

21st Century Jobs Package

1. Innovation Funding for Local Communities and Mid-Size Cities Across the Country

The vision of this first section of the legislation is to marry federal resources and guidance with local initiative and innovation. The proposed budget for this part of the bill is \$900 billion over ten years. This would raise total public R&D spending to 1% of GDP by the end of the period, returning us to our role as an international leader. Most importantly, it would create as many as three million good new jobs per year. Many of these jobs would be in places that are left out of the innovation economy. Here is how the funding will be allocated via the newly created Federal Institute of Technology:

- Funds will go to land grant universities, community colleges, or HBCUs across the country that apply with a credible plan to create technology jobs. For example, the plan could include a proposal for technology software and equipment, infrastructure upgrades, faculty, STEM scholarships, apprenticeships, boot camps, venture capital seed money, recruitment initiatives, and stipends. Communities across the country, like Erie, Pennsylvania, should have access to this funding, not just the major innovation hubs like Pittsburgh. Each grant should be in the \$500,000-\$25 million range and help smaller communities like Jefferson, Iowa, Paintsville, Kentucky, and Clarksdale, Mississippi develop a vibrant tech base.
- The legislation also creates 30 new larger hubs that will be in mid-size cities, like Iowa City. While not every city in America will be awarded a hub, most hubs will only be an hour's drive away. The amount spent on the 30 technology hubs will be at least 20% of the total allocation. Innovation hubs that already exist, like Silicon Valley and Cambridge, Massachusetts are not eligible, and each hub will be focused on that region's specialty. For example, a hub in eastern Washington state could focus on emerging timber technology.
- In addition to the grant funding and hubs above, the remainder of the \$900 billion will be allocated through the National Science Foundation, Department of Energy, National Institutes of Health, each for basic science research. This funding will lead to new jobs of the future down the road and keep us competitive vis-a-vis China. This will be distributed to the leading universities, think tanks, and research centers across the country,

2) Computer Science for Every Student and More Educators

Making Computer Science Part of Every Student's Educational Experience

This bill modifies Sec. 1111(b)(1)(c) of the Elementary and Secondary Education Act to add "Computer Science" to the list of subjects that states must create academic standards for. Currently, that list only requires "mathematics, reading or language arts, and science." Effectively, this mandates computer science to be part of the base curriculum for all K-12 students nationwide. Computer science as defined in this legislation will include data science.

Investing in the Full Pipeline of Teacher Training

This bill also creates an \$8 billion grant fund administered by the Department of Education to states to help implement the new standards, train and certify educators at the local and higher educational levels, acquire educational materials, and build out technical infrastructure, including equipment.

Our goal through this legislation is to create 100,000 new computer science education K-12 teachers at a cost of \$5 billion per year. It will also include \$1 billion for state colleges and universities to grow the ranks of computer science education graduate faculty by 10,000, a more than tenfold increase from present levels.

3) Federal Software Preference to Keep Jobs at Home in Places Left Behind

This part of the package will incentivize contractors who sell software to the federal government to locate part of their workforce in America, and specifically in rural (as defined by the USDA) and disadvantaged minority areas. This legislation will give more favorable consideration to bids where at least 10% of the computer programming for the software is completed in America's rural and disadvantaged minority areas. By incentivizing this relocation of work, there could be a move by government contractors to open software development locations in areas left behind and create good paying tech jobs.

4) Stronger Equal Employment Opportunity Reporting Requirements

Stronger Equal Employment Opportunity reporting requirements will be created for companies based upon the number of employees they hire by country and location. This part would help identify businesses that are sending jobs to foreign countries by requiring employers to report the number of individuals they employ, the countries in which the employees perform their jobs, and the revenue generated by location. Such reporting would include the number of employees by country and their respective revenues in those countries. Currently, the Equal Employment Opportunity Commission (EEOC) already collects workforce data from employers with more than 100 employees (lower thresholds apply to federal contractors) as the EEO-1 Report, otherwise known as The Employer Information Report. Congress should adopt stronger Equal Employment Opportunity reporting requirements for companies based upon the number of employees they hire by country and location.

5) Rural and Minority STEM Scholarship

This provision creates Department of Education-administered "SMART Students Everywhere Grants" to fund up to 50,000 annual scholarships worth up to \$10,000 over the course of their study for racial and ethnic minority students and students from rural communities studying STEM in undergraduate, graduate, or certificate programs. The provision achieves this by reviving, focusing, and improving now-defunct "SMART grants" which were a smaller scholarship program for students studying STEM that ended in 2010.

6) Tech Hiring Incentives for Rural and Disadvantaged Minority Workers

Through a tax incentive, the provision will incentivize companies, located in rural and minority areas, to hire graduates who receive the rural and minority STEM scholarship. The following tax credit is authorized, and the IRS should create a regulation to implement it during the first year of an established FIT. Companies are eligible to claim the tax credit by hiring a person who received the rural and minority STEM scholarship:

- 5% of \$50,000 of the employee's first year wages. Maximum credit of \$5,000.
- 10% of \$50,000 of the employee's first year wages if they are a veteran, taking a job in a rural area, are from a rural area, or are minorities. Maximum credit of \$10,000.