DOMESTIC AND GLOBAL SECURITY

WHERE ARE WE?

Three decades after the Cold War, an increasingly volatile world presents new types of security threats.

WHAT DO WE KNOW?

Domestically

- ☑ Cyber threats are challenging public trust in institutions and governance.
- ☑ Home-grown violent extremists remain an unpredictable terror threat.
- ☑ Social media is allowing extremists to find each other and meet—and gives them a platform for violent ideas.

Globally

- ☑ Major powers (e.g., Russia, China, and the United States) increasingly have competing interests.
- ☑ North Korea and Iran threaten regional and global order.
- ☑ Cyberattacks may be used against the United States and its allies to counter military advantages.
- ☑ The global threat from terrorism, including the Islamic State of Iraq and Syria (ISIS), will remain geographically diverse and multifaceted.

Foreign countries and regions with an established ISIS presence (as of June 2017)
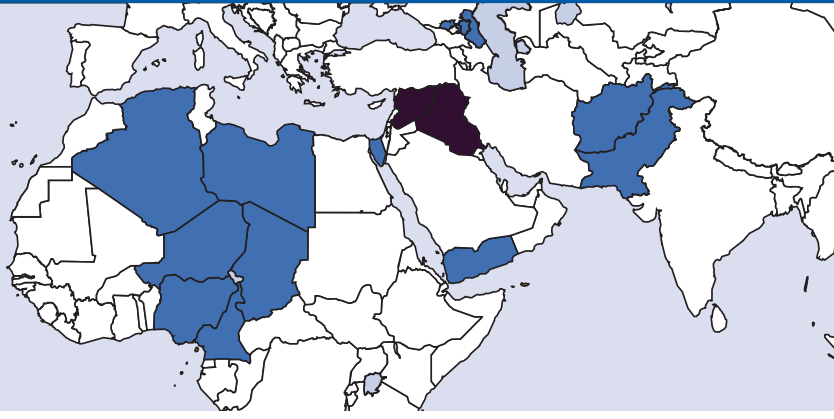
- ISIS has established core territory
- ISIS has established a branch designated as a foreign terrorist organization by the Department of State

Sources: GAO analysis of Department of State data; Map Resources (map).

WHAT ARE THE IMPLICATIONS?

New threats will affect how U.S. agencies and the military are organized and equipped to respond to them.

Protecting U.S. cyber assets complicates national security and defense planning.

Rebalancing, rebuilding, and recapitalizing the U.S. military and its assets will take leadership, time, planning, and money.

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FISCAL OUTLOOK AND THE DEBT

WHERE ARE WE?

The federal government is on a long-term unsustainable fiscal path.

76% Debt held by the public was **76 percent** of gross domestic product (GDP) at the end of FY17.

45% This compares to an average of **45 percent** of GDP since 1946.

Source: *2017 Financial Report* and GAO analysis of OMB data.

Absent policy changes, the debt-to-GDP ratio is projected to

surpass its historical high of **106 percent** within **14–22 years.**
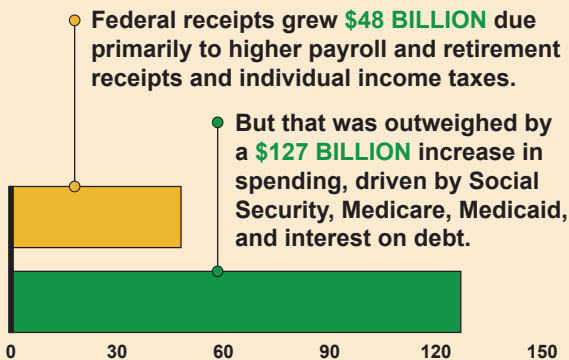
Source: GAO analysis of GAO, CBO, and the *2017 Financial Report* data.

Note: These projections do not reflect the effects of any legislation enacted after September 30, 2017.

WHAT DO WE KNOW?

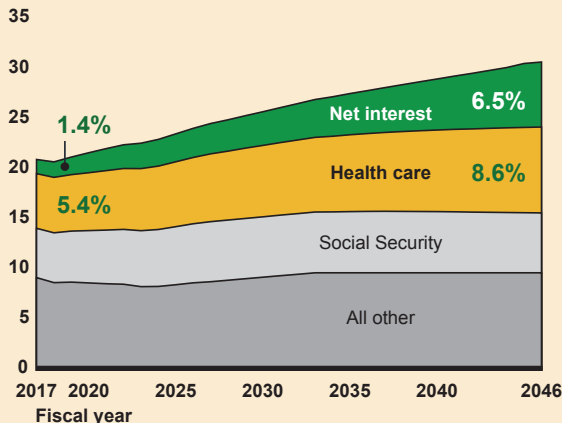In FY17, the federal deficit increased to **$666 billion**—up from $587 billion in FY16.

- Federal receipts grew **$48 BILLION** due primarily to higher payroll and retirement receipts and individual income taxes.

- But that was outweighed by a **$127 BILLION** increase in spending, driven by Social Security, Medicare, Medicaid, and interest on debt.

| 0 | 30 | 60 | 90 | 120 | 150 |

Dollars (in billions)

Source: *2017 Financial Report*.

Federal spending on **health care programs** and **interest on debt** are the key drivers of long-term spending increases.

Percentage of GDP

1.4% — Net interest 6.5%

Health care 8.6%

5.4%

Social Security

All other

2017 2020 2025 2030 2035 2040 2046
Fiscal year

Source: GAO.

Note: GAO's simulations do not reflect the effects of any legislation enacted after September 30, 2017.

WHAT ARE THE IMPLICATIONS?

The large and growing federal debt will:

reduce national savings and income in the long term

increase the government's interest costs

limit lawmakers' ability to respond to unforeseen events

make a fiscal crisis more likely

The longer that action to address these **fiscal challenges** is delayed, the greater and more drastic the changes will have to be.
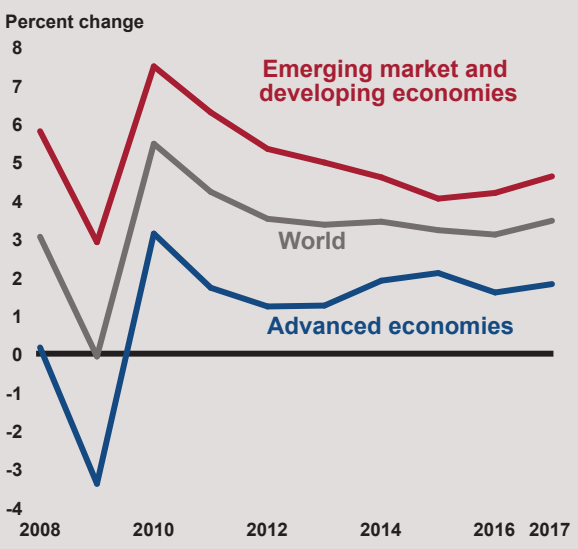
Source: CBO.

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ECONOMICS AND TRADE

WHERE ARE WE?

National and global economies have experienced divergent growth since the financial crisis.

WHAT DO WE KNOW?

Economies Have Experienced Divergent Growth since the Financial Crisis, with Faster Growth in Emerging Markets

Percent change

Emerging market and developing economies

World

Advanced economies

2008   2010   2012   2014   2016   2017

Source: International Monetary Fund.

DEBT Fiscal and monetary measures during the crisis left many countries with higher debt and lower interest rates.

Global economic growth has improved, especially in emerging markets.

International trade and technology have transformed the nature of work and consumption across the globe.

U.S. growth outpaced Europe and Japan, but with gains for only a portion of the population.

25 years Key international trade agreements such as NAFTA haven't been updated in 25 years.

Domestic policies have not consistently or effectively addressed the needs of those adversely impacted by globalization and technological change.

WHAT ARE THE IMPLICATIONS?

Many outcomes are possible as the choices and priorities of governments and institutions lead the global community to pursue collaborative, inclusive growth while accounting for nationalistic interests.

Opportunities to reinforce international cooperation lie in finding areas of common interest and addressing the consequences of globalization and technological change.
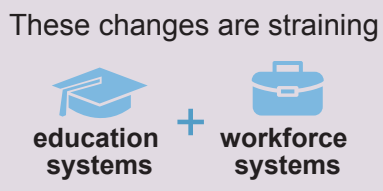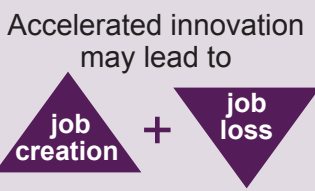
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JOBS AND EDUCATION

WHERE ARE WE?

Technological advances could change work, beyond any past experience.

New technologies affect:
- ☑ types of jobs that are available
- ☑ specific job skills required

Accelerated innovation may lead to

job creation + **job loss**

These changes are straining

education systems + **workforce systems**

WHAT DO WE KNOW?

38 percent of employers report difficulty recruiting employees, due to candidates' lack of technical skills.
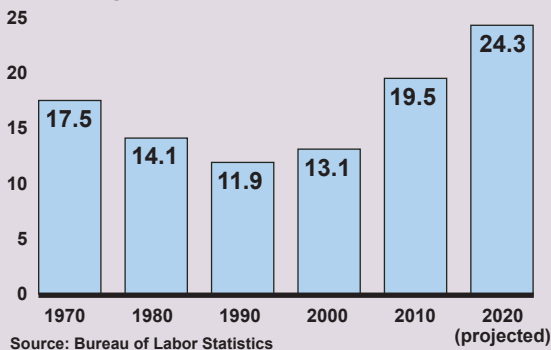
U.S. students lag behind their peers in **science** and **math**.

Many jobs require specialized **training**.

Workers aged 55+ are expected to comprise **24.3 percent** of the workforce by 2020.

Percentage of U.S. labor force

Year	Percentage
1970	17.5
1980	14.1
1990	11.9
2000	13.1
2010	19.5
2020 (projected)	24.3

Source: Bureau of Labor Statistics

WHAT ARE THE IMPLICATIONS?

Closer alignment between education and workforce systems could:
- ☑ better prepare workers for the future
- ☑ use financial resources efficiently

Uncertainty about the impact of technological changes could:
- ☑ slow implementation of new technology
- ☑ drive some companies to relocate their operations to other countries as a result

Failure to develop effective retraining efforts could result in:
- ☑ challenges for special populations facing barriers to employment, such as older workers
- ☑ increased division in income and employment opportunities

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DEMOGRAPHICS AND SOCIETY

WHERE ARE WE?

Demographics are shifting in ways that affect U.S. society and the economy.

WHAT DO WE KNOW?

Population

54% Between 1970 and 2013, the U.S. population grew 54%.

26% Between 2013 and 2050, the U.S. population is expected to grow about 26% (while the world population is expected to grow about 33%).

33%

Sources: U.S. Census and United Nations.

Longevity

The U.S. population is aging.

10,200 per day In 2018, an average of **about 10,200 people** will turn 65 each day.

<10% ⟶ **~20%**

The percentage of U.S. adults over age 65 was less than 10% in 1970 but is expected to be about 20% by 2030.
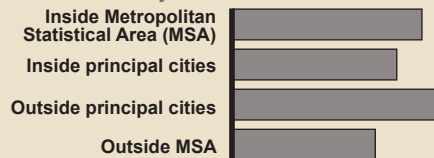
Sources: U.S. Census and Social Security Administration.

Diversity and income inequality

U.S. society has become increasingly diverse, but median incomes vary by demographics.
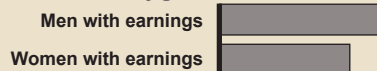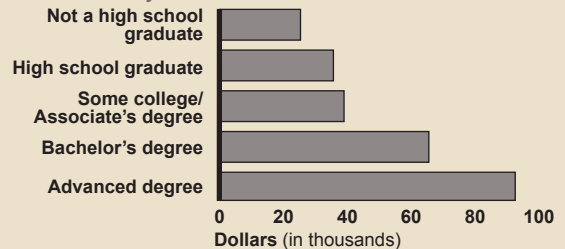
Median income by race
- White, not Hispanic
- Black
- Asian
- Hispanic (any race)

Median income by urban/rural
- Inside Metropolitan Statistical Area (MSA)
- Inside principal cities
- Outside principal cities
- Outside MSA

Median income by gender
- Men with earnings
- Women with earnings

Median income by educational attainment
- Not a high school graduate
- High school graduate
- Some college/Associate's degree
- Bachelor's degree
- Advanced degree

Dollars (in thousands): 0 20 40 60 80 100

Source: U.S. Census Bureau, Current Population Survey, 2015 and 2016 Annual Social and Economic Supplements.

WHAT ARE THE IMPLICATIONS?

These trends affect the nation's future economic performance and the basic fabric of society. They will pose challenges to:

☑ federal programs such as **Social Security** and **Medicare**

☑ public policies in areas such as **health care**, **education**, and **income support**

—with major effects on government budgets at all levels: federal, state, and local.

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SCIENCE AND TECHNOLOGY

WHERE ARE WE?

Five emerging technologies will potentially transform society.

1. Genome Editing

Genome editing: A technique used to make specific and intentional additions, deletions, or alterations to genetic material. It could:

- prevent, treat, or cure medical conditions
- create unintended and unforeseen genetic changes in the population

2. Artificial Intelligence and Automation

Artificial intelligence (AI) could:

- produce smarter machines that perform more sophisticated tasks
- disrupt the job market by eliminating jobs and creating others with new skill requirements

While its use is expected to grow, AI that is as intelligent as a human is not expected to occur in the next 20 years.

3. Quantum Information Science

Quantum information science: uses the behavior of atoms or molecules to obtain and process information in ways that existing systems cannot. It could:

- drastically improve information acquisition, processing, and transmission

4. Brain/Augmented Reality

Brain-computer interfaces: systems that connect the human brain to an external device. Research is ongoing to create implantable versions that could, for example, compensate for vision loss or hearing impairment.

Augmented reality: superimposing a digital image onto a view of the real world through a device, such as a smartphone camera. It is a new trend in entertainment, education, and health care.

5. Cryptocurrencies and Blockchain

Cryptocurrencies: virtual currencies—digital representations of value that are not government-issued—that operate online and verify transactions using a public ledger called **blockchain**.

Cryptocurrencies offer:

- benefits such as anonymity and lower transaction costs
- drawbacks such as making it harder to detect money laundering and other financial crimes

Blockchain could:

- reshape financial services
- have more security vulnerabilities as quantum computing, an area of quantum information science, develops

WHAT ARE THE IMPLICATIONS?

Continued **debate, study, and evaluation** are needed in the public sector to consider the potential implications:

economic   ethical   privacy   safety   security   societal

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GOVERNMENT AND GOVERNANCE
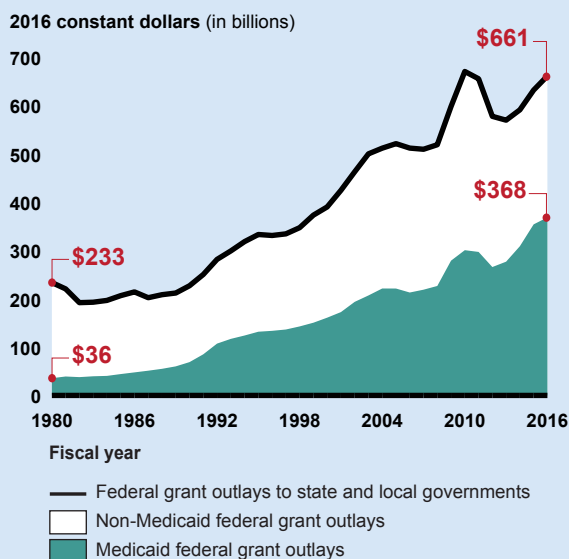
WHERE ARE WE?

The world is changing, and the government will need to develop new approaches and partnerships to get things done.

WHAT DO WE KNOW?

- ☑ The federal government increasingly relies on third parties to get its work done.

- ☑ The government does not always have the right people, tools, and data in place to manage these partnerships.

- ☑ Requirements for far-reaching programs, such as health care and transportation infrastructure, are constantly evolving.

- ☑ As technology and the workforce change, the government struggles to keep up.

- ☑ Public confidence in the federal government is at historic lows.

- ☑ Initiatives such as the DATA Act and Performance.gov promise transparent information on federal spending and performance but face challenges in implementation.

Total Federal Outlays for Grants to State and Local Governments, FY 1980–2016

2016 constant dollars (in billions)

$661
$368
$233
$36

700
600
500
400
300
200
100
0

1980   1986   1992   1998   2004   2010   2016

Fiscal year

—— Federal grant outlays to state and local governments
☐ Non-Medicaid federal grant outlays
■ Medicaid federal grant outlays

Source: GAO analysis of OMB data.

WHAT ARE THE IMPLICATIONS?

Achieving national policy objectives in this interconnected environment will require

developing whole-of-government strategies

systematically managing risk

collaborating across boundaries and borders

building communication and civic engagement

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ENVIRONMENT AND SUSTAINABILITY

WHERE ARE WE?

Our environment is increasingly stressed, and solutions require balancing competing needs among society, economy, and natural resources.

WHAT DO WE KNOW?

Agriculture, communities, and energy producers are increasingly competing for water.

Energy is critical to our economy, but some drivers of growth may adversely affect air and water quality and potentially change the climate.

The federal government must balance competing priorities for the vast amount of resources it owns and manages, including:

☑ **>640 million acres** of federal land

☑ rights to minerals underlying **>700 million acres**

☑ **1.7 billion acres** of the Outer Continental Shelf

Over the last decade, extreme weather and fire events have cost the government **>$350 billion**, including:

$205 billion for domestic disaster response and relief

$34 billion for wildland fire management

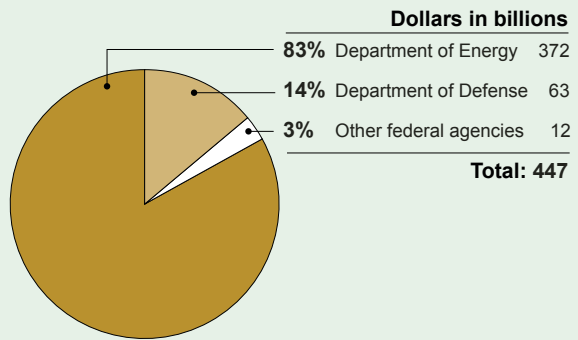**$28 billion** for maintenance and repairs to federal assets

$90 billion for crop and flood insurance

Total Reported U.S. Environmental Liability, FY 2016

Dollars in billions

83%	Department of Energy	372
14%	Department of Defense	63
3%	Other federal agencies	12
	Total:	**447**

Source: GAO analysis of the Financial Report of the U.S. Government, FY 2016.

WHAT ARE THE IMPLICATIONS?

Key stresses and interdependencies **cut across agency missions** and pose challenges that are larger than any one federal agency can manage.

Increasingly complex environmental and natural resource challenges emphasize the need for analysis of **forward-looking policy options** for Congress.

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