

# Jobs for America

*Investments and policies for economic growth  
and competitiveness*

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# Improving economic and tax policy

## *Key findings*



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- Reducing the U.S. **corporate income tax rate** to match the OECD average would trigger new growth. By 2019, it could boost real GDP by \$375.5 billion (2.2 percent), create an additional 350,000 manufacturing jobs, and increase total employment by 2.13 million.
- Increasing the **R&D tax credit** by 25 percent and making it permanent could boost real GDP by \$206.3 billion (1.2 percent), generate 316,000 manufacturing jobs, and raise total employment by 510,000 within a decade.
- **Modernizing U.S. export controls** could increase exports in high-value areas. By 2019, these policy adjustments could enhance real GDP by \$64.2 billion (0.4 percent), create 160,000 manufacturing jobs, and heighten total employment by 340,000.

# Improving economic and tax policy

## *Methodology*



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- **Macro-econometric growth model of U.S. economy**
- **Long term tied to productive potential of economy**
  - **Human capital**
  - **Physical capital**
  - **Energy usage**
  - **Technological progress – R&D investment**
- **Short-run cyclical movements converge to long-run equilibrium**
- **Compare policy change scenario to a baseline projection without adjustment**

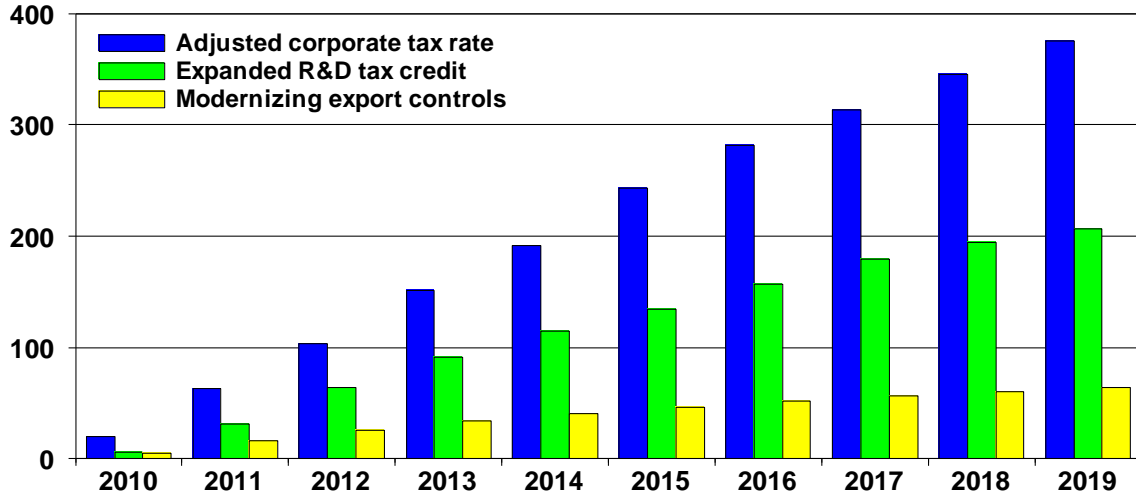
# Impacts on real GDP

*Absolute change from baseline*



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Billions of chained 2005\$



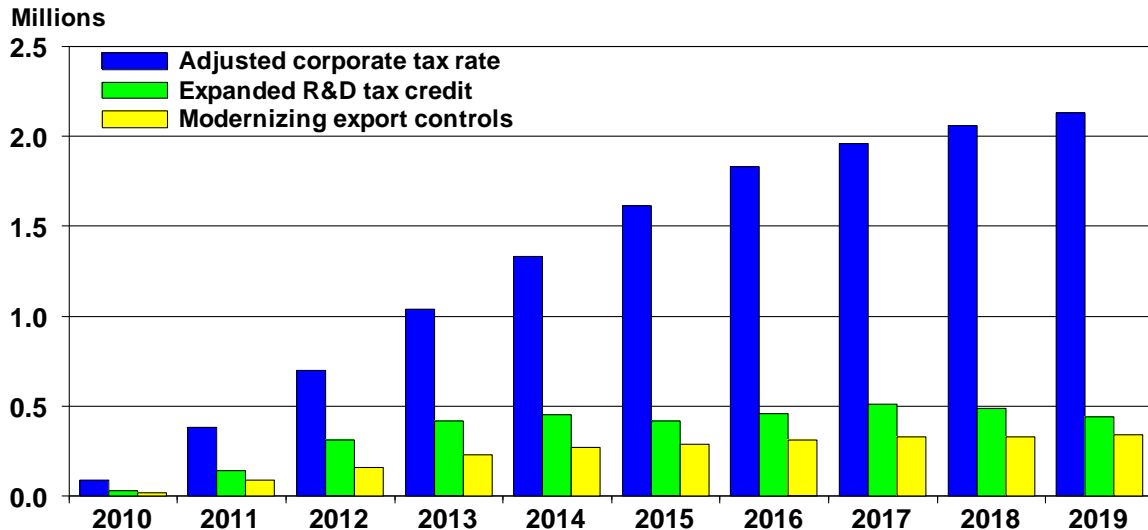
Sources: U.S. Bureau of Economic Analysis, Milken Institute.

# Impacts on total employment

*Absolute change from baseline*



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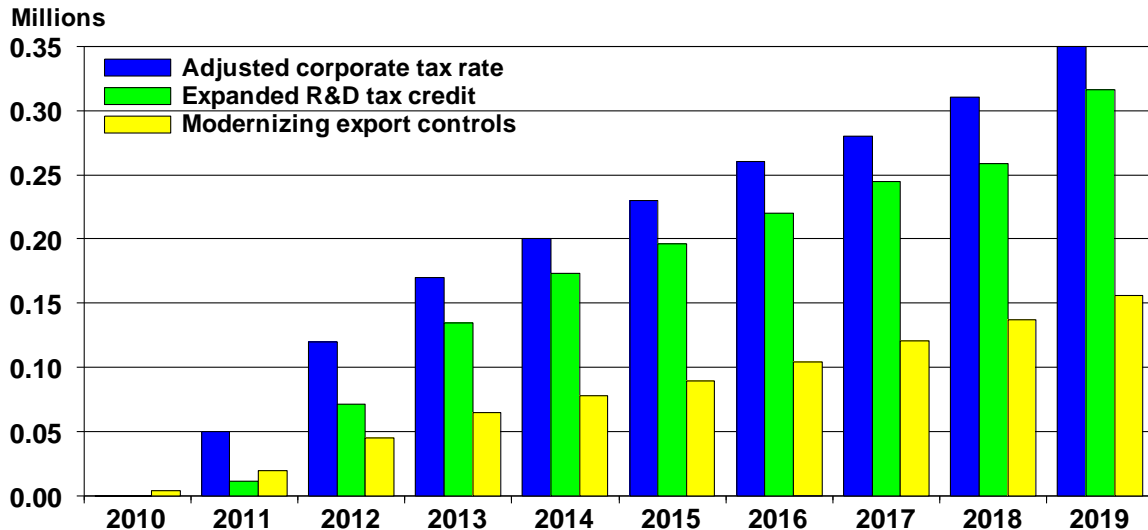
Sources: U.S. Bureau of Labor Statistics, Milken Institute.

# Impacts on manufacturing employment

*Absolute change from baseline*



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Sources: U.S. Bureau of Labor Statistics, Milken Institute.

# Corporate income tax policy simulation

## Results



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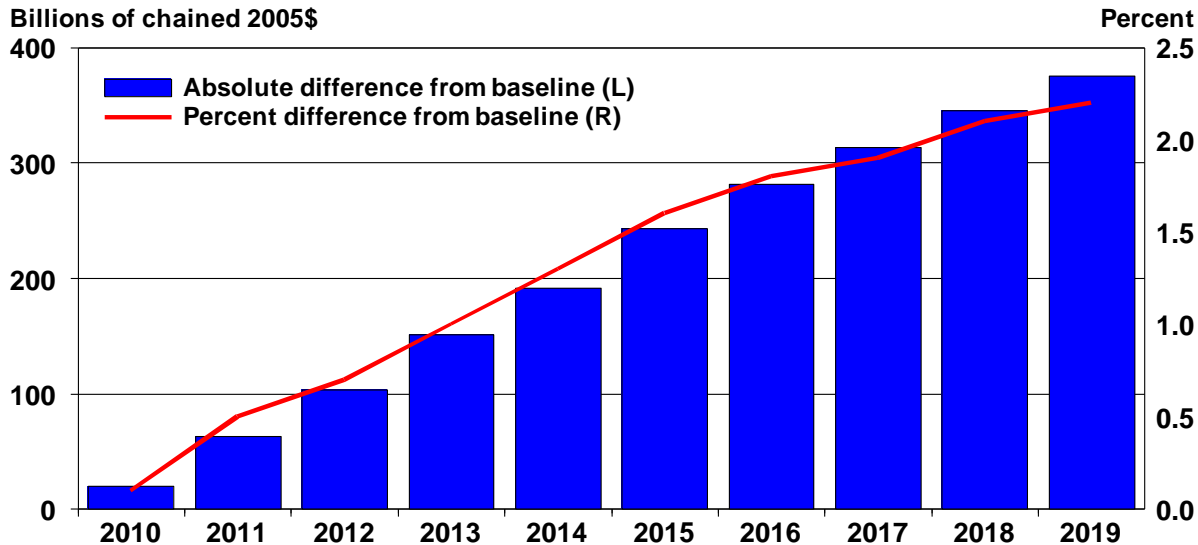
- Real GDP growth improves by 0.3 percentage point on an annual basis from 2011 to 2013, an average of 0.2 percentage point from 2014 through 2017, and 0.1 percentage point in 2018 and 2019, relative to a baseline projection without a change in tax policy.
- Real GDP is \$375.5 billion, or 2.2 percent, above the baseline projection in 2019.
- Exports respond to the lower corporate tax rate. By 2019, real exports stand at \$233.3 billion, or 7.8 percent, above the baseline projection.
- Real business fixed investment jumps 4.6 percent, or \$102.4 billion, above the baseline scenario in 2019.
- Industrial production in the rate-cut scenario exceeds the baseline by 3.9 percent in 2019, while total employment increases by 2.13 million (1.4 percent) and manufacturing employment rises by 350,000 (2.7 percent).

# Corporate income tax policy simulation

*Impact on real GDP*



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Sources: U.S. Bureau of Economic Analysis, Milken Institute.

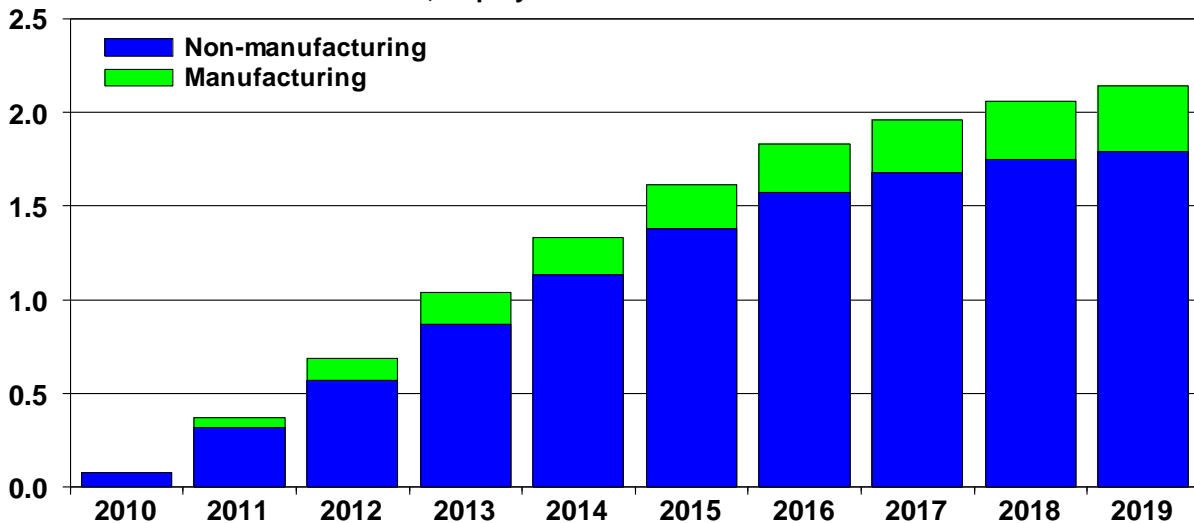
# Corporate income tax policy simulation

## *Impact on employment*



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Absolute difference from baseline, employment in millions



Sources: U.S. Bureau of Labor Statistics, Milken Institute.

# R&D tax credit permanent and increased by 25 percent policy simulation



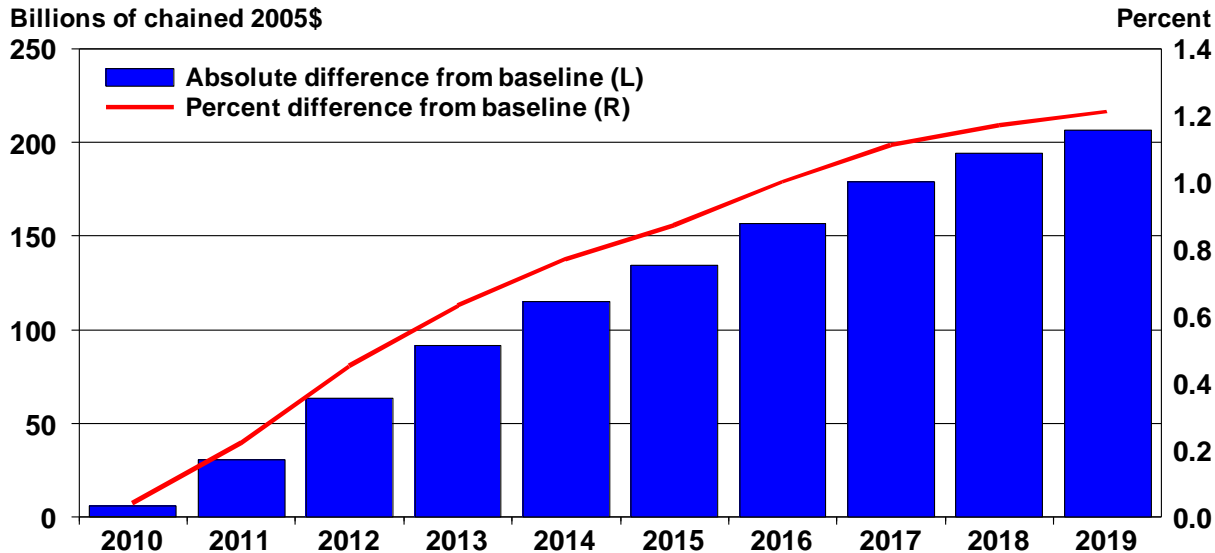
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## *Results*

- Real GDP growth improves by 0.2 percentage point on an annual basis from 2011 to 2013, and by 0.1 percentage point after 2013, relative to a baseline projection without a change in policy.
- After 10 years, real GDP is \$206.3 billion, or 1.2 percent, above the baseline projection in 2019.
- Real business fixed investment rises 4.8 percent, or \$107.3 billion, above the baseline scenario in 2019.
- Exports, especially technology-related goods and services, experience higher growth. By 2019, real exports stand at \$63 billion, or 2.1 percent, above the baseline projection.
- Industrial production exceeds the baseline scenario by 4.4 percent in 2019. Total employment rises by 510,000 jobs (0.4 percent) above the baseline at its peak in 2017, and manufacturing employment jumps by 316,000 jobs (2.5 percent) above the baseline in 2019.

# R&D tax credit permanent and increased by 25 percent policy simulation

*Impact on real GDP*



Sources: U.S. Bureau of Economic Analysis, Milken Institute.

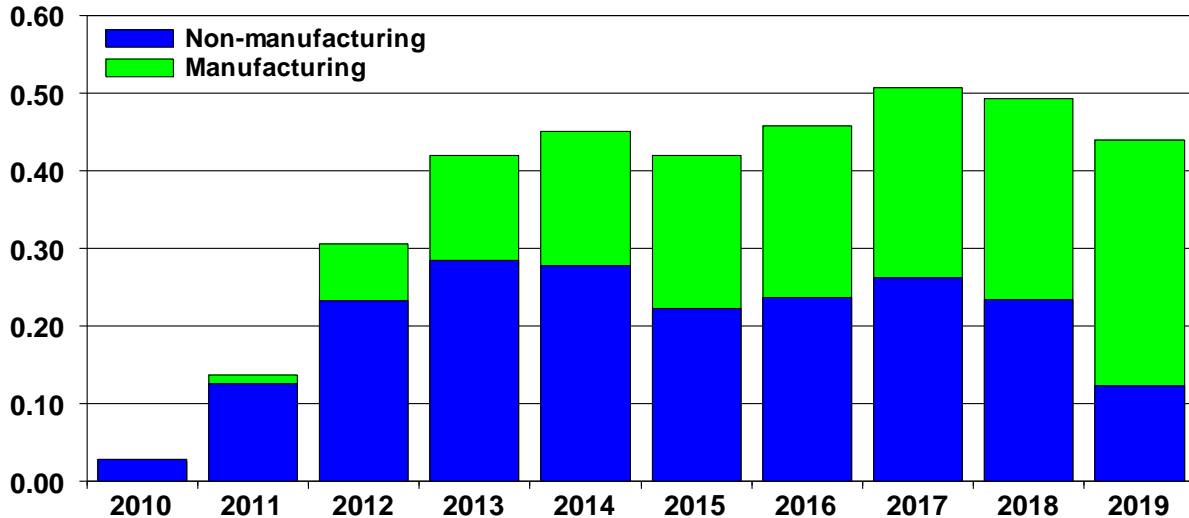
# R&D tax credit permanent and increased by 25 percent policy simulation

## *Impact on employment*



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Absolute difference from baseline, employment in millions



Sources: U.S. Bureau of Labor Statistics, Milken Institute.

# Modernizing export controls on commercially available technology products policy simulation



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## *Results*

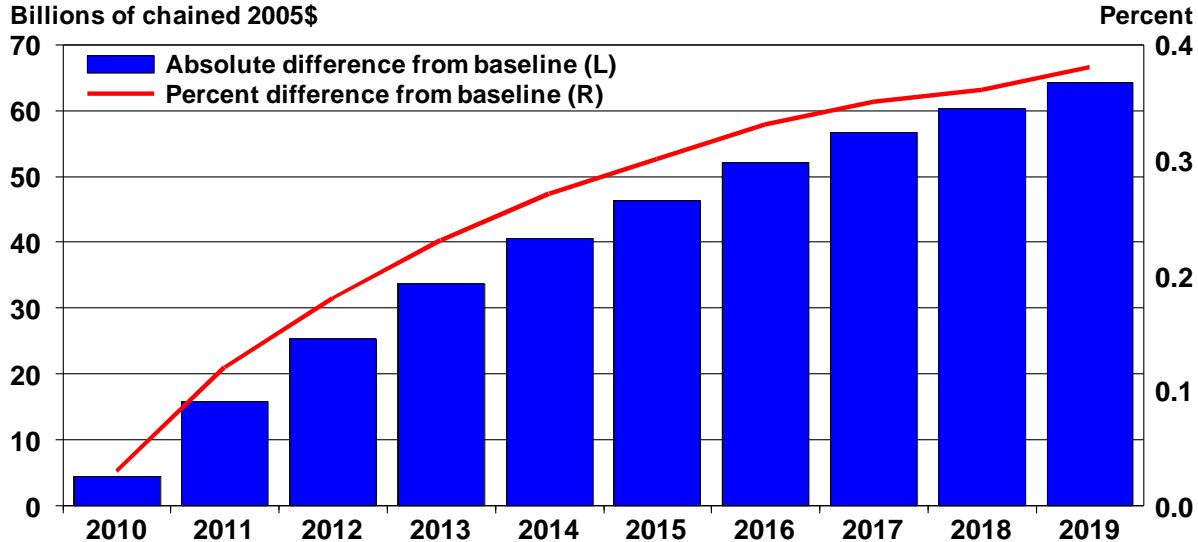
- **Modernizing U.S. export controls would produce higher export growth in the future, particularly in the high-valued-added areas in which the United States excels.**
- **The most rapid period of export growth (0.2 to 0.3 percentage point on an annual basis) relative to the baseline occurs from 2011 to 2016, based on a 2010 implementation. After that, export growth relative to that in the baseline moderates to 0.1 percentage point annually. Real exports are \$56.6 billion (1.9 percent) higher than the baseline in 2019.**
- **Real GDP rises by \$64.2 billion (0.4 percent) relative to the baseline projection in 2019.**
- **Real business fixed investment grows faster in the adjusted export control scenario than in the baseline scenario over the next decade. It stands \$18.7 billion (0.8 percent) above the baseline in 2019.**
- **Industrial production exceeds the baseline by 1.5 percent in 2019, while total employment increases by 340,000 jobs (0.2 percent) and manufacturing employment rises by 160,000 jobs (1.2 percent).**

# Modernizing export controls on commercially available technology products policy simulation



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## Impact on real GDP



Sources: U.S. Bureau of Economic Analysis, Milken Institute.

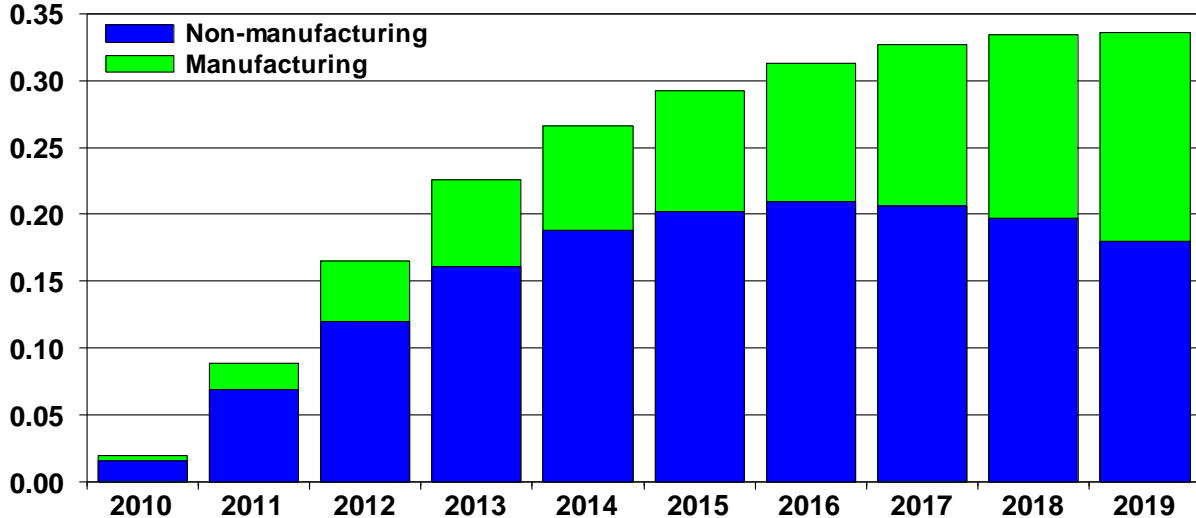
# Modernizing export controls on commercially available technology products policy simulation



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## *Impact on employment*

Absolute difference from baseline, employment in millions



Sources: U.S. Bureau of Labor Statistics, Milken Institute.

# Infrastructure Investment

## *Key findings*



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- The proposed investments analyzed in this report, totaling \$425.6 billion across 10 projects over three years (with just over half in highway and transit initiatives), translate into \$1.4 trillion in total output, including the ripple effects generated across all sectors.
- Taken together, these 10 investments have the potential to create 3.4 million jobs directly and, including all the ripple effects, 10.7 million jobs in total (an average annual increase of 3.5 million across three years).
- The projects outlined here could generate direct earnings of \$147.1 billion (and total earnings of \$420.6 billion, including all ripple effects).

# Infrastructure Investment

## *Key assumptions*



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- **These 10 projects were chosen because they affect energy security and involve infrastructure upgrades and expansion, which create the type of high-value jobs that bolster the economy.**
- **The report focuses on additional proposed investments using a framework based on recent funding allocation and industry knowledge.**
- **The proposed investment funding was derived from various sources, including congressional reports, industry analysts, academia, the National Association of Manufacturers (NAM), and the Milken Institute. These funds also reflect various incentives and public-private partnerships.**
- **Proposed investment funding is computed over a three-year period to focus on near-term job creation and economic impacts. These new investments would be in addition to recent funding.**

# Infrastructure Investment

## *Key assumptions (cont'd)*



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- **Regional Input-Output Modeling System (RIMS II) from the Bureau of Economic Activity (BEA) was used to compute the economic and employment impacts of the allotted and proposed investments. For example, highway expansion mainly involves construction, so the BEA multiplier for construction was applied to those funding amounts. Indirect employment effects capture byproducts such as manufacturing, wholesale and retail trade.**
- **Program descriptions from the federal government and trade groups provided the classification details used in the application of BEA multipliers.**
- **Proposed funding will follow the same allocation priorities as recently passed legislation. The assumption is that each agency recognizes and prioritizes allocation funding based on need.**

# Summary of economic impacts by project

(2010-2012)

Project	Proposed investment amounts (US\$B)	Direct impact employment (# jobs)	Direct impact earnings (US\$B)	Total impact employment (# jobs)	Total impact earnings (US\$B)	Total impact output (US\$B)
Highway and Transit System	225.0	2,106,914	85.8	6,189,480	238.2	775.4
Broadband Infrastructure	55.0	293,736	15.1	1,048,064	43.9	158.3
Onshore Exploration and Development/Offshore Drilling	46.5	194,844	9.9	896,185	38.8	145.0
Drinking Water and Wastewater Infrastructure	30.0	280,922	11.4	825,264	31.8	103.4
Sustainability Projects: Smart Grid	24.0	219,578	9.1	649,627	25.1	82.0
Nuclear Energy	15.0	139,145	6.1	397,271	15.6	48.7
Sustainability: Renewables (Solar, Wind, Biofuel)	14.5	115,874	4.8	337,558	13.1	44.3
NextGen	10.4	30,631	2.7	181,921	8.9	32.1
Inland Waterways	2.6	23,951	1.1	67,100	2.7	8.1
Sustainability Projects: Clean Coal Technology	2.55	24,018	1.1	66,127	2.6	7.9
<b>Total of all Projects</b>	<b>425.6</b>	<b>3,429,612</b>	<b>147.1</b>	<b>10,658,597</b>	<b>420.6</b>	<b>1,405.3</b>

Note: Total economic impact is an accumulated statistic over the 3-yr period.

For example, total employment translates to an average annual of 3.5 million jobs per year.

# Summary of economic impacts by project

## *Results*



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- Highway and transit investment of \$225 billion over three years creates 6.2 million jobs, roughly 2 million per year, along with \$238.2 billion in earnings and \$775.4 billion in output.
- Broadband infrastructure investment of \$55 billion creates 1.1 million jobs, 349,300 per year, along with 43.9 billion in earnings and \$158.3 billion in output.
- Onshore and offshore exploration and development investment of \$46.5 billion over three years creates 896,200 jobs, 298,700 jobs per year, along with \$38.8 billion in earnings and \$145 billion in output.
- Drinking water and wastewater infrastructure investment of \$30 billion over three years creates 825,300 jobs, 275,100 jobs annually, along with \$31.8 billion in earnings and \$103.4 billion in output.
- Smart grid investment of \$24 billion over three years creates 649,600 jobs, 216,500 jobs annually, along with \$25.1 in earnings and \$82 billion in output.

# Summary of economic impacts by project

## *Results (cont'd)*



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- Nuclear energy investment of \$15 billion over three years creates 397,300 jobs, 132,400 jobs annually, along with \$15.6 billion in earnings and \$48.7 billion in output.
- Renewable energy investment of \$14.5 billion over three years creates 337,600 jobs, 112,500 jobs per year, along with \$13.1 billion in earnings and \$44.3 billion in output.
- Next Generation Air Transportation System investment of \$10.4 billion over three years creates 181,900 jobs, 60,600 jobs per year, along with \$8.9 billion in earnings and \$32.1 billion in output.
- Inland waterways investment of \$2.6 billion over three years creates 67,100 jobs, 22,400 jobs annually, along with \$2.7 billion in earnings and \$8.1 billion in output.
- Clean coal technology investment of \$2.6 billion over three years creates 66,100 jobs, roughly 22,000 per year, along with \$2.6 billion in earnings and \$7.9 billion in output.

# Economic activity generated by construction

*Distribution of jobs across all sectors*



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