Using Technology-Driven Strategies to Improve Fiscal Stewardship

April 22 | 2:00–3:50 PM ET | 2 CPEs | FOS: AUDG

AGA **Webinars**

Welcome!

Using Technology-Driven Strategies to Improve Fiscal Stewardship

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AGA **Webinars**

Moderator and Speakers

- Moderator:
  - Berri Davis, Director, Sikich

- Speakers:
  - Ken Dieffenbach, Executive Director, PRAC

  - Tina Kim, Deputy Comptroller, State of New York

  - Dr. Sterling Thomas – Chief Scientist, GAO

Using Technology-Driven Strategies to Improve Fiscal Stewardship

April 22, 2026

Ken Dieffenbach, CFE, CCEP
Executive Director
Pandemic Response Accountability Committee

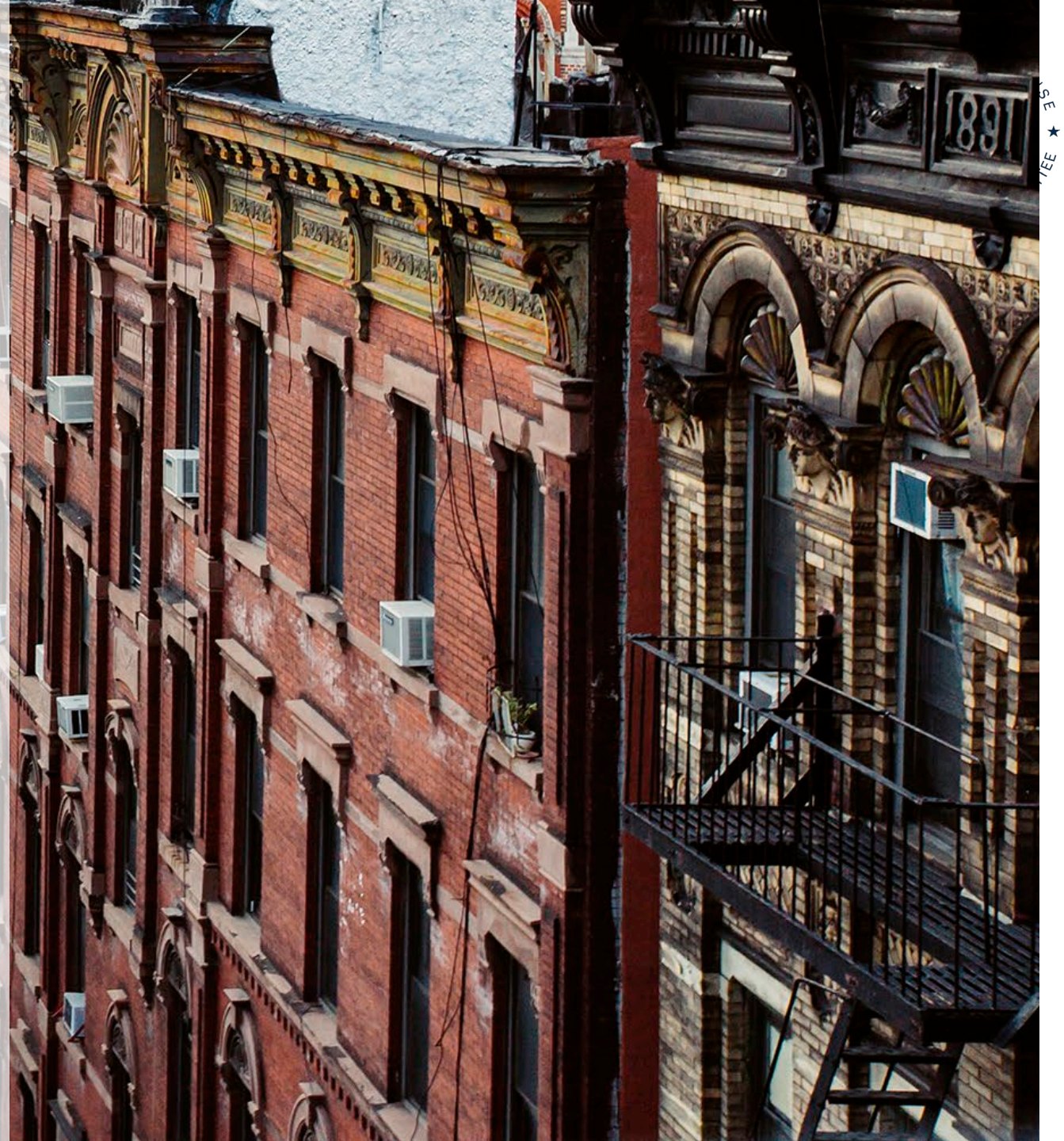
FULL HING TRADING INC
TEL: 347-703-6
1891

New York City

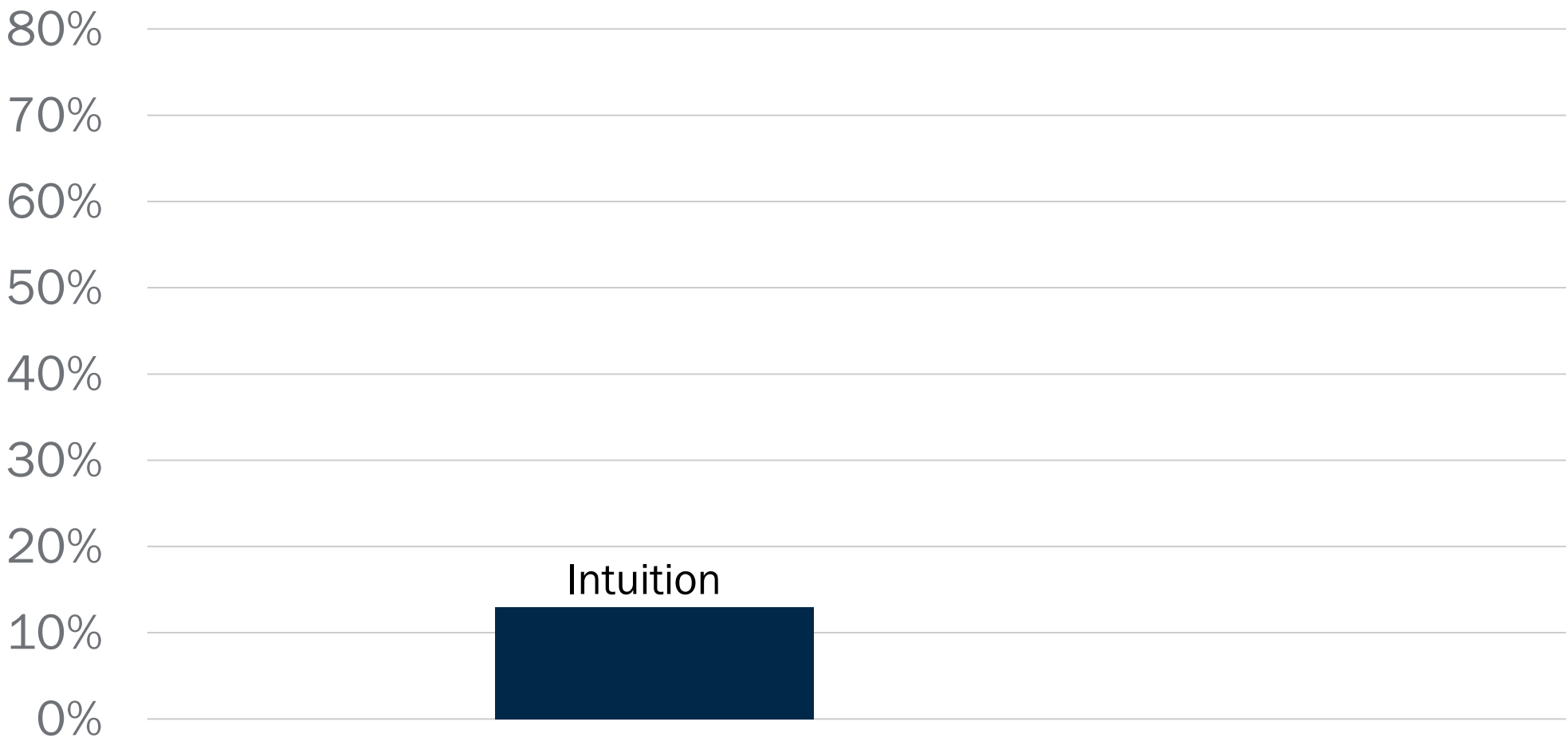
- 8,400,000 residents
- 900,000 residential properties
- 25,000 annual housing complaints
- 200 housing inspectors

“Available” Data

- Utility usage & payments
- Property taxes assessed and paid
- Building permits
- Foreclosures
- Fire calls
- Police calls
- Criminal activity
- Code violations



Inspections that Led to “Vacate” Orders



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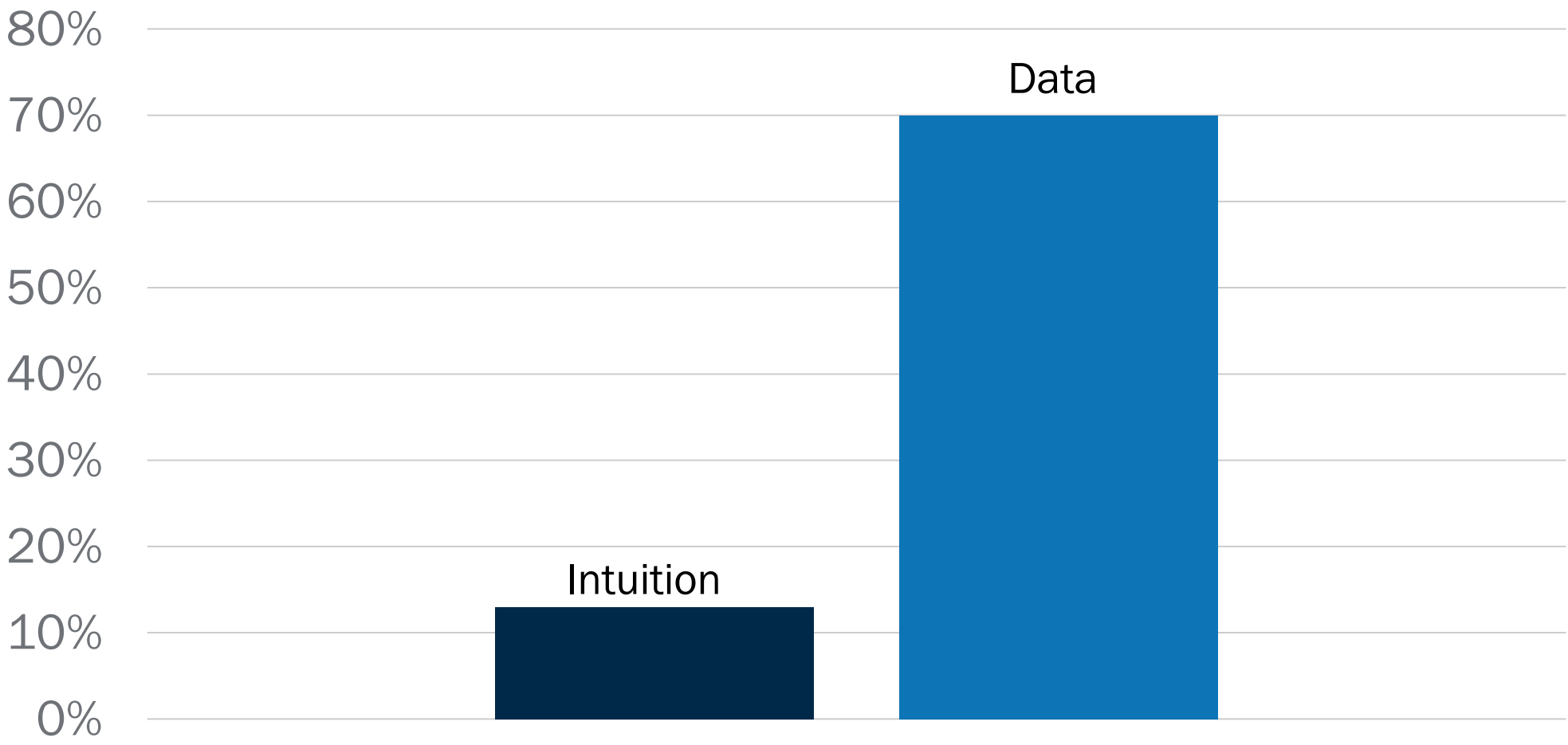


What is the PRAC?

- March 2020 — the CARES Act created the Pandemic Response Accountability Committee to conduct independent oversight of the more than $5 trillion in pandemic relief.
- July 2025– extended in the "Big Beautiful Bill" to 2034 and expanded the scope to include oversight of the bill.
- Mitigates fraud risks that cut across program and agency boundaries.
- Comprised of 20 federal Inspectors General
- Supports a community of 14,000 oversight professionals.

Lessons Learned in Oversight of Pandemic Relief Funds
UPDATED
As of June 8, 2022
PANDEMIC RESPONSE ACCOUNTABILITY COMMITTEE
Blueprint for Program Inte
Chapter 1: Best Prac for Strengthening Federal Programs
May 2024
Blueprint for Enhanced Program Integrity
Chapter 2: Opportunities for Policymakers to Improve Program Integrity
August 2024
Blueprint for Program Inte
Chapter 3: Fraud Pre and Detection
December 2024
Blueprint for Program Inte
Chapter 4: Whole-of- Approach
April 2025
Blueprint for Enhanced Program Integrity
Chapter 5: Cross-Cutting Projects
September 2025
FRAUD PREVENTION ALERT: Pre-Award Vetting Using Data Analytics Could Have Prevented Over $79 Billion in Potentially Fraudulent Pandemic Relief Payments
The PRAC Analyzed Applications Across Major Pandemic Relief Programs to Identify Potential Fraud Using Stolen or Invalid Social Security Numbers
FRAUD ALERT: PRAC Identifies $5.4 Billion in Potentially Fraudulent Pandemic Loans Obtained Using Over 69,000 Questionable Social Security Numbers
Improved Government Information-Sharing and Controls Would Strengthen Program Integrity and Better Protect the Public
FRAUD PREVENTION ALERT: Using Data Analytics to Compare Income Representations by Applicants Seeking Benefits from Multiple Federal Programs Could Have Prevented Hundreds of Millions of Dollars in Pandemic Fraud
FRAUD ALERT FOLLOW-UP: Improved Sharing of Death Records and Use of the Do Not Pay System Would Strengthen Program Integrity and Better Protect the Public
PRAC Identifies $38 Million in Potentially Improper or Fraudulent Pandemic Loans Associated with Social Security Numbers of Deceased Individuals

Data Analytics

The future of fraud prevention and detection lies in leveraging all available information and exploiting it via automated analysis.

For example, predictive models can “score” applications or ongoing awards for risk and help target interventions and oversight.

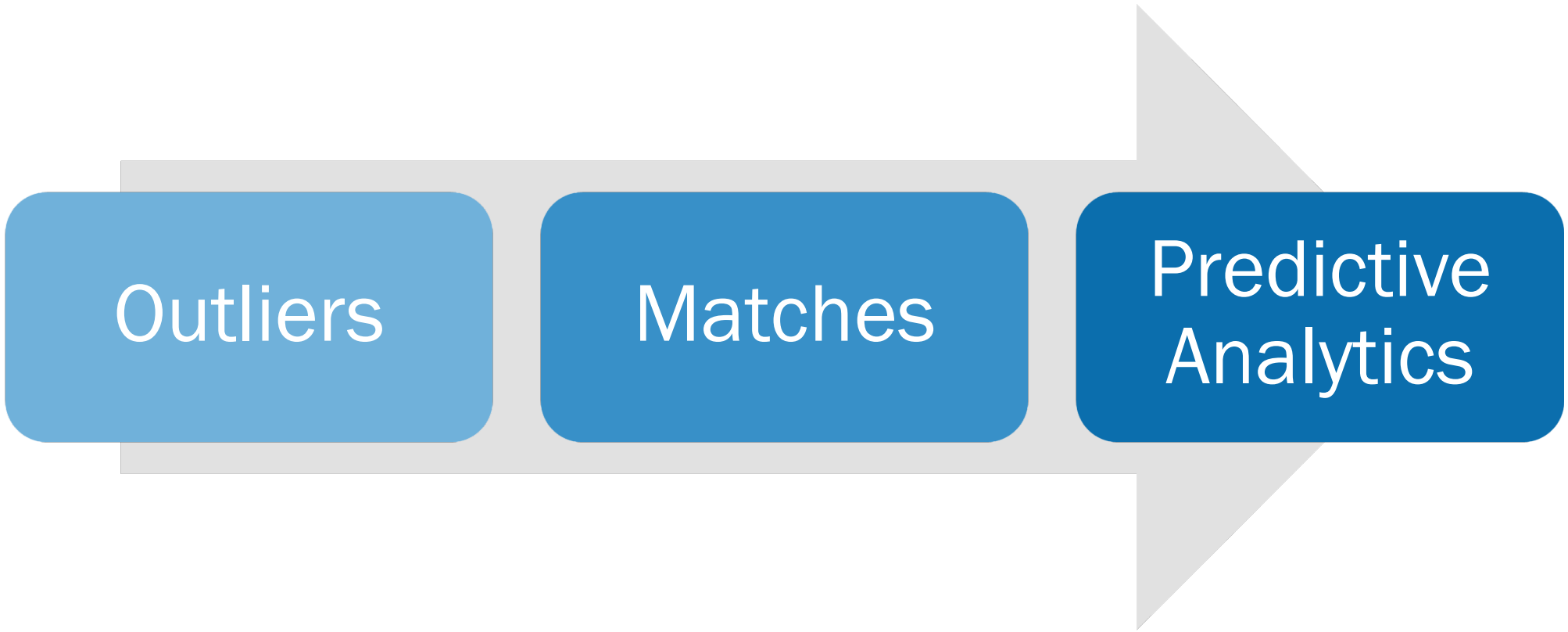
We now have the ability to “see” all transactions in real-time and analyze them for patterns, trends, and anomalies and compare them to everything we have “seen” previously.

Data Literacy is a Core Skill

…the ability to explore, understand, and communicate with data in a meaningful way. Can be technical or non-technical.

Data literacy helps people identify, understand, interpret, and act on data within a business context to influence business value or outcomes.

One Way to Look at Big Data



Cordele, Georgia Case Example

City population is approximately **10,000 people**, but **11,000 claims** filed for unemployment

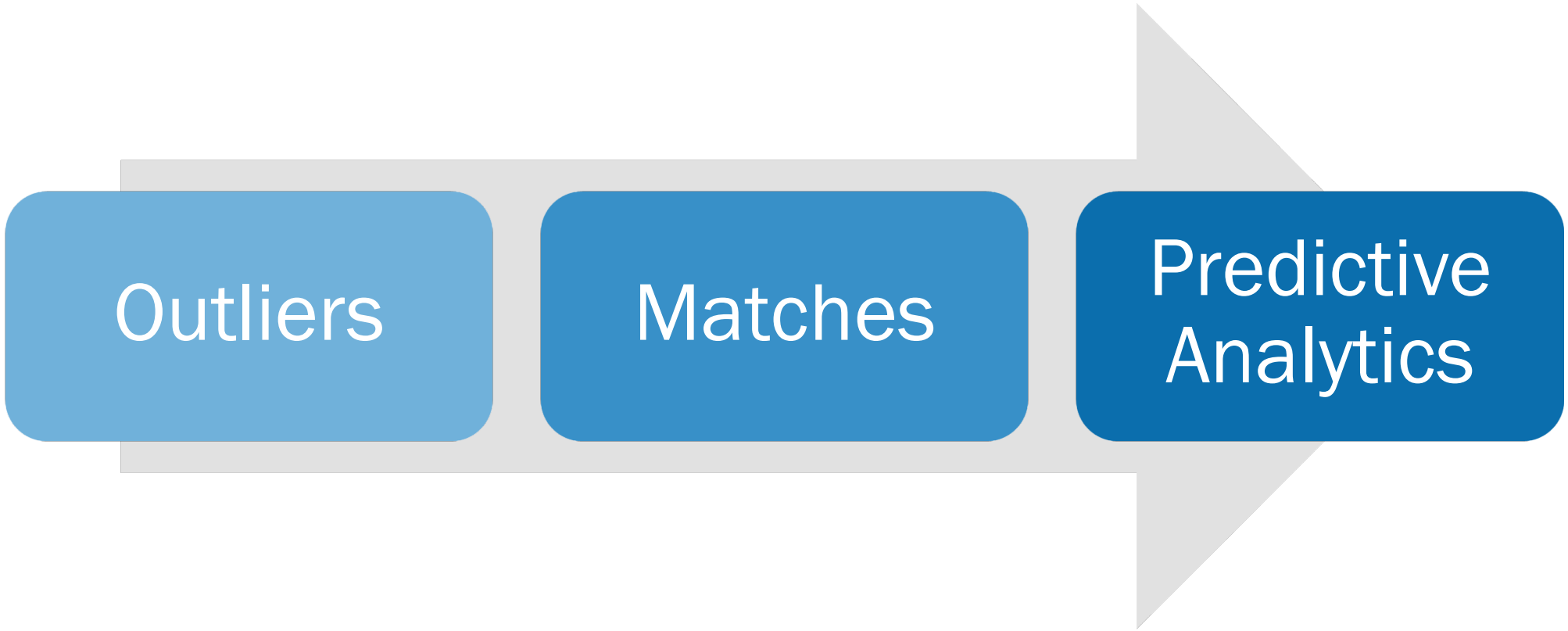
$54M in total claims related to **35 fictitious employer accounts**

Most **street addresses** listed were **invalid**

46 other **state workforce agencies** allegedly targeted with **similar false claims**

A multi-agency investigation led to **12 individuals** being **indicted**

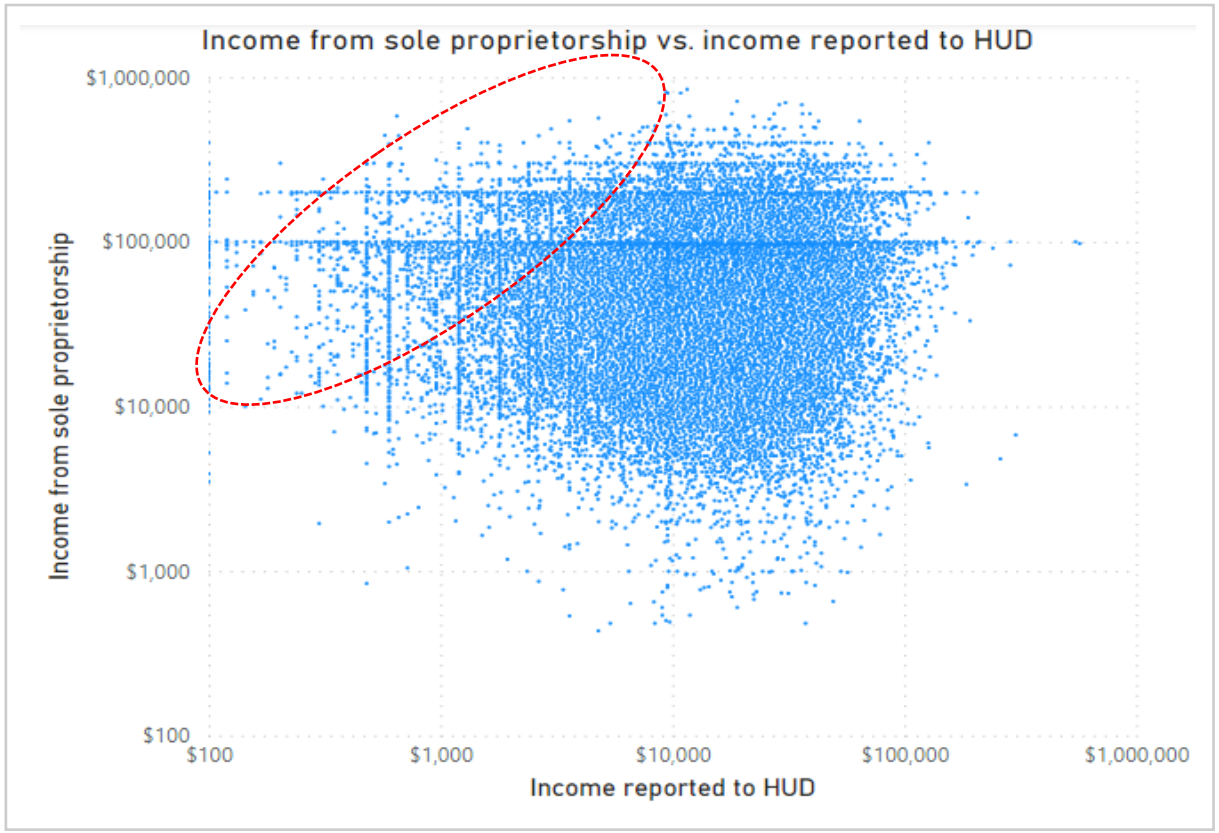
One Way to Look at Big Data



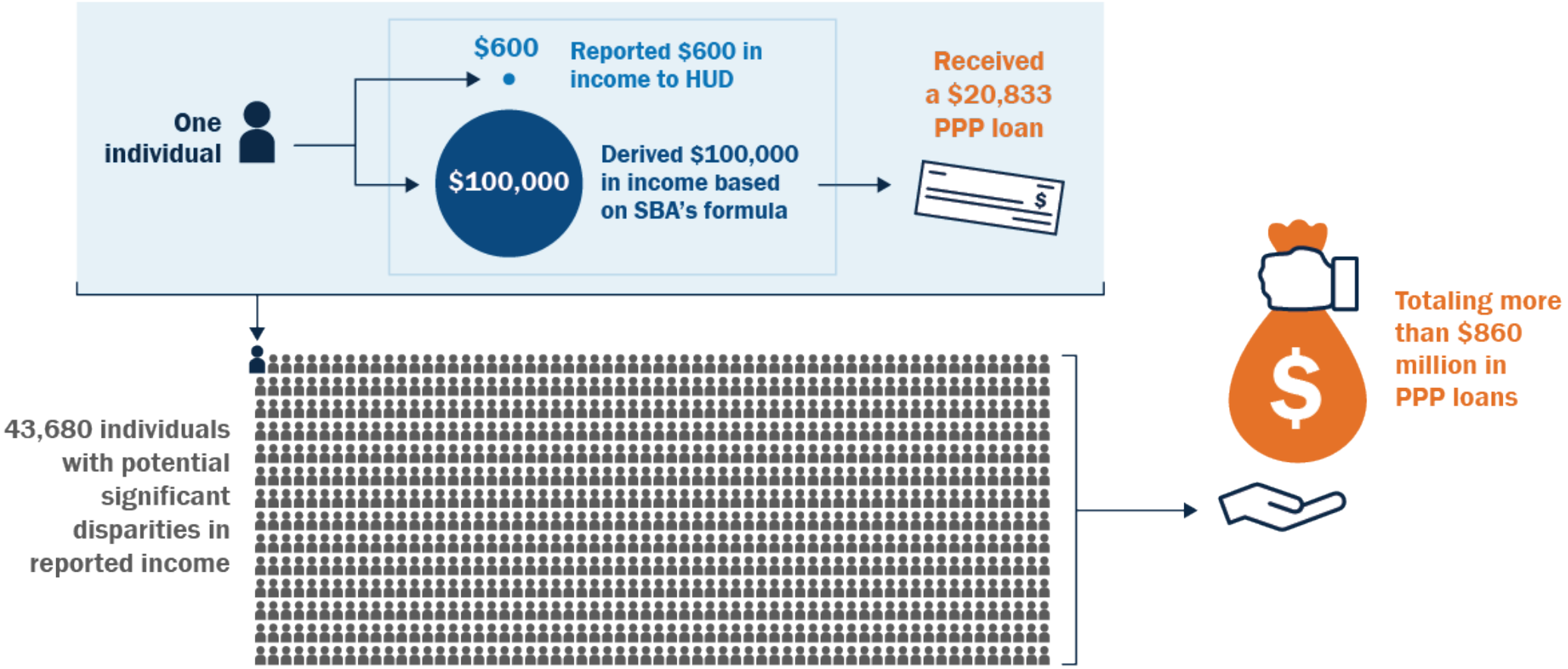
HUD and SBA Income Misrepresentation

The PRAC issued a Fraud Prevention Alert based on analysis performed in partnership with HUD OIG that flagged incidents where the same personal identifiers were used to receive low-income housing benefits and small business assistance. (Link)

- Income reporting should be the same across programs; points in the red oval illustrate the greatest disparity.
- The more the reporting is divergent, there is likelihood of under-reporting to HUD for housing program eligibility, and/or over-reporting to SBA to qualify for higher loans.



HUD and SBA Income Misrepresentation Alert



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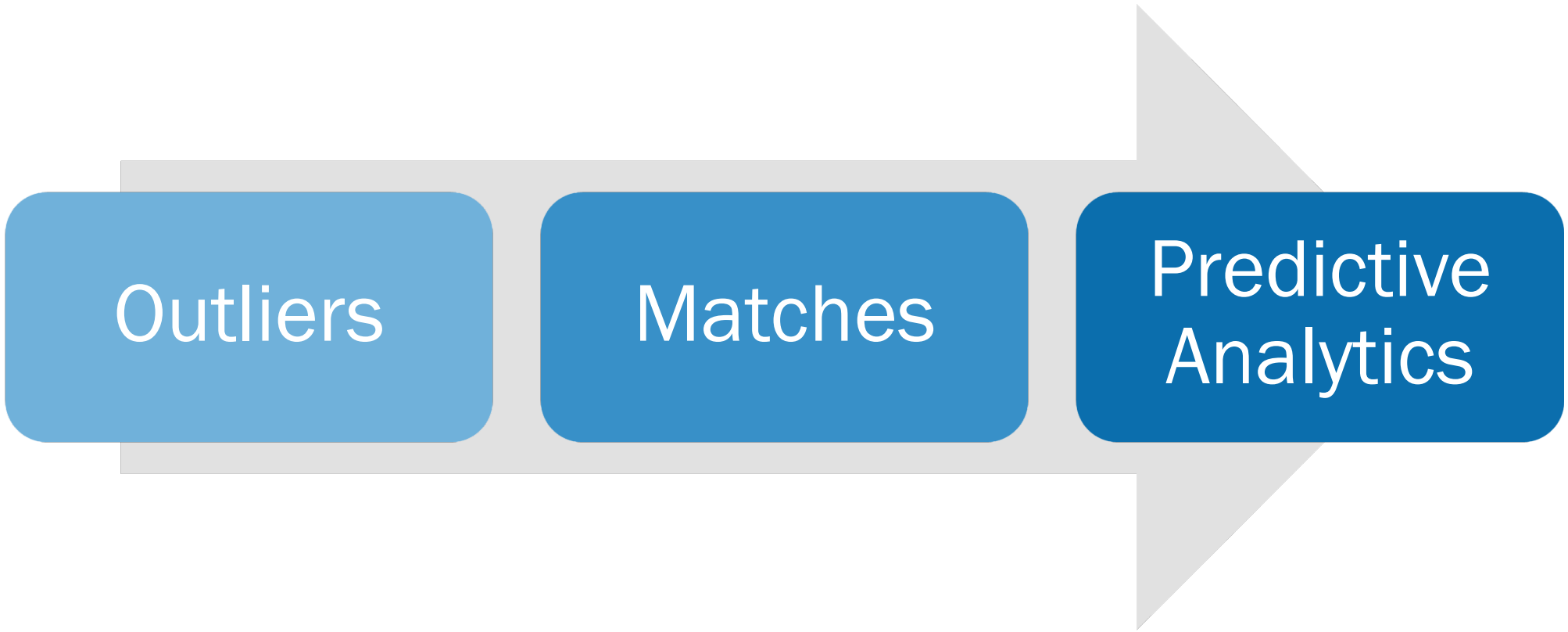


Graph Analytics

Graph Analytics: Analytic solution that leverages the connections between data points to uncover hidden patterns and relationships

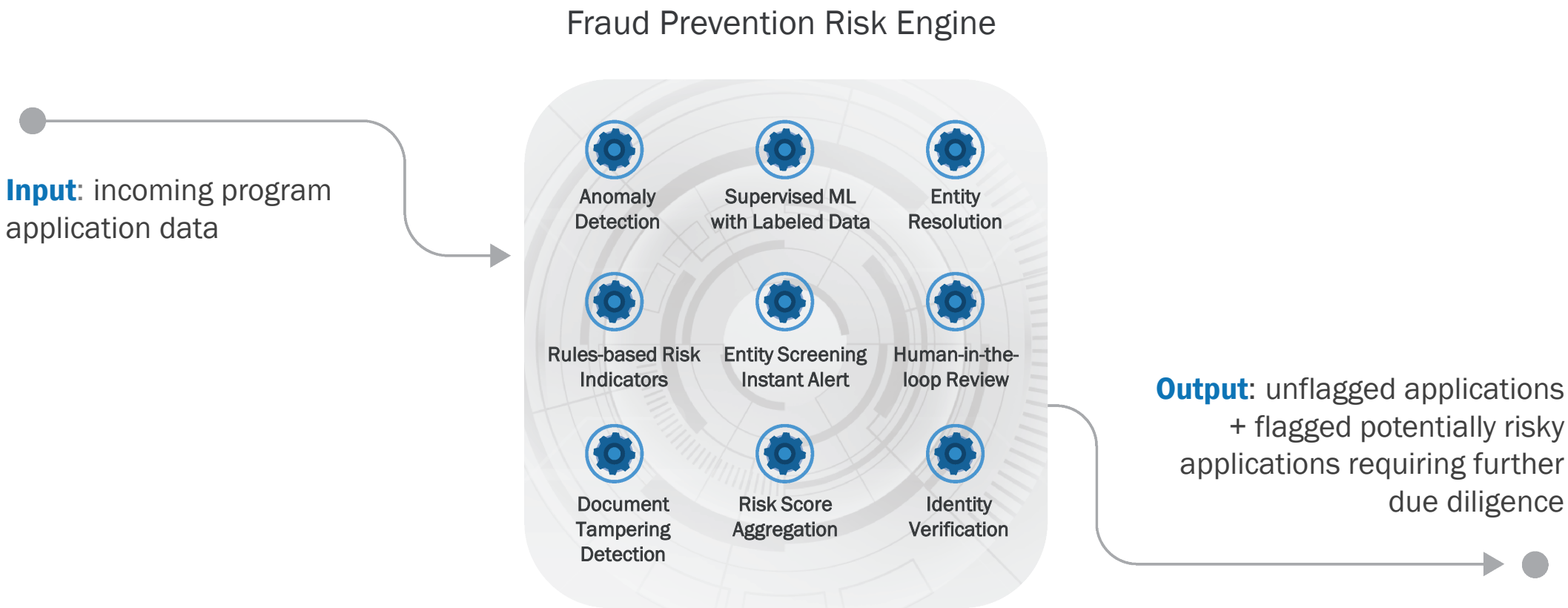
Benefits of Graph:

- Identify non-obvious relationships among entities
- Uncover difficult-to-detect patterns and anomalies
- Analyze complex relationships visually
- Significantly reduce manual effort analyzing data
- Identify and predict fraud and anomalies at scale using machine learning techniques

Pension Benefit Guarantee Corporation OIG Risk Model

- PBGC's Special Financial Assistance Program makes up to $91B available for troubled multiemployer pension plans
- Prior to PRAC's involvement, PBGC-OIG had a manually intensive human process to gather and ingest necessary datasets, review applicants and annual filings, and identify and act upon potential risks.
- The PRAC/PBGC OIG risk model ingested 10 years of data and helped target limited oversight resources; 49 plans have repaid a total of over $209M to the Treasury.

Fraud Prevention: PRAC Risk Engine



A highly modular analytics engine applies diverse AI and analytical techniques to rapidly assess large volumes of applications in real-time or near real-time, flagging potentially suspicious ones to help prevent fraud.

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Pinpointing High-Risk Federal Awards

Dr. Sterling Thomas, Chief Scientist

April 22, 2026

FACET helps GAO identify high-risk federal awards

Single audits cover $2.02 trillion of federal awards spending per year

- **Purpose of FACET:** to allow GAO auditors to analyze, summarize, and download data from single audits, which contain detailed information on reported deficiencies in grants spending, using a self-service dashboard analytics tool.
- **Benefit of FACET:** auditors can gain insights into higher-risk programs, agencies, and auditees; identify trends and common causes in deficiencies; and use this data in scoping, planning, and reporting phases of an audit.

FAC data shows who spent federal funds, on what, and with what issues

- **Spending Amounts**: How much the largest federal grantees spent in federal funds each year, including:
  - which program the funds originated from,
  - if they sub-granted funds to other entities, and
  - the location of auditee and auditor

  In FY2023, federal spending from grants and sub-grants reported to the FAC totaled $2.02 trillion

- **Findings**: If any deficiencies (findings) were reported in how grantees spent funds, and how severe they were

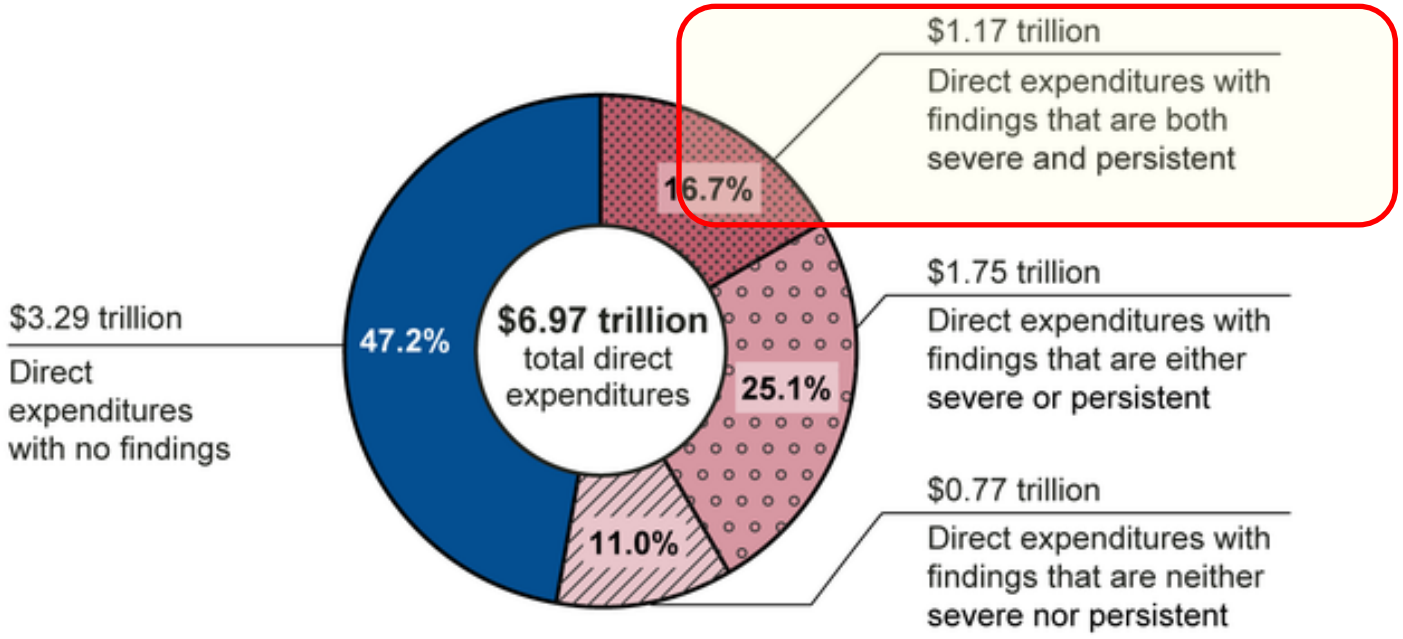
  In FY2023, over 16,000 findings were reported to the FAC

- **Responsible Agencies:** The highest-dollar grantees have a federal agency assigned to conduct additional oversight

  In FY2023, 1,900 grantees were assigned a cognizant agency (spent >$50M); 43,000 had an oversight agency (spent >$25M)

Severe and persistent audit problems affect over $1 trillion in federal awards

- In April 2024, GAO reviewed government-wide FY2017-2021 FAC data and administrative processes (GAO-24-106173)
- Made 13 recommendations to GSA, OMB, and Congress to improve single audit quality

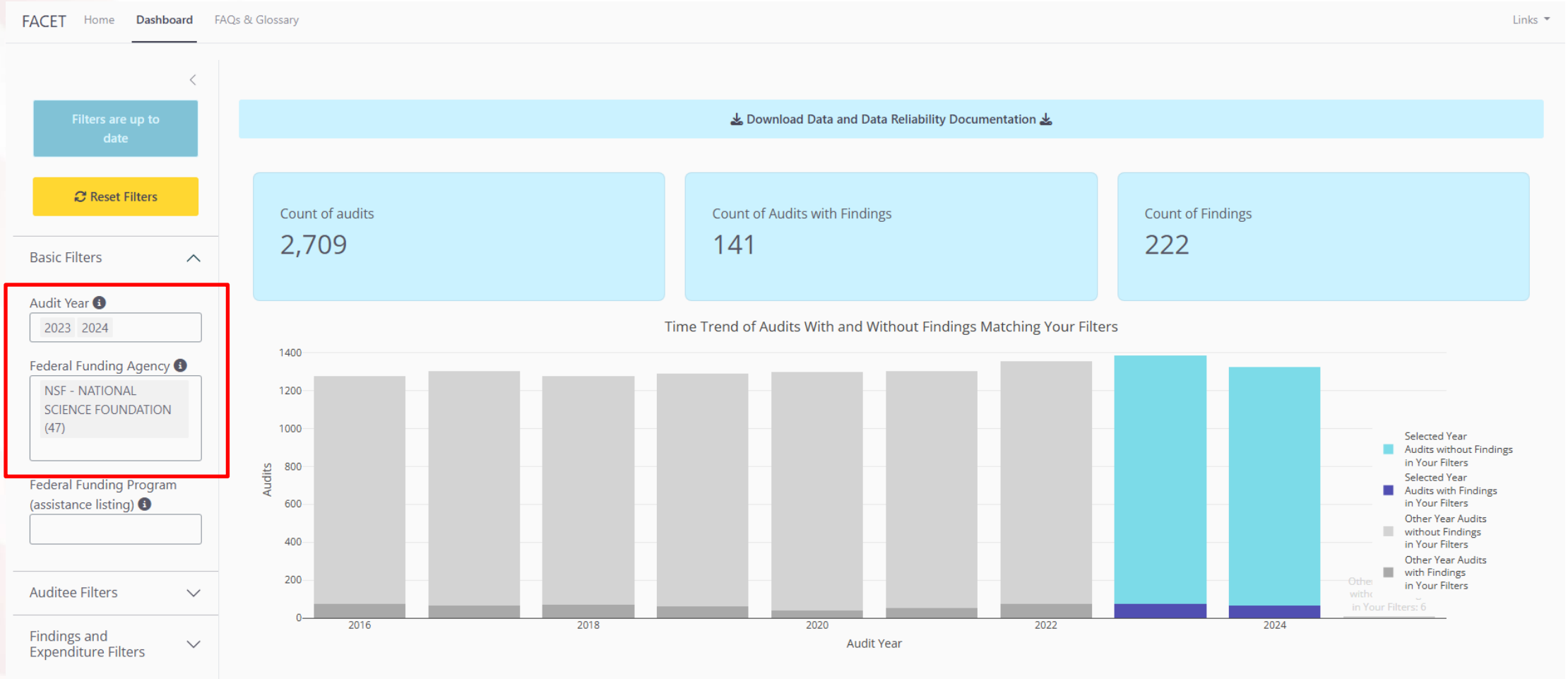


Source: GAO analysis of data from U.S. Census Bureau. | GAO-24-106173

GAO's Federal Audit Clearinghouse Exploration Tool (FACET)

- Internal-use dashboard for GAO to analyze single audit data for future work
- Identifies trends and patterns in audit findings (i.e., program, agency, government-wide)
- Uses GenAI to recover structure in audit text, enabling faster analysis
- Can inform scoping and planning of audits, and provide reliable data to be used as evidence
- Can conduct future systemic studies of single audit quality by evaluating:
  - Single audit effectiveness by entity type
  - Cognizant agency involvement
  - Audit firms performing single audits in relation to population of single audits
  - Overall timeliness of single audit reporting

FACET Use Case: National Science Foundation findings



FACET Use Case: National Science Foundation findings

Funding Agencies and Programs Associated with Findings

Select Columns to Add/Remove:

☑ Funding Agency ☑ Program ☐ Severity and/or Persistence ☐ Cognizant/Oversight Agency(ies) for Audit

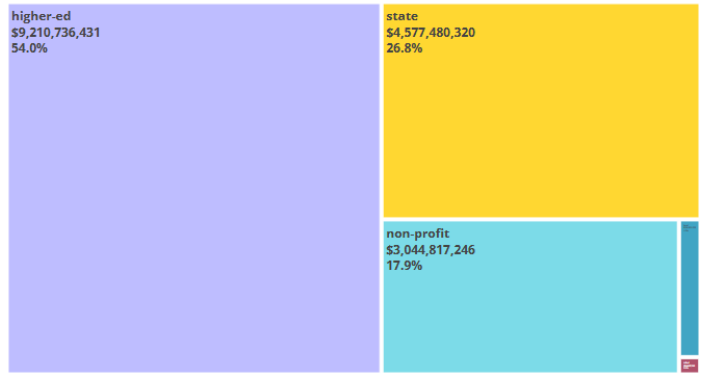
Funding Agency	Program	Audits with Findings	Findings
All	All	All	All
NSF	47.076 - STEM EDUCATION (FORMERLY EDUCATION AND HUMAN RESOURCES)	88	142
NSF	47.074 - BIOLOGICAL SCIENCES	61	93
NSF	47.049 - MATHEMATICAL AND PHYSICAL SCIENCES	54	85
NSF	47.070 - COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	52	83
NSF	47.050 - GEOSCIENCES	51	81
NSF	47.083 - INTEGRATIVE ACTIVITIES	40	72

Previous 1 2 3 4 Next

Note: Findings may be linked to more than one program; therefore, the number of findings shown here will often exceed the total number of audit findings shown elsewhere in this app.

Count of Single Audits by Auditee Type

Count of Federal Award Expenditures by Auditee Type



FACET Use Case: National Science Foundation findings

Funding Agencies and Programs Associated with Findings

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Funding Agency	Program	Severity and/or Persistence	Audits with Findings	Findings
All	All	All	All	All
NSF	47.050 - GEOSCIENCES	1. Both severe and persistent	4	7
NSF	47.076 - STEM EDUCATION (FORMERLY EDUCATION AND HUMAN RESOURCES)	1. Both severe and persistent	3	6
NSF	47.070 - COMPUTER AND INFORMATION SCIENCE AND ENGINEERING	1. Both severe and persistent	3	5
NSF	47.074 - BIOLOGICAL SCIENCES	1. Both severe and persistent	3	5
NSF	47.041 - ENGINEERING	1. Both severe and persistent	2	4
NSF	47.049 - MATHEMATICAL AND PHYSICAL SCIENCES	1. Both severe and persistent	2	4

Previous 1 2 3 4 5 ... 10 Next

Note: Findings may be linked to more than one program; therefore, the number of findings shown here will often exceed the total number of audit findings shown elsewhere in this app.

FACET Use Case: National Science Foundation findings

Auditee Information

Show 10 entries

Auditee Name	Auditee State	Auditee Type	Audit Year	Total Expenditures	Total Findings	UEI
UNIVERSITY OF CALIFORNIA	CA	higher-ed	2024	$622,310,584	2	PKK5TD16N4H1
UNIVERSITY OF CALIFORNIA	CA	higher-ed	2023	$609,806,174	2	PKK5TD16N4H1
STATE OF TEXAS C/O COMPTROLLER OF PUBLIC ACCOUNTS	TX	state	2024	$412,850,475	4	JCJBPTJXYXH9
STATE OF TEXAS C/O COMPTROLLER OF PUBLIC ACCOUNTS	TX	state	2023	$343,477,702	4	JCJBPTJXYXH9
STATE OF FLORIDA	FL	state	2023	$236,702,532		LR3CBBHMAXM5
STATE OF FLORIDA	FL	state	2024	$225,806,931		LR3CBBHMAXM5
STATE OF MARYLAND	MD	state	2024	$216,492,194		EJEEH8S7HW17
STATE OF COLORADO	CO	state	2024	$198,964,731		V4FMY71FYXZ6
STATE OF COLORADO	CO	state	2023	$194,398,770		V4FMY71FYXZ6
STATE OF WASHINGTON C/O OFFICE OF FINANCIAL MANAGEMENT	WA	state	2024	$194,032,123		GCU8PW8ZDXN8

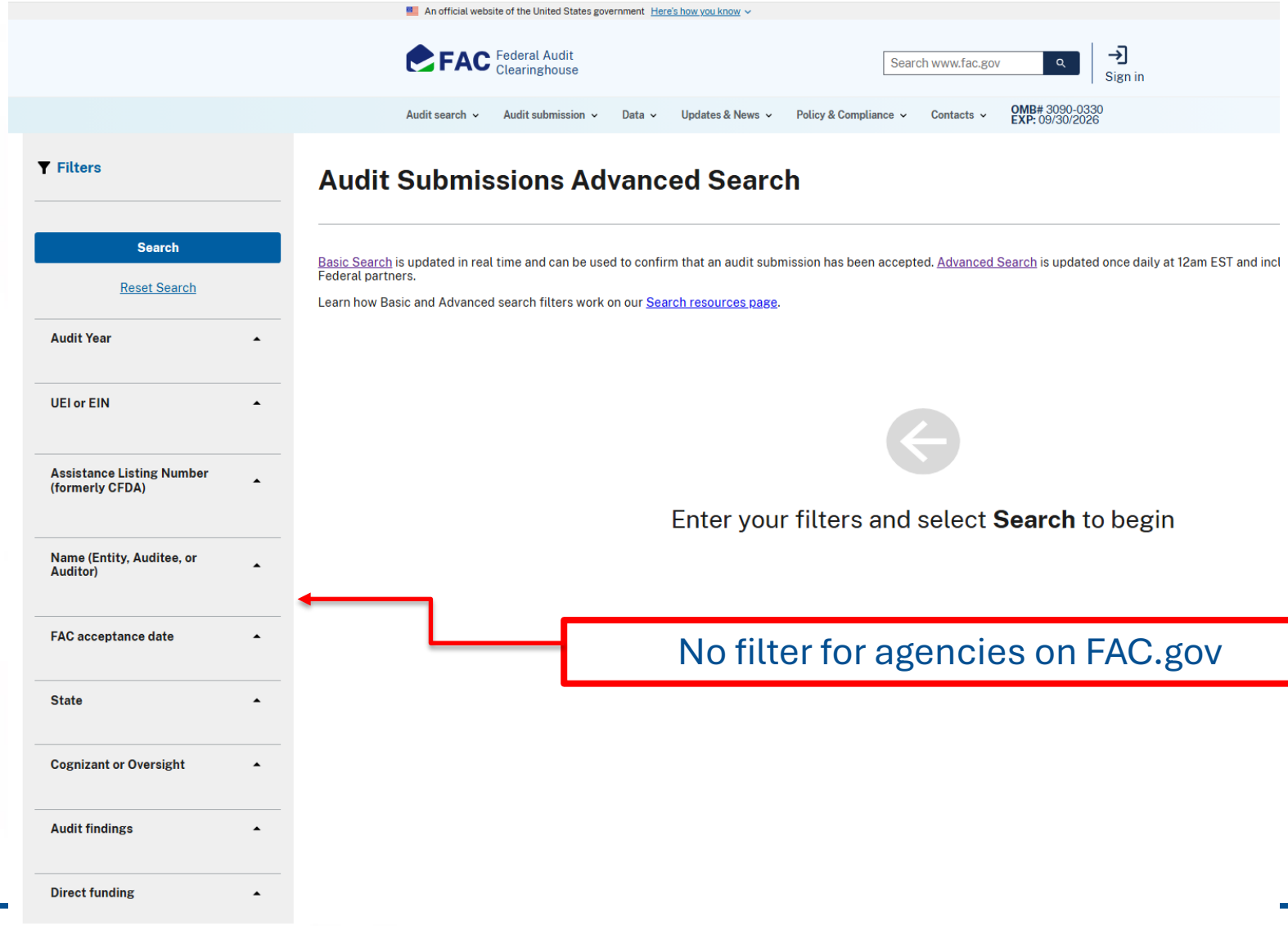
Showing 1 to 10 of 2,677 entries

Previous 1 2 3 4 5 ... 268 Next

FACET Use Case: National Science Foundation findings

Assistance Listing Federal Agency and Program Name - Research and Development Cluster R D Small Business Development Centers SBDC Epidemiology and Laboratory Capacity for Infectious Diseases ELC
Federal Award Identification Number and Year - R D - All ALN s SBDC - SBAHQ21B0057 SBAHQ22B0059 SBAOEDSB230049 SBAHQ20C0031 ELC - NU50CK000510
Pass through Entity - R D - Various SBDC - None ELC - Michigan Department of Health and Human Services and Kent County Health Department
Finding Type - Material weakness and material noncompliance with laws and regulations
Repeat Finding - No
Criteria - As outlined in 2 CFR 200.430 i salaries and wages must be based on records that accurately reflect the work performed including complying with established accounting policies and practices of the University. Per the University s policy effort reports are to be certified by an individual or a person with suitable means of verification the principal investigator department chair or Dean of the work performed approximately 30 days after each reporting period.
Condition - Of the 10 employees included within the hourly payroll expenditure sample selected for testing in the Research and Development Cluster the University did not complete a full executed review of the effort certifications within the time period as outlined in the policy for all 10 employees. Of the 14 employees included within the hourly payroll expenditure sample selected for testing in the Small Business Development grants the University did not complete a full executed review of the effort certifications within the time period as outlined in the policy for 7 employees. Of the 8 employees included within the hourly payroll expenditure sample selected for testing in the Epidemiology and Laboratory Capacity for Infectious Diseases grants the University did not complete a full executed review of the effort certifications within the time period as outlined in the policy for all 8 employees.
Questioned Costs - None
Identification of How Questioned Costs Were Computed - N A
Context - In the samples mentioned above the University ultimately completed review of the effort certifications to support salaries and wages were allowable however 25 of the total 32 employees tested in these three programs were not reviewed timely.
Cause and Effect - The University did not follow its policy to ensure that time and efforts were being reviewed and approved in a timely manner.
Recommendation - We recommend the University maintain a procedure and control in place to ensure that upon each reporting period the University reviews and approves effort certifications as outlined in its policy.
Views of Responsible Officials and Corrective Action Plan - Management agrees. The University implemented a new grant management software that will provide greater functionality to complete the effort certification process within the time requirements as identified in the University s Time and Effort Reporting policy.

FAC.gov Comparison: National Science Foundation findings



Investments in GAO technology infrastructure enable FACET

- Analytics infrastructure is a strategic investment for GAO that delivers substantial taxpayer value.
- FACET was developed in R / Shiny
- It is hosted on the Innovation Lab's AWS Cloud infrastructure
- FACET leverages machine learning for forecasts, GenAI for interpretation of data and model results
- FACET's data pipeline is engineered to automate data reliability checks and other GAGAS requirements

The Auditors' Perspective on Data Analytics

Building Capability, Culture, and Impact in State Government

Tina Kim
Division of State Government Accountability

The $175 Billion Challenge

$175B

U.S. GAO estimate of improper overpayments in FY 2023

- 14 federal agencies across 71 programs reported improper payments
- Excludes state and local programs — the real total is much higher
- Every dollar may represent a preventable breakdown: control weaknesses, suspicious patterns, or unreviewed red flags

Impact by the Numbers

$2.88B

in actual and potential cost savings and recoveries

$14.9B

in questionable transactions identified

$120M

fraud prosecution from analytics-driven referral

Analytics scale has dramatically expanded with new technologies.

Capability Starts with Culture

Technology Focus

Most organizations emphasize platforms, tools, or vendors

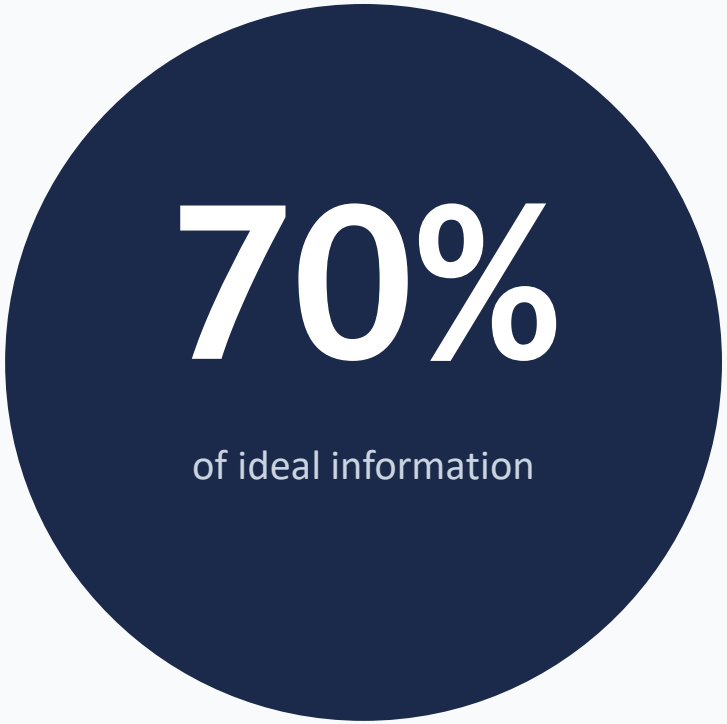
The Reality

Failure is usually caused by people and processes, not the technology

Key Question

What is your risk appetite?

Risk Appetite & The '70% Rule'



Make decisions with ~70% of ideal information.

> *"Culture eats strategy for breakfast."*
> — Peter Drucker

Misalignment risk: When leadership's risk appetite and staff culture diverge, organizations see shadow IT and unused tools.

Four Steps to Building Alignment

01

Communicate the 'Why'

02

Build Internal Capability

03

Create Hands-On Opportunities

04

Invest in Tech Literacy

Navigating the GenAI Frontier

Shadow IT Reality

LLMs are common shadow IT systems — people will use them regardless of bans.

Inherent Risk

Hallucinations stem from the probabilistic nature of models.

Strategy

Treat staff as professionals; help them understand the rationale behind organizational choices.

Mitigating AI Risk

Effective Prompting

Chain of thought, asking for citations, 'do not guess' instructions reduce hallucination risk.

RAG

Retrieval-Augmented Generation provides authoritative context to ground model responses.

Strategic Use Cases

Best for situations where precision is less critical or answers are easily verified via grounded citations.

Enterprise Data Warehouses

Structured Data

Working with governed and cleansed data sources.

Continuous Auditing

Automated, recurring tests over transaction data.

Goal

Identify improper payments and the control weaknesses that allowed them.

Tools

SQL, Python, and low-code data mining tools.

Ad Hoc Analytics

Fragmented Data

Spreadsheets, PDFs, scanned documents.

Low-Code Platforms

Ingest, cleanse, and standardize data without heavy coding.

Audit Innovation Unit

Evaluating new tech and rolling out solutions.

Tools

Python for advanced extraction and transformation.

The Importance of AI-Based OCR

80-90%

of data generated today
is unstructured

'Dark Data'

Unanalyzed data hiding material issues or fraud indicators.

Modern AI OCR

Handles handwritten notes, low-quality scans, and complex layouts far better than traditional tools.

Cleansing & Normalization Matter

AI Accelerates Data Prep

Standardization, deduplication, and correcting inconsistencies — freeing analysts for higher-value work.

Closing Thought

Structured Data

Continuous monitoring
Low-code tools
SQL + Python

Unstructured Data

AI-based OCR
Low-code tools
Python

Goal: Tap into data that was historically inaccessible to protect taxpayer dollars.

Thank You for Participating!

AGA **Webinars**