced vs. simplifications
- Different institutions
- **Different regions**
- Different reactions
- Different administrators

- And different legislature attitudes toward higher education
- Different election cycles

Advocating for your discipline(s): Disclaimers



- Very nuanced vs. simplifications
- Different institutions
- Different regions
- **Different reactions**
- Different administrators

- Innovate, Differentiate
- Dig heels, hang on to traditions
- Everything in between

Advocating for your discipline(s): Disclaimers



- Very nuanced vs. simplifications
- Different institutions
- Different regions
- Different reactions
- **Different administrators**

Advocating for your discipline(s): About your Administrators

- Looking out for the institution
- Pressures from above and from outside
- Respond differently to “feedback” from department administrators and faculty
- Generally mean well, but their priorities do not necessarily match yours
- What’s in their mind?



Advocating for your discipline(s) ”Do” and “Don’t”

- Understand your institution’s priorities/identity/situation
- Understand your needs versus wants
- Understand your value
- Become embedded into the institution’s initiatives
- Be a partner



Advocating for your discipline(s) ”Do” and **“Don’t”**

- Be clueless about what is happening outside your department
- Be disengaged from the institution’s initiatives
- Be disengaged from admissions/enrollment initiatives
- Ask for unrealistic resources
- Be an adversary



Advocating for your discipline(s) ”Do” and “Don’t”

- Collaborate with other disciplines
- Engage outside partners
- Be willing to evolve and innovate
- Be willing to compromise



IN SHORT

Position your program(s) at the forefront of your institution's goals, help your administrators understand the value of those programs, be a partner. Accept compromise.

Thank you!



Q&A and Discussion



You lost one mid career faculty member who decided to leave academia and work in the private industry. Your remaining faculty have too many responsibilities. Your enrollments have come down from about 100 in 2005 to about 25 in 2025. At the same time the state has decreased its funding of higher education and your institution is expected to be in the red and severely limiting faculty hires.

- How do you justify replacing your lost faculty? Can you justify it?
- What other actions should you take to adjust to your new reality?
- How do you keep your curriculum, your faculty, your technology up to date?
- Who/what offices in your institution can you partner with to help your program?
- How do you build a trusting two-sided relationship with your dean/provost that will help protect your discipline during the challenging times?