



New Collar Jobs Act

*Re-Educate America's Industrial Workers
For High-Demand Jobs in Cybersecurity*

Our Challenge

The U.S. manufacturing sector has created few new factory jobs over the past 10 years. Yet while manufacturing employment has been flat since late 2014, American innovation has not declined.ⁱ Entrepreneurs are hard at work creating modern, automated factories of the future. New technologies, from robotics to distributed control systems, have created high-tech factories and industrial plants with unique employment needs.

But some parts of the country are still suffering from high unemployment even while jobs go unfilled in specialized skills. We need to re-tool and re-educate our workers for the careers of the future. Workers with both cybersecurity knowledge and industry-specific knowledge of operations are being actively sought out by industrial employers. Cisco Corporation estimates there are 1 million unfilled cybersecurity jobs seeking a wide range of skills.ⁱⁱ Cybersecurity personnel are desperately needed to address the [250 percent spike in industrial automation and control system cyber incidents](#) which occurred from 2011 to 2015.

The Cost of Inaction

If we continue to do nothing to address this challenge, we will waste millions of taxpayer dollars, will see more devastating cyber attacks, and threats to our national security will escalate. Recently, DHS and FBI issued warnings of [cyber attackers targeting U.S. nuclear power plants and raised alert levels](#). With the 2015 [OPM hack costing taxpayers over \\$133 million](#), expenses from the well-known [Target and Home Depot attacks reaching a combined \\$554 million](#), and the advent of novel cybersecurity threats posed by nation states and non-state actors, building a stronger and larger cybersecurity workforce is essential to the defense of our nation and the health of our economy.

Our Opportunity: New Collar Jobs

Our vision is to improve our economy and national security by re-educating industrial workers with high-demand skills in cybersecurity to fill these “New Collar” jobs – positions that have competitive salaries, career growth potential, and cannot be outsourced. And we should start by focusing on economically-distressed regions of the country.

The New Collar Jobs Act fosters job growth by providing federal stimulus for re-education of workers in cybersecurity. It will help our country by:

- Creating jobs in economically-distressed regions supporting the infrastructure and industrial sectors;
- Educating workers in early to mid-career stages to be qualified for higher paying, sustainable jobs;
- Addressing a critical shortage of specialized workers with operations technology and cybersecurity knowledge;
- Establishing a workforce to provide information security for critical infrastructure and manufacturing organizations making our nation safer.

Vision Meets Opportunity: The New Collar Jobs Act

- **Tax Credits:** A new tax credit for companies sending employees to learn cybersecurity skills, as defined by [NIST's National Initiative for Cybersecurity Education \(NICE\) Workforce Framework](#). Current federal tax law offers no tax credits for employer-provided training or education for employees.
- **Student Loan Repayment:** Loan programs will be modified to provide a financial incentive for individuals to take cybersecurity jobs in economically-distressed counties. Jobs can be in the form of instructor positions, provided they supply training for NICE Workforce Framework-recognized skills.
- **Grants:**
 - Authorizes double the funding for The CyberCorps Scholarship for Service Program; eliminates federal government hiring prioritization so that state, local, and tribal governments can hire graduates; and allows students to complete service obligation as cybersecurity instructors.
 - Increases funding by \$10 million to the Advanced Technological Education (ATE) Program Information Technology/Cybersecurity category, which is heavily focused on 2-year education programs. Community colleges play a vital role in training job seekers with needed skills.
- **Government Contracting Incentive:** Companies will receive a 5% increase in their evaluation score for proposals with demonstrated usage of the New Collar re-education tax credit. By mandating the Executive Branch add an evaluation factor for new contracts greater than \$5 million, companies will receive a better score on government bids.

The New Collar Jobs Act will incentivize companies to retrain their workers for excellent paying, sustainable jobs. These initiatives will generate thousands of new jobs. They will also provide growth in hard-hit areas of the country and will spawn additional training and entrepreneurial growth for new technologies, such as the Internet of Things.

While job growth is critical to the well-being of our nation, the value of cybersecurity in protecting our critical infrastructure cannot be ignored. This Act is an important step in growing a workforce with skills to defend the nation against future cyber attacks. The New Collar re-education initiative is a much-needed investment to head off the next big cyber disaster. This bill is necessary for our economic growth and our security.

ⁱ CRS, "The State of U.S. Manufacturing," Marc Levinson, February 22, 2017.

ⁱⁱ Mitigating the Cybersecurity Skills Shortage, CISCO,

<http://www.cisco.com/c/dam/en/us/products/collateral/security/cybersecurity-talent.pdf>