The impending 2013 Reauthorization of the America COMPETES Act affords an opportunity to introduce new or extend effective existing programs and initiatives related to: innovation and technology commercialization; federal institutional reforms to spur innovation; and science, technology, engineering, and mathematics (STEM) education and skills. ITIF provides 25 actionable recommendations:

**INNOVATION AND TECHNOLOGY COMMERCIALIZATION:**

1. Continue the R&D doubling path for core science programs.
2. Create a university-industry collaborative R&D tax credit.
3. Increase funding for Engineering Research Centers (ERCs) and Industry/University Cooperative Research Centers (I/UCRCs).
4. Support the designation of at least 20 U.S. “manufacturing universities.”
5. Create a National Network for Manufacturing Innovation.
6. Increase funding for the Manufacturing Extension Partnership.
7. Create a Spurring Commercialization of Our Nation’s Research program to support technology commercialization initiatives.
8. Fund a pilot program supporting experimental approaches to technology transfer and commercialization.
9. Fund the Regional Innovation Program.
10. Add more weight for technology transfer measures in the Department of Energy’s National Laboratories Performance and Evaluation Measurement Plans.
12. Allow the national laboratories to take an equity stake in start-ups.

**FEDERAL INSTITUTIONAL REFORMS TO SPUR INNOVATION:**

13. Reallocate NSF monies to areas with stronger national economic impacts.
14. Create a National Engineering and Innovation Foundation alongside NSF (or); Change NSF’s name to the National Science and Engineering Foundation.
15. Create a Deputy Director for Economic Growth and Innovation Position at NSF.
17. Establish an Office of Innovation Review in OMB.
SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (STEM)
EDUCATION AND SKILLS:

18. Fund specialty math and science high schools.
19. Offer planning grants for regions that want to create alternative types of STEM high schools or universities.
20. Provide prizes to colleges and universities doing best at retaining STEM students.
21. Expand undergraduate research opportunities, especially during freshman year.
22. Require colleges to report “National Survey of Student Engagement” scores.
23. Expand interdisciplinary higher education learning.
25. Allow foreign students receiving STEM Ph.D.s from U.S. universities to automatically qualify for green cards.

CONCLUSION:

• A robust reauthorization of the America COMPETES Act in 2013 can play an important role in bolstering the STEM education, scientific research, technology commercialization, and innovation activities that underpin U.S. economic competitiveness and growth.

ABOUT ITIF

The Information Technology and Innovation Foundation (ITIF) is a Washington, D.C.-based think tank at the cutting edge of designing innovation strategies and technology policies to create economic opportunities and improve quality of life in the United States and around the world. Founded in 2006, ITIF is a 501(c)(3) nonprofit, non-partisan organization that documents the beneficial role technology plays in our lives and provides pragmatic ideas for improving technology-driven productivity, boosting competitiveness, and meeting today’s global challenges through innovation.

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