SPRING CONFERENCE 2025

Arizona Biltmore - Phoenix
April 8-9

SESSION CODE: lmc0408

INFORMATION MANAGEMENT COMMITTEE LEADERSHIP

Bradley Hammer,
Heitman | Chair

Jason Robisch,
SitusAMC | Vice Chair

Pete Schow, UBS |
Vice Chair

NCREIF SPRING CONFERENCE 2025

SESSION CODE: Imc0408

AGENDA

- Mission Statement
- Committee Update
    - Hot Topics
    - Tech Working Group
- Data Governance and Workflow Task Force Updates
    - Chart of Accounts best practice discussion
        - Review results of COA Survey
        - Examine current state of existing COA structures.
        - Discuss what we've identified as significant challenges related to data integration across multiple systems and platforms, whether within a firm or involving various service providers.
    - Asset onboarding and investment structure discussion for Fall 2025 Conference

SESSION CODE: lmc0408

MISSION STATEMENT

The mission of the NCREIF Information Management Committee is to provide leadership and guidance in the administration and use of real estate investment information to improve decision-making through:

1. Education
2. Effective data management and governance
3. Recommendation on standards for data elements
4. Collaboration with other NCREIF committees

SESSION CODE: Imc0408

HOT TOPICS
CURRENT LIST

- Continuation of COA standardization discussion – **Spring 2025**
- Asset Onboarding and Investment Structure Standardization – **Slated for Fall 2025**
- GL/TB workflow case study
- AI
  - Dispelling AI myths
  - What else to think about for AI
    - Use case specific?
    - Quantity of data sets
    - What is needed
    - How does AI actually work?
    - Legal implications
- Data Lake
  - Leveraging for AI use cases
  - What elements go into it
  - What is in there for reporting, what isn't?
- Challenges in growing technology
  - Disruptive Technology
  - Trying to keep up
  - Getting people to adapt to new technology – "I do it in Excel and it works for me"
- Ask the question "Why don't we have solutions"
  - Discuss reasons why, what can we do, how do we get the data we want and were will it live, etc.
- Use cases for data management tools – RPA
  - What works / what doesn't
  - Issues around simulating user – passing username/password
- What technology is available to help create reporting or dashboards
- How can we use technology to share data
- Asset and Investment Best Practices perspective (Reporting Standards Council)

SESSION CODE: lmc0408

HOT TOPICS
COMPLETED TOPICS

- Data Governance and Workflow
  - Developing and Maintaining a Chart of Accounts – **Fall 2024 Conference**
  - Workflow Case Study though the lens of the valuation process – **Fall 2024 Conference**
- AI
  - Is AI About to Unleash an Incoming Storm of Innovation & Efficiency in Real Estate? – **November 2023 Conference**
- Solutions Expo related
  - Going through a Lift-Out retrospective – **April 2023 Conference**
- Session that "dumbs down" tech – **November 2022 Conference**
  - Ex, what is API, ETL, understanding the basics
- Revisit the "Build It or Buy It" panel – **November 2022 Conference**

SESSION CODE: lmc0408

TECH WORKING GROUP

- We are not looking to start a whole new committee, but rather looking to start it as a working group to gauge people's interest
- We want to make sure we are not excluding anybody or any idea that they have, we really wanted to keep all the discussions going and give people the right forum to have them

SESSION CODE: lmc0408

DATA GOVERNANCE AND WORKFLOW TASK FORCE UPDATES

- Chart of Accounts best practice discussion
  - Review results of COA Survey
  - Examine current state of existing COA structures.
  - Discuss what we've identified as significant challenges related to data integration across multiple systems and platforms, whether within a firm or involving various service providers.
- Asset onboarding and investment structure discussion for Fall 2025 Conference

SESSION CODE: lmc0408

TASK FORCE MEMBERS

Brad Hammer, Heitman **(NCREIF IMC Chair)**
Pete Schow, UBS **(NCREIF IMC Vice-Chair)**
Jason Robisch, Situs AMC **(NCREIF IMC Vice-Chair)**
Marlyn Ramirez, Vistra **(Task Force Lead)**
Stephanie McClain, American Realty Advisors **(Task Force Lead)**
Teresa Rykowski, Blue Vista **(Task Force Lead)**
Sally Johnstone, Altus Group
Daniel Kalish, Aztec Group
Lana Sokolov, Blackrock
Jay Marling, Capright
Ben Kalisch, Harrison Street
Tanuja Adiani , IQ-EQ
Lindsay Xhillari, Juniper Square
Mel Tsao, LACERA
Jamie Kingsley, NCREIF
Lauren Stokes, Nuveen
Ben Tremblay, Nuveen
Ron Singh, PGIM
Robb Fitzsimmons, The Linnaean Company
Kathryn Hess, Utah Retirement Systems

SESSION CODE: Imc0408

CHART OF ACCOUNTS BEST PRACTICE DISCUSSION

- Review results of COA Survey
- Examine current state of existing COA structures.
- Discuss what we've identified as significant challenges related to data integration across multiple systems and platforms, whether within a firm or involving various service providers.

SESSION CODE: lmc0408

CHART OF ACCOUNT SURVEY GOALS

- Assess existing COA structure across major accounting platforms
- Expose areas of data inconsistencies
- Promote enhanced integration
- Identify pain points across industry
- Give exposure to NCREIF members what is being used across firms

SESSION CODE: Imc0408

SURVEY RESULTS

PRIMARY ROLES	
Accounting	31%
Finance	14%
Data Management	11%
Valuations	10%
Asset Management	7%
Portfolio Manager	7%
Investor Relations	6%
Other (please specify)	6%
Fund Manager	5%
Research	2%
Information Technology	0%
Software Development	0%
	100%

ASSETS MANAGED	
Office	14%
Residential	13%
Retail	13%
Industrial	13%
Land	10%
Self Storage	9%
Seniors Housing	8%
Hotel	7%
Data Center	5%
Other (please describe)	5%
Non-real estate asset types?	2%
	100%

Others:

Farmland	Debt	Fund Administrator (AUA); Whiskey, Tech, VC, Cannabis, PE Debt	Admin for PE, Venture Capital and Real estate assets
Cold Storage	Garage	Academic	Timberlands
Operating Company	SFR & Other Alternatives	Student Housing	Common Stock, Mutual Fund

SESSION CODE: lmc0408

SURVEY RESULTS

77% of the Responders ingest data from third parties

97% provided pain points in ingesting data

1. Manual and Time Consuming
This category includes responses that mention the use of templates, tools, or manual processes for mapping and data ingestion.
*2. Timeliness When Data is Available*
This category includes responses that highlight issues related to the timeliness of data availability.
3. Inconsistency of Data Received
This category includes responses that mention inconsistencies in the data received from outside organizations.

Pain Points Identified

3. Data Inconsistency 18%

2. Timeliness/Time Lag 17%

1. Manual and Time Consuming to Map 65%

SESSION CODE: lmc0408
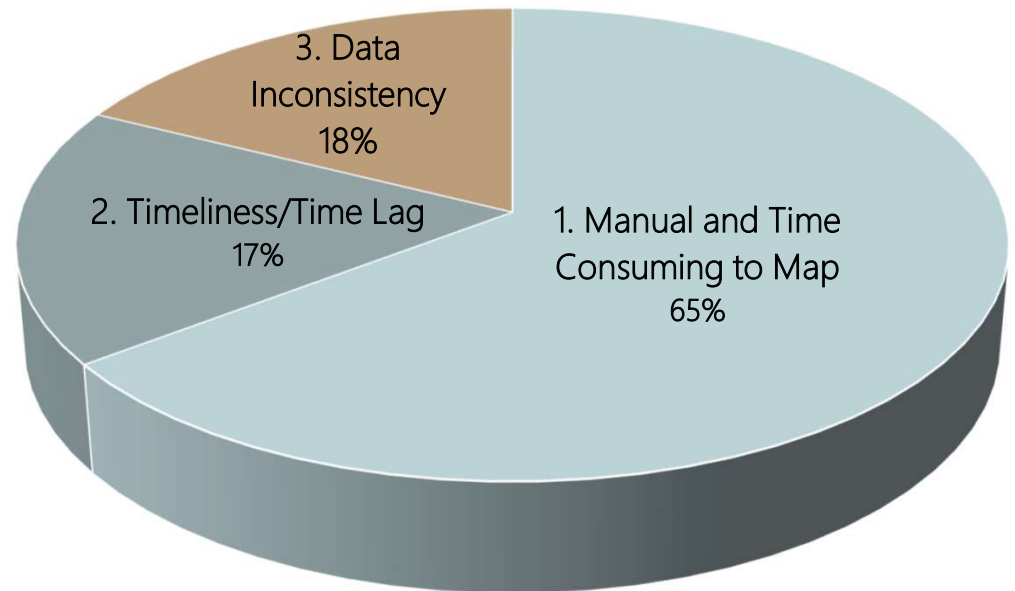
SURVEY RESULTS

Number of responses using 1 COA: 30
Number of responses using more than 1 COA: 9

COA # OF DIGITS	
8 digits	32%
6 digits	21%
9 digits	16%
7 digits	11%
10 digits	5%
14 digits	5%
5 digits	5%
4 digits	3%
2 digits	3%

SESSION CODE: lmc0408

SURVEY RESULTS

Question – Do you ingest financial data from 3rd party providers (property managers, JV partners, Fund Admins., etc.) and if so, do you normalize the providers financials in your COA

- Results show that template use is not common, and the list below highlights how respondents address this today

Using Templates or Tools for Mapping

- Excel file for ETL: Each manager has a bespoke template created during onboarding.
- Fund Admin converts accounts: Property managers' accounts are converted to the Fund Admin's COA.
- Template file: Maps third- party COA to internal COA.
- Solution in progress: Working on allowing providers to submit in their native COA and perform mapping internally.
- Recode providers' data: Match Yardi chart of accounts.
- Mapped COA: Internal COA mapped to third- party providers' COA.
- Submission portal: Preset mapping of providers' COA to internal COA, loaded and mapped through a submission portal.
- Mapping exercise: Ensure accounts are mapped to internal COA.
- Direct import: TBs imported directly without a reporting layer.
- Required mapping: Third- party providers map their COA to Yardi COA.

- Fund Administrator tool: Property level COA mapped/ normalized to fund level COA.
- Imported based on internal COA: Data imported directly.
- Mapping Excel / lookup: Normalize to COA via mapping Excel/ lookup.
- Yardi instance: Keeps record of partner submission account number and name.
- Yardi and other tools: Data ingestion using Yardi and COA, with assistance from other reporting tools.
- Microsoft Access tool: Converts data to an import file from standardized trial balance or general ledger report.
- MRI Third party: Responsible for uploading data into MRI database.
- Yardi DAS

SESSION CODE: lmc0408

SURVEY RESULTS

SUGGESTIONS

- Consistency
  - Perfection will never be reached with COA's evolving over time, but achieving alignment and adoption at a high level would be monumental in transforming the industry.
  - Globally, it would be nice to have consistent description; for example, Revenue - XXXX; every major category to start with the same word/s.

- System Considerations
  - There are sooooo many system considerations… To the extent you can consider any standard breakdowns to accommodate Performance and Investor Reporting – this is a good starting point
  - This is an area where consulting expertise can help

- Industry Guidance
  - Obtain industry guidance where possible such as US GAAP, INREV, NCREIF, PREA, etc to assist with major reporting requirements - ILPA, NPI, Investment Performance,TIGR etc

- Flexibility
  - Would recommend flexibility as companies and clients have different reporting needs.

SESSION CODE: Imc0408

SURVEY RESULTS
SUMMARY AND CONCLUSIONS

PS0

1. 1 out of 30 survey responders who ingest third-party data does not experience any challenges
    a. Additionally, only 1 reported minor inconvenience
2. The three main concerns are: Time-consuming manual processes, time lag, and data inconsistences
3. 45% of the responders are accounting and finance professionals

There is clearly a consensus of an underlying problem.
What can we do as an industry to alleviate this?

1. Standards! Standards! Standards!
2. Education (How does it impact operations, financial reporting, etc.)
3. Alignment between core Business Units (Accounting, Asset Management, IT, Etc.)

SESSION CODE: lmc0408

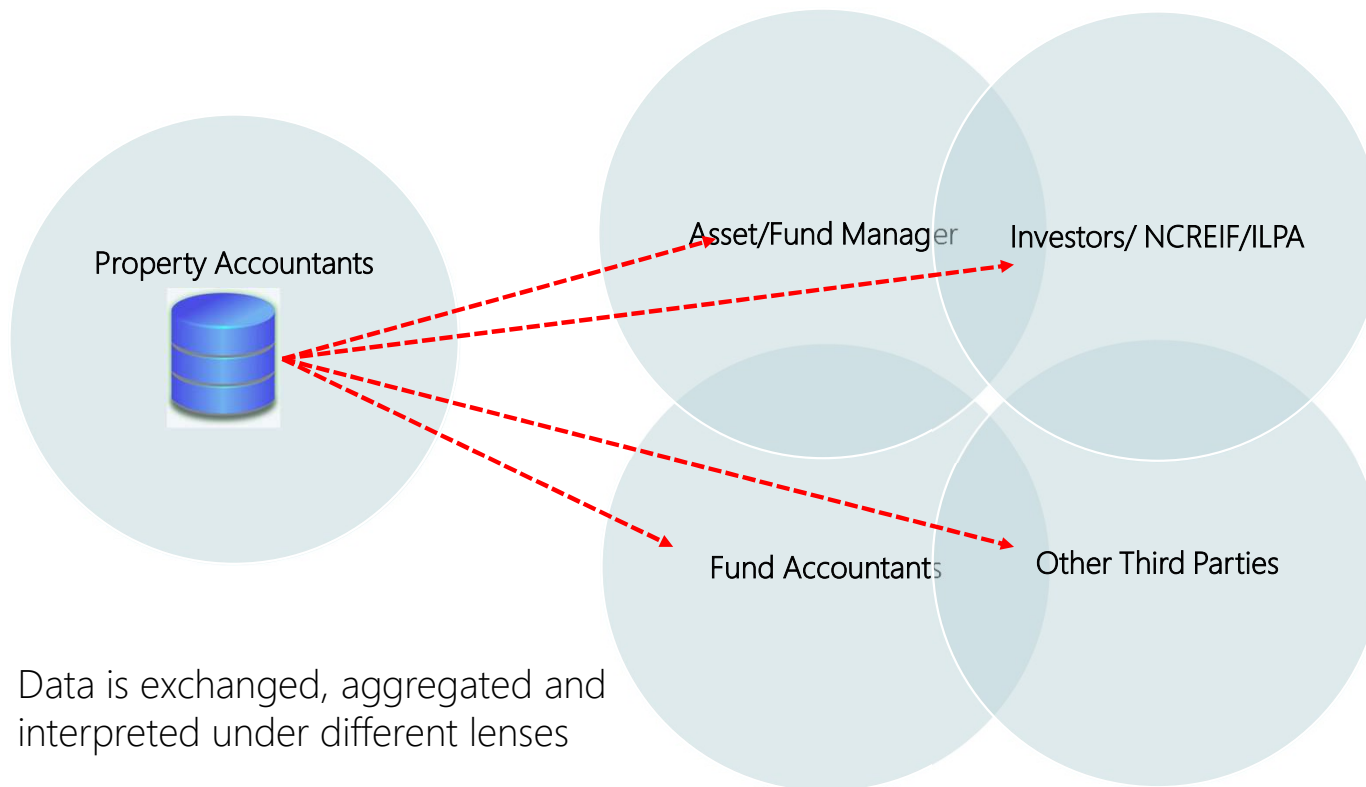**PS0**   Did we mean to say 45%?
Schow, Pete, 2025-04-04T20:22:19.881

How can we normalize data as an industry?

Property Accountants

Asset/Fund Manager

Investors/ NCREIF/ILPA
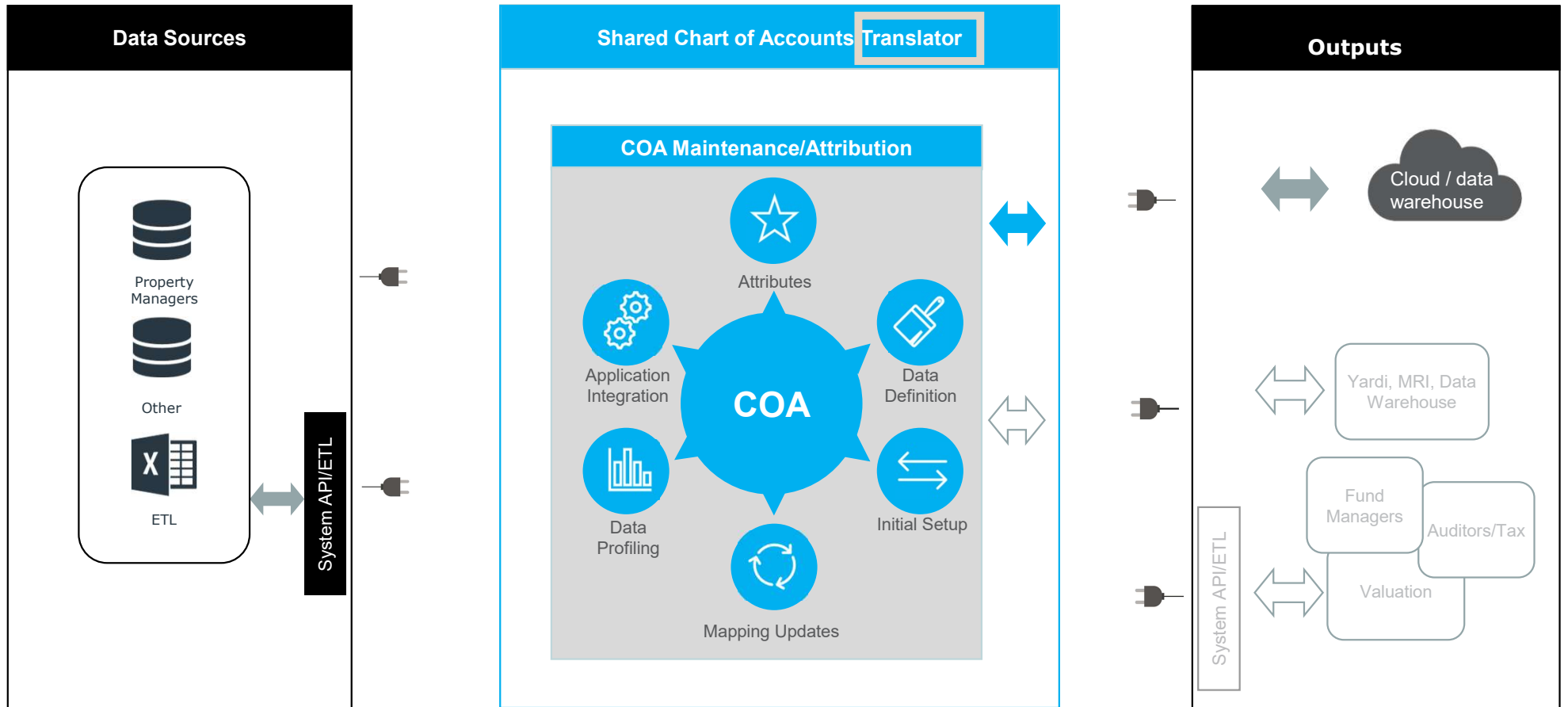
Fund Accountants

Other Third Parties

Data is exchanged, aggregated and interpreted under different lenses

1. 93% of the member surveyed use Excel or other mapping tools; however, the majority of accountants and finance professionals carry out these processes manually, outside of the accounting systems
2. Data inconsistencies **limit** automation of data mapping *(use of AI)*
3. 97% of responders who ingest data, normalize data received

SESSION CODE: lmc0408

HOW CAN TECHNOLOGY ASSIST?

Data Sources

Property Managers

Other

ETL

System API/ETL

Shared Chart of Accounts Translator

COA Maintenance/Attribution

Attributes

Application Integration

COA

Data Definition

Data Profiling

Initial Setup

Mapping Updates

Outputs

Cloud / data warehouse

Yardi, MRI, Data Warehouse

Fund Managers

Auditors/Tax

Valuation

System API/ETL

SESSION CODE: lmc0408

WHAT OTHERS ARE DOING?

- Industries
  - o Other industries use blockchain technologies
  - o Broker-dealer network use AIP reporting through DTCC (Direct-Connect/no template or file exchange)
  - o Medical billing is unified; non-medical professionals can be trained
- Governing Bodies
  - o Germany, France, Spain, Brazil, Russia and Italy often have detailed guidelines to ensure consistency in financial reporting
  - o Public companies in these countries are generally required to adhere to the standard charts of accounts for financial reporting, though there might be some flexibility or additional requirements depending on the specific regulations of each country. The links to the guidelines for each country are in the appendix
- Real Estate
  - o Hotel industry has a uniform system: Uniform System of Accounts for the Lodging Industry | HFTP
  - o NMHC is starting to explore standardizing COA with OSCRE

With the shortage of next-generation accountants, we need to alleviate this pain point by automating this time-consuming data exchange. We can only automate if we have standard data definitions of the granular data. This will enable the use of AI to expedite data exchange timelines and ensure data accuracy.

Having a "standard" Shared COA, NCREIF can provide guidance and education to accountants/data processor

SESSION CODE: Imc0408

WHAT HAVE WE DONE SO FAR?

1. COA Task Force has been created
2. Contacted other industry players and organizations – most of them are very supportive
3. Contacted technology providers – all of them are excited about the idea of a "standard" Shared COA
4. Survey has been sent NCREIF Members and results analyzed

Next Steps?

1. COA Task Force – Review suggestions provided
   a. How to act upon suggestions?
2. Continue collaboration with NCREIF members and industry partners
   a. Alignment with Accounting and Performance Committees
3. Continue to gather suggestions from members
4. Identify all possible best practices and decide on a framework
5. Continue to collaborate and seek participation from major players
6. Evaluate OSCRE capabilities to assist in this endeavor

SESSION CODE: lmc0408

WHAT HAVE WE DONE SO FAR? NEXT STEPS

Started discussions with OSCRE and below is their suggested approach

- Emulate OSCRE prior experience developing standards for other organizations
- Establish goals and target business case for the project
- Conduct scoping phase to confirm scope, fund the project, secure participation
- Identify applicable content already built into the OSCRE Industry Data Model
- Gather insights and content from both NCREIF and PREA to cover stakeholders
- Blend with existing work
- Conduct a series of standards development workshops with stakeholders
- Plan the process for publishing and industry communications

SESSION CODE: lmc0408

WHAT HAVE WE DONE SO FAR? NEXT STEPS – OSCRE CONT.

The purpose of this outline is to begin a conversation about potential support to NCREIF and the Task Force in the development of a standard chart of accounts for investment real estate. The following are highlights of OSCRE's experience and how a collaboration might work. This is simply to start the conversation between OSCRE and the Task Force.

OSCRE as a standards development partner

- OSCRE is an international real estate data standards organization, with a focus on investment.
- Standards development is a core competency at OSCRE.
- 20+ years' experience in standards development has led to a proven methodology and process.
- Deep collaboration with other industry organizations is a high priority for OSCRE.
- OSCRE works with other industry organizations including standards development as a service
- OSCRE and NCREIF know each other well and we have members in common.
- Multiple benefits from working with OSCRE, including speed, approach, structured deliverables.

Leveraging the OSCRE Industry Data Model ™ ("IDM") and building on existing content

- The Task Force is considering development of a standard chart of accounts.
- Existing content in the IDM could be combined with existing NCREIF content.
- A lot of work has already been done by NCREIF in collaboration with PREA, INREV and ANREV.
- OSCRE is aware of that work and knows all 3 of these organizations.
- A recent collaborative standards project combines existing content with OSCRE content.
- Typical OSCRE deliverables could guide the Task Force in what to produce.
- A common deliverable is the business case for adoption.
- OSCRE also publishes implementation guidelines to help standards implementation.

An approach to consider based on experience

- A common approach is a series of structured workshops with target deliverables.
- Facilitated by the OSCRE team in collaboration with the Task Force leadership.
- The OSCRE team would be the same people that has developed the majority of OSCRE's IDM.
- A data dictionary may not be enough – promoting adoption may call for other deliverables.
- Plan the development and publishing timeline to coincide with major industry events.
- Maximize the use of existing content wherever possible.

SESSION CODE: Imc0408

DISCUSSION QUESTIONS

General Questions:

1. What do you foresee as the biggest obstacles for your company to adopt an industry-standard sharing chart of accounts (either as a provider or recipient of data)?
2. Do you feel that sector-specific standards are necessary (e.g., USALI for the hotel sector, NHMC for the housing sector), or could there be an agnostic sharing chart used by all sectors? Why or why not?
3. How can a standard CoA improve overall operations? Are there any specific areas that will benefit most? What operational efficiencies do you anticipate gaining from a standardized CoA?
4. How do you currently use technology to transmit data? Do you think this process can be improved by a standard CoA? Why or why not?

SESSION CODE: Imc0408

DISCUSSION QUESTIONS CONT.

Specific Questions:

1. Are there certain account types or accounts that you constantly have to modify mappings for or reclassify entries? If so, please provide and discuss specifics.
2. Based on how you currently aggregate your financial data, is there a particular investor request, business analytic, or reporting requirement that is difficult to meet? If so, please provide and discuss specifics.
3. If an industry-standard sharing CoA was created, what information would you expect to find within that standard? For example:
   a. Account Number, Account Description, Account Definitions?
   b. Mapping to various accounting standards?
   c. About 30% of respondents to the survey organized their chart of accounts to align with an accounting standard (GAAP, IFRS, etc.).
   d. Translation of accounts into various languages or sector-specific terminologies?
   e. There was a comment about having all countries adopt common naming; I think revenue was the example. Is that more beneficial, or should we be thinking of this like capturing synonyms for your business terms?
4. How does your current CoA handle new sets of data as your portfolio grows? Are there any challenges adapting it to new properties or assets? How can a standard CoA better support growth? Are there any emerging trends or innovations that we should consider?
5. Have you received feedback from your team or other stakeholders regarding the current CoA? What are the common suggestions or complaints?
6. We have identified country-specific, sector-specific, and accounting standard requirements of the Chart of Accounts (on input) and regulatory requirements, benchmark requirements, and investor requirements (on output). Is there anything else you feel the task force needs to consider in this endeavor?

SESSION CODE: lmc0408

Appendix

SURVEY RESULTS

PARTICIPATING MEMBERS

Alter Domus
Altus Group
American Realty Advisors
BDO
Blue Vista Capital Management
CalPERS
CBRE - Investment Accounting & Reporting Solutions
CenterSquare Investment Management LLC
Cigna Realty Investors
Clarion Partners
ConnomWealth Partners, LLC
Conservation Resource Partners, LLC
Corebridge Real Estate Investors
General Motors Asset Management
GRIFFIS
Harrison Street Real Estate
Heitman
Intercontinental Real Estate Corp
Bernard Baruch College
JPMorgan Asset Management (REA)
Juniper Square

L&B Realty Advisors
LaSalle Investment Management
Morgan Stanley
NB Almanac Realty
Nuveen
OPERS
PGIM Real Estate
Principal
Realterm
Regency Centers
Research Triangle Foundation of NC
RREEF America LLC aka DWS
State Teachers Retirement System of Ohio
Swift Creek Real Estate Partners
The Lyme Timber Company
Townsend
UBS Realty Investors
Virginia Tech University
Vistra
Waterton

SESSION CODE: Imc0408

COUNTRIES WITH STANDARD COA

Germany – The "Kontenrahmen" (SKR03 and SKR04) is detailed on Consultinghouse:
https://service.consultinghouse.eu/en/knowledge/what-is-the-german-chart-of-accounts
France – The "Plan Comptable Général" can be accessed on the ANC website: https://www.anc.gouv.fr/plan-comptable-general-0
Brazil – The "Plano de Contas Contábil" is outlined on the [Conselho Federal de Contabilidade website:
https://cfc.org.br/wp-content/uploads/2023/01/ITG-1000.pdf
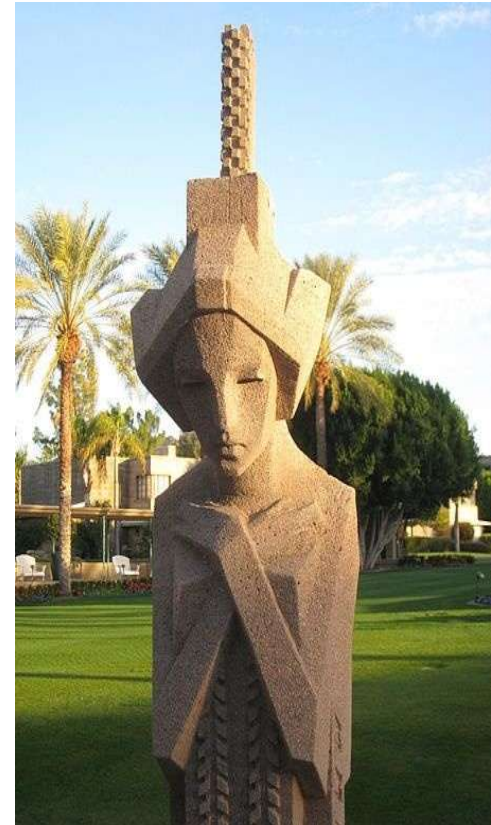Russia – The chart of accounts under Russian Accounting Standards can be found in the Ministry of Finance's order: https://cis-legislation.com/document.fwx?rgn=4340
Spain – Plan General de Contabilidad
Italy – Piano dei Conti

THANK YOU

Questions?