## NIST PSCR RESEARCH INVESTMENTS BOLSTER PENNSYLVANIA'S ECONOMY

The National Institute of Standards and Technology (NIST) Public Safety Communications Research (PSCR) Division is the primary federal laboratory focused on conducting research, development, testing, and evaluation for public safety communications technologies. Their mission is to accelerate communications innovation in support of public safety communities and the citizens they serve.

The Middle Class Tax Relief and Job Creation Act of 2012 allocated \$300 Million from the Public Safety Trust fund to NIST PSCR to perform critical public safety communications R&D during a 10-year period. PSCR implemented numerous research mechanisms to support the development and deployment of the Nationwide Public Safety Broadband Network: grants, Small Business Innovation Research (SBIR) contracts, prize challenge competitions, and internal research. These research mechanisms were housed within six research portfolios and crosscutting initiatives to maximize their impact:

- User Interface/User Experience
- Location-Based Services
- Mission Critical Voice

- Public Safety Analytics
- Security
- · Resilient Systems

While the ultimate impact of these research mechanisms is the increased safety of first responders and their communities through improved communications technologies, PSCR was interested in better understanding how their R&D investments to date result in economic impacts that ripple outward to state economies. An independent analysis was conducted to demonstrate how PSCR's deployment of the \$300 Million from the Public Safety Trust Fund translated into broader impacts to the United States, including jobs, earnings, value added, and total economic output. PSCR's R&D investments resulted in economic output in 33 of the 50 states. Results of the analysis are presented here.

For more information, see NIST PSCR's Economic Impact Study.

## 6 Prize Challenge Participants Awards Totaling \$0.1 Million Carnegie Mellon University (5 awards) PUBLIC SAFETY COMMUNICATIONS

## **PENNSYLVANIA BY THE NUMBERS**



NIST INVESTMENT \$5.5 Million





OUTPUT \$12.5 Million



**VALUE-ADDED** \$17.5 Million



**EARNINGS** \$10.5 Million

**JOBS** 

140



Output: the total value of economic activity circulating through the U.S. economy generated by PSCR's R&D investments

Value-Added: how much the combined U.S. state economies grew over a period of time due to PSCR's R&D investments

**Earnings:** the change in household earnings in the U.S. economy generated by PSCR's R&D investments

Jobs: the change in the number of full- and part-time jobs generated by each one million dollar change in U.S. economic activity due to PSCR's R&D investments

\*All dollar amounts presented in 2022 and reflect data as of October 2022.

\*\*All values are rounded; thus, the sum of the components may not sum exactly to the NIST Investment amount.