



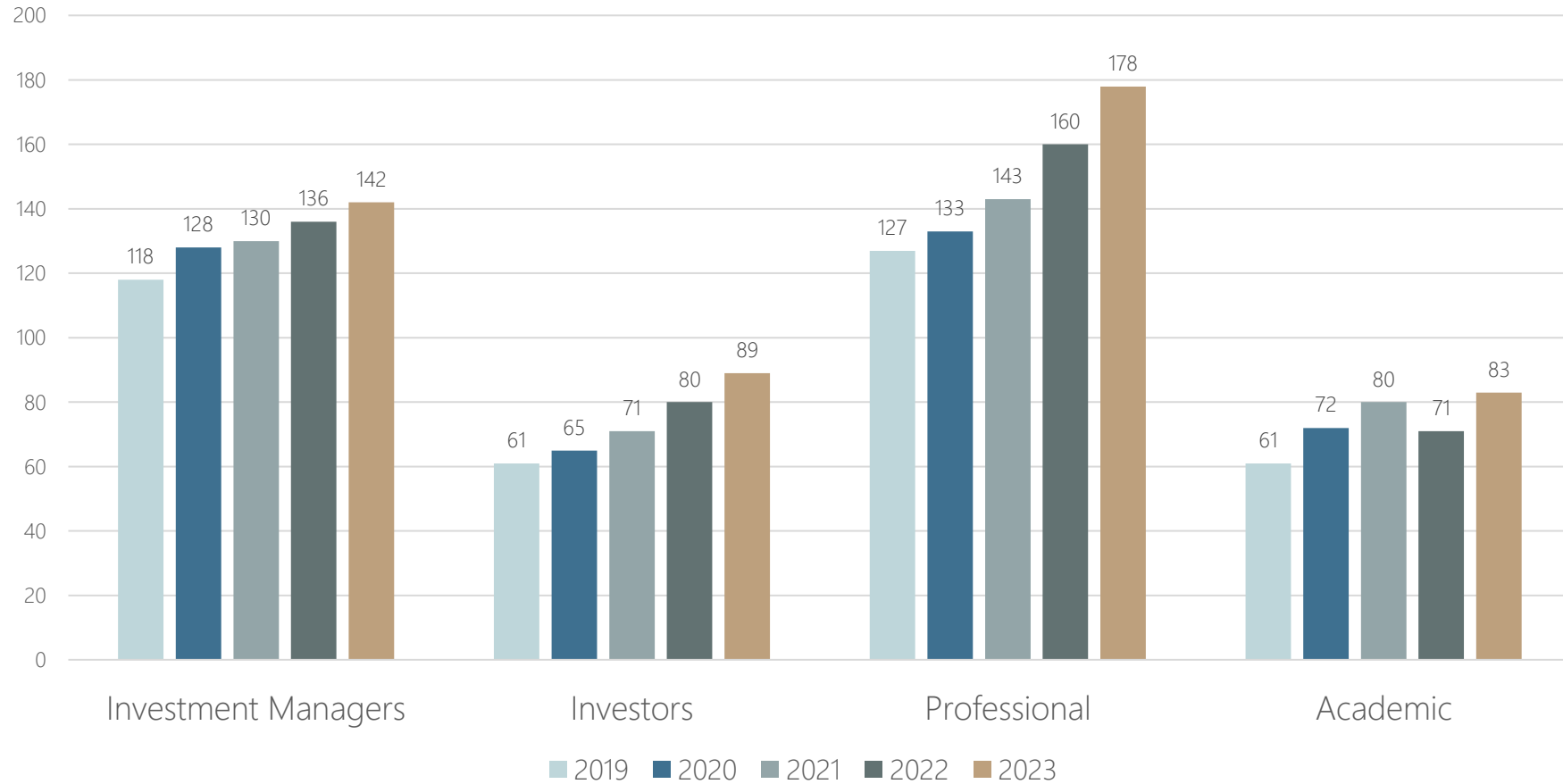
TOWN HALL MEETING

November 14th
Dan Dierking
NCREIF President

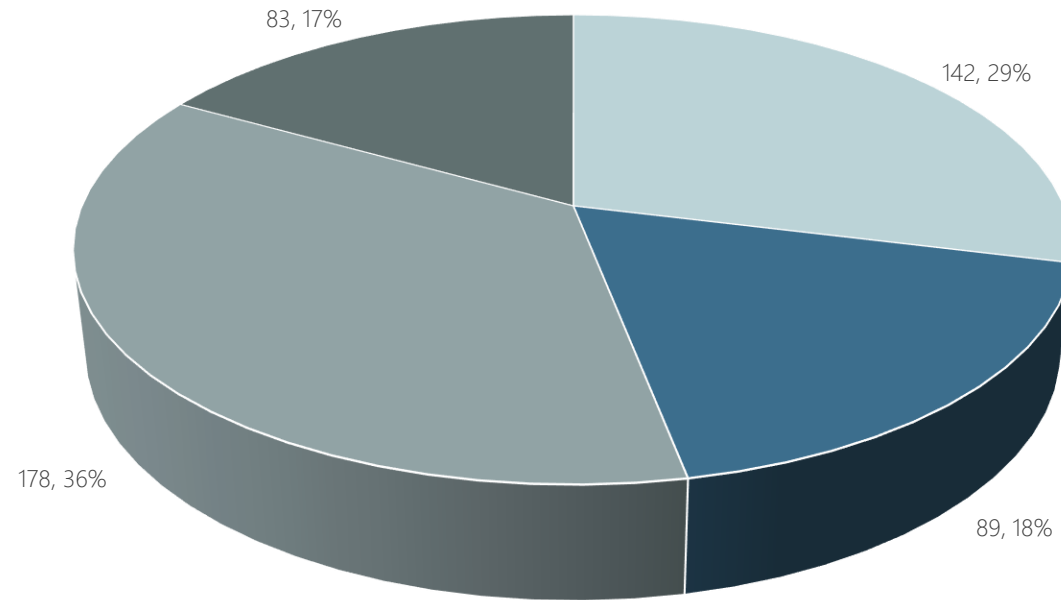


- Membership and Association Update
- Debt Aggregate
- Data Projects
- Technology Update - Project Impact
- Events & Education

MEMBERSHIP GROWTH



MEMBERSHIP COUNT



■ Investment Managers ■ Investors ■ Professional* ■ Academic

STAFF EXPANSION





OPEN-END DEBT FUND AGGREGATE

Joe D'Alessandro

Director of Performance Measurement

NCREIF FALL CONFERENCE 2023

OPEN-END DEBT FUND AGGREGATE

- Is a work in progress.
- Is a project by the industry for the industry.
- Contains open-end funds with various strategies and styles ranging from core to value-add.
- Is NOT an INDEX or a BENCHMARK, yet.
- Metrics are equal-weighted (for now).
- Individual fund metrics will NEVER be revealed.
- Co-ordinating w/ NCREIF/PREA Reporting Standards.
- Co-branded with CREFC (Commercial RE Finance Council).
- Furthers the missions of the three groups.

OPEN-END DEBT FUND AGGREGATE

Data Contributors

- ARES Management LLC (2 funds)
- CIM Group
- Barings LLC
- CrossHarbor Capital Partners
- Heitman
- INVESCO
- MetLife Investment Management
- Nuveen Real Estate
- PGIM Real Estate (2 funds)
- Sound Mark Partners
- Trawler Capital Management
- UBS Realty
- Walton Street Capital

Project Working Group

- Clarion Partners, Nuveen, Principal, UBS
- CREFC, NCREIF

ad hoc participation

• Managers

- ARES Capital Management
- Trawler Capital Management
- Walton Street Capital

• Investors

- CalSTRS
- Griffin Capital
- NYSTRS
- Oregon State Treasury

• Consultants & Others

- Altus Group
- AON
- Bard Consulting
- Chatham Financial
- Situs AMC

2018 Task Force

AON Hewitt, Clarion Partners, CBRE Global Investors, CREFC, Heitman, INVESCO, Mesa West, Met Life, NCREIF, PGIM, Principal, Quadrant RE Advisors, TH Real Estate, UBS, Voya

OPEN-END DEBT FUND AGGREGATE

Project Timeline

2018-2019

- Task Force, Preliminary Exploration

2021-2022

- Collect Data, Develop Analytics & Reporting, Review w/Managers

2019-2020

- Project Working Group
Develop Data
Collection Template

2023 Consultative
Industry Launch

Next Steps: Definitions of Styles, Loan Level Data Collection, Closed-end/SA collection

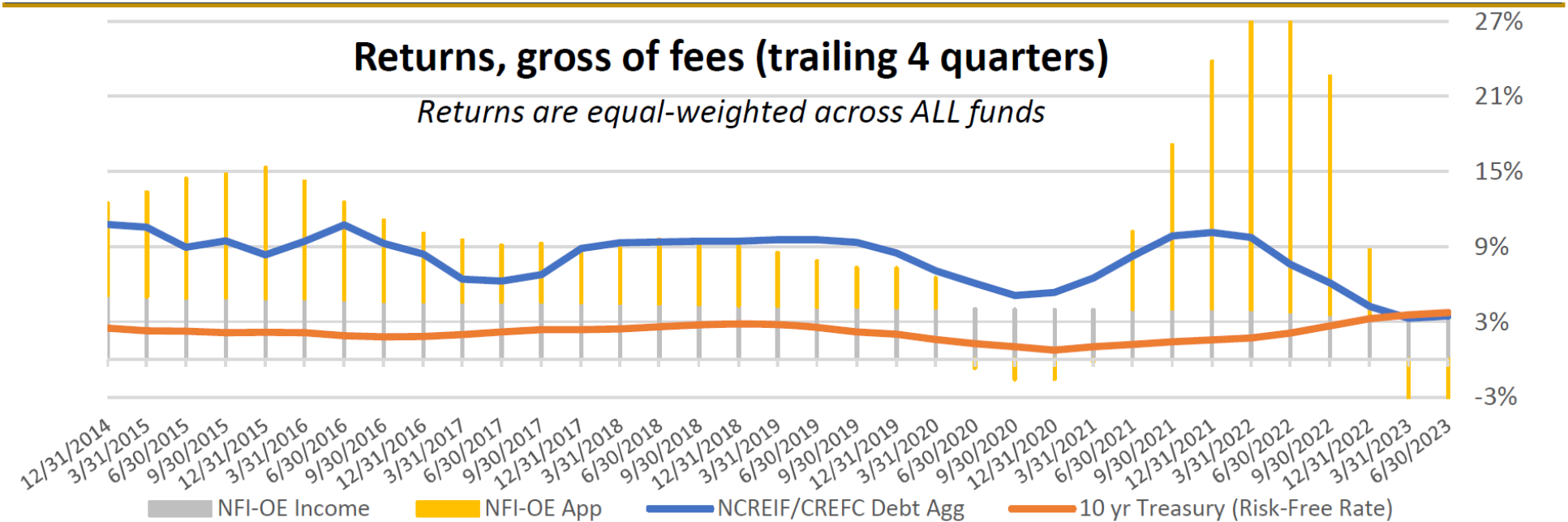
OPEN-END DEBT FUND AGGREGATE

Summary

RETURNS (fund level)	Quarter-ended	YTD	1 yr	3 yr	5 yr	7 yr	10 yr
Income	2.11%	4.3%	8.4%	8.1%	8.0%	7.8%	na
Appreciation	-1.07%	-2.6%	-5.0%	-1.7%	-1.0%	-0.6%	na
Total Gross of Fees	1.04%	1.7%	3.4%	6.4%	7.0%	7.2%	na
Total Net of Fees and Fund Costs	0.86%	1.3%	2.7%	5.5%	5.9%	6.1%	na
Fund Costs	-0.08%						<i>[returns available since 3/31/2014]</i>
<i>[returns are equal-weighted across ALL funds]</i>							

OPEN-END DEBT FUND AGGREGATE

Returns



The NFI-OE is the NCREIF All Open-end Fund Index for real estate equity investments

9.5 yrs analysis	NCREIF/CREFC Debt Agg	NFI-OE
Annualized Return	7.70%	9.30%
Avg Annl Excess Return	5.33%	6.96%
Std Dev Excess Return	1.6%	5.4%
Sharpe Ratio	3.3	1.3
<i>Correlation</i>	<i>0.55</i>	

OPEN-END DEBT FUND AGGREGATE

Balance Sheet and Metrics

BALANCES (\$millions at fair value)

as of Quarter-end

Cash	\$934
Loan Investments	\$35,568
Total Assets	\$37,132
Debt Payable	-\$18,400
Financial Leverage (debt pay / tot assets)	49.6%
Net Assets	\$18,826
Contributions (quarter activity)	\$1,236
Distributions & Redemptions (quarter activity)	-\$778
Fund Count	15

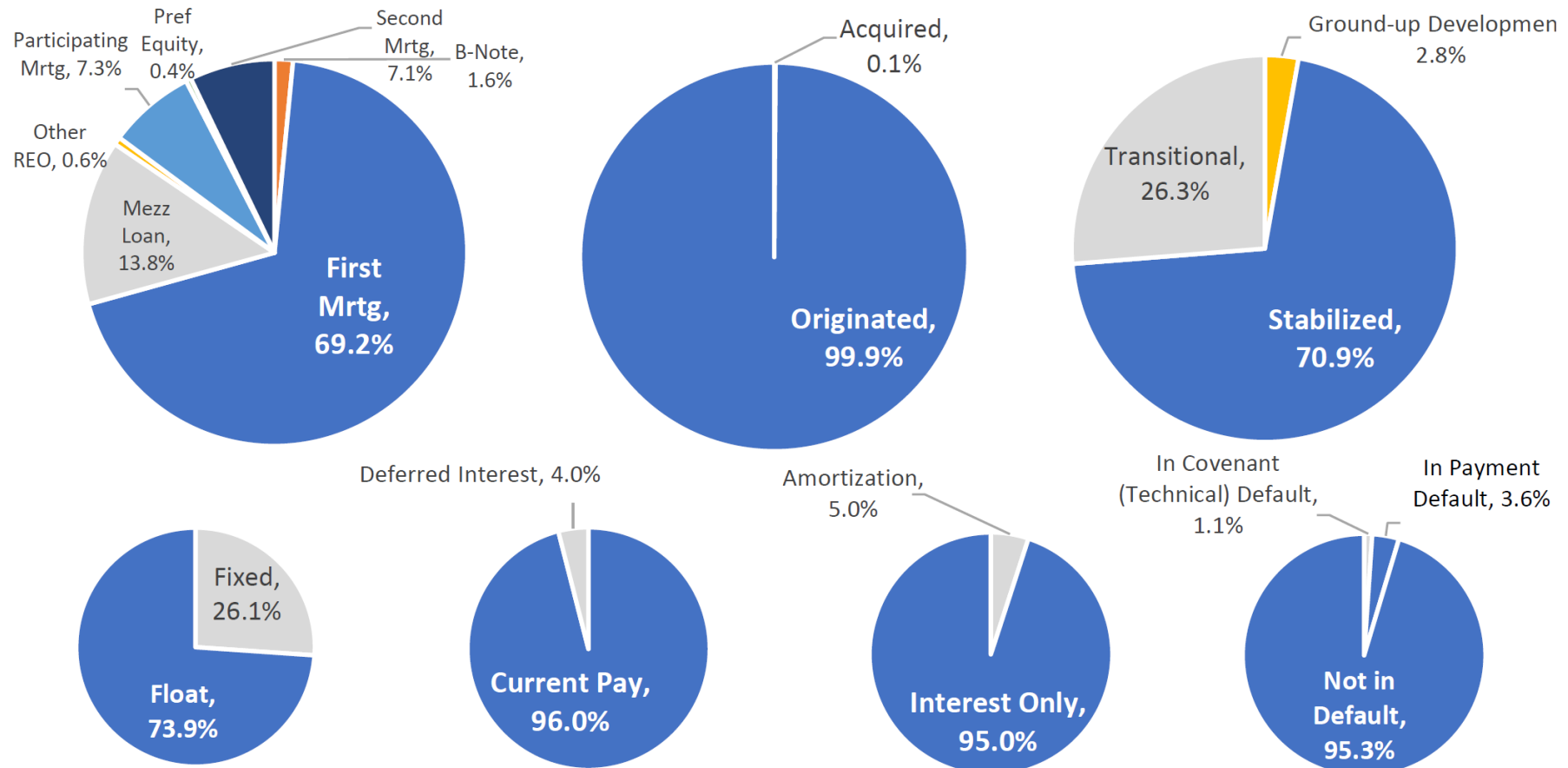
LOAN INVESTMENT METRICS

All-in Rate-Loan Investments (annualized)	7.9%
Wgt Avg Remaining Term (x/extensions)	2.4 yrs
First\$Risk LTV% (attach point of sub loans)	56.5%
Last\$Risk LTV% (detach point of sub loans)	74.1%
DSCR (NOI / [interest + principal])	1.0x
Debt Yield Annualized (noi / loan balance)	6.8%
Future Fundings % of Principal Outstanding	9.1%
# of Loan Investments	616

[metrics are equal-weighted across ALL funds]

OPEN-END DEBT FUND AGGREGATE

Debt Characteristics





NPI+ TRANSITION & ROLLOUT

NCREIF FALL CONFERENCE 2023

NPI to transition to NPI+ Property and Subtypes

Current NPI Property Types

- **Apartment**
- **Hotel**
- **Industrial**
- **Office**
- **Retail**



Transition NPI Property Types

- **Residential**
- **Hotel**
- **Industrial**
- **Office**
- **Retail**
- **Self-Storage**
- **Senior Living**
- **Other**

- Utilize new data collection fields to derive new subtypes.
- Migrate historical data to new property types.
- Provide minimum 1-year transition period with existing NPI.
- Freeze after transition period.
- Use "Research Database" as new foundational database.
 - NCREIF Property Database to become database name.
- Communications to follow each month until release.

Q1 2024 Release

- Reports include:
 - Detail PDF – similar format as current detail
 - Detail xls. MSA, and detail.
 - Modified to include subtype, design, usage, clusters
 - Phase other reports & files with each additional quarter
- Query Tool
 - Separate database with queries.
 - Cluster queries included.

VALUATION TRENDS

- Actively collecting Valuation Data for ODCE Properties.
- IAVS continuing to review data and develop report.
- Data Improvements:
 - Working on definitions around all fields.
 - Establishing validation process and acceptable data point ranges.
- Expand collection to all Open-end funds. Targeting Q1 2024.

Discount Rate	Market Rent
Terminal Cap Rate	Average Market Rent Growth
Going-in Cap Rate	3 Year Average Rent Growth
Contract Rent	10 Year Average Rent Growth



TECHNOLOGY UPDATE

Jeannie Olson

Director of Data Management

NCREIF FALL CONFERENCE 2023

Farmland and Timberland Dashboards

- New Dashboards available on the NCREIF member website for Farm and Timber Data Contributors only
 - Released this Fall to both committees
 - Continue to add more features based on feedback from both committees
 - Will evaluate when these dashboards can be rolled out to larger membership
 - We can use these as a foundation for Commercial Dashboards

TECHNOLOGY UPDATES



[NCREIF INITIATIVES](#) [NCREIF HOME](#) [WELCOME, JEANINE](#) [SIGN OUT](#) 

[Dashboards](#) [Analytics](#) [Products](#) [Knowledge Base](#) [Member Directory](#) [Query Tool](#) [Data Management](#)

DASHBOARDS



Farmland Property Dashboard

The Farmland Dashboard is an interactive tool that allows you to analyze and display farmland property returns and KPIs.

[Enter Farmland Dashboard](#)

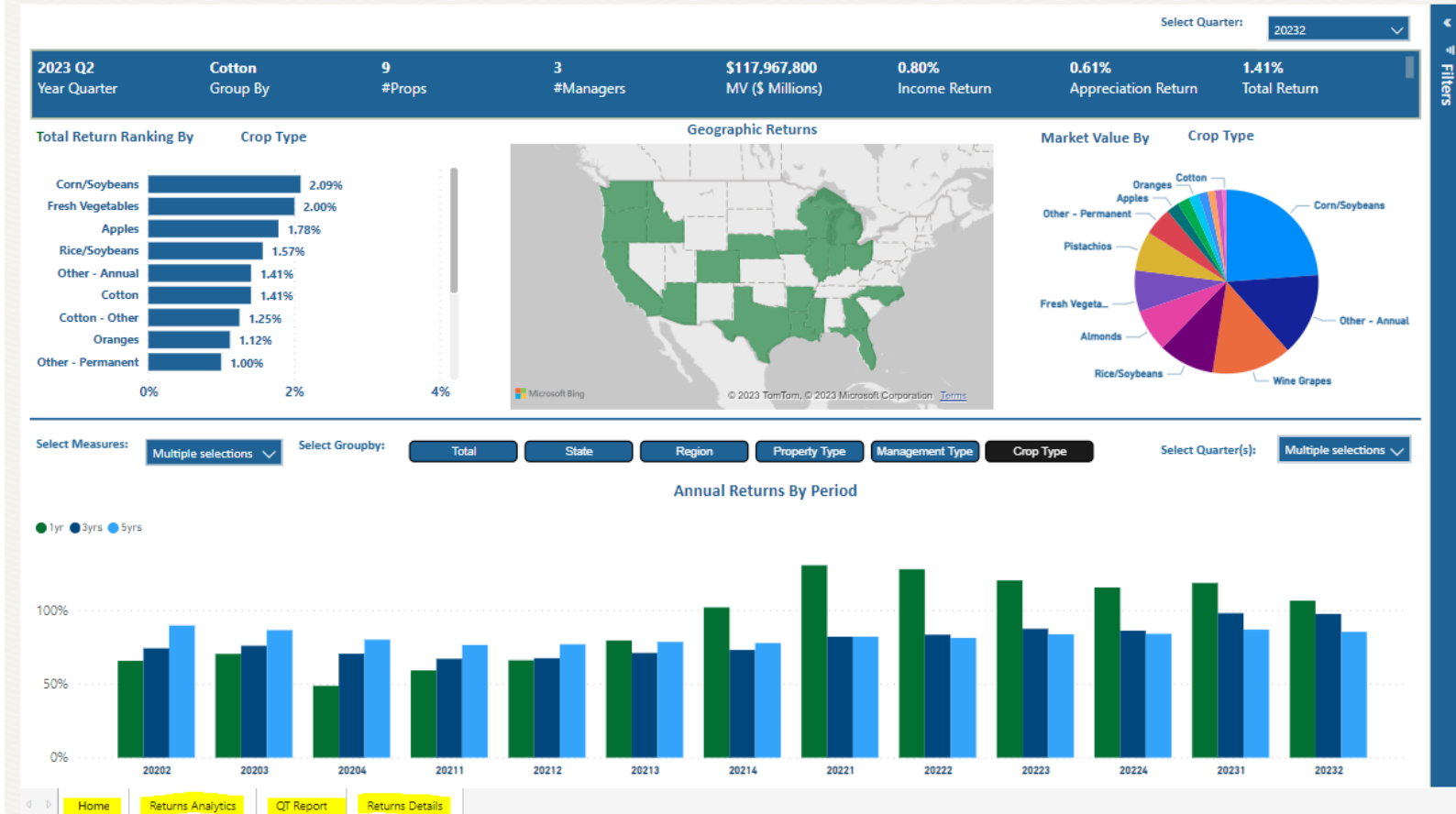


Timberland Property Dashboard

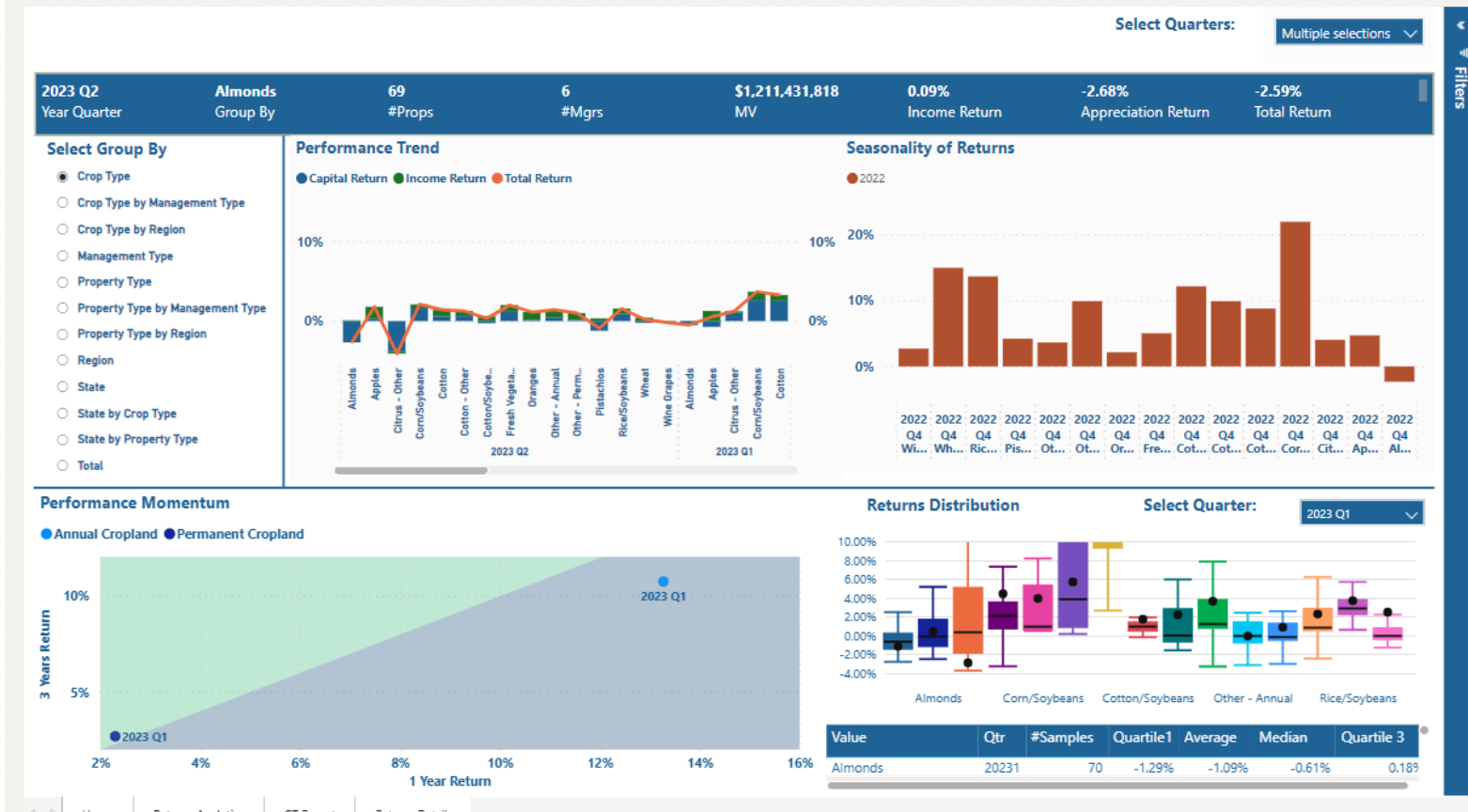
The Timberland Dashboard is an interactive tool that allows you to analyze and display Timberland returns and KPIs.

[Enter Timberland Dashboard](#)

FARMLAND DASHBOARD



FARMLAND DASHBOARD



Select Group By

- Crop Type
- Crop Type by Management Type
- Crop Type by Region
- Management Type
- Property Type
- Property Type by Management Type
- Property Type by Region
- Region
- State
- State by Crop Type
- State by Property Type
- Total

YYYYQ	#Props	NOI	CapEx	BMV	EMV	UAces	PSales	PPurch	IncReturn	AppReturn	TotReturn	Groupby Value
19921	4	186742	\$215,611	\$24,877,500	24,878,438.00	5710	\$40,500	\$0	0.75%	-0.70%	0.05%	Almonds
19922	4	349476	\$334,225	\$24,878,438	24,988,438.00	5710	\$0	\$0	1.41%	-0.90%	0.50%	Almonds
19923	4	208287	\$1,186	\$24,988,438	24,989,624.00	5710	\$0	\$0	0.84%	0.00%	0.84%	Almonds
19924	4	829433	\$37,388	\$24,989,624	25,250,000.00	5710	\$0	\$0	3.37%	0.91%	4.28%	Almonds
19931	5	316933	\$22,870	\$26,593,617	26,593,671.00	5990	\$17,650	\$0	1.20%	-0.02%	1.18%	Almonds
19932	6	-118547	\$226,155	\$28,687,953	30,187,096.00	6330	\$0	\$0	-0.41%	4.41%	4.00%	Almonds
19933	7	-72829	\$53,538	\$32,516,235	32,550,044.00	6657	\$0	\$0	-0.22%	-0.06%	-0.28%	Almonds
19934	7	3273097	\$48,543	\$32,550,044	33,205,622.00	6658	\$0	\$0	10.58%	1.96%	12.54%	Almonds
19941	7	869445	\$7,599	\$33,205,622	33,213,221.00	6661	\$0	\$0	2.65%	0.00%	2.65%	Almonds
19942	8	-702715	\$1,687,983	\$34,749,221	37,052,400.00	7262	\$12,000	\$0	-1.96%	1.75%	-0.21%	Almonds
19943	8	144662	\$504,480	\$37,052,400	37,017,080.00	7262	\$0	\$0	0.39%	-1.45%	-1.06%	Almonds
19944	8	1709300	\$361,636	\$37,017,080	37,109,201.00	7262	\$0	\$0	4.70%	-0.74%	3.96%	Almonds
19951	8	430126	\$174,328	\$37,109,201	37,261,818.00	7262	\$0	\$0	1.16%	-0.06%	1.10%	Almonds
19952	9	645675	\$340,929	\$37,603,062	37,097,250.00	7424	\$30,000	\$0	1.72%	-2.18%	-0.46%	Almonds
19953	11	281900	\$357,113	\$41,996,309	42,056,481.00	8509	\$0	\$0	0.67%	-0.71%	-0.04%	Almonds
19954	12	3108403	\$537,314	\$43,973,110	44,899,905.00	8827	\$0	\$0	7.28%	0.91%	8.19%	Almonds
19961	11	223642	\$1,212,715	\$42,632,104	43,392,946.00	8413	\$0	\$0	0.52%	-1.05%	-0.53%	Almonds
19962	12	287292	\$1,057,507	\$44,528,415	44,478,226.00	8563	\$0	\$0	0.64%	-2.47%	-1.83%	Almonds
19963	12	277723	\$848,525	\$44,478,226	45,293,344.00	8563	\$0	\$0	0.62%	-0.07%	0.55%	Almonds
19964	12	2050789	\$594,293	\$50,675,241	54,097,560.00	9413	\$9,882	\$0	4.11%	5.68%	9.79%	Almonds
19971	12	324968	\$477,335	\$54,097,560	54,546,218.00	9413	\$500	\$0	0.60%	-0.05%	0.55%	Almonds
19972	12	368846	\$777,976	\$54,546,218	55,746,773.00	9395	\$13,900	\$0	0.67%	0.80%	1.47%	Almonds
19973	13	350590	\$852,354	\$60,448,110	57,134,199.00	10995	\$3,568,785	\$0	0.60%	-1.01%	-0.42%	Almonds
19974	14	3836180	\$132,074	\$64,947,577	66,588,842.00	11697	\$0	\$0	6.08%	2.39%	8.47%	Almonds
19981	15	105028	\$2,206,691	\$69,977,337	72,548,355.00	12024	\$1,000	\$0	0.15%	0.51%	0.66%	Almonds
19982	17	172678	\$991,922	\$80,994,055	83,205,239.00	13067	\$259,625	\$0	0.21%	1.82%	2.03%	Almonds
19983	17	265081	\$1,188,636	\$83,205,239	84,424,873.00	13067	\$0	\$0	0.32%	0.04%	0.35%	Almonds
19984	17	683988	\$1,068,463	\$84,424,873	85,020,404.00	12825	\$1,020,500	\$0	0.81%	0.65%	1.46%	Almonds
19991	18	-464036	\$1,317,114	\$86,838,243	87,352,350.00	13162	\$1,500	\$0	-0.53%	-0.91%	-0.38%	Almonds
19992	18	-331469	\$1,588,784	\$87,352,350	91,470,875.00	13162	\$3,225	\$0	-0.38%	2.87%	2.49%	Almonds
19993	17	106653	\$1,053,953	\$75,711,513	76,566,982.00	10797	\$0	\$0	0.14%	-0.26%	-0.12%	Almonds
19994	17	1273159	\$572,387	\$76,566,982	76,660,069.00	10797	\$2,628	\$0	1.67%	-0.63%	1.04%	Almonds

Select Qtr(s)
All

Filters

Search

Filters on this visual

Group By Value is (All)

Filter type: Basic filtering

Search

- Select all
- Almonds 126
- Apples 99
- Citrus - Other 57
- Corn/Soybeans 130
- Cotton 125

Select Qtr(s)
All

Filters

Search

Filters on this visual

Export data

Show as a table

Spotlight

Get insights

Sort descending

Sort ascending

Sort by

- Almonds 126
- Apples 99
- Citrus - Other 57
- Corn/Soybeans 130

Applied filters: Group By is Crop Type

YYYYQ	#Props	NOI	CapEx	BMV	EMV	UAces	PSales	PPurch	IncReti	AppRet	TotReturn	Group
19921	4	186742	\$215,611	\$24,877,500	24,878,438	5710	\$40,500	\$0	0.75%	-0.70%	0.05%	Almonds
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19984	17	683988	\$1,068,463	\$84,424,873	85,020,404	12825	\$1,020,500	\$0	0.81%	0.65%	1.46%	Almonds

All data can be downloaded into Excel

Project Impact – Submission Update

- Farm and Timber submitting Q3 data into test environment first week of December
- Farm and Timber go live in 2023q4 on new Submission System
- Refocus resources to Commercial submission development with a mid-2024 test submission run
 - Start with Property level submission mid-2024
 - Phase in the following submissions after successful property collection:
 - Open End Fund Collection
 - Closed End Fund Collection
 - Daily Price Monthly Collection
 - Attribution Additional data
- Roll out Commercial Dashboards with Property collection, mid-2024

Welcome to NCREIF

The premier US institutional real estate association since 1982.



About NCREIF



*"Established over 40 years ago, the **National Council of Real Estate Investment Fiduciaries (NCREIF)** serves the institutional real estate investment community as its Data Central, representing the largest, most robust and diverse database of country-specific real estate assets in the world. NCREIF produced the first property level return index, the NCREIF Property Index (NPI), dating back to 1978 to capture investment performance records that meet the rigorous scrutiny and review of major investors and academia."*

-Blake Eagle, Founder of NCREIF

[More About NCREIF](#) →



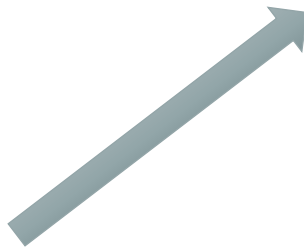
NCREIF Initiatives

The following are current projects and ap

[Project Impact](#)

[Subtype Project](#)

[Committee Initiatives](#)



[Percent Leased Aggregation](#)

[Debt & Derivative Mark-to-Market](#)

[NCREIF Chart of Accounts](#)

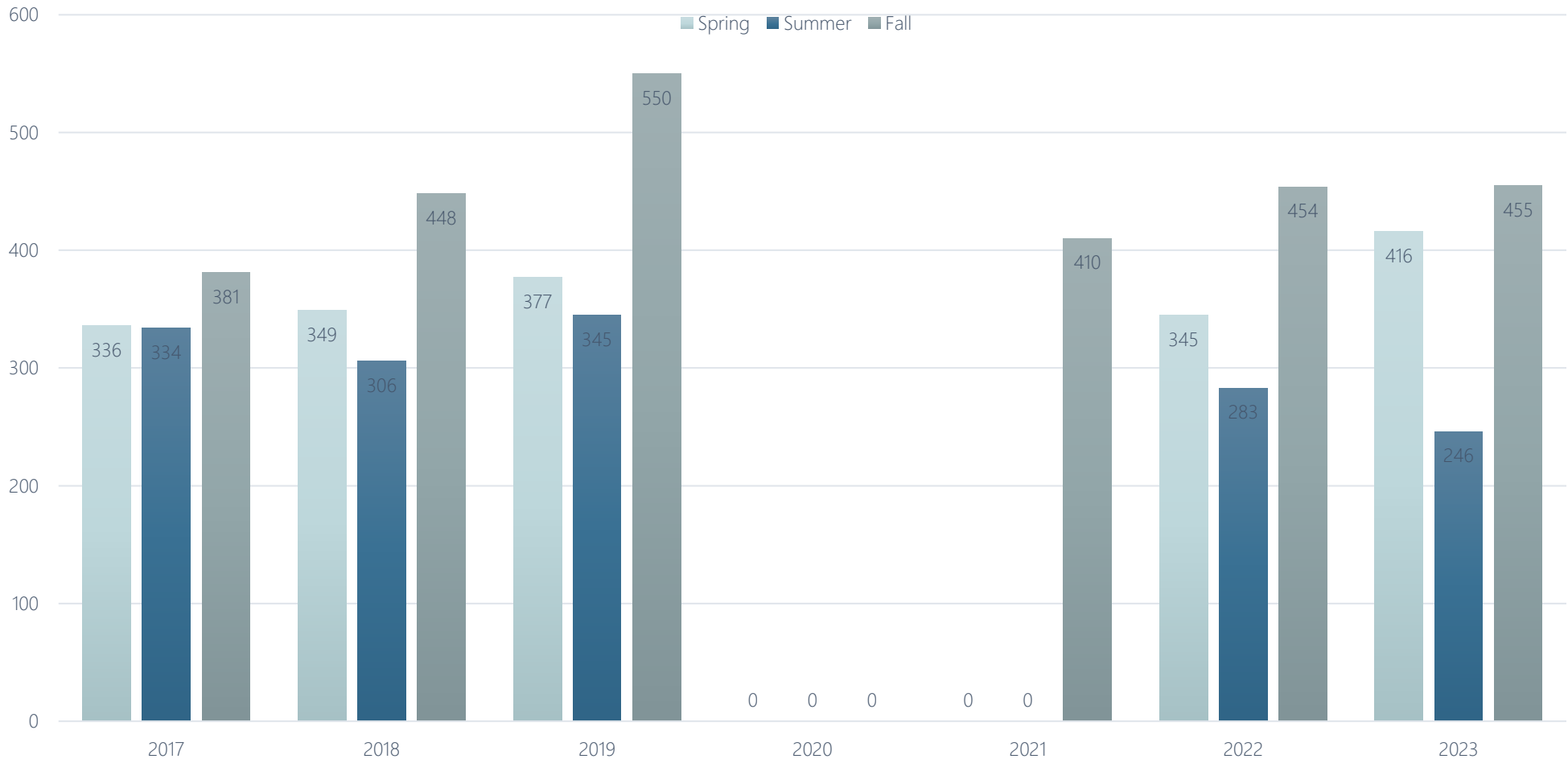
[Data Governance-Management-Catalog Discussion Paper](#)

[Guidance Clarification for Lifecycle Operating-Renovation Properties-Square Footage Fields](#)

[NPI Inclusion Revision to Lifecycle Criteria](#)

[Moderate Income Housing Task Force](#)

CONFERENCES



NCREIF FALL CONFERENCE 2023

MARCH 25-28, 2024

NCREIF SPRING CONFERENCE

PHOENIX, AZ

Artificial Intelligence in Real Estate

OCT. 14-17, 2024

NCREIF FALL CONFERENCE

HOLLYWOOD, FL

Global Focus

ESG Solutions Expo

1. Ryan Hoium – Travelers
2. David Alfi - Washington Capital Management
3. Amanda Carrillo - CBRE Investment Management
4. Courtney LeBlanc - CalPERS
5. Andre Perry - City of Los Angeles
6. Christopher Parilo - CalPERS
7. Jaime Mulder - Altus Group
8. Jamil Harkness - Bailard Inc
9. Samantha Phan - CalSTRS

38 Certificates Achieved

Phoenix, AZ	March 25	Performance Measurement and Benchmarking
Phoenix, AZ	March 28	Performance Reporting and Manager Evaluation
	Virtual - May	Real Estate Fund Formation
	Virtual - Early June	Intro to Reporting Standards
Dallas, TX	June 24-25	Essentials of Institutional Real Estate Investment
Dallas, TX	June 26	Institutional Portfolio Construction & Strategy
Dallas, TX	June 27	Space Markets Analysis
Dallas, TX	June 27	Asset and Debt Valuation
	Virtual - TBD	Investment Vehicles: Key Terms and Fee Structures
Hollywood, FL	October 14	Attribution and Risk Analysis
Hollywood, FL	October 14	New Course** Environmental, Social & Governance
Hollywood, FL	October 17	Investment Analysis and Due Diligence
Hollywood, FL	October 17	Digging into Reporting Standards

13 Classes Offered



THANK YOU!

Questions?



NCREIF FALL CONFERENCE 2023