The Endless Frontier Act

Funding for the great unfunded mandate?

June 4, 2021



"a bold initiative to advance and solidify the United States' leadership in scientific and technological innovation through increased investments in the discovery, creation, and manufacturing of technology critical to U.S. national security and economic competitiveness"



ENDLESS FRONTIER ACT OVERVIEW

- Create a new Directorate for Technology and Innovation at the NSF
- Authorize (not appropriate) \$100 billion over 5 years
- Increase research spending at universities
- Focus on ten key technology areas



NOW PART OF THE U.S. INNOVATION & COMPETITION ACT

- EFA has been incorporated into the U.S. Innovation and Competition Act (USICA) (S. 1260) as of May 18th
 - Numerous bills have also been folded into the USICA
 - Concern that NSF funding is being hollowed out
 - Now ~1,500 pages (was ~300 pages)

"Everyone knows this thing is going to pass, so every lobbyist wants to add everything they can" – Rep. Ro Khanna (D-CA)



SECTION 2109: ACADEMIC TECHNOLOGY TRANSFER

- "make awards, on a competitive basis, to eligible entities [higher ed or nonprofit] to advance the development and commercialization of technologies, particularly those in the key technology focus areas."
- Two Programs:
 - ACADEMIC TECHNOLOGY TRANSFER ENHANCEMENT PROGRAM
 - to support eligible entities in building sustainable technology transfer capacity
 - COLLABORATIVE INNOVATION RESOURCE CENTER PROGRAM
 - establish collaborative innovation resource centers that promote regional technology transfer and technology development activities



ACADEMIC TECHNOLOGY TRANSFER ENHANCEMENT PROGRAM

- "to support eligible entities in building sustainable technology transfer capacity"
- Funds to be used for [partial list]:
 - Providing <u>training and support to scientists, engineers, and inventors on technology</u> <u>transfer</u>, commercialization, and research protection.
 - Offsetting the costs of patenting and licensing research products, both domestically and internationally.
 - Ensuring the availability of staff, including technology transfer professionals, entrepreneurs in residence, and other mentors as required to accomplish the purpose of this subsection.
 - **Building technology transfer capacity** at institutions of higher education.
- award not more than \$1,000,000 per fiscal year to an eligible entity



COLLABORATIVE INNOVATION RESOURCE CENTER PROGRAM

- "establish collaborative innovation resource centers that promote regional technology transfer and technology development activities available to more than one institution of higher education and to other entities in a region."
- USE OF FUNDS.—An eligible entity that receives an award under this subsection shall use award funds to carry out one or more of the following activities, to the benefit of the region in which the center is located:
 - (A) Providing start-ups and small business concerns within the region with <u>access</u> to facilities, scientific infrastructure, personnel, and other assets as required for <u>technology maturation</u>.
 - (B) **Supporting entrepreneurial training** for start-up and small business personnel.
 - (C) Providing engineering and <u>entrepreneurial experiences and hands-on</u> <u>training for students</u> enrolled in participating institutions of higher education.



(f) REPORTING ON COMMERCIALIZATION BASED ON METRICS. —The Director shall establish—
(1) metrics related to commercialization for an award under this section; and
(2) a reporting schedule for recipients of such awards that takes into account both short- and long-term goals of the programs under this section.

(g) GEOGRAPHIC DIVERSITY.—The Director shall ensure regional and geographic diversity in issuing awards under this section.

(h) SUPPLEMENT NOT SUPPLANT. — The Director shall ensure that funds made available under this section shall be used to create additional support for technology transfer activities at eligible entities. For the duration of the awards, <u>recipients shall be required to maintain</u> <u>funding for such activities at similar levels</u> as the funding for those activities <u>for the</u> <u>2 fiscal years preceding the award</u>

USICA/EFA FUNDING

- EFA: \$81 Billion (only authorized)
 - \$4.06 Billion allocated for Section 2109 (Academic Technology Transfer)
 - \$252 Million in 2022
 - \$448 Million in 2023
 - \$882 Million in 2024
 - \$1.176 Billion in 2025
 - \$1.302 Billion in 2026
 - Note: FASTER Proposal estimated at ~\$432 million annually
- Many other components, including \$52 billion for CHIPS, semiconductors and 5G (both authorized AND appropriated)



- 200+ Amendments have been proposed
- Multiple Amendments have already been added
 - Including the Inventor Diversity for Economic Advancement (IDEA) Act
- Many others still in play final bill's language unclear...
- Senate expected to vote next week (June 8th)
- If passed, then reconciliation needed with a smaller House Bill (NSF For the Future Act – H.R. 2225)

