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**U.S. Senate Committee on  
Banking, Housing, and Urban Affairs**

**Subcommittee on Economic Policy**

**Senator Elizabeth Warren, Chair**

**The Economic Impact of Federal Investments in Massachusetts**

**Testimony of UMass Lowell Chancellor Julie Chen**

Chair Warren, Ranking Member Kennedy, Senator Markey, and distinguished Committee Members,

Thank you for the opportunity to testify today about the profound and transformative economic impact of federal investments in Massachusetts. It's an honor to welcome you to Lowell, a city founded on innovation and entrepreneurship and transformed by the National Park Service's investment in sharing that history.

Federal investments — particularly through the Commonwealth's research universities — have played a pivotal role in spurring innovation and bolstering research and development (R&D) in the Commonwealth. At UMass Lowell, these projects hold the potential to:

- convert greenhouse gases into clean-burning fuels;
- to target RNA molecules to aid in early disease detection;
- to ensure water quality in underserved communities;
- and to create jobs and economic growth as research is converted into technology — technology into businesses — and businesses into the cutting-edge industries of tomorrow.

For UMass Lowell and countless organizations in Massachusetts and across the country, it is federal funding that creates bold ideas and innovative theories and transforms them into tangible technology and societal impact.

Federal Agencies like the National Science Foundation, the National Institutes of Health, the Environmental Protection Agency, and the Departments of Transportation, Energy, and Defense all play a critical role for federal investment in the Commonwealth. Federal funds from these agencies invest in ideas that are:

- Using Inflation Reduction Act funds to create community-based energy efficiency programs to combat climate change and save residents of underserved communities needed money on monthly energy bills.
- Using CARES Act funds during the pandemic to enhance our medical manufacturing capacity, provide personal protective equipment, and create training opportunities.
- Using ARPA money via the Mass Tech Collaborative, to provide equitable access to high-speed internet and digital literacy to gateway cities and underserved communities in the Merrimack Valley.
- And using National Institutes of Health (NIH) funding to develop point-of-care technologies that target heart, lung, blood, and sleep disorders, especially in underserved populations.

These investments bolster economic development, create good paying jobs and high-tech opportunities for the state's workforce, provide professional and research experiences for students and also promote equity outcomes across healthcare, infrastructure and clean energy production.

Today UMass Lowell is actively working to accelerate this model of success on our East Campus. Through the redevelopment of underutilized land, the university will create a mixed-use district in downtown Lowell with R&D and industry collaboration at its core.

Co-location of faculty, researchers, students and industry, government, and non-profit partners has been key to UMass Lowell's rapidly growing \$111 million dollar research enterprise. From start-ups to joint research centers with major corporations, our commitment to collaboration has attracted business partners through our shared research facilities, innovation hub business incubators and the Massachusetts Medical Device Development (M2D2) Center run jointly with UMass Chan Medical School. M2D2 was one of the first nine Johnson & Johnson life sciences innovation labs worldwide. And through Biomedical Advanced Research and Development Authority funding, M2D2 supported more than 80 companies who worked to develop life-saving solutions in response to the COVID-19 public health crisis.

This recognition by industry, coupled with critical federal investments, have created clusters of expertise around technology and the health sciences and bio-tech industries.

I was proud to join UMass President Marty Meehan last November in an op-ed in the Boston Globe as part of a statewide push by industry, non-profits and state agencies urging the Biden

administration to locate the Advanced Research Projects Agency for Health (ARPA-H) in Massachusetts.

I was thrilled by Governor Healey's announcement last month that the state had succeeded. While the technical depth and breadth of our universities and industry representatives were no doubt key to the administration's choice, as important, I believe, is a history and culture of collaboration between Massachusetts legislators, organizations and researchers to translate goals and aspirations into results that help real people.

In fact, five days before the ARPA-H announcement, we witnessed a similar outcome. The Healey/Driscoll Administration announced Massachusetts would receive nearly \$20 million through the federal CHIPS and Science Act to establish the Northeast Microelectronics Coalition Hub.

We are delighted to join with our Massachusetts industry and educational partners to help meet the nation's microelectronics requirements, stimulate job creation, train the next generation of STEM workers, and build the region's advanced manufacturing and technology sectors.

UMass Lowell, the Commonwealth, and the country are already beginning to see the tangible outcomes from the historic investment Congress has made over the last several years. I look forward to your questions today and our ongoing conversations in the months and years ahead as we continue to work with elected officials and federal agencies to advance knowledge, discovery and prosperity in Massachusetts and across the United States.

Thank you to the Committee, to the United States Senate and to the entire Massachusetts Congressional Delegation for your continued support and recognition of the significant impact of federal investments in our great Commonwealth.

Thank you.