

# Data Analysis of Audit Aging Reports

Wednesday — May 8, 2024



# Presenting

- ❑ Dennis Johnston, Administrator, Utah Unclaimed Property Division, Utah Treasurer's Office
- ❑ Barbie Proffitt, Unclaimed Property Holder Services and Audit Manager, Washington State Department of Revenue
- ❑ Danielle Anthony, Deputy Treasurer, Nevada Treasurer's Office
- ❑ Brian Beck, Audit Manager, Utah Unclaimed Property Division, Utah Treasurer's Office
- ❑ Claudia Ciobanu, Trust Property Director, Oregon Treasury Office



# Features of Zoom Webinar

The presentation is being recorded. The video and slide deck will be sent to all registrants.

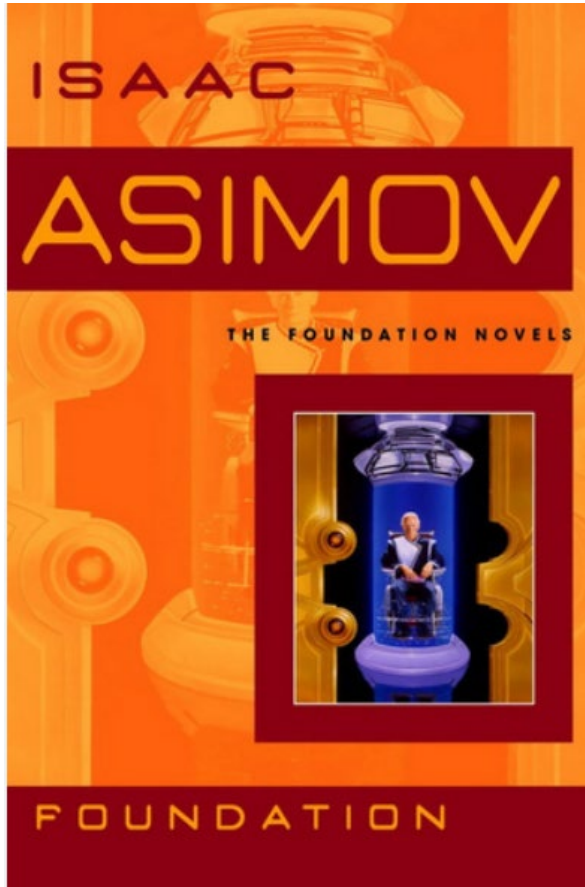
All audience members are muted.

Use “Q & A” to ask questions of the panelists and organizers at any time.



# Data Visualization

*Foundation* based on Isaac Asimov novel: “Prime Radiant”



# Data Visualization

- Larger data sets can be understood better via data visualization tools
  - Tableau
  - Jamovi
  - Power BI
- Geo-mapping
- Statistical analysis tools
  - Jamovi
  - Excel
- Line graphs
- Bar graphs
- Box Plots
- Scatter Plots
- Word maps





# Data Visualization UP addresses

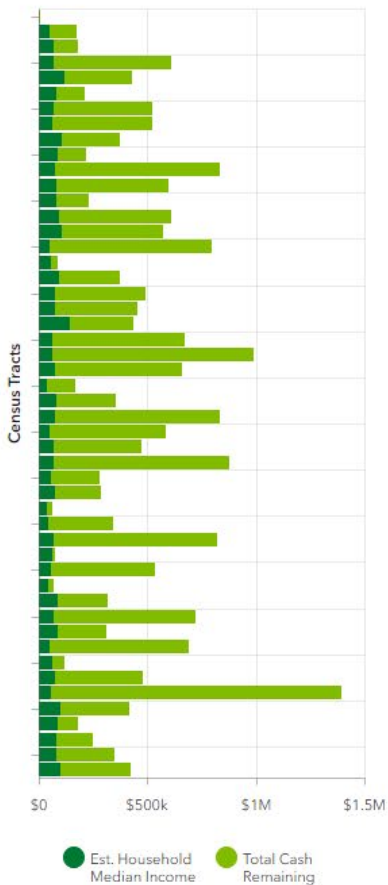


## Unclaimed Property by Census Tract

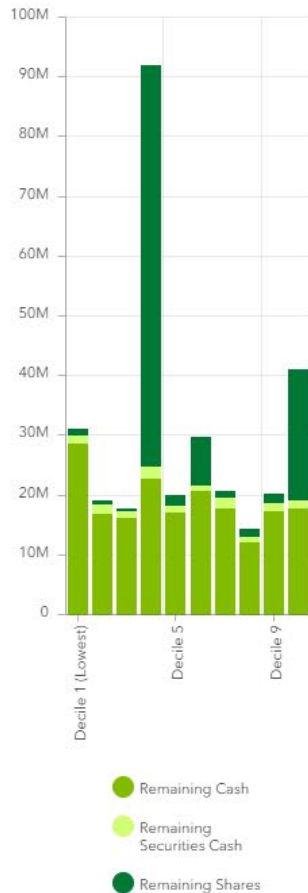
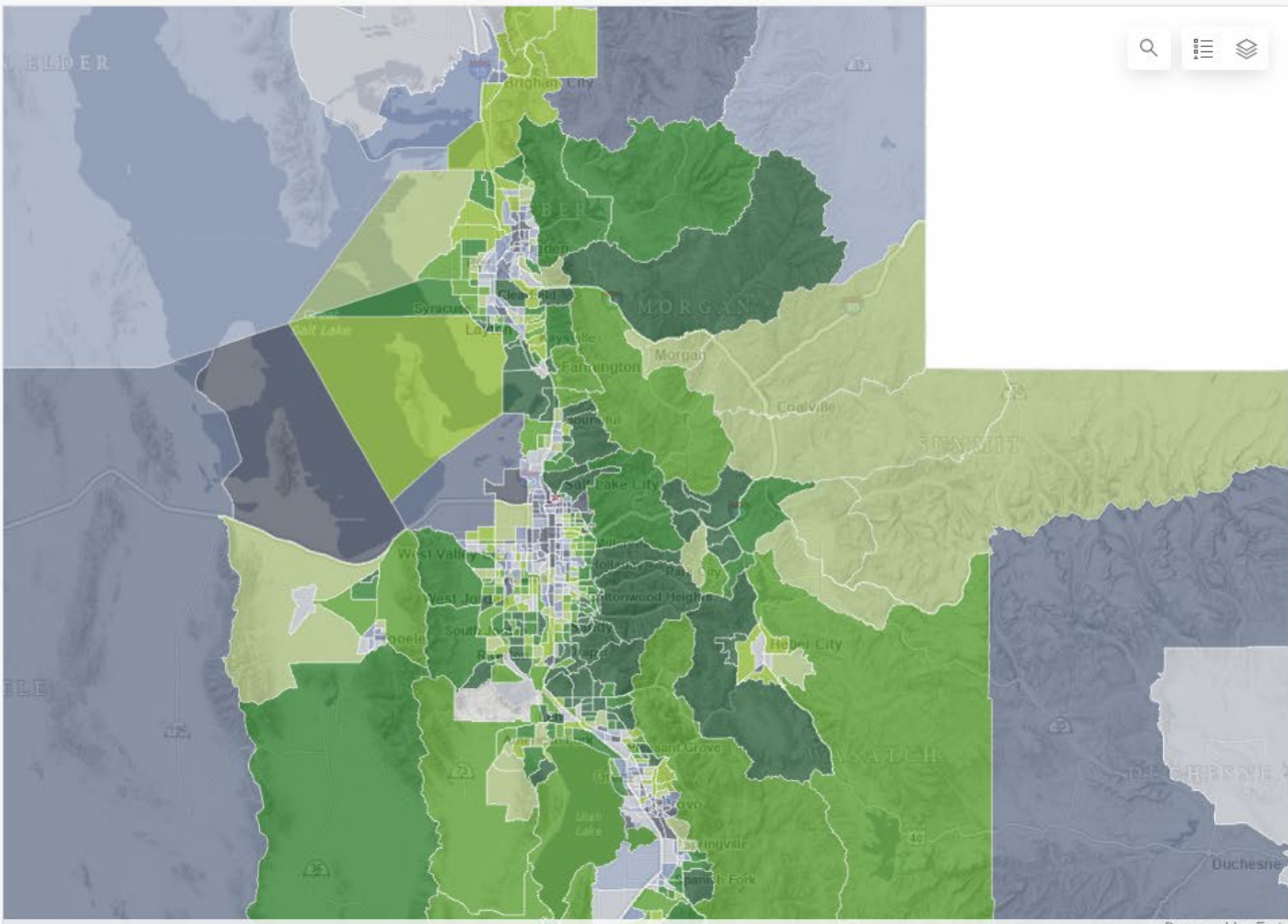
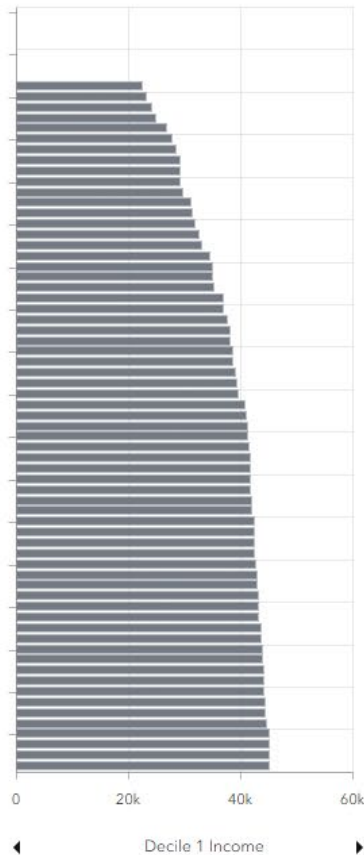


**mycash**  
UTAH.GOV

UTAH'S OFFICIAL SITE  
FOR UNCLAIMED PROPERTY



Decile 1: Estimated Median Income



NATIONAL ASSOCIATION OF  
UNCLAIMED PROPERTY ADMINISTRATORS



NATIONAL ASSOCIATION OF  
STATE TREASURERS

# Data Visualization of UP addresses

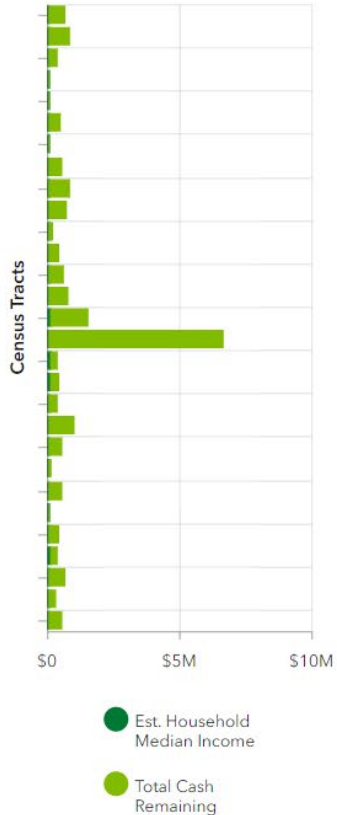


## Unclaimed Property by Census Tract

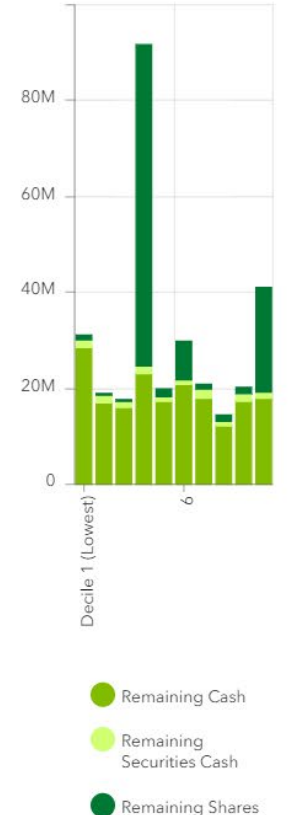
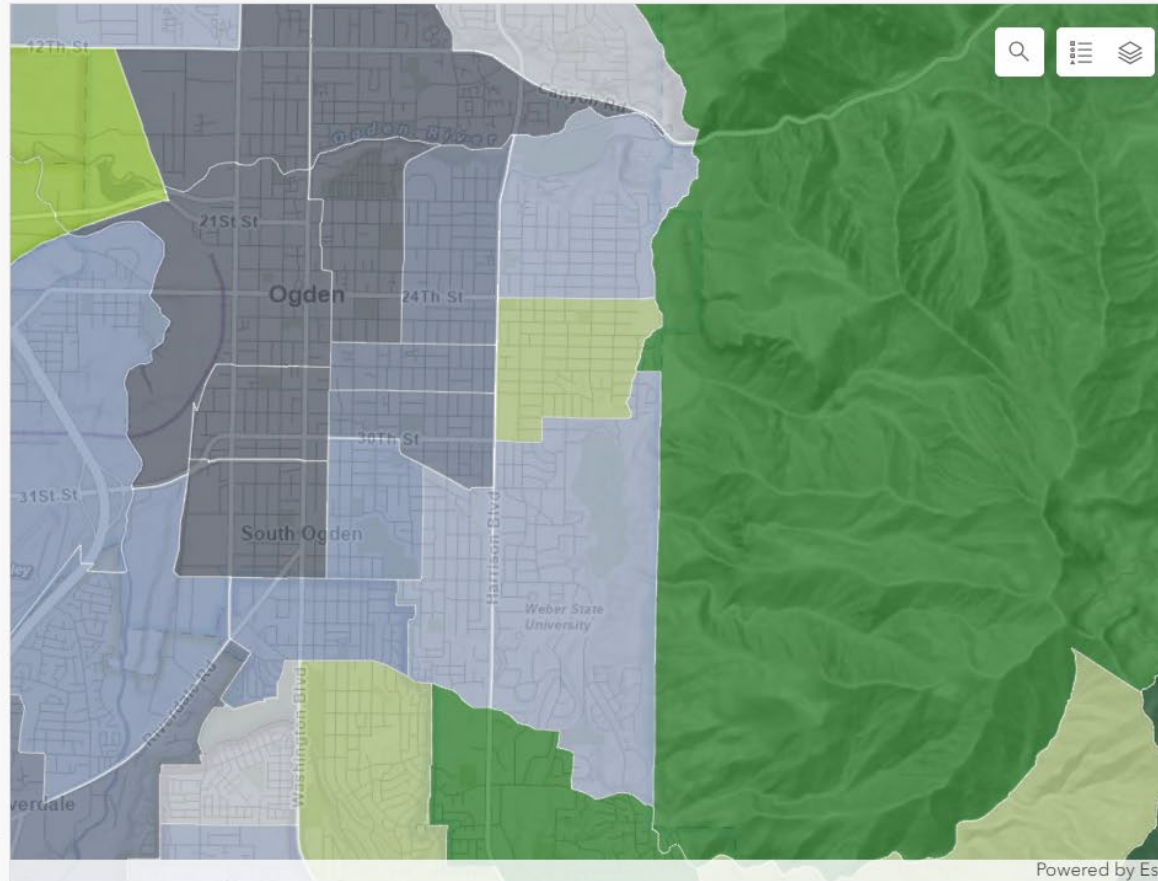
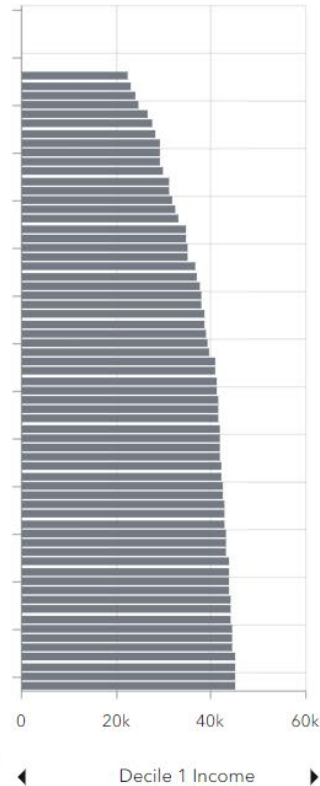


**mycash**  
UTAH.GOV

UTAH'S OFFICIAL SITE  
FOR UNCLAIMED PROPERTY



Decile 1: Estimated Median Income

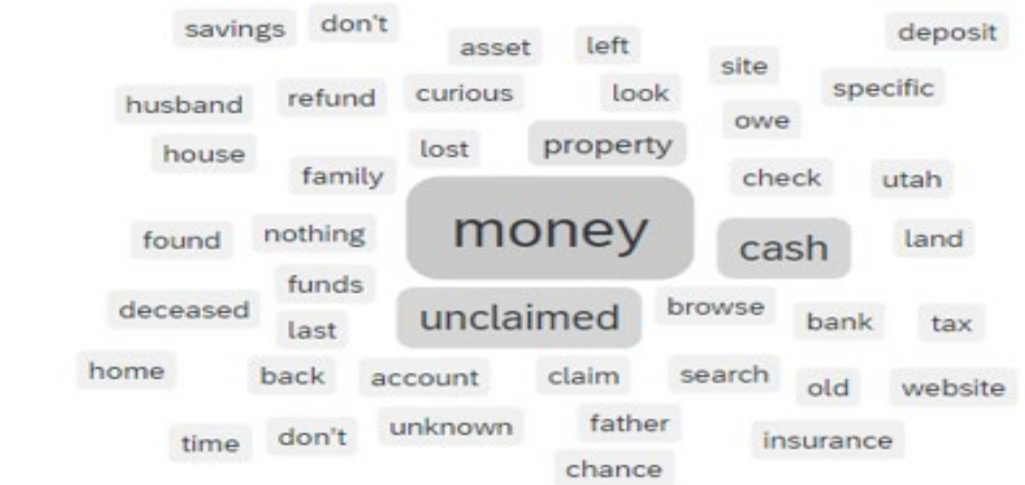


NATIONAL ASSOCIATION OF  
UNCLAIMED PROPERTY ADMINISTRATORS



NATIONAL ASSOCIATION OF  
STATE TREASURERS

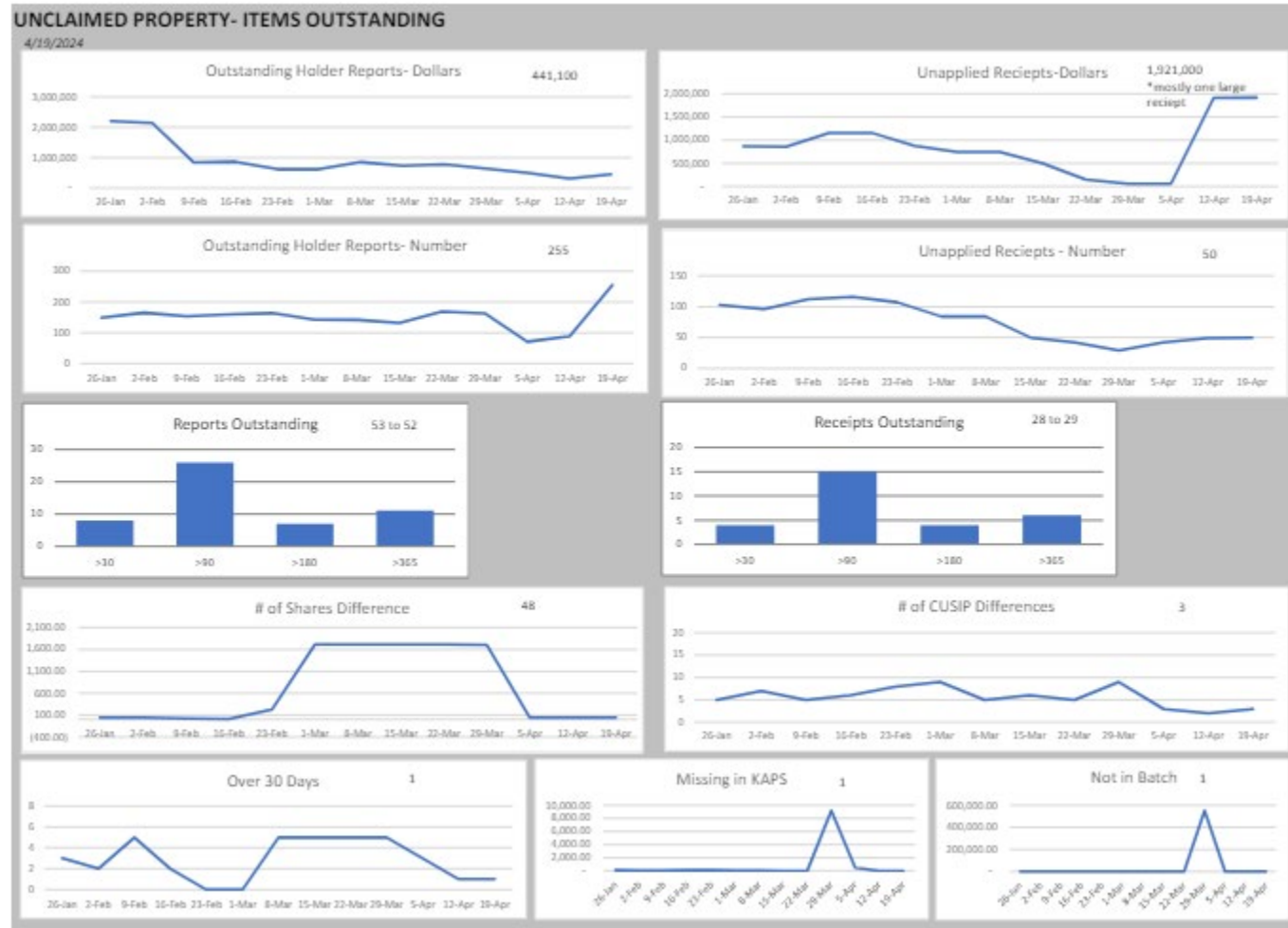




Total Calls	CSAT Score	Negative Emotion Score	Positive Emotion Score	Self-Risk New Score	Jargon Avoidance Score	Summing Score
185	95.43	8.23	13.79	9425	94.29	81.90
95	96.00	6.93	11.22	1225	93.68	82.11
18	90.00	39.50	39.29	395	100.00	88.00
499	95.64	5.68	12.83	7175	66.67	79.52
1	80.00	25.00	30.00	75	0.00	100.00
6	100.00	0.00	0.00	50.00	100.00	100.00
363	95.69	5.30	12.31	5725	85.72	75.92
99	95.35	7.15	15.21	1375	71.72	90.91
7335	95.17	6.58	14.44	119450	83.48	88.71
1	100.00	0.00	0.00	100.00	100.00	100.00
18	94.29	7.43	11.93	175	71.43	71.43
81	95.31	6.12	11.48	1080	99.06	86.67
643	95.46	7.93	14.67	8790	78.23	75.12
79	94.86	9.90	17.16	1495	94.29	75.71
896	93.64	9.61	23.06	23225	84.71	76.23
212	94.72	6.28	13.14	3375	73.11	88.21
123	95.68	4.91	19.38	12675	88.39	84.38
49963	95.78	6.16	6.65	527850	82.68	88.90



# Data Visualization of holder reports



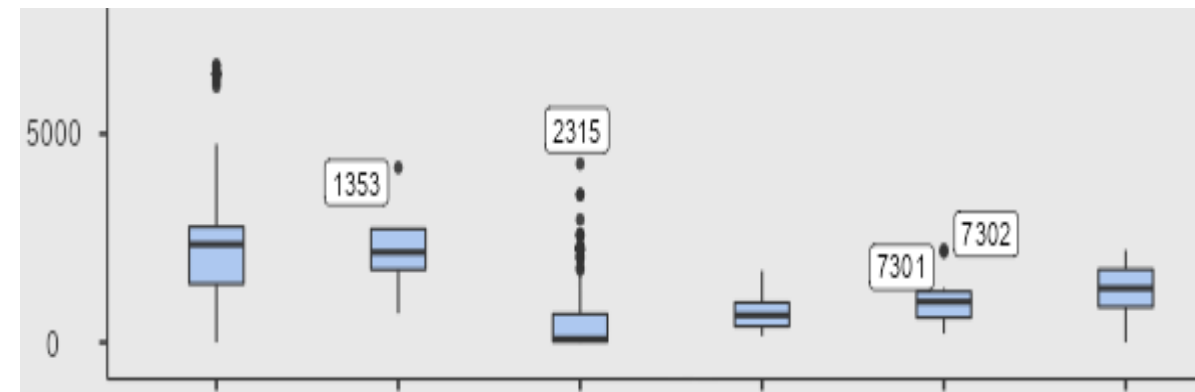
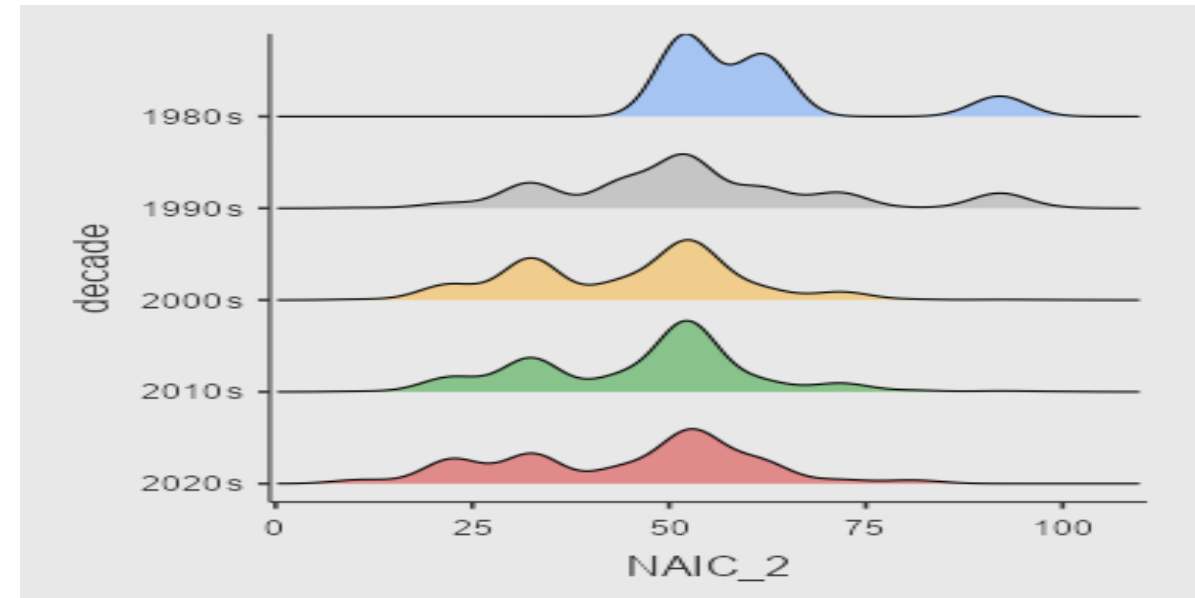
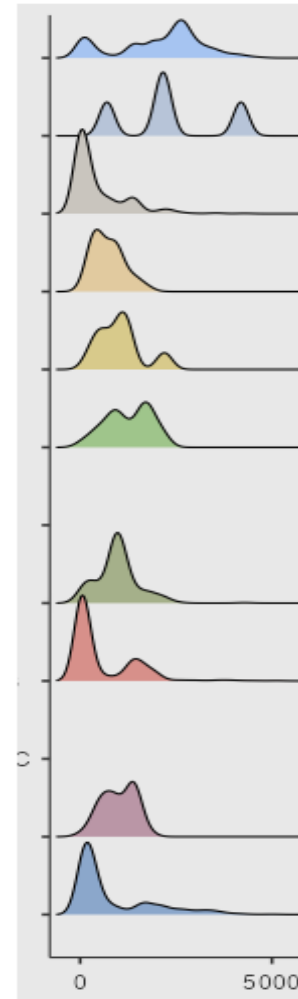
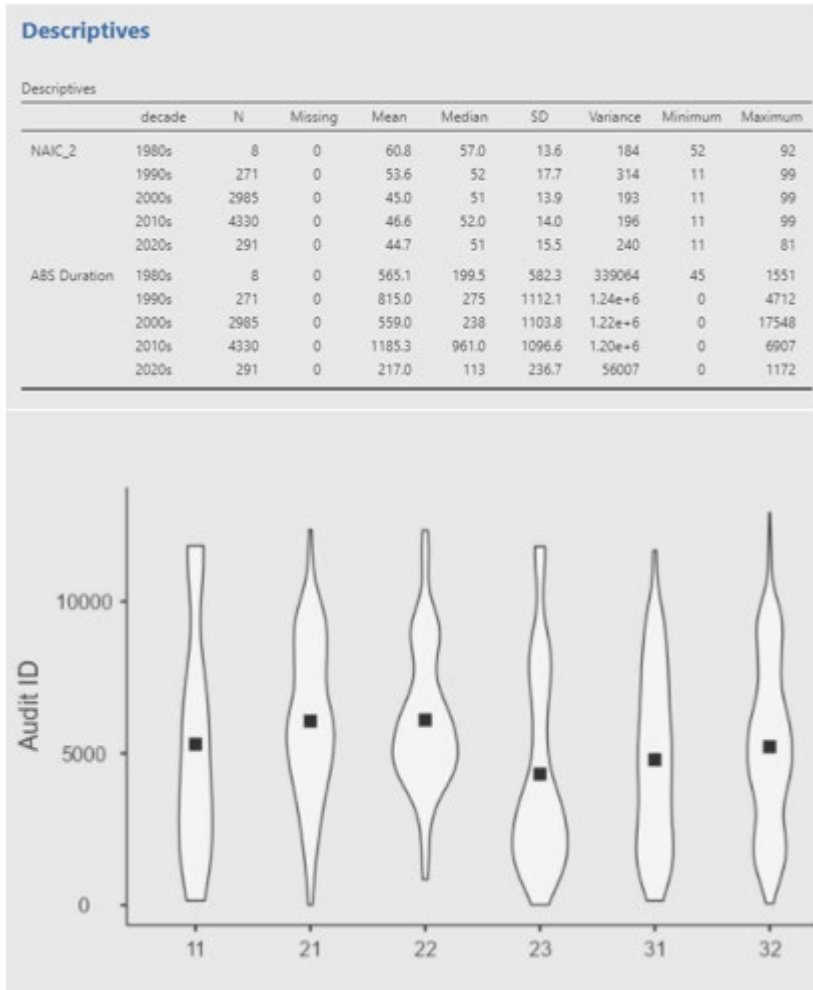
# Third\_Party\_Audit\_Aging\_by\_Workflow

# Third\_Party\_Audit\_Aging\_by\_Workflow

Audit ID	Opening Conference - NDA Signed	Audit Open Date
Holder ID	NDA Signed - Initial Records Delivered	Audit Closed Date
Holder Name	Initial Records Delivered - Most Recent Records Delivered	Process to Date
NAICS Code	Most Recent Records Delivered - Preliminary Findings/Remediation	Process to Close
Status	Preliminary Findings/Remediation - Final Findings Presented	Percent Audit Complete
Audit Vendor	Final Findings Presented - Report Uploaded	Note
Holder Advocate	Report Uploaded - Funds Delivered	
Holder Advocate Attorney	Funds Delivered - Audit Closed	
Audit Type Code Description		
Audit Scope		
Audit Approved - Opening Conference		

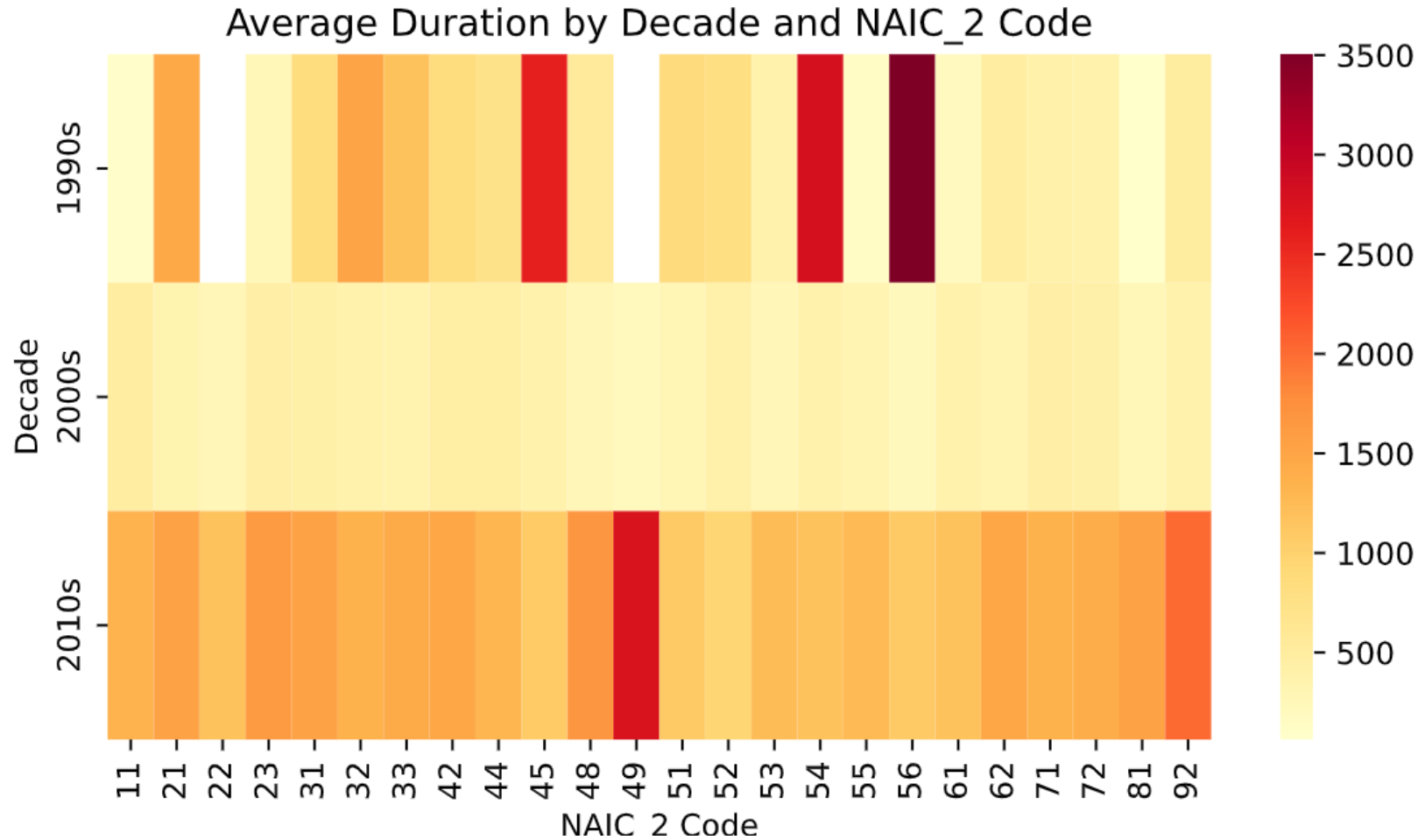


# Data Visualization of audits?



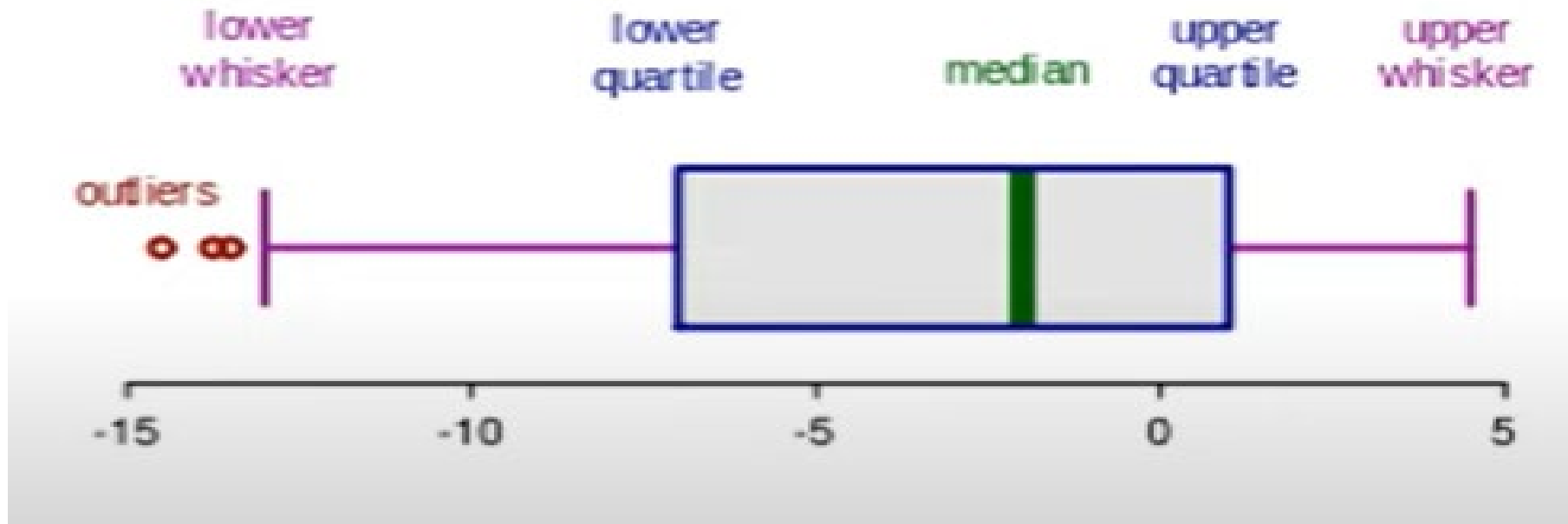


# Audit Duration Through Past Decades

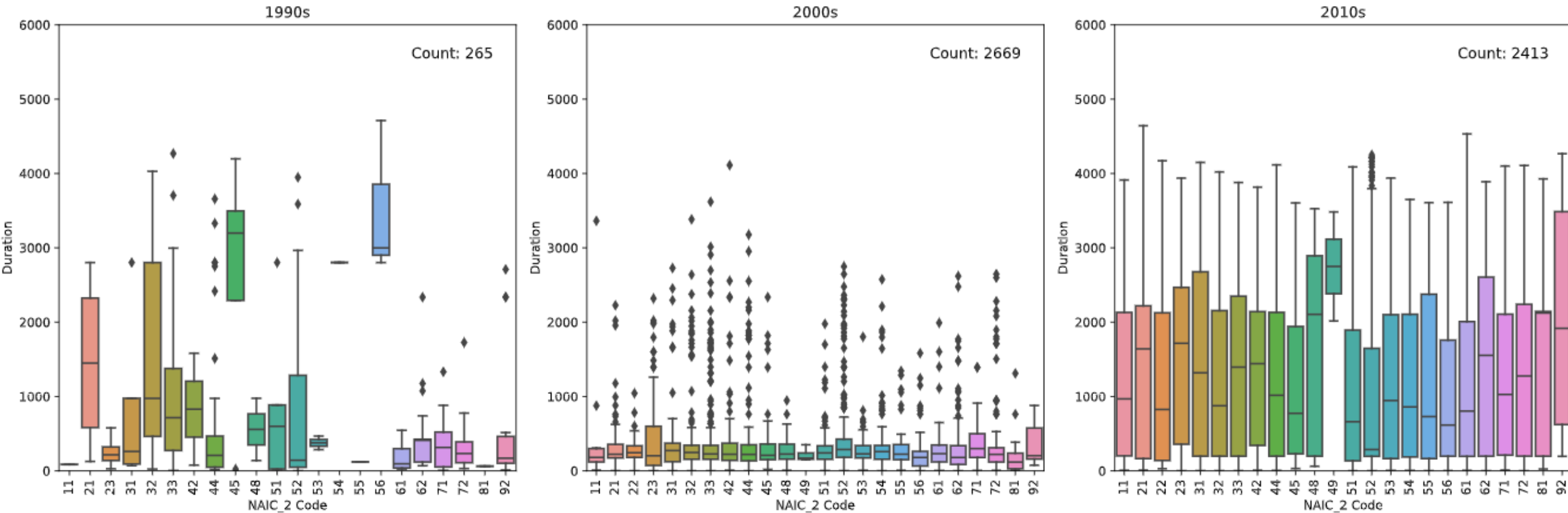


# Box plot basics

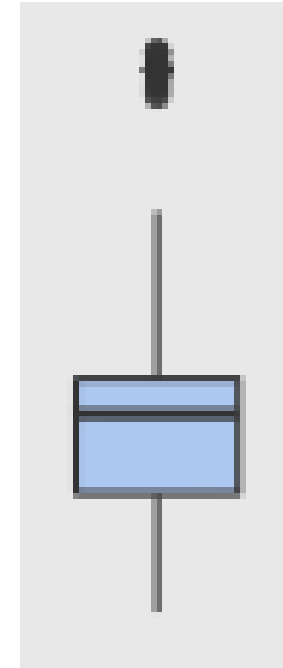
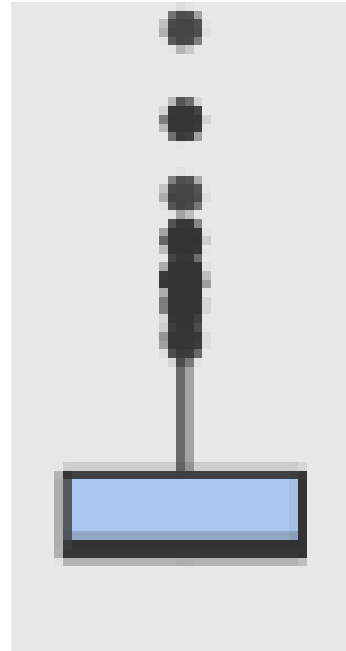
## BOX PLOT



# Audit Duration Trends Over the Past Decades by Industry Codes



# What to do with outliers?





# Audit Challenges

- Audit selection/approvals
- Holder education VS audit
- Contract compliance

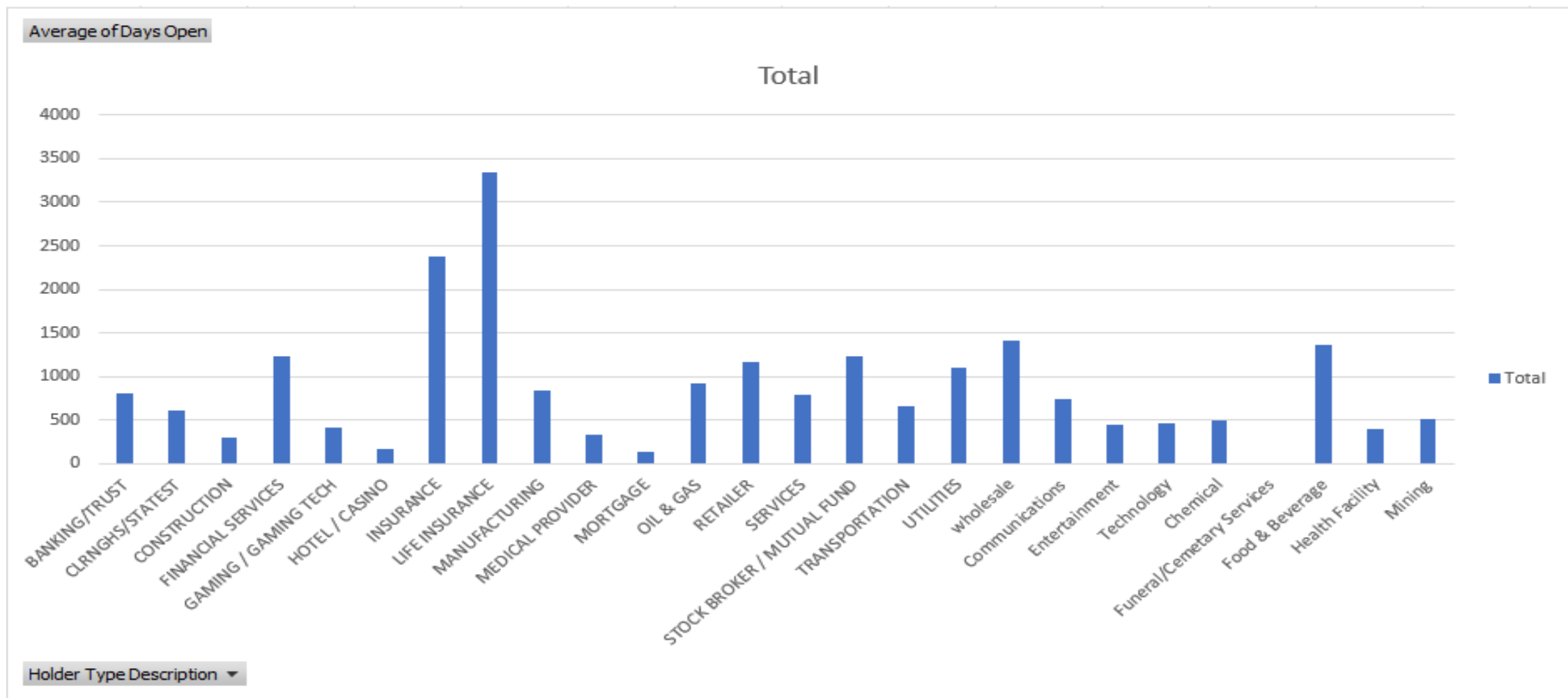


# Data Analysis Based on Industry

- Setting your system up for success. Reduce GIGO
- Only allow metrics that are useful to be options for the Holder.
- For example:
  - Holder Types: NAICS Codes may be a uniform way for holders to explain their operations
- Useful beyond audit analytics. Could be used to determine a particular industry's reporting compliance, property types reported, values of annual reports, etc.



# Data Analysis Based on Industry



# Data Analysis Based on Industry

- The outliers can be drilled into to determine the cause of and responses to audit delays
- Is a particular industry more prone to:
  - Utilizing stall tactics
  - Utilizing any particular 3<sup>rd</sup> party that more frequently delays audits
  - Litigation
  - Etc.
- Are each of those reasonable?
- Do they require action by the State?
- Should the Audit Committee discuss the issue to develop best practices?





# Where Did This Project Originate From?

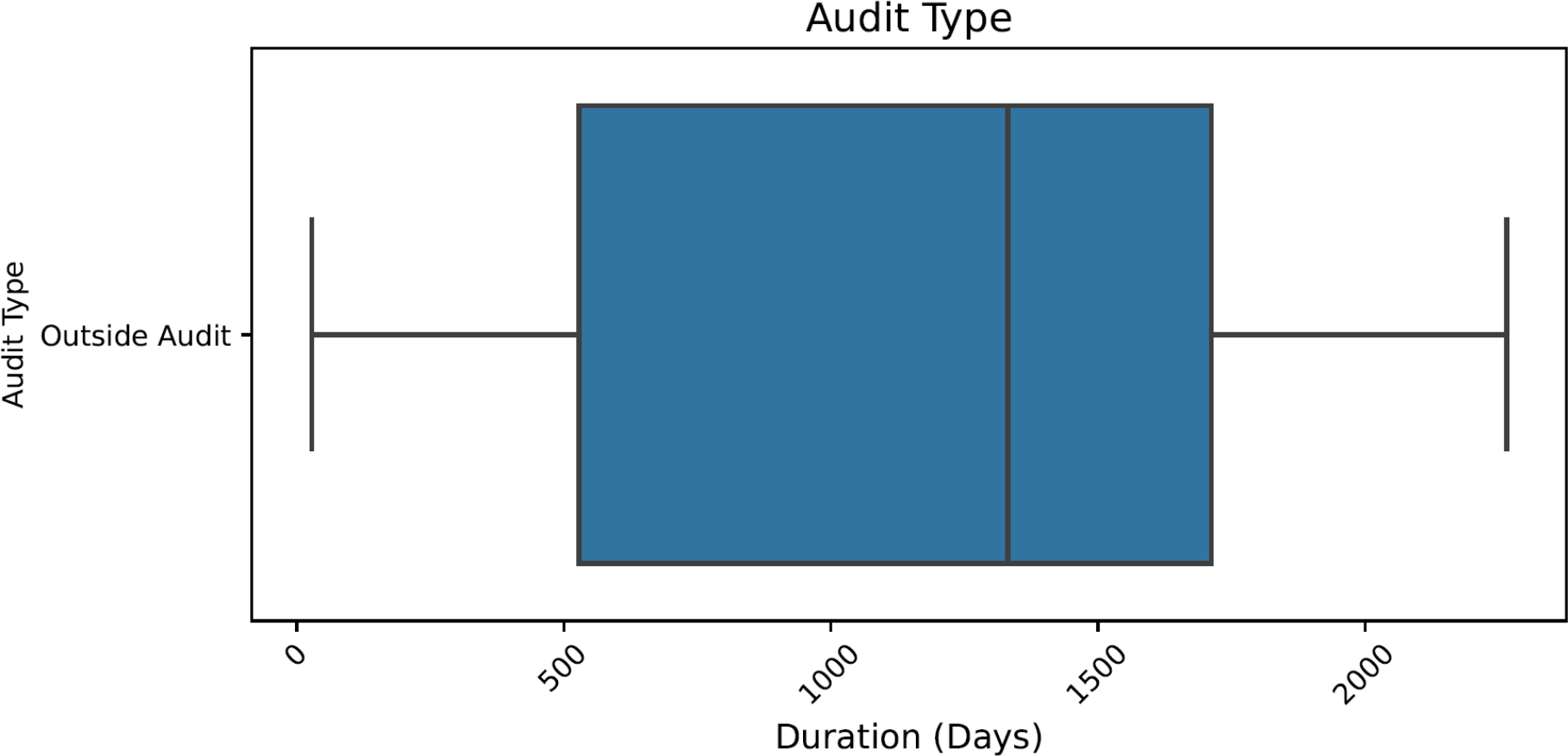
- New Audit Manager – with a solid financial audit background asking questions
- Audit Vendors who have industry expertise, yet some vendors appear to be quicker completing audits
- Some holders in specific industries utilize advocates – and audits stayed open for years
- Advocates – lot of “gut feelings” but no solid evidence to suggest help or a hinderance



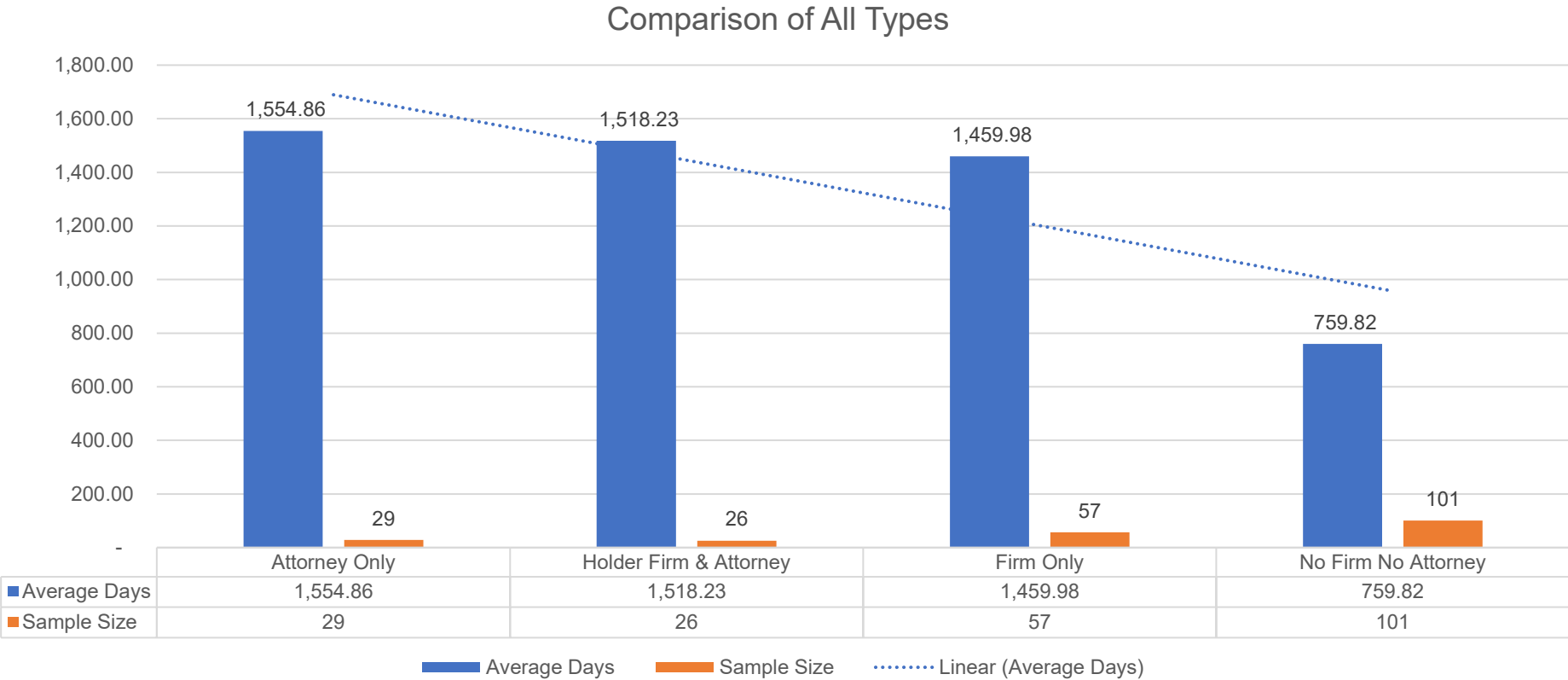
## Data Used

- Decision was made to start with 2017 data, as several audit vendors were brought on board during this time
- Vendors were asked to include more data into monthly WIP reports
- 213 lines of closed audit data was used
- Utilized NAICS codes – to aid our analysis
- Project involved a lot of cleanup

# Audit Type

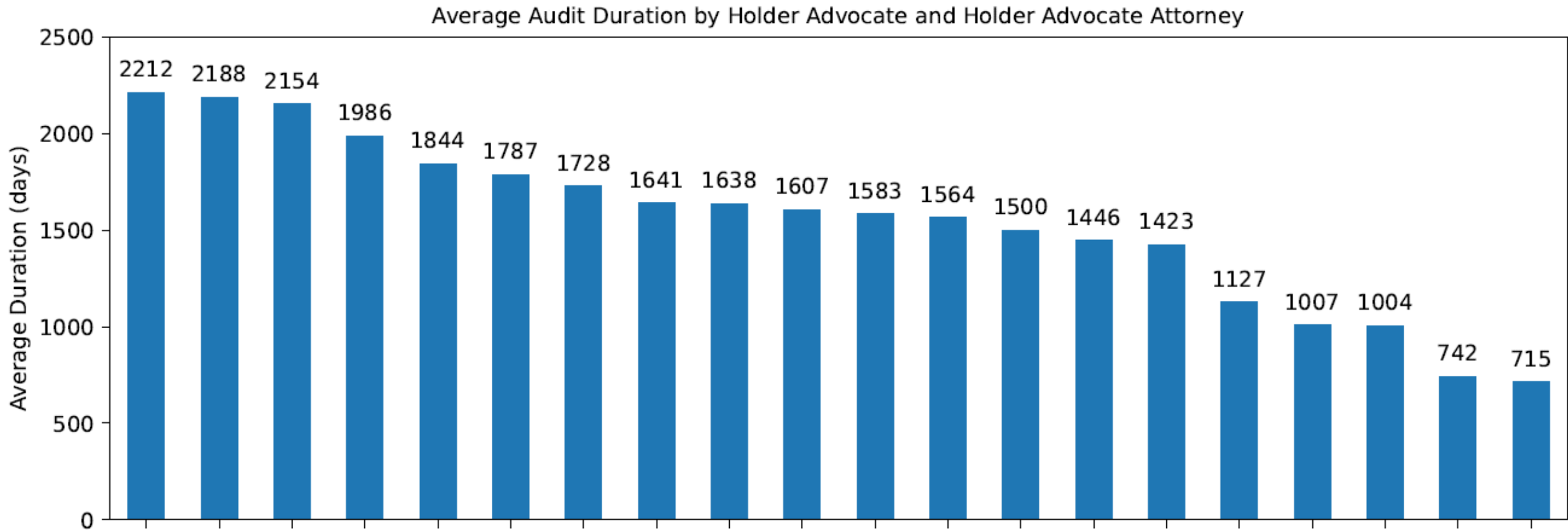


# We Then Looked At Data Showing All Combinations

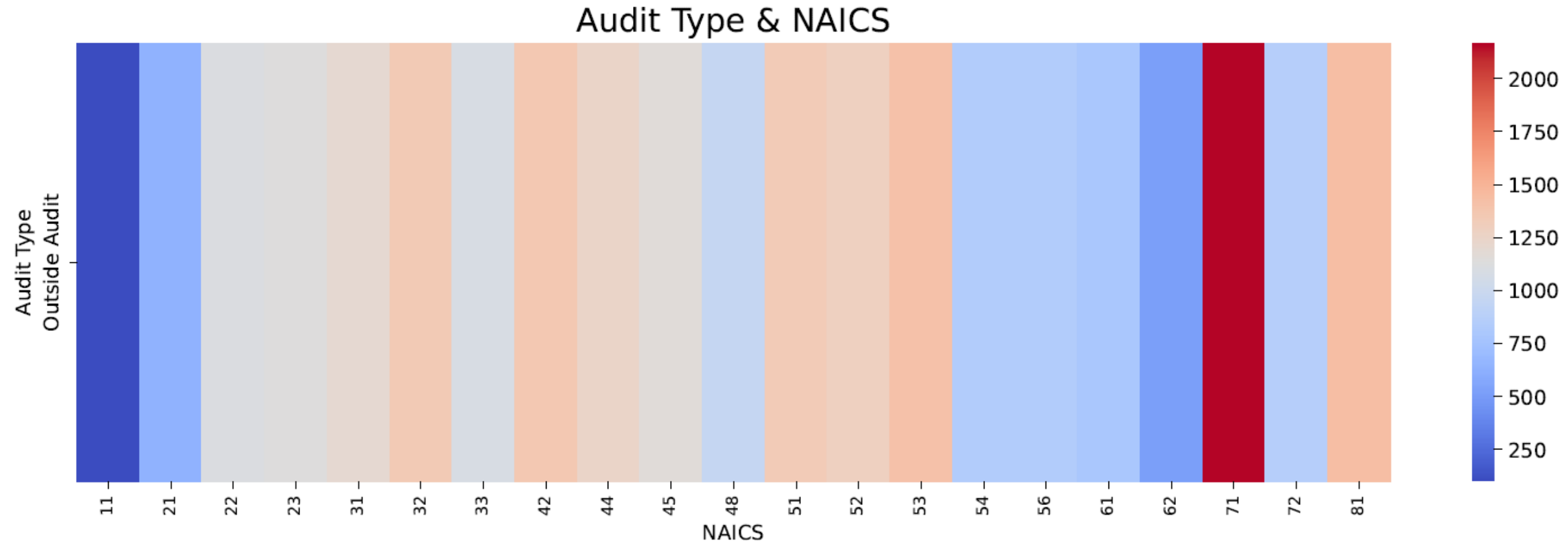




## Audit Duration for Holders With Both an Advocate Firm and Attorney

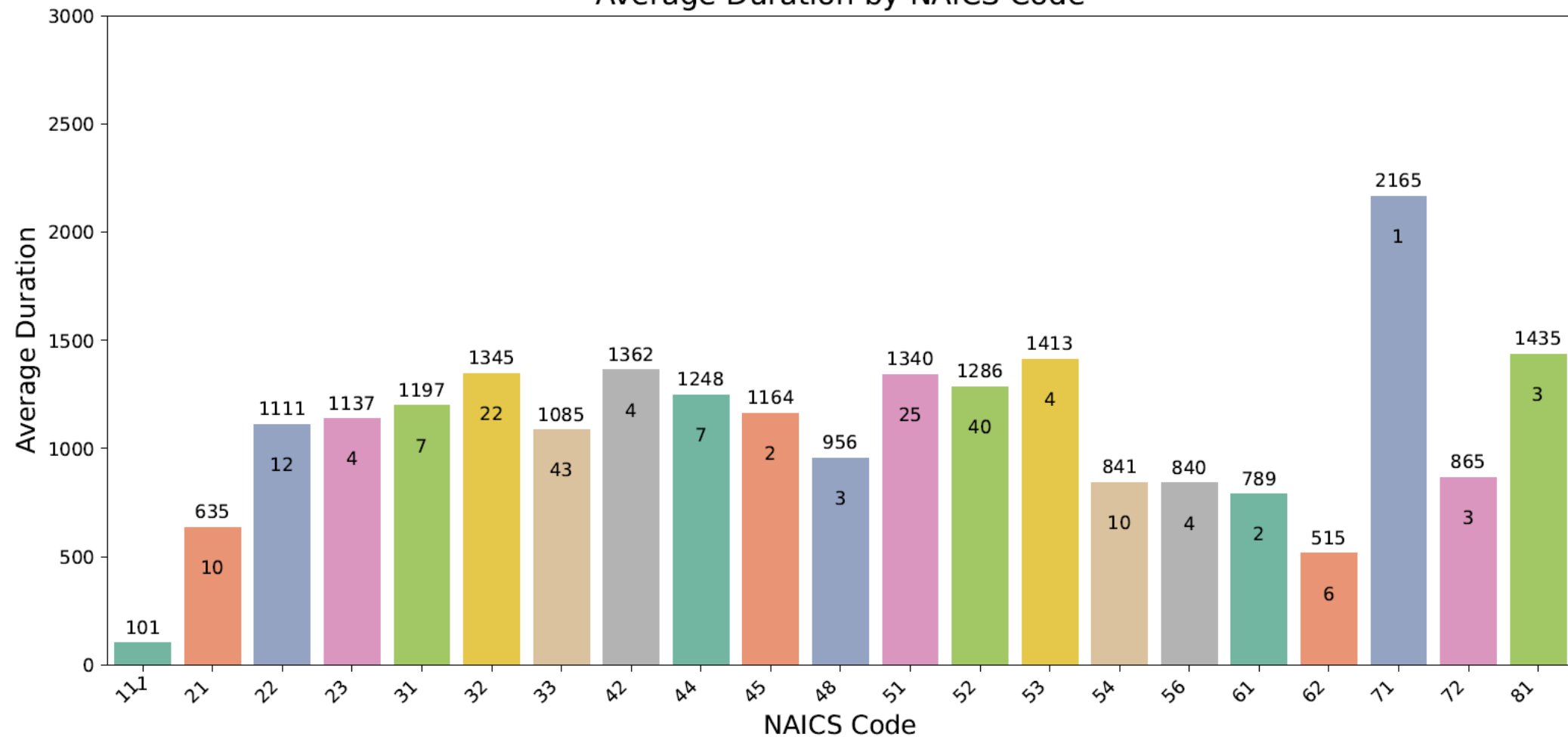


# Duration by NAICS code



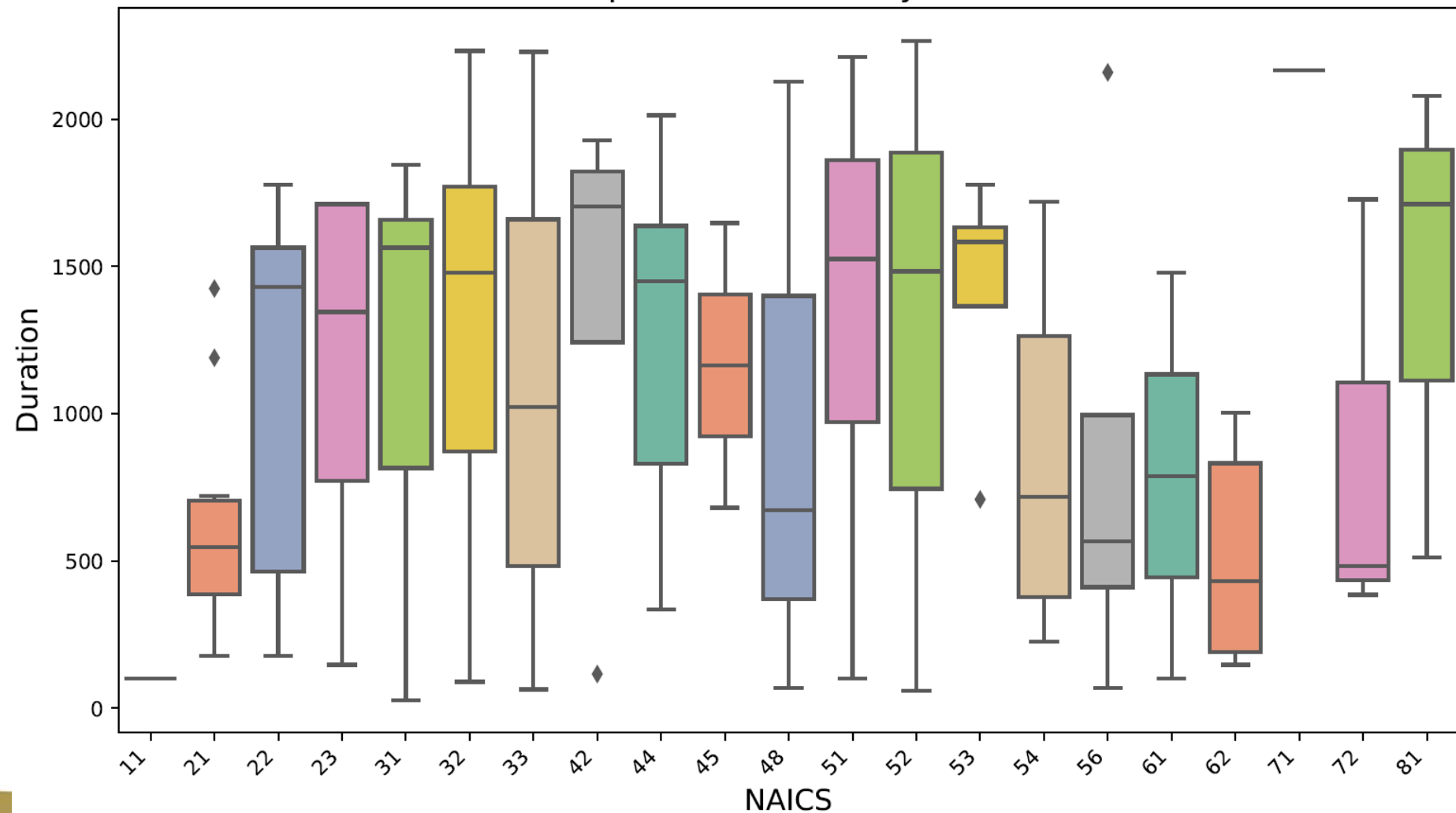
# Duration by NAICS code

Average Duration by NAICS Code



# Duration by NAICS code

Boxplot of Duration by NAICS



# The Audit Landscape Has Changed

## 2020:

- 96 audit requests – 82 approved a 85% approval rate
- 1 audit that required intervention

## • 2023:

- 124 audit requests – 115 approved à 93% approval rate
- 2,032 self-audit requests – 1,891 approved a 93% approval rate
- 18 interventions: 3 penalties issues for lack of response; 4 meetings with holders and/or advocates to get the audit going; 13 other communication





# Lessons and Perspective Gained

- Need dedicated resources to keep audits moving;
- Contract auditors don't always ask for help timely;
- Early and personal intervention can get results;
- Don't be afraid to use your authority and resources;
- Be open to conversation and show some grace; if the goal is compliance, remain focused on it and look forward;
- It's just business, it's not personal.



# Can data tools be applied to holder compliance too?

## Some questions for consideration . . .

- How do States decide about examination requests from audit vendors?
- When do States know they should intervene in delayed exams?
- How burdensome are holder compliance requirements?
- Are States adequately providing holder guidance regarding unique state law/requirements?



# Questions?

# Links & references

- <https://treasurer.utah.gov/updata/>
- <https://www.jamovi.org/>
- <https://www.youtube.com/@datalabcc>
- <https://www.tableau.com/>
- <https://www.microsoft.com/en-us/power-platform/products/power-bi>
- <https://www.youtube.com/watch?v=csXmVBw8cdo>



Thank You



NATIONAL ASSOCIATION OF  
STATE TREASURERS