

# **Data Analytics for Government Oversight**

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**Predictive Analytics World for Government  
3<sup>rd</sup> Annual Conference**

**Thursday, September 19, 2013**

**Gene L. Dodaro  
Comptroller General of the United States  
U.S. Government Accountability Office**

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# Agenda

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- About GAO
- Why analytics are important for oversight
- How analytics can be used
- Challenges and opportunities
- Legislation can help

# U.S. Government Accountability Office

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- Independent, nonpartisan congressional watchdog
- Advise Congress and executive agencies to help improve government performance and ensure accountability
- Work comes from Congressional mandates and requests and the Comptroller General's authority

# U.S. Government Accountability Office

## GAO strategic planning goals

Goals	Objectives	
<p><b>Provide Timely, Quality Service to the Congress and the Federal Government to...</b></p> <p><b>...Address Current and Emerging Challenges to the Well-being and Financial Security of the American People</b> related to...</p>	<ul style="list-style-type: none"> <li>• Health care needs</li> <li>• Lifelong learning</li> <li>• Benefits and protections for workers, families, and children</li> <li>• Financial security</li> <li>• Effective system of justice</li> </ul>	<ul style="list-style-type: none"> <li>• Viable communities</li> <li>• Stable financial system and consumer protection</li> <li>• Stewardship of natural resources and the environment</li> <li>• Infrastructure</li> </ul>
<p><b>...Respond to Changing Security Threats and the Challenges of Global Interdependence</b> involving...</p>	<ul style="list-style-type: none"> <li>• Homeland security</li> <li>• Military capabilities and readiness</li> </ul>	<ul style="list-style-type: none"> <li>• Advancement of U.S. Interests</li> <li>• Global market forces</li> </ul>
<p><b>Help Transform the Federal Government to Address National Challenges</b> by assessing...</p>	<ul style="list-style-type: none"> <li>• Government's fiscal position and options for closing gap</li> <li>• Fraud, waste, and abuse</li> </ul>	<ul style="list-style-type: none"> <li>• Major management challenges and program risks</li> </ul>

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# Why analytics are important

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Data analytics can be used to

- Identify patterns or trends, and identify when aberrations occur
  - Data-mining and data-matching techniques can identify fraud or improper payments that have already been made
  - Predictive analytic technologies can identify fraud and errors before payments are made, helping avoid “pay and chase” payment recovery
- Determine whether problems are widespread and systematic in nature
- Evaluate program performance and outcomes
  - For example, accessing data to verify program eligibility, thus improving program integrity and payment accuracy

# How analytics can be used

## Top 10 program improper payment estimates by dollar amount

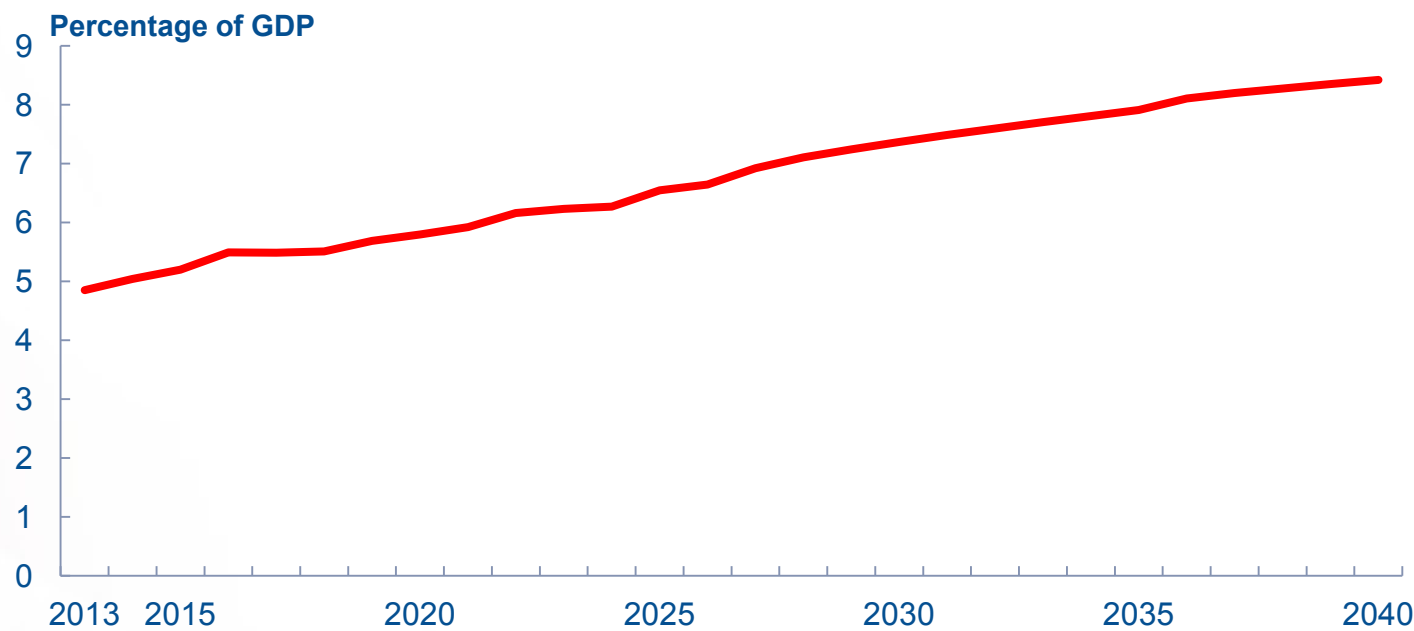
Program	Agency	Reported Improper Payment Estimates	
		Dollars (in billions)	Error rate (percent of outlays)
Medicare Fee-for-Service	HHS	\$29.6	8.5%
Medicaid	HHS	\$19.2	7.1%
Medicare Advantage (Part C)	HHS	\$13.1	11.4%
Medicare Prescription Drug	HHS	\$1.6	3.1%
School Lunch	USDA	\$1.6	15.5%
Earned Income Tax Credit	Treasury	\$12.6	22.7%
Unemployment Insurance	DOL	\$10.3	11.4%
Supplemental Security Income	SSA	\$4.7	9.2%
Old Age, Survivors & Disability Insurance	SSA	\$3.2	.4%
Supplemental Nutrition Assistance Program	USDA	\$2.7	3.8%

Source: Estimates reported by OMB for FY 2012.

# How analytics can be used

Expected growth in federal health care spending highlights need for oversight

## Spending on Major Federal Health Care Programs Under GAO's Spring 2013 Baseline Extended Simulation

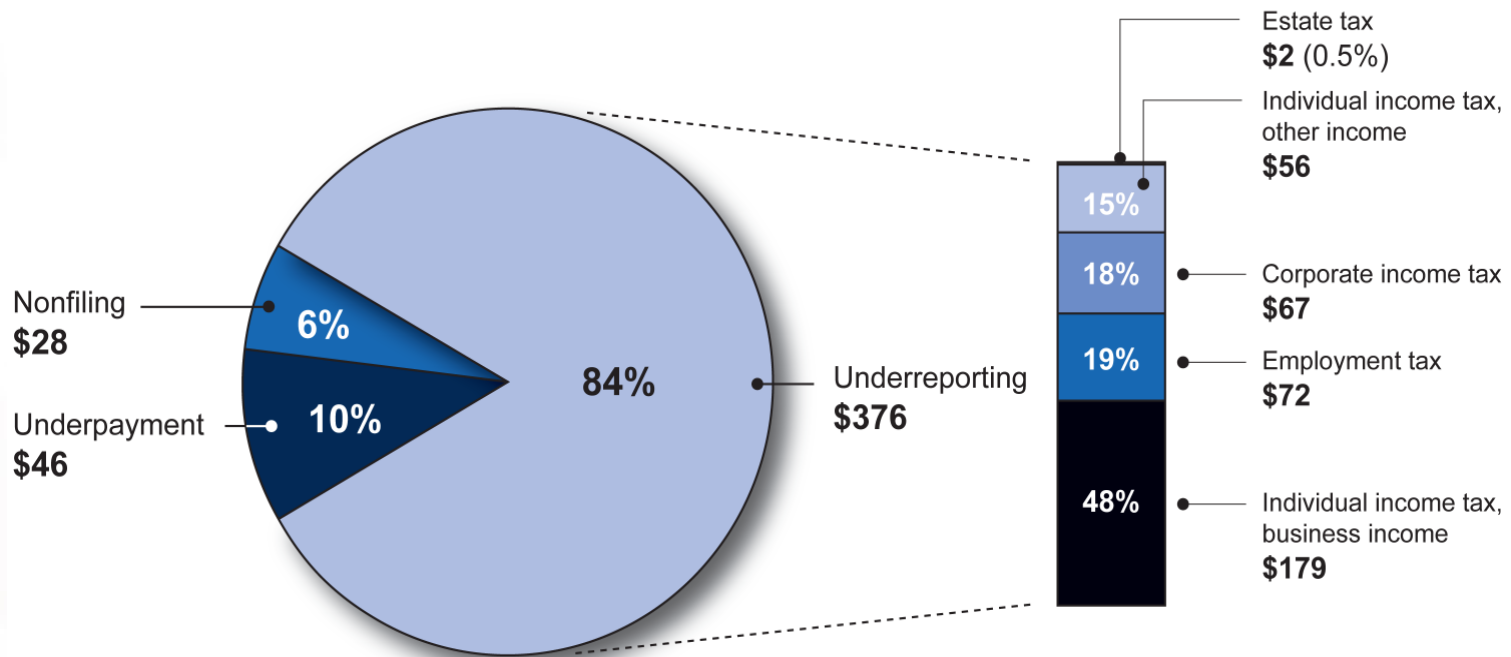


Source: GAO analysis.

# How analytics can be used

Analytics can help with the tax gap—the difference between taxes owed and paid

**Tax Gap Components** (Dollars in billions)



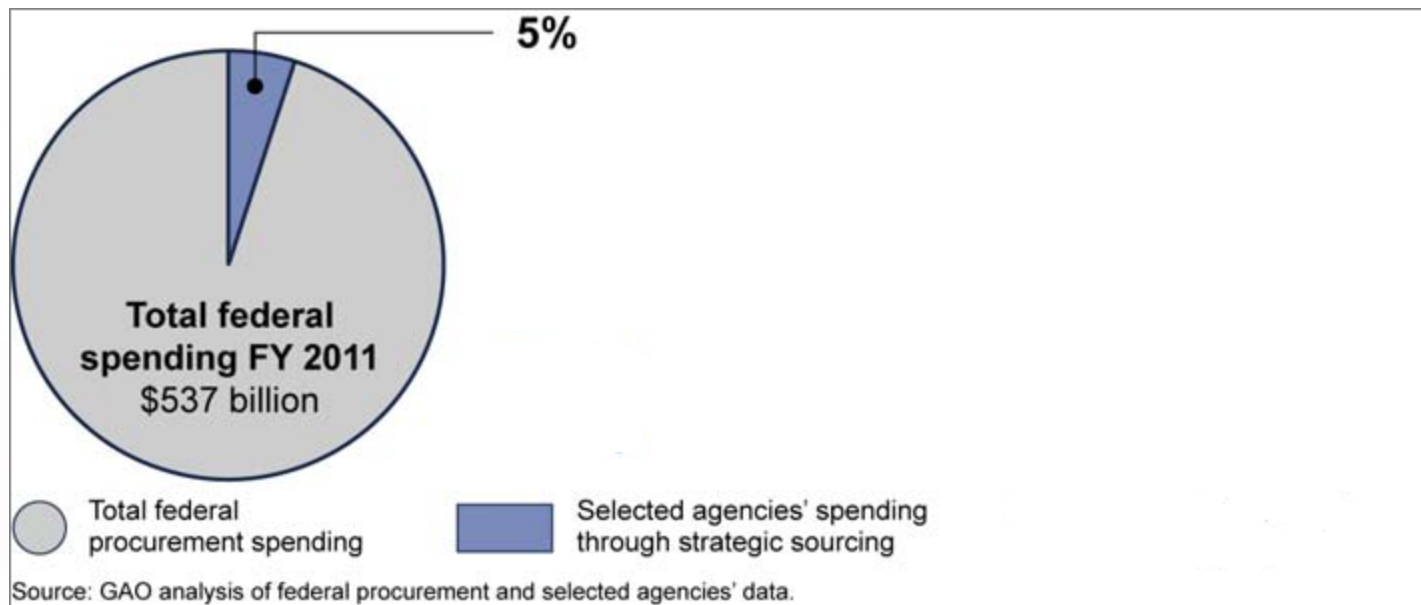
Source: GAO Analysis of IRS data.



# How analytics can be used

GAO found that large federal agencies leveraged only a small fraction of their buying power through strategic sourcing and achieved limited savings

**Selected Agencies' Strategic Sourcing Spending and Savings Reported in FY 2011**



Achieving a 10 percent savings rate would yield \$50 billion in annual savings

## Challenges and opportunities

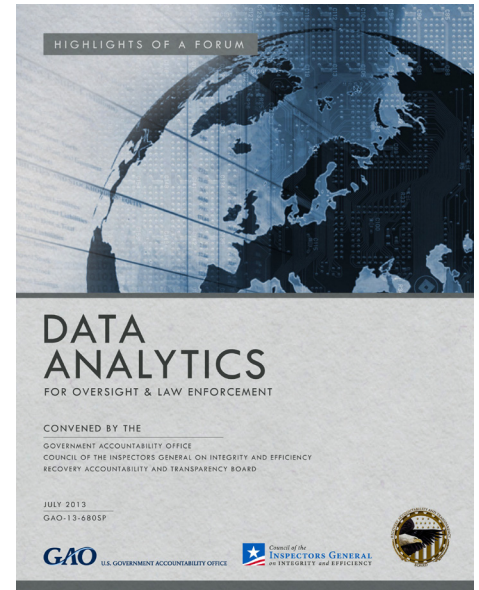
### Recent forum identified challenges in using data analytics

#### Accessing and using data

- Need for more awareness of data sources
- Lack of incentives to design systems useful for oversight due to differing missions
- Difficulties in measuring results and prioritizing resources

#### Sharing data

- Varying standards make interpreting and using others' data difficult
- Intergovernmental challenges—such as costly access to certain federal data and perceptions that sharing is a “one-way street”



# Challenges and opportunities

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## Opportunities identified to enhance analytics efforts

- Attracting and retaining knowledgeable and skilled staff
- Garnering organizational support by demonstrating value and building credibility
- Supporting legislative updates to better balance privacy with data transparency

## Forum next-steps

- Compile directories of data sources, known offenders, and open-source analytics, modules, and tools
- Explore and work to address any statutory issues related to data access and use
- Develop an ongoing community of practice focused on data-sharing challenges
  - [GovernmentDataShare@gao.gov](mailto:GovernmentDataShare@gao.gov)

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## Legislation can help

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### GPRA Modernization Act of 2010

- Requires senior leadership involvement at the government-wide and agency levels
  - Identify and prioritize key performance and management issues
  - More-frequent analysis and monitoring of performance
- Quarterly senior-level data-driven meetings on key goals
- Disclosure on the reliability and accuracy of performance information
- Transparency of results achieved through web-based reporting

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## Legislation can help

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### Improper Payments Elimination and Recovery Improvement Act of 2012 (IPERIA)

- Passed in January 2013
- Latest in a series of laws addressing government-wide improper payments
- Requires that agencies, at a minimum, check multiple existing databases to verify benefit eligibility before making a payment to a person or entity

# Legislation can help

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## Digital Accountability and Transparency Act (DATA Act)

- Introduced in the House and Senate in May 2013
- Both bills would expand requirements for federal spending data
  - Government-wide financial data standards
  - OMB reviews of federal agencies' financial reporting to reduce duplicative reporting
  - Inspector General of each agency to report on the timeliness and accuracy of each agency's spending data, with GAO to assess and report on the information reported by each agency
  - Recovery Accountability and Transparency Board to develop and test IT and oversight systems to enhance transparency and reduce fraud, waste, and abuse



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## **GAO on the Web**

Web site: <http://www.gao.gov/>

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