

Congress of the United States
Washington, D.C. 20510

February 27, 2024

The Honorable Gina M. Raimondo
Secretary
Department of Commerce
1401 Constitution Ave., NW
Washington, D.C. 20230

The Honorable Alejandra Y. Castillo
Assistant Secretary of Commerce for Economic Development
Department of Commerce
1401 Constitution Ave., NW
Washington, D.C. 20230

Dear Secretary Raimondo and Assistant Secretary Castillo,

We write in support of Elevate Quantum’s application for Phase II funding as part of the Department of Commerce’s Regional Technology and Innovation Hubs (Regional Tech Hubs) program. As the United States undertakes critical work to spur innovation, carry out research and development, and create a manufacturing and workforce strategy to maintain our global leadership in quantum information science (QIS), the Mountain West stands ready to lead our country in the discovery, development, and deployment of this transformative technology. Elevate Quantum plans to generate more than \$2 billion in economic output and create over 11,000 high-paying jobs, provide access to capital for innovative early-stage startups, accelerate the commercialization of tested quantum technologies through applied demonstrations in open-access lab facilities, and develop the high-skilled workforce of the 21st century.

Quantum technologies will transform the global competitive landscape over the coming decade. Strategic competitors have recognized quantum’s importance and are directing significant funds to develop their domestic industries. Targeted investments in the quantum innovation ecosystem here at home will ensure the U.S. continues to lead the development of this critical technology. Colorado, Wyoming, and New Mexico will accelerate the commercialization of quantum technologies that will revolutionize healthcare delivery, improve supply chain logistics, and fulfill the needs of national security missions.

The Mountain West’s leadership in quantum technology dates back over 80 years, when the National Institute of Standards and Technology (NIST), Los Alamos National Lab, Sandia National Laboratories, and the Joint Institute for Laboratory Astrophysics (JILA) were established. Key innovations that created the QIS discipline were developed at Los Alamos National Lab, the University of New Mexico, and Sandia National Labs. Today, Colorado boasts four Nobel Prize winners in quantum science. This deep history of scientific success demonstrates the Mountain West’s potential to translate leading-edge research into commercially viable applications through regional partnerships with institutions like the University of Wyoming, University of New Mexico, University of Colorado, and the Colorado School of Mines. This research pays dividends: Colorado has the highest number of patents per investment dollars in the nation, underscoring the strength of the state’s quantum return on investment.

Now, the Mountain West is charting the United States’ quantum future in the QIS areas most

immediately available for national security needs. Three of the top 20 U.S. institutions for quantum sensing and hardware are in Colorado, and over 50 percent of overall quantum research in the Denver–Aurora–Lakewood metro area is focused on quantum sensing and hardware, which the Defense Science Board has identified as the most mature military application of quantum technologies. The vast majority of the consortium’s industry partners are actively operating and selling products and services to the market. Investments in the Mountain West will build upon the quantum sensing work that is already underway in the region, directly benefiting our national security interests and driving responsible technology use across the biomedical, finance, and aerospace sectors.

The breadth of the consortium’s regional collaboration is exemplary. Elevate Quantum is a consortium of over 80 companies, universities, national labs, local governments, and workforce development organizations focused on advancing the quantum field to benefit the United States. With representation across the entirety of the QIS ecosystem—from quantum computing and sensing to networking and hardware—Elevate Quantum boasts the highest concentration of quantum companies in the nation.

Quantum Information Science requires a wide variety of skills and technical expertise, from welders and lab technicians to engineers and PhDs. To fill these in-demand careers, Elevate Quantum is prepared to foster a high-skilled and diverse workforce trained through traditional and emerging pathways. Elevate Quantum will be able to harness an existing talent pipeline of graduates in science and engineering disciplines and equip traditionally underrepresented groups with the skills they need to succeed in an advanced manufacturing economy. The consortium has key members representing rural counties and will ensure more than 40 percent of leadership roles in future startups are filled by traditionally underrepresented groups. Elevate Quantum will also take advantage of existing collaborations—such as the Quantum New Mexico Institute which serves to create holistic workforce development programs and provide new opportunities for New Mexican students—to prepare the workforce of tomorrow. This workforce vision will not only revitalize regional economies, but it will help our nation stay ahead of global competitors and discover new innovations driving the modern technological race.

The Elevate Quantum Tech Hub is poised to uplift startups, spur innovation, and grow a deep talent pool in rural and urban communities across the Mountain West that will maximize our nation’s capability, ingenuity, and creativity. In turn, this will accelerate domestic quantum discoveries, bridge critical gaps in bringing quantum technologies to market, and cement the U.S. as the global leader in the quantum revolution. Additional support from the Department of Commerce would augment the ongoing efforts of the Elevate Quantum Tech Hub as it builds cutting-edge quantum applications, supports our national security needs, and develops a diverse STEM workforce.

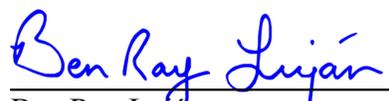
Thank you, and we look forward to working with you on this important initiative critical to the United States’ future success.

Sincerely,


John Hickenlooper
United States Senator


Michael F. Bennet
United States Senator


Martin Heinrich
United States Senator


Ben Ray Lujan
United States Senator


John Barrasso, M.D.
United States Senator


Cynthia M. Lummis
United States Senator


Lauren Boebert
Member of Congress


Yadira Caraveo, M.D.
Member of Congress


Jason Crow
Member of Congress


Joe Neguse
Member of Congress


Brittany Pettersen
Member of Congress


Diana DeGette
Member of Congress

Melanie A. Stansbury

Melanie Stansbury
Member of Congress

Gabe Vasquez

Gabe Vasquez
Member of Congress

Teresa Leger Fernández

Teresa Leger Fernández
Member of Congress