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Dr. Laurie E. Locascio
Under Secretary of Commerce for Standards and Technology
Director, National Institute for Standards and Technology
National Institute of Standards and Technology
100 Bureau Drive
Gaithersburg, MD 20899

Re: *Request for Information Related to NIST's Assignments Under Sections 4.1, 4.5 and 11 of the Executive Order Concerning Artificial Intelligence*

Dear Under Secretary Locascio,

Thank you for the opportunity to provide information on NIST's role under the Artificial Intelligence (AI) Executive Order. The University of Colorado Boulder (CU Boulder) is a leader in AI and deep partner of the federal government to advance these and other emerging technology priorities. We are grateful for our collaboration with NIST over many years on foundational research and technology development through JILA, our joint research institute, and other mechanisms. As NIST develops its role in AI and response to the Executive Order, we hope the agency will consider how to incorporate collaborative research mechanisms to stay at the forefront of AI risk management and evaluation. These mechanisms would enable better workforce pathways between academia, NIST, and industry and ensure that generative AI is governed in the public interest.

CU Boulder has a large number of researchers pursuing AI and it is striking how trust and governance vary depending on sector context. For example, CU Boulder directs the National Science Foundation-funded National AI Institute for Student-AI Teaming. The institute is developing research with tremendous possibilities for education with a deep commitment to ethics and reducing bias. In a completely different context, researchers at CU Boulder are part of an Air Force funded Multidisciplinary University Research Initiative that is studying trust in autonomous systems. This group is building models for real time predictions of trust, which should be adaptable for building better AI that can work with human teams in complex engineering systems. Moreover, AI-augmented learning for engineering education is an area of strategic emphasis in CU Boulder's College of Engineering and Applied Science, where our engineers are exploring the convergence between AI/machine learning and engineering and computer education and assessment. A goal of the effort is to advance student-centered learning and create next-generation learning environments in K-16, and professional engineering and computing education.

These examples are disparate, but NIST must consider AI risks from many angles. Bringing together experts from across many sector contexts will help ensure these varied perspectives are understood. Researchers should be at the table for a neutral assessment and red teaming activities so that these conversations go beyond industry priorities.

CU Boulder stands ready to support NIST in AI through JILA or other collaborative mechanisms to connect NIST with top AI researchers and help understand varied contexts for trust and safety. We are

appreciative of NIST's role reducing AI risk and creating AI standards. These activities will help ensure U.S. safety and competitiveness for a secure and prosperous future.

Thank you for considering this input, and please do not hesitate to reach out if you would like to discuss.

Sincerely,

Massimo Ruzzene
Vice Chancellor for Research and Innovation and Dean of the Institutes
Slade Professor of Mechanical Engineering
University of Colorado Boulder