



# Online Geoscience Education Among Ancient and Current Cultures



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## Who is NMSU Grants<sup>1</sup>?

- NMSU Grants is a small, two-year campus within the New Mexico State University System
- Fall 2015 Statistics:
  - Student Credit Hours : 5,814 (1,946 courses)
  - Full-time/Part Time Students: 155/893 (1,048 total)
  - Full-time Faculty: 12
  - Minority Serving Institution for two minority groups:
    - Student body is 29% Native American and 38% Hispanic

## Demographics of Service Area

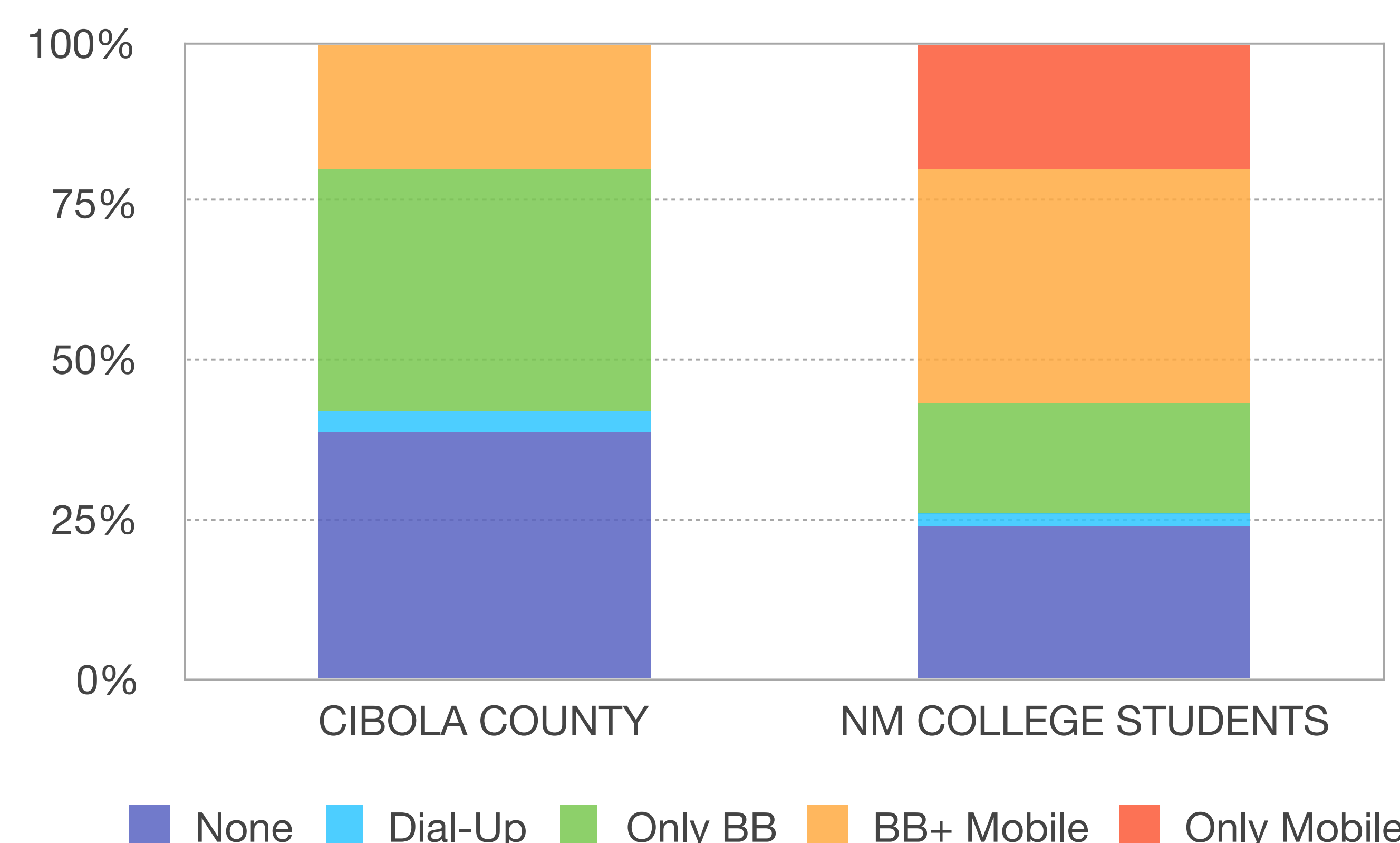
Our service area is Cibola County in West Central New Mexico:

- Area<sup>2</sup>: 4,542 square miles
- Population (2014 est.)<sup>3</sup>: 27,349 - Density: 6.0/mi<sup>2</sup>
- Poverty rate<sup>3</sup>: 27.8% - 95<sup>th</sup> percentile among US counties
- Adults (25+) holding at least a Bachelor's Degree<sup>3</sup>: 10.4%, lowest of any county in New Mexico
- Land held by Federal Government<sup>4</sup>: 68.8%

## (Lack of) Internet Connectivity<sup>5</sup>

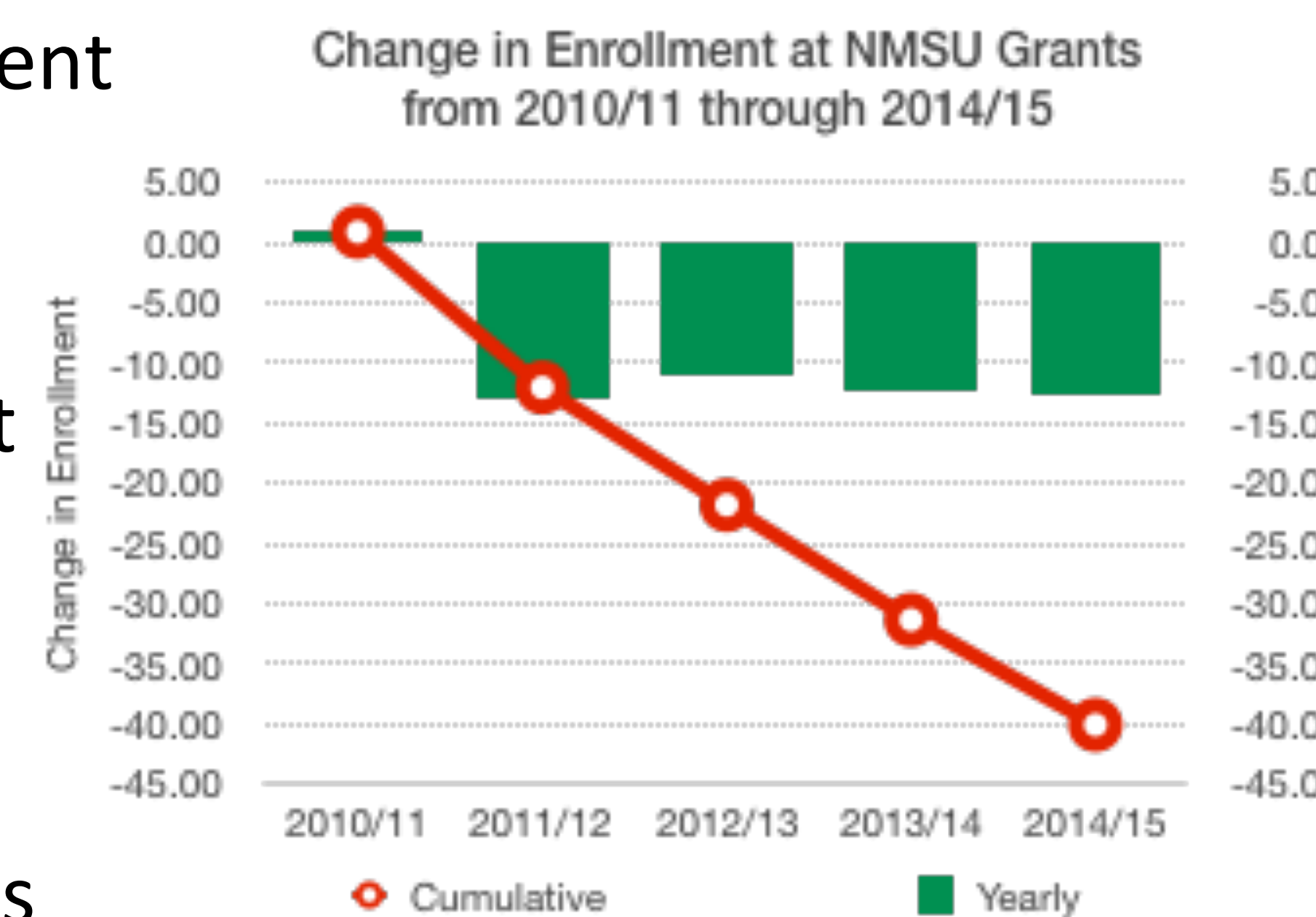
- Only 47% of households have access to wired broadband (BB) in Cibola County, most of which have DSL speeds (1.5Mbps)
  - Non-wired options:
    - Mostly satellite (3-5Mbps) with monthly data caps
    - Some line-of-sight radiowave receivers (up to 10Mbps) with no data caps

Home Internet Usage Chart



## Enrollment Trends and the Future

- Downward trend in enrollment over past 4 years<sup>1</sup>
  - Cumulative loss of 31%
  - Gains in Dual Enrollment
- In July 2015, NMSU Regents voted to reduce credits for degree from 128 to 120
  - NMSU Grants Associate's Degrees must be reduced from 66 to 60 credits; electives likely to be cut
- Climate Studies was offered in the Spring of 2015:
  - Not considered General Science - only an elective
  - Only 3 students enrolled - critical mass of 5 preferred



## Enrollment Growth Strategies

- A "Take a Hike" course in Spring 2016
  - Three 6-mile hikes exploring the physical geography of our region, and connections to the environment
- A 2-week intensive Summer Academy "Climate Change and New Mexico" will be offered in 2016, geared to high school students
- A collaboration with local public school district to train educators in climate issues
  - Gets topics into classrooms for future students
  - Increases salary/education level for teachers (which district funding from the state of New Mexico)
- An initiative to bring in public speakers to campus to engage the community with current topics, including climate issues

## Opportunities

- Diverse history and geography of the surrounding area presents opportunity to introduce climate issues:
  - Many nearby cultural sites have historical connections to climate changes
  - Varied geography provides numerous examples of climate zones within the state



- Drought issues plague NM, providing direct connection to importance of climate
- Largest and most destructive fires in NM history have occurred since 2011

## References

- <sup>1</sup>Data from NMSU Grants Institutional Researcher, Rose Carlson
- <sup>2</sup>[https://en.wikipedia.org/wiki/Cibola\\_County,\\_New\\_Mexico](https://en.wikipedia.org/wiki/Cibola_County,_New_Mexico) (Accessed: 7 January 2016)
- <sup>3</sup><http://quickfacts.census.gov/qfd/states/35/35006.html> (Accessed: 5 January 2016)
- <sup>4</sup>[http://www.co.cibola.nm.us/documentsfinal\\_comp\\_plan\\_2015.pdf](http://www.co.cibola.nm.us/documentsfinal_comp_plan_2015.pdf) (Accessed 7 January 2016)
- <sup>5</sup>Data found at <http://www.doit.state.nm.us/broadband/> (Accessed: 5 January 2016)
- <sup>6</sup>[https://upload.wikimedia.org/wikipedia/commons/2/2e/Chaco\\_Canyon\\_Chetro\\_Ketl\\_great\\_kiva\\_plaza\\_NPS.jpg](https://upload.wikimedia.org/wikipedia/commons/2/2e/Chaco_Canyon_Chetro_Ketl_great_kiva_plaza_NPS.jpg) (Accessed: 8 January 2016)
- <sup>7</sup>[https://en.wikipedia.org/wiki/Whitewater-Baldy\\_Complex\\_Fire#/media/File:Whitewater\\_baldy\\_night\\_fire\\_2012-06-06.jpg](https://en.wikipedia.org/wiki/Whitewater-Baldy_Complex_Fire#/media/File:Whitewater_baldy_night_fire_2012-06-06.jpg) (Accessed: 6 January 2016)

## Acknowledgment

To the AMS Climate Studies Diversity Project in support of my professional development as a Climate Science Instructor

## Contact Info

