The Honorable Nita M. Lowey Chair Committee on Appropriations U.S. House of Representatives Washington, D.C. 20515

The Honorable Richard Shelby Chair Committee on Appropriations United States Senate Washington, D.C. 20510 The Honorable Kay Granger Ranking Member Committee on Appropriations U.S. House of Representatives Washington, D.C. 20515

The Honorable Patrick Leahy Vice Chair Committee on Appropriations United States Senate Washington, D.C. 20510

Dear Chair Lowey, Ranking Member Granger, Chair Shelby, and Vice Chair Leahy:

We are writing to urge you to provide the highest possible fiscal year (FY) 2021 allocation for the Commerce-Justice-Science (CJS) Appropriations Subcommittees, at least equal to the FY 2020 allocation and sufficient to fully fund the basic and applied research programs in the CJS portfolio. The bill includes agencies and departments that are vital to the advancement of science, technology, economic development, and criminal justice. These include the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), the National Institute for Standards and Technology (NIST), the Office of Science and Technology Policy (OSTP), the Department of Commerce statistical agencies, and the Department of Justice (DOJ) Office of Justice Programs.

Strong funding for the CJS bill is necessary for the United States to maintain its global lead in science and technology. According to the 2020 *Science and Engineering Indicators* report, while the US remains at the forefront of research, spending \$548 billion on research and development (R&D) in 2017, other nations have dramatically increased their investments in science. For example, between 2010 and 2017, China's R&D enterprise grew by 13 percent annually and South Korea's grew by 8 percent annually. In comparison, U.S. R&D expenditures increased by only about 4 percent per year over this same period. China is now likely to surpass us in total spending, threatening our science and technology leadership in fields such as artificial intelligence, space exploration, quantum computing, and other areas.

In addition to increased competition in the realm of science and technology, our nation faces immense environmental challenges. The CJS research agencies play a central role in understanding and predicting global and regional changes; developing new technologies to improve resilience; and providing life-saving weather forecasts. NSF, NASA, and NOAA together fund over 60 percent of our nation's federal investments in environmental research and development as well as funding a large portion of our civilian observational capabilities. Additionally, there is an ever-increasing need for the disaster resilience research headed by

NIST, including investment in post-disaster impact research and pre-impact mitigation, whether from high-winds, fire, or flood.

A robust CJS allocation will also allow the Commerce Department to provide vital funding to offices that support the U.S. economy. Commerce Department programs produce detailed analyses that are indispensable for understanding our multitrillion-dollar economy. Our nation must sustain these and other efforts, including successful conclusion of the 2020 Census and the dissemination of high quality socioeconomic and demographic decennial census data that scientists will use throughout the next decade to inform basic, clinical, and applied research and research training activities.

The CJS bill includes critical research that supports law enforcement and criminal justice. In recent years, there has been increased demand for objective research regarding policing, prison and sentencing reform, mental health, addiction and community-trust building activities. Research funded by DOJ is central to our understanding of these issues and sound policymaking. Increasing the allocation for CJS will help to provide additional resources for these essential DOJ research programs.

In sum, the federal government has a unique role in funding the R&D crucial for our national needs, but the federal share of R&D spending as a percentage of GDP is now at its lowest point since the 1950s. The CJS bill is singularly responsible for determining over 50 percent of the annual federal investment in non-defense, non-biomedical research – research that is essential for our long-term economic growth, security, and prosperity.

Given the importance of federal support for R&D and the vital role played by the CJS Subcommittees in funding a substantial portion of this research, we urge you and your colleagues to do everything you can to ensure a sufficient CJS 302(b) allocation. Doing so will allow the Subcommittees to support the R&D investments necessary to meet our nation's challenges and opportunities.

Sincerely,

The Census Project Coalition for Aerospace and Science Coalition for National Science Funding Crime and Justice Research Alliance The NIST Coalition

AASRO (Association of Academic Survey Research Organizations)
American Anthropological Association
American Association for the Advancement of Science
American Association of Geographers
American Association of Physics Teachers
American Astronomical Society
American Educational Research Association
American Geophysical Union

American Institute for Medical and Biological Engineering (AIMBE)

American Institute of Biological Sciences

American Institute of Physics

American Mathematical Society

American Physical Society

American Physiological Society

American Psychological Association

American Society for Microbiology

American Society of Agronomy

American Society of Civil Engineers

American Society of Plant Biologists

American Sociological Association

American Statistical Association

Annis Water Resources Institute - Grand Valley State University

Arafune Government Relations, LLC

Associated Universities Inc.

Association for Psychological Science

Association for Public Policy Analysis and Management (APPAM)

Association for Women in Mathematics

Association for Women in Science

Association of American Medical Colleges

Association of American Universities

Association of Public and Land-grant Universities

Association of Public Data Users (APDU)

Association of Science-Technology Centers (ASTC)

Battelle

Bermuda Institute of Ocean Sciences (New York and Bermuda)

Biophysical Society

Boise State University

Boston University

Brandeis University

Brown University

California Institute of Technology

California State University Council on Ocean Affairs, Science & Technology

Cavarocchi Ruscio Dennis Associates

Center for Coastal Studies

Cheasapeake Bay Foundation

Coalition for Academic Scientific Computation

Computing Research Association

Consortium for Ocean Leadership

Consortium of Social Science Associations

Cornell University

Council for Community Economic Research

Council of Professional Associations on Federal Statistics

Council on Undergraduate Research

Crop Science Society of America

Dauphin Island Sea Lab

Department of Geography and Meteorology, Valparaiso University

Departrment of Ocean, Earth & Atmospheric Sciences, Old Dominion University

Duke University

EarthCorps

Earthjustice

East Carolina University - Integrated Coastal Programs

Eastman

Ecological Society of America

Environmental Defense Fund

Environmental Law & Policy Center

Eversole Associates

FAU HBOI

Federation of American Societies for Experimental Biology

Federation of Associations in Behavioral & Brain Sciences

Florida State University

Galveston Bay Foundation

Geological Society of America

George Mason University

Georgia Institute of Technology

Harvard University

Hatfield Marine Science Center, Oregon State University

Hawaii Institute of Marine Biology

Huxley College of the Environment, Western Washington University

Incorporated Research Institutions for Seismology (IRIS)

Independent Organizational Development Consultant

Indiana University

Institute for Global Environmental Strategies

IOOS Association

Johns Hopkins University

Lehigh University

Lewis-Burke Associates LLC

Linguistic Society of America

Marine Biological Laboratory

Marine Conservation Institute

Massachusetts Institute of Technology

Mathematical Association of America

Metropolitan State University of Denver

Michigan State University

Michigan Technological University

Mineralogical Society of America

National Association of Development Organizations

National Association of Marine Laboratories

National Communication Association

National Estuarine Research Reserve Association

National Science Teachers Association

NC State University/CMAST

Northeastern University

Northern Illinois University

Northern Vermont University-Lyndon

Northview Weather LLC

Northwestern University

Ocean Conservancy

The Ohio State University

Population Association of America/Association of Population Centers

Princeton University

Psychonomic Society

PsySiP: Psychology of Science in Policy

Purdue University

Research!America

Restore America's Estuaries

Rutgers, The State University of New Jersey

SAGE Publishing

Scripps Institution of Oceanography

Sea Grant Association

Society for American Archaeology

Society for Industrial and Organizational Psychology

Society for Neuroscience

Society for Research in Child Development

Society for the Psychological Study of Social Issues (SPSSI)

SOEST, University of Hawaii at Manoa

Soil Science Society of America

SPIE

St. Louis University

State University of New York System (SUNY)

Stockton University

Stony Brook University

Tufts University

University of California System

University of California, Berkeley

University of Cincinnati

University of Colorado Boulder

University of Florida

University of Georgia

University of Illinois

University of Iowa

University of Massachusetts Dartmouth School for Marine Science and Technology

University of Michigan

University of Nebraska

University of New Hampshire

University of New Mexico

University of North Carolina at Chapel Hill

University of Oregon

University of Pennsylvania

University of Texas at Austin

University of Virginia

University of Wisconsin-Madison

US Ignite

USC Wrigley Institute for Environmental Studies

Vanderbilt University

Verizon

Virginia Alliance of Public Research and Land-Grant Universities

Washington State University

West Virginia University

Woods Hole Oceanographic Institution

Yale University