



Analytical Tools: What Auditors Need to Know About Big Data

20th Biennial Forum of Government Auditors

August 20, 2014

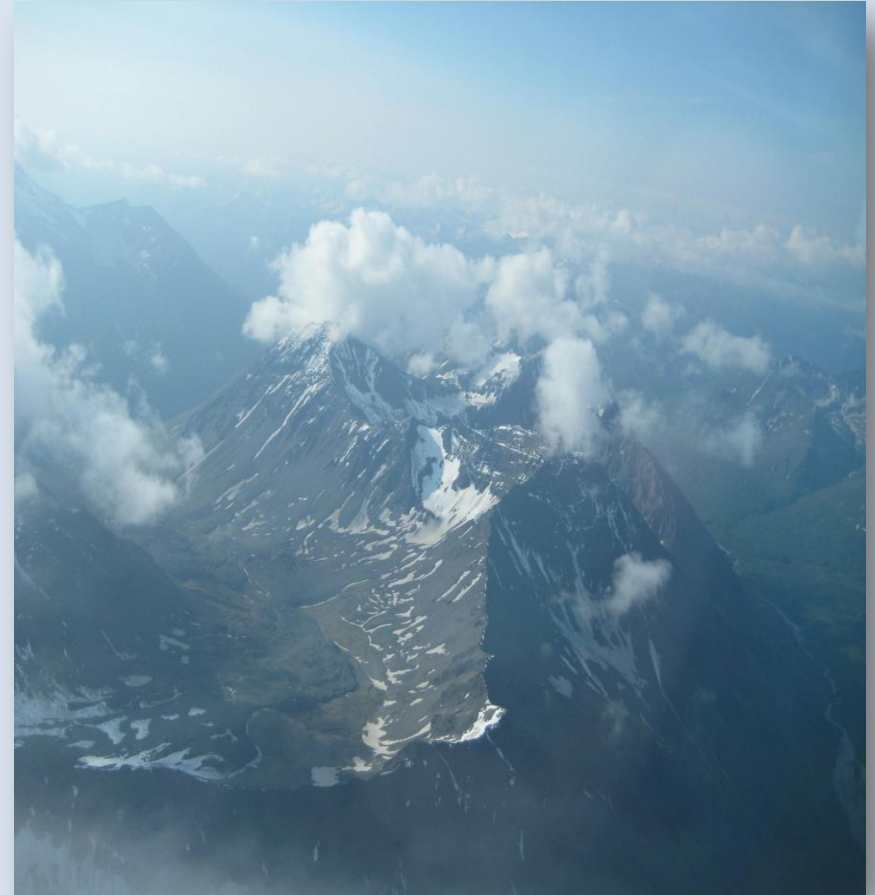
Della Whorton

Assistant Director Audit Liaison and Reports



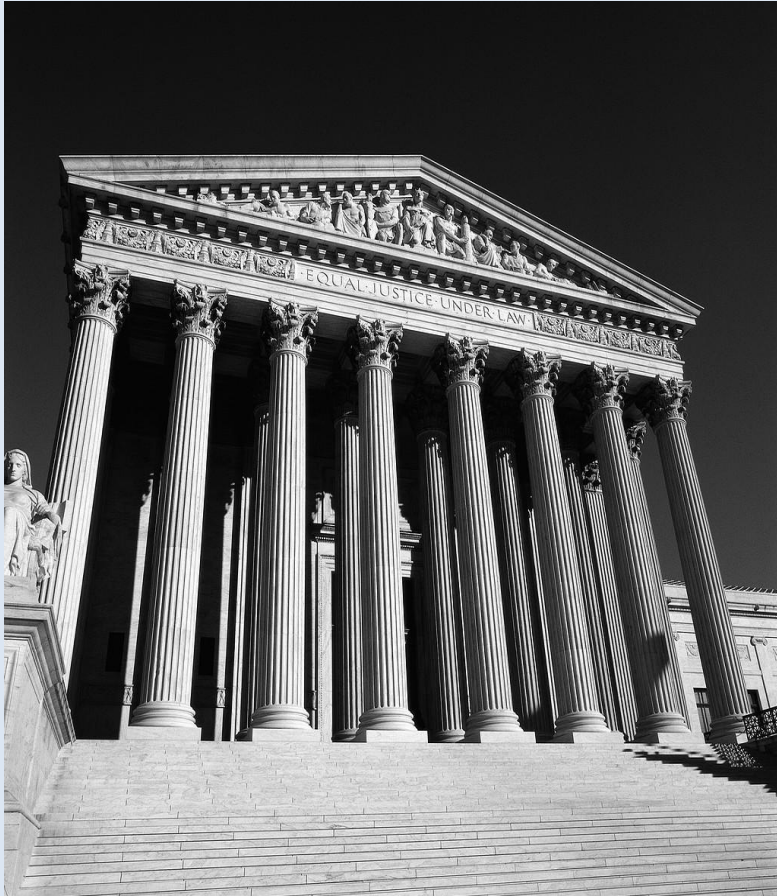
OVERVIEW

- Recovery Board
- Fraud Detection
- Challenges
- Lessons Learned
- Data Sets
- Making it Useful





ACCOUNTABILITY FOR FRAUD DETECTION



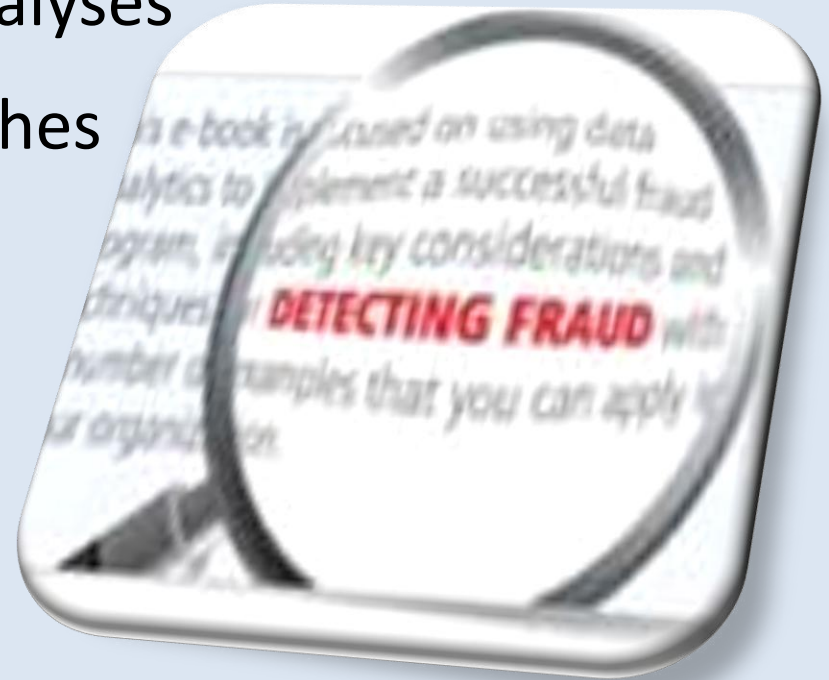
- The Recovery Board's accountability mission is to detect and prevent fraud, waste, and abuse and identify systemic issues related to the expenditure of federal funds.
- The mission is accomplished by working closely with the Inspectors General Community, the U.S. Attorneys' Offices, and law-enforcement agencies.
- Sophisticated analytical tools are used to identify fraud indicators for predictive analyses.



FRAUD PREVENTION AND DETECTION

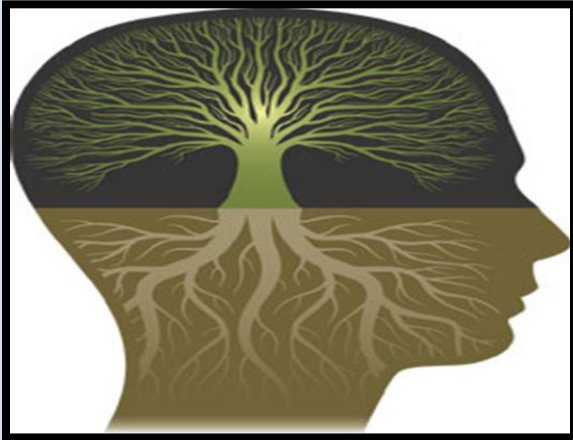
The Recovery Board identifies potential fraud through:

- Identification of Risk Indicators
- Trend and Predictive Analyses
- Unstructured Text Searches
- Statistical Sampling
- Ad Hoc Searches
- Link Analysis



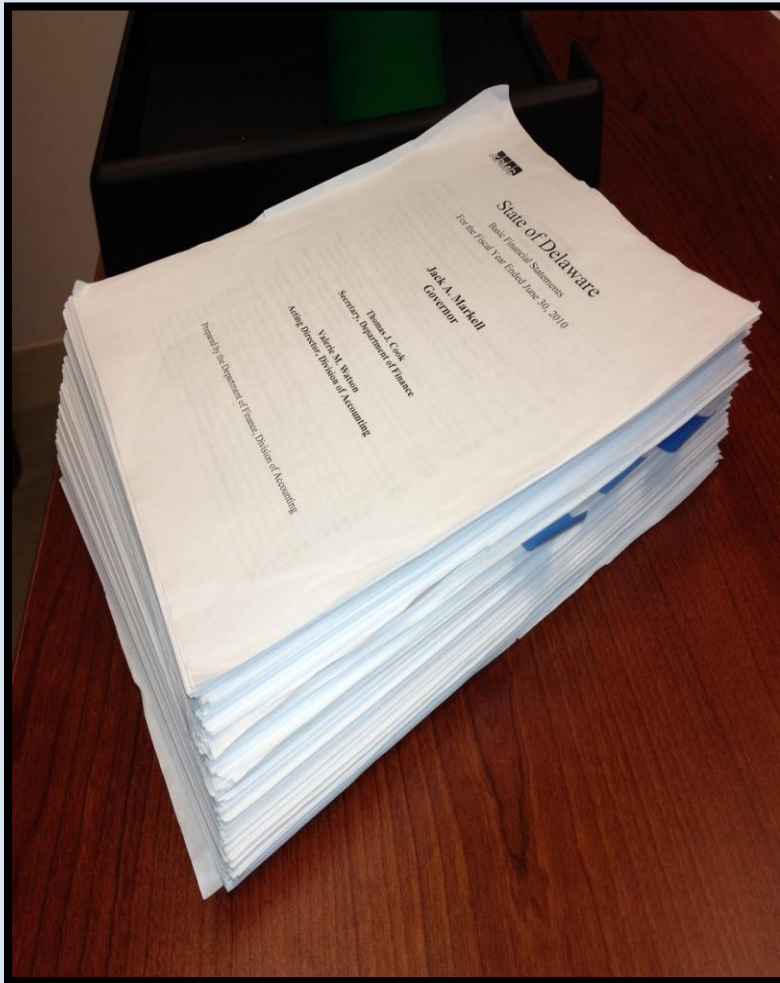


CHALLENGES





OTHER CHALLENGES



(Page 3 - #35 of 45) Primary EIN: 55-0526580

PART III FEDERAL PROGRAMS - Continued

9. FEDERAL AWARDS EXPENDED DURING FISCAL YEAR								10. AUDIT FINDINGS	
Federal Agency Prefix ¹ (a)	Extension ² (b)	Research and development (c)	Name of Federal program (d)	Amount expended (e)	Direct award (f)	Major program (g)	Major program if yes, type of audit report ³ (h)	Type(s) of compliance requirement(s) ⁴ (a)	Audit finding reference number(s) ⁵ (b)
9 3	.630	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	DEVELOPMENTAL DISABILITIES BASIC SUPPORT AND ADVOCACY GRANTS	\$ 668,375.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		O	N/A
9 3	.642	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CHILDREN SUBJECT GRANTS TO STATES	\$ 136,357.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Q	N/A
9 3	.645	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CHILD WELFARE SERVICES STATE GRANTS	\$ 1,810,390.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		O	N/A
9 3	.658	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	FOSTER CARE-TITLE IV-E	\$ 35,226,043.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Q	2009-12, 43, 52, 53
9 3	.658	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ARRA - FOSTER CARE-TITLE IV-E	\$ 1,484,503.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Q	2009-12, 43, 52, 53
9 3	.659	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ADOPTION ASSISTANCE	\$ 14,997,512.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Q	2009-12, 43, 54, 55
9 3	.659	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ARRA - ADOPTION ASSISTANCE	\$ 910,647.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Q	2009-12, 43, 54, 55
9 3	.667	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SOCIAL SERVICES BLOCK GRANT	\$ 11,164,860.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		O	N/A
9 3	.669	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CHILD ABUSE AND NEGLECT STATE GRANTS	\$ 108,361.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		O	N/A
9 3	.671	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	FAMILY VIOLENCE PREVENTION AND SERVICES GRANTS FOR BATTERED WOMENS SHELFT	\$ 907,804.00	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		O	N/A
TOTAL FEDERAL AWARDS EXPENDED				\$ 4,927,279,107.00					

¹ See Appendix 1 of instructions for valid Federal Agency two-digit prefixes.
² Or other identifying number when the Catalog of Federal Domestic Assistance (CFDA) number is not available. (See Instructions)
³ If major program is marked "Yes," enter only one letter (U = Unqualified opinion, Q = Qualified opinion, A = Adverse opinion, D = Disclaimer of opinion) corresponding to the type of audit report in the adjacent box. If major program is marked "No," leave the type of audit report box blank.
⁴ Enter the letter(s) of all type(s) of compliance requirement(s) that apply to audit findings (i.e., noncompliance, significant deficiency (including material weaknesses), questioned costs, fraud, and other items reported under § 510(a)) reported for each Federal program.
 A. Activities allowed or unallowed E. Eligibility I. Procurement and suspension and debarment L. Reporting
 B. Allowable costs/cost principles F. Equipment and real property management J. Program income M. Subrecipient monitoring
 C. Cash management G. Matching, level of effort, earmarking K. Real property acquisition and relocation assistance N. Special tests and provisions
 D. Davis - Bacon Act H. Period of availability of Federal funds O. None
⁵ N/A for NONE P. Other



ELEMENTS OF BIG DATA ANALYSES



Combines:

- Multiple data sets
- Open-source information
- Sophisticated software tools
- Traditional and cutting-edge analyses
- Forward thinking analysts



DATA SETS

Several data sets are used:

- Law enforcement
- Regulatory
- Open source
- Government
- Commercial
- Corporate Websites
- Customer Provided

The screenshot shows two windows from a file manager. The left window, titled 'X-A file directory tree', displays a tree view of a directory structure. The right window, titled 'X- Comparison of Table-like Widgets', shows a comparison of various table features across different widget types.

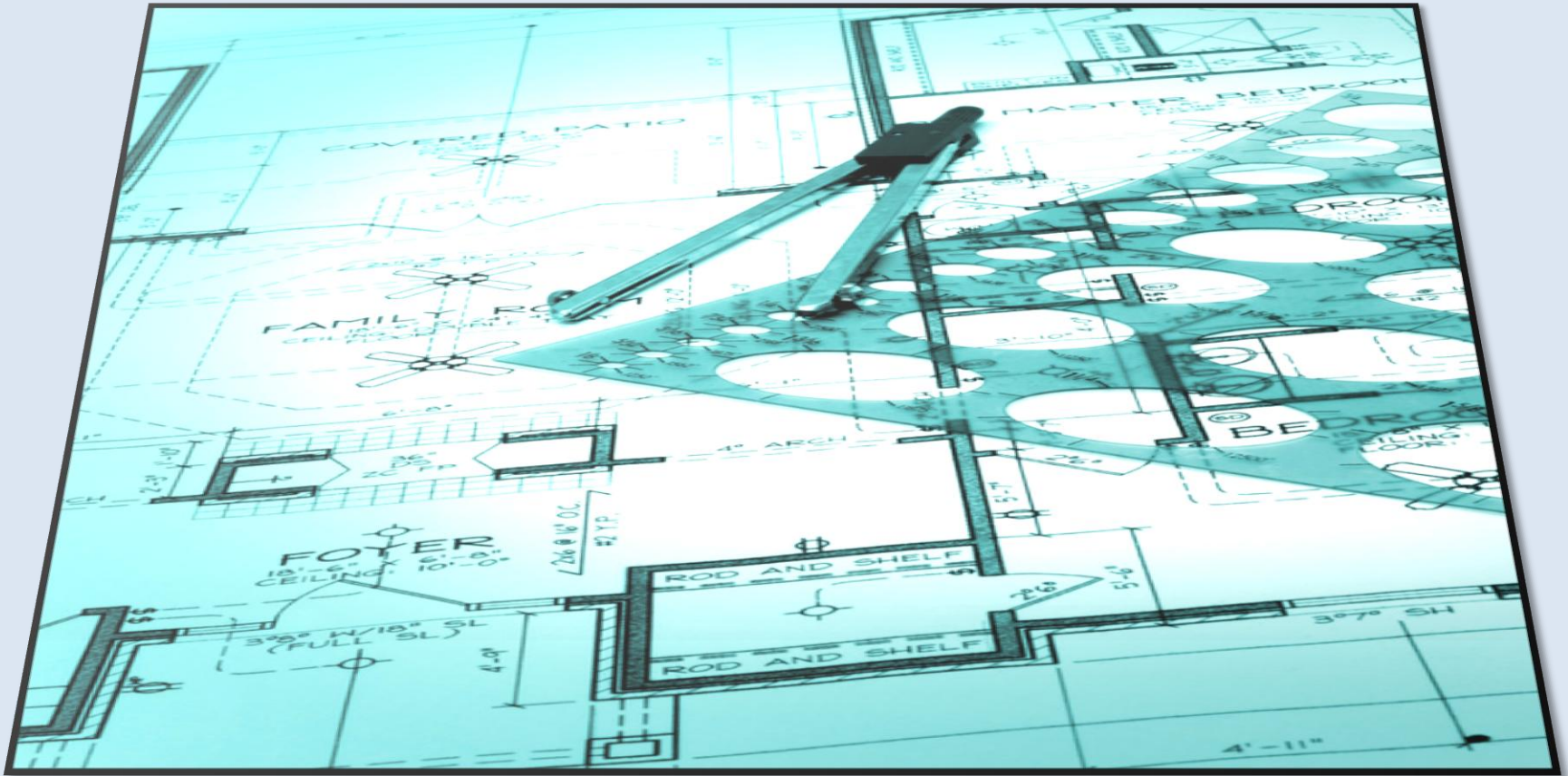
File	Size	Date	Owner	Perms
CVS/	4K	2008-03-05 20:58:48	pcnacdon	040775
Entries	849	2008-03-05 20:58:48	pcnacdon	00664
Repository	14	2008-02-20 14:00:37	pcnacdon	00664
Root	23	2008-02-20 14:00:37	pcnacdon	00664
Data/	4K	2008-08-08 09:09:34	pcnacdon	040775
Data2/	4K	2008-07-25 07:55:39	pcnacdon	040775
Data3/	4K	2008-07-30 10:26:29	pcnacdon	040775
docidx/	4K	2008-08-09 10:29:12	pcnacdon	040775
Frack/	4K	2008-08-03 12:21:10	pcnacdon	040775
FI/	4K	2008-08-03 12:21:08	pcnacdon	040775
F2/	4K	2008-08-16 08:31:17	pcnacdon	040775
c/	4K	2008-08-16 08:31:17	pcnacdon	040775
a	0	2008-08-03 12:21:17	pcnacdon	00664
b	0	2008-08-03 12:21:18	pcnacdon	00664
include/	4K	2008-07-03 10:36:39	pcnacdon	040775
RCS/	4K	2008-08-20 08:22:50	pcnacdon	040775
Tests/	4K	2008-08-20 08:00:39	pcnacdon	040775
big.tad	7399K	2008-07-10 16:52:08	pcnacdon	00664
Combo.tcl	16K	2008-06-28 08:51:11	pcnacdon	00644
cust.tad	720	2008-07-10 16:52:08	pcnacdon	00664
cust_idx1.tad	349	2008-07-10 16:52:08	pcnacdon	00664
cust_idx2.tad	287	2008-07-10 16:52:08	pcnacdon	00664

Feature	Tabular	Tablelist	Tktable	Treeview	Gr
Cell borders	y	n	y	n	y
Fast column sizing	y	n	y	y	y
Data variable	y	y	y	n	n
Dynamic layout	y	n	y	n	y
Auto-sizing cells	y	y	n	y	y
Per-char tags	y	n	n	n	y
Styles	y	n	n	y	n
Million+ rows	y	n	n	n	n
Tree Ops	y	n	n	y	n
Pure Tcl	y	y	n	n	y
Load 30K rows (secs)	1	15	3	70	NA

rowid	able	Baker	Bark	Dog	E	F	G	H	I
14847	a	b	c	14847	e	f	g	h	i
14848	a	b	c	14848	e	f	g	h	i
14849	a	b	c	14849	e	f	g	h	i
14850	a	b	c	14850	e	f	g	h	i
14851	a	b	c	14851	e	f	g	h	i
14852	a	b	c	14852	e	f	g	h	i
14853	a	b	c	14853	e	f	g	h	i

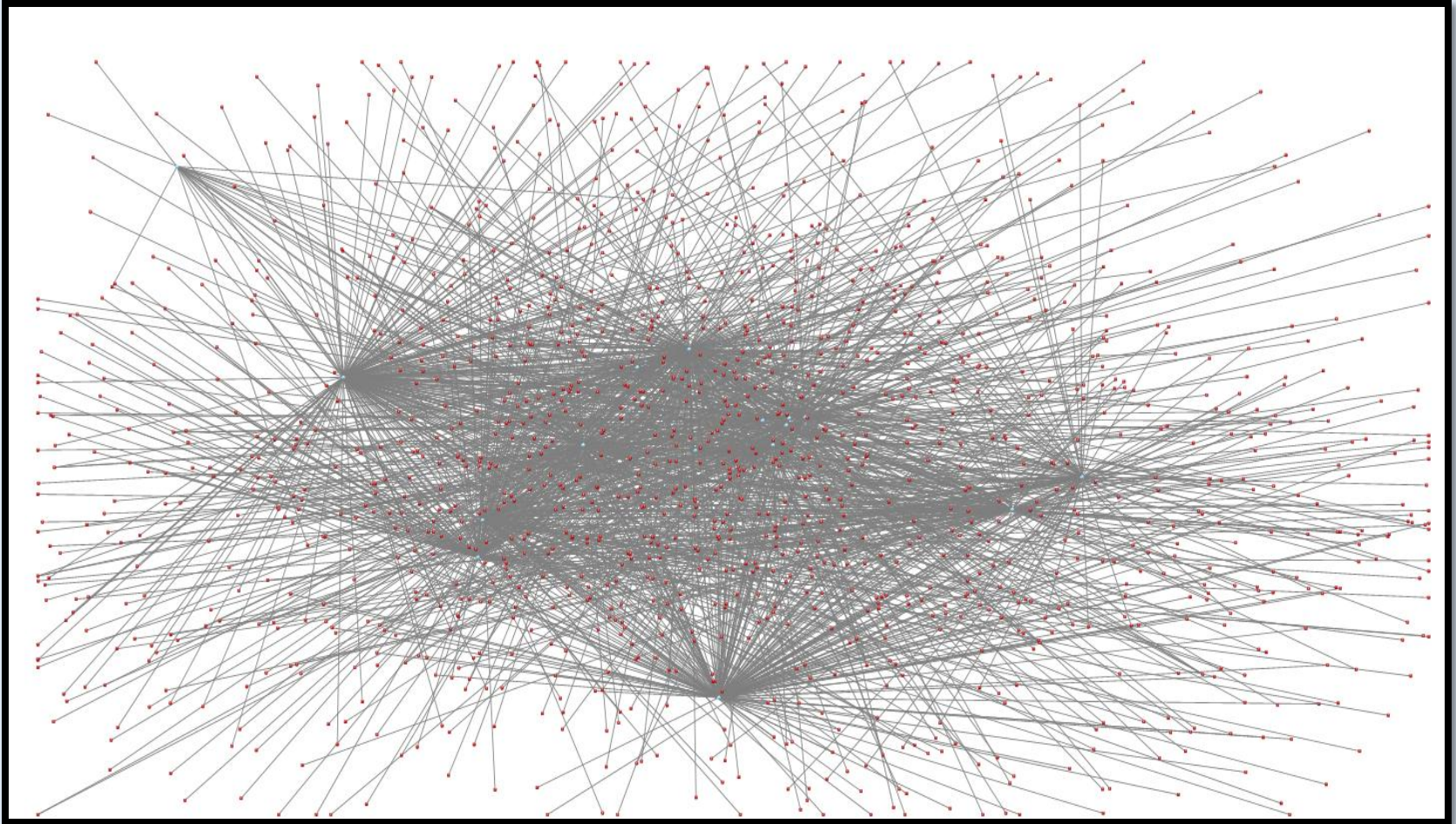


MAKING IT USABLE



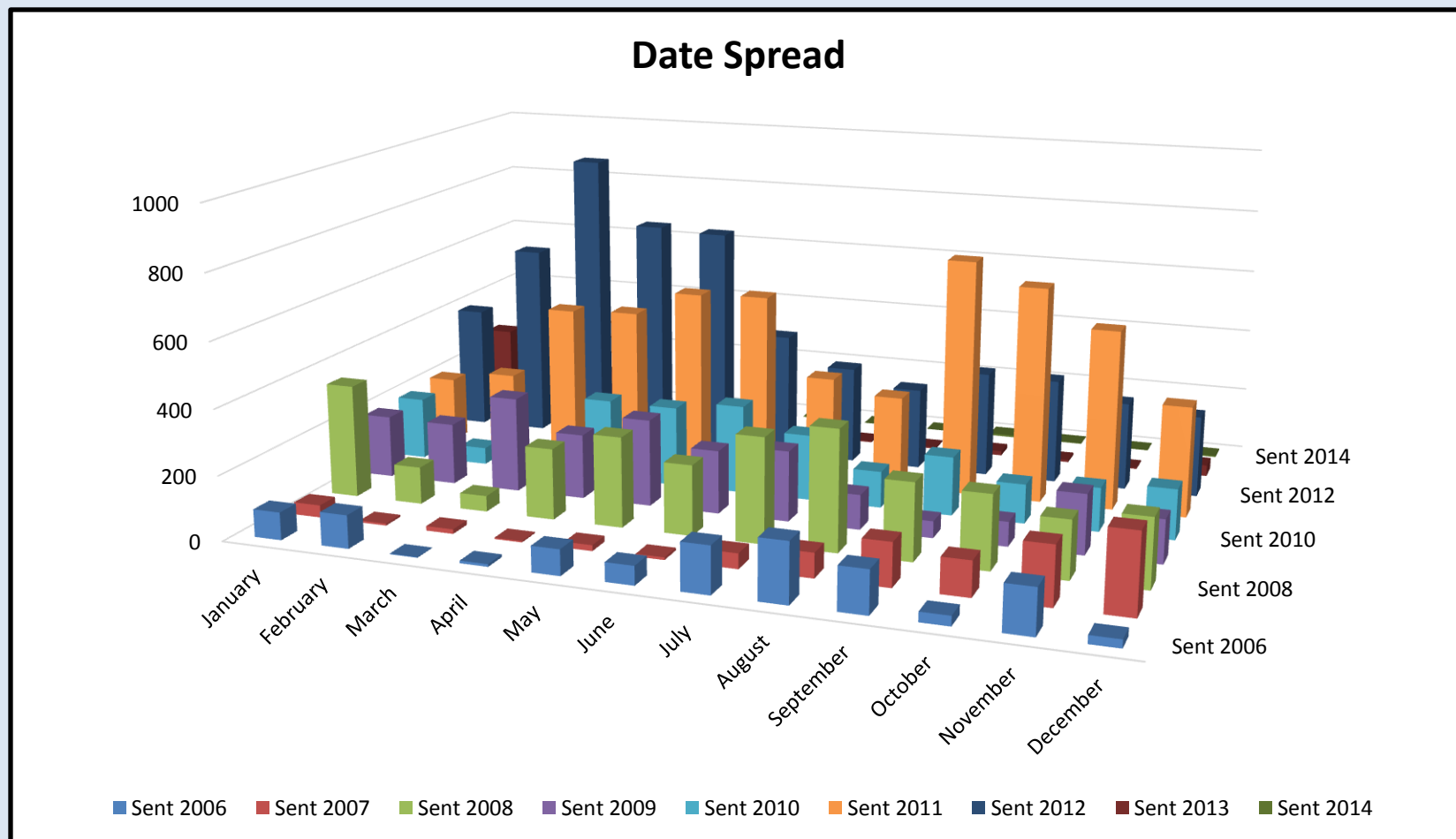


RAW DATA



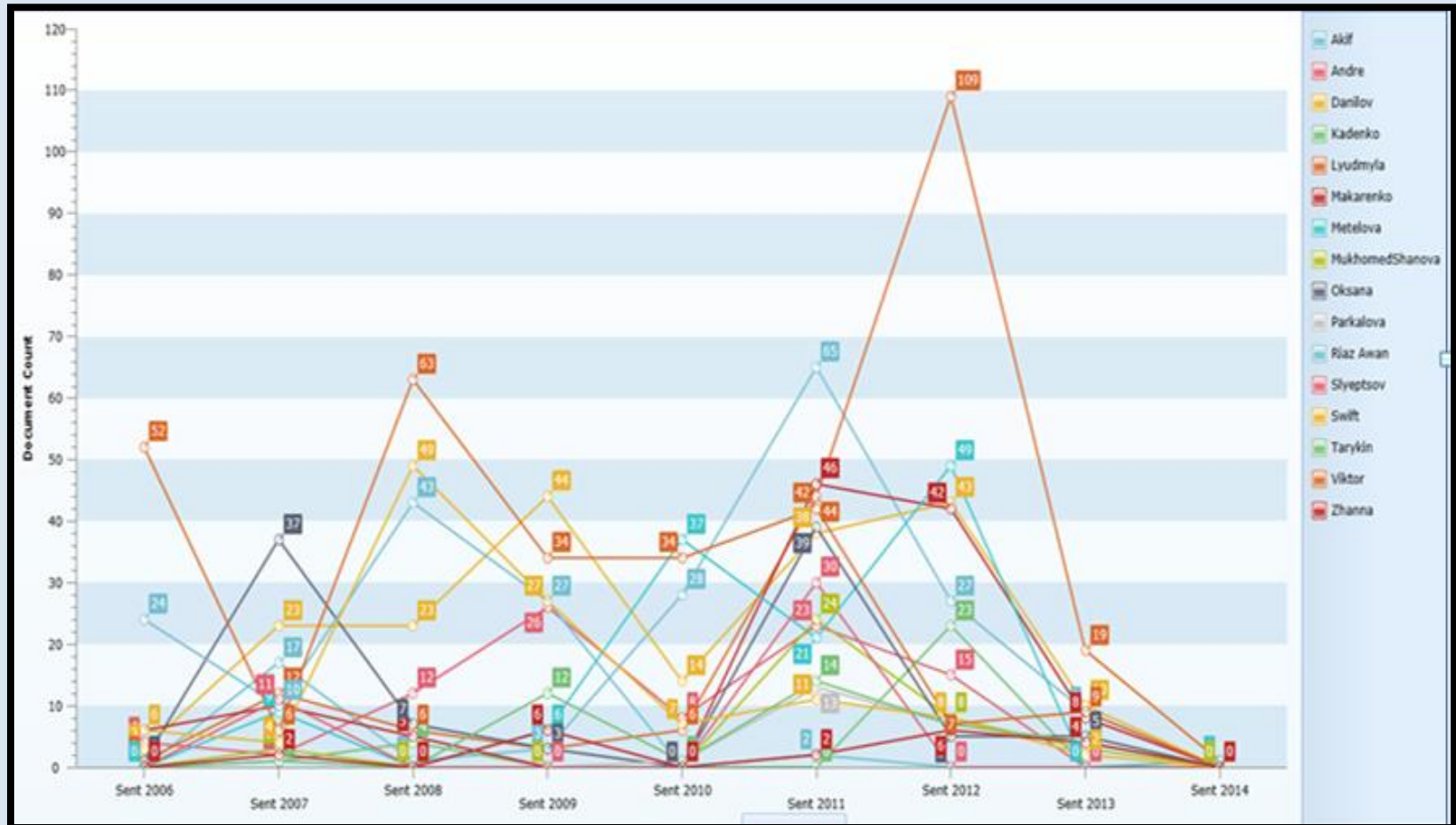


QUANTITY OF EMAIL OVER TIME



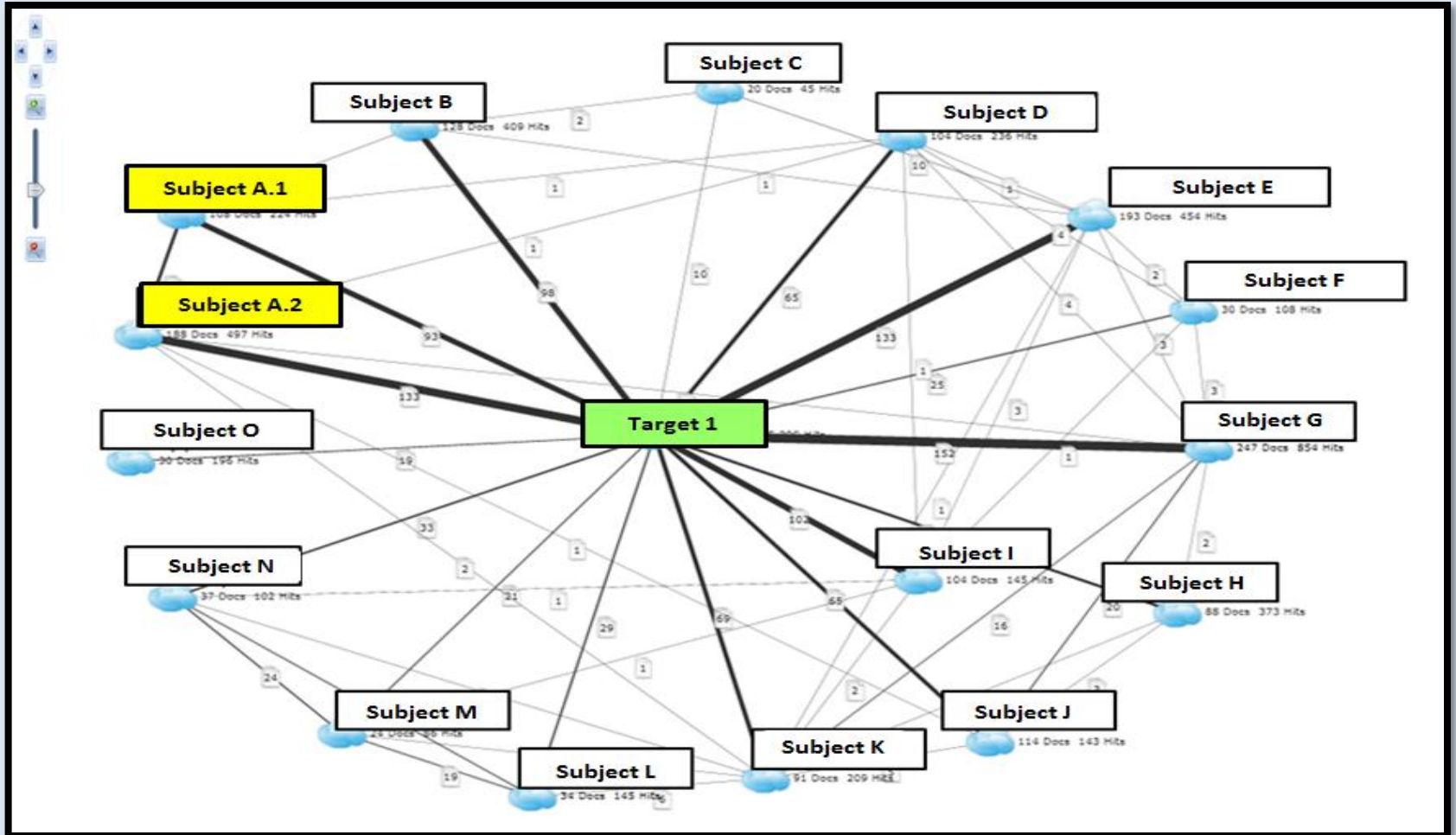


TOPIC BY YEAR





LINKING EMAILS





THE EMAIL CONVERSATION

24 hits **E-mail Subject Line**
2/7/2014 2:59:02 PM | 135.5 KB
Data Source and Source Doc

21 RE: !!!! 586371631.msg
Data Source and Source Doc

17 RE: !.msg
hits 2/7/2014 2:56:09 PM | 39.5 KB
Data Source and Source Doc

17 RE: !!!! 1363430070.msg
hits 2/7/2014 2:57:27 PM | 40.5 KB
Data Source and Source Doc

17 hits **E-mail Subject Line**
2/7/2014 2:53:02 PM | 63.0 KB
Data Source and Source Doc

16 hits **E-mail Subject Line**
2/7/2014 2:56:17 PM | 56.0 KB
Data Source and Source Doc

13 **E-mail Subject Line**

Date: 2013/02/21 07:12:00
Importance: Low
Type: Note
Thank you.

-----Original Message-----
From: **Subject A**
Sent: Thursday, February 21, 2013 7:10 AM
To: **Target 1**
Subject: Re: !

I didn't want to do it. I just wanted to bring some joy into your life and take you away from solitude
21.02.2013, 16:04, **Target 1**
> You are breaking my heart.
>

> -----Original Message-----
> From: **Subject A**
> Sent: Thursday, February 21, 2013 6:56 AM
> To: **Target 1**
> Subject: Re: !

> All I want now is just embrace you and never let you go from me.
>

> 21.02.2013, 15:40, **Target 1**
>> OK, dear.
>>

>> -----Original Message-----
>> From: **Subject A**
>> Sent: Thursday, February 21, 2013 6:27 AM
>> To: **Target 1**
>> Subject: Re: !

>> We will do it together in the evening.



OTHER DATA TYPES





DATASET CROSSWALK

Unstructured
Dataset

A

Structured
Dataset

B

Unstructured
Dataset

C

Structured
Dataset

D

Unstructured
Dataset

E



CROSSWALK BETWEEN DATASETS

Dataset 1

A133_RowId	1
A133_FILENAME	03318230
A133_AUDITYEAR	2008
A133_DBKEY	122362
A133_TYPEOFENTITY	100
A133_FYENDDATE	30-Jun-08
A133_AUDITTYPE	S
A133_PERIODCOVERED	A
A133_NUMBERMONTHS	
A133_EIN	Auditee EIN
A133_MULTIPLEEINS	
A133_EINSUBCODE	Auditee DUNS
A133_DUNS	
A133_MULTIPLEDUNS	
A133_AUDITEENAME	Auditee Name
A133_STREET1	
A133_STREET2	Auditee Address
A133_CITY	SAN JOSE
A133_STATE	CA
A133_ZIPCODE	951101705
A133_AUDITEECONTACT	
A133_AUDITEETITLE	
A133_AUDITEEPHONE	
A133_AUDITEEFAX	
A133_AUDITEEMAIL	
A133_AUDITEEDATESIGNED	
A133_AUDITEENAMEITITLE	
A133_CPAFIRMNAME	
A133_CPASTREET1	
A133_CPASTREET2	
A133_CPACITY	
A133_CPASTATE	
A133_CPAZIPCODE	
A133_CPACONTACT	
A133_CPATITLE	
A133_CPAPHONE	
A133_CPAFAX	
A133_CPAEMAIL	CPON@MGOCPA.COM
A133_CPADATESIGNED	17-Nov-09
A133_COG_OVER	C



Dataset 2

Auditee Name	Agency
Schedule of Findings and Questioned Costs March 31, 2009	
B. Findings - Required to be reported under Government Auditing Standards	
09-1 Fixed Assets Significant Deficiency in Internal Control	
<u>Condition:</u>	
The Authority did not perform a review of fixed asset accounts on a routine basis. The complete listing of construction in progress was not properly maintained and its balance was not in agreement with the general ledger. Lastly, the Authority did not provide proper descriptions for assets. This was also a finding in the prior year.	
<u>Criteria:</u>	
Generally accepted accounting principles require that the fixed asset ledger be maintained properly and reconciled with the general ledger.	
<u>Cause:</u>	
The Authority did not have strong control policies and procedures in place. The Authority did not have a designated person to perform timely reconciliation of fixed asset accounts.	
<u>Effect:</u>	
The Authority is required to keep the fixed asset ledger up-to-date. It should be reconciled with the general ledger, and contain proper asset descriptions. Failure to follow this GAAP requirement could result in the financial statements being misstated and misleading to the reader. In addition, it could cause management to rely on incomplete and/or inaccurate financial information.	
<u>Recommendation:</u>	
Management should reconcile the fixed asset ledger with the general ledger on a monthly basis. In addition, we recommend that management provide proper descriptions for all assets. We further recommend that the Authority maintain a complete inventory for all property, plant and equipment.	
<u>Views of Management:</u>	
Significant changes have been made in this area. The Authority has assigned the Modernization Officer to maintain the detailed records throughout the year. Now that the general ledger software has been debugged, it is possible to be into detail on a monthly basis. The reason that the detail did not be into the general ledger was due to final entries made on the general ledger that did not get entered onto the detail ledger.	
<u>Corrective Action Plan:</u>	
Finance will have the final entries posted onto the detail sub-ledgers.	



Dataset 3

Agency Name	
Agency	
Agency Address	
Date:	NOV 29 2013
To:	See Attached Distribution
From:	Employee Name
Subject:	Auditee Name
the period July 1, 2011 through June 30, 2012 (Report Number A-04-14-2262) Going Concern	
XXXX	
On January 18, 2013, we issued a National External Audit Review Center (NEAR) Alert on the Organization for the fiscal year ended June 30, 2011 (Report Number A-04-14-2262) Going Concern review of the nonfederal audit report on the Organization identified XXXX conditions we believe should be brought to your attention:	
<ul style="list-style-type: none"> The Risk and Uncertainties note on page 10 stated the financial statements were prepared on the basis that the Organization would continue as a going concern. In addition, the Contingencies note identified \$528,000 in disallowed costs for the period July 1, 2011 through June 30, 2012. Program Name Current liabilities exceeded current assets by \$471,750 that resulted in a current ratio (current assets/current liabilities) of .66 as of June 30, 2012. Total expenses exceeded total revenues by \$66,865 for the year ended June 30, 2012. 	
These findings have been identified for resolution in the departmental stewardship system. We recommend departmental management consider closer monitoring and increased attention by grants management staff to protect the Federal interest.	
We are also bringing this information to the attention of the OIG management for consideration in the work planning process.	



COMBINED DATA SETS

Document Path to PDF Reports	Aiding and Abetting	Indicted	Lacked Adequate Documentation	Program Fraud	Document Path to Summary Table	A133 Summary Table AMOUNT EXPENDED	A133 Summary Table AUDITYEAR	A133 Summary Table CFDA	A133 Summary Table CITY	A133 Summary Table STATE	A133 Summary Table FINDINGREFNUMS
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 156,192	2009	16.589	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 57,934	2009	16.587	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 223,347	2009	16.557	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 105,523	2009	16.59	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 86,412	2009	93.671	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 8,606	2009	16.806	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 73,792	2009	16.588	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 2,759	2009	16.587	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 39,984	2009	16.557	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 6,723	2009	16.587	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 3,966	2009	16.524	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 2,324	2009	16.017	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	1	1	1	1	db://A133SQLDSN.	\$ 156,192	2009	16.589	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\fresh c	1	1	1	1	db://A133SQLDSN.	\$ 57,934	2009	16.587	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\fresh c	1	1	1	1	db://A133SQLDSN.	\$ 223,347	2009	16.557	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\fresh c	1	1	1	1	db://A133SQLDSN.	\$ 105,523	2009	16.59	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\fresh c	1	1	1	1	db://A133SQLDSN.	\$ 86,412	2009	93.671	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\fresh c	1	1	1	1	db://A133SQLDSN.	\$ 8,606	2009	16.806	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\fresh c	1	1	1	1	db://A133SQLDSN.	\$ 73,792	2009	16.588	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\fresh c	1	1	1	1	db://A133SQLDSN.	\$ 2,759	2009	16.587	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\fresh c	1	1	1	1	db://A133SQLDSN.	\$ 39,984	2009	16.557	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\fresh c	1	1	1	1	db://A133SQLDSN.	\$ 6,723	2009	16.587	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\fresh c	1	1	1	1	db://A133SQLDSN.	\$ 3,966	2009	16.524	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\fresh c	1	1	1	1	db://A133SQLDSN.	\$ 2,324	2009	16.017	MISSION	SD	09-1 09-2 07-1 02-1 02-2
\\fagowfs\census	0	0	0	0	db://A133SQLDSN.	\$ 103,086	2008	16.54	BENTON	IL	2008-1 TO 2008-4
\\fagowfs\census	0	0	0	0	db://A133SQLDSN.	\$ 238,351	2008	14.228	BENTON	IL	2008-1 TO 2008-4
\\fagowfs\census	0	0	0	0	db://A133SQLDSN.	\$ 15,565	2008	97.042	BENTON	IL	2008-1 TO 2008-4
\\fagowfs\census	0	0	0	0	db://A133SQLDSN.	\$ 100,190	2008	16.71	BENTON	IL	2008-1 TO 2008-4

= Crosswalk Analysis



VALIDATION

21 hits	01546743.pdf 8/21/2013 2:01:03 PM 1.5 MB	Data Source
21 hits	01546760.pdf 8/21/2013 2:01:03 PM 1.5 MB	Data Source
21 hits	01467385.pdf 7/17/2013 7:10:19 AM 1.5 MB	Data Source pdf
21 hits	01467385.pdf 7/17/2013 7:10:19 AM 1.5 MB	Data Source

Less: Accumulated Depreciation
Total

ITS AND CONTINGENCIES

(152,150.91)
\$161,627.64

The former Executive Director of the Organization was **indicted** by a federal grand jury on July 6, 2011, for **Program Fraud** and **Aiding and Abetting**. She appeared before the courts on July 19, 2011 and pled not guilty to the **indictment**. The charge is merely an accusation, and the former Executive Director is presumed innocent until and unless proven guilty. The financial statements do not include accrual or provisions for loss contingencies that may result from these proceedings.

While the outcome of the above noted proceedings cannot be predicted, the Organization feels that any settlement or judgment would

...

Document Excerpt: [Page 39 Paragraph 30]
"... 2011
24
Auditee

STATUS OF PRIOR YEAR INTERNAL CONTROL FINDINGS, COMPLIANCE FINDINGS, AND QUESTIONED COSTS
DECEMBER 31, 2010
FINDING 09-2 - LACK OF SUPPORTING DOCUMENTATION
CRITERIA:
A-87 and all contracts administered by the Organization require that costs be documented to include appropriate authorization, invoices and time records to support payroll costs.
CONDITION:
Many expenditures **lacked adequate documentation**, including purchase orders, invoices, and account code information.
QUESTIONED COSTS:
\$60,586.47
EFFECT:
Possible misuse of federal, state, and local funds
RECOMMENDATION:
Controls need to be in place to ensure checks are not released until all proper support is attached and in place.
MANAGEMENT RESPONSE
The current management **Auditee** the documentation of financial transactions. Because of this the Financial Policies and Procedures were reviewed at the end of 2010 and in

...



IMPACT CROSSWALK

Document Path to PDF Reports	Aiding and Abetting	Indicted	Lacked Adequate Documentation	Program Fraud	Document Path to Summary Table	A133 Summary Table AMOUNT EXPENDED	A133 Summary Table AUDITYEAR	A133 Summary Table CFDA	A133 Summary Table Program Name	A133 Summary Table FINDINGREFNUMS
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$156,192.00	2009	16.589	RURAL DOMESTIC VIOLENCE	09-1 09-2 07-1 02-1 02-2
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$57,934.00	2009	16.587	XXXX COALITION	09-1 09-2 07-1 02-1 02-2
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$223,347.00	2009	16.557	ABC COALITION	09-1 09-2 07-1 02-1 02-2
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$105,523.00	2009	16.59	ENCOURAGE ARREST POLICIES AND ENFORCEMENT OF PROTECTION ORDERS PROGRAM	09-1 09-2 07-1 02-1 02-2
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$86,412.00	2009	93.671	FAMILY VIOLENCE PREVENTION	09-1 09-2 07-1 02-1 02-2
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$8,606.00	2009	16.806	TRANSITIONAL HOUSING	09-1 09-2 07-1 02-1 02-2
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$73,792.00	2009	16.588	VIOLENCE AGAINST WOMEN GRANTS	09-1 09-2 07-1 02-1 02-2
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$2,759.00	2009	16.587	O UW RECOVERY ACT	09-1 09-2 07-1 02-1 02-2
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$39,984.00	2009	16.557	TECHINICAL ASSISTANCE PROGRAM	09-1 09-2 07-1 02-1 02-2
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$6,723.00	2009	16.587	SAFETY FOR WOMEN FROM SEXUAL ASSAULT	09-1 09-2 07-1 02-1 02-2
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$3,966.00	2009	16.524	CIVIL LEGAL ASSISTANCE	09-1 09-2 07-1 02-1 02-2
Group 4\01467385.pdf	1	1	1	1	db://A133SQLDSI	\$2,324.00	2009	16.017	SEXUAL ASSAULT	09-1 09-2 07-1 02-1 02-2

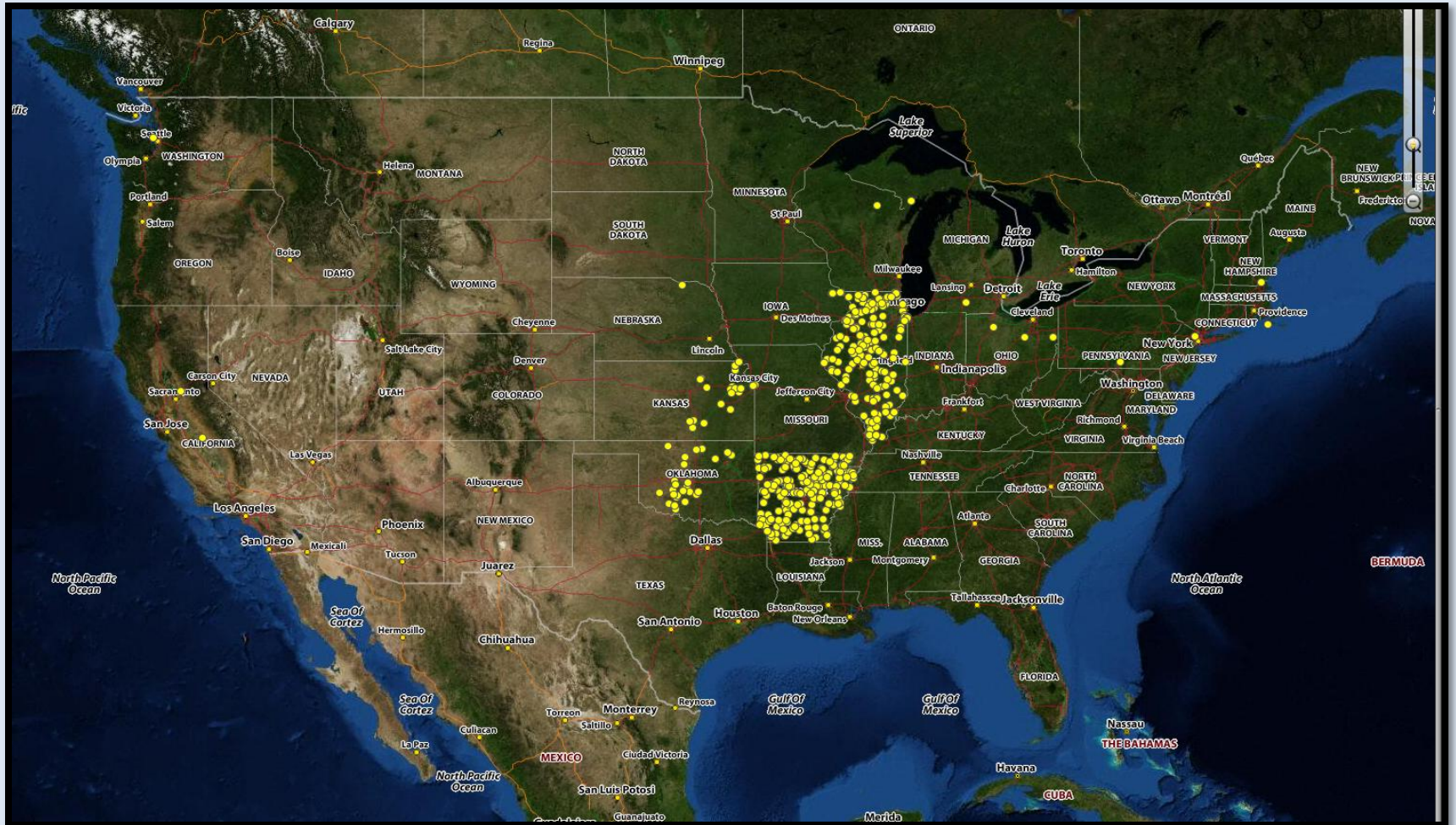


MAPPING (OR "GIS")





ADVERSE OPINIONS





EXPLORING THE DETAILS

Investigation Edit Preferences Applications Helpers Help

Home | People | Global | Charts | Reports | Info | Users

Import | Update | Publish

Click here to search [] Search

All Objects: All objects visible from current... 75M objects

Of type: Audit Event: Of type: Audit Event 212k objects

Type Report FS = Qua...: Objects matching one of the f... 6.1k objects

Audit Year = 2009, Au...: Objects matching one of the f... 2.6k objects

Oversight Agency = D...: Objects matching property val... 1.8k objects

Linked Audited O...: Linked Audited Organi... 1.1k objects

New Formula | New Derived Property

Load Formula | Save Formula | Apply Formula

Back | Forward | Chart | Properties | Group By | Links | Timeline | Proximate | Link Count

Oversight Agency	Sum	Count	Average	Min	Max
Department of Education	3.7B	1.8k	2,000,483.91	501,123.00	32M
Department of Health and Human...	936M	77	12M	677,903.00	48M
Department of the Interior	716M	74	9,672,652.77	511,035.00	44M
Department of Agriculture	699M	321	2,178,963.89	504,889.00	24M
Department of Housing and Urban...	490M	90	5,446,337.61	502,261.00	48M
Department of Defense	340M	86	3,953,380.64	691,861.00	14M
Department of Justice	129M	32	4,021,118.19	521,006.00	48M
Department of Transportation	92M	30	3,077,837.37	527,985.00	49M
Department of Homeland Security	57M	33	1,719,491.88	526,037.00	9,291,815.00
Department of Energy	40M	11	3,632,208.18	676,072.00	10M
Environmental Protection Agency	36M	24	1,484,937.63	512,719.00	8,193,896.00
Department of Labor	18M	3	5,998,790.67	4,932,482.00	6,637,503.00
Appalachian Regional Commission	17M	1	17M	17M	17M
Corporation for National and Com...	17M	7	2,358,361.29	1,067,893.00	4,099,939.00
Department of Commerce	2,831,339.00	2	1,415,669.50	1,201,374.00	1,629,965.00
National Endowment for the Hum...	2,021,237.00	3	673,745.67	649,171.00	693,495.00
Denali Commission	1,105,458.00	1	1,105,458.00	1,105,458.00	1,105,458.00
Scholarship Foundations	913,598.00	1	913,598.00	913,598.00	913,598.00
95	599,585.00	1	599,585.00	599,585.00	599,585.00

Group by: Oversight Agency | Sort by: Sum | Statistics for: Total Federal Amou... | Minimum: 0 occurrences | Drill Down

Audit Year = 2009, Audit Year = 2009, or... 2640 objects

Event Types (2/2)

- All Events 2,640
- Audit Event 2,640

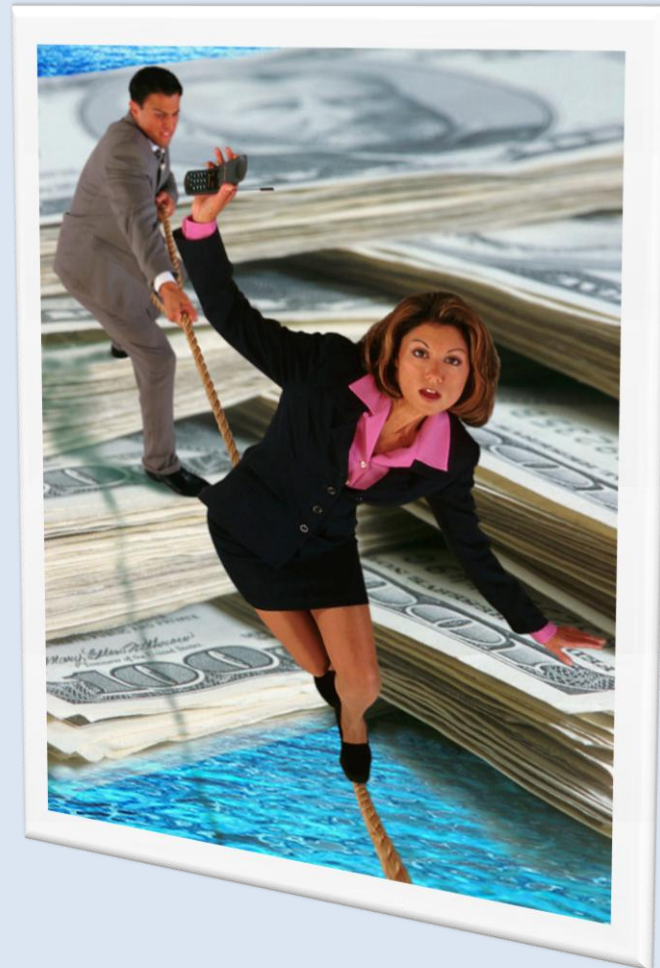
Property Types (25/25)

- Audit Type 2,640
- Audit Year 2,640
- CFDA Program Amount 2,640
- CFDA Program Number 2,640
- CY Findings 2,640
- Date Range and Location 2,640
- Date Signed 2,640
- Event Title 2,640
- Fiscal Year 2,640
- Going Concern 2,640
- Label 2,640
- Low Risk 2,640
- Material Noncompliance 2,640
- Material Weakness MP 2,640
- PY Schedule 2,640
- Questionable Costs 2,640
- Reportable Condition 2,640
- Reportable Condition 2,640
- Total Federal Amount 2,640
- Type Report FS 2,640
- Type Report MP 2,640
- Oversight Agency 2,626
- Material Weakness 2,343
- Reporting Agency 219
- Cognizant Agency 14



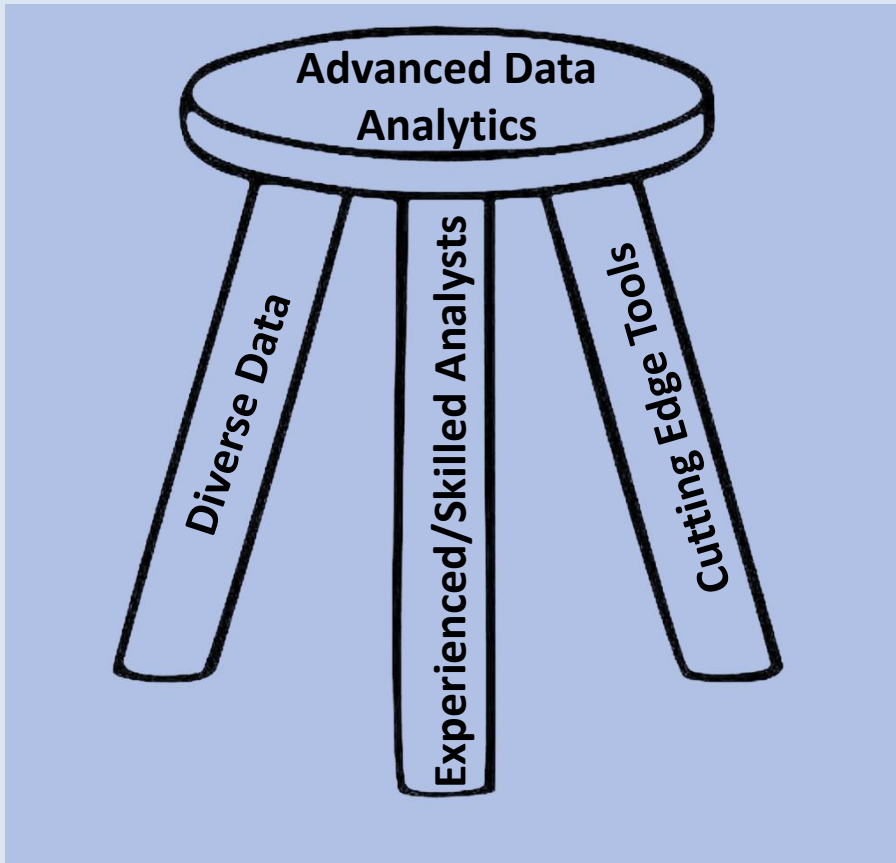
ASSISTANCE WITH AUDITS?

- Resource allocation – audit planning
- Time savings
- ROI
- Identification of relationships between audits and criminal investigations – earlier and concurrently





LESSONS LEARNED



- Do not use one tool
- Research false positives
- Conduct outreach
- Obtain feedback
- Provide intelligence packages vs. data dumps
- Partner with IT shop

