To: Illinois Commission on Equitable Public University Funding, Technical Modeling

Workgroup

From: Gay Miller, Professor, University of Illinois at Urbana Champaign

Date: 4-13-23

Re: The value and importance of research in higher education – Public Comment

Research and Innovation Investment - Value and Importance:

- Research brings millions of direct \$ to Illinois:
 - o FY 2021 Research Sponsored Expenditures for UIUC alone \$731 Million
 - Many higher education institutions across Illinois also bring millions of direct \$
- Returns on investment in research: in the long run incalculable
 - Consider the impact of relatively recent research work
 - Covid <u>Shield</u> program:
 - Pandemic response and protection to the UIUC community; expanded protection to other Illinois education communities and citizens across Illinois; expanded protection to other states across the nation and world.
 - o Consider the impact of the research of a few Illinois notables:
 - Paul C. Lauterbur, Nobel Prize for keys to MRI.
 - <u>Sallie Greenberg</u>'s research led to her serving on a new <u>White House</u>
 <u>Council on Environmental Quality Task Force</u>.
 - Marc Andreessen et al: development of browsers and graphic internet.
 - Eight Illinois researchers are among world's most influential in 2019.
 - Consider the potential impact of these new research projects given their topics:
 - <u>Chan Zuckerberg Biohub Chicago</u> will do integrated cross-disciplinary research to solve medical problems of today.
 - \$9.5 Million study at UIUC to prevent viruses spreading.
 - \$3 Million at UIUC for advanced imaging to study Alzheimer's disease.
 - Collaborations across the broad academic research communities are critical for success in solving the most pressing societal problems of our day.

Research inextricably intertwined with education. Research inspires faculty and students.

- UIUC Research Park has 875 UIUC students working there.
- Alumni making a difference, in part fueled by their research learning:
 - Learn about <u>100 UIUC alumni</u>

Research, and education, inextricably intertwined with service and societal impact.

- o US Representative from 9th District of Illinois: <u>Jan Schakowsky</u>
- Research in higher education an incredibly important contribution to society.
- Research is at the core of the hearts, souls and minds of faculty, staff and students in Illinois. New discovery gives energy and drive making higher education all that it can be.

The development and subsequent use and value of models:

- Simplistically, higher education is supported by state funds, tuition, research grants, and philanthropy. This is a State-Students-Research-Donors funding structure.
 - The mix of the support from State-Students-Research-Donors varies from institution to institution.
 - In deciding how to support Illinois institutions of higher education and the students in them, it is critical to recognize and understand the different needs and missions of the institutions and the students in Illinois, and what they can do to benefit all of the citizens of Illinois.
- Trying to make funding of higher education completely quantitative, without regard for the complicated balance of State-Students-Research-Donors that exists and that is needed at different institutions, can easily lead less than optimal, even undesirable, outcomes.
- Research has a positive impact on all students in Illinois, including those who are the
 focus of the current discussions on how to equitably allocate State of Illinois
 resources to higher education. This is just one reason why research needs to be a
 component of how the state allocates resources to institutions of higher education.