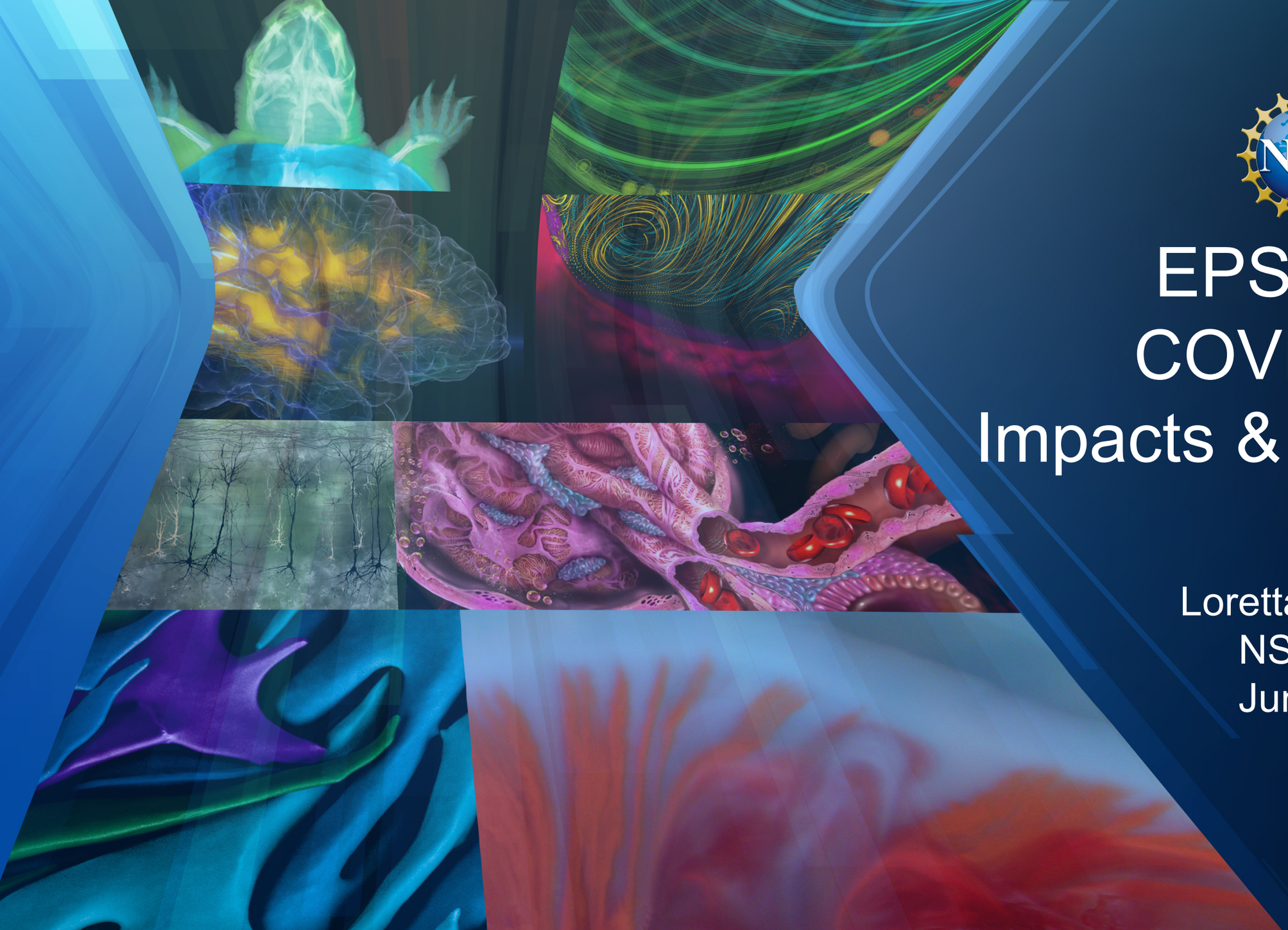
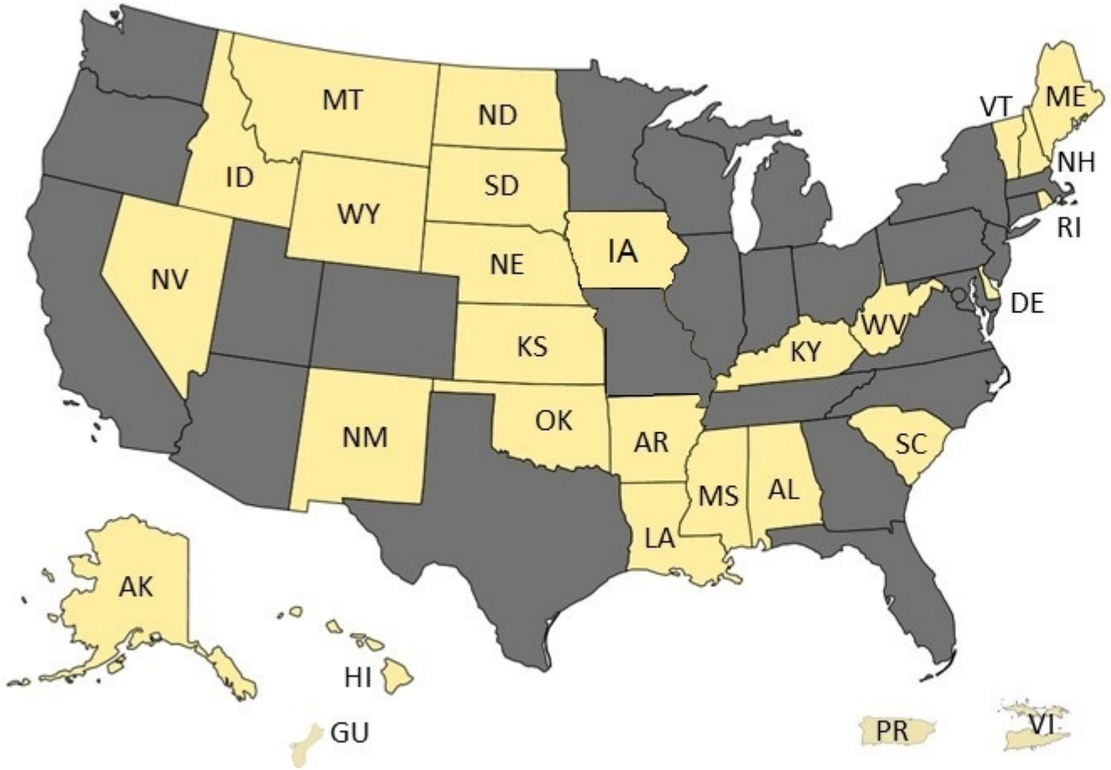


EPSCoR COVID-19 Impacts & Response

Loretta Moore, Head
NSF EPSCoR
June 11, 2020

Current EPSCoR Jurisdictions



AL Alabama
AK Alaska
AR Arkansas
DE Delaware
GU Guam
HI Hawaii
IA Iowa
ID Idaho
KS Kansas
KY Kentucky
LA Louisiana
ME Maine
MS Mississippi
MT Montana
NE Nebraska
NH New Hampshire
NM New Mexico
ND North Dakota
NV Nevada
OK Oklahoma
PR Puerto Rico
RI Rhode Island
SC South Carolina
SD South Dakota
VI U.S. Virgin Islands
VT Vermont
WV West Virginia
WY Wyoming

Findings Related to Contextual Variability

EPSCoR jurisdictions vary along several measures across 3 contextual domains:

Environment and Institutional Capacity

Research Capacity

State-Level Financial Resource Capacity

Findings Related to Contextual Variability

Environment and Institutional Capacity

Compared to Non-EPSCoR jurisdictions, EPSCoR jurisdictions tend to—

- be less populous,
- have populations that live in nonmetro areas,
- have varying levels of racial diversity, and
- have smaller numbers of research-intensive doctoral universities and associate colleges.

Findings Related to Contextual Variability

Compared to Non-EPSCoR jurisdictions, most EPSCoR jurisdictions—

- have a smaller economic base,
- confer a lower percentage of S&E degrees,
- have a low percentage of S&E workers, and
- receive a low amount of federal funding, possibly due to their low number of research-intensive doctoral universities.

Findings Related to Contextual Variability

State-Level Financial Resource Capacity

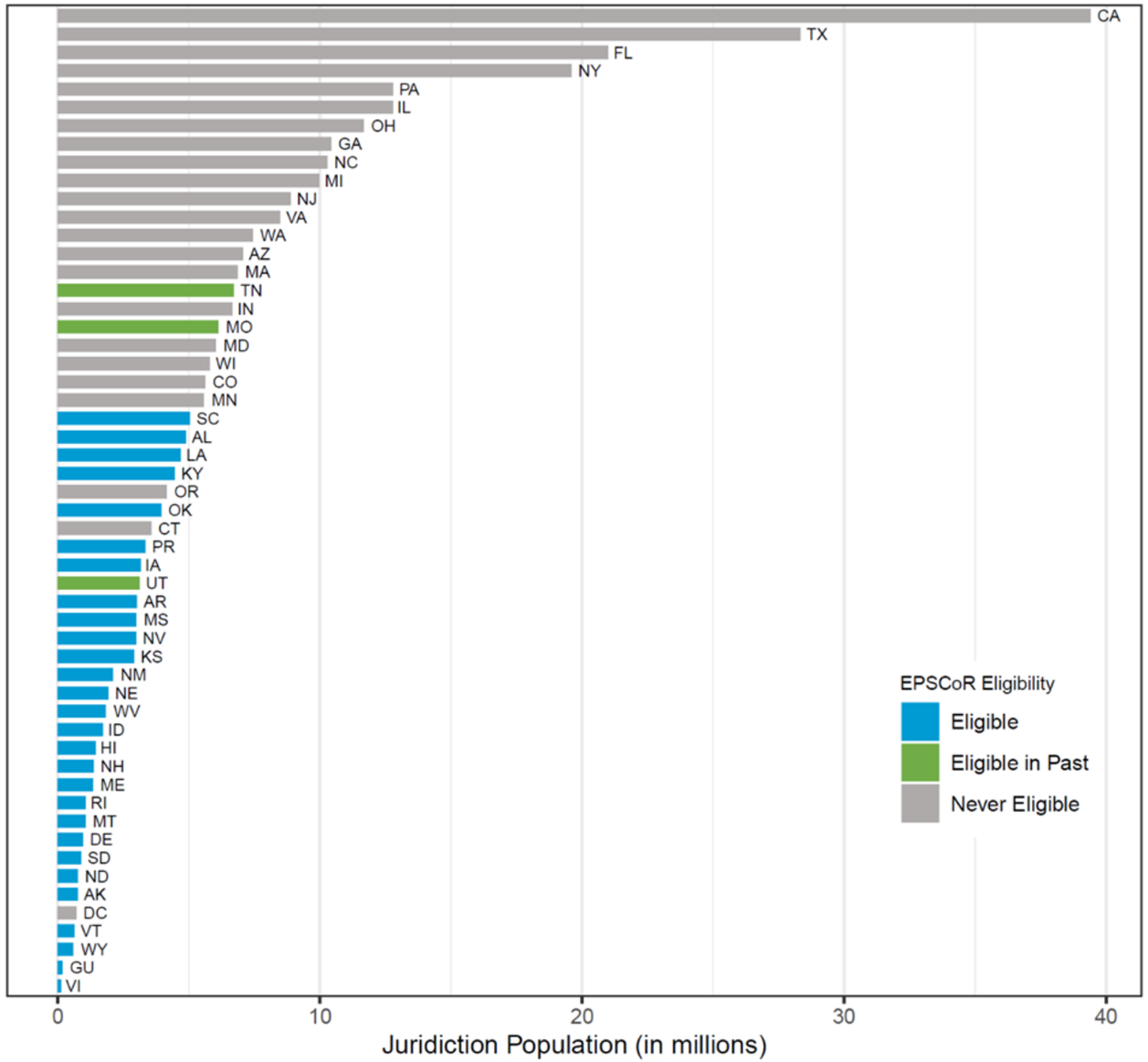
Compared to Non-EPSCoR jurisdictions, most EPSCoR jurisdictions **support R&D activities** to complement federal funding for research at academic institutions, albeit to a **much lower extent**.

Contextual Variability

Environment and Institutional Capacity

Compared to non-EPSCoR jurisdictions, a majority of EPSCoR jurisdictions are less populous.

Jurisdiction Population Size in 2017

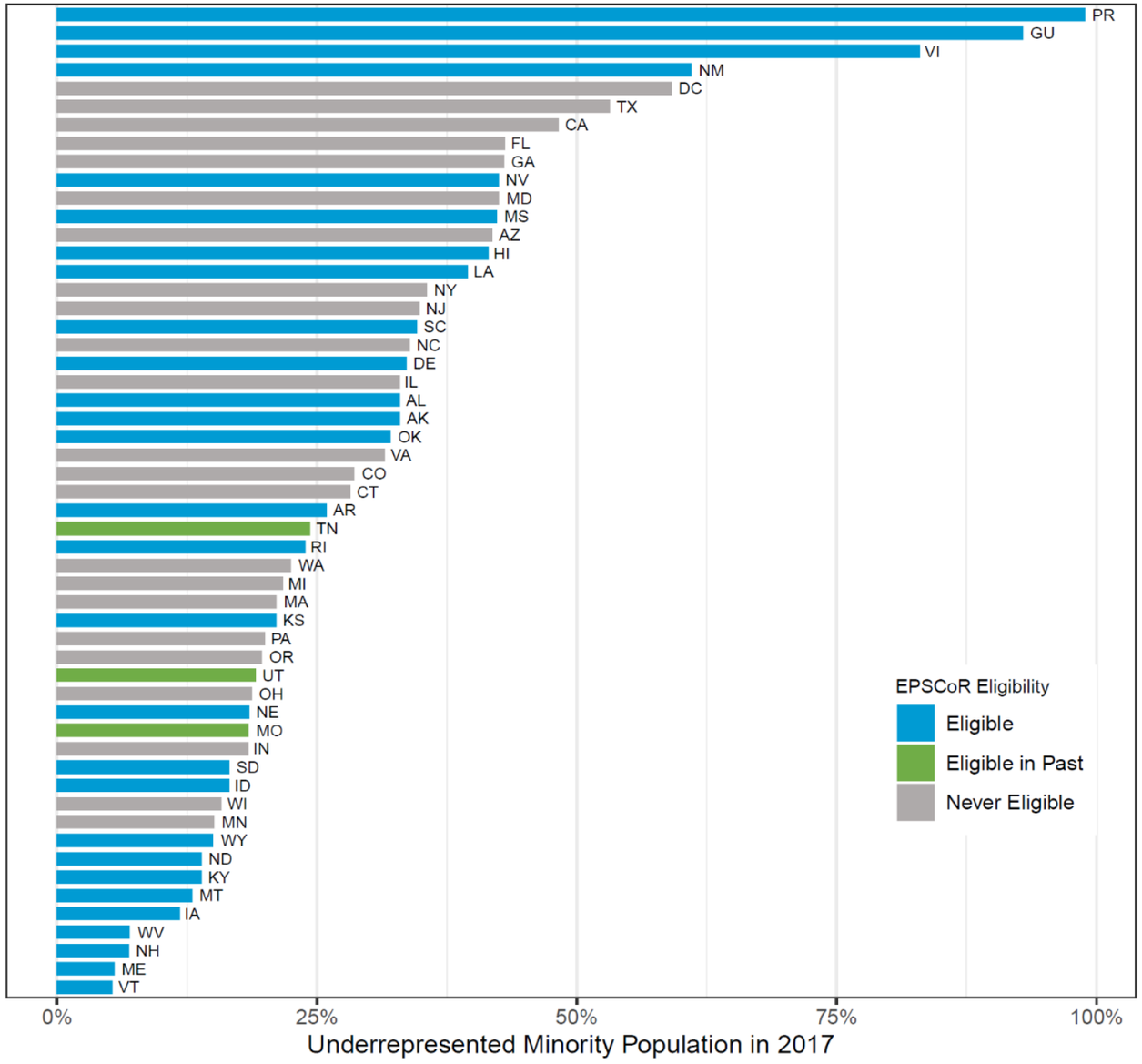


Contextual Variability

Environment and Institutional Capacity

EPSCoR jurisdictions have varying racial diversity.

Jurisdiction's URM Population in 2017

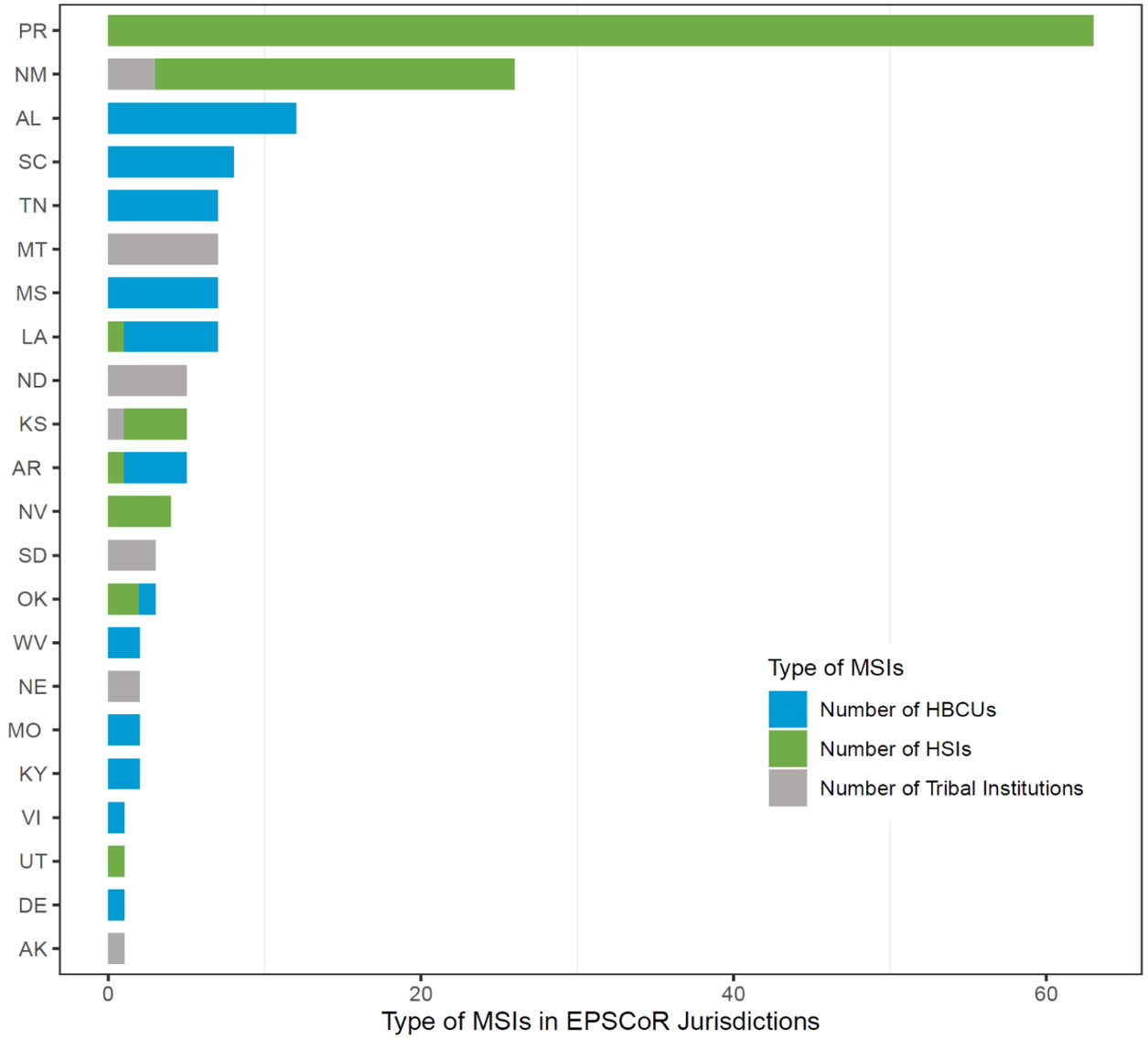


Contextual Variability

Environment and Institutional Capacity

EPSCoR jurisdictions tend to have different number of MSIs

Number and Type of MSIs in EPSCoR Jurisdictions



Note: Hawaii, Guam, Idaho, Iowa, Maine, New Hampshire, Rhode Island, Vermont, and Wyoming have no HBCUs, HSIs, or Tribal Institutions.

COVID-19 Impacts on URM Communities

- The limited or lack of Internet access for **Tribal College and Native K-12** students has made moving activities online for these populations difficult, if not impossible.
- **HBCU** students, especially first-generation students and those with modest family incomes, have similar challenges — limited access to Internet, no laptop or home computer, family responsibilities, etc. – resulting in these students falling further behind during the distance learning period.

EPSCoR Resilience Strategies Include:

- Revising project strategic plans to adapt timelines due to the COVID-19 disruptions
- Conducting outreach initiatives and summer undergraduate research activities using virtual technologies, if possible
- Keeping project personnel, including students, employed on non-laboratory projects while labs are closed or open with limited operations

Past EPSCoR investments have benefitted rural and MSI Internet connectivity

EPSCoR Research Infrastructure Improvement Program: Inter-Campus and Intra-Campus Cyber Connectivity (RII C2)

PROGRAM SOLICITATION
NSF 10-598

Up to $1M for up to 2 years of support

Examples from this funding from the American Recovery and Reinvestment Act of 2009

- EPS-1006891 connected **Xavier University of Louisiana** to Louisiana's research cyberinfrastracture
- EPS-1006988 connected Nebraska researchers with the Network Nebraska Education **K-12 network**
- EPS-1007033 increased connectivity for Hawaii's STEM initiatives at **Kapiolani Community College**

EPSCoR Jurisdictions' strengths will ease impacts of COVID-19

- Jurisdiction-wide projects have flourished with investments in virtual communication tools to link educational institutions, from research institutions to MSIs
- Creative responses to COVID-19 have been encouraged at our annual PI meeting and will be collected from annual reports in the coming months

EPSCoR will continue to identify strategies by which to support Jurisdictions' efforts in Education, Outreach, and Diversity.

Thank You!