Framework for Grant Oversight

Federal Audit Executive Council

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• RATB Grant Fraud Focus Group

• Federal Government Oversight

• Forensic Techniques to Identify Anomalies

• Grant Process: Identifying Key Systems

• Forensic Framework and Grant Risk
Grant Fraud Focus Group

- Chartered by the Recovery Accountability and Transparency Board

- To Develop a Framework for Grants Oversight
  - Similar to DOD guide for contingency contracting
  - Will promote more automated techniques
  - Guide to be available in early 2011

- Focus is to Improve Grant Oversight
  - Better ways to identify problem grantees
  - Standardize grant audit and investigative efforts

- Members are Auditors, Investigators, and Attorneys
  - Participation encouraged
Federal Oversight Now

- 26 Federal Grants Agencies / 29 ARRA Agencies
  - $753 Billion in Grants (FY 2009)
  - About 11,000 OIG staff provide oversight

- Circular A-133 (Single Audit Act) Reports by Independent CPA Firms
  - $500,000 in annual federal expenditures threshold
  - Grantees initiate as part of their Financial Statement audits
  - 35,000 single audits to Audit Clearinghouse
  - OIGs review audit reports and CPA firms

- RATB: $275 Billion in ARRA Funds (88,791 Grants)
- GAO: Forensic Oversight and Special Investigations (FOSI)
- OMB: $110 Billion Improper Payments in FY 2009 (4%)
Federal Grants FY 09
Total: $753 Billion

$540,035,693
$168,416,911
$14,580,480
$29,999,563

Source: U.S Census, Federal Assistance Award Data System, FY 09 Q1-4
RATB Data Analytics Coordination

ARRA Recipient Reports

Open Source Data

Public Law Enforcement Data

Recipient Transaction Level Data

OIGs

Agency Grant Data
Forensic Techniques

- Focus: Financial Misconduct, Waste, Abuse

- Automated Tools and Techniques

- Analysis of Transaction-Level Data

- 100% Transaction Review

- Integrated Effort with Investigations
Forensic Techniques: Benefits

- Allows Examination of all Records, not Just a Sample
- Tests not Limited to Predetermined Data Formats and/or Relationships
- Creates Relationships, Checks Calculations, Performs Comparisons
  - Assess limitless number of analytical relationships
  - Summarize large volume of data
  - Database comparison
- Identifies Anomalies
Focus on Anomalies/Outliers

Anomalous Activity

Normal Activity

Anomalous Activity
Focus on Anomalies/
Cash Draw Pattern

Abnormal Distribution

High Amount Drawn
Low Amount Drawn
High Amount Drawn
Data Analysis: Database Comparisons

Awardee Table

Awardee not yet Paid

Awardee Paid and in Awardee Table

Awardee Paid but not included in Awardee Table

Disbursing Transactions
Forensic Techniques: Hardware and Software Applications

- **Hardware**
  - SQL servers
  - Mainframe (QMF)
  - Docking stations
  - Terminal server

- **Software**
  - Data mining and predictive analytics, e.g., Clementine
  - Data interrogation – e.g., ACL, IDEA, MS Access, Excel
  - Statistical analysis – e.g., SPSS and SAS
  - Link analysis – I2, Plantir
  - Lexis-Nexis
  - Data conversion utilities (Monarch)
  - Internet, open-source research
  - Access to system query tools
End to End Process for Grant Oversight

**PRE-AWARD RISKS**
- Funding Over Time
- Conflict of Interest
- False Statements
- False Certifications
- Duplicate Funding
- Inflated Budgets
- Candidate Suspended/Debarred
- New Awardee

**ACTIVE AWARD RISKS**
- Unallowable, Unallocable, Unreasonable Costs
- Inadequate Documentation
- General Ledger Differs from Draw Amount
- Burn Rate
- No /Late/Inadequate Reports
- Sub-awards, Contracts, Consultants
- Duplicate Payments
- Excess Cash on Hand/Cost Transfers
- Unreported Program Income

**AWARD END RISKS**
- No /Late Final Reports
- Cost Transfers
- Spend-out
- Financial Adjustments
- Unmet Cost Share

DATA ANALYSIS
Typical NSF Award Process

- Proposal
- Fast lane
- Pre-Award Review
- Award System
- FAS
- Post Award
- Fin. & Project Reports
- Close Out
Cash Disbursement Process

Cash Request → Fast Lane → NSF FAS → ACH/Secure Payment System → Treasury → Bank
Look at Red Flag Areas

The more red flags, the higher the risk.

The less red flags, the lower the risk.

Use Data Analysis to Identify Anomalies That are Potential Fraud Indicators, such as Breaks in Trends and Outliers

Break in drawdown trend: 25% increase in drawdowns over the past 6 months

Elevated Success Rate on Awards

History of incomplete, inadequate, and untimely project reports
Transaction Level Fraud Indicators: Grantee Data

- Cost Transfers to Other Projects or Contracts
- Multiple Payments of Same Invoice
- Excessive Costs/Large Budget Reallocations
- Multiple Adjusting Entries
- Unallowable Charges for Interest, Travel, Excess Salary
Anomalies in Payroll Transactions

Compare data from multiple systems

Compare records in recipient’s system

Payments to individuals not listed in the HR system
(Possible fictitious employees)

Payments to individuals listed in the HR system

Listing of Employees

Proposals System

Internal Grants Portal

Awards System

Recipient Project System

Pay System

U.S. Treasury

Acctg System

Acctg System

HR System

HR System

Payments to individuals not listed in the HR system
(Possible fictitious employees)
NSF Case Study: School District
Trust is Not a Control

- Grantee Draws $2.1 Million in 3 Months
  - Usual drawdown pattern: $250,000 quarterly
  - NSF asks, Grantee cannot provide documentation
  - NSF refers to OIG

- Total NSF Funds Awarded: $23.1 Million
  - Audit Universe 2008: $13.1 Million
  - OIG Questioned Costs: $4.2 Million
  - NSF sustains: $3.3 Million
Forensic Framework Summary
Finding Grant Fraud Risk

- Set Objectives and Define Universe
- Facilitated Brainstorming
  - Risk factors
- Map out End-to-End Process
  - Identify systems and key processes
  - Identify key controls
- Identify and Obtain Transaction-Level Data
  - Record layout
  - ACL, IDEA, Monarch
- Build Targeted Business Rules and Run Against Data
  - PI/Institution patterns over time
  - Risk factors
- Examine Anomalies
Suggested Resources

Council on the Inspectors General on Integrity and Efficiency (CIGIE)
  http://www.ignet.gov/

Federal Audit Executive Council
  http://www.ignet.gov/pande/faec1.html
Additional Information

- National Procurement and Grant Fraud Conference
  Philadelphia, November 15-17, 2010

Questions?

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